Community Health Needs Assessment

McKenzie County Healthcare Systems, Inc. Service Area Watford City, North Dakota

2022

Jodi Bosch, Project Coordinator Kylie Nissen, BBA, CHA, Program Director



Table of Contents

Executive Summary	3
Overview and Community Resources	4
Assessment Process	11
Demographic Information	16
Survey Results	26
Findings of Key Informant Interviews and Community Group	45
Priority of Health Needs	46
Next Steps – Strategic Implementation Plan	48
Appendix A – Critical Access Hospital Profile	50
Appendix B – Economic Impact Analysis	52
Appendix C – Survey Instrument	53
Appendix D – County Health Rankings Explained	59
Appendix E – Youth Risk Behavior Survey	70
Appendix F – Prioritization of Community's Health Needs	74
Appendix G – Survey "Other" Responses	75

This project was supported, in part, by the Federal Office of Rural Health, Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS), Medicare Rural Flexibility Hospital grant program and State Office of Rural Health grant program. This information content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS, or the U.S. Government.

Executive Summary

To help inform future decisions and strategic planning, McKenzie County Healthcare Systems, Inc. (MCHS) conducted a Community Health Needs Assessment (CHNA) in 2022, the previous CHNA having been conducted in 2019. The Center for Rural Health (CRH) at the University of North Dakota (UND) School of Medicine & Health Sciences (SMHS) facilitated the assessment process, which solicited input from area community members and healthcare professionals as well as analysis of community health-related data.



To gather feedback from the community, residents of the area were given the opportunity to participate in a survey. One hundred twenty-nine MCHS service area residents completed the survey. Additional information was collected through seven key informant interviews with community members. The input from the residents, who primarily reside in McKenzie County, represented the broad interests of the communities in the service area. Together with secondary data gathered from a wide range of sources, the survey presents a snapshot of the health needs and concerns in the community.

With regard to demographics, McKenzie County's population from 2020 to 2021 decreased by 6%. The average number of residents younger than age 18 (31.8%) for McKenzie County comes in 8.2 percentage points higher than the North Dakota average (23.6%). The percentage of residents, ages 65 and older, is almost 7% lower for McKenzie County (8.8%) than the North Dakota average (15.7%), and the rate of education is slightly lower for McKenzie County (76.0%) than the North Dakota average (89.0%). The median household income in McKenzie County (\$75,238) is much higher than the state average for North Dakota (\$65,315).

Data, compiled by County Health Rankings, show McKenzie County is doing better than North Dakota in health outcomes/factors for 11 categories while performing poorly relative to the rest of the state in 20 outcome/factor categories.

Of 106 potential community and health needs set forth in the survey, the 129 MCHS service area residents who completed the survey indicated the following 10 needs as the most important:

- Not enough affordable housing
- Having enough child daycare services
- Lack of affordable housing
- Smoking and tobacco use youth
- Ability to meet needs of older population
- Depression/anxiety all ages

- Assisted living options
- Long-term/nursing home options
- Alcohol use and abuse all ages
- Drug use and abuse (including prescription drugs) – all ages

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). They included can't get transportation service (N=37), no insurance/limited insurance (N=36), and distance from health facility (N=28).

When asked what the best aspects of the community were, respondents indicated the top community assets were:

- Local events and festivals
- Activities for families and youth
- Family-friendly

- People who live here are involved in their community
- People are friendly, helpful, and supportive
- Recreational and sports activities

Input from community leaders, provided via key informant interviews and the community focus group, echoed many of the concerns raised by survey respondents. Concerns emerging from these sessions were:

- Having enough child daycare services
- Not enough affordable housing
- Change in population size
- Attracting and retaining young families
- Alcohol use and abuse all ages
- Depression/anxiety all ages
- Drug use and abuse (including prescription drug abuse) – all ages

- Ability to retain primary care providers (MD, DO, NP, PA) and nurses
- Availability of mental health services
- Cost of long-term/nursing home care
- Availability of resources to help the elderly stay in their homes
- Availability of home health

Overview and Community Resources

In collaboration with Upper Missouri District Health Unit (UMDHU) and with assistance from the Center for Rural Health (CRH) at the University of North Dakota (UND) School of Medicine & Health Sciences (SMHS), McKenzie County Healthcare Systems, Inc. (MCHS) completed a Community Health Needs Assessment (CHNA) of the MCHS service area. The hospital identifies its service area as McKenzie County. McKenzie County also provides an outreach ortho specialty clinic in New Town, Williston, Tioga, and Stanley, serving



Williams and Mountrail Counties. Many community members and stakeholders worked together on the assessment.



MCHS is located in Watford City, North Dakota, the county seat of McKenzie County, and operates as a Critical Access Hospital (CAH), a Rural Health Clinic, specialty clinic, urgent care, surgery center, long-term care, and assisted living, all under one roof. Sanford Health offers clinic services in the building as well with two FNP providers and visiting specialists. The MCHS hospital is one hour from Williston, 1.5 hours from Dickinson, 2.5 hours from Minot, and three hours from Bismarck.

McKenzie County was the fastest growing county in the nation and saw a 131.2% increase in population in just 10 years from 6,360 to 14,704. Located in extreme western North Dakota, McKenzie County is unique in its economy, landscape, and attitude. Once known as the "Island Empire," the county is bordered by the Yellowstone River, Lake Sakakawea, the Missouri River, and the Little Missouri River. The natural resource-based economy is dependent on farming, ranching, and energy development with landscapes, ranging from rich farmland to heavy badlands. The county is home to over 500,000 acres of Little Missouri National Grasslands, an area rich in oil reserves and grassland resources.

According to the U.S. Census Bureau, the estimated census in McKenzie County was 14,704 in 2020. McKenzie County makes up the majority of MCHS services. The racial makeup of the counties was 72.3% White, 12.9% American Indian, 10.4% Hispanic or Latino, and 1.5% Black. The number of housing units increased by 147.9% from 3,090 in 2010 to 7,661 in 2020.

Other healthcare facilities and services in McKenzie County include ANOVA Family Health Clinic (Physical Therapy, Speech



Pathology, Family Nurse Practitioners, and Esthetics), Legendary Smiles Dental office, one optometry clinic, two chiropractor clinics with one offering massage therapy, and Garden of Healing and Elevated Therapeutic Massage therapy clinics. MCHS also offers home and community-based services for Medicaid and private pay clients as a Quality Service Provider Agency for McKenzie County's Department of Human Services, the social services agency. Personal care and assistance with activities of daily living, housekeeping, non-medical transportation, companionship, and homemaker services are offered through this program.

Watford City has a number of community assets and resources that can be mobilized to address population health improvement. In terms of physical assets and features, the community includes a bike path, a fitness center with a therapy pool, weights and exercise machines, and a track available for winter walking. Parks and recreation include an indoor and outdoor swimming pool/water park, 11 city parks, tennis courts, a golf course, a movie theatre, Theodore Roosevelt National Park, Tobacco Gardens Resort and Marina, and the Maah Daah Hey trail. McKenzie County offers several cultural attractions, such as the Heritage Park Museum, which pays tribute to the early history of the city and region.

Watford City offers public transportation through the Northwest Transit, where seniors can ride free, and the Veterans Administration supplies transportation for local veterans. The community also has four grocery stores; one locally owned grocery store offers delivery services on Wednesdays, and the two pharmacies offer medication delivery as well. The McKenzie County Public School system offers a comprehensive program for students K-12 and has three separate buildings: Bakken Elementary and Fox Hills Elementary hosting grades K-5, the middle school hosting grades 6-8, and the high school grades 9-12. The Wolf Pup Preschool offers privately funded preschool with the Head Start program offering publicly funded preschool for low-income students. Some licensed as well as unlicensed daycares are available in the area.

🔰 Interstate Highways

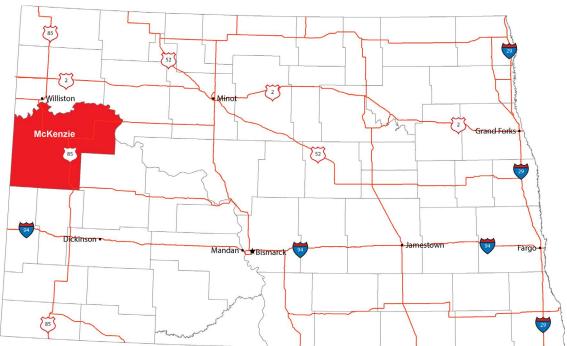


Figure 1: McKenzie County

US Highways

McKenzie County Healthcare Systems, Inc. (MCHS)

MCHS began its mission in 1952 as McKenzie County Memorial Hospital. On July 1, 2004, with the merger of the Good Shepherd Home Corporation and the McKenzie County Memorial Hospital Corporation, MCHS was born. This union resulted in the consolidation of all healthcare services in McKenzie County. MCHS consists of McKenzie County Hospital, McKenzie County Rural Health Clinic, Good Shepherd Home, Horizon Assisted Living, and the Connie Wold Wellness Center. Their goal is to provide our rural communities with access to quality healthcare. The CAH Profile for McKenzie County Healthcare Systems includes a summary of hospital-specific information and is available in Appendix A.



MCHS is here today because of the hard work and vision of community minded individuals. These people epitomize the spirit of work and caring that made McKenzie County the place it is today. They spoke of the "founders of our community" and how they "spent the vigor of their youth building up the way of life we enjoy today." They felt a responsibility to provide quality healthcare to those pioneers. With that same attitude, MCHS continues to work to provide healthcare services to those who chose to live and work in a rural area.

MCHS is a faith-based organization supported by the Christian churches in the community. They are dedicated to the healing ministry of McKenzie County. MCHS is committed to excellence and service in a personcentered environment that respects the human life of all, regardless of race, creed, color, national origin, disability, pregnancy, sex, and/or marital status.

The grand opening of MCHS's new medical facility took place on June 22, 2018. This state-of-the-art, \$76.3 million facility features a brand new hospital and clinic, as well as updates to the connected Good Shepherd Home (nursing home) and nearby Horizon Assisted Living. Some additional highlights of the new medical facility include 24 inpatient rooms, nine emergency bays, helipad, 44 private resident rooms (Good Shepherd Home), three couples resident rooms (Good Shepherd Home), three outdoor courtyards, MRI center, two operating rooms, and two procedure rooms.

MCHS has a significant economic impact on the region. They directly employ 194.93 FTE employees with an annual payroll of over \$17.5 million (including benefits). These employees create an additional 62 jobs and over \$3.57 million in income as they interact with other sectors of the local economy. This employment results in a total impact of 257 jobs and more than \$21 million in income. Additional information is provided in Appendix

Services, offered locally by CMC include:

General and Acute Services

- Acne treatment and laser hair removal
- Allergy immunizations
- Blood pressure checks
- Cardiology (Sanford Clinic)
- Cardiac rehab
- Clinic
- Diabetes management
- Emergency room
- Gynecology (Great Plains Women's Health)
- Hospital (acute care)

- Independent senior housing
- Mole/wart/skin lesion removal
- Nutrition counseling (telehealth)
- Obstetrics (Great Plains Women's Health)
- Orthopedics
- Pharmacy
- Podiatry evaluation and surgery
- Prenatal care up to 32 weeks (Great Plains Women's Health)
- Physicals: annuals, sports, insurance and flight

- Sports medicine
- Surgical services biopsies
- Surgical services outpatient

Screening/Therapy Service

- Chronic disease management
- Holter monitoring
- Laboratory services
- Lower extremity circulatory assessment
- Massage therapy
- Occupational physicals
- Occupational therapy
- Pediatric services

Long-Term Care

- Chronic disease management
- Flu, COVID-19, and pneumonia shots
- Hair stylist
- Help in assisting appointments for dental, vision, and hearing
- Licensed dietician
- Meals three times per day
- Medication management

Horizon Assisted Living

- Light housekeeping
- Medication reminders (HERO System)
- Noon meals provided with option (for fee) for other meals

Medical/Surgical Services

- Cardiac monitoring
- Catheter care
- Dressing changes/wound vac
- Electrocardiograms
- Gastric tube insertion, care and feeding

Pediatric Services

- Dressing changes
- Inhalation treatment
- IV therapy

Obstetrics

- Anesthesia epidural administration and management
- Antenatal testing and treatment
- •IV administration and medication additives

- Swing bed services
- Urgent Care Clinic
- Urology Care Clinic
- Physical therapy
- Respiratory care
- Sleep studies
- Social services
- Telehealth Services (ENDO, psychiatry, genetics, dietary)
- Visiting nurse services and home and community-based services
- Monthly medical provider visits
- Nurse/CNA services 24 hours per day
- PT/OT Services
- Psychiatry services telemedicine
- Speech services
- Social services
- Spiritual services
- Transporting to out-of-town medical visits
- Nurse aide 8:00 am 11:00 pm
- Nurse once weekly
- Spiritual services
- Injections
- IV administration and medication additives
- Respiratory treatments
- Treatment of a variety of medical/surgical conditions
- Medications
- Medical care
- Newborn care
- Vaginal deliveries
- Cesarean sections with and without tubal ligation

Swing Bed Unit

- Activity program
- Dental services
- Dietary
- Non-skilled nursing care
- Physical/occupational/speech therapy

Outpatient Surgical Services

- General surgery
- Gynecology

Postoperative Recovery Room

- Cardiac monitoring
- General surgical nursing care

Anesthesia

- Blocks for pain control
- Epidural steroid injection

Emergency Room Services

- Cardiac monitoring
- Catheter care
- Dressing changes
- Electrocardiogram
- Feeding tube insert
- Injections
- IV administration

Laboratory Services

- Blood products
- Chemistry
- Hematology/coagulation

Radiology

- CT services
- Dexa
- EKG
- General diagnostic X-ray

Physical Therapy

- Aquatic therapy
- Body composition screening
- Gait training

- Physician services
- Respiratory therapy
- Skilled nursing care
- Social service program
- Vision services
- Orthopedic
- Urology
- Non-invasive blood pressure monitoring
- Respiratory therapy
- General, spinal, MAC
- Lab and radiology services
- Medical screening
- Non-invasive blood pressure monitoring
- Resuscitation according to ACLS guidelines
- Thrombolytic therapy
- Transcutaneous pacing
- Immunohematology
- Specialty tests sent to reference lab
- Urinalysis/serology
- Mammography
- MRI
- Surgical services
- Ultrasound
- Manual therapy: soft tissue mobilizations, joint mobilizations
- Modalities: electrical stimulation, ultrasound therapy, dry needling, decompression therapy,

phonophoresis, iontophoresis, vaso pneumatic compression therapy, contrast baths

- Neuromuscular re-education: balance difficulties
- Orthotics
- Pain management
- Pediatric care

Occupational Therapy

- Aquatic therapy
- Cognitive therapy: executive function retraining, memory training, vision therapy
- Manual therapy: soft tissue mobilizations, joint mobilizations
- Modalities: electrical stimulation ultrasound therapy, decompression therapy, phonophoresis, iontophoresis, vaso pneumatic compression therapy, contrast baths
- Neuromuscular re-education: balance difficulties
- **Occupational Therapy**
 - Holter monitoring
- **Respiratory Therapy**
 - Asthma education
 - Pulmonary function testing
- **Social Service Program**
 - Referrals/assessments
- **Telehealth Medicine**
 - Behavioral health
 - Dietician (outpatient)
- **Blood**
 - Provision of full blood services
- **Dentist**
 - Consultant
- Dietician
 - Bi-monthly visits
 - Provides consulting of dietary services

- Postural awareness training
- Pre-operative and post-operative treatment
- Therapeutic exercises: strengthening and conditioning
- Women's health
- Vertigo/dizziness treatments
- Pain management
- Pediatric care
- Postural awareness training
- Pre-operative and post-operative treatment
- Stroke rehabilitation
- Therapeutic exercises: strengthening and conditioning
- Phase II and III
- Pulmonary rehab phase II and III
- Sleep studies
- Genetic counseling
- Rheumatology
- Emergency dental care
- Provides patient education as needed
- Provides telephone consultation as needed

Upper Missouri District Health Unit

The Upper Missouri District Health Unit (UMDHU) was founded and began offering sanitation and nursing services in Divide, McKenzie, and Williams Counties in 1947. It was the third public health unit formed in the state. Mountrail County joined the health unit in 1949. The central office is located in Williston; satellite offices are maintained in Crosby, Stanley, and Watford City (all are county seats).

UMDHU provides public health services that encompass all residents, aged birth to end of life in Divide, McKenzie, Mountrail, and Williams Counties. Services include environmental health, emergency preparedness, nursing services, WIC (women, infants, and children) program, ATOD prevention and education services. Each of these programs provides a wide variety of services in order to accomplish the mission of public health, which is to assure that our community is a healthy place to live and each person has an equal opportunity for optimal health.

Funding for public health services comes from a variety of funding sources. Programs and services are covered by county mill dollars, state funding, federal funding, donations, and fees for services. UMDHU applies for other funding that supports the mission. Services are available to all eligible UMDHU residents, including all age groups and economic status. UMDHU uses a sliding fee scale for some services, based on financial income.

Mission

UMDHU, serving northwestern North Dakota, promotes healthy lifestyles through health education, prevention and control of disease, and the protection and enhancement of the environment.

UMDHU works to prevent illness and injury, promote healthy communities, and offer protection of the environment, keeping it clean, healthy, and safe. Quality of life is improved, and money is saved when illness and injury are prevented. Health promotion goals are to develop public policy and programs to support healthy lifestyles and to encourage the public to practice healthy lifestyles. A clean and safe environment doesn't just happen. Assisting people to identify and prevent public health risks in their community is an important public health responsibility.

Specific services that UMDHU provides are:

- Blood pressure checks
- Breastfeeding resources
- Bringing Home Baby weight checks/ education
- Car seat program
- Cribs for Kids
- Emergency preparedness services work with community partners as part of local emergency response team
- Environmental health services (water, sewer, health hazard abatement)
- Family planning
- Flu shots
- Footcare for elders
- Immunizations (foreign travel, COVID, schoolaged and other vaccinations)
- Nutrition education

- Online courses pregnancy, childbirth, breastfeeding, and postpartum/baby care
- Preschool education programs and screening
- Ryan White program
- School health—health education and resource to the schools
- STD testing and treatment
- Substance abuse prevention
- Telehealth for STD/contraception
- Tobacco prevention and control
- Tuberculosis testing and management
- West Nile program—surveillance and education
- WIC (Women, Infants, and Children) program
- Worksite wellness

Assessment Process

The purpose of conducting a Community Health Needs Assessment (CHNA) is to describe the health of local people, identify areas for health improvement, identify use of local healthcare services, determine factors that contribute to health issues, identify and prioritize community needs, and help healthcare leaders identify potential action to address the community's health needs.

A CHNA benefits the community by:

- 1. Collecting timely input from the local community members, 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.
- 4. Engaging community members about the future of healthcare.
- 5. Allowing the community hospital to meet the federal regulatory requirements of the Affordable Care Act, which requires not-for-profit hospitals to complete a CHNA at least every three years as well as helping the local public health unit meet accreditation requirements.

This assessment examines health needs and concerns in McKenzie County service area.

The Center for Rural Health (CRH), in partnership with McKenzie County Healthcare Systems, Inc. (MCHS) and Upper Missouri District Health Unit (UMDHU), facilitated the CHNA process. Community representatives met regularly in-person, by telephone conference, and email. A CHNA liaison was selected locally who served as the main point of contact between CRH and MCHS. A small steering committee (see Figure 2) was formed that was responsible for planning and implementing the process locally. Representatives from CRH met and corresponded regularly by videoconference and/or via the eToolkit with the CHNA liaison. The community group (described in more detail below) provided in-depth information and informed the assessment process in terms of community perceptions, community resources, community needs, and ideas for improving the health of the population and healthcare services. Five people, representing a cross section demographically, attended the focus group meeting. The meeting was highly interactive with good participation.

Figure 2: Steering Committee

Daniel Stenberg	Job Development Authority, McKenzie County Courthouse
Gretchen Stenehjem	Public Relations, First International Bank and Trust
Jim Johnsrud	Chief of Ambulance, McKenzie County Ambulance
Robert Black	Interim Director of Operations, MCHS
Steven Holen	Superintendent of Schools, McKenzie County Public School District

The original survey tool was developed and used by CRH. In order to revise the original survey tool to ensure the data gathered met the needs of hospitals and public health, CRH worked with the North Dakota Department of Health's public health liaison. CRH representatives also participated in a series of meetings that garnered input from the state's health officer, local North Dakota public health unit professionals, and representatives from North Dakota State University (NDSU).

As part of the assessment's overall collaborative process, CRH spearheaded efforts to collect data for the assessment in a variety of ways:

- A survey solicited feedback from area residents
- Community leaders, representing the broad interests of the community, took part in one-on-one key informant interviews
- The community group, comprised of community leaders and area residents, was convened to discuss area health needs and inform the assessment process
- A wide range of secondary sources of data were examined, providing information on a multitude of measures, including demographics, health conditions, indicators, outcomes, rates of preventive measures, rates of disease, and at-risk behavior

CRH 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. CRH is the designated State Office of Rural Health and administers the Medicare Rural Hospital Flexibility (Flex) program, funded by the Federal Office of Rural Health Policy, Health Resources Services Administration, and Department of Health and Human Services. CRH connects the University of North Dakota (UND) School of Medicine & Health (SMHS) and other necessary resources to rural communities and other healthcare organizations in order to maintain access to quality care for rural residents. In this capacity, CRH works at a national, state, and community level.

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

A community group, consisting of 17 community members, was convened and first met on February 3, 2022. During this first community group meeting, group members were introduced to the needs assessment process, reviewed basic demographic information about the community, 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 April 7, 2022 with nine community members in attendance. At this second meeting, the community 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 McKenzie County. The group was then tasked with identifying and prioritizing the community's health needs.

Members of the community group represented the broad interests of the community served by MCHS and UMDHU. They included representatives of the health community, business community, faith community, and law enforcement. Not all members of the group were present at both meetings.

Interviews

One-on-one interviews with five key informants were conducted via zoom and phone in January 2022. Two additional key informant interviews were conducted over the phone in February 2022. A representative from CRH conducted the interviews. Interviews were held with selected members of the community 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 healthcare by local providers, 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 solicit feedback from the community and was not intended to be a scientific or statistically valid sampling of the population. 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. A copy of the survey instrument is included in Appendix C, and a full listing of direct responses, provided for the questions that included "Other" as an option, are included in Appendix G.

The community member survey was distributed to various residents of McKenzie County, which includes the MCHS service area. 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.
- Learn more about how local health services are used by residents.

Specifically, the survey covered the following topics:

- Residents' perceptions about community assets
- Broad areas of community and health concerns
- Awareness of local health services
- Barriers to using local healthcare
- Basic demographic information
- Suggestions to improve the delivery of local healthcare

To promote awareness of the assessment process, press releases led to published articles in the local newspaper in December 2021. Additionally, information was published on Facebook, Instagram, and LinkedIn.

Approximately 120 community member surveys were available for distribution at the hospital and public health unit.

To help ensure anonymity, included with each survey was a postage-paid return envelope to CRH. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling MCHS or UMDHU. The survey period ran from December 1, 2021 to February 14, 2022. Sixty-nine completed paper surveys were returned.

Area residents were also given the option of completing an online version of the survey, which was emailed to several community members, along with Facebook and Instagram pages. Sixty online surveys were completed. Thirty-two of those online respondents used the QR code to complete the survey. In total, counting both paper and online surveys, the 129 community member surveys were completed, equating to a 2.5% response rate. This response rate is low for this type of unsolicited survey methodology but falls in line with response rates during the pandemic.

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 United States Census Bureau; Robert Wood Johnson Foundation's County Health Rankings, which pulls data from

20 primary data sources (www.countyhealthrankings.org); the National Survey of Children's Health, which touches on multiple intersecting aspects of children's lives (www.childhealthdata.org/learn/NSCH); North Dakota KIDS COUNT, which is a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation (www.ndkidscount.org); and Youth Risk Behavior Surveillance System (YRBSS) data, which is published by the Centers for Disease Control and Prevention (https://www.cdc.gov/healthyyouth/data/yrbs/index.htm).

Social Determinants of Health

Social determinants of health are, according to the World Health Organization, "the circumstances in which people are born, grow up, live, work, and age and the systems put in place to deal with illness. These circumstances are in turn shaped by wider set of forces: economics, social policies, and politics."

Income-level, educational attainment, race/ethnicity, and health literacy all impact the ability of people to access health services. Basic needs, such as clean air and water and safe and affordable housing, are all essential to staying healthy and are also impacted by the social factors, listed previously. The barriers already present in rural areas, such as limited public transportation options and fewer choices to acquire healthy food, can compound the impact of these challenges.

There are numerous models that depict the social determinants of health. While the models may vary slightly in the exact percentages that they attribute to various areas, the discrepancies are often because some models have combined factors when other models have kept them as separate factors.

For Figure 3, data has been derived from the County Health Rankings model (https://www.countyhealthrankings.org/resources/county-health-rankings-model) and it illustrates that healthcare, while vitally important, plays only one small role (approximately 20%) in the overall health of individuals and ultimately of a community. Physical environment, social and economic factors, and health behaviors play a much larger part (80%) in impacting health outcomes. Therefore, as needs or concerns were raised through this Community Health Needs Assessment process, it was imperative to keep in mind how they impact the health of the community and what solutions can be implemented.

Figure 3: Social Determinants of Health

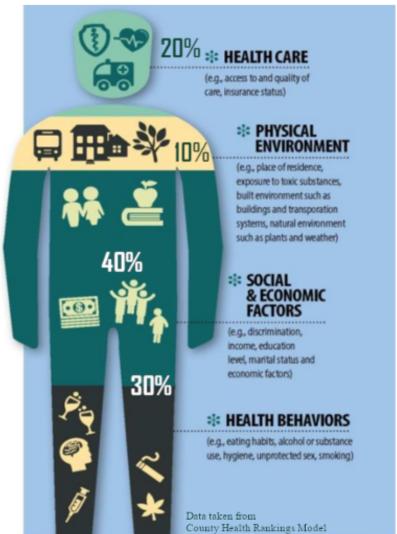


Figure 4 (Henry J. Kaiser Family Foundation, https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/), provides examples of factors that are included in each of the social determinants of health categories that lead to health outcomes.

For more information and resources on social determinants of health, visit the Rural Health Information Hub website, https://www.ruralhealthinfo.org/topics/social-determinants-of-health.

Figure 4: Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment Income Expenses Debt Medical bills Support	Housing Transportation Safety Parks Playgrounds Walkability Zip code / geography	Literacy Language Early childhood education Vocational training Higher education	Hunger Access to healthy options	Social integration Support systems Community engagement Discrimination Stress	Health coverage Provider availability Provider linguistic and cultural competency Quality of care
Health Outcomes Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations					

Demographic Information

Table 1 summarizes general demographic and geographic data about McKenzie County.

	McKenzie County	North Dakota
Population (2021)	13,819	779,948
Population change (2020-2021)	-6.0%	-0.5%
People per square mile (2010)	2.3	9.7
Persons 65 years or older (2020)	8.8%	15.7%
Persons younger than 18 years (2020)	31.8%	23.6%
Median age (2020)	38.7	35.2
White persons (2020)	84.2%	86.9%
High school graduates (2020)	91.4%	93.1%
Bachelor's degree or higher (2020)	26.8%	30.7%
Live below poverty line (2020)	7.5%	10.2%
Persons without health insurance younger than 65 years (2019)	8.9%	8.1%
Households with a broadband internet subscription (2020)	86.7%	83.1%

The population of North Dakota has decreased in recent years, and McKenzie County has been no exception. The U.S. Census Bureau estimates show that McKenzie County's population from 2020 to 2021 decreased by 6%.

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, McKenzie County is compared to North Dakota rates and national benchmarks on various topics, ranging from individual health behaviors to the quality of healthcare.

The data used in the 2021 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 counties having high ranks, such as 1 or 2, are considered to be the "healthiest." Counties are ranked on both health outcomes and health factors. Following is a breakdown of the variables that influence a county's rank.

A model of the 2021 County Health Rankings – a flow chart of how a county's rank is determined – may be found in Appendix D. For further information, visit the www.countyhealthrankings.org.

Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to McKenzie 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. In other words, all of the following statistics are based on the health behaviors and conditions of the county's residents, not necessarily the patients and clients of UMDHU and MCHS or of any particular medical facility.

For most of the measures included in the rankings, the County Health Rankings' authors have calculated the "Top U.S. Performers" for 2021. 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).

Health Outcomes

- Length of life
- Quality of life

Health Factors

- Health behavior
 - Smoking
 - Diet and exercise
 - Alcohol and drug use
 - Sexual activity

Health Factors (continued)

- Clinical care
 - Access to care
 - Quality of care
- Social and Economic Factors
 - Education
 - Employment
 - Income
 - Family and social support
 - Community safety
- Physical Environment
 - Air and water quality
 - Housing and transit

McKenzie County rankings within the state are included in the summary following. For example, McKenzie County ranks 34th out of 46 ranked counties in North Dakota on health outcomes and 27th on health factors. The measures, marked with a bullet point (•), are those where a county is not measuring up to the state rate/percentage; a square () indicates that the county is not meeting the U.S. Top 10% rate on that measure. Measures that are not marked with a colored shape but are marked with a plus sign (+) indicate that the county is doing better than the U.S. Top 10%.

The data from County Health Rankings show that McKenzie County is doing poorly, compared to the rest of the state, on several outcomes. And, like many North Dakota counties, is doing poorly in many areas when it comes to the U.S. Top 10% ratings. One particular outcome where McKenzie County does not meet the U.S. Top 10% ratings is poor or fair health.

On health factors, McKenzie County performs below the North Dakota average for counties in several areas as well.

Data, compiled by County Health Rankings, show McKenzie County is doing better than North Dakota in health outcomes and factors for the following indicators:

- Poor mental health days
- Adult smoking
- Adult obesity
- Excessive drinking
- Sexually transmitted infections
- Unemployment

- Children in poverty
- Income inequality
- Children in single-parent households
- Air pollution (particulate matter)
- Preventable hospital stays

Outcomes and factors in which McKenzie County is performing poorly, relative to the rest of the state, include:

- Premature death
- Poor to fair health
- Poor physical health days
- Low birth rate
- Food environment index
- Physical inactivity
- Access to exercise opportunities
- Alcohol-impaired driving deaths
- Teen birth rate
- Uninsured

- Primary care physicians
- Dentists
- Mental health providers
- Mammography screenings
- Flu vaccinations
- Social associations
- Violent crime
- Injury deaths
- Drinking water violations

TABLE 2: SELECTED MEASURES FROM COUNTY HEALTH RANKINGS 2021- MCKENZIE COUNTY

= Not meeting
North Dakota
average

- = Not meeting U.S. Top 10% Performers
- + = Meeting or exceeding U.S. Top 10% Performers

Blank values reflect unreliable or missing data

MCKENZ	IE COUNTY		
	McKenzie County	U.S. Top 10%	North Dakota
Ranking: Outcomes	34 th		(of 46)
Premature death	8,600	5,400	6,600
Poor or fair health	16% ●■	14%	14%
Poor physical health days (in past 30 days)	3.4 +•	3.4	3.2
Poor mental health days (in past 30 days)	3.6 +	3.8	3.8
Low birth weight	7% ●■	6%	6%
Ranking: Factors	27 th	0,0	(of 45)
Health Behaviors			(0)
Adult smoking	20%	16%	20%
Adult obesity	34%	26%	34%
Food environment index (10=best)	8.5	8.7	8.9
Physical inactivity	26%	19%	23%
Access to exercise opportunities	67%	91%	74%
Excessive drinking	22%	15%	24%
Alcohol-impaired driving deaths	43% •	11%	42%
Sexually transmitted infections	337.9	161.2	466.6
Teen birth rate	29 •	12	20
Clinical Care			
Uninsured	10% ●■	6%	8%
Primary care physicians	6,820:1	1,030:1	1,300:1
Dentists	3,000:1	1,210:1	1,510:1
Mental health providers	15,020:1	270:1	510:1
Preventable hospital stays	2,553 +	2,565	4,037
Mammography screening (% of Medicare enrollees ages 65-74 receiving screening)	41% ●■	51%	53%
Flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination)	29% ●■	55%	50%
Social and Economic Factors			
Unemployment	1.6% +	2.6%	2.4%
Children in poverty	9% +	10%	11%
Income inequality	4.3	3.7	4.4
Children in single-parent households	17% ■	14%	20%
Social associations	10.3	18.2	16.0
Violent crime	369 ●■	63	258
Injury deaths	93 •	59	71
Physical Environment			
Air pollution – particulate matter	1.8 +	5.2	4.7
Drinking water violations	Yes		
Severe housing problems	10%	9%	12%

Source: http://www.countyhealthrankings.org/app/north-dakota/2021/rankings/outcomes/overall

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 healthcare, and information on the child's family, neighborhood, and social context. Data are from 2019-20. 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 ages 0-17 unless noted otherwise), 2020

Health Status	North Dakota	National
Children born premature (3 or more weeks early)	9.9%	11.2%
Children 10-17 overweight or obese	26.9%	32.1%
Children 0-5 who were ever breastfed	86.1%	80.8%
Children 6-17 who missed 11 or more days of school	2.9%	3.9%
Healthcare		
Children currently insured	93.6%	93.1%
Children who spent less than 10 minutes with the provider at a preventive medical visit	16.0%	18.1%
Children (1-17 years) who had preventive a dental visit in the past year	73.7%	77.5%
Children (3-17 years) received mental healthcare	10.5%	11.0%
Children (3-17 years) with problems requiring treatment did not receive mental healthcare	2.3%	2.5%
Young children (9-35 mos.) receiving standardized screening for developmental problems	31.1%	36.9%
Family Life		
Children whose families eat meals together 4 or more times per week	79.2%	75.2%
Children who live in households where someone smokes	16.1%	14.0%
Neighborhood		
Children who live in neighborhood with a park, sidewalks, a library, and a community center	81.1%	74.9%
Children living in neighborhoods with poorly kept or rundown housing	9.1%	13.3%

Source: https://www.childhealthdata.org/browse/survey

The data on children's health and conditions reveal 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:

- Children (1-17 years) who had a preventative dental visit in the past year
- Young children (9-35 mos.) receiving standardized screening for developmental problems
- Children who live in households where someone smokes

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 focuses on the main components of children's well-being; more information about KIDS COUNT is available at www.ndkidscount.org. The measures highlighted in blue in the table are those in which the counties are doing worse than the state average. The year of the most recent data is noted.

The data show McKenzie County is performing more poorly than the North Dakota average on only one factor: the four-year high school graduation rate (13% lower rate in McKenzie County).

Table 4: Selected County-Level Measures Regarding children's Health

	McKenzie County	North Dakota
Child food insecurity, 2019	9.6%	9.6%
Medicaid recipient (% of population age 0-20), 2020	22.9%	26.1%
Children enrolled in Healthy Steps (% of population age 0-18), 2020	1.6%	2.1%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2020		16.5%
Licensed childcare capacity (# of children), 2020		37,701
Four-year high school cohort graduation rate, 2020/2021		89.0%
Victims of child abuse and neglect requiring services (rate per 1,000 children ages 0-17), 2020	NA	9.98

Source: https://datacenter.kidscount.org/data#ND/5/0/char/0

Another means for obtaining data on the youth population is through the Youth Risk Behavior Survey (YRBS). The YRBS was developed in 1990 by the Centers for Disease Control and Prevention (CDC) to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the U.S. The YRBS was designed to monitor trends, compare state health risk behaviors to national health risk behaviors, and intended for use to plan, evaluate, and improve school and community programs. North Dakota began participating in the YRBS survey in 1995. Students in grades 7-8 and 9-12 are surveyed in the spring of odd years. The survey is voluntary and completely anonymous.

North Dakota has two survey groups, selected and voluntary. The selected school survey population is chosen, using a scientific sampling procedure which ensures that the results can be generalized to the state's entire student population. The schools that are part of the voluntary sample, selected without scientific sampling procedures, will only be able to obtain information on the risk behavior percentages for their school and not in comparison to all the schools.

Table 5 depicts some of the YRBS data that have been collected in 2015, 2017, and 2019. They are further broken down by rural and urban percentages. The trend column shows an "=" for statistically insignificant change (no change), "↑" for an increased trend in the data changes from 2017 to 2019, and "↓" for a decreased trend in the data changes from 2017 to 2019. The final column shows the 2019 national average percentage. For a more complete listing of the YRBS data, see Appendix E.

TABLE 5: Youth Risk Behavior Survey Results

North Dakota High School Survey

Rate Increase \uparrow , rate decrease \downarrow , or no statistical change = in rate from 2017-2019.

	ND 2015	ND 2017	ND 2019	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2019
Injury and Violence		l					
% of students who rarely or never wore a seat belt (when riding in a car							
driven by someone else)	8.5	8.1	5.9	=	8.8	5.4	6.5
% of students who rode in a vehicle with a driver who had been	4	465			4==	40 =	467
drinking alcohol (one or more times during the 30 prior to the survey)	17.7	16.5	14.2	=	17.7	12.7	16.7
% of students who talked on a cell phone while driving (on at least one							
day during the 30 days before the survey)	NA	56.2	59.6	=	60.7	60.7	NA
% of students who texted or e-mailed while driving a car or other	F7.6	52.6	52.0		56.5	54.0	20.0
vehicle (on at least one day during the 30 days before the survey)	57.6	52.6	53.0	=	56.5	51.8	39.0
% of students who were in a physical fight on school property (one or							0.0
more times during the 12 months before the survey)	5.4	7.2	7.1	=	7.4	6.4	8.0
% of students who experienced sexual violence (being forced by							
anyone to do sexual things [counting such things as kissing, touching,							
or being physically forced to have sexual intercourse] that they did not							40.0
want to, one or more times during the 12 months before the survey)	NA	8.7	9.2	=	7.1	8.0	10.8
% of students who were bullied on school property (during the 12							
months before the survey)	24.0	24.3	19.9	V	24.6	19.1	19.5
% of students who were electronically bullied (includes texting,							
Instagram, Facebook, or other social media ever during the 12 months							
before the survey)	15.9	18.8	14.7	Ψ	16.0	15.3	15.7
% of students who made a plan about how they would attempt suicide							
(during the 12 months before the survey)	13.5	14.5	15.3	=	16.3	16.0	15.7
Tobacco, Alcohol, and Other Drug Use		l				Τ	
% of students who currently use an electronic vapor product (e-							
cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs,							
and hookah pens at least one day during the 30 days before the							
survey)	22.3	20.6	33.1	^	32.2	31.9	32.7
% of students who currently used cigarettes, cigars, or smokeless							
tobacco (on at least one day during the 30 days before the survey)	NA	18.1	12.2	NA	15.1	10.9	10.5
% of students who currently were binge drinking (four or more drinks							
for female students, five or more for male students within a couple of							
hours on at least one day during the 30 days before the survey)	NA	16.4	15.6	=	17.2	14.0	13.7
% of students who currently used marijuana (one or more times during							
the 30 days before the survey)	15.2	15.5	12.5	=	11.4	14.1	21.7
% of students who ever took prescription pain medicine without a							
doctor's prescription or differently than how a doctor told them to use							
it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone,					40.0	40.0	44.0
and Percocet, one or more times during their life)	NA	14.4	14.5	=	12.8	13.3	14.3
Weight Management, Dietary Behaviors, and Physical Activity	1	l	ı				
% of students who were overweight (>= 85th percentile but <95 th							
percentile for body mass index)	14.7	16.1	16.5	=	16.6	15.6	16.1
% of students who had obesity (>= 95th percentile for body mass							
index)	13.9	14.9	14.0	=	17.4	14.0	15.5
% of students who did not eat fruit or drink 100% fruit juices (during							
the seven days before the survey)	3.9	4.9	6.1	=	5.8	5.3	6.3
% of students who did not eat vegetables (green salad, potatoes							
[excluding French fries, fried potatoes, or potato chips], carrots, or	4.7	- 1	6.6		5 2	6.6	7.0
other vegetables, during the seven days before the survey)	4.7	5.1	6.6	=	5.3	6.6	7.9

18.7	16.3	15.9	=	17.4	15.1	15.1
13.9	14.9	20.5	^	14.8	20.3	30.6
11.9	13.5	14.4	=	13.3	14.1	16.seven
	2.se					
NA	ven	2.8	=	2.1	2.9	NA
NA	51.5	49.0	=	55.0	22.6	55.9
18.9	18.8	18.8	=	18.3	18.2	19.8
38.6	43.9	45.3	=	48.3	45.9	46.1
38.9	36.6	38.3	=	35.4	36.1	38.4
NA	31.8	29.5	=	31.8	33.1	NA
NA	69.1	66.8	=	63.0	68.2	NA
	13.9 11.9 NA NA 18.9 38.6	13.9 14.9 11.9 13.5 2.se NA ven NA 51.5 18.9 18.8 38.6 43.9 38.9 36.6 NA 31.8	13.9 14.9 20.5 11.9 13.5 14.4 2.se NA 21.5 49.0 18.9 18.8 18.8 38.6 43.9 45.3 38.9 36.6 38.3 NA 31.8 29.5	13.9 14.9 20.5	13.9 14.9 20.5	13.9 14.9 20.5 \\rightarrow\$ 14.8 20.3 11.9 13.5 14.4 = 13.3 14.1 NA 2.se ven 2.8 = 2.1 2.9 NA 51.5 49.0 = 55.0 22.6 18.9 18.8 18.8 = 18.3 18.2 38.6 43.9 45.3 = 48.3 45.9 38.9 36.6 38.3 = 35.4 36.1 NA 31.8 29.5 = 31.8 33.1

Sources: https://www.cdc.gov/healthyyouth/data/yrbs/results.htm; https://www.nd.gov/dpi/districtsschools/safety-health/youth-risk-behavior-survey

Low Income Needs

The North Dakota Community Action Agencies (CAAs), as nonprofit organizations, were originally established under the Economic Opportunity Act of 1964 to fight America's war on poverty. CAAs are required to conduct statewide needs assessments of people experiencing poverty. The most recent statewide needs assessment study of low-income people in North Dakota, sponsored by the CAAs, was performed in 2020. The needs assessment study was accomplished through the collaboration of the CAAs and North Dakota State University (NDSU) by means of several kinds of surveys (such as online or paper surveys, etc., depending on the suitability of these survey methods to different respondent groups) to low-income individuals and families across the state of North Dakota. In the study, the survey data were organized and analyzed in a statistical way to find out the priority needs of these people. The survey responses from low-income respondents were separated from the responses from non-low-income participants, which allows the research team to compare them and then identify the similarity, difference, and uniqueness of them in order to ensure the validity and accuracy of the survey study and avoid bias. Additionally, two comparison methods were used in the study, including cross-sectional and longitudinal comparisons. These methods allow the research team not only to identify the top specific needs under the seven need categories, including Employment, Income and Asset-Building, Education, Housing, Health and Social/Behavior Development, Civic Engagement, and Other Supports, through the cross-sectional comparison but also to be able to find out the top specific needs, regardless to which categories these needs belong through the longitudinal comparison.

Top Needs Identified by People Experiencing Poverty Across North Dakota				
Category	Need			
Housing	Rental Assistance			
Income	Financial Issues			
Employment	Finding a job			
Health	Dental Insurance/Affordable Dental Care			
Education	Cost			

2020 North Dakota

LOW INCOME COMMUNITY NEEDS



NDSU SPATE DAKOTA

Assessed by CAPND and NDSU, November 2020

KEY FINDINGS

1st Priority Need

Rental Assistance

Total Survey Responses

Low-Incomes

Others (roles cannot be identified)

"Rental Assistance" becomes the 1st priority need of people experiencing poverty across the state under the category of "Housing". This need, however, would represent their immediate (short-term) need, which could be partially or significantly affected by the pandemic of COVID-19.

STATEWIDE OVERALL NEEDS

- The 1st priority need for the non-low-income respondents is "Mental Health Service".
- For the community (including both low-income and non-lowincome people), the 1st priority need is "Dental Issuance/Affordable Dental".

TOP STATEWIDE SPECIFIC NEEDS Housing - Rental Assistance EMPLOYMENT 41.8% 37.5% Low-Health and Social/Behavior Development -INCOME AND ASSET-Dental Insurance/Affordable Dental Incomes 37.3% BUILDING Other Needs - Food 36.4% 35.7% EDUCATION Health and Social/Behavior Development-33 3% Mental Health Service Non-Low-HOUSING 50.0% Health and Social/Behavior Development -Health Insurance/Affordable Health Care 50.1% Incomes 37.5% HEALTH AND Income and Asset-Building SOCIAL/BEHAVIOR. 40.7% Budget/Credit/Debit Counseling 12.5% Low-Income Health and Social/Behavior Development -22.9% CIVIC ENGAGEMENT 18.0% Responses Non-Low-Income Dental Insurance/Affordable Dental Community Responses Health and Social/Rehavior Development -OTHER SUPPORTS 12.4% Total Responses (Low-Income & Health Insurance/Affordable Health Care 13.6% Non-Low-Income) Health and Social/Behavior Development 0% 20% 40% 60% Mental Health Service TOP REGIONAL OVERALL NEEDS FOR LOW-INCOMES 1. Housing 2. Income and Asset - Building 2. Health and Social/Behavior 3. Education Development 3. Income and Asset - Building 1. Housing WALSH 4 2 Education 1. Housing 3. Income and Asset - Building 2. Income and Asset - Building MILEO 3. Employment 1. Housing 1. Housing FOSTER 2. Health and Social/Behavior 2. Employment Development 3. Health and Social/Behavior 3. Income and Asset - Building Development 6 1. Health and Social/Behavior 1. Housing Development 2. Employment Income and Asset - Building 3. Income and Asset - Building Housing

ACKNOWLEDGMENTS

This project was supported by the Consensus Council, Inc. (in partnership with the Bush Foundation) through the Community Innovation Grants.



info@capnd.org



701-232-2452



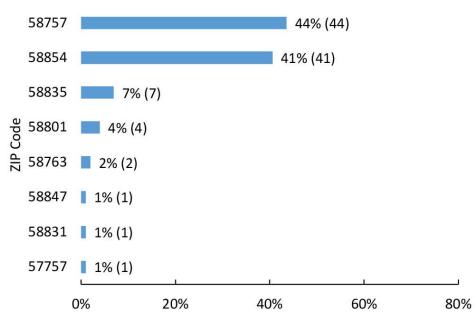
https://www.capnd.org/

Survey Results

As noted previously, 129 community members completed the survey in communities throughout the counties in the McKenzie County Healthcare Systems service area. For all questions that contained an "Other" response, all of those direct responses may be found in Appendix G. In some cases, a summary of those comments is additionally included in the report narrative. The "Total respondents" number under each heading indicates the number of people who responded to that particular question. Some questions allowed for selection of more than one response.

The survey requested that respondents list their home ZIP code. While not all respondents provided a ZIP code, 101 persons did, revealing that most respondents lived in Mandaree and the Fort Berthold Reservation (44%, N=44), while the second-highest responses lived in Watford City (41%, N=41). These results are shown in Figure 5.

Figure 5: Survey Respondents' Home ZIP Code Total respondents = 101



Survey results are reported in six categories: demographics; healthcare access; community assets, challenges; community concerns; delivery of healthcare; and other concerns or suggestions to improve health.

Survey Demographics

To better understand the perspectives offered by survey respondents, survey-takers were asked a few demographic questions. Throughout this report, numbers (N) instead of just percentages (%) are reported because percentages can be misleading with smaller numbers. Survey respondents were not required to answer all questions.

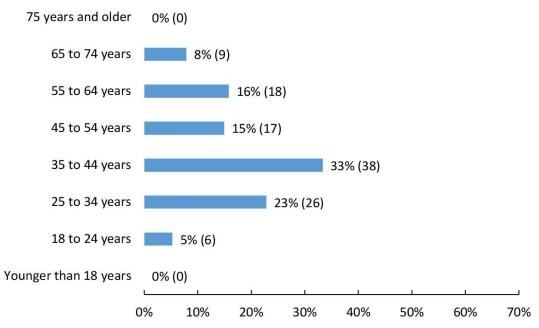
With respect to demographics of those who chose to complete the survey:

- 24% (N=27) were age 55 or older
- The majority (63%, N=73) were female
- Slightly less than one-third of the respondents (29%, N=33) had bachelor's degrees or higher
- The number of those working full time (65%, N=74) was over 10 times more than those who were retired (6%, N=7)

- 52% (N=59) of those who reported their ethnicity/race were White
- 46% of the population (N=50) had household incomes of less than \$50,000

Figures 6 through 12 show these demographic characteristics. It illustrates the range of community members' household incomes and indicates how this assessment considered input from parties who represent the varied interests of the community served, including a balance of age ranges, those in diverse work situations, and community members with lower incomes.

Figure 6: Age of Survey Respondents Total respondents = 114



People younger than age 18 are not questioned using this survey method.

Figure 7: Gender of Survey Respondents Total respondents = 116

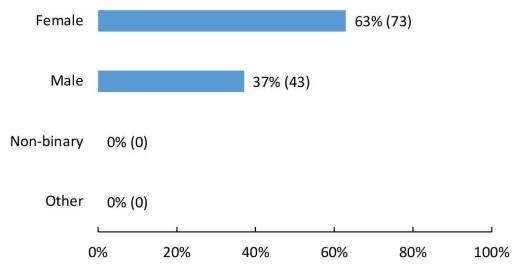


Figure 8: Educational Level of Survey Respondents Total respondents = 114

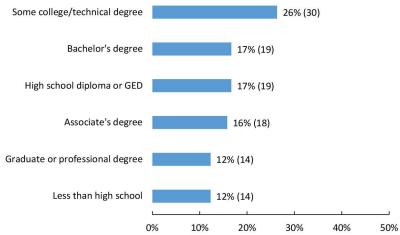
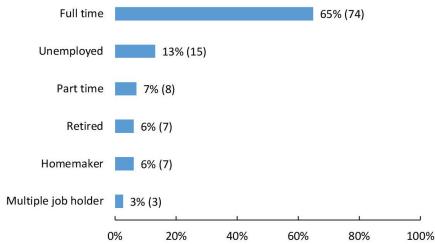
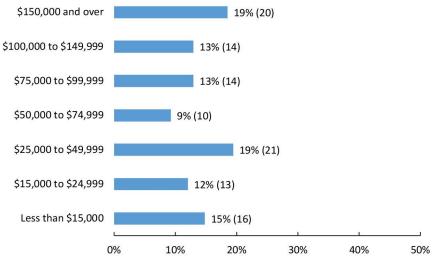


Figure 9: Employment Status Demographics of Survey Respondents Total respondents = 114



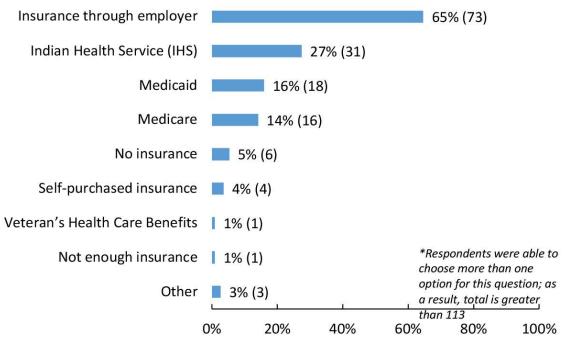
Of those who provided a household income, 27% (N=29) of the community members reported a household income of less than \$25,000. Thirty-two percent (N=34) indicated a household income of \$100,000 or more. This information is shown in Figure 10.

Figure 10: Household Income of Survey Respondents Total respondents = 108



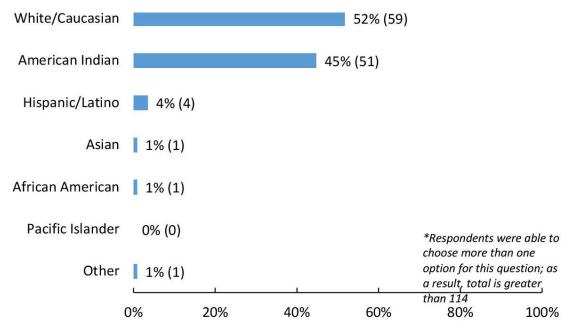
Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. Six percent (N=7) of the respondents reported having no health insurance or being under-insured. The most common insurance types were insurance through one's employer (N=73), followed by Indian Health Service (N=31), and Medicaid (N=18).

Figure 11: Health Insurance Coverage Status of Survey Respondents Total respondents = 113*



As shown in Figure 12, there were almost equal amounts of White/Caucasians (52%) and American Indians (45%), taking the survey.

Figure 12: Race/Ethnicity of Survey Respondents Total respondents = 114*



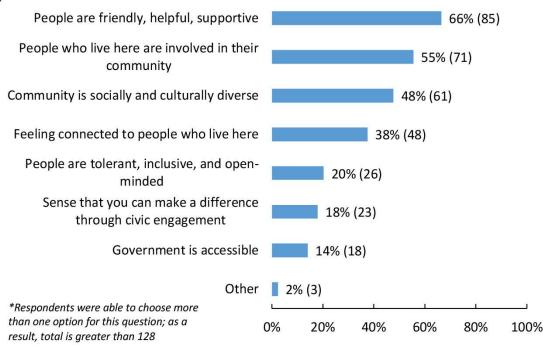
Community Assets and Challenges

Survey-respondents were asked what they perceived as the best things about their community in four categories: people, services and resources, quality of life, and activities. In each category, respondents were given a list of choices and asked to pick the three best things. Respondents occasionally chose less than three or more than three choices within each category. If more than three choices were selected, their responses were not included. The results indicate there is consensus (with at least 65 respondents agreeing) that community assets include:

- Family-friendly (N=85)
- People are friendly, helpful, supportive (N=85)
- Local events and festivals (N=71)
- People who live here are involved in their community (N=71)
- Activities for families and youth (N=69)
- Recreational and sports activities (N=69)

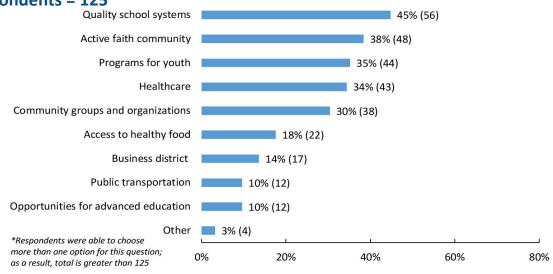
Figures 13 to 16 illustrate the results of these questions.

Figure 13: Best Things About the PEOPLE in Your Community Total respondents = 128*



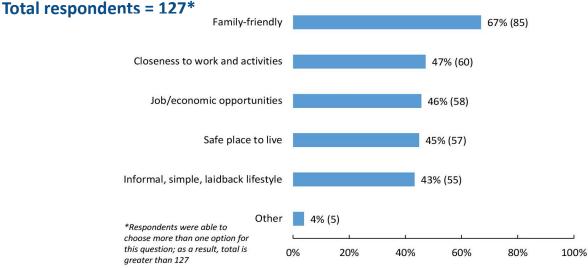
Included in the "Other" category of the best things about the people was that locals in Watford City are not welcoming to new people and diversity, and too many people are on drugs with no one doing anything.

Figure 14: Best Things About the SERVICES AND RESOURCES in Your Community Total respondents = 125*



Respondents who selected "Other" specified that in order to access any quality services, you have to leave Watford City, not enough people care to do things for the young, and none of these apply.

Figure 15: Best Things About the QUALITY OF LIFE in Your Community



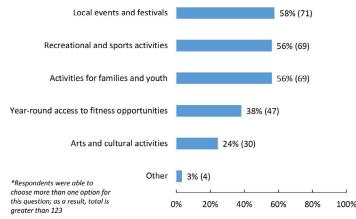
The "Other" responses, regarding the best things about the quality of life in the community, specified that none of this is available in Watford City, outdoor recreation, and country life is better than in town.

Figure 16: Best Thing About the ACTIVITIES in Your Community

Total responses = 123*

Local events and festivals

58% (3)



Respondents who selected "Other" specified that the best things about the activities in the community included activities for senior citizens, Little Missouri National Grasslands, and Theodore Roosevelt National

Park.

Community Concerns

At the heart of this Community Health Needs Assessment (CHNA) was a section on the survey asking survey respondents to review a wide array of potential community and health concerns in six categories and pick their top three concerns. The six categories of potential concerns were:

- Community/environmental health
- Availability/delivery of health services
- Youth population
- Adult population
- Senior population
- Impacts of oil development

With regard to responses about community challenges, the most highly voiced concerns (those having at least 40 respondents) were:

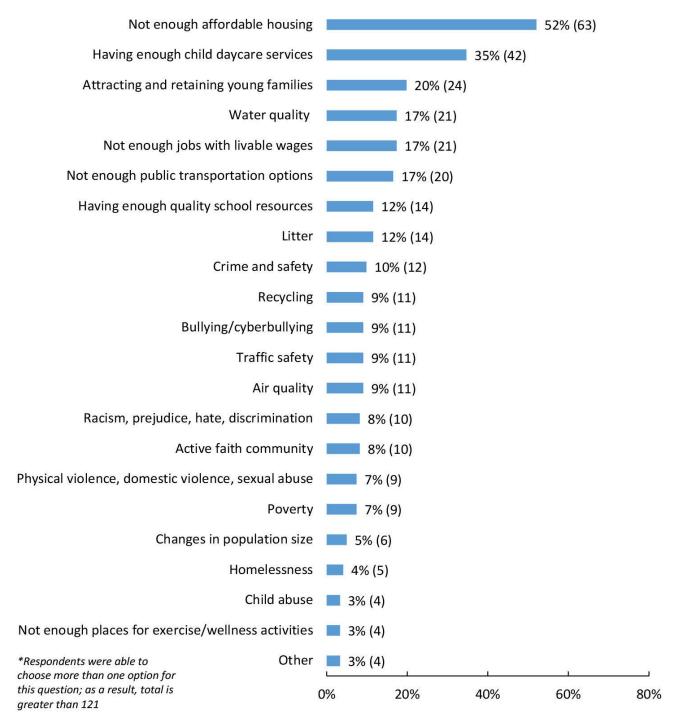
- Alcohol use and abuse adult (N=64)
- Drug use and abuse youth (N=64)
- Not enough affordable housing (N= 63)
- Drug use and abuse adult (N=56);
- Alcohol use and abuse youth (N=54);
- Alcohol and drug use and abuse oil impact (N=52)
- Lack of affordable housing (N=43)
- Having enough child daycare services (N=42)
- Smoking and tobacco use (second-hand smoke, vaping) youth (N=40)

The other issues that had at least 27 votes included:

- Depression/anxiety adult (N=36)
- Assisted living options (N=35)
- Depression/anxiety youth (N=35)
- Long-term/nursing home care options (N=34)
- Ability to meet needs of older population (N=32)
- Availability of resources to help the elderly stay in their homes (N=29)
- Ability to get appointments for health services within 48 hours (N=29)
- Not enough healthcare staff in general (N=28)
- Ability to retain primary care providers (MD, DO, NP, PA, nurses) in the community (N=28)
- Availability of home health (N=27)

Figures 17 through 22 illustrate these results.

Figure 17: Community/Environmental Health Concerns
Total respondents = 121*



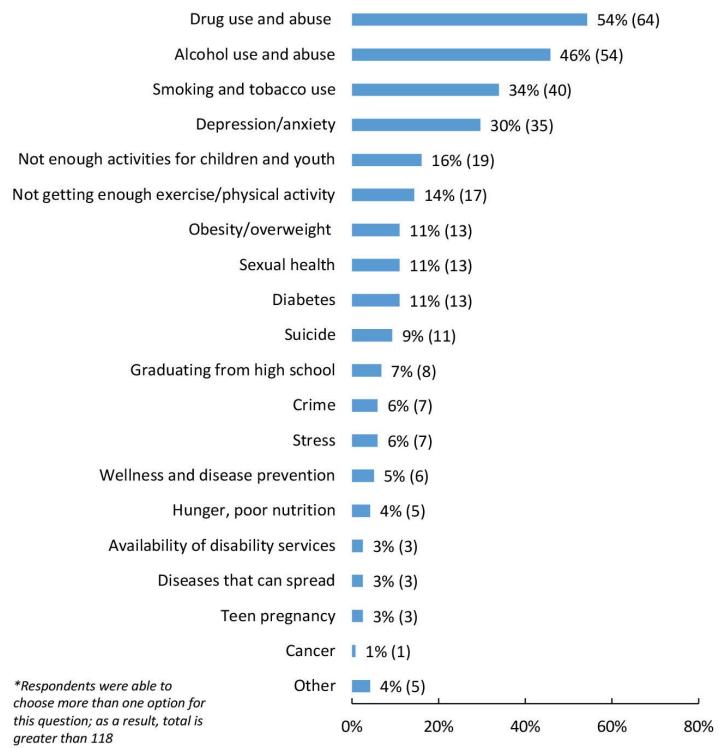
In the "Other" category for community and environmental health concerns, the following were listed: overreach of government, not enough places to shop for goods, drugs, and all of the above.

Figure 18: Availability/Delivery of Health Services Concerns
Total respondents = 121*



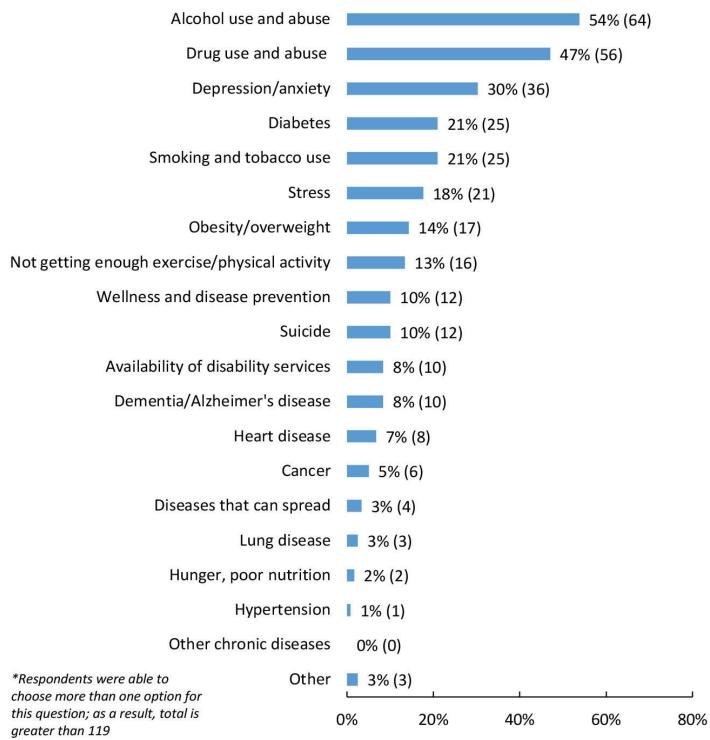
Respondents who selected "Other" identified concerns in availability and delivery of health services as notorious billing system issues, door to door checkups, and all of the above.

Figure 19: Youth Population Health Concerns Total respondents = 118*



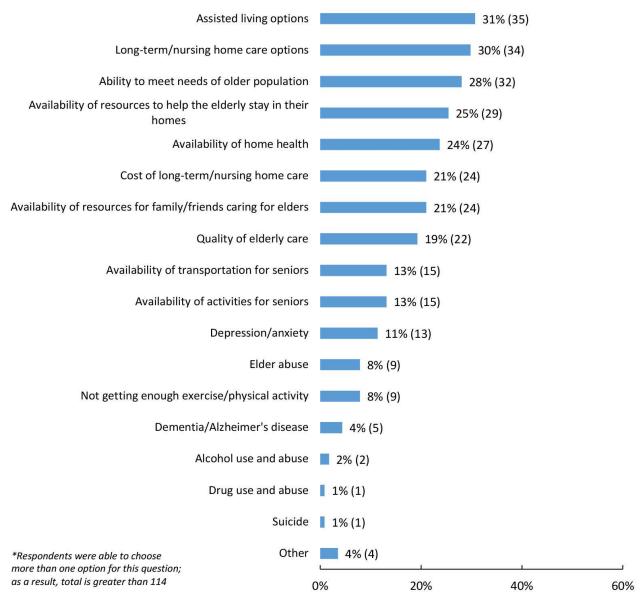
Listed in the "Other" category for youth population concerns were use of energy drinks and all of the above.

Figure 20: Adult Population Concerns Total respondents = 119*



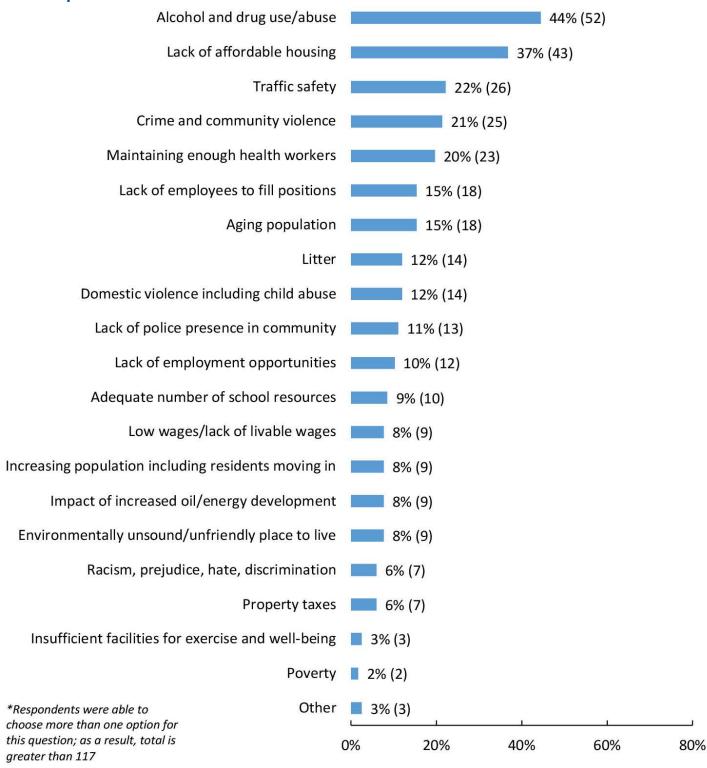
COVID-19 and all of the above were indicated in the "Other" category for adult population concerns.

Figure 21: Senior Population Concerns Total respondents = 114*



In the "Other" category, the concerns listed were no one level housing, no assisted living, and all of the above.

Figure 22: Concerns about Impacts of Oil Development Total respondents = 117*



In the "Other" category, the concerns listed were all of the above.

In an open-ended question, respondents were asked what single issue they feel is the biggest challenge, facing their community. Two categories emerged above all others as the top concerns:

- 1. Affordable housing
- 2.Drug/alcohol/substance abuse

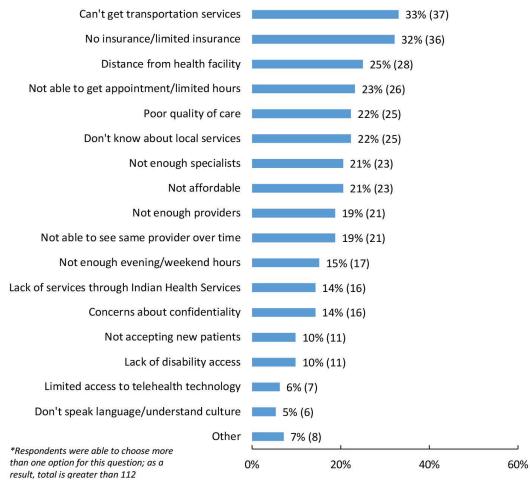
Other biggest challenges that were identified were clean water and air, high rent costs for businesses, distance to larger food markets, inadequate healthcare, lack of affordable childcare, lack of livable wages, lack of support for elders, not enough activities for the youth, lack of places to buy healthy food, oil companies, year-round gym opportunities with hours outside normal business hours for those who work, COVID-19 vaccine refusal, racism/prejudice/discrimination, and the school system.

Delivery of Healthcare

The survey asked residents what they see as barriers that prevent them or other community residents from receiving healthcare. The most prevalent barrier, perceived by residents, was can't get transportation services (N=37), with the next highest being no insurance/limited insurance (N=36). After these items, the next most commonly identified barriers were distance from health facility (N=28), not able to get appointment/limited hours (N=26), poor quality of care (N=25), and don't know about local services (N=25). The majority of concerns indicated in the "Other" category were insurance issues, cannot get through on phones, poor bedside manners by current staff, poor billing system, and no trust in the hospital.

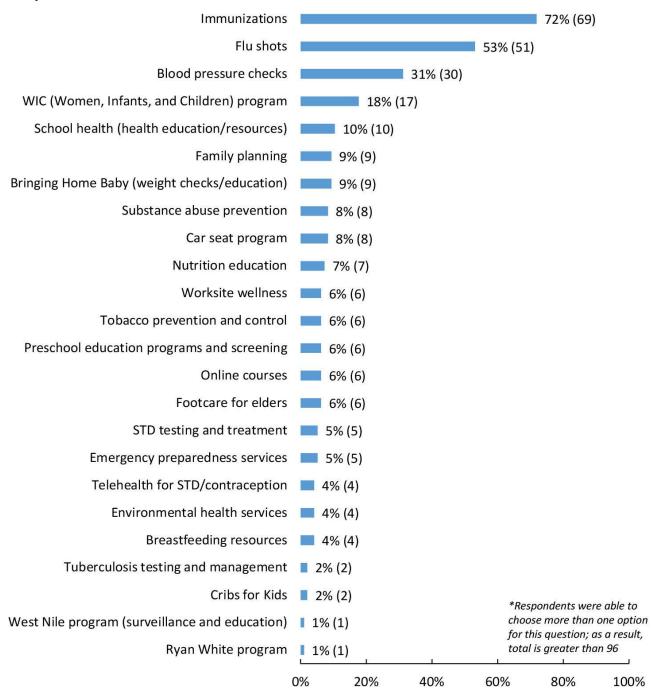
Figure 23 illustrates these results.

Figure 23: Perceptions About Barriers to Care Total respondents = 112*



Considering a variety of healthcare services offered by Upper Missouri District Health Unit (UMDHU), respondents were asked to indicate what, if any, services they or a family member have used at UMDHU (See Figure 24).

Figure 24: Utilization of Public Health Unit Services Total respondents = 96*



In an open-ended question, respondents were asked what specific healthcare services, if any, they think should be added locally. The number one desired service to add locally was mental health services. Other requested services included:

- More timely access to clinic
- Dialysis
- Home healthcare
- More staff for local public health
- Increased number of cardiac screening services
- Men's Health Day programs
- Surgeon
- Alzheimer's and dementia
- ENT, Dermatology
- Delivery room and NICU

- More infant (pediatric care)
- Birth control more options
- 24/7 on-call nurse
- Cancer
- 24/7 ER or clinic
- Faster ambulance services
- Personal training fitness
- More education on flu shots
- WIC
- Physician in Mandaree at all times

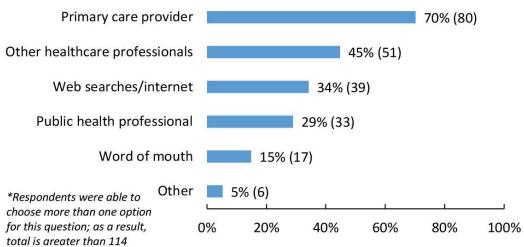
While not a service, many respondents indicated that they would like services for alcohol and drug treatment to include alcohol and narcotic anonymous meetings. Two people indicated they would like to see cardiology added or increased cardiac screening service.

The key informant and focus group members felt that the community members were aware of the majority of the health system and public health services. There were a number of services where they felt the hospital should increase marketing efforts; these services included pharmacy, specialists and even our everyday docs that are here in Watford City (hospitalists too), therapy (especially for seniors), new services, orthopedics, and walk-in clinic. Some comments were made about keeping the community informed about what is happening with OB services if it turns into reality and prenatal care. Some mentioned that all of the services should be advertised, as the community is not aware; in addition, there was a comment about new docs needing to get out into the community.

Respondents were asked where they go to for trusted health information. Primary care providers (N=80) received the highest response rate, followed by other healthcare professionals (N=51), and then web/internet searches (N=39).

Results are shown in Figure 25.

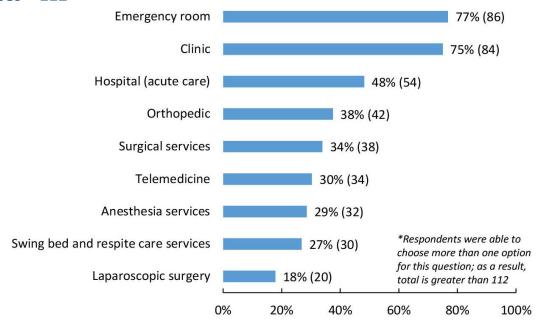
Figure 25: Sources of Trusted Health Information Total respondents = 114*



In the "Other" category, frontline Doctors, utilize gynecologist in another city as my primary caregiver, I can't trust my health to anyone here, telehealth via BCBSND, off the reservation, and don't know were listed as a source of trusted information.

Considering a variety of healthcare services offered by MCHS, respondents were asked to indicate of what services they are aware and what, if any, services they or a family member have used at MCHS (See Figure 24).

Figure 26: Awareness/Use of General and Acute Services
Total responses = 112*



(See Figure 26-29).

Figure 27: Awareness/Use of Screening and Therapy Services Total responses = 97*

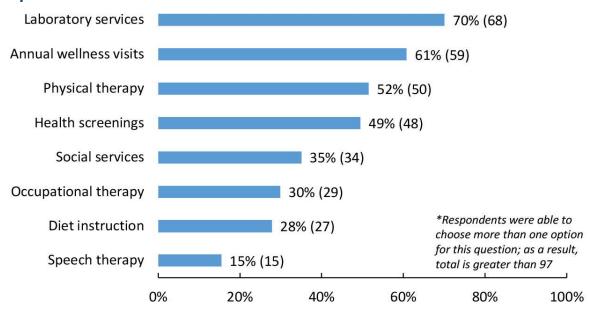


Figure 28: Awareness/Use of Radiology Services Total responses = 90*

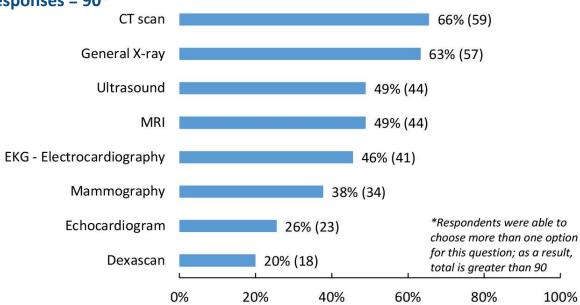
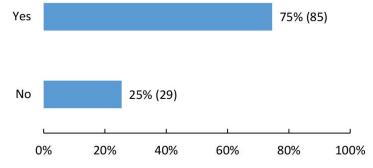


Figure 29: Awareness of McKenzie County Healthcare System Urgent Care Clinic Total responses = 114



In an effort to gauge if community members were aware of MCHS Foundation and ways they gave to the Foundation, two questions were included below. (see Figure 30 and 31).

Figure 30: Awareness of McKenzie County Healthcare System Foundation Total responses = 111

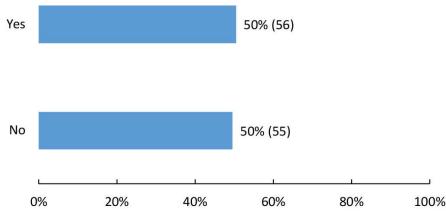
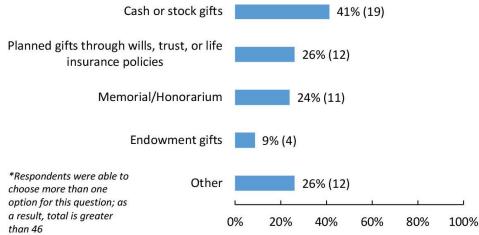


Figure 31: Forms of Support for the McKenzie County Healthcare System Foundation Total responses = 46*

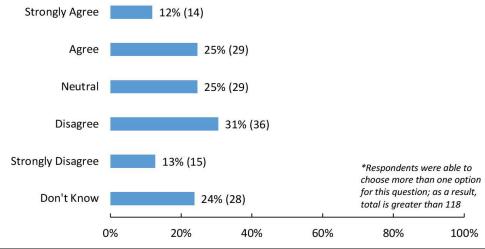


In the "Other" category, concerns listed was no they waste their money, not at all, the prices for the services are outrageous they can pay for stuff with the gouging they do to the community, they already charge an arm and a leg for anything, so why would I give my money to the foundation and never knew.

Respondents were asked if they would support a sales tax to support MCHS. (Figure 32).

Figure 32: Do You Feel the Community Would Agree to a Sales Tax to Support McKenzie County Healthcare System

Total responses = 118*



The final question on the survey asked respondents to share concerns and suggestions to improve the delivery of local healthcare. Some of responses focused on concern with the lack of physicians, physicians leaving the community to practice elsewhere, and not having consistency with the same provider. The community needs to retain existing providers and continue to recruit new ones even when there is no shortage. Finding ways to retain providers and shorten appointment times so that more people can be seen at the rural health clinic along with giving more support to the urgent care clinic. Try to bring on core staff providers for the urgent care and emergency department. Recruit more FMD's and specialists. Some people felt traveling three hours for needed care would be worth it before stopping at the local facility. Others said the travel is too much.

Additional suggestions for MCHS included the addition of early morning, evening, and weekend appointments. Saturday options for mammograms and preventive care would be nice along with a website that is user friendly and phones that are answered. Create more awareness through media/newspapers/radio etc. Our community needs information on services available and transportation. Administration should have community meetings for those wanting to be informed or for asking questions.

Waiting room experiences could be improved. There needs to be continued update of all addresses in their system. Updating the 911 locations/address is a must in our community.

Comments were made about locals being blamed for many leaving the community, even the providers. Better quality of life, which includes better healthcare and kinder people, can be found other places. Some even said they were concerned about confidentiality at the clinic and hospital. One person felt there was lack of care about the patients, and that doctors and nurses need to listen to their patients versus talking down to them.

Concerns about adequately trained lab staff and follow through on calling patients with lab results (especially when promised). Demanding 50-100% service in order to get labs or images is sometimes impossible; therefore, most people go without healthcare because they have to choose between health or bills that need to be paid. Better communication was mentioned in addition to too much COVID-19 testing after two years.

In addition, two comments were brought up about the question of sales tax and the wellness center. On the survey sales tax question, they felt it was interesting. One idea is the city will have the GPT portion of the Roughrider Center debt paid off in 2026. After 2026, maybe the GPT revenue could assume the Roughrider sales tax bond currently being paid for with 0.75% of our sales tax revenue through 2045, and the 0.75% sales tax revenue could then be assigned to MCHS if the community feels that is a responsible decision. Otherwise, MCHS is already receiving sales tax dollars today, not sure on net percentage, but 0.25% currently may be close. In regard to the wellness center, they felt there should have been a question added to the survey to hear from the community. They were wanting the opportunity to share and hear other issues, regarding this subject.

It was suggested that the obstetrics services are being mentioned, but nothing is coming to reality in the community.

High hopes of many to deliver their baby in Watford City.

Others believe that MCHCS does a great job of identifying and delivering healthcare within its means and offers a wide variety of healthcare services.

Findings from Key Informant Interviews & the Community Meeting

Questions about the health and well-being of the community, similar to those posed in the survey, were explored during key informant interviews with community leaders, health professionals, and with the community group at the first meeting. The themes that emerged from these sources were wide-ranging with some directly associated with healthcare and others more rooted in broader social and community matters.

Generally, overarching issues that developed during the interviews and community meeting can be grouped into five categories (listed in alphabetical order):

- Having enough child daycare services
- Cost of long-term/nursing home care
- Not enough affordable housing
- Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community
- Depression/anxiety in youth and adults

To provide context for the identified needs, following are some of the comments made by those interviewed about these issues:

Having enough child daycare services

- Constant struggle as there is never enough
- Community concerns...Daycare/childcare services and cost of childcare services
- Availability and cost of childcare. Childcare effects parent's ability to work and seek other desired services
- More jobs here than people, but if you don't have daycare, moms can't work

Cost of long-term/nursing home care

- The ability to care for our senior and the chronically ill. Because the lack of home health services and hospice programs, our seniors and those persons who are chronically ill are dependent on family and friends. This situation causes a problem for those who do not have close family in the area.
- One of my biggest concerns is specific to the elderly.

Not enough affordable housing

• Constant struggle. Not enough single-family homes.

Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community

- Too much use of traveling doctors and other staff
- Lack of consistency of providers
- Quality of doctors and quality of care. We want to know that we are getting the best are we can by choosing to go to Watford City. Otherwise, we can go to surrounding healthcare facilities

Depression/anxiety in youth and adults

- Depression in our area is bad
- As community continues to expand, we continue to have shortages in the services; we need (mental health), healthcare services. Match our population to our needs. Diversity.
- Mental health services are needed badly for depression
- I have a ton of folks, looking for counseling and psychological services

Community Engagement and Collaboration

Key informants and focus group participants were asked to weigh in on community engagement and collaboration of various organizations and stakeholders in the community. Specifically, participants were asked, "On a scale of 1 to 5, with 1 being no collaboration/community engagement and 5 being excellent collaboration/community engagement, how would you rate the collaboration/engagement in the community among these various organizations?" This question was not intended to rank services provided. They were presented with a list of 13 organizations or community segments to score. According to these participants, the hospital, pharmacy, public health, and other long-term care (including nursing homes/assisted living) are the most engaged in the community. The averages of these scores (with 5 being "excellent" engagement or collaboration) were:

- Schools (4.0)
- Long-term care, including nursing homes and assisted living (3.75)
- Emergency services, including ambulance and fire (3.75)
- Economic development organizations (3.75)
- Hospital (healthcare system) (3.50)
- Law enforcement (3.50)
- Business and industry (3.50)
- Pharmacy (3.50)
- Public Health (3.0)
- Faith-based (3.0)
- Other local health providers, such as dentists and chiropractors (3.0)
- Human services agencies (2.75)
- Tribal Health and Indian Health Services (2.0)

Priority of Health Needs

A community group met on April 7, 2022. Thirteen community members attended the meeting. Representatives from the Center for Rural Health (CRH) presented the group with a summary of this report's findings, including background and explanation about the secondary data, highlights from the survey results (including perceived community assets and concerns, and barriers to care), and findings from the key informant interviews.

Following the presentation of the assessment findings and after considering and discussing the findings, all members of the group were asked to identify what they perceived as the top four community health needs. All of the potential needs were listed on large poster boards, and each member was given four stickers to place next to each of the four needs they considered the most significant.



The results were totaled, and the concerns most often cited were:

- Having enough child daycare services (6 votes)
- Availability of resources to help the elderly stay in their homes (6 votes)
- Not enough affordable housing (4 votes)
- Availability of mental health services (4 votes)

From those top four priorities, each person put one sticker on the item they felt was the most important. The rankings were:

- 1. Availability of mental health services (6 votes)
- 2. Availability of resources to help the elderly stay in their homes (2 votes)
- 3. Having enough child daycare services (1 vote)
- 4. Not enough affordable housing (0 votes)

Following the prioritization process during the second meeting of the community group and key informants, the number one identified need was the availability of mental health services. A summary of this prioritization may be found in Appendix E.

Comparison of Needs Identified Previously

Top Needs Identified 2019 CHNA Process	Top Needs Identified 2022 CHNA Process
Affordable and available housing	Not enough affordable housing
Ability to retain and recruit physicians/ RNs to the area	Availability of resources to help the elderly stay in their homes
Domestic/Spouse violence	Having enough child daycare servicee
	Availability of mental health services

The current process identified one common need from 2019, which was the lack of affordable housing.

Hospital and Community Projects and Programs Implemented to Address Needs Identified in 2019

In response to the needs identified in the 2019 community health needs assessment process, the following actions were taken:

Need 1: Affordable Housing: Since the last CHNA process, McKenzie County Healthcare Systems (MCHS) has migrated, over time, of non-employees out of MCHS rental units (over 40 units owned by hospital with enough employees to occupy). Because of this situation, new housing units were/are available. Information is provided to new employees, making them aware of available realtors and the county program to underwrite the cost of developing a new construction home. MCHS continues to actively participate in any county or state initiatives that would promote affordable housing (Lewis and Clark development group and USDA). Pete Edis, CEO of MCHS, participates on the local Economic Development Council (EDC).

Need 2: Ability to Retain and Recruit Physicians/RNs in Area: The community was concerned, during the

last CHNA process, about the number of physicians and RNs available and the turnover of physicians and RNs. MCHS maintains a contract with a recruiting agency. Three physicians were hired who have remained in place until year two, per expected outcomes – Dr. Maria Marchenko, Pediatrician; Dr. Torfi Hoskuldsson, General Surgery; and Dr. Ravindra Joshi, Orthopedic Surgery. The new hospital facility has been a great tool for attracting new employees. As local economic development efforts flourish, it has increased the diversity in types of jobs available for spouses. In 2021, MCHS established an HR Recruiter position to enhance and expand recruitment networks and, specifically, to make a concerted effort to hire additional nursing staff in the midst of a national shortage. Benefits available to employees are promoted through employment ads in print and digital publications as well as through social media and recruitment initiatives. CNA courses are available onsite as well. MCHS partners with Williston State College to provide clinical experiences for LPN students and actively works to recruit Williston State College LPN graduates. MCHS has implemented a Tuition Reimbursement Incentive Program as well.

Need 3: Domestic/Spouse Violence: The community was concerned with issues surrounding domestic/spouse violence. Through social media, resources have been shared and made available. A meeting was held with the local Family Crisis Shelter representative, Jennifer Winter, to discuss materials that could be provided in the ED. She thought it might be more effective to have providers share them with individuals in patient rooms as opposed to having them available in a waiting room. Tips were provided for providers on how they could assess whether a person is feeling safe in their home. Jennifer shared that if someone presents in the ED and needs crisis services to assist with domestic violence, sexual assault (ages 14 +), and/or human trafficking, it's important for the provider or nurse to give the patient the crisis line, not her landline. The crisis line is always staffed; the landline is not. The number for the crisis line is (701) 770-1141. The opportunity for planning a community event/presentation was discussed as well in September 2019, looking into 2020. COVID-19 then struck, so a community event was not held.

The above implementation plan for McKenzie County Healthcare Systems, Inc., is posted on their website at https://www.mckenziehealth.com/about/.

Next Steps – Strategic Implementation Plan

Although a Community Health Needs Assessment (CHNA) and strategic implementation plan are required by hospitals and local public health units considering accreditation, it is important to keep in mind the needs identified, at this point, will be broad community-wide needs along with healthcare system-specific needs. This process is simply a first step to identify needs and determine areas of priority. The second step will be to convene the steering committee, or other community group, to select an agreed-upon prioritized need on which to begin working. The strategic planning process will begin with identifying current initiatives, programs, and resources already in place to address the identified community need(s). Additional steps include identifying what is needed and feasible to address (taking community resources into consideration) and what role and responsibility the hospital, clinic, and various community organizations play in developing strategies and implementing specific activities to address the community health need selected. Community engagement is essential for successfully developing a plan and executing the action steps for addressing one or more of the needs identified.

"If you want to go fast, go alone. If you want to go far, go together." Proverb

Community Benefit Report

While not required, the Center for Rural Health (CRH) strongly encourages a review of the most recent Community Benefit Report to determine how/if it aligns with the needs identified, through the CHNA, as well as the implementation plan.

The community benefit requirement is a long-standing requirement of nonprofit hospitals and is reported in Part I of the hospital's Form 990. The strategic implementation requirement was added as part of the ACA's CHNA requirement. It is reported on Part V of the 990. Not-for-profit healthcare organizations demonstrate their commitment to community service through organized and sustainable community benefit programs providing:

- Free and discounted care to those unable to afford healthcare.
- Care to low-income beneficiaries of Medicaid and other indigent care programs.
- Services designed to improve community health and increase access to healthcare.

Community benefit is also the basis of the tax-exemption of not-for-profit hospitals. The Internal Revenue Service (IRS), in its Revenue Ruling 69–545, describes the community benefit standard for charitable tax-exempt hospitals. Since 2008, tax-exempt hospitals have been required to report their community benefit and other information, related to tax-exemption on the IRS Form 990 Schedule H.

What Are Community Benefits?

Community benefits are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs. They increase access to healthcare and improve community health.

A community benefit must respond to an identified community need and meet at least one of the following criteria:

- Improve access to healthcare services
- Enhance health of the community
- Advance medical or health knowledge
- Relieve or reduce the burden of government or other community efforts

A program or activity should not be reported as community benefit if it is:

- Provided for marketing purposes
- Restricted to hospital employees and physicians
- Required of all healthcare providers by rules or standards
- Questionable as to whether it should be reported
- Unrelated to health or the mission of the organization

Appendix A – Critical Access Hospital Profile



Critical Access Hospital Profile Watford City, North Dakota

McKenzie County Healthcare Systems

Administrator / CEO:

Peter Edis

Chief of Medical Staff: Dr. Gary Ramage

Board Chair: Gary Brown

City Population:

6,207 (2020 Decennial Census)

County Population:

14,704 (2020 Decennial Census)

County Median Household Income:

75,238 (American Community Survey 5-Year Estimates)

County Median Age:

30.3 (2020 American Community Survey 5-year Estimates)

Service Area Population: 25,000

Owned by: Nonprofit

Hospital Beds: 24

Skilled Nursing Facility

Beds: 39

Trauma Level: V

Critical Access Hospital

Designation: 1999

Economic Impact on the County²

Employment Impact:

Direct – 195 Secondary – 62 Total – 257

Financial Impact:

Direct – \$17.5 million Secondary – \$3.57 million Total – \$21 million

Mission

Our commitment is to the patients and their families, whatever their needs may be. Our goal is to achieve the highest level of healthcare for these patients and their families. We are rural USA, therefore, we provide hometown values committed to quality services, continuity of care, assurance of qualified staff, and family involvement for individual patients and clients.

County: McKenzie

Address: 709 4th Ave NE, Watford City, ND 58854

Phone: 701.842.3000 Fax: 701.842.6248

Web: www.mckenziehealth.com

McKenzie County Healthcare Systems, Inc. (MCHS), supported by the Christian churches in our community, is a 24-bed Medicare certified hospital, offering swing bed program services. Dedicated to a healing ministry, we are committed to excellence and service in a person-centered environment that respects the human life of all, regardless of race, creed, color, national origin, disability, pregnancy, sex, and/or marital status.

MCHS supports a team approach to effectively and efficiently meeting the needs of our patients and their families. Evidence-based nursing practice is an important element of quality care at MCHS. The nursing staff incorporates evidence-based decision making to optimize outcomes for patients, improve clinical practice, achieve cost-effective nursing care, and ensure accountability in decision making.

Services

McKenzie County Healthcare Systems provides the following services directly:

- · Assisted living
- Cardiac rehab
- Emergency services
- · General surgery
- Hospitalist services
- Inpatient pharmacy
- Laboratory services
- Nursing
- Nursing home
- Nutrition services
- Occupational therapy
- Orthopedic surgery
- Pain management
- Pediatrics

- · Physical therapy
- Pulmonary rehab
- Radiology (MRI, CT, X-Ray, US, Dexa)
- Respiratory therapy
- Respite care
- Rural Health Clinic
- Specialty clinics: orthopedics, general surgery, urology, sports medicine
- Surgery department
- · Swing bed program
- Urology
- · Wellness center

McKenzie County Healthcare Systems provides the following services through contract or agreement:

- · Speech therapy
- · Echocardiography

Staffing

Physicians:	16
PAs:	0
DNP:	1
Nurse Practitioners:	6
RNs:	44
LPNs:	15
Total Employees:	226

Sources

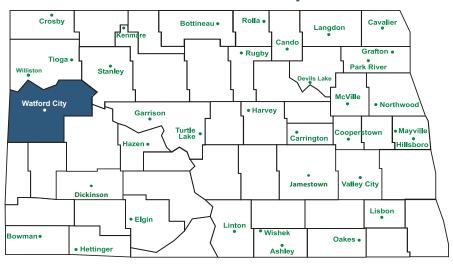
- ¹-US Census Bureau; American Factfinder, Community Facts
- ² -Economic Impact 2020 Center for Rural Health Oklahoma State University and Center for Rural Health University of North Dakota



This project is supported by the Medicare Rural Hospital Flexibility Grant Programs and the State Office of Rural Health Grant Program at the Center for Rural Health, University of North Dakota School of Medicine & Health Sciences located in Grand Forks, North Dakota.

ruralhealth.und.edu

North Dakota Critical Access Hospitals



History

McKenzie County Healthcare Systems, Inc., was born on July 1, 2004, with the merger of the Good Shepherd Home Corporation and the McKenzie County Memorial Hospital Corporation. This resulted in the consolidation of all healthcare services in McKenzie County. McKenzie County Healthcare Systems (MCHS) consists of a 24-bed CAH, emergency department, Rural Health Clinic, specialty clinics, urgent care, physical therapy, occupational therapy, Connie Wold Wellness Center, Good Shepherd Home Nursing Home, and Horizon Assisted Living.

McKenzie County Memorial Hospital officially opened its doors on March 10, 1952. Dr. A.H. Lamal was the first physician with Mrs. Royce Gravert, R.N. as the Administrator. New building additions were added in 1963 and 1977. In 1986, the McKenzie County Clinic opened across the street from the hospital, under the experienced eye of Dr. G.D. Ebel. The Healthy Hearts Wellness Center was opened in 1992 to provide the community with a workout center.

The Good Shepherd Home was opened on January 8, 1964. The Lutheran Churches of McKenzie County, in conjunction with the Arnegard Old Folks Home, had a vision of providing Christian care to the aging residents of their community. The first board of directors included Lee Stenehjem, Murphy Ecklund, Ivan Omlid, Sidney Swenson, and Paul Berge. In 1994, the Basic Care Addition was added. In 1986, the Heritage Senior Apartments were added, and in 2002 the Horizon Assisted Living Facility opened their doors. In late 2017 the nursing home moved, and in July 2018 MCHS moved into their newly contructed building.

Recreation

Watford City is in west central North Dakota, just 40 miles from the Montana border. The economic base of the area relies primarily on farming, ranching, and oil and gas related industries. Two elementary schools and a high school provide educational services to the community. Within 50 to 125 miles of the city, post-secondary opportunities are available from four state-affiliated universities. The city park system includes several parks, a swimming pool, hockey rink, tennis courts and softball complex. An 18-hole golf course is only two miles east of town. Lake Sakakawea, the world's largest man-made lake, is 25 miles north, with outstanding opportunities for fishing, sailing and other water sports. The North Dakota Badlands and Theodore Roosevelt National Park's North Unit are 15 miles south, offering spectacular scenery, hiking, camping, and canoeing on the Little Missouri River.

Updated 6/22

Appendix B – Economic Impact Analysis

McKenzie County Healthcare Systems

Healthcare, especially a hospital, plays a vital role in local economies.



Economic Impact

McKenzie County Healthcare Systems is composed of a Critical Access Hospital (CAH), a Rural Health Clinic which also offers visiting nurse services, an urgent care clinic, a skilled nursing facility, a basic care nursing facility, an assisted living facility, and a wellness center, in Watford City, North Dakota.

McKenzie County Healthcare Systems **directly** employs **194.93 FTE employees** with an annual payroll of over **\$17.5 million** (including benefits).

- After application of the employment multiplier of 1.32, these employees created an additional 62 jobs.
- The same methodology is applied to derive the income impact. The income multiplier of 1.20 is applied to create over **\$3.57 million** in income as they interact with other sectors of the local economy.
- Total impacts = 257 jobs and more than \$21 million in income.

Healthcare and Your Local Economy

The health sector in a rural community, anchored by a CAH, is responsible for a number of full- and part-time jobs and the resulting wages, salaries, and benefits. Research findings from the National Center for Rural Health Works indicate that rural hospitals typically are one of the top employers in the rural community. The employment and the resulting wages, salaries, and benefits from a CAH are critical to the rural community economy. Figure 1 depicts the interaction between an industry like a healthcare institution and the community, containing other industries and households.

Key contributions of the health system include

- Attracts retirees and families
- Appeals to businesses looking to establish and/or relocate
- High quality healthcare services and infrastructure foster community development
- · Positive impact on retail sales of local economy
- · Provides higher-skilled and higher-wage employment
- Increases the local tax base used by local government

Data analysis was completed by the Center for Rural Health at the Oklahoma State University Center for Health Sciences utilizing IMPLAN data.

Fact Sheet Author: Kylie Nissen, BBA

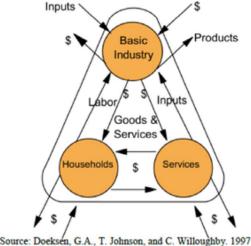
For additional information, please contact: Kylie Nissen, Program Director, Center for Rural Health kylie.nissen@und.edu • (701) 777-5380



CENTER FOR RURAL HEALTH OSU Center for Health Sciences



Figure 1. An overview of the community economic system.



Source: Doeksen, G.A., T. Johnson, and C. Willoughby. 1997. Measuring the Economic Importance of the Health Sector on a Local Economy: A Brief Literature Review and Procedures to Measure Local Impacts

This project is/was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) through the Medicare Rural Hospital Flexibility Grant Program and the State Office of Rural Health Grant.

Appendix C – CHNA Survey Instrument

McKenzie County Healthcare System Area Health Survey

McKenzie County Healthcare System and Upper Missouri District Health Unit are interested in hearing from you about community health concerns.

The focus of this effort is to:

- Learn of the good things in your community as well as concerns in the community
- Understand perceptions and attitudes about the health of the community, 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 https://tinyurl.com/WatfordCityCHNA21 or by scanning on the QR Code at the right.

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 Kylie Nissen at 701.777.5380.

Surveys will be accepted through Dec 15, 2021. Your opinion matters – thank you in advance!

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

1.	Considering the PEOPLE in your community, the best thin	gs aı	re (choose up to <u>THREE</u>):
	Community is socially and culturally diverse or becoming more diverse Feeling connected to people who live here Government is accessible People are friendly, helpful, supportive		People who live here are involved in their community People are tolerant, inclusive, and open-minded Sense that you can make a difference through civic engagement Other (please specify):
	Considering the SERVICES AND RESOURCES in your comm		
	Access to healthy food Active faith community Business district (restaurants, availability of goods) Community groups and organizations Healthcare		Opportunities for advanced education Public transportation Programs for youth Quality school systems Other (please specify):
3.	Considering the QUALITY OF LIFE in your community, the	bes	t things are (choose up to <u>THREE</u>):
	Closeness to work and activities Family-friendly; good place to raise kids Informal, simple, laidback lifestyle		Job opportunities or economic opportunities Safe place to live, little/no crime Other (please specify):
4.	Considering the ACTIVITIES in your community, the best t	hing	s are (choose up to <u>THREE</u>):
	Activities for families and youth Arts and cultural activities Local events and festivals		Recreational and sports activities Year-round access to fitness opportunities Other (please specify):

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

5.	Considering the COMMUNITY /ENVIRONMENTAL HEALT	H in	your community, concerns are (choose up to <u>THREE</u>):
	Active faith community		Having enough quality school resources
	Attracting and retaining young families		Not enough places for exercise and wellness activities
	Not enough jobs with livable wages, not enough to live on		Not enough public transportation options, cost of public transportation
	Not enough affordable housing		Racism, prejudice, hate, discrimination
	Poverty		Traffic safety, including speeding, road safety, seatbelt
	Changes in population size (increasing or decreasing)		use, and drunk/distracted driving
	Crime and safety, adequate law enforcement		Physical violence, domestic violence, sexual abuse
	personnel		Child abuse
	Water quality (well water, lakes, streams, rivers)		Bullying/cyber-bullying
	Air quality		Recycling
	Litter (amount of litter, adequate garbage collection)	_	Homelessness
	Having enough child daycare services		Other (please specify):
	Considering the AVAILABILITY/DELIVERY OF HEALTH SER REE):	VICE	ES in your community, concerns are (choose up to
	Ability to get appointments for health services within 48 hours.		
	Extra hours for appointments, such as evenings and		together to coordinate patient care within the health
	weekends	_	system.
	Availability of primary care providers (MD,DO,NP,PA)		
	and nurses		together to coordinate patient care outside the local community.
	Ability to retain primary care providers		
	(MD,DO,NP,PA) and nurses in the community	_	personal health information)
	Availability of public health professionals		Not comfortable seeking care where I know the
	Availability of specialists	_	employees at the facility on a personal level
	Not enough health care staff in general		
	Availability of wellness and disease prevention		cost of ficultificate services
	services		Cost of health insurance
	Availability of mental health services		Adequacy of health insurance (concerns about out-of-
	Availability of substance use disorder treatment		pocket costs)
	services		Understand where and how to get health insurance
	Availability of hospice		Adequacy of Indian Health Service or Tribal Health
	Availability of dental care		Services Other (please specify):

7.	Considering the YOUTH POPULATION in your community,	, con	ncerns are (choose up to <u>THREE</u>):
	Alcohol use and abuse Drug use and abuse (including prescription drug abuse) Smoking and tobacco use, exposure to second-hand smoke or vaping (juuling) Cancer Diabetes Depression/anxiety Stress Suicide Not enough activities for children and youth Teen pregnancy Sexual health		diseases or AIDS Wellness and disease prevention, including vaccine- preventable diseases Not getting enough exercise/physical activity Obesity/overweight Hunger, poor nutrition Crime Graduating from high school Availability of disability services
8.	Considering the ADULT POPULATION in your community,	con	cerns are (choose up to <u>THREE</u>):
	Alcohol use and abuse Drug use and abuse (including prescription drug abuse) Smoking and tobacco use, exposure to second-hand smoke or vaping (juuling) Cancer Lung disease (i.e. emphysema, COPD, asthma) Diabetes Heart disease Hypertension Dementia/Alzheimer's disease Other chronic diseases: Depression/anxiety		Suicide Diseases that can spread, such as sexually transmitted diseases or AIDS Wellness and disease prevention, including vaccine-preventable diseases Not getting enough exercise/physical activity Obesity/overweight Hunger, poor nutrition Availability of disability services
9.	Considering the ELDERLY POPULATION in your communit	у, сс	oncerns are (choose up to <u>THREE</u>):
	Ability 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 Cost of activities for seniors Availability of activities for seniors Availability of resources for family and friends caring for elders Quality of elderly care Cost of long-term/nursing home care		Availability of activities for seniors Elder abuse

	Crime and community violence Domestic violence, including child ab Environmentally unsound (or unfriend) Impact of increased oil/energy devel Increasing population, including resid Insufficient facilities for exercise and Lack of affordable housing Lack of employees to fill positions	opm dent well	ace to live ent s moving in I-being		wellness) Poverty Property taxes Racism, prejudice Traffic safety, inc drunk driving Other (please spe	e, ha	nealth workers (e.g., medical, dental, lite, discrimination ng speeding, road safety and
	. What single issue do you feel is the b	oigge	est challenge faci	ng y	your community?		
_							
De	elivery of Healthcare						
	Considering GENERAL and ACUTE SE (or have you used in the past year)? (C				inty Healthcare Sy	ster	ns, which services are you aware
	Anesthesia services Clinic Emergency room Hospital (acute care)		Laparoscopic Orthopedic Surgical servi				Swing bed and respite care services Telemedicine
	Considering SCREENING/THERAPY S (or have you used in the past year? (Cl				unty Healthcare S	yste	ems, which services are you aware
	Annual wellness visits Diet instruction Health screenings		Laboratory se Coccupational Physical there	the	erapy	5.00	Social services Speech therapy
	Considering RADIOLOGY SERVICES a ve you used in the past year)? (Choose			leal	thcare Systems, w	hich	services are you aware of (or
	Dexascan		EKG - Electrocard General x-ray Mammography	diog	graphy		MRI Ultrasound
15.	Are you aware of the McKenzie Cour	nty H	lealthcare Syster	ns l	Jrgent Care Clinic	?	
	☐ Yes				□ No		

	ed in the past year? (Choose <u>ALL</u> that			PUB	LIC HEALTH UNIT	nav	e you or a ramily member
	checks/education Car seat program Cribs for Kids Emergency preparedness services Environmental health services (water, sewer, health hazard abatement) Family planning Flu shots Footcare for elders		COVID-19, school-aged, other) Nutrition education Online courses – pregnancy, childbirth, breastfeeding, postpartum/baby care Preschool education programs and screening Ryan White program				Substance abuse prevention Telehealth for STD/contraception Tobacco prevention and control Tuberculosis testing and management West Nile program – surveillance and education WIC (Women, Infants, and Children) program Worksite wellness
	what specific fleathcare services, ii	u.,,	, do you chink si	ioui	a be added local	у.	
_							
18.	What PREVENTS community residen	nts f	rom receiving he	alth	ncare? (Choose <u>A</u>	<u>LL</u> th	nat apply)
Can't get transportation services Concerns about confidentiality Distance from health facility Don't know about local services Don't speak language or understand culture Lack of disability access Lack of services through Indian Health Services Limited access to telehealth technology (patients seen by providers at another facility through a monitor/TV screen) No insurance or limited insurance				Not able to see Not accepting r Not affordable Not enough pro Not enough eve Not enough spe	sam new ovide enin ecial care	ers (MD, DO, NP, PA) g or weekend hours ists	
19.	Where do you turn for trusted healt	h in	formation? (Cho	ose	ALL that apply)		
 □ Other healthcare professionals (nurses, chiropractors, dentists, etc.) □ Primary care provider (doctor, nurse practitioner, physician assistant) □ Public health professional □ Web searches/internet (webMD, Mayo Clinic, Healthline, Word of mouth, from others (friends, neighbors, co-word etc.) □ Other (please specify):						n others (friends, neighbors, co-workers,	
20.	Are you aware of the foundation wh	ich e	exists to financia	lly s	upport the McKe	nzie	County Healthcare Systems, Inc?
	Have you supported the McKenzie C	oun	ty Healthcare Sy	sten	n Foundation in a	ny (of the following ways? (Choose <u>ALL</u>
	it apply) Cash or stock gift Endowment gifts Memorial/Honorarium		Planned gifts th trusts or life ins		_		Other (please specify):

22. Do you agree that individuals in the community would favor a sales tax (e.g., a 1-cent sales tax) to support McKenzie County Healthcare Systems to help keep it financially viable and operational?							
☐ Strongly Agree ☐ Agree	☐ Neutral ☐ Disagree				Strongly Disagree Don't Know		
Demographic Information: Plea	ase tell us about your	self.					
23. Do you work for the hospital, clinic	, or public health unit	t?					
☐ Yes			No				
24. How did you acquire the survey (or	survey link) that you	are	completing?				
Hospital or public health website Hospital or public health social med Hospital or public health employee Hospital or public health facility Economic development website or Other website or social media page Newspaper advertisement Newsletter (if so, what one):		☐ Church bulletin ☐ Flyer sent home from school ☐ Flyer at local business ☐ Flyer in the mail ☐ Word of Mouth ☐ Direct email (if so, from what organization): ☐ Other (please specify):					
25. Health insurance or health coverage status (choose <u>ALL</u> that apply):							
 □ Indian Health Service (IHS) □ Insurance through employer (self, spouse, or parent) □ Self-purchased insurance 	☐ Medicaid ☐ Medicare ☐ No insurance ☐ Veteran's Healt	thcar	re Benefits		Other (please specify):		
26. Age:							
☐ Less than 18 years ☐ 18 to 24 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		
27. Highest level of education:							
☐ Less than high school ☐ High school diploma or GED	☐ Some college/te ☐ Associate's degr		cal degree		Bachelor's degree Graduate or professional degree		
28. Gender:							
☐ Female ☐ Other (please specify):	☐ Male				□ Non-binary		
29. Employment status:							
☐ Full time ☐ Part time	☐ Homemaker ☐ Multiple job hole	der			Unemployed Retired		
30. Your zip code:	_						

Appendix D – County Health Rankings Explained

Source: http://www.countyhealthrankings.org/

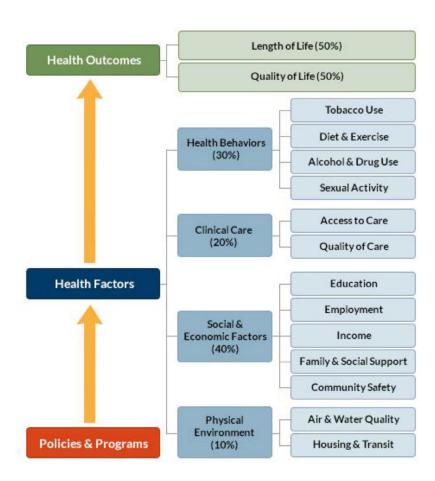
Methods

The County Health Rankings, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, measure the health of nearly all counties in the nation and rank them within states. The Rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically informed weights.

What is Ranked

The County Health Rankings are based on counties and county equivalents (ranked places). Any entity that has its own Federal Information Processing Standard (FIPS) county code is included in the Rankings. We only rank counties and county equivalents within a state. The major goal of the Rankings is to raise awareness about the many factors that influence health and that health varies from place to place, not to produce a list of the healthiest 10 or 20 counties in the nation and only focus on that.

Ranking System



The County Health Rankings model (shown above) provides the foundation for the entire ranking process.

Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, e.g. 1 or 2, are considered to be the "healthiest." Counties are ranked relative to the health of other counties in the same state. We calculate and rank eight summary composite scores:

1. Overall Health Outcomes

- 2. Health Outcomes Length of life
- 3. Health Outcomes Quality of life
- 4. Overall Health Factors
- 5. Health Factors **Health behaviors**
- 6. Health Factors Clinical care
- 7. Health Factors Social and economic factors
- 8. Health Factors **Physical environment**

Data Sources and Measures

The County Health Rankings team synthesizes health information from a variety of national data sources to create the rankings. Most of the data used are public data available at no charge. Measures based on vital statistics, sexually transmitted infections, and Behavioral Risk Factor Surveillance System (BRFSS) survey data were calculated by staff at the National Center for Health Statistics and other units of the Centers for Disease Control and Prevention (CDC). Measures of healthcare quality were calculated by staff at The Dartmouth Institute.

Data Quality

The County Health Rankings team draws upon the most reliable and valid measures available to compile the rankings. Where possible, margins of error (95% confidence intervals) are provided for measure values. In many cases, the values of specific measures in different counties are not statistically different from one another; however, when combined using this model, those various measures produce the different rankings.

Calculating Scores and Ranks

The County Health Rankings are compiled from many different types of data. To calculate the ranks, they first standardize each of the measures. The ranks are then calculated based on weighted sums of the standardized measures within each state. The county with the lowest score (best health) gets a rank of #1 for that state and the county with the highest score (worst health) is assigned a rank corresponding to the number of places we rank in that state.

Health Outcomes and Factors

Source: http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank

Health Outcomes

Premature Death (YPLL)

Premature death is the years of potential life lost before age 75 (YPLL-75). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost to a county's YPLL. The YPLL measure is presented as a rate per 100,000 population and is age-adjusted to the 2000 U.S. population.

Reason for Ranking

Measuring premature mortality, rather than overall mortality, reflects the County Health Rankings' intent to focus attention on deaths that could have been prevented. Measuring YPLL allows communities to target resources to high-risk areas and further investigate the causes of premature death.

Poor or Fair Health

Self-reported health status is a general measure of health-related quality of life (HRQoL) in a population. This measure is based on survey responses to the question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the County Health Rankings is the percentage of adult respondents who rate their health "fair" or "poor." The measure is modeled and age-adjusted to the 2000 U.S. population. Note that the methods for calculating this measure changed in the 2016 rankings.

Reason for Ranking

Measuring HRQoL helps characterize the burden of disabilities and chronic diseases in a population. Self-reported health status is a widely used measure of people's health-related quality of life. In addition to measuring how long people live, it is important to also include measures that consider how healthy people are while alive.

Poor Physical Health Days

"Poor physical health days" are based on survey responses to the question: "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their physical health was not good. The measure is age-adjusted to the 2000 U.S. population. Note that the methods for calculating this measure changed in the 2016 rankings.

Reason for Ranking

Measuring health-related quality of life (HRQoL) helps characterize the burden of disabilities and chronic diseases in a population. In addition to measuring how long people live, it is also important to include measures of how healthy people are while alive – and people's reports of days when their physical health was not good are a reliable estimate of their recent health.

Poor Mental Health Days

"Poor mental health days" are based on survey responses to the question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their mental health was not good. The measure is age-adjusted to the 2000 U.S. population. Note that the methods for calculating this measure changed in the 2016 rankings.

Reason for Ranking

Overall health depends on both physical and mental well-being. Measuring the number of days when people report that their mental health was not good, i.e., poor mental health days, represents an important facet of health-related quality of life.

Low Birth Weight

Birth outcomes are a category of measures that describe health at birth. These outcomes, such as low birthweight (LBW), represent a child's current and future morbidity — or whether a child has a "healthy start" — and serve as a health outcome related to maternal health risk.

Reason for Ranking

LBW is unique as a health outcome because it represents multiple factors: infant current and future morbidity, as well as premature mortality risk, and maternal exposure to health risks. The health associations and impacts of LBW are numerous.

In terms of the infant's health outcomes, LBW serves as a predictor of premature mortality and/or morbidity during the life course. LBW children have greater developmental and growth problems, are at higher risk of cardiovascular disease later in life, and have a greater rate of respiratory conditions.

From the perspective of maternal health outcomes, LBW indicates maternal exposure to health risks in all categories of health factors, including her health behaviors, access to healthcare, the social and economic environment the mother inhabits, and environmental risks to which she is exposed. Authors have found that modifiable maternal health behaviors, including nutrition and weight gain, smoking, and alcohol and substance use or abuse, can result in LBW.

LBW has also been associated with cognitive development problems. Several studies show that LBW children have higher rates of sensorineural impairments, such as cerebral palsy, and visual, auditory, and intellectual impairments. As a consequence, LBW can "impose a substantial burden on special education and social services, on families and caretakers of the infants, and on society generally."

Health Factors

Adult Smoking

Adult smoking is the percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime. Please note that the methods for calculating this measure changed in the 2016 rankings.

Reason for Ranking

Each year approximately 443,000 premature deaths can be attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birthweight and other adverse health outcomes. Measuring the prevalence of tobacco use in the population can alert communities to potential adverse health outcomes and can be valuable for assessing the need for cessation programs or the effectiveness of existing programs.

Adult Obesity

Adult obesity is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2.

Reason for Ranking

Obesity is often the result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status.

Food Environment Index

The Food Environment Index ranges from 0 (worst) to 10 (best) and equally weights two indicators of the food environment:

- 1) Limited access to healthy foods estimates the percentage of the population that is low income and does not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas; in rural areas, it means living less than 10 miles from a grocery store, whereas in nonrural areas, it means less than 1 mile. "Low income" is defined as having an annual family income of less than or equal to 200% of the federal poverty threshold for the family size.
- 2) Food insecurity estimates the percentage of the population that did not have access to a reliable source of food during the past year. A two-stage fixed effects model was created using information from the Community Population Survey, Bureau of Labor Statistics, and American Community Survey.

More information on each of these can be found among the additional measures.

Reason for Ranking

There are many facets to a healthy food environment, such as the cost, distance, and availability of healthy food options. This measure includes access to healthy foods by considering the distance an individual lives from a grocery store or supermarket. There is strong evidence that food deserts are correlated with high prevalence of overweight, obesity, and premature death. Supermarkets traditionally provide healthier options than convenience stores or smaller grocery stores.

Additionally, access in regard to a constant source of healthy food due to low income can be another barrier to healthy food access. Food insecurity, the other food environment measure included in the index, attempts to capture the access issue by understanding the barrier of cost. Lacking constant access to food is related to negative health outcomes, such as weight gain and premature mortality. In addition to asking about having a constant food supply in the past year, the module also addresses the ability of individuals and families to provide balanced meals, further addressing barriers to healthy eating. It is important to have adequate access to a constant food supply, but it may be equally important to have nutritious food available.

Physical Inactivity

Physical inactivity is the percentage of adults ages 20 and older reporting no leisure-time physical activity. Examples of physical activities provided include running, calisthenics, golf, gardening, or walking for exercise.

Reason for Ranking

Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. Inactivity causes 11% of premature mortality in the U.S. and caused more than 5.3 million of the 57 million deaths that occurred worldwide in 2008. In addition, physical inactivity at the county level is related to healthcare expenditures for circulatory system diseases.

Access to Exercise Opportunities

Change in measure calculation in 2018: Access to exercise opportunities measures the percentage of individuals in a county who live reasonably close to a location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state, and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and are comprised of a wide variety of facilities including gyms, community centers, dance studios, and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984, or 799998.

Individuals who reside in a census block within a half mile of a park; in urban census blocks: reside within one mile of a recreational facility; and in rural census blocks: reside within three miles of a recreational facility are considered to have adequate access for opportunities for physical activity.

Reason for Ranking

Increased physical activity is associated with lower risks of type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. The role of the built environment is important for encouraging physical activity. Individuals who live closer to sidewalks, parks, and gyms are more likely to exercise.

Excessive Drinking

Excessive drinking is the percentage of adults that report either binge drinking, defined as consuming more than four (women) or five (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or two (men) drinks per day on average. Please note that the methods for calculating this measure changed in the 2011 rankings and again in the 2016 rankings.

Reason for Ranking

Excessive drinking is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. Approximately 80,000 deaths are attributed annually to excessive drinking. Excessive drinking is the third leading lifestyle-related cause of death in the U.S.

Alcohol-Impaired Driving Deaths

Alcohol-impaired driving deaths are the percentage of motor vehicle crash deaths with alcohol involvement.

Reason for Ranking

Approximately 17,000 Americans are killed annually in alcohol-related motor vehicle crashes. Binge/heavy drinkers account for most episodes of alcohol-impaired driving.

Sexually Transmitted Infection Rate

Sexually transmitted infections (STI) are measured as the chlamydia incidence (number of new cases reported) per 100,000 population.

Reason for Ranking

Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain. STIs are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, infertility, and premature death. STIs also have a high economic burden on society. The direct medical costs of managing STIs and their complications in the U.S., for example, was approximately \$15.6 billion in 2008.

Teen Births

Teen births are the number of births per 1,000 female population, ages 15-19.

Reason for Ranking

Evidence suggests teen pregnancy significantly increases the risk of repeat pregnancy and of contracting a sexually transmitted infection (STI), both of which can result in adverse health outcomes for mothers, children, families, and communities. A systematic review of the sexual risk among pregnant and mothering teens concludes that pregnancy is a marker for current and future sexual risk behavior and adverse outcomes. Pregnant teens are more likely than older women to receive late or no prenatal care, have eclampsia, puerperal endometritis, systemic infections, low birthweight, preterm delivery, and severe neonatal conditions. Preterm delivery and low birthweight babies have increased risk of child developmental delay, illness, and mortality. Additionally, there are strong ties between teen birth and poor socioeconomic, behavioral, and mental outcomes. A teenage woman who bears a child is much less likely to achieve an education level at or beyond high school, much more likely to be overweight/obese in adulthood, and more likely to experience depression and psychological distress.

Uninsured

Uninsured is the percentage of the population younger than age 65 that has no health insurance coverage. The Small Area Health Insurance Estimates uses the American Community Survey (ACS) definition of insured: Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans: insurance through a current or former employer or union, insurance purchased directly from an insurance company, Medicare, Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability, TRICARE or other military healthcare, Indian Health Services, VA, or any other type of health insurance or health coverage plan? Note that the methods for calculating this measure changed in the 2012 rankings.

Reason for Ranking

Lack of health insurance coverage is a significant barrier to accessing needed healthcare and to maintaining financial security.

The Kaiser Family Foundation released a report in December 2017 that outlines the effects insurance has on access to healthcare and financial independence. One key finding was that "going without coverage can have serious health consequences for the uninsured because they receive less preventative care, and delayed care often results in serious illness or other health problems. Being uninsured can also have serious financial consequences, with many unable to pay their medical bills, resulting in medical debt."

Primary Care Physicians

Primary care physicians is the ratio of the population to total primary care physicians. Primary care physicians include nonfederal, practicing physicians (MDs and DOs) younger than age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. Note this measure was modified in the 2011 rankings and again in the 2013 rankings.

Reason for Ranking

Access to care requires not only financial coverage, but also access to providers. While high rates of specialist physicians have been shown to be associated with higher (and perhaps unnecessary) utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.

Dentists

Dentists are measured as the ratio of the county population to total dentists in the county.

Reason for Ranking

Untreated dental disease can lead to serious health effects, including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to accessing oral healthcare, much of the country suffers from shortages. According to the Health Resources and Services Administration, as of December 2012, there were 4,585 Dental Health Professional Shortage Areas (HPSAs), with 45 million people total living in them.

Mental Health Providers

Mental health providers is the ratio of the county population to the number of mental health providers, including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers who treat alcohol and other drug abuse, and advanced practice nurses specializing in mental healthcare. In 2015, marriage and family therapists and mental health providers who treat alcohol and other drug abuse were added to this measure.

Reason for Ranking

Thirty percent of the population lives in a county designated as a Mental Health Professional Shortage Area. As the mental health parity aspects of the Affordable Care Act create increased coverage for mental health services, many anticipate increased workforce shortages.

Preventable Hospital Stays

Preventable hospital stays is the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 feefor-service Medicare enrollees. Ambulatory care-sensitive conditions include convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection, and dehydration. This measure is age adjusted.

Reason for Ranking

Hospitalization for diagnoses treatable in outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care.

Mammography Screening

Mammography screening is the percentage of female fee-for-service Medicare enrollees ages 67-69 who had at least one mammogram during a two-year period.

Reason for Ranking

Evidence suggests that mammography screening reduces breast cancer mortality, especially among older women. A physician's recommendation or referral—and satisfaction with physicians—are major factors facilitating breast cancer screening. The percent of women ages 40-69 receiving a mammogram is a widely endorsed quality of care measure.

Flu Vaccinations

Flu vaccinations are Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination.

Reason for Ranking

Influenza is a potentially serious disease that can lead to hospitalization and even death. Every year there are millions of influenza infections, hundreds of thousands of flu-related hospitalizations, and thousands of flu-related deaths. An annual flu vaccine is the best way to help protect against influenza and may reduce the risk of flu illness, flu-related hospitalizations, and even flu-related death. It is recommended that everyone 6 months and older get a seasonal flu vaccine each year, and those over 65 are especially encouraged because they are at higher risk of developing serious complications from the flu.

Unemployment

Unemployment is the percentage of the civilian labor force, age 16 and older, that is unemployed but seeking work.

Reason for Ranking

The unemployed population experiences worse health and higher mortality rates than the employed population. Unemployment has been shown to lead to an increase in unhealthy behaviors related to alcohol and tobacco consumption, diet, exercise, and other health-related behaviors, which in turn can lead to increased risk for disease or mortality, especially suicide. Because employer-sponsored health insurance is the most common source of health insurance coverage, unemployment can also limit access to healthcare.

Children in Poverty

66

Children in poverty is the percentage of children younger than age 18 living in poverty. Poverty status is defined by family; either everyone in the family is in poverty or no one in the family is in poverty. The characteristics of the family used to determine the poverty threshold are number of people, number of related children younger than age 18, and whether the primary householder is older than age 65. Family income is then compared to the poverty threshold; if that family's income is below that threshold, the family is in poverty. For more information, please see Poverty Definition and/or Poverty.

In the data table for this measure, we report child poverty rates for Black, Hispanic and White children. The rates for race and ethnic groups come from the American Community Survey, which is the major source of data used by the Small Area Income and Poverty Estimates to construct the overall county estimates. However, estimates for race and ethnic groups are created using combined five-year estimates from 2012-2016.

Reason for Ranking

Poverty can result in an increased risk of mortality, morbidity, depression, and poor health behaviors. A 2011 study found that poverty and other social factors contribute a number of deaths comparable to leading causes of death in the U.S., such as heart attacks, strokes, and lung cancer. While repercussions resulting from poverty are present at all ages, children in poverty may experience lasting effects on academic achievement, health, and income into adulthood. Low-income children have an increased risk of injuries from accidents and physical abuse and are susceptible to more frequent and severe chronic conditions and their complications, such as asthma, obesity, and diabetes, than children living in high-income households.

Beginning in early childhood, poverty takes a toll on mental health and brain development, particularly in the areas associated with skills essential for educational success such as cognitive flexibility, sustained focus, and planning. Low-income children are more susceptible to mental health conditions such as ADHD, behavior disorders, and anxiety, which can limit learning opportunities and social competence, leading to academic deficits that may persist into adulthood. The children in poverty measure is highly correlated with overall poverty rates.

Income Inequality

Income inequality is the ratio of household income at the 80th percentile to that at the 20th percentile (i.e., when the incomes of all households in a county are listed from highest to lowest, the 80th percentile is the level of income at which only 20% of households have higher incomes, and the 20th percentile is the level of income at which only 20% of households have lower incomes). A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum. Note that the methods for calculating this measure changed in the 2015 rankings.

Reason for Ranking

Income inequality within U.S. communities can have broad health impacts, including increased risk of mortality, poor health, and increased cardiovascular disease risks. Inequalities in a community can accentuate differences in social class and status and serve as a social stressor. Communities with greater income inequality can experience a loss of social connectedness, as well as decreases in trust, social support, and a sense of community for all residents.

Children in Single-Parent Households

Children in single-parent households is the percentage of children in families where the household is headed by a single parent (male or female head of household with no spouse present). Note that the methods for calculating this measure changed in the 2011 rankings.

Reason for Ranking

Adults and children in single-parent households are at risk for adverse health outcomes, including mental illness (e.g. substance abuse, depression, suicide) and unhealthy behaviors (e.g. smoking, excessive alcohol use). Self-reported health has been shown to be worse among lone parents (male and female) than for parents living as couples, even when controlling for socioeconomic characteristics. Mortality risk is also higher among lone parents. Children in single-parent households are at greater risk of severe morbidity and all-cause mortality than their peers in two-parent households.

Violent Crime Rate

Violent crime rate is the number of violent crimes reported per 100,000 population. Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, rape, robbery, and aggravated assault. Note that the methods for calculating this measure changed in the 2012 rankings.

Reason for Ranking

High levels of violent crime compromise physical safety and psychological well-being. High crime rates can also deter residents from pursuing healthy behaviors, such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders and may contribute to obesity prevalence. Exposure to chronic stress also contributes to the

increased prevalence of certain illnesses, such as upper respiratory illness and asthma in neighborhoods with high levels of violence.

Injury Deaths

Injury deaths is the number of deaths from intentional and unintentional injuries per 100,000 population. Deaths included are those with an underlying cause of injury (ICD-10 codes *U01-*U03, V01-Y36, Y85-Y87, Y89).

Reason for Ranking

Injuries are one of the leading causes of death; unintentional injuries were the 4th leading cause, and intentional injuries the 10th leading cause, of U.S. mortality in 2014. The leading causes of death in 2014 among unintentional injuries, respectively, are: poisoning, motor vehicle traffic, and falls. Among intentional injuries, the leading causes of death in 2014, respectively, are: suicide firearm, suicide suffocation, and homicide firearm. Unintentional injuries are a substantial contributor to premature death. Among the following age groups, unintentional injuries were the leading cause of death in 2014: 1-4, 5-9, 10-14, 15-24, 25-34, 35-44. Injuries account for 17% of all emergency department visits and falls account for more than 1/3 of those visits.

Air Pollution-Particulate matter

Air pollution - particulate matter is the average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) in a county. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers. These particles can be directly emitted from sources such as forest fires or they can form when gases emitted from power plants, industries, and automobiles react in the air.

Reason for Ranking

The relationship between elevated air pollution (especially fine particulate matter and ozone) and compromised health has been well documented. Negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects. Long-term exposure to fine particulate matter increases premature death risk among people age 65 and older, even when exposure is at levels below the National Ambient Air Quality Standards.

Drinking Water Violations

Change in measure calculation in 2018: Drinking water violations is an indicator of the presence or absence of health-based drinking water violations in counties served by community water systems. Health-based violations include Maximum Contaminant Level, Maximum Residual Disinfectant Level, and Treatment Technique violations. A "Yes" indicates that at least one community water system in the county received a violation during the specified time frame, while a "No" indicates that there were no health-based drinking water violations in any community water system in the county. Note that the methods for calculating this measure changed in the 2016 rankings.

Reason for Ranking

Recent studies estimate that contaminants in drinking water sicken 1.1 million people each year. Ensuring the safety of drinking water is important to prevent illness, birth defects, and death for those with compromised immune systems. A number of other health problems have been associated with contaminated water, including nausea, lung and skin irritation, cancer, and kidney, liver, and nervous system damage.

Severe Housing Problems

Severe housing problems is the percentage of households with at least one or more of the following housing problems:

- Housing unit lacks complete kitchen facilities;
- Housing unit lacks complete plumbing facilities;
- Household is severely overcrowded; or
- Household is severely cost burdened.

Severe overcrowding is defined as more than 1.5 persons per room. Severe cost burden is defined as monthly housing costs (including utilities) that exceed 50% of monthly income.

Reason for Ranking

Good health depends on having homes that are safe and free from physical hazards. When adequate housing protects individuals and families from harmful exposures and provides them with a sense of privacy, security, stability, and control, it can make important contributions to health. In contrast, poor quality and inadequate housing contributes to health problems, such as infectious and chronic diseases, injuries, and poor childhood development.

Appendix E – Youth Risk Behavior Survey

Youth Behavioral Risk Survey Results North Dakota High School Survey Rate Increase " \uparrow " rate decrease " \downarrow ", or no statistical change = in rate from 2017-2019

				ND	Rural ND	Urban	National
	ND	ND	ND	Trend	Town	ND Town	Average
	2015	2017	2019	↑ , ↓ , =	Average	Average	2019
Injury and Violence							
Percentage of students who rarely or never wore a seat belt (when							
riding in a car driven by someone else)	8.5	8.1	5.9	=	8.8	5.4	6.5
Percentage of students who rode in a vehicle with a driver who had							
been drinking alcohol (one or more times during the 30 prior to the							
survey)	17.7	16.5	14.2	=	17.7	12.7	16.7
Percentage of students who talked on a cell phone while driving (on at							
least one day during the 30 days before the survey, among students							
who drove a car or other vehicle)	NA	56.2	59.6	=	60.7	60.7	NA
Percentage of students who texted or e-mailed while driving a car or							
other vehicle (on at least one day during the 30 days before the survey,							
among students who had driven a car or other vehicle during the 30							
days before the survey)	57.6	52.6	53.0	=	56.5	51.8	39.0
Percentage of students who never or rarely wore a helmet (during the							
12 months before the survey, among students who rode a motorcycle)	NA	20.6	NA	NA	NA	NA	NA
Percentage of students who carried a weapon on school property (such							
as a gun, knife, or club on at least one day during the 30 days before							
the survey)	5.2	5.9	4.9	=	6.2	4.2	2.8
Percentage of students who were in a physical fight on school property							
(one or more times during the 12 months before the survey)	5.4	7.2	7.1	=	7.4	6.4	8.0
Percentage of students who experienced sexual violence (being forced							
by anyone to do sexual things [counting such things as kissing,							
touching, or being physically forced to have sexual intercourse] that							
they did not want to, one or more times during the 12 months before							
the survey)	NA	8.7	9.2	=	7.1	8.0	10.8
Percentage of students who experienced physical dating violence (one							
or more times during the 12 months before the survey, including being							
hit, slammed into something, or injured with an object or weapon on							
purpose by someone they were dating or going out with among							
students who dated or went out with someone during the 12 months							
before the survey)	7.6	NA	NA	NA	NA	NA	8.2
Percentage of students who have been the victim of teasing or name							
calling because someone thought they were gay, lesbian, or bisexual					40.6		
(during the 12 months before the survey)	NA	11.4	11.6	=	12.6	11.4	NA
Percentage of students who were bullied on school property (during			40.0		24.6	40.4	40.5
the 12 months before the survey)	24.0	24.3	19.9	Ψ	24.6	19.1	19.5
Percentage of students who were electronically bullied (including being							
bullied through texting, Instagram, Facebook, or other social media	45.0	40.0	1.6 7		16.0	45.0	45.7
during the 12 months before the survey)	15.9	18.8	14.7	Ψ	16.0	15.3	15.7
Percentage of students who felt sad or hopeless (almost every day for							
two or more weeks in a row so that they stopped doing some usual	27.2	20.0	20.5		24.0	22.4	267
activities during the 12 months before the survey)	27.2	28.9	30.5	=	31.8	33.1	36.7
Percentage of students who seriously considered attempting suicide							
(during the 12 months before the survey)	16.2	16.7	18.8	=	18.6	19.7	18.8

ND ND ND The		ı	1	•				
Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey) Percentage of students who attempted suicide (one or more times during the 12 months before the survey) Percentage of students who attempted suicide (one or more times during the 12 months before the survey) Percentage of students who experted (agarettes before age 13 years (even one or two pulfs) Percentage of students who ever tried (igarette smoking (even one or two pulfs) Percentage of students who who ever tried (igarette before age 13 years (even one or two pulfs) NA 11.2 NA NA NA NA NA NA NA NA NA Percentage of students who currently smoked cigarettes (on a test one day during the 30 days before the survey) Percentage of students who currently smoked parettes daily (on all 30 days during the 30 days before the survey) Percentage of students who currently smoked objected the survey) Percentage of students who currently smoked objected the survey) Percentage of students who currently smoked objected the survey) Percentage of students who currently smoked objected the survey) Percentage of students who currently smoked objected the survey) Percentage of students who currently smoked objected the survey among students who currently smoked objected the survey among students who currently smoked objected the survey) Percentage of students who currently used an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, smuf, or dip on at least one day during the 30 days before the survey) Percentage of students who currently used digarettes, cigars, or smokeless tobacco (on a teast 1 day during the 30 days before the survey) Percentage of students who currently used digarettes, cigars, or smokeless tobacco (on a teast 1 day during the 30 days before the survey) Percentage of students who curr								
Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey) Percentage of students who attempted suicide (one or more times during the 12 months before the survey) Percentage of students who attempted suicide (one or more times during the 12 months before the survey) Percentage of students who ever tried cigarette smoking (even one or two puffs) Percentage of students who smoked a whole cigarette before age 13 NA 11:2 NA		ND	ND	ND		Town	ND Town	Average
attempt suicide (during the 12 months before the survey) Percentage of students who attempted suicide (one or more times during the 12 months before the survey) Percentage of students who swoked a whole cigarette smoking (even one or two pulfs) Percentage of students who swoked a whole cigarette before age 13 years (even one or two pulfs) Percentage of students who smoked a whole cigarette before age 13 years (even one or two pulfs) NA 11.2 NA N		2015	2017	2019	↑ , ↓ , =	Average	Average	2019
Percentage of students who attempted suicide (one or more times during the 12 months before the survey) 10 months before the survey) 10 months before the survey 11 months before the survey 12 months before the survey 13 months before the survey 14 months before the survey 15 months before the survey 16 months before the survey 17 months before the survey 18 months before the survey 19 months before the survey 10 more day during the 30 days before the survey 10 more day during the 30 days before the survey 10 more days during the 30 days before the survey 10 more days during the 30 days before the survey 10 more days during the 30 days before the survey 10 more days during the 30 days before the survey 11 months before the survey 12 months before the survey 13 months before the survey 14 months before the survey 15 months before the survey 16 months before the survey 17 months before the survey 18 months before the survey 19 months before the survey 10 more day during the 30 days before the survey 10 more days during the 30 days before the survey 10 more days during the 30 days before the survey 10 more days during the 30 days before the survey 10 more days before t	Percentage of students who made a plan about how they would							
Description 12 months before the survey 9.4 13.5 13.0 = 12.5 11.7 8.9	attempt suicide (during the 12 months before the survey)	13.5	14.5	15.3	II	16.3	16.0	15.7
Tobaco Use Percentage of students who ever tried cigarette smoking (even one or two puffs) Students who smoked a whole cigarette before age 13 Years (even one or two puffs) NA 11.2 NA NA NA NA NA NA NA N	Percentage of students who attempted suicide (one or more times							
Percentage of students who ever tried cigarette smoking (even one or two puffs) Percentage of students who smoked a whole cigarette before age 13 years (even one or two puffs) Percentage of students who currently smoked cigarettes (on at least one day during the 30 days before the survey) Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey) Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey) Percentage of students who currently smoked cigarettes (and 30 days before the survey) Percentage of students who currently smoked cigarettes (and 30 days before the survey) Percentage of students who currently smoked cigarettes (and 30 days before the survey) Percentage of students who currently smoked cigarettes (and 30 days before the survey) Percentage of students who currently smoked cigarettes (and 30 days before the survey) Percentage of students who currently smoked cigarettes (and 30 days before the survey) Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently west dispersed to the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day durin	during the 12 months before the survey)	9.4	13.5	13.0	=	12.5	11.7	8.9
two puffs 35.1 30.5 29.3	Tobacco Use							
two puffs 35.1 30.5 29.3	Percentage of students who ever tried cigarette smoking (even one or							
Percentage of students who smoked a whole cigarette before age 13 NA 11.2 NA Percentage of students who currently smoked cigarettes (on at least one day during the 30 days before the survey) Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey) Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey) Percentage of students who currently smoked cigarettes (on 30 or more days during the 30 days before the survey) Percentage of students who currently smoked cigarettes (on 30 or more days during the 30 days before the survey) Percentage of students who currently smoked cigarettes (on 30 or		35.1	30.5	29.3	=	32.4	23.8	24.1
pears (even one or two puffs) Percentage of students who currently smoked cigarettes (on at least one day during the 30 days before the survey) Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey) Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey) Percentage of students who susally obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey) Percentage of students who susally obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey) Percentage of students who currently smoked cigarettes and who were aged c18 years) Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes (among students who currently used smokeless tobacco (chewing tobacco, smuff, or dip on at least one day during the 30 days before the survey) 22.3 20.6 33.1	Percentage of students who smoked a whole cigarette before age 13							
Percentage of students who currently smoked cigarettes (on at least one day during the 30 days before the survey) Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey) A.3 3.8 2.1		NA	11.2	NA	NA	NA	NA	NA
one day during the 30 days before the survey) Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey) Percentage of students who currently smoked cigarettes (aliv) (on all 30 days during the 30 days before the survey) Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey) Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey) Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey) Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes (among students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently ward the solution of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank								
Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey) Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey) Percentage of students who currently smoked cigarettes by buying them in a store or gas station (during the 30 days before the survey) Percentage of students who tried to quit smoking cigarettes and who were aged <18 years) Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes (among students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars, cigars, cigars, conclusing the 30 days before the survey) Percentage of students who currently smoked cigars, cigars, cigars, or at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars, cigars, cigars, or at least one day during the 30 days before the survey) Percentage of students who currently used cigars, cigars, cigars, or at least one day during the 30 days before the survey) Percentage of students who currently used cigars, cigars, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigars cigars, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes and citars one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alco		11.7	12.6	8.3	4	10.9	7.3	6.0
20 or more days during the 30 days before the survey) Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey) Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey) Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey among students who currently smoked cigarettes (among students who currently use an electronic vapor product (e-cigarettes, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently draink alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently draink alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male stud				0.0	<u> </u>	20.5	7.10	0.0
Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey) Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey among students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey) Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently smoked cigars (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently d		4.3	3.8	2.1	J	2.3	1.7	1.3
3.2 3.0 1.4 ↓ 1.6 1.2 1.1 Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey among students who currently smoked cigarettes and who were aged <18 years) Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes (among students who currently smoked cigarettes during the 12 months before the survey) Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently de cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who drank alcohol fat least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before			0.0		•			
Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey among students who currently smoked cigarettes and who were aged <18 years) Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey) Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (and the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (and teast 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (and teast 1 day during the 30 days before the survey) Percentage of students who currently send cigarettes, cigars, or smokeless tobacco (and teast 1 day during the 30 days before the survey) Percentage of students who currently send cigarettes, cigars, or smokeless tobacco (and teast 1 day during the 30 days before the survey) Percentage of students who drank alcohol (at least one drink of alcohol on at least one day during the ilife) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Alcohol and Cher Drug Use Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one day during the 30 days before the survey) Percentage o	· · · · · · · · · · · · · · · · · · ·	3.2	3.0	14	T	1.6	1.2	1 1
buying them in a store or gas station (during the 30 days before the survey among students who currently smoked cigarettes and who were aged <18 years) Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes famong students who currently smoked cigarettes during the 12 months before the survey) Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) NA 18.1 12.2 NA 15.1 10.9 10.5 Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one day during the 30 days before the survey) Percentage of students who urrently drank alcohol (at least one day during the 30 days before the survey) Pe		3.2	3.0	1.7		1.0	1.2	1.1
survey among students who currently smoked cigarettes and who were aged <18 years) Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey) NA 50.3 54.0 = 52.8 51.4 NA Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) NA 18.1 12.2 NA 15.1 10.9 10.5 Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) 62.1 59.2 56.6 = 60.6 54.0 NA Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one day during the 30 days before the survey)								
aged <18 years) Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey) Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) NA 8.0 4.5 Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) NA 8.0 4.5 \$\sum_{0.0}\$ 5.7 \$\frac{3.8}{3.8}\$ 3.8 Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) NA 18.1 12.2 NA 15.1 10.9 10.5 Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol in a row for female students, five or more for male students within								
Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey) Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who curre		NIA	7 5	12.2	_	0.4	10.1	0 1
students who currently smoked cigarettes during the 12 months before the survey) Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used digarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) 41.3 37.7 NA		INA	7.5	15.2	-	9.4	10.1	0.1
the survey) Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during the ilife) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) 41.3 37.7 NA NA NA NA NA NA 40.5 Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who tried marijuana (one or more								
Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) NA 18.1 12.2 NA 15.1 10.9 10.5 Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who during their life) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more		NIA	EO 2	E40	_	E2 0	F1 /	NIA
(e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more		INA	50.3	54.0	=	52.8	51.4	INA
hookahs, and hookah pens at least one day during the 30 days before the survey) 22.3 20.6 33.1								
the survey) 22.3 20.6 33.1								
Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) NA 18.1 12.2 NA 15.1 10.9 10.5 Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) NA 16.4 15.6 = 17.2 14.0 13.7 Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) 5.3 5.6 5.0 = 5.5 5.1 5.6		22.2	20.6	22.4	_	22.2	21.0	22.7
(chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) NA 18.1 12.2 NA 15.1 10.9 10.5 Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently drank alcohol they drank by someone giving it to them (among students who currently drank alcohol) Alcohol and Other Drug Use Shall 12.2 NA 15.1 10.9 10.5 NA 18.1 12.		22.3	20.6	33.1	个	32.2	31.9	32.7
before the survey) NA 8.0 4.5 \$\subset\$ 5.7 3.8 3.8 Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) NA 18.1 12.2 NA 15.1 10.9 10.5 Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) NA 16.4 15.6 = 17.2 14.0 13.7 Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Source of the survey of the survey of the survey of the first time) Source of the survey of the								
Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) NA 18.1 12.2 NA 15.1 10.9 10.5 Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Sample of the survey of the survey of the survey of the survey of the first time) Percentage of students who tried marijuana (one or more			0.0	4.5	.1.	F 7	2.0	2.0
or little cigars on at least one day during the 30 days before the survey) Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) NA 18.1 12.2 NA 15.1 10.9 10.5 Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who ried marijuana before age 13 years (for the first time) Percentage of students who tried marijuana (one or more		INA	8.0	4.5		5.7	3.8	3.8
Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more		0.2	0.2	F 2	.1.	6.2	4.2	F 7
smokeless tobacco (on at least 1 day during the 30 days before the survey) Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more		9.2	8.2	5.2	Ψ	6.3	4.3	5.7
Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more								
Alcohol and Other Drug Use Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more			40.4	42.2	A.1.A	45.4	40.0	40.5
Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more	7.	NA	18.1	12.2	NA	15.1	10.9	10.5
alcohol on at least one day during their life) Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more		ı	ı	ı				
Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more	· ·	62.4	50.0	56.6		60.6	540	
first time other than a few sips) Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more		62.1	59.2	56.6	=	60.6	54.0	NA
Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) NA 16.4 15.6 = 17.2 14.0 13.7 Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more								
of alcohol on at least one day during the 30 days before the survey) Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more		12.4	14.5	12.9	=	16.4	13.2	15.0
Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more								
more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more		30.8	29.1	27.6	=	29.4	25.4	29.2
male students within a couple of hours on at least one day during the 30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more	, , , , , , , , , , , , , , , , , , , ,							
30 days before the survey) Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more								
Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) 41.3 37.7 NA								
someone giving it to them (among students who currently drank alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more		NA	16.4	15.6	=	17.2	14.0	13.7
alcohol) Percentage of students who tried marijuana before age 13 years (for the first time) Percentage of students who currently used marijuana (one or more 41.3 37.7 NA NA NA NA NA 40.5 5.3 5.6 5.0 = 5.5 5.1 5.6 Percentage of students who currently used marijuana (one or more								
Percentage of students who tried marijuana before age 13 years (for the first time) 5.3 5.6 5.0 = 5.5 5.1 5.6 Percentage of students who currently used marijuana (one or more								
the first time) 5.3 5.6 5.0 = 5.5 5.1 5.6 Percentage of students who currently used marijuana (one or more		41.3	37.7	NA	NA	NA	NA	40.5
Percentage of students who currently used marijuana (one or more	Percentage of students who tried marijuana before age 13 years (for							
	,	5.3	5.6	5.0	=	5.5	5.1	5.6
times during the 30 days before the survey) 15.2 15.5 12.5 = 11.4 14.1 21.7								
	times during the 30 days before the survey)	15.2	15.5	12.5	=	11.4	14.1	21.7

ND ND ND Trend Trend Town Average Average 2015
Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor toold them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life) Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey) Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) Percentage of students who ever had sexual intercourse Percentage of students who had sexual intercourse Percentage of students who had sexual intercourse before age 13 years (for the first time) Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight Percentage of students who were trying to lose weight NA 44.5 44.7 = 46.8 45.5 NA
Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life) Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey) Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) Percentage of students who ever had sexual intercourse Percentage of students who ever had sexual intercourse Percentage of students who had sexual intercourse before age 13 years (for the first time) Percentage of students who were overweight (>= 85th percentile but < 95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart) Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight Percentage of students who were trying to lose weight NA 14.4 14.5 = 12.8 13.3 14.3 14.3 14.3 14.5
without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life) Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey) Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) Percentage of students who ever had sexual intercourse Percentage of students who ever had sexual intercourse Percentage of students who had sexual intercourse before age 13 years (for the first time) Weight Management and Dietary Behaviors Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart) Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight 32.2 31.4 32.6 = 35.7 33.0 32.4 Percentage of students who were trying to lose weight NA 14.4 14.5 14.5 = 12.8 13.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3
them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life) Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey) Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) Percentage of students who ever had sexual intercourse Percentage of students who ever had sexual intercourse Percentage of students who had sexual intercourse before age 13 years (for the first time) Weight Management and Dietary Behaviors Percentage of students who were overweight (>= 85th percentile but <95 th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight Percentage of students who were trying to lose weight NA 14.4 14.5 = 12.8 13.3 14.3 14.3 14.3 14.5 = 12.8 13.3 14.3 14.3 14.5 = 12.8 13.3 14.3 14.3 14.3 14.5 = 12.8 13.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3
Hydrocodone, and Percocet, one or more times during their life) Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey) Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) NA N
Hydrocodone, and Percocet, one or more times during their life) Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey) Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) NA N
Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey) Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) NA N
on school property (during the 12 months before the survey) Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) NA N
Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) NA N
alcohol or other drugs (on at least one day during the 30 days before the survey) NA N
the survey) NA N
Percentage of students who ever had sexual intercourse
Percentage of students who ever had sexual intercourse 38.9 36.6 38.3 = 35.4 36.1 38.4 Percentage of students who had sexual intercourse before age 13 years (for the first time) 2.6 2.8 NA NA NA NA NA NA NA N
Percentage of students who had sexual intercourse before age 13 years (for the first time) 2.6 2.8 NA
Weight Management and Dietary BehaviorsPercentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart)14.716.116.5=16.615.616.1Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart)13.914.914.0=17.414.015.5Percentage of students who described themselves as slightly or very overweight32.231.432.6=35.733.032.4Percentage of students who were trying to lose weightNA44.544.7=46.845.5NA
Weight Management and Dietary BehaviorsPercentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart)14.716.116.5=16.615.616.1Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart)13.914.914.0=17.414.015.5Percentage of students who described themselves as slightly or very overweight32.231.432.6=35.733.032.4Percentage of students who were trying to lose weightNA44.544.7=46.845.5NA
Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart) Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight 32.2 31.4 32.6 = 35.7 33.0 32.4 Percentage of students who were trying to lose weight NA 44.5 44.7 = 46.8 45.5 NA
<95 th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart) Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight 32.2 31.4 32.6 35.7 33.0 32.4 Percentage of students who were trying to lose weight NA 44.5 44.7 46.8 45.5 NA
reference data from the 2000 CDC growth chart) Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight 32.2 31.4 32.6 = 35.7 33.0 32.4 Percentage of students who were trying to lose weight NA 44.5 44.7 = 46.8 45.5 NA
Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight Percentage of students who were trying to lose weight NA 44.5 44.7 = 46.8 45.5 NA
Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight Percentage of students who were trying to lose weight NA 44.5 44.7 = 46.8 45.5 NA
mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight Percentage of students who were trying to lose weight NA 44.5 44.7 = 46.8 45.5 NA
2000 CDC growth chart) Percentage of students who described themselves as slightly or very overweight Percentage of students who were trying to lose weight 13.9 14.9 14.0 = 17.4 14.0 15.5 14.0 14.0 15.5 14.0 15.5 14.0 15.5 1
Percentage of students who described themselves as slightly or very overweight 32.2 31.4 32.6 = 35.7 33.0 32.4 Percentage of students who were trying to lose weight NA 44.5 44.7 = 46.8 45.5 NA
overweight 32.2 31.4 32.6 = 35.7 33.0 32.4 Percentage of students who were trying to lose weight NA 44.5 44.7 = 46.8 45.5 NA
Percentage of students who were trying to lose weight NA 44.5 44.7 = 46.8 45.5 NA
Percentage of students who did not eat fruit or drink 100% fruit juices
(during the seven days before the survey) 3.9 4.9 6.1 = 5.8 5.3 6.3
Percentage of students who ate fruit or drank 100% fruit juices one or
more times per day (during the seven days before the survey) NA 61.2 54.1 \checkmark 54.1 57.2 NA
Percentage of students who did not eat vegetables (green salad,
potatoes [excluding French fries, fried potatoes, or potato chips],
carrots, or other vegetables, during the seven days before the survey) 4.7 5.1 6.6 = 5.3 6.6 7.9
Percentage of students who ate vegetables one or more times per day
(green salad, potatoes [excluding French fries, fried potatoes, or potato
chips], carrots, or other vegetables, during the seven days before the
survey) NA 60.9 57.1 \downarrow 58.2 59.1 NA
Percentage of students who did not drink a can, bottle, or glass of soda
or pop (such as Coke, Pepsi, or Sprite, not including diet soda or diet
pop, during the seven days before the survey) NA 28.8 28.1 = 26.4 30.5 NA
Percentage of students who drank a can, bottle, or glass of soda or pop
one or more times per day (not including diet soda or diet pop, during
the seven days before the survey) 18.7 16.3 15.9 = 17.4 15.1 15.1
Percentage of students who did not drink milk (during the seven days
before the survey) 13.9 14.9 20.5 \uparrow 14.8 20.3 30.6
Percentage of students who drank two or more glasses per day of milk
(during the seven days before the survey) NA 33.9 NA NA NA NA NA
Percentage of students who did not eat breakfast (during the 7 days
before the survey) 11.9 13.5 14.4 = 13.3 14.1 16.7
Percentage of students who most of the time or always went hungry
because there was not enough food in their home (during the 30 days
before the survey) NA 2.7 2.8 = 2.1 2.9 NA
Physical Activity
Percentage of students who were physically active at least 60 minutes
per day on 5 or more days (doing any kind of physical activity that
increased their heart rate and made them breathe hard some of the
time during the 7 days before the survey) NA 51.5 49.0 = 55.0 22.6 55.9
Time during the 7 days before the survey) NM 31.3 43.0 - 33.0 22.0 35.9

				ND	Rural ND	Urban	National
	ND	ND	ND	Trend	Town	ND Town	Average
	2015	2017	2019	↑ , ↓ , =	Average	Average	2019
Percentage of students who watched television three or more hours							
per day (on an average school day)	18.9	18.8	18.8	=	18.3	18.2	19.8
Percentage of students who played video or computer games or used a							
computer three or more hours per day (counting time spent on things							
such as Xbox, PlayStation, an iPad or other tablet, a smartphone,							
texting, YouTube, Instagram, Facebook, or other social media, for							
something that was not school work on an average school day)	38.6	43.9	45.3	=	48.3	45.9	46.1
Other							
Percentage of students who had eight or more hours of sleep (on an							
average school night)	NA	31.8	29.5	=	31.8	33.1	NA
Percentage of students who brushed their teeth on seven days (during							
the 7 days before the survey)	NA	69.1	66.8	=	63.0	68.2	NA
Percentage of students who most of the time or always wear							
sunscreen (with an SPF of 15 or higher when they are outside for more							
than one hour on a sunny day)	NA	12.8	NA	NA	NA	NA	NA
Percentage of students who used an indoor tanning device (such as a							
sunlamp, sunbed, or tanning booth [not including getting a spray-on							
tan] one or more times during the 12 months before the survey)	NA	8.3	7.0	=	6.0	5.9	4.5

 $Sources: \underline{https://www.rdc.gov/healthyyouth/data/yrbs/results.htm; \underline{https://www.nd.gov/dpi/districtsschools/safety-health/youth-risk-behavior-survey}$

Appendix F – Prioritization of Community's Health Needs

Community Health Needs Assessment Watford City, North Dakota Ranking of Concerns

The top concerns for each of the six topic areas, based on the community survey results, were listed on flipcharts and available as an attachment to the participants for those that participated by Zoom. The numbers below indicate the total number of votes by the people in attendance at the second community meeting. The "Priorities" column lists the number of votes placed on the concerns indicating which areas are felt to be priorities. Each person in person was given four dots to place on the items they felt were priorities, while those attending by Zoom put their top concerns in the chat box. The "Most Important" column lists the number of red dots placed on the flipcharts. After the first round of voting, the top five priorities were selected based on the highest number of votes. Each person was given one dot to place on the item they felt was the most important priority of the top five highest ranked priorities.

	Priorities	Most
COMMMUNITY/ENVIDONMENTAL HEALTH CONCEDNIC		Important
COMMUNITY/ENVIRONMENTAL HEALTH CONCERNS		
Not enough affordable housing	4	
Having enough child daycare services	6	1
Attracting and retaining young families	3	
Change in population size		
AVAILABILITY/DELIVERY OF HEALTH SERVICES CONCERNS		
Ability to get appointments for health services within 48 hours		
Ability to retain primary care providers (MD, DO, NP, PA) and nurses	1	
Availability of primary care providers		
Availability of mental health services	4	6
Not enough healthcare staff in general		
ALL AGES HEALTH CONCERNS		
Alcohol use and abuse	3	
Depression/anxiety	1	
Drug use and abuse (including prescription drugs)	2	
YOUTH POPULATION HEALTH CONCERNS		
Smoking & tobacco use		
ADULT POPULATION HEALTH CONCERNS		
Stress	1	
SENIOR POPULATION HEALTH CONCERNS		
Availability of resources to help the elderly stay in their homes	6	2
Availability to meet the needs of older population		
Assisted living options		
Long-term/nursing home options		
Cost of long-term/nursing home care		
Availability of home health		
CONCERNS ABOUT IMPACTS OF OIL DEVELOPMENT		
Lack of affordable housing		

Appendix G – Survey "Other" Responses

The number in parenthesis () indicates the number of people who indicated that EXACT same answer. All comments below are directly taken from the survey results and have not been summarized.

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

- 1. Considering the PEOPLE in your community, the best things are: "Other" responses:
 - Alive
 - Locals in Watford are not welcoming to new people and diversity
 - Too many people on drugs, no one doing anything
- 2. Considering the SERVICES AND RESOURCES in your community, the best things are: "Other" responses:
 - In order to access any quality services, you have to leave Watford City
 - None of these apply
 - None
 - Not enough people care to do things for the young
- 3. Considering the QUALITY OF LIFE in your community, the best things are: "Other" responses:
 - Country life is better than in town
 - More clean up
 - None of this is available in Watford City
 - Outdoor recreation
- 4. Considering the ACTIVITIES in your community, the best things are: "Other" responses:
 - Activities for senior citizens
 - Little Missouri National Grasslands and Theodore Roosevelt National Park

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

- 5. Considering the COMMUNITY /ENVIRONMENTAL HEALTH in your community, concerns are: "Other" responses:
 - Drugs
 - Not enough places to shop for goods
 - Overreach of government
 - To be honest, except for the air quality, I could mark all of this as a concern in Watford City
- 6. Considering the AVAILABILITY/DELIVERY OF HEALTH SERVICES in your community, concerns are: "Other" responses:
 - All of these are a concern here. For as large of a population in the area, healthcare SHOULD be better
 - All the above
 - Door to door check ups
 - Receiving a bill like 7-8 months after the appointment and having the incorrect insurance amount applies. MCHS is notorious for wild and crazy billing scenarios in the past.

- 8. Considering the YOUTH POPULATION in your community, concerns are: "Other" responses:
 - All of these are a concern
 - All the above (2)
 - The healthcare is crap in WC
 - Use of energy drinks
- 9. Considering the ADULT POPULATION in your community, concerns are: "Other" responses:
 - Covid
 - All the above (2)
- 10. Considering the SENIOR POPULATION in your community, concerns are: "Other" responses:
 - All of these
 - All the above (2)
 - No one level housing, not assisted living
- 11. Regarding impacts from oil development in our community, concerns are: "Other" responses:
 - All of these
 - All the above (2)
- 12. What single issue do you feel is the biggest challenge facing your community?
 - Access to healthy foods
 - Affordable housing (5)
 - Affordable housing and affordable childcare
 - Clean water and air
 - Cost to buy or rent space for mom and pop businesses is too much, so we do not have much diversity for food or shopping. Makes it difficult to live here.
 - Disrespect with young and older people that have moved here
 - Distance to larger food markets
 - Drug abuse leads to more crime and elder abuse
 - Drug and alcohol abuse (2)
 - Drug/traffic
 - Drugs (4)
 - Drugs and alcohol
 - Drugs are very terrible on the reservation/community. Our leaders do not do enough, because their kids, friends, and family involved. That's why nothing is being done
 - Drugs or chemical abuse
 - Drugs with young kids.
 - Drugs, oil, poverty
 - Helping maintain families who the current shutdown of pipelines has impacted
 - Homes for families.
 - Idk, sounds like the lack of single-family housing is still a major issue
 - Lack of adequate health care that have knowledge and keeping good ones. Like there is one ENT in Bismarck now and only 1 allergy specialist. And as much as those who try here they just don't know enough
 - Lack of affordable childcare
 - Lack of affordable housing/developable property and high cost of living
 - Lack of awareness- to everything that matters
 - Lack of jobs paying a liveable wage
 - Lack of people helping elders

- Low wages High cost. Not enough childcare
- No housing
- Not as many medical services in the immediate area
- Not enough activities for the youth, drug abuse
- Not enough economic development
- Not enough housing
- Not enough places/activities for kids
- NOTHING for kids to do, nowhere to buy good food (nutritious)
- Oil companies trash the land
- Oil companies- we don't know who works or lives in town. Community- I'm thinking the safety of our children/elders
- Oil traffic, drug/alcohol
- Open minded opinions and constructive criticism
- Opportunity to exercise year-round at a gym with hours that make sense for people that work.
- People don't mind their business
- People refusing Covid vaccine.
- Poor uptake of vaccinations especially in children
- Providing a welcoming atmosphere to the city
- Rules and regulations for business to expand or build
- Small business owners are struggling to stay open
- The amount of drug use and the people that set away with it, and do it over and over again cause the person knows they can get away with it
- The cost of living vs. allowable wages. Even for businesses in the area with high rents, they cannot afford to stay open when oil drops off and the community is at a financial low because of it.
- The racism, prejudice, hate, discrimination and unwillingness for people to step outside of themselves for the greater good.
- The school system
- There is no single answer. The community is run by locals and they are blocking any and all things that can help people who move into the community of services unless they are rich. The BIPOC and LGBTQ populations are significantly shut off from prospering in this community as well.....
- Trumpism
- We need a Walmart!
- We need more jobs

Delivery of Healthcare

- 17. What specific healthcare services, if any, do you think should be added locally?
 - 24/7 ER or clinic faster ambulance services
 - 24/7 on-call nurse
 - A different hospital
 - AA, NA
 - Alzheimer's and dementia
 - Birth control- more options
 - Cancer
 - Cardiologist
 - Cardiology
 - Delivery room and NICU

- Dialysis
- ENT, dermatology
- Handicap van to help disabled go home from nursing home for day
- Have a dr here in Mandaree at all times
- Home health care
- Home nurse provider for all ages
- Increased number of cardiac screening services
- Men's health day programs
- Mental health services (2)
- Mental therapy
- More education on flu shots
- More infant (pediatric care)
- More staff for local public health
- More timely access to clinic
- None
- None, it's all good. They got it covered
- Personal training fitness
- Surgeon
- Treatment place
- We need more access to mental health care here
- WIC
- 18. What PREVENTS community residents from receiving healthcare? "Other" responses:
 - All the above
 - Cannot get through on phones
 - Insurance seems to control what services you can receive, instead of medical professionals
 - N/A
 - No one trusts the hospital
 - Poor bedside manners by current staff
 - Refusal from the general practitioner to perform procedures or even look at problems
 - Scared about getting a bill 8 months later with incorrect insurance, having to make ten phone calls to help square all the details away etc.
- 19. Where do you turn for trusted health information? "Other" responses:
 - Don't know
 - Frontline Doctors
 - I utilize gynecologist in another city as my primary caregiver. I can't trust my health to anyone here
 - Off the reservation
 - Telehealth via BCBSND
- 21. Have you supported the McKenzie County Health System Foundation in any of the following ways? "Other" responses:
 - I don't know anything about it
 - Never knew
 - No (3)
 - No, they waste their money.
 - None (2)
 - Nope! They already charge an arm and a leg for anything, so why would I give my money to the

foundation

- Not at all. The prices for the services are outrageous they can pay for stuff with the gouging they do to the community
- 33. Overall, please share concerns and suggestions to improve the delivery of local healthcare.
 - Adequately trained lab staff
 - Be on call 24/7
 - Better communication.
 - Community store needs more variety
 - Demanding 50-100% in order to get labs or images. Most go without healthcare because they have to choose between health or bills
 - Find ways to retain providers and shorten appointment times so that more people can be seen at the rural health clinic. Give more support to the urgent care clinic. Try to bring on core staff providers for the urgent care and emergency department so people become comfortable with seeing the same providers at those locations
 - Follow through on calling patients with lab results (especially when promised). Care about the patients, don't talk down to them. Listen. Doctors and nurses need to listen to their patients.
 - Getting in for appointments earlier. Not having to schedule bloodwork.
 - Handicap transportation to go home for the day from nursing home
 - I suggest you strongly talk about HIPPA!!! and confidentiality
 - I would have liked to have questions about the Wellness Center and to have an opportunity to share my and hear others issues with the Wellness Center.
 - It would be lovely if more specialists would come here so one wouldn't have to travel to Bismarck
 - Just get it done.
 - Keep at it
 - Medical pot please!
 - Need better access and more healthcare workers
 - Need more resources
 - Need to have a good facility for the people to work in
 - None (2)
 - Ok
 - People in the community would rather travel 3hrs for needed care before getting it in WC. Waste of time and money.
 - Question of sales tax is interesting. One idea is the city will have the GPT portion of the Roughrider Center debt paid off in 2026. After 2026 maybe the GPT revenue could assume the Roughrider sales tax bond currently being paid for w / 0.75% of our sales tax revenue through 2045 and the 0.75% sales tax revenue could then be assigned to MCHS if the community feels that is a responsible decision. Otherwise MCHS is already receiving sales tax dollars today, not sure on net percentage but 0.25% currently may be close.
 - Quit with all the Covid testing!! At home kits also. 2 years is enough
 - Recruit more FMD's and specialists. ER and urgent care core staff instead of travelers.
 - Saturday options for mammograms, preventive care would be nice along with navigable website and phones that are answered. Hiring family practice docs who are relatable to various age groups would be excellent. Waiting room experiences could be improved.
 - The ED doctors are very slow in the ED. It shouldn't take 90 minutes with only one other patient in the room to be seen by a doctor. Urgent Care is useless with no radiology services in their building.
 - The system is broken and I blame the locals.... I will be leaving the community as soon as I can for better quality of life which includes better healthcare and kinder people
 - Update 911 locations/address. Create more awareness through media/newspapers/radio etc. Have meetings
 - Update all addresses- community information on services available and transportation
 - We need a better clinic or better confidentiality
 - Yes