Bismarck-Burleigh Public Health
Community Health Improvement Plan
2019-2021

Public Health
Prevent. Promote. Protect.

Bismarck-Burleigh Public Health

Bismarck

Prepared by: Renae Moch, MBA, FACMPE
Director, Bismarck-Burleigh Public Health

TABLE OF CONTENTS

WELCOME LETTER 1

ACKNOWLEDGEMENTS 2

COMMUNITY HEALTH COLLABORATIVE CORE GROUP MEMBERS 2

DESCRIPTION OF BISMARCK-BURLEIGH PUBLIC HEALTH 3

DESCRIPTION OF COMMUNITY SERVED 3

EVALUATION OF 2015 COMMUNITY HEALTH NEEDS ASSESSMENT 4

2018 COMMUNITY HEALTH NEEDS ASSESSMENT 5

PURPOSE 5

STUDY DESIGN & METHODOLOGY 5

PRIMARY RESEARCH 5

Key Stakeholder Survey 5

Resident Survey 5

SECONDARY RESEARCH 8

LIMITATIONS OF THE STUDY 8

KEY FINDINGS 8

COMMUNITY HEALTH CONCERNS 8

Economic Well-Being 8

Children and Youth 9

Aging Population 9

Safety 9

Health Care Access 9

Mental Health and Substance Abuse 9

BBPH PRIORITIES 10

APPENDIX 10

PRIMARY RESEARCH 10

2018 Key Stakeholder Survey Results 10

2018 Residents Survey Results 10

SECONDARY RESEARCH 10

2018 Burleigh County Community Health Profile 10

2018 Morton County Community Health Profile 10

ASSET MAPPING 10

Asset Mapping Document 10

Welcome Letter

Bismarck-Burleigh Public Health partnered with CHI St. Alexius Health and Sanford Health in Bismarck to complete a Community Health Needs Assessment for our local area in 2018. This report is designed to summarize the assessment process, frame our community assets relating to health and wellness, and identify implementation strategies that Bismarck-Burleigh Public Health will utilize to address the health and wellness needs in our community.

Bismarck-Burleigh Public Health is continuously planning and collaborating with local health partners to work towards community level changes that are sustainable and will shift social norms relating to the health and wellness of our residents. I applaud the efforts that have been put forth thus far by our colleagues.

The progressive leadership in our local area is something to be proud of. As you read this report, take pride in our community assets, embrace our community needs and engage in becoming part of the solution.

Sincerely,

Renae Moch, MBA, FACMPE

Renae Moch, MBA, FACMPE
Public Health Director
Bismarck-Burleigh Public Health

Acknowledgements

Bismarck-Burleigh Public Health would like to acknowledge and thank the City of Bismarck's Administration and City and County Boards of Health for their supportive efforts throughout the collaborative process of conducting the 2018 Community Health Needs Assessment Survey. A special "thank you" goes out to Bismarck City Commissioner, Nancy Guy, and Burleigh County Commissioner, Kathleen Jones, the portfolio holders for Public Health who have actively participated and provided feedback to our department throughout this process. Your support of this collaboration encourages efficient use of resources and a coordinated effort to improve the health of our community.

In addition, we recognize the Burleigh-Morton Community Health Collaborative Core Group Members for their expertise and leadership throughout the assessment process. This group carried the responsibility of completing a Community Health Needs Assessment for Burleigh and Morton Counties and led efforts to complete the process successfully.

Community Health Collaborative Core Group Members

Renae Moch, MBA, FACMPE
Public Health Director
Bismarck-Burleigh Public Health

Angelia K. Svihovec, MBA
VP Regional Services & State Advocacy
CHI St. Alexius Health

Sister Mariah Dietz
Vice President of Mission Integration
CHI St. Alexius Health

Marnie Walth
Senior Legislative Affairs Specialist
Sanford Health

Carrie McLeod
Sanford Enterprise Community Health/Community Benefit
Sanford Health

Bismarck-Burleigh Public Health also expresses gratitude to the community stakeholders and Bismarck-Burleigh Public Health staff members who participated in planning efforts and facilitated discussions and assisted with prioritizing needs identified through the assessment process. Group facilitators: Theresa Schmidt, Jodi Wolf, Betsy Kanz, Kjersti Hintz, Katie Johnke, Susan Kahler, Anton Sattler and Kelly Nagel (NDDOH). We also thank the Burleigh and Morton County residents who assisted in survey completion and all others that supported these efforts in any way throughout the assessment process. Working together we can obtain a healthy and safe community for all residents!

Description of Bismarck-Burleigh Public Health

Bismarck-Burleigh Public Health operates as a City of Bismarck department and is comprised of the following sections: Health Administration, Health Services, Health Maintenance, Environmental Health, Emergency Preparedness and Response, Nutrition Services, Tobacco Prevention and Control, Women's Way, and the Business Office. Burleigh County contracts with the City of Bismarck for public health nursing services.

Bismarck-Burleigh Public Health employs public health professionals who work to protect the health of the population for Bismarck and Burleigh County. Public health professionals work to prevent the spread of infectious diseases and food-borne illnesses and stress the importance of preventive care to maintain good health. Public Health promotes and encourages preventive health care and healthy lifestyles for children and families.

Public Health protects the public against injuries and environmental threats by preparing for and responding to natural and man-made disasters and emergencies. Public Health plays a vital role in the development of policies and standards to address the challenges to our community's health.

Description of Community Served

Bismarck-Burleigh Public Health serves the residents of the City of Bismarck and Burleigh County. Bismarck is the capital of the state of North Dakota and the county seat of Burleigh County. The U.S. Census population estimate for Bismarck in 2017 was 72,865 people and 95,030 for Burleigh County. Bismarck is the 2nd most populous city in the state of North Dakota.

Bismarck is on the east bank of the Missouri River, directly across the river from the City of Mandan. The two cities make up the core of the Bismarck-Mandan Metropolitan Statistical Area.

As a hub of retail and healthcare, Bismarck is the economic center of south-central North Dakota and north-central South Dakota. Bismarck has received national recognition and stands out as an emerging community by being listed on the following: Forbes Best Small Places for Business and Careers, Milken Institute's Best Small Cities, and CNN Money's list of top 100 places to live in the nation.

Bismarck-Burleigh County serves as home to higher education facilities such as Bismarck State College, the University of Mary, United Tribes Technical College in addition to several of the state's top businesses.

Evaluation of 2015 Community Health Needs Assessment

Bismarck-Burleigh Public Health participated in a Community Health Needs Assessment (CHNA) in 2015. Public Health collaborated with CHI St. Alexius Health and Sanford Health to complete its second CHNA, a requirement of the Affordable Care Act for hospitals to maintain their tax exempt status.

Community Health Stakeholders identified the following as key community concerns in 2015:

1. **Affordable Housing**
2. **Chronic Disease**
3. **Access to Affordable Health Care**
4. **Obesity / Poor Nutrition / Lack of Exercise**
5. **Timely Access to Mental Health Providers**
6. **Child Abuse / Neglect**
7. **Homelessness**
8. **Coordination of Care between Providers & Services**
9. **Drug Use / Presence of Drugs & Alcohol**
10. **Stress**

Following prioritization of needs, the Community Health Collaborative Core Group Members met to discuss the priorities and how to best address the health needs in our community. Concerns addressed would focus on each agency's individual ability to make the biggest impact on improving the concern identified.

Bismarck-Burleigh Public Health chose the following concerns as priorities to include in the agency's strategic plan for 2015-2018:

- **Access to Affordable Health Care**
- **Chronic Disease**
- **Obesity / Poor Nutrition / Lack of Exercise**

2018 Community Health Needs Assessment

In 2018, Bismarck-Burleigh Public Health again participated in a Community Health Needs Assessment in collaboration with both local hospitals, CHI St. Alexius Health and Sanford Health. This section of the report contains information regarding the purpose of the assessment and a description of the surveys and information gathered throughout the survey process. Priorities have been identified and key concerns will be addressed through implementation strategies in the next three years.

Purpose

The purpose of the survey of residents in the greater Bismarck-Mandan area (i.e., Burleigh and Morton counties in North Dakota) was to learn about the perceptions of area residents regarding their personal health, the prevalence of disease, and other health issues in the community.

This Community Health Needs Assessment is a collaborative project of Bismarck-Burleigh Public Health, CHI St. Alexius Health and Sanford Health whose efforts ultimately lead to the implementation of comprehensive strategies for community health improvement in our local area.

Study Design & Methodology

Primary Research

Key Stakeholder Survey

An online survey was conducted with identified community key stakeholders. The study concentrated on the stakeholders' concerns for the community specific to economic wellbeing, transportation, children and youth, the aging population, safety, health care and wellness, mental health and substance abuse. The study was conducted through a partnership with Center for Social Research (CSR) at North Dakota State University. The CSR developed and maintained links to the online survey tool. Bismarck-Burleigh Public Health distributed the survey link via email to stakeholders and key leaders located within the Bismarck/Mandan community and Burleigh and Morton counties. Data collection occurred during December 2017. A total of 68 community stakeholders participated in the survey.

Resident Survey

The resident survey tool included questions about the respondent's personal health. An online survey was developed in partnership with public health experts. The Minnesota Health Department reviewed the survey and advised to include key questions used in the State Health Improvement Program (SHIP) surveys and those questions were included in this survey. The North Dakota Public Health Association developed an Addendum to the survey with questions specific to the American Indian population. The survey was sent to a representative sample of the Burleigh County

and Morton County populations secured through Qualtrics, a qualified vendor. A total of 645 community residents participated in the resident survey.

Community Asset Mapping

Asset mapping was conducted to find the community resources available to address the assessed needs. Each unmet need was researched to determine what resources were available to address the needs.

Community Stakeholders Meeting

Community stakeholders were invited to attend a presentation of the findings of the CHNA research. On **Thursday, April 5, 2018** the Community Health Collaborative Core Group hosted a **Community Health Stakeholders meeting** at the Bismarck Event Center Prairie Rose Rooms 102 & 103. Community profile information for Burleigh and Morton counties were presented to attendees in addition to survey findings from NDSU Center for Social Research.

A total of 61 stakeholders were present for the Community Health Stakeholders meeting representing the following agencies:

AARP, Bismarck City Commission, Bismarck Parks & Recreation, Bismarck Police Department, Bismarck-Burleigh Public Health, Bismarck-Mandan Chamber of Commerce, Bridging the Dental Gap, Burleigh County Commission, Burleigh County Housing Authority, Charles Hall Youth Services, CHI St. Alexius Health, City of Bismarck Administration, Community Healthcare Association of the Dakotas, Community Options, Go! Bismarck Mandan, Heartview Foundation, Lutheran Social Services, Mandan Police Department, Mental Health America of ND, Missouri Valley Homeless Coalition, ND Department of Health, Ruth Meiers Hospitality House, Sanford Health, State Legislators, UND Center for Family Medicine, United Tribes Technical College, United Way, University of Mary, Vulnerable Adult Protective Services, West Central Human Service Center, YMCA

Following the presentations, facilitated round table discussions took place where attendees provided feedback on the survey results and shared ideas on how their organizations could assist with the needs identified. Facilitators captured the discussions and feedback from attendees.

Prioritization Process

The primary and secondary research data was analyzed to develop the top unmet needs. The analyzed list of needs was developed into a worksheet. A multi-voting methodology from the American Society for Quality was implemented to determine what top priorities would be further developed into implementation strategies. Community stakeholders utilized the worksheet for voting and prioritization was completed and ranked as follows:

Health Indicator/Concern CHNA Survey Results	Stakeholder Group Consensus Ranking
Economic Well-Being A. Homelessness 4.44 B. Housing accepting chemical dependency, mental health, criminal history, domestic violence 4.33 C. Availability of affordable housing 3.87 D. Hunger 3.64 (No food no $ to buy more)	1. Homelessness 2. Affordable Housing 3. Hunger
Children and Youth A. Cost of quality child care 3.97 B. Substance abuse by youth 3.97 C. Childhood obesity 3.94 D. Teen suicide 3.86 E. Cost of services for at-risk youth 3.79 F. Bullying 3.78 G. Availability of quality child care 3.69 H. Availability of services for at-risk youth 3.69 I. Teen tobacco use 3.54	1. Available services for at-risk youth 2. Childhood Obesity 3. Substance Abuse by Youth
Aging Population A. Cost of long-term care 4.07 B. Cost of memory care 4.03 C. Cost of in-home services 3.69	1. Cost of long-term care 2. Cost of in-home services 3. Cost of memory care
Safety A. Abuse of prescription drugs 4.27 B. Culture of excessive and binge drinking 3.74 C. Domestic violence 3.74 D. Presence of street drugs 3.71 E. Child abuse and neglect 3.64 F. Sex trafficking 3.63 G. Criminal activity 3.50	1. Abuse of prescription drugs 2. Culture of excessive & binge drinking 3. Child abuse & neglect
Healthcare Access A. Availability of mental health providers 4.27 B. Availability of behavioral health providers 4.23 C. Access to affordable prescription drugs 3.67 D. Access to affordable healthcare 3.66 E. Access to affordable health insurance 3.65 F. Care coordination between providers/services3.64 G. Availability of non-traditional hours 3.56	1. Availability of mental health providers 2. Availability of behavioral health providers 3. Access to affordable healthcare
Wellness A. Obesity (30% self-report overweight/38% obese) B. High cholesterol (26% self-reported high) C. Hypertension (22% self-reported high BP) D. Asthma (19% self-reported asthma) E. Arthritis (17% self-reported arthritis) F. Diabetes (11% self-reported diabetes)	1. Obesity 2. Diabetes 3. High cholesterol
Mental Health and Substance Abuse A. Drug use and abuse 4.53 B. Alcohol use/abuse 4.19 (42% self-report binge drinking) C. Depression 3.90 D. Suicide 3.89 E. Dementia and Alzheimer's Disease 3.63 F. Anxiety and stress (49% report anxiety/stress)	1. Drug use and abuse 2. Depression 3. Alcohol use & abuse

Secondary Research

2018 County Health Rankings – North Dakota State Report
2018 Burleigh County Community Health Profile
2018 Morton County Community Health Profile

Limitations of the Study

The findings in this study provide an overall snapshot of behaviors, attitudes, and perceptions of residents living in Burleigh and Morton counties in North Dakota. A good faith effort was made to secure input from a broad base of the community. However, when comparing certain demographic characteristics (i.e., age, gender, income, minority status) with the current population estimates from the U.S. Census Bureau, there was improvement over the last several CHNA's but there is still a need to capture demographics that better represent the community.

Those community members specified in the statute include persons who represent the broad interests of the community served by the hospital facility including those with special expertise in public health; Federal, tribal, regional, state and or local health or other departments or agencies with information relevant to the health needs of the community served; and leaders, representatives, or members of medically underserved, low income, and minority populations. We extended a good faith effort to engage all of the aforementioned community representatives in the survey process. We worked closely with the local hospitals and public health experts throughout the assessment process.

Key Findings

Community Health Concerns

The key findings are based on the key stakeholder survey, the resident survey and secondary research. The key stakeholder survey ranked key indicators on a Likert scale with 1 meaning no attention needed and 5 meaning critical attention needed. Survey results ranking 3.5 or above are considered to be high ranking. The high ranking needs of 3.5 or above are considered for prioritization. The resident survey addresses personal health needs and concern. The secondary research provides further understanding of the health of the community and in many cases the indicators are aligned and validate our findings.

Economic Well-Being

Community stakeholders are most concerned about homelessness (ranking 4.44), that there is a need for housing that accepts people with chemical dependency, mental health problems, criminal history or victims of domestic violence (4.33), affordable housing (3.87), and hunger (3.62). People in Burleigh County and Morton County are struggling with food insecurity - 22% of resident surveys report that their food did not last until they had money to buy more.

Children and Youth

Community stakeholders are most concerned about the cost and availability of quality childcare (3.97), substance abuse by youth (3.97), childhood obesity (3.94), teen suicide (3.86), the availability and cost of services for at-risk youth (3.79), bullying (3.78), and teen tobacco use (3.54).

Aging Population

Community stakeholders are most concerned about the cost of long-term care (4.07), the cost of memory care (4.03), and the cost of in-home services (3.69).

Safety

Community stakeholders are most concerned about abuse of prescription drugs (4.27), a culture of excessive and binge drinking (3.74), domestic violence (3.74), the presence of street drugs (3.71), child abuse and neglect (3.64), sex trafficking (3.63), and criminal activity (3.50).

Health Care Access

Community stakeholders are most concerned about the availability of mental health providers (4.27), the availability of behavioral health (substance abuse) providers (4.23), access to affordable prescription drugs (3.67), access to affordable health care (3.66), access to affordable health insurance (3.65), coordination of care between providers and services (3.64), and the availability of non-traditional hours (3.56).

Mental Health and Substance Abuse

Community stakeholders are most concerned about drug use and abuse (4.53), alcohol use and abuse (4.19), depression (3.90), suicide (3.89), and dementia and Alzheimer's (3.63).

Resident survey participants are facing the following issues:

- 68% report that they are overweight or obese
- 49% have been diagnosed with anxiety
- 42% self-report binge drinking at least 1X/month
- 42% have been diagnosed with depression
- 26% self-report that they have drugs in their home they are not using
- 26% have been diagnosed with high cholesterol
- 23% report that alcohol use has had a harmful effect on them or a member of their family in the past two years
- 22% have a diagnosis of hypertension
- 22% report running out of food before having money to buy more
- 17% currently smoke cigarettes
- 17% have not visited a dentist in more than a year

BBPH Priorities

Bismarck-Burleigh Public Health will address the following health needs for the 2019-2021 fiscal years:

1. **Access to Affordable Health Care**
2. **Behavioral Health & Addiction**
3. **Cost of Care & Services for the Aging Population**
4. **Chronic Disease & Obesity**

Goals and objectives will be identified through the department's strategic plan which is compiled in a separate document presented and approved by the boards of health for the City of Bismarck and Burleigh County.

Appendix

Primary Research

- 2018 Key Stakeholder Survey Results
- 2018 Residents Survey Results

Secondary Research

- 2018 Burleigh County Community Health Profile
- 2018 Morton County Community Health Profile
- 2018 County Health Rankings – North Dakota Report

Asset Mapping

- Asset Mapping Document

2018 Key Stakeholder Survey

Bismarck-Mandan Medical Center

Community Health Needs Assessment
Results from a December 2017 Non-Generalizable

Online Survey of Community Stakeholders

January 2018

STUDY DESIGN and METHODOLOGY

The following report includes non-generalizable survey results from a December 2017 online survey of community leaders and key stakeholders identified by Sanford Bismarck-Mandan Medical Center. This study was conducted through a partnership between the Community Health Collaborative and the Center for Social Research (CSR) at North Dakota State University. The CSR developed and maintained links to the online survey tool. Members of the Community Health Collaborative distributed the survey link via e-mail to stakeholders and key leaders, located within various agencies in the community, and asked them to complete the online survey. **Therefore, it is important to note that the data in this report are not generalizable to the community.** Data collection occurred during the month of December. A total of 68 respondents participated in the online survey.

TABLE OF CONTENTS

SURVEY RESULTS 3

Current State of Health and Wellness Issues Within the Community 3

Figure 1. Current state of community issues regarding ECONOMIC WELL-BEING 3

Figure 2. Current state of community issues regarding TRANSPORTATION 4

Figure 3. Current state of community issues regarding CHILDREN AND YOUTH 5

Figure 4. Current state of community issues regarding the AGING POPULATION 6

Figure 5. Current state of community issues regarding SAFETY 7

Figure 6. Current state of community issues regarding HEALTHCARE AND WELLNESS 8

Figure 7. Current state of community issues regarding MENTAL HEALTH AND SUBSTANCE ABUSE ... 9

Demographic Information 9

Figure 8. Age of respondents 9

Figure 9. Biological sex of respondents 10

Figure 10. Race of respondents 10

Figure 11. Whether respondents are of Hispanic or Latino origin 11

Figure 12. Marital status of respondents 11

Figure 13. Living situation of respondents 12

Figure 14. Highest level of education completed by respondents 12

Figure 15. Employment status of respondents 13

Figure 16. Whether respondents are military veterans 13

Figure 17. Annual household income of respondents, from all sources, before taxes 14

Table 1. Zip code of respondents 14

Table 2. Comments from respondents 15

APPENDIX TABLE 16

Appendix Table 1. Current state of health and wellness issues within the community 16

SURVEY RESULTS

Current State of Health and Wellness Issues Within the Community

Using a 1 to 5 scale, with 1 being “no attention needed”; 2 being “little attention needed”; 3 being “moderate attention needed”; 4 being “serious attention needed”; and 5 being “critical attention needed,” respondents were asked to, based on their knowledge, select the option that best describes their understanding of the current state of each issue regarding ECONOMIC WELL-BEING, TRANSPORTATION, CHILDREN AND YOUTH, the AGING POPULATION, SAFETY, HEALTHCARE AND WELLNESS, and MENTAL HEALTH AND SUBSTANCE ABUSE.

Figure 1. Current state of community issues regarding ECONOMIC WELL-BEING

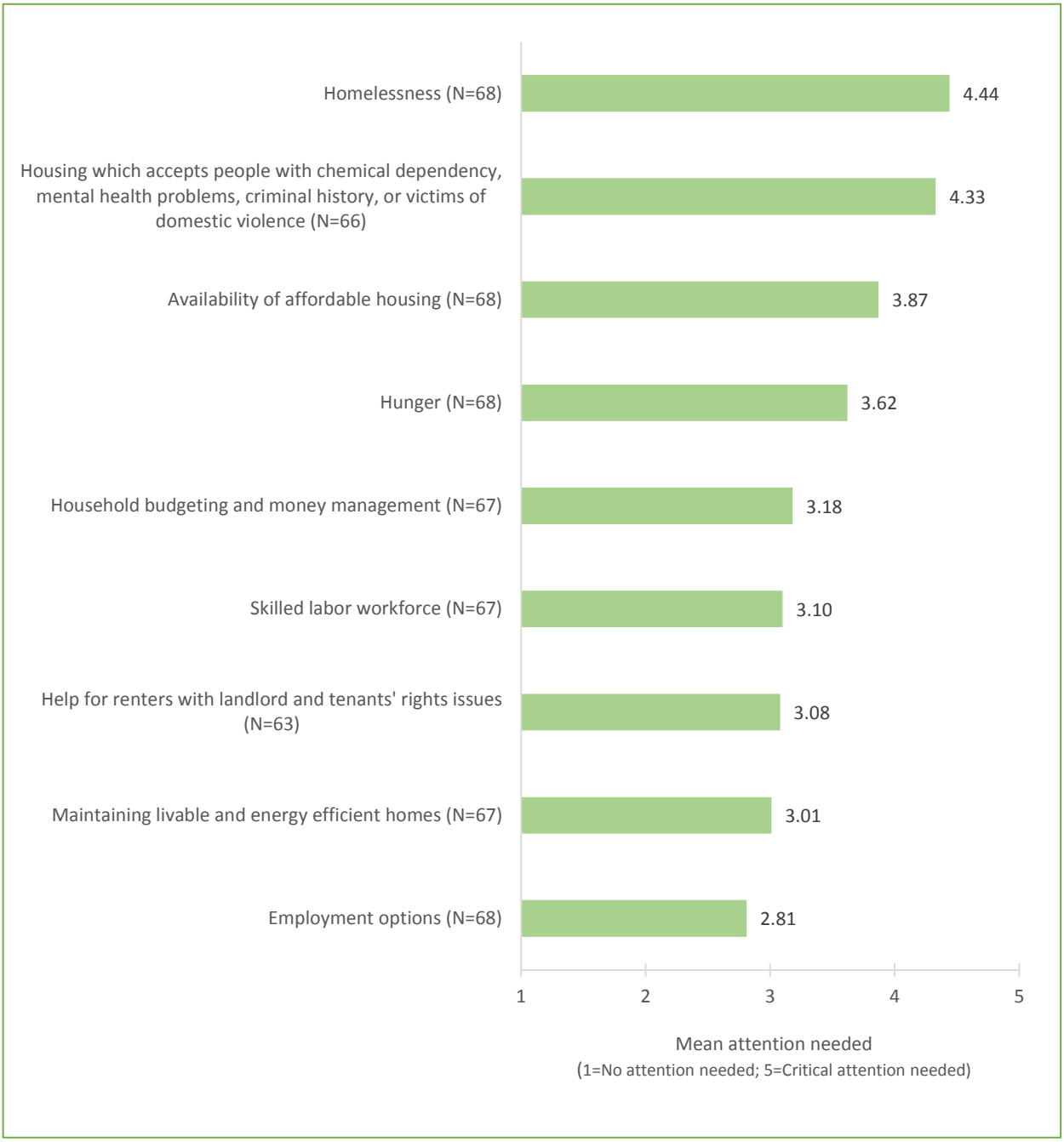


Figure 2. Current state of community issues regarding TRANSPORTATION

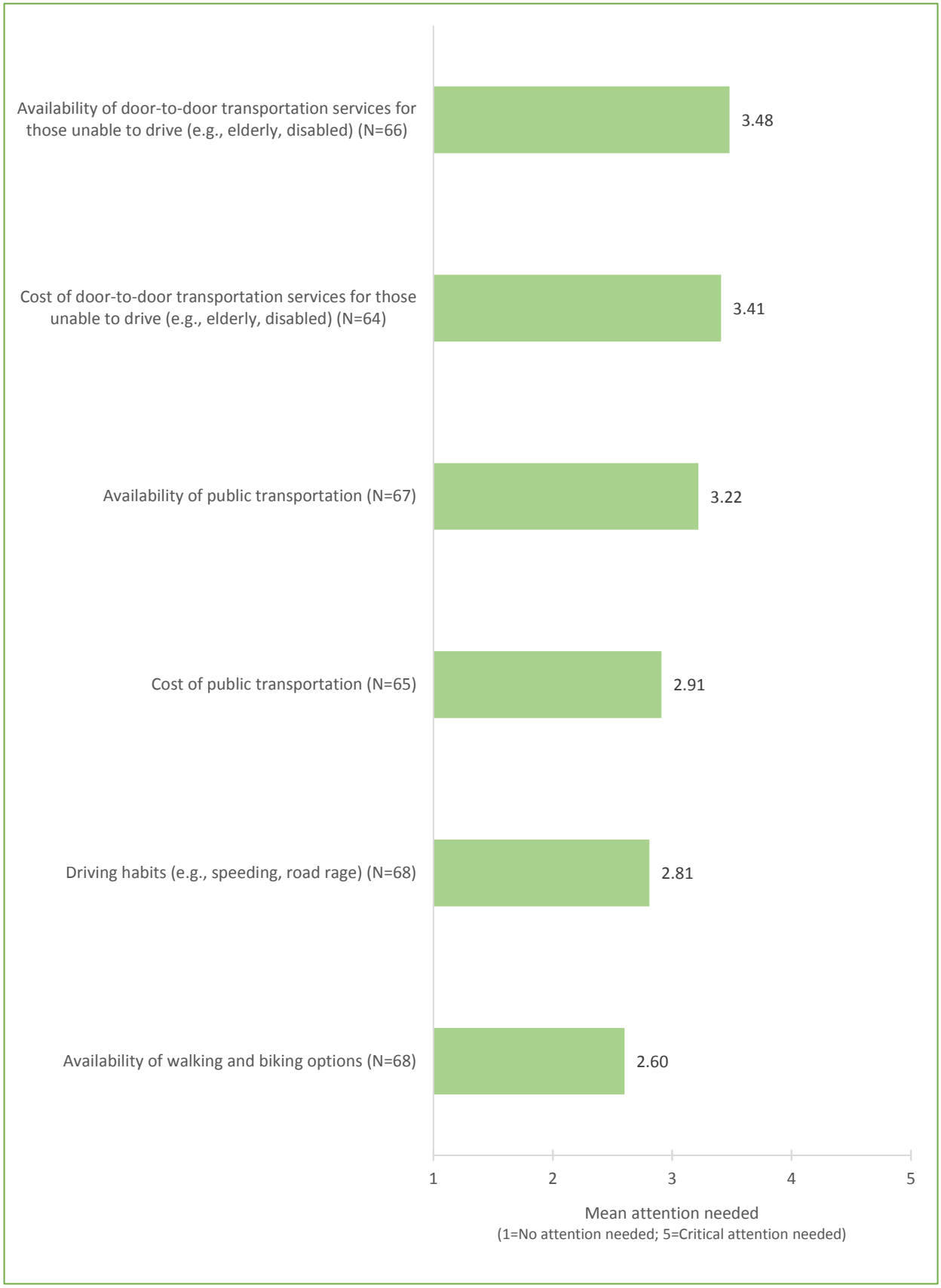


Figure 3. Current state of community issues regarding CHILDREN AND YOUTH

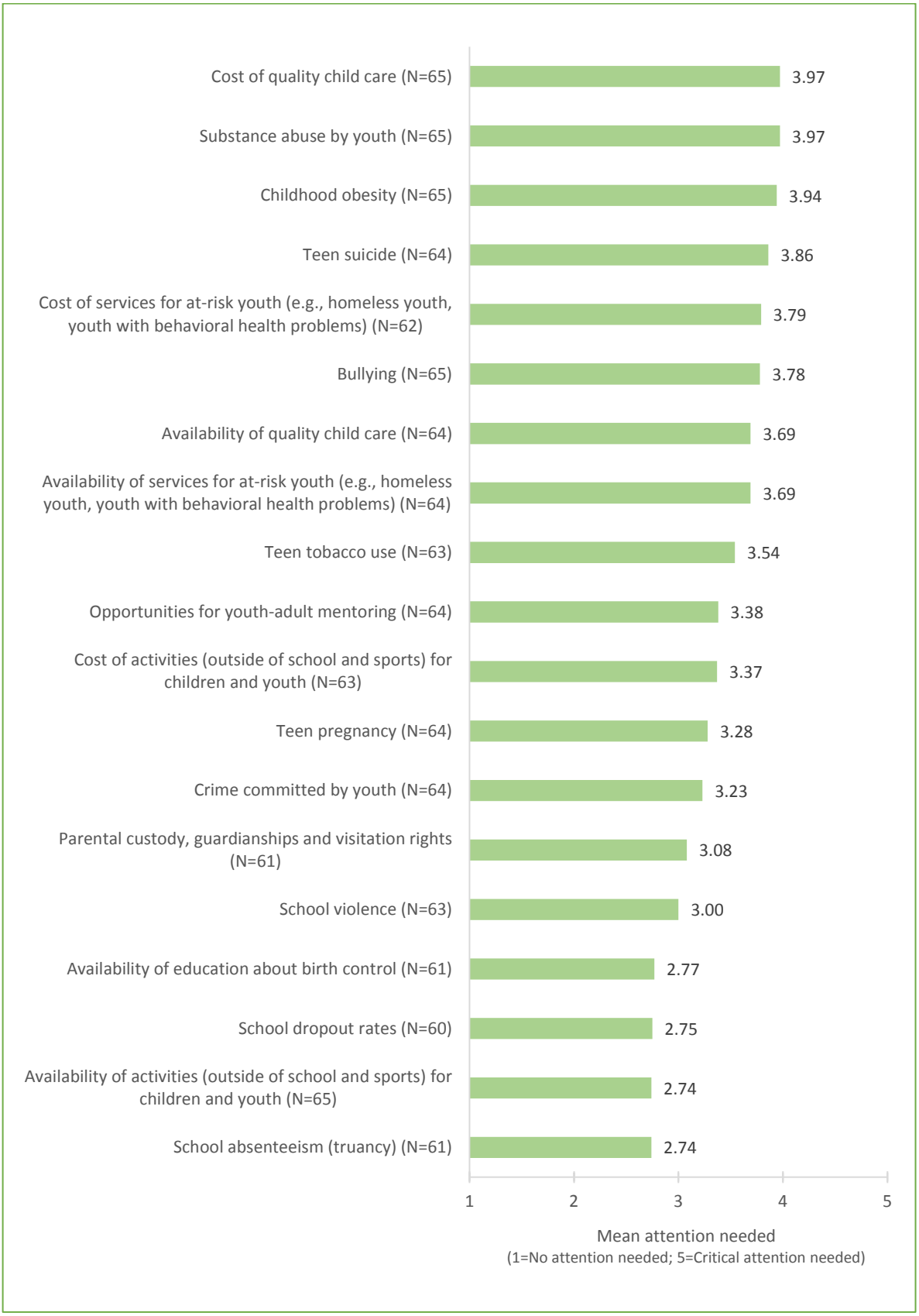


Figure 4. Current state of community issues regarding the AGING POPULATION

Figure 5. Current state of community issues regarding SAFETY

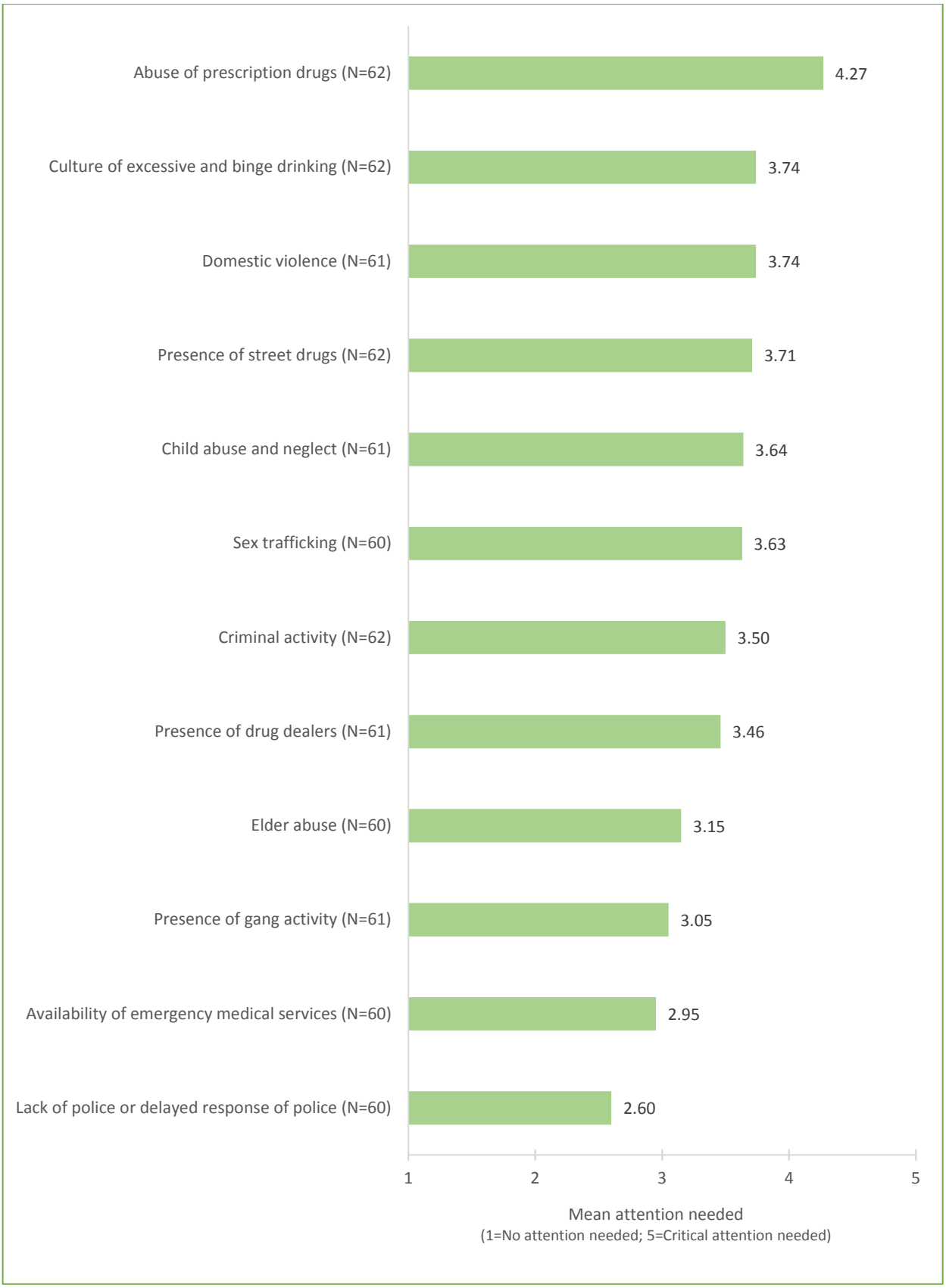
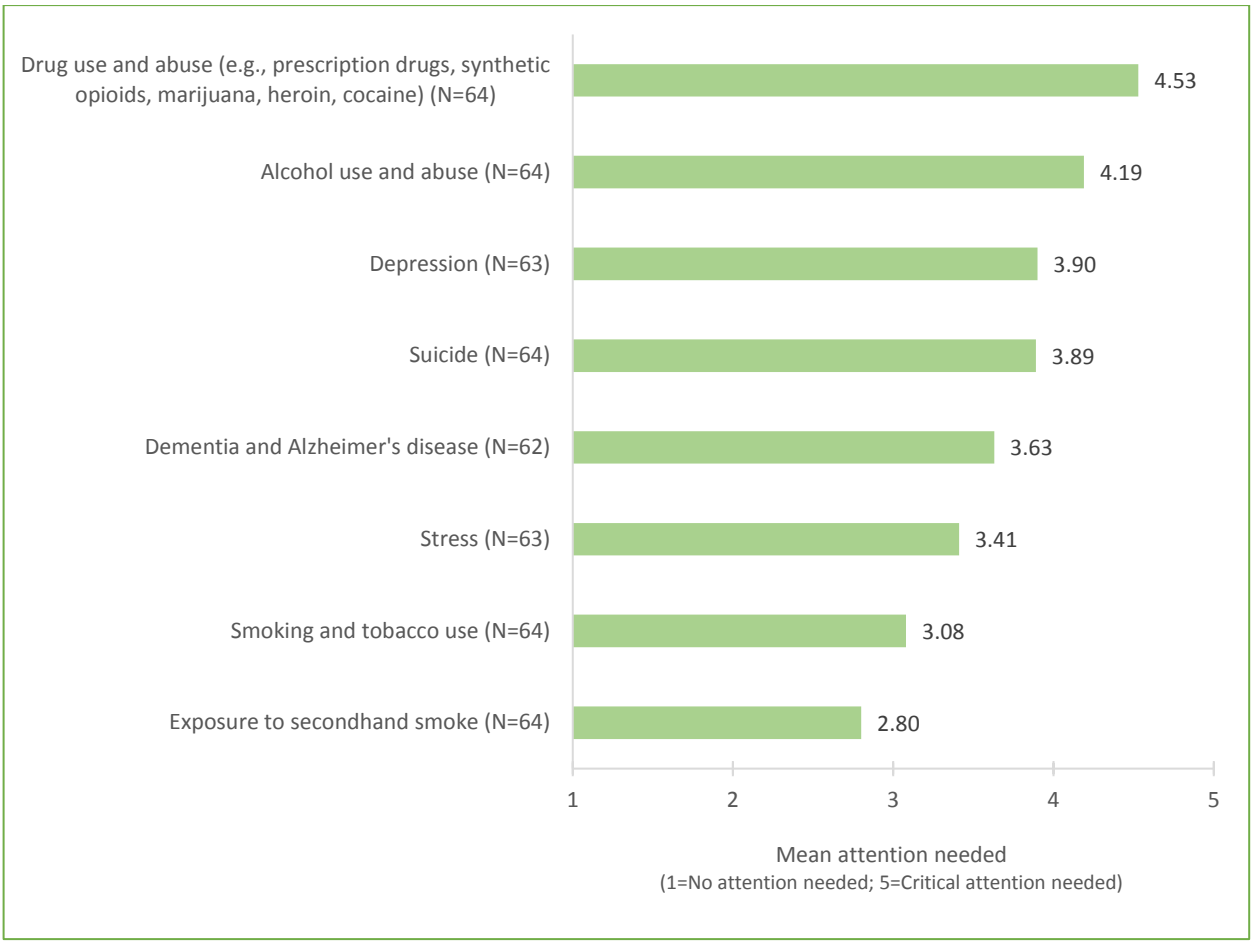


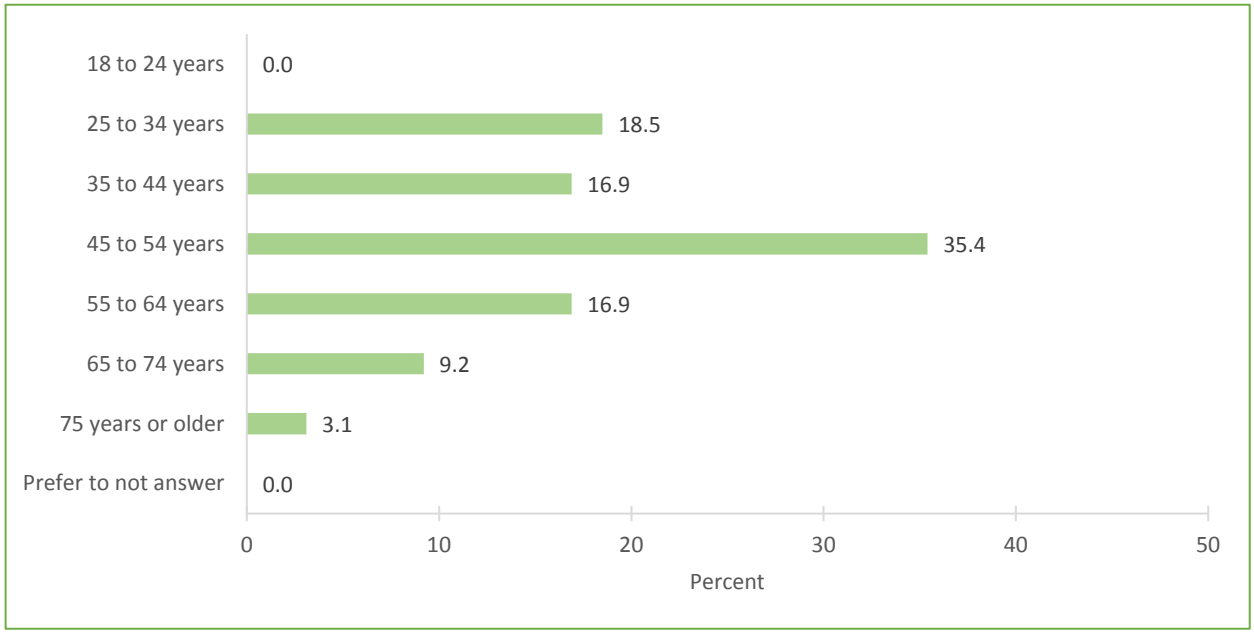
Figure 6. Current state of community issues regarding HEALTH CARE AND WELLNESS

Figure 7. Current state of community issues regarding MENTAL HEALTH AND SUBSTANCE ABUSE



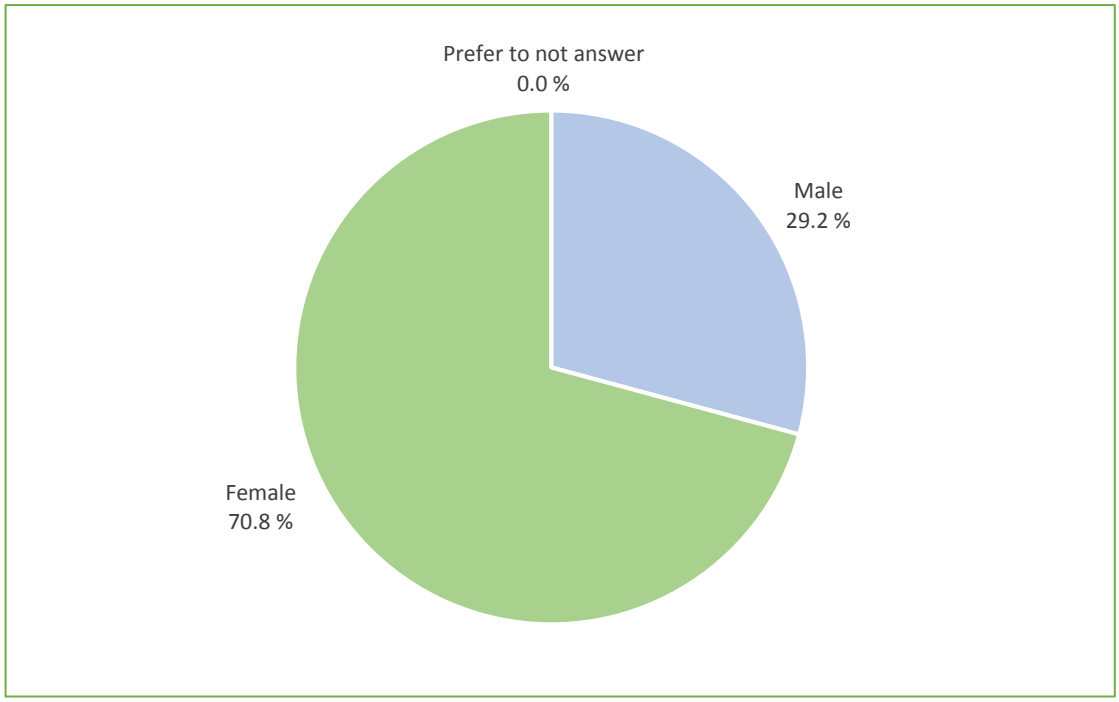
Demographic Information

Figure 8. Age of respondents



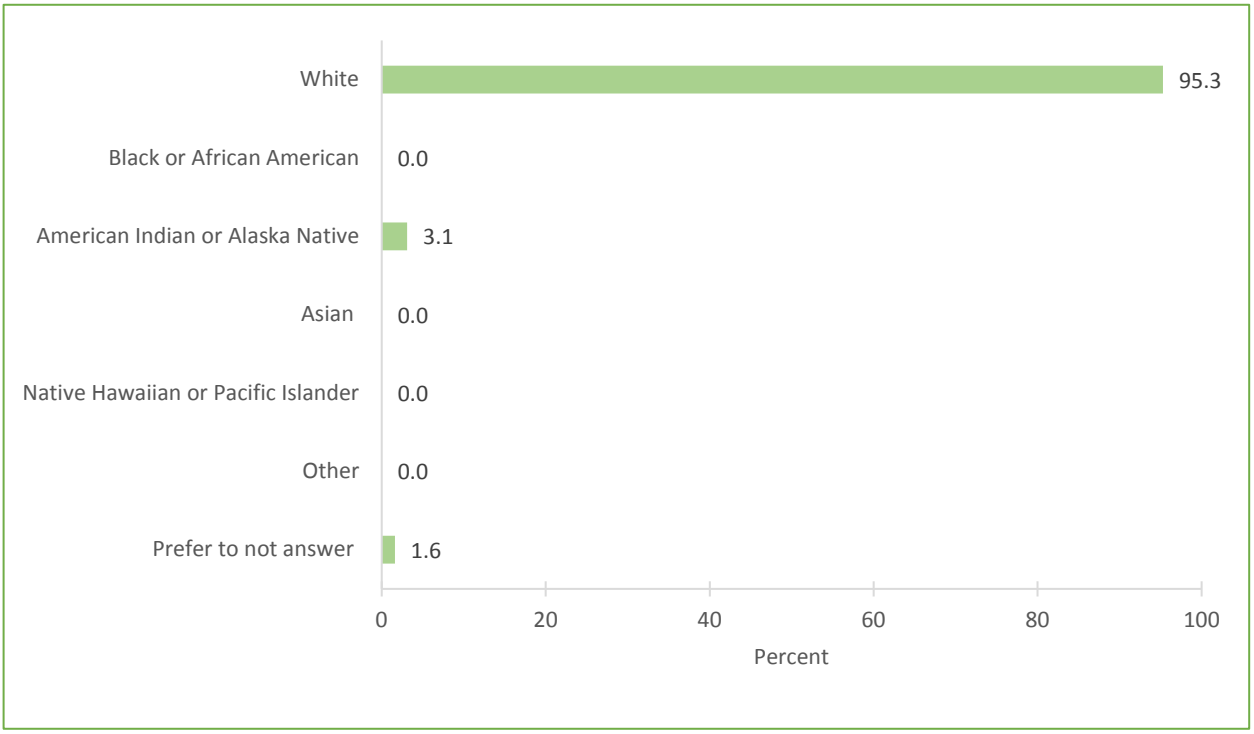
N=65

Figure 9. Biological sex of respondents



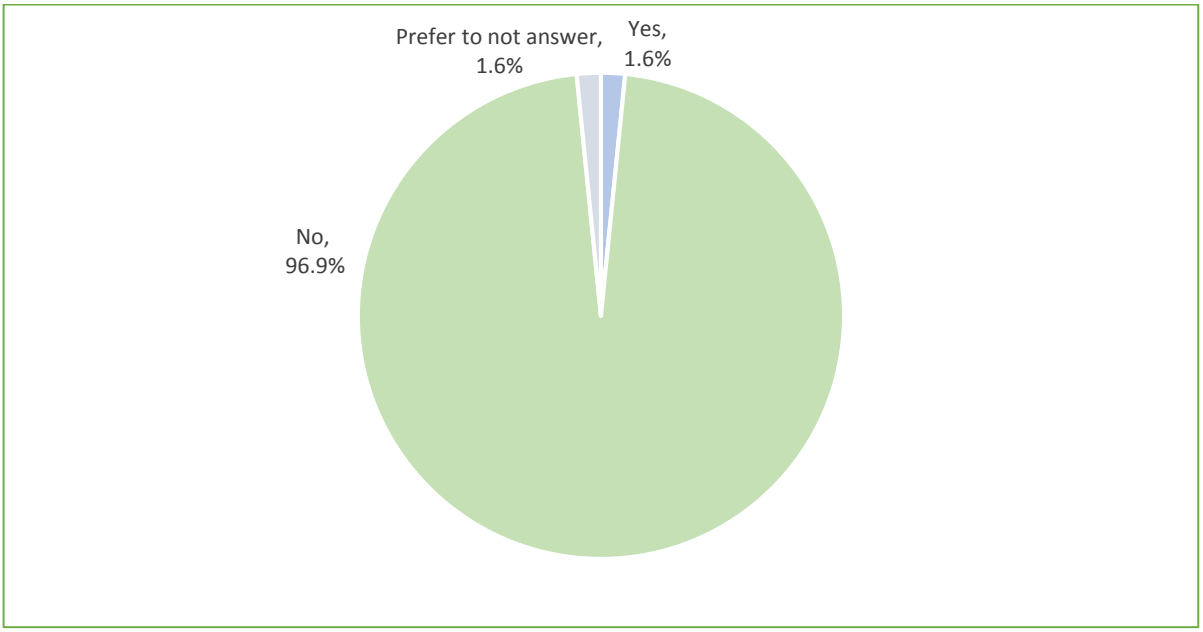
N=65

Figure 10. Race of respondents



N=64

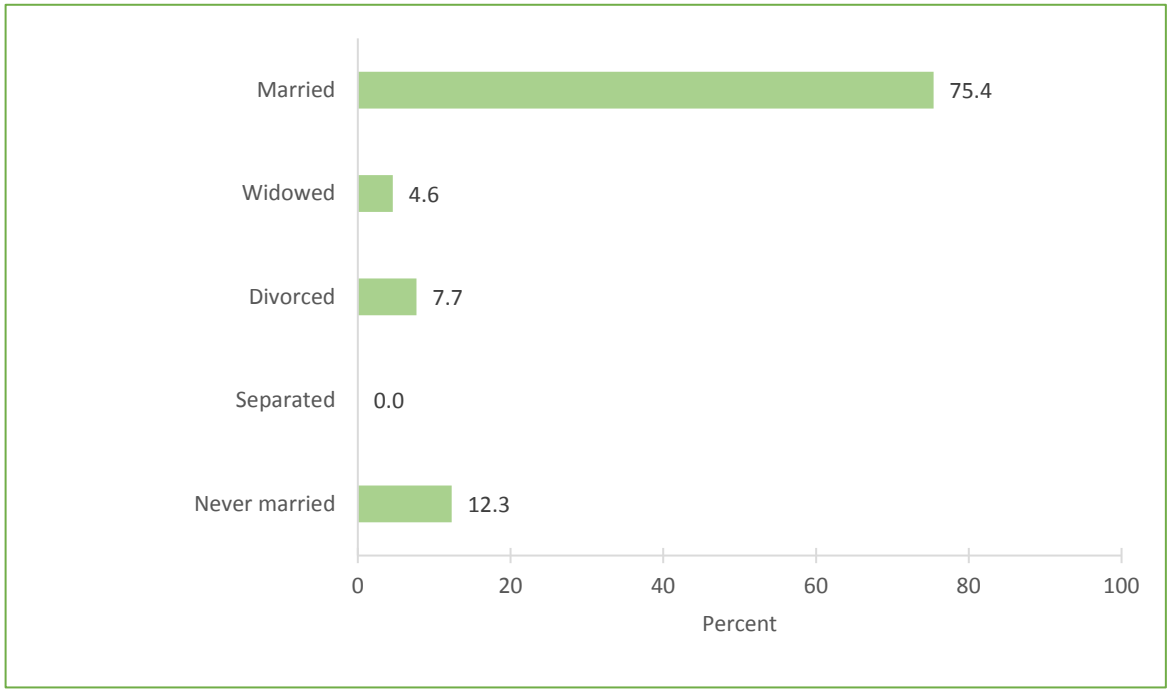
Figure 11. Whether respondents are of Hispanic or Latino origin



N=64

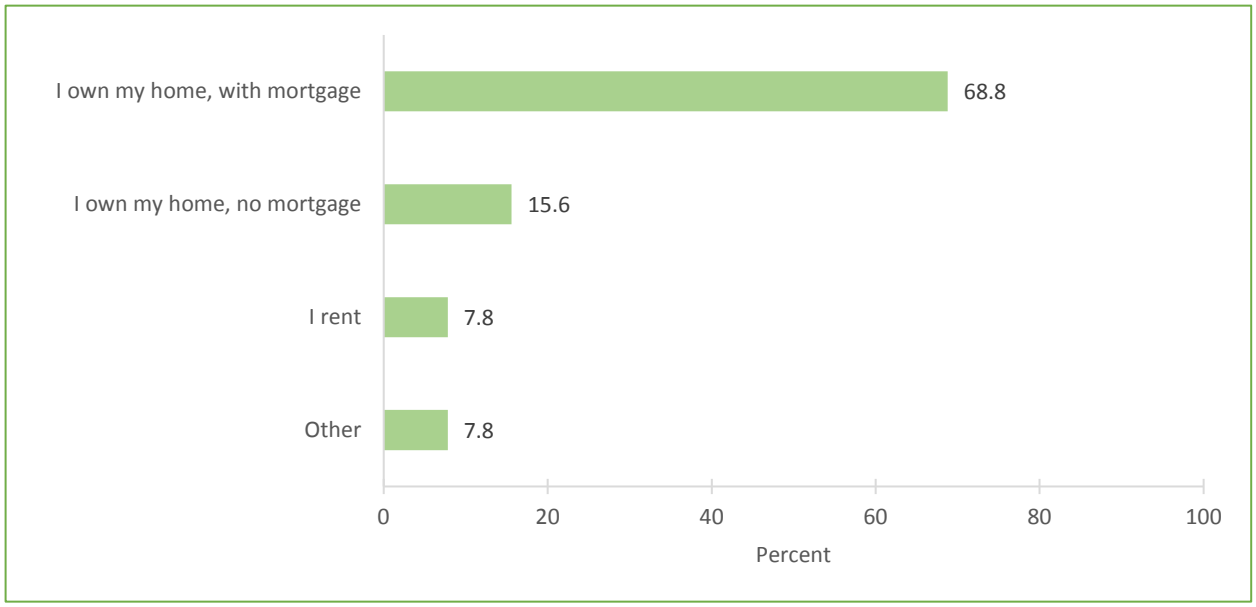
*Percentages do not total 100.0 due to rounding.

Figure 12. Marital status of respondents



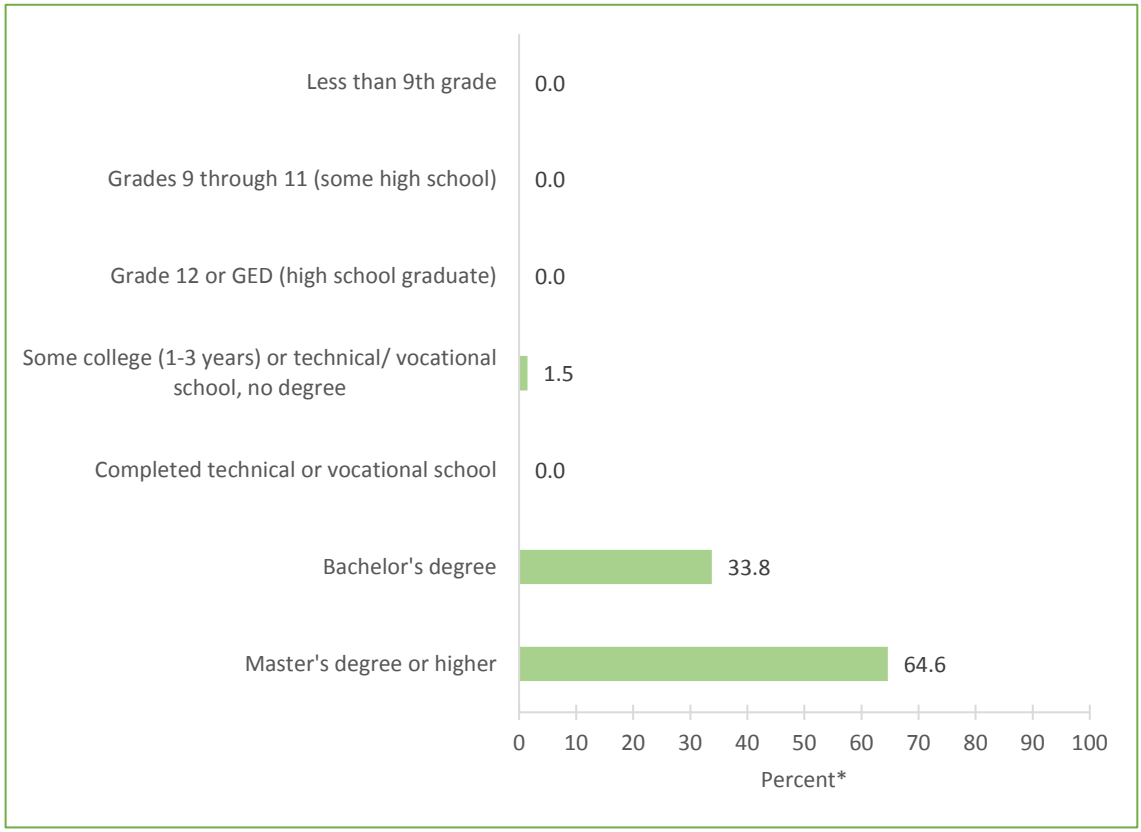
N=65

Figure 13. Living situation of respondents



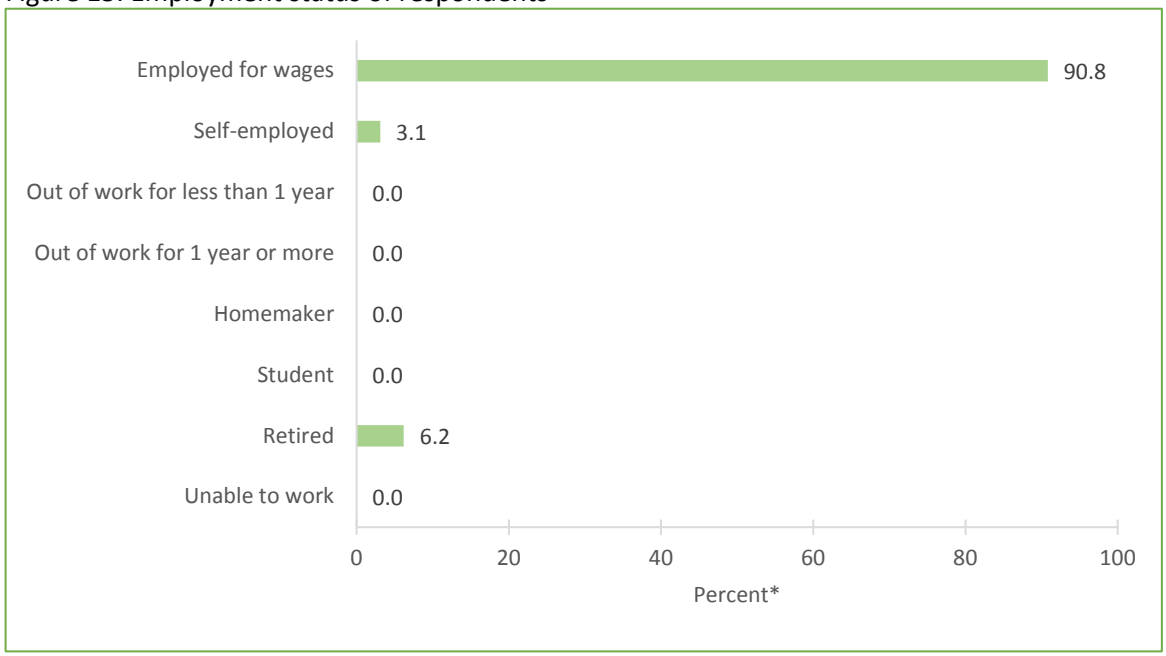
N=64

Figure 14. Highest level of education completed by respondents



N=65
*Percentages do not total 100.0 due to rounding.

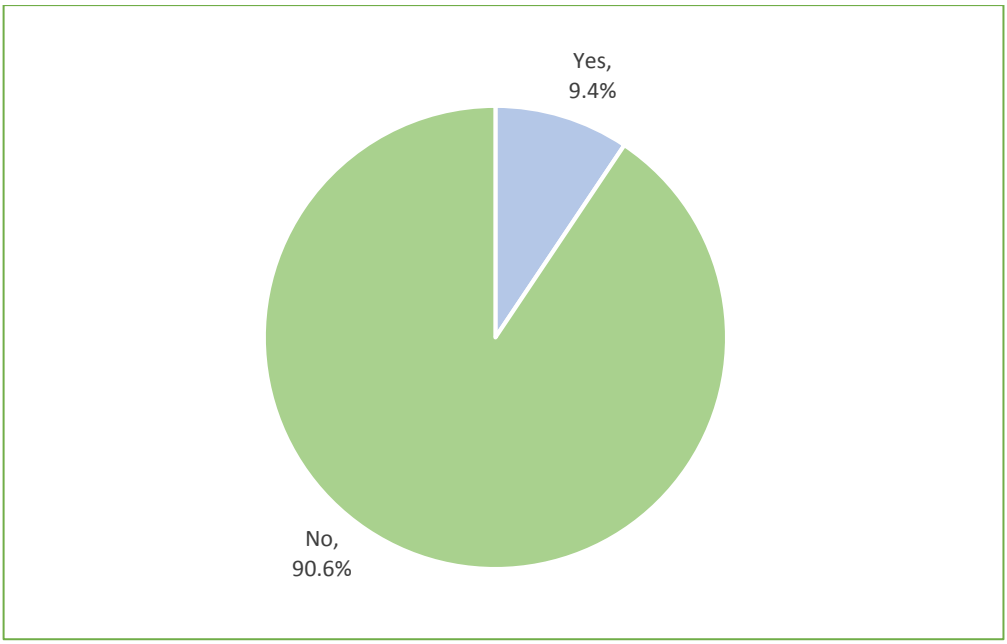
Figure 15. Employment status of respondents



N=65

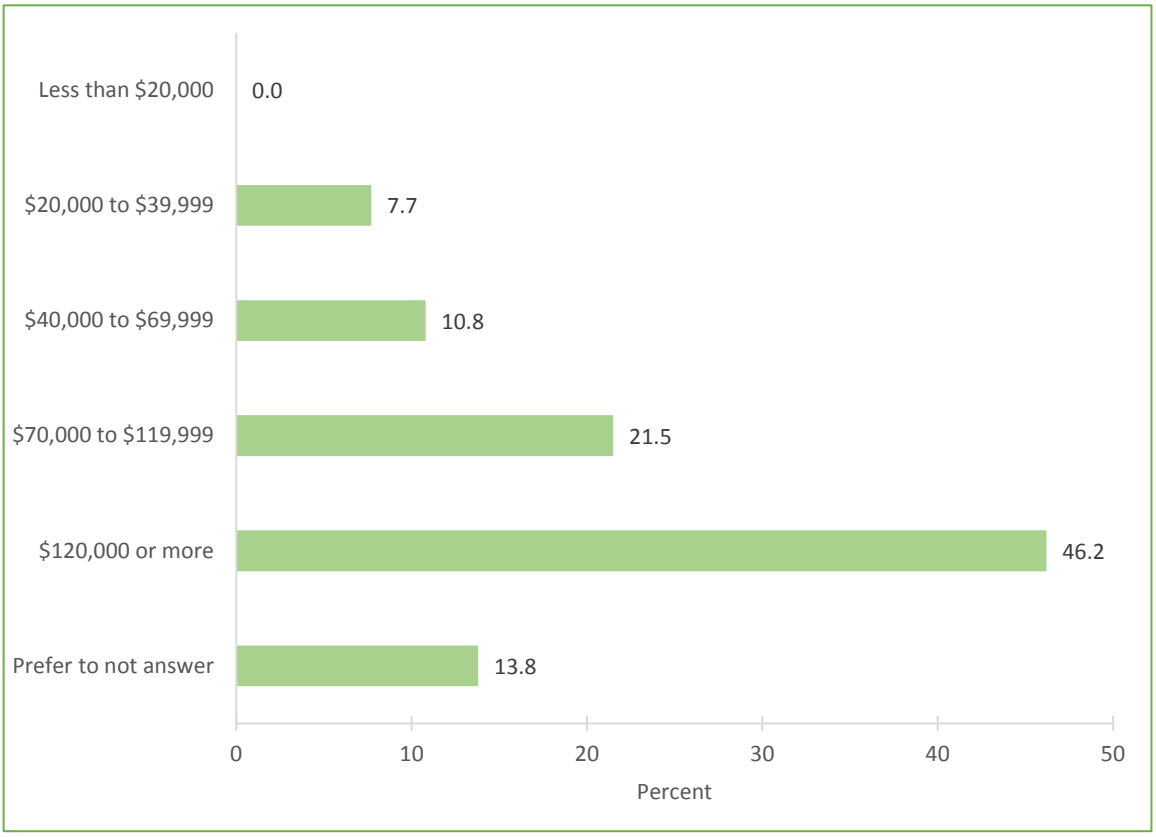
*Percentages do not total 100.0 due to rounding.

Figure 16. Whether respondents are military veterans



N=64

Figure 17. Annual household income of respondents, from all sources, before taxes



N=65

Table 1. Zip code of respondents

Zip code	Number of respondents
58501	20
58503	17
58504	13
58554	10
57504	1
58502	1
58530	1

N=63

Table 2. Comments from respondents

Comments
Need to address the need for homeless shelter & support services and intoxication management facility & services as soon as possible.
North Dakota needs better tenant rights. As it stands currently, tenants can be evicted for little to no reason. Most cases I see they are evicted for trying to improve the living space they are occupying because the landlord will not put any money into the property. It is unfair. The condition of some of the places I inspect are deplorable especially when I find out how much they cost. This issue only adds to the poverty issues most people are facing right now.
Survey did not include Brain Injury services or lack of. We need awareness and continuum of care for individuals with Mild, Moderate and Traumatic Brain Injuries.
Teen drug and alcohol substance abuse problems are very prevalent in our community.
Thanks for doing the survey.
There are questions that would be answered differently for Mandan vs. Bismarck (i.e. law enforcement availability).
There is a lack of jobs in leadership roles and at the mid to higher income range.
There should be a category that says "Don't Know".
This is perception data, influenced by community messaging. As I filled out the survey, I realized I was responding in some areas that I know little about. Ex: bullying is down but since bullying isn't defined, respondents may think bullying is conflict. They are very different terms.

APPENDIX TABLE

Appendix Table 1. Current state of health and wellness issues within the community

Statements	Mean**	Percent of respondents*						
		Level of attention needed						Total
		1 None	2 Little	3 Moderate	4 Serious	5 Critical	NA	
ECONOMIC WELL-BEING ISSUES								
Availability of affordable housing (N=68)	3.87	1.5	2.9	30.9	36.8	27.9	0.0	100.0
Employment options (N=68)	2.81	7.4	36.8	27.9	23.5	4.4	0.0	100.0
Help for renters with landlord and tenants' rights issues (N=67)	3.08	4.5	26.9	32.8	16.4	13.4	6.0	100.0
Homelessness (N=68)	4.44	0.0	1.5	14.7	22.1	61.8	0.0	100.1
Housing which accepts people with chemical dependency, mental health problems, criminal history, or victims of domestic violence (N=68)	4.33	1.5	1.5	17.6	19.1	57.4	2.9	100.0
Household budgeting and money management (N=68)	3.18	4.4	11.8	51.5	23.5	7.4	1.5	100.1
Hunger (N=68)	3.62	0.0	10.3	38.2	30.9	20.6	0.0	100.0
Maintaining livable and energy efficient homes (N=68)	3.01	8.8	17.6	42.6	22.1	7.4	1.5	100.0
Skilled labor workforce (N=68)	3.10	2.9	25.0	33.8	32.4	4.4	1.5	100.0
TRANSPORTATION ISSUES								
Availability of door-to-door transportation services for those unable to drive (e.g., elderly, disabled) (N=68)	3.48	0.0	20.6	29.4	26.5	20.6	2.9	100.0
Availability of public transportation (N=68)	3.22	1.5	29.4	25.0	30.9	11.8	1.5	100.1
Availability of walking and biking options (N=68)	2.60	14.7	35.3	27.9	19.1	2.9	0.0	99.9
Cost of door-to-door transportation services for those unable to drive (e.g., elderly, disabled) (N=68)	3.41	1.5	20.6	30.9	20.6	20.6	5.9	100.1
Cost of public transportation (N=68)	2.91	2.9	36.8	32.4	13.2	10.3	4.4	100.0
Driving habits (e.g., speeding, road rage) (N=68)	2.81	5.9	36.8	38.2	8.8	10.3	0.0	100.0
CHILDREN AND YOUTH								
Availability of activities (outside of school and sports) for children and youth (N=65)	2.74	10.8	32.3	33.8	18.5	4.6	0.0	100.0
Availability of education about birth control (N=64)	2.77	7.8	28.1	42.2	12.5	4.7	4.7	100.0
Availability of quality child care (N=65)	3.69	0.0	16.9	21.5	35.4	24.6	1.5	99.9
Availability of services for at-risk youth (e.g., homeless youth, youth	3.69	0.0	9.2	33.8	33.8	21.5	1.5	99.8

Statements	Mean**	Percent of respondents*						
		Level of attention needed						Total
		1 None	2 Little	3 Moderate	4 Serious	5 Critical	NA	
with behavioral health problems) (N=65)								
Bullying (N=65)	3.78	0.0	7.7	30.8	36.9	24.6	0.0	100.0
Childhood obesity (N=65)	3.94	0.0	4.6	26.2	40.0	29.2	0.0	100.0
Cost of activities (outside of school and sports) for children and youth (N=65)	3.37	0.0	13.8	50.8	15.4	16.9	3.1	100.0
Cost of quality child care (N=65)	3.97	1.5	6.2	21.5	35.4	35.4	0.0	100.0
Cost of services for at-risk youth (e.g., homeless youth, youth with behavioral health problems) (N=64)	3.79	0.0	6.3	35.9	26.6	28.1	3.1	100.0
Crime committed by youth (N=65)	3.23	1.5	20.0	40.0	27.7	9.2	1.5	99.9
Opportunities for youth-adult mentoring (N=65)	3.38	1.5	13.8	43.1	26.2	13.8	1.5	99.9
Parental custody, guardianships and visitation rights (N=64)	3.08	0.0	29.7	34.4	25.0	6.3	4.7	100.1
School absenteeism (truancy) (N=63)	2.74	3.2	41.3	34.9	12.7	4.8	3.2	100.1
School dropout rates (N=62)	2.75	1.6	45.2	30.6	14.5	4.8	3.2	99.9
School violence (N=65)	3.00	1.5	32.3	35.4	20.0	7.7	3.1	100.0
Substance abuse by youth (N=65)	3.97	0.0	7.7	23.1	33.8	35.4	0.0	100.0
Teen pregnancy (N=65)	3.28	0.0	26.2	36.9	16.9	18.5	1.5	100.0
Teen suicide (N=65)	3.86	0.0	10.8	26.2	27.7	33.8	1.5	100.0
Teen tobacco use (N=65)	3.54	3.1	13.8	30.8	26.2	23.1	3.1	100.1
THE AGING POPULATION								
Availability of activities for seniors (e.g., recreational, social, cultural) (N=64)	2.98	3.1	25.0	43.8	17.2	6.3	4.7	100.1
Availability of long-term care (N=64)	3.24	1.6	28.1	26.6	26.6	14.1	3.1	100.1
Availability of memory care (N=64)	3.37	1.6	23.4	28.1	25.0	18.8	3.1	100.0
Availability of resources for family and friends caring for and helping to make decisions for elders (e.g., home care, home health) (N=64)	3.44	0.0	15.6	37.5	29.7	14.1	3.1	100.0
Availability of resources for grandparents caring for grandchildren (N=63)	3.25	0.0	25.4	31.7	27.0	11.1	4.8	100.0
Availability of resources to help the elderly stay safe in their homes (N=64)	3.49	1.6	14.1	31.3	32.8	15.6	4.7	100.1
Cost of activities for seniors (e.g., recreational, social, cultural) (N=64)	3.05	3.1	26.6	42.2	9.4	14.1	4.7	100.1
Cost of in-home services (N=63)	3.69	1.6	9.5	28.6	34.9	22.2	3.2	100.0
Cost of long-term care (N=63)	4.07	1.6	3.2	22.2	30.2	39.7	3.2	100.1
Cost of memory care (N=62)	4.03	1.6	3.2	25.8	27.4	40.3	1.6	99.9
Help making out a will or health care directive (N=63)	2.97	3.2	30.2	38.1	17.5	7.9	3.2	100.1

Statements	Mean**	Percent of respondents*						
		Level of attention needed						Total
		1 None	2 Little	3 Moderate	4 Serious	5 Critical	NA	
SAFETY								
Abuse of prescription drugs (N=62)	4.27	0.0	3.2	14.5	33.9	48.4	0.0	100.0
Availability of emergency medical services (N=60)	2.95	5.0	40.0	23.3	18.3	13.3	0.0	99.9
Child abuse and neglect (N=62)	3.64	0.0	9.7	37.1	30.6	21.0	1.6	100.0
Criminal activity (N=62)	3.50	0.0	16.1	33.9	33.9	16.1	0.0	100.0
Culture of excessive and binge drinking (N=62)	3.74	1.6	6.5	35.5	29.0	27.4	0.0	100.0
Domestic violence (N=62)	3.74	0.0	8.1	30.6	38.7	21.0	1.6	100.0
Elder abuse (N=62)	3.15	0.0	25.8	40.3	21.0	9.7	3.2	100.0
Lack of police or delayed response of police (N=62)	2.60	12.9	37.1	27.4	14.5	4.8	3.2	99.9
Presence of drug dealers (N=62)	3.46	1.6	19.4	30.6	25.8	21.0	1.6	100.0
Presence of gang activity (N=62)	3.05	3.2	33.9	32.3	12.9	16.1	1.6	100.0
Presence of street drugs (N=62)	3.71	0.0	9.7	35.5	29.0	25.8	0.0	100.0
Sex trafficking (N=61)	3.63	0.0	18.0	27.9	24.6	27.9	1.6	100.0
HEALTH CARE AND WELLNESS								
Access to affordable dental insurance coverage (N=64)	3.36	1.6	15.6	46.9	17.2	18.8	0.0	100.1
Access to affordable health insurance coverage (N=63)	3.65	1.6	6.3	36.5	36.5	19.0	0.0	99.9
Access to affordable health care (N=64)	3.66	1.6	6.3	37.5	34.4	20.3	0.0	100.1
Access to affordable prescription drugs (N=64)	3.67	1.6	4.7	35.9	40.6	17.2	0.0	100.0
Access to affordable vision insurance coverage (N=64)	3.27	1.6	21.9	40.6	20.3	15.6	0.0	100.0
Access to technology for health records and health education (N=64)	2.78	10.9	31.3	32.8	15.6	7.8	1.6	100.0
Availability of behavioral health (e.g., substance abuse) providers (N=64)	4.23	0.0	1.6	20.3	31.3	46.9	0.0	100.1
Availability of doctors, physician assistants, or nurse practitioners (N=64)	3.11	6.3	26.6	31.3	21.9	14.1	0.0	100.2
Availability of health care services for Native people (N=64)	3.27	6.3	20.3	32.8	15.6	21.9	3.1	100.0
Availability of healthcare services for New Americans (N=64)	3.29	6.3	17.2	34.4	20.3	18.8	3.1	100.1
Availability of mental health providers (N=62)	4.27	0.0	9.7	11.3	21.0	58.1	0.0	100.1
Availability of non-traditional hours (e.g., evenings, weekends) (N=64)	3.56	7.8	14.1	28.1	14.1	35.9	0.0	100.0
Availability of prevention programs and services (e.g., Better Balance, Diabetes Prevention) (N=64)	3.17	7.8	17.2	39.1	21.9	14.1	0.0	100.1
Availability of specialist physicians (N=64)	3.06	7.8	26.6	32.8	17.2	15.6	0.0	100.0

Statements	Mean**	Percent of respondents*						
		Level of attention needed						Total
		1 None	2 Little	3 Moderate	4 Serious	5 Critical	NA	
Coordination of care between providers and services (N=64)	3.64	3.1	15.6	25.0	26.6	29.7	0.0	100.0
Timely access to medical care providers (N=64)	3.17	4.7	25.0	35.9	17.2	17.2	0.0	100.0
Timely access to dental care providers (N=64)	3.09	4.7	32.8	26.6	20.3	15.6	0.0	100.0
Timely access to vision care providers (N=63)	2.52	12.7	41.3	33.3	6.3	6.3	0.0	99.9
Use of emergency room services for primary health care (N=62)	3.47	1.6	17.7	35.5	22.6	22.6	0.0	100.0
MENTAL HEALTH AND SUBSTANCE ABUSE								
Alcohol use and abuse (N=64)	4.19	0.0	3.1	20.3	31.3	45.3	0.0	100.0
Dementia and Alzheimer's disease (N=63)	3.63	0.0	11.1	33.3	34.9	19.0	1.6	99.9
Depression (N=63)	3.90	0.0	4.8	25.4	44.4	25.4	0.0	100.0
Drug use and abuse (e.g., prescription drugs, synthetic opioids, marijuana, heroin, cocaine) (N=64)	4.53	0.0	0.0	6.3	34.4	59.4	0.0	100.1
Exposure to secondhand smoke (N=64)	2.80	6.3	42.2	25.0	18.8	7.8	0.0	100.1
Smoking and tobacco use (N=64)	3.08	4.7	29.7	32.8	18.8	14.1	0.0	100.1
Stress (N=63)	3.41	3.2	15.9	36.5	25.4	19.0	0.0	100.0
Suicide (N=64)	3.89	0.0	4.7	32.8	31.3	31.3	0.0	100.1

*Percentages may not total 100.0 due to rounding.

**NA (not applicable) responses were excluded when calculating the Means. As a result, the number of responses (N) in Appendix Table 1, which reflects total responses, may differ from the Ns in Figures 1 through 7, which exclude NA.

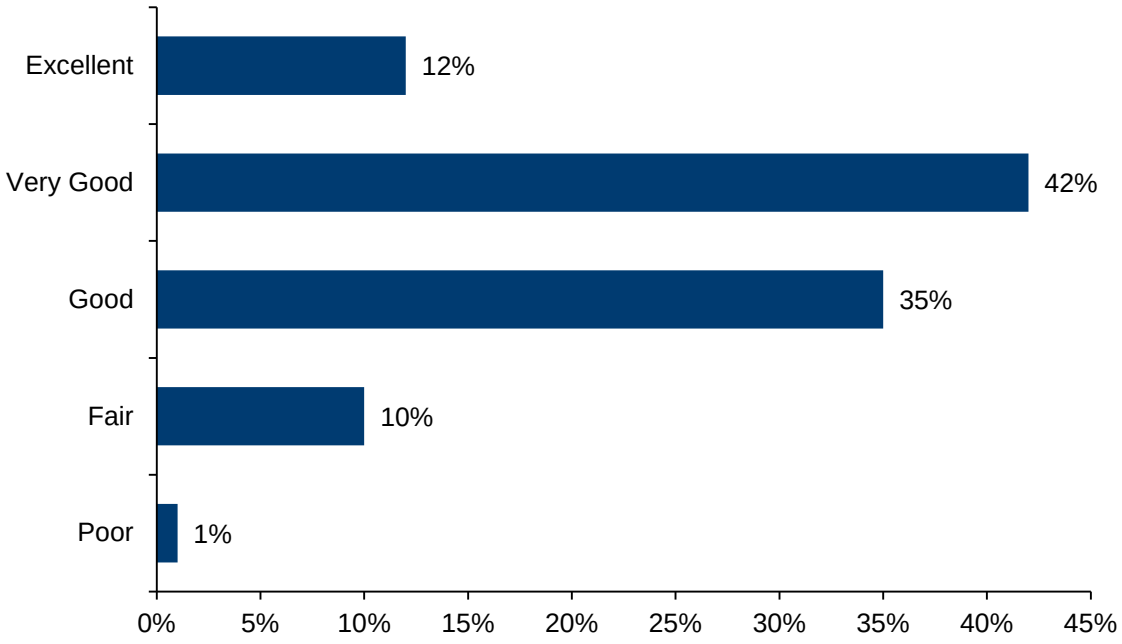
2018 Resident Survey

Bismarck CHNA Report 02202018

February 20, 2018

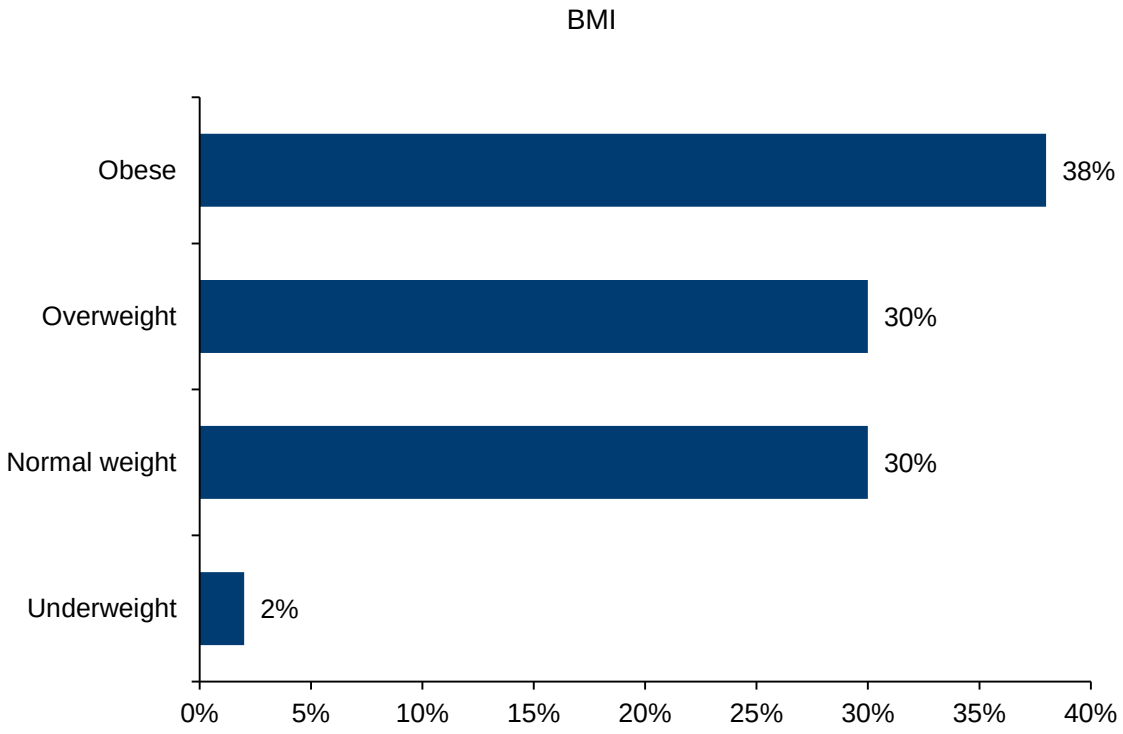
Charts Exported by MarketSight®

How would you rate your health?



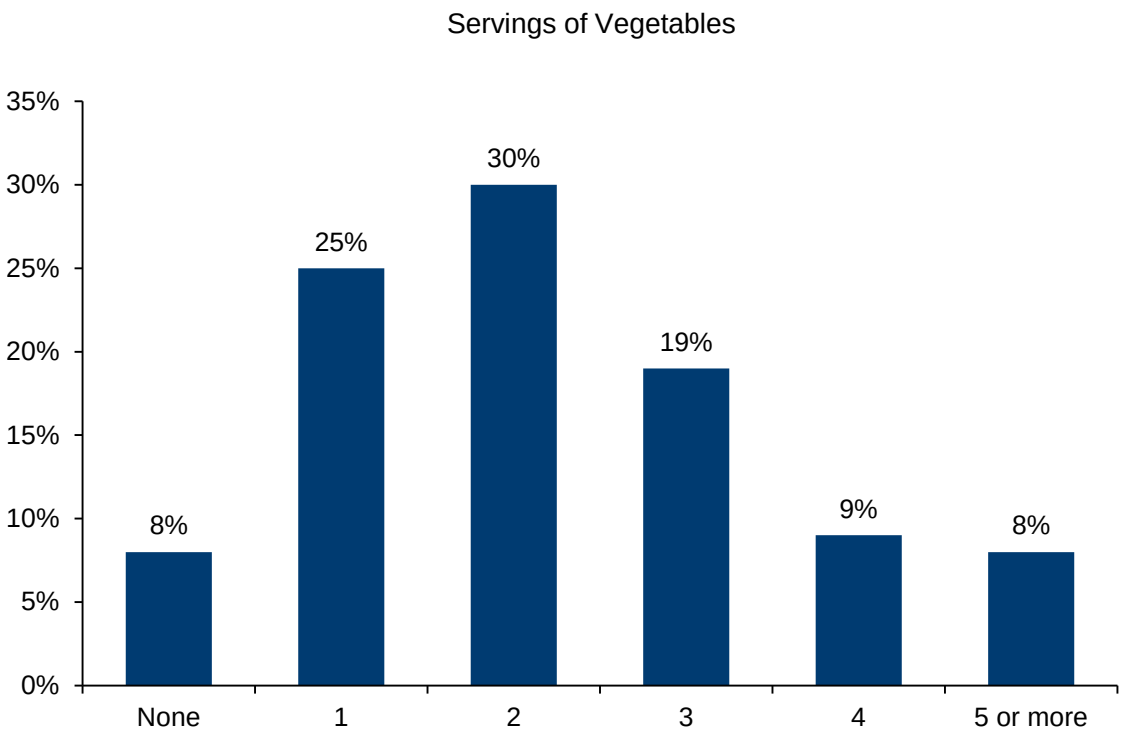
Base: Poor (n=6), Fair (n=65), Good (n=228), Very Good (n=270), Excellent (n=75), Sample Size = 644

(Community = Burleigh / Morton)



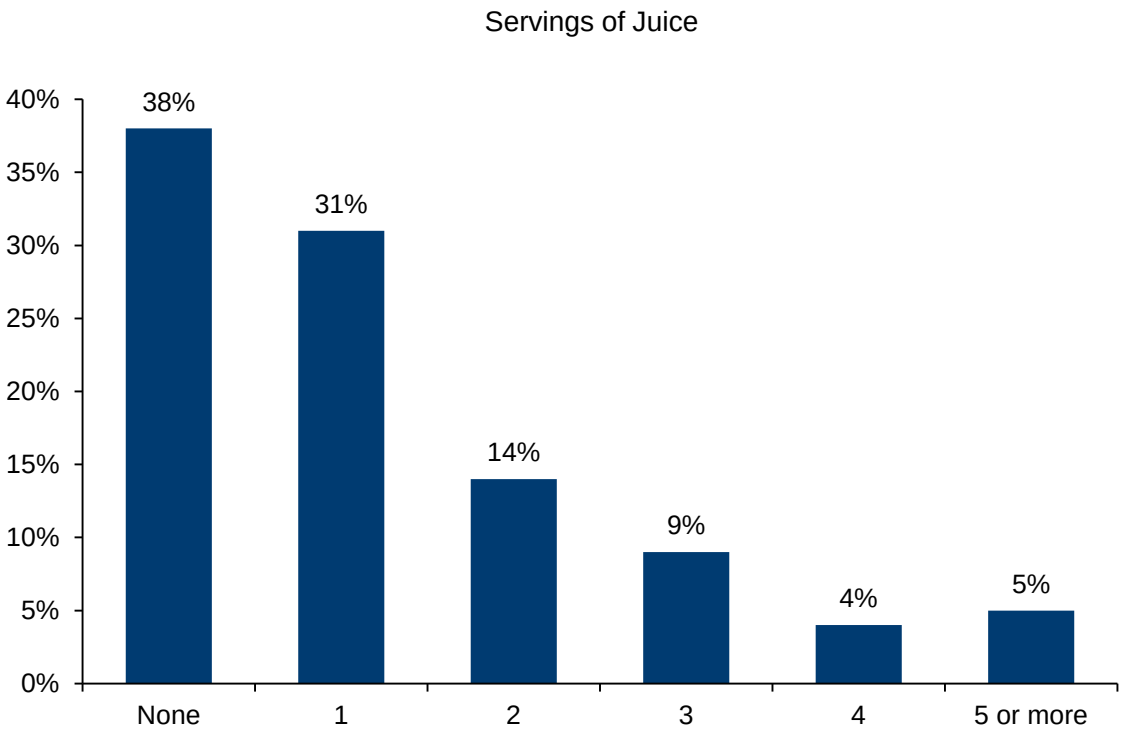
Base: Underweight (n=11), Normal weight (n=191), Overweight (n=191), Obese (n=241), Sample Size = 634

(Community = Burleigh / Morton)



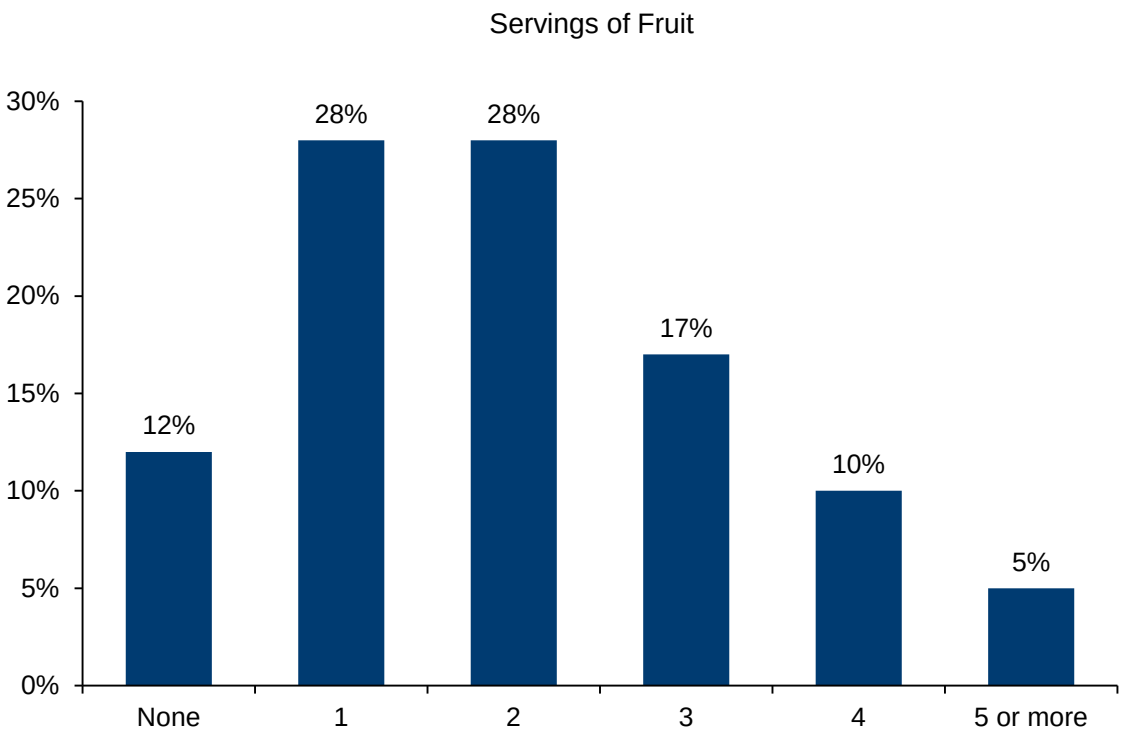
Sample Size = 595

(Community = Burleigh / Morton)



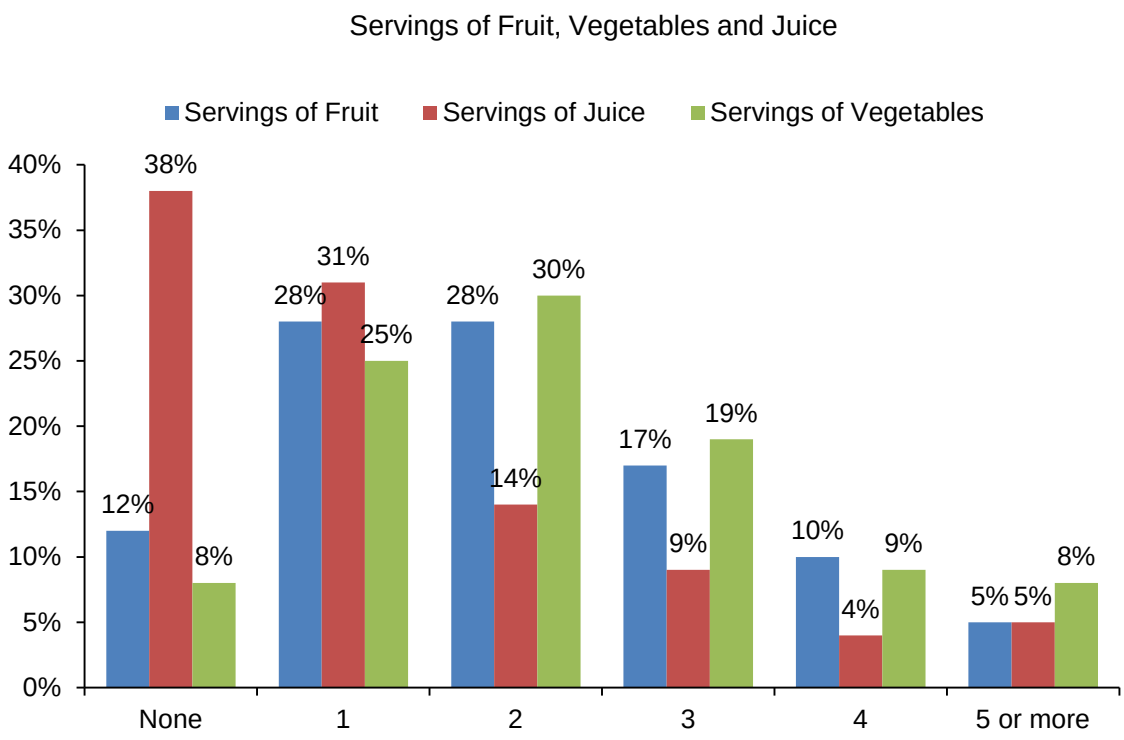
Base: None (n=151), 1 (n=123), 2 (n=56), 3 (n=34), 4 (n=14), 5 or more (n=21), Sample Size = 399

(Community = Burleigh / Morton)



Base: None (n=63), 1 (n=145), 2 (n=143), 3 (n=90), 4 (n=52), 5 or more (n=25), Sample Size = 518

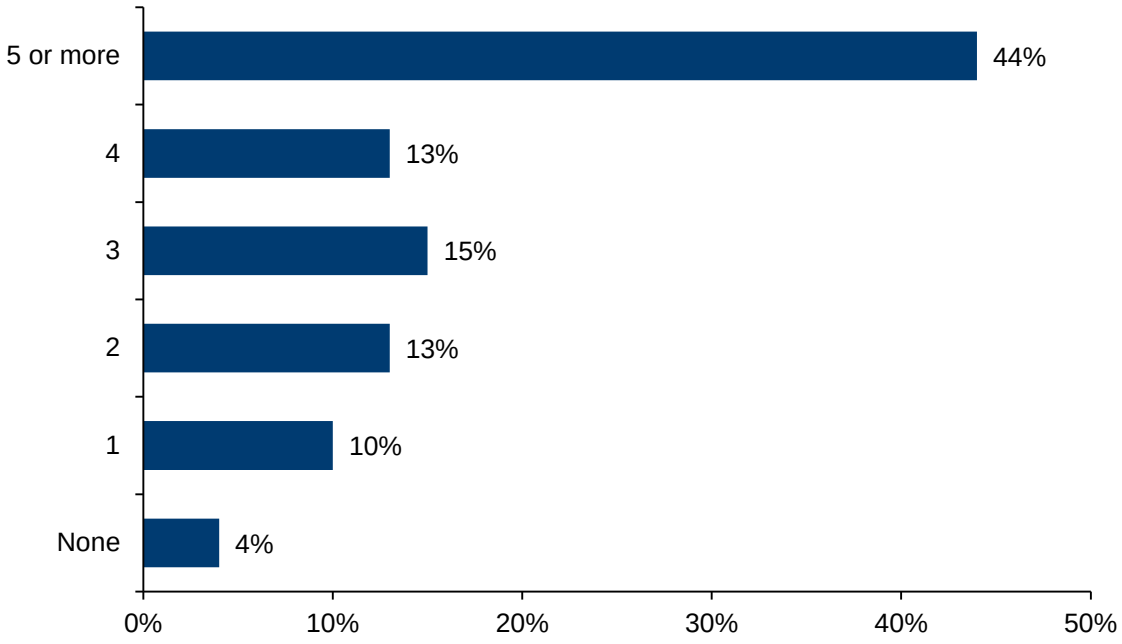
(Community = Burleigh / Morton)



Sample Size = Variable

(Community = Burleigh / Morton)

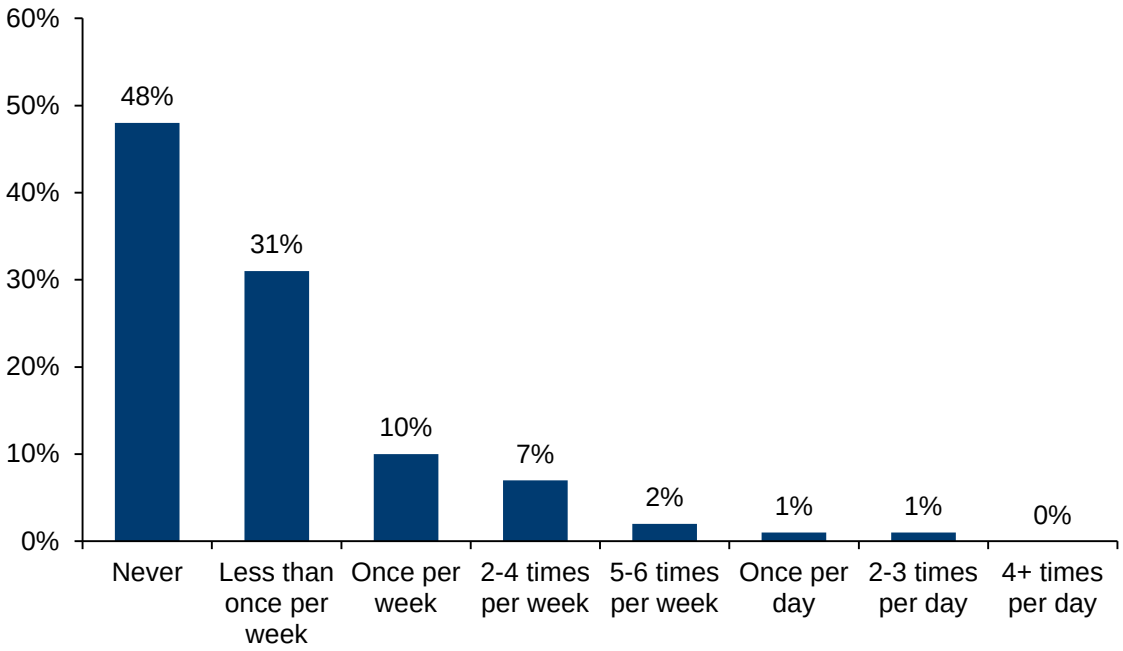
Total Servings of Fruits, Vegetables and Juice



Base: None (n=24), 1 (n=62), 2 (n=85), 3 (n=96), 4 (n=84), 5 or more (n=279), Sample Size = 630

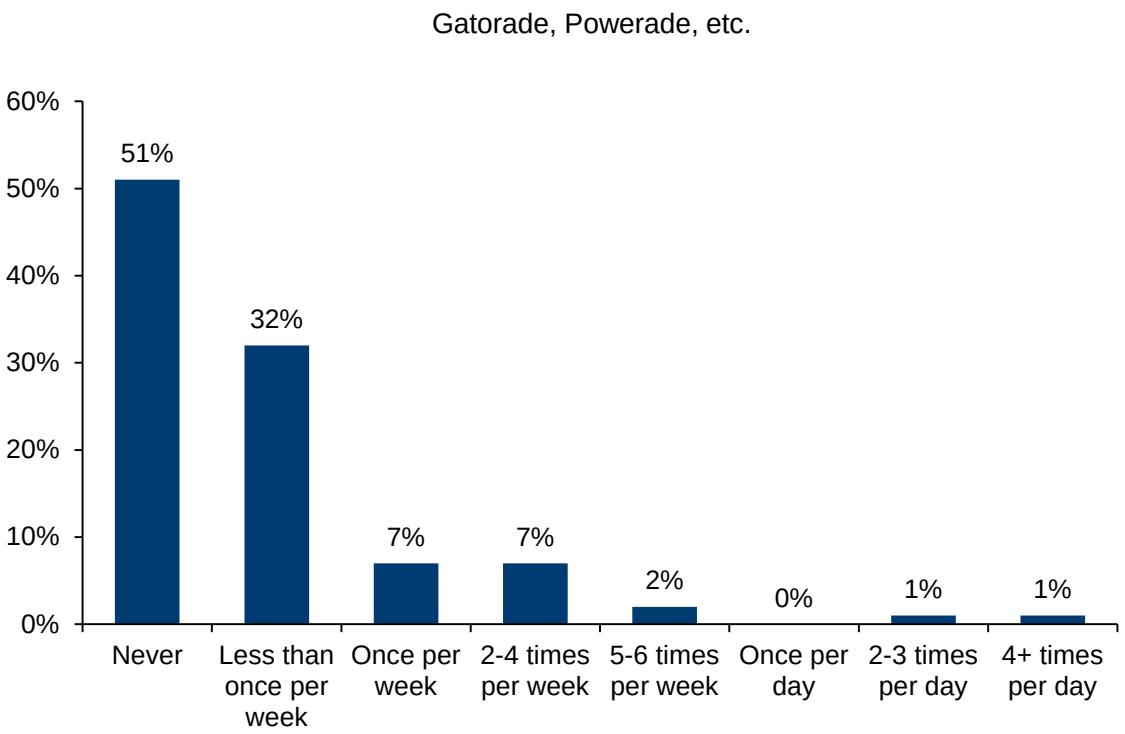
(Community = Burleigh / Morton)

Snapple, Flavored Teas, Capri Sun, etc.



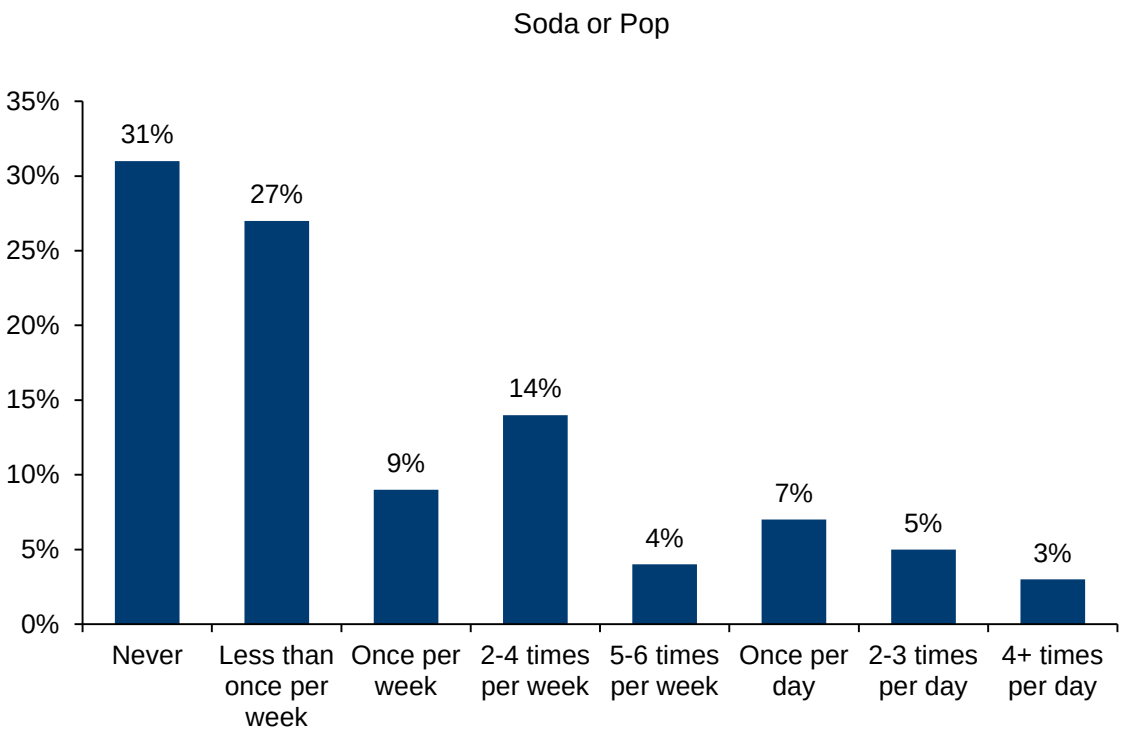
Base: Never (n=306), Less than once per week (n=194), Once per week (n=61), 2-4 times per week (n=43), 5-6 times per week (n=14), Once per day (n=9), 2-3 times per day (n=5), 4+ times per day (n=1), Sample Size = 633

(Community = Burleigh / Morton)



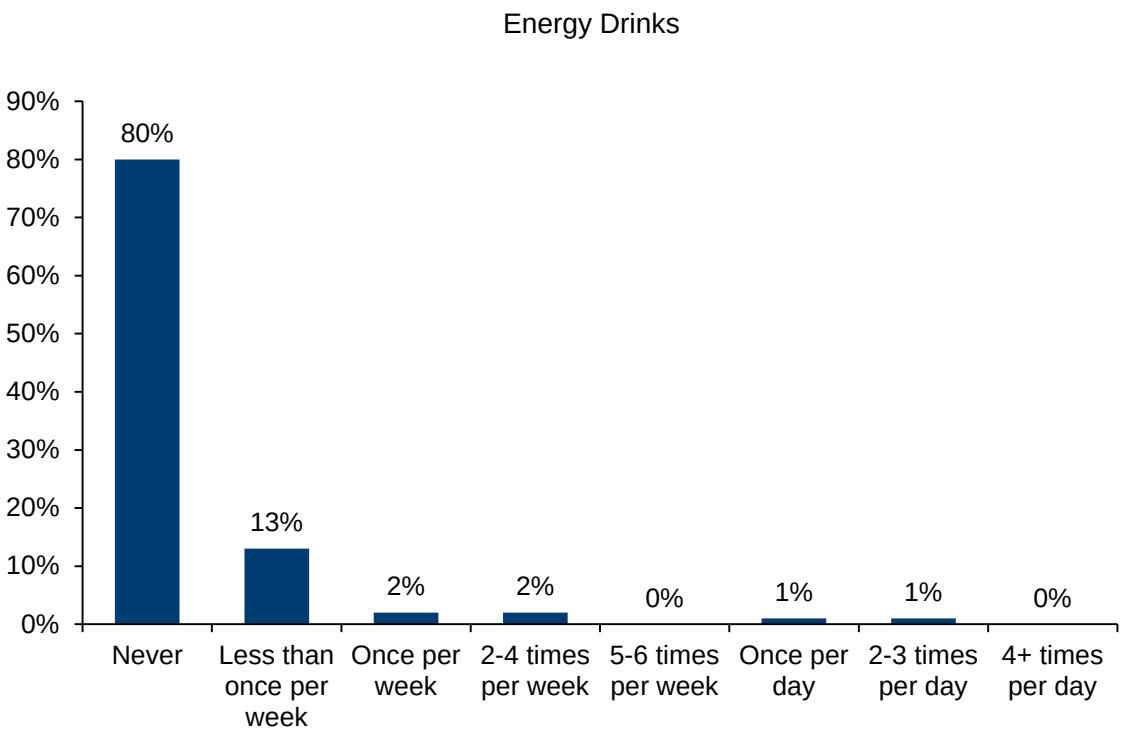
Base: Never (n=322), Less than once per week (n=203), Once per week (n=43), 2-4 times per week (n=42), 5-6 times per week (n=11), Once per day (n=3), 2-3 times per day (n=6), 4+ times per day (n=4), Sample Size = 634

(Community = Burleigh / Morton)



Base: Never (n=198), Less than once per week (n=171), Once per week (n=57), 2-4 times per week (n=91), 5-6 times per week (n=24), Once per day (n=46), 2-3 times per day (n=29), 4+ times per day (n=19), Sample Size = 635

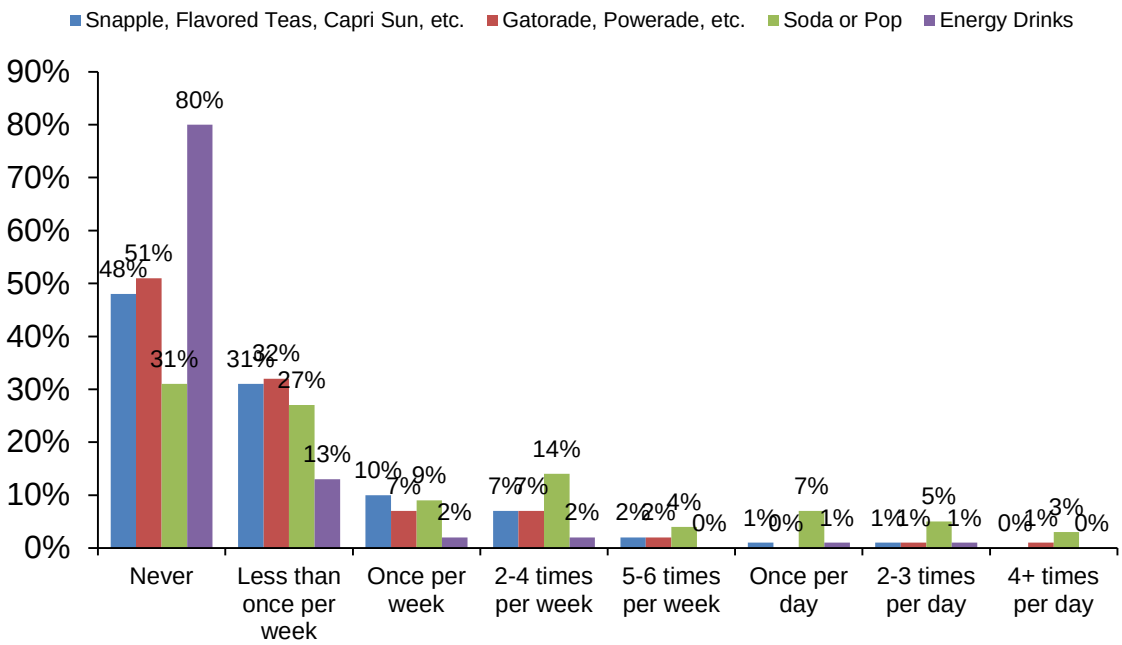
(Community = Burleigh / Morton)



Base: Never (n=505), Less than once per week (n=81), Once per week (n=11), 2-4 times per week (n=15), 5-6 times per week (n=3), Once per day (n=7), 2-3 times per day (n=5), 4+ times per day (n=1), Sample Size = 628

(Community = Burleigh / Morton)

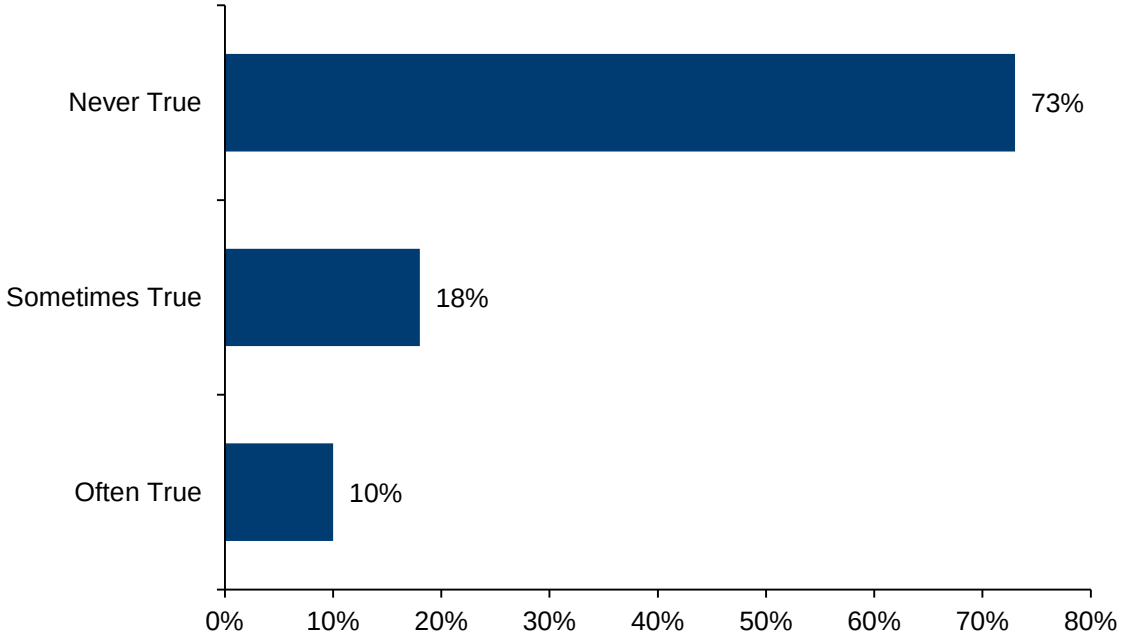
Sugar Sweetened Drinks



Sample Size = Variable

(Community = Burleigh / Morton)

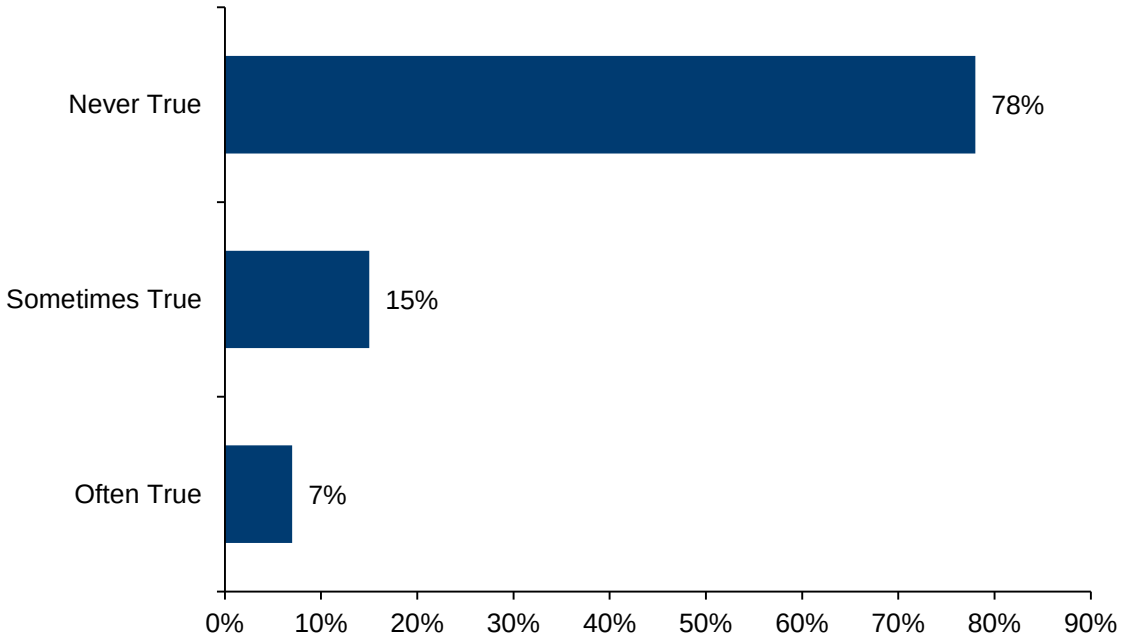
Worried whether our food would run out before we got money to buy more.



Base: Often True (n=63), Sometimes True (n=113), Never True (n=467), Sample Size = 643

(Community = Burleigh / Morton)

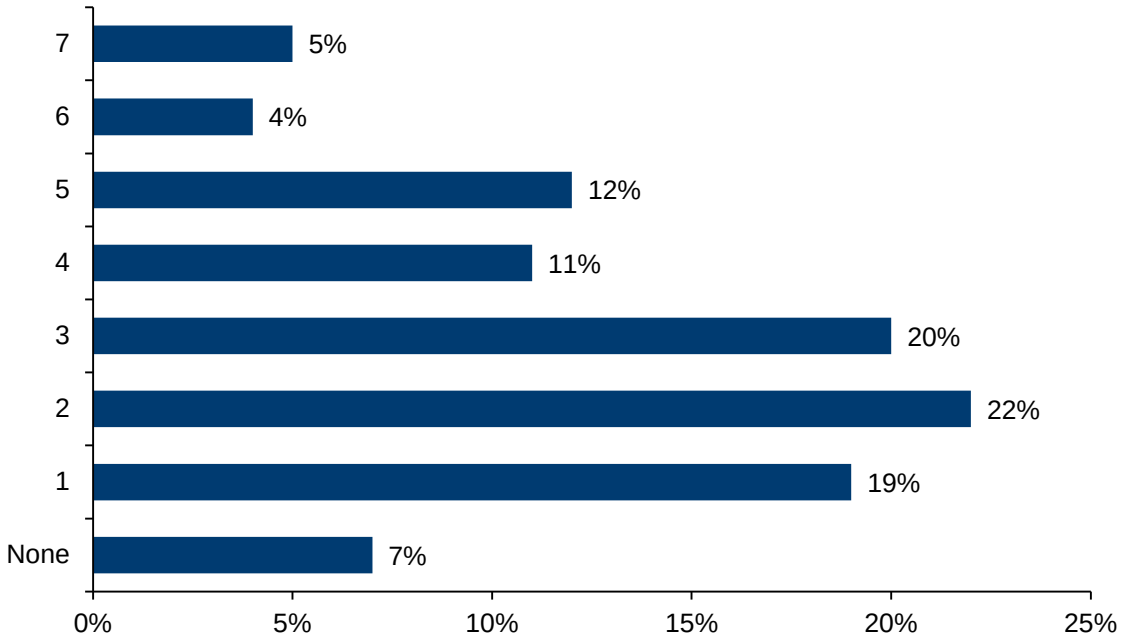
The food that we bought just didn’t last, and we didn’t have money to get more.



Base: Often True (n=45), Sometimes True (n=97), Never True (n=501), Sample Size = 643

(Community = Burleigh / Morton)

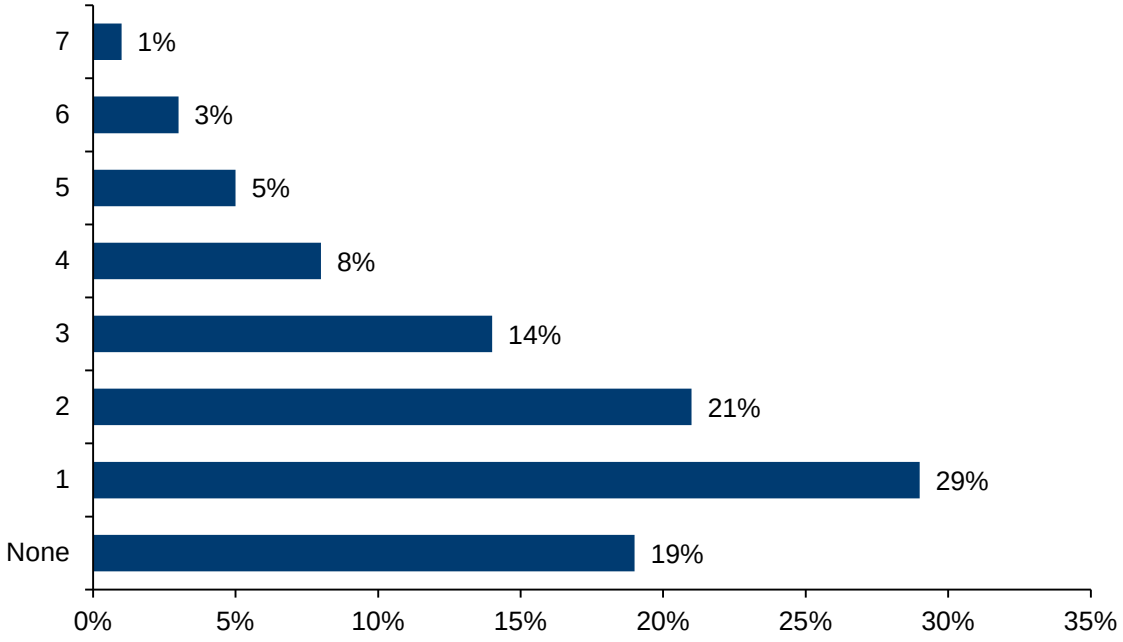
Days Per Week of Moderate Physical Activity



Base: None (n=40), 1 (n=112), 2 (n=130), 3 (n=116), 4 (n=65), 5 (n=72), 6 (n=23), 7 (n=30), Sample Size = 588

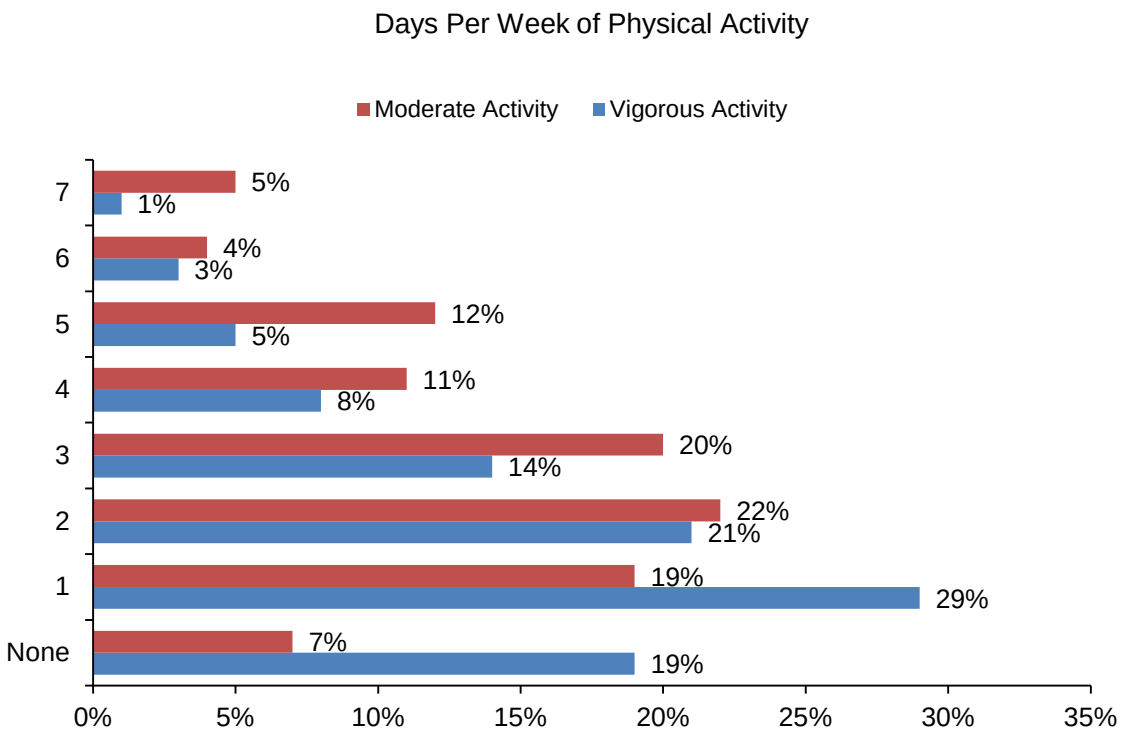
(Community = Burleigh / Morton)

Days Per Week of Vigorous Physical Activity



Base: None (n=89), 1 (n=136), 2 (n=98), 3 (n=66), 4 (n=39), 5 (n=26), 6 (n=12), 7 (n=7), Sample Size = 473

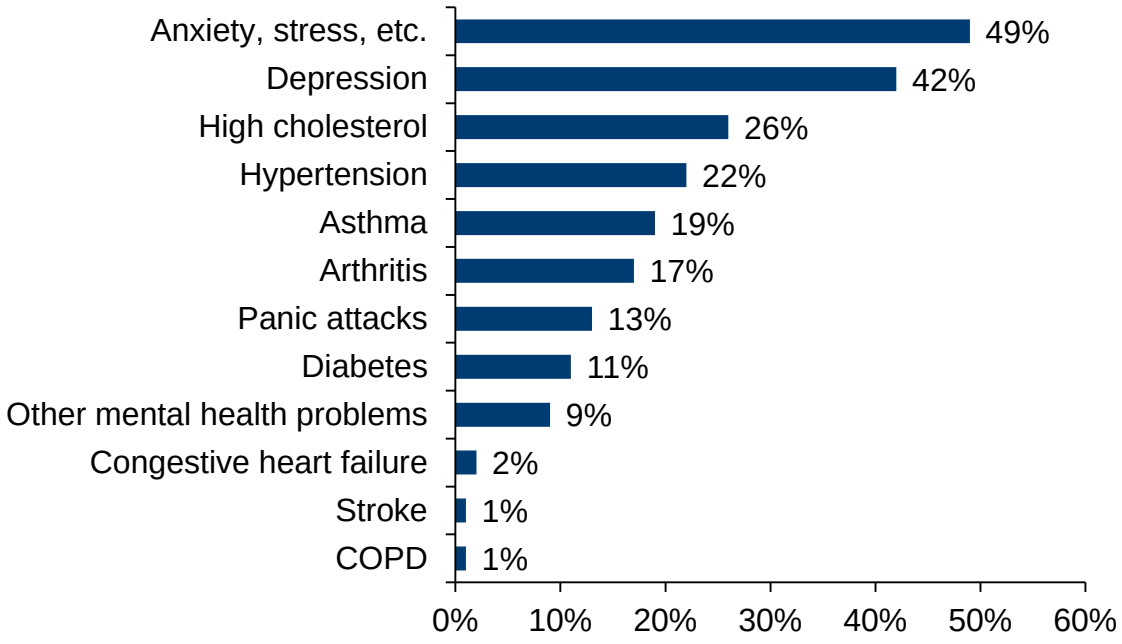
(Community = Burleigh / Morton)



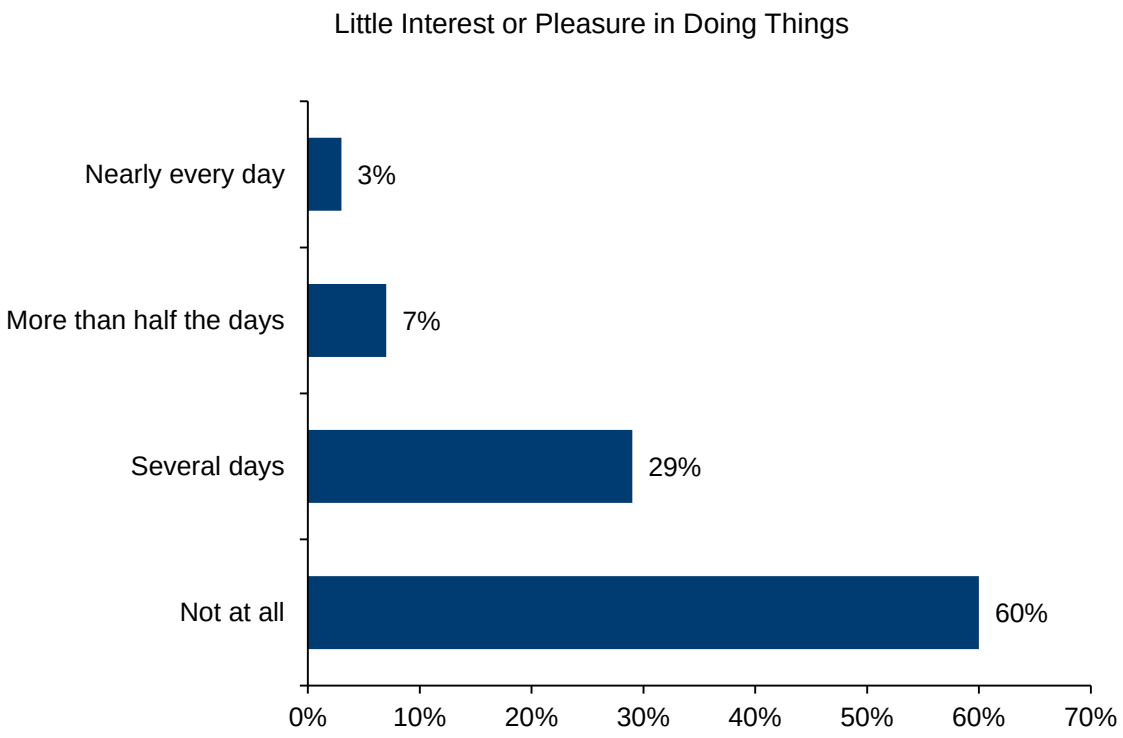
Sample Size = Variable

(Community = Burleigh / Morton)

Past Diagnosis

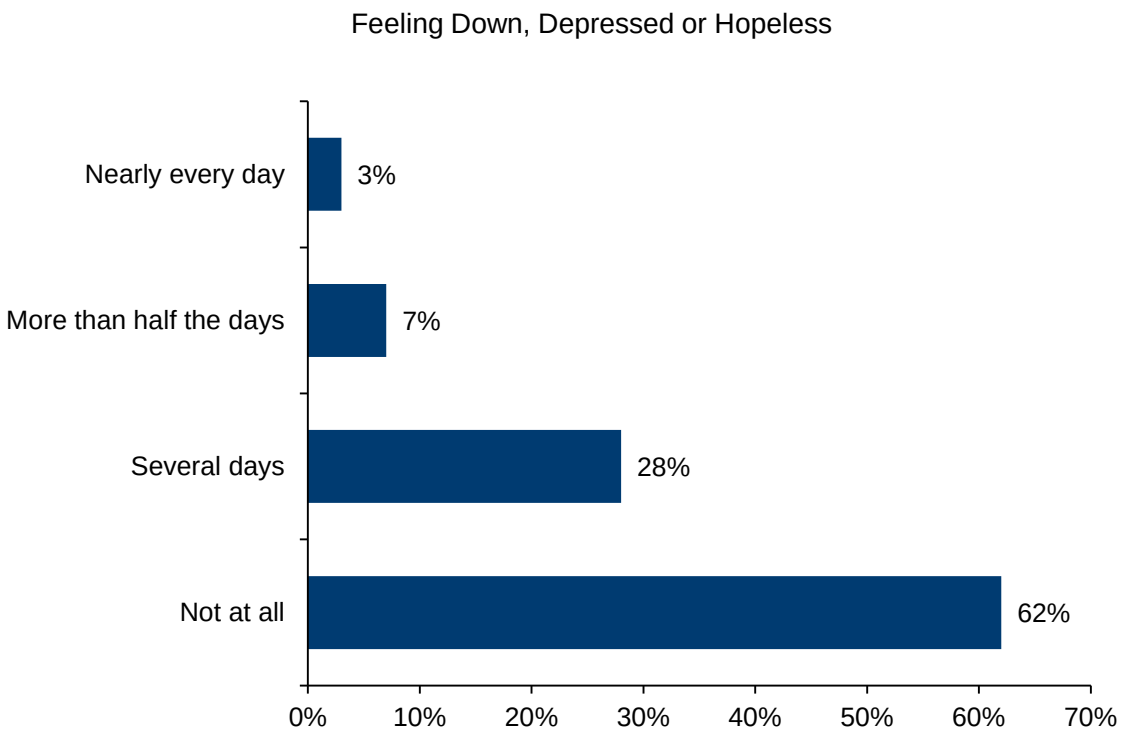


Base: Anxiety, stress, etc. (n=198), Arthritis (n=68), Asthma (n=78), Congestive heart failure (n=8), COPD (n=4), Depression (n=169), Diabetes (n=45), High cholesterol (n=103), Hypertension (n=89), Other mental health problems (n=35), Panic attacks (n=54), Stroke (n=2), Sample Size = 402
(Community = Burlington + Milton)



Base: Not at all (n=386), Several days (n=189), More than half the days (n=46), Nearly every day (n=21), Sample Size = 642

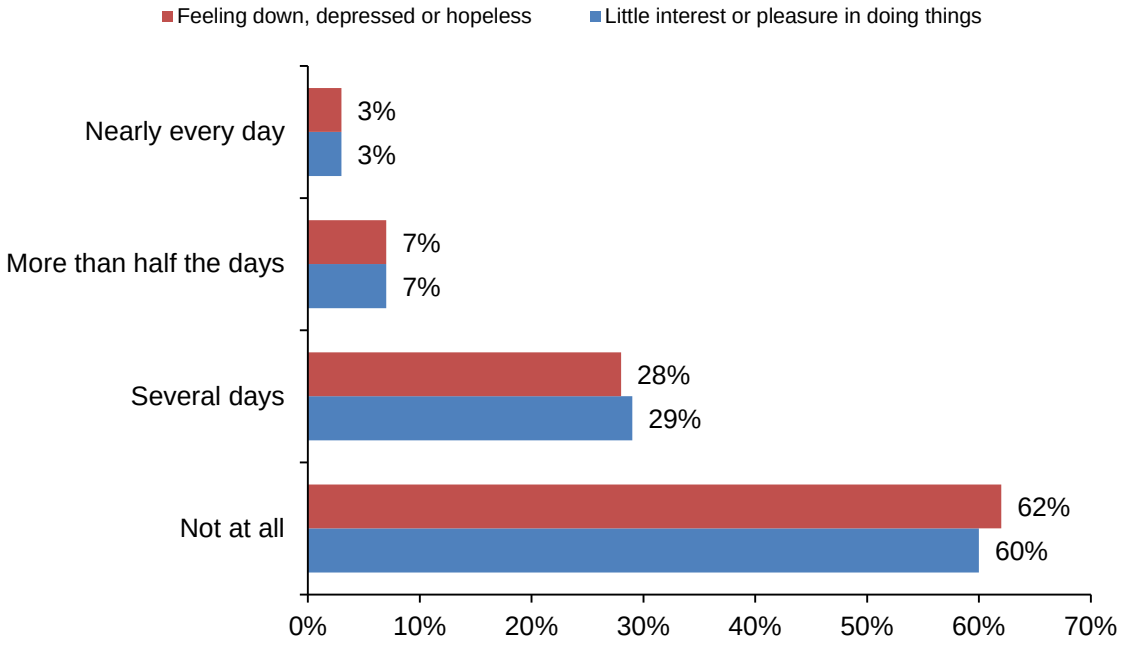
(Community = Burleigh / Morton)



Base: Not at all (n=397), Several days (n=180), More than half the days (n=47), Nearly every day (n=20), Sample Size = 644

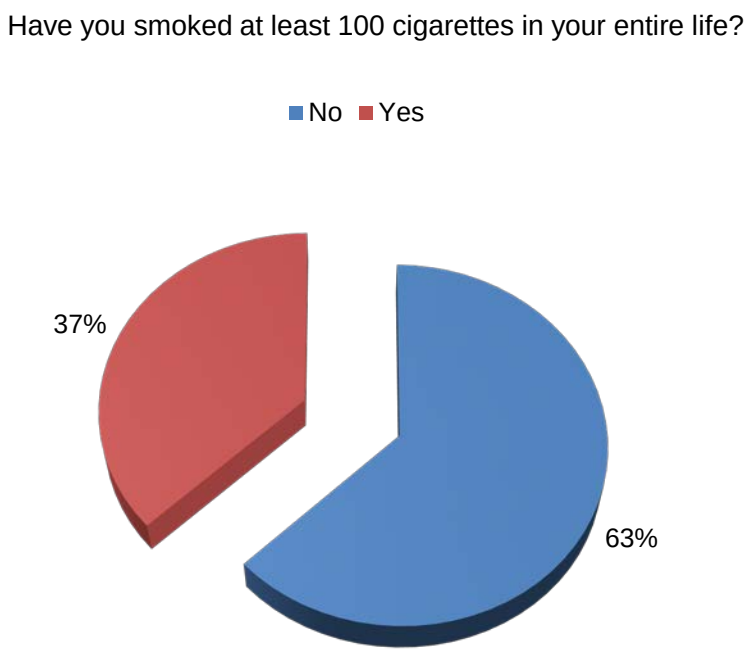
(Community = Burleigh / Morton)

Over the past two weeks, how often have you been bothered by either of the following issues?



Sample Size = Variable

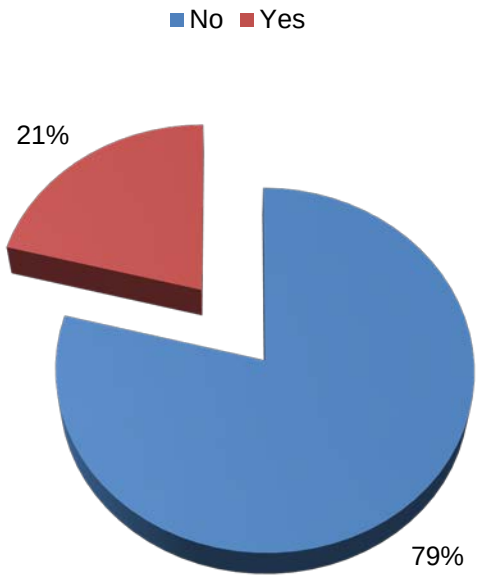
(Community = Burleigh / Morton)



Base: Yes (n=237), No (n=408), Sample Size = 645

(Community = Burleigh / Morton)

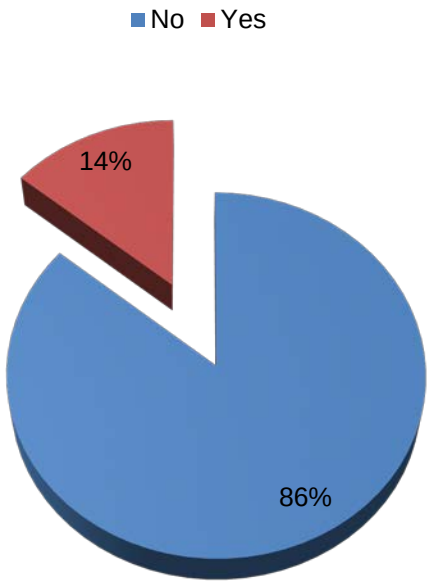
Has someone smoked cigarettes, cigars or used vape pens anywhere inside your home?



Sample Size = 644

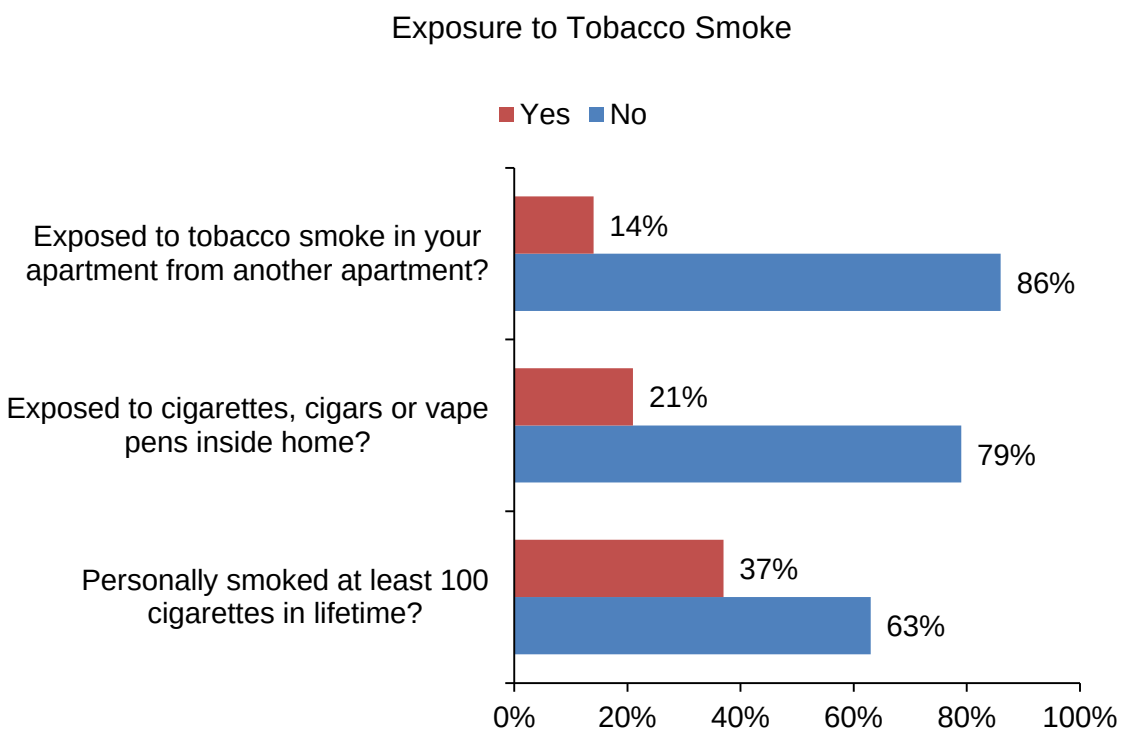
(Community = Burleigh / Morton)

Have you smelled tobacco smoke in your apartment that comes from another apartment?



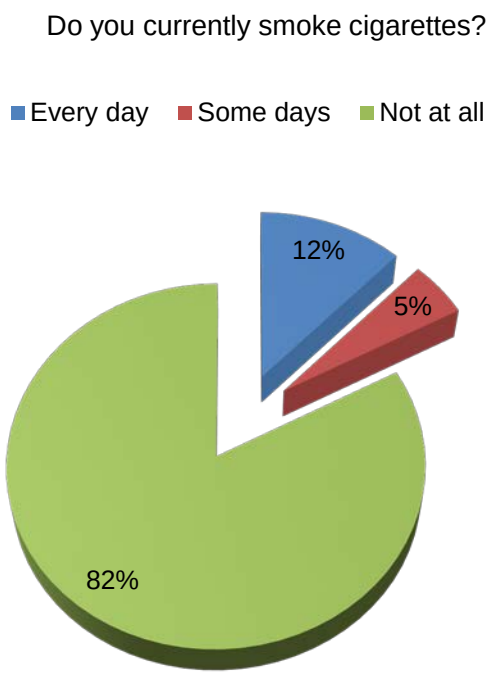
Base: Yes (n=92), No (n=550), Sample Size = 642

(Community = Burleigh / Morton)



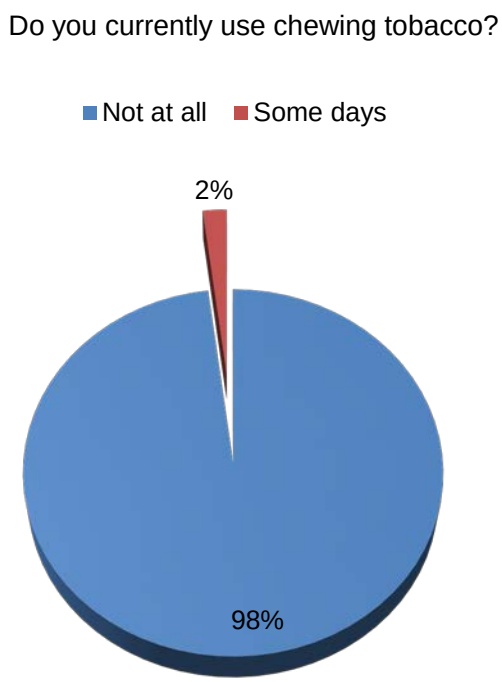
Base: Personally smoked at least 100 cigarettes in lifetime? (n=645), Exposed to cigarettes, cigars or vape pens inside home? (n=644), Exposed to tobacco smoke in your apartment from another apartment? (n=642), Sample Size = Variable

(Community = Burleigh / Morton)



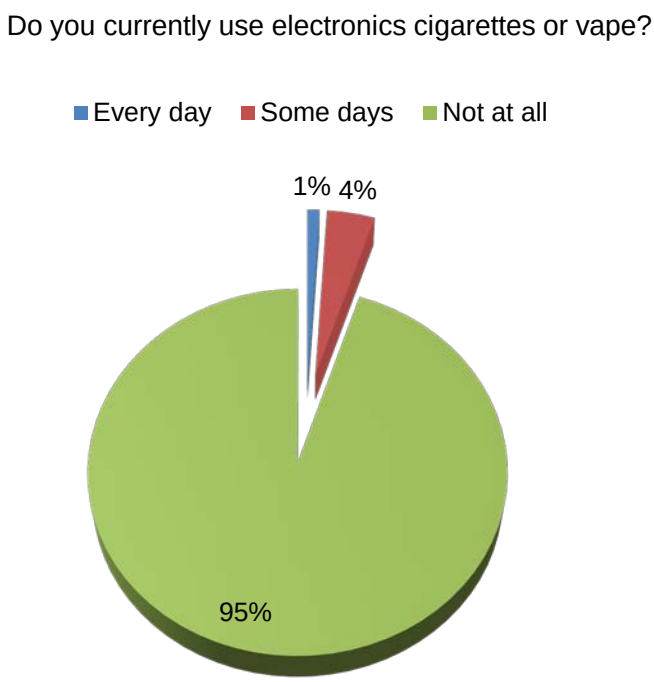
Base: Not at all (n=531), Some days (n=33), Every day (n=80), Sample Size = 644

(Community = Burleigh / Morton)



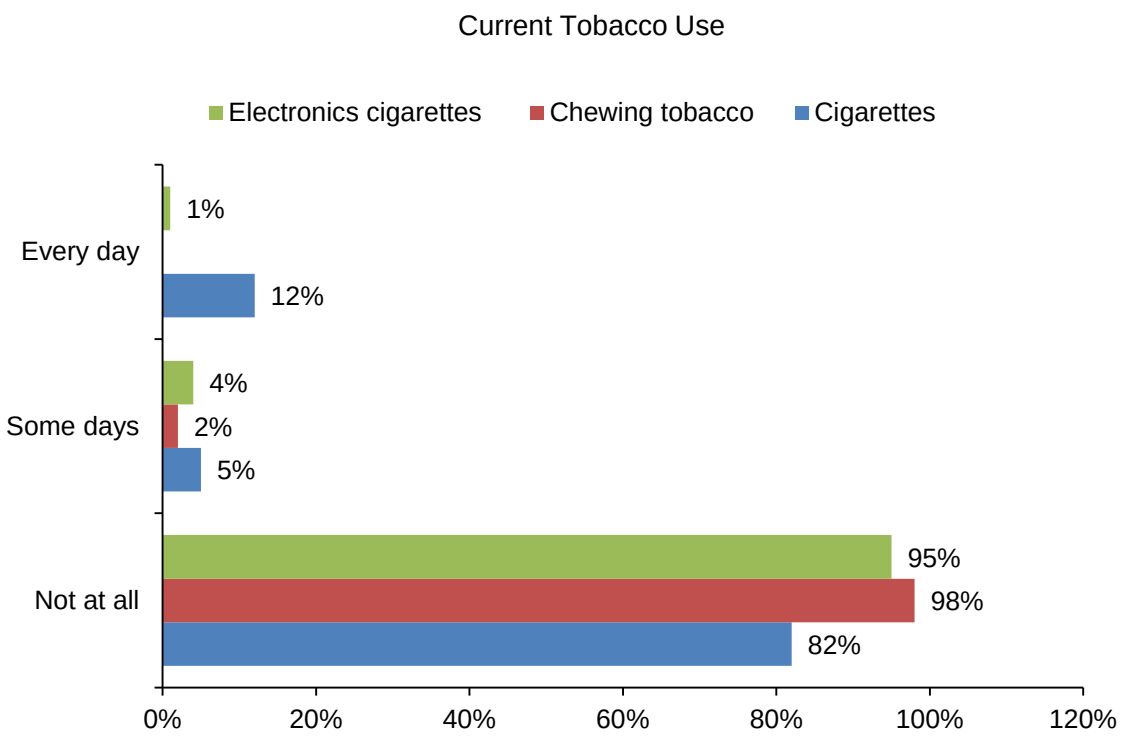
Base: Not at all (n=631), Some days (n=10), Sample Size = 641

(Community = Burleigh / Morton)



Base: Not at all (n=608), Some days (n=26), Every day (n=7), Sample Size = 641

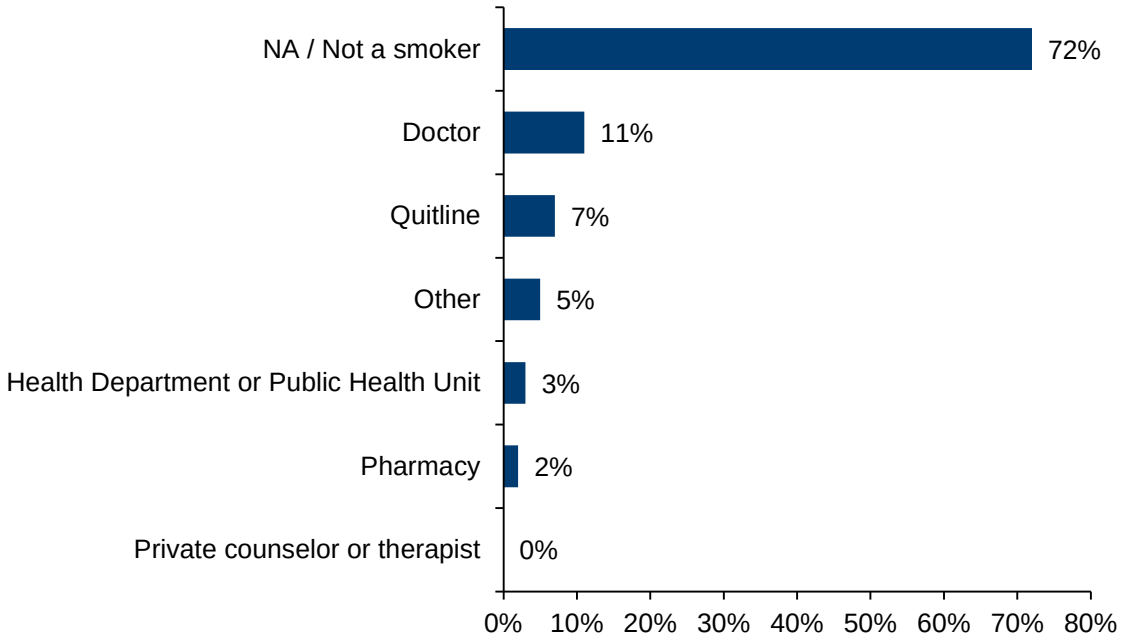
(Community = Burleigh / Morton)



Sample Size = Variable

(Community = Burleigh / Morton)

Where would you go for help if you wanted to quit using tobacco products?



Base: NA / Not a smoker (n=410), Quitline (n=39), Doctor (n=65), Pharmacy (n=9), Private counselor or therapist (n=2), Health Department or Public Health Unit (n=20), Other (n=28), Sample Size = 573

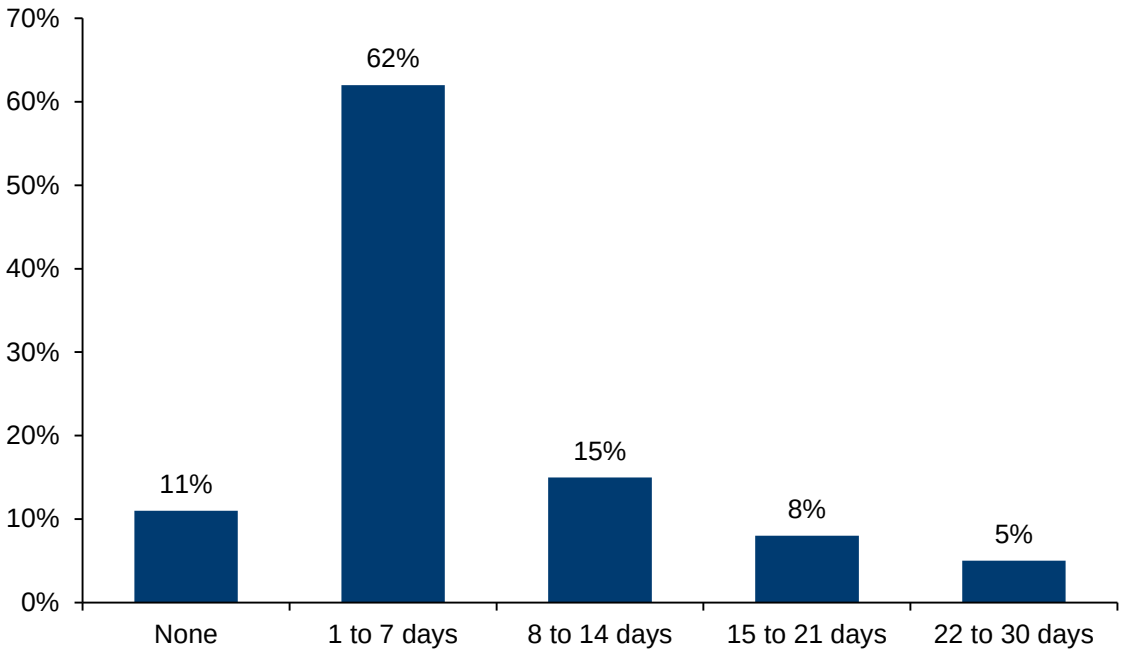
(Community = Burleigh / Morton)

During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit? (Smokers only)

Base: Yes (n=72), No (n=74), Sample Size = 146

(Community = Burleigh / Morton)

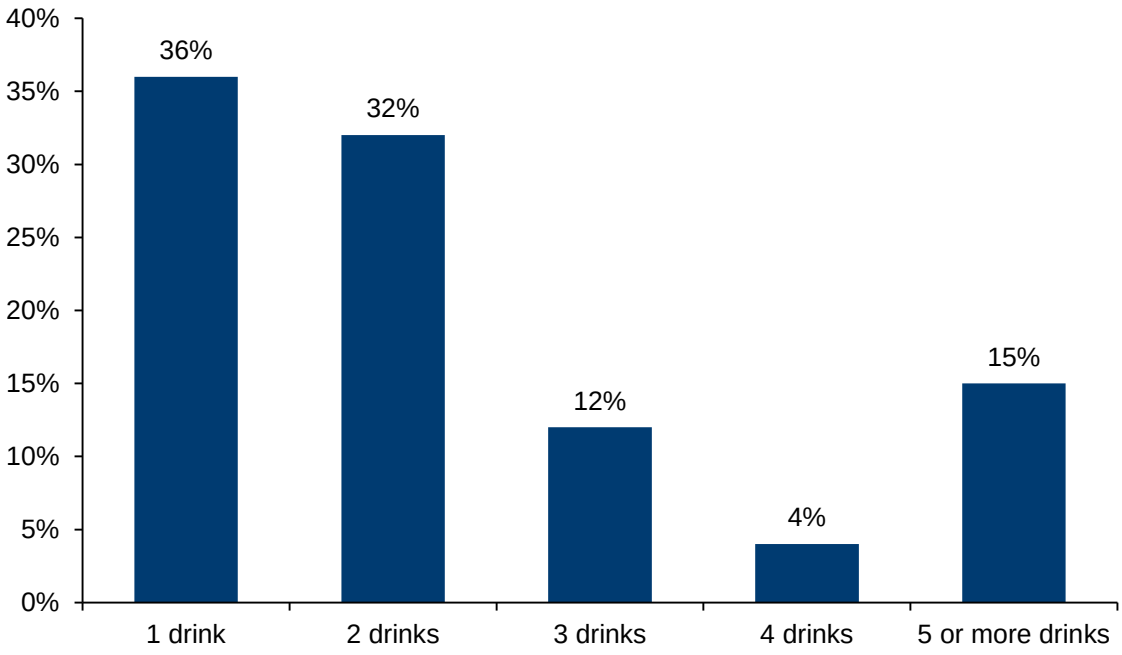
Number of days with at least 1 drink in the past 30 days



Base: None (n=61), 1 to 7 days (n=332), 8 to 14 days (n=78), 15 to 21 days (n=41), 22 to 30 days (n=25), Sample Size = 537

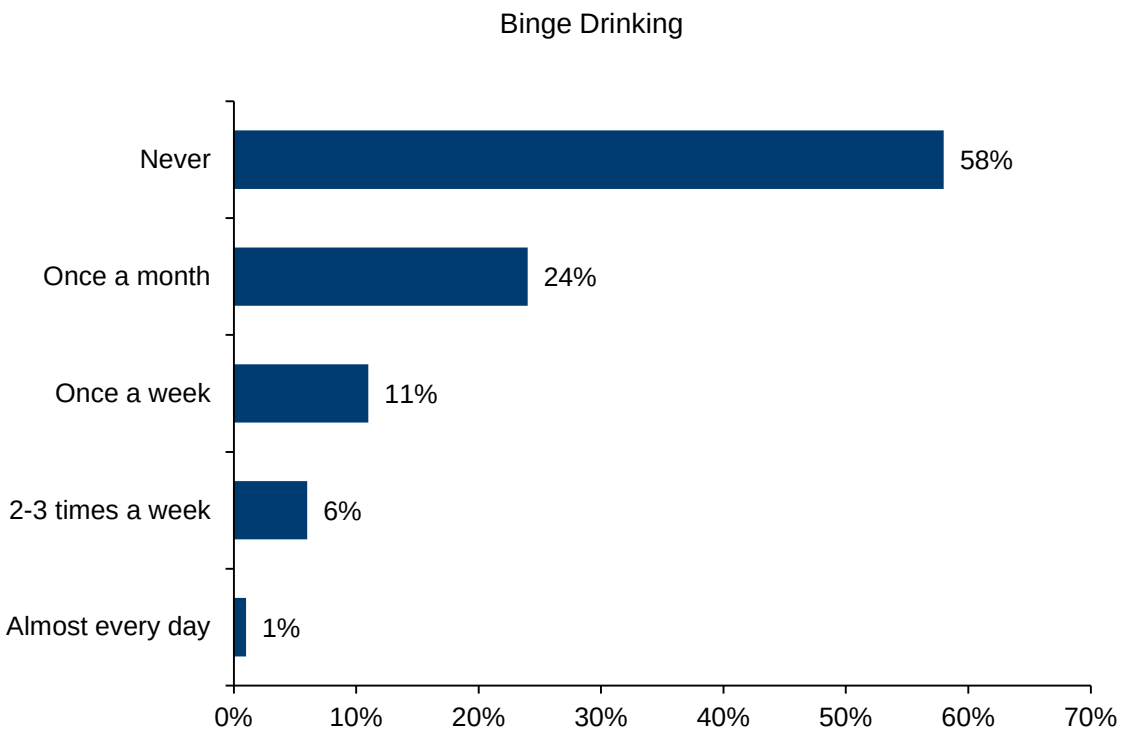
(Community = Burleigh / Morton)

Average number of drinks per day when you drink



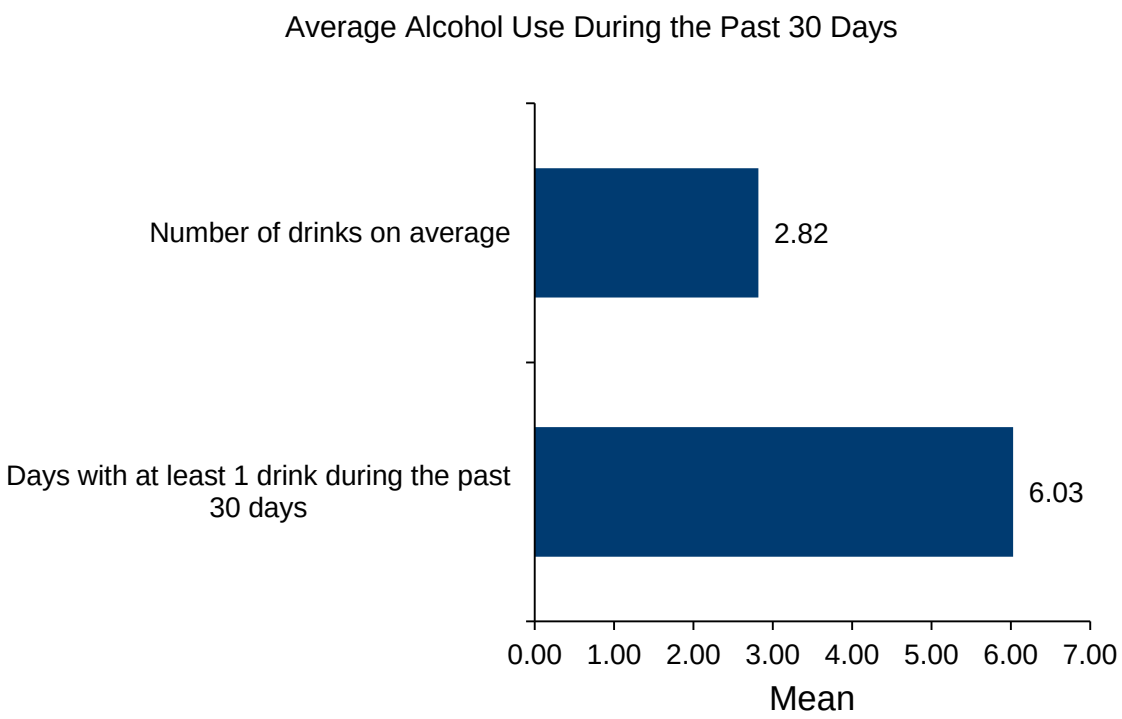
Base: 1 drink (n=167), 2 drinks (n=148), 3 drinks (n=57), 4 drinks (n=20), 5 or more drinks (n=69), Sample Size = 461

(Community = Burleigh / Morton)



Base: Almost every day (n=3), 2-3 times a week (n=28), Once a week (n=54), Once a month (n=115), Never (n=276), Sample Size = 476

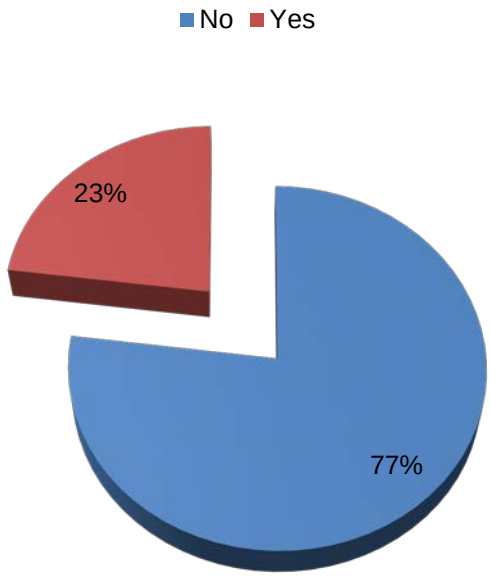
(Community = Burleigh / Morton)



Base: Days with at least 1 drink during the past 30 days (n=537), Number of drinks on average (n=472), Sample Size = Variable

(Community = Burleigh / Morton)

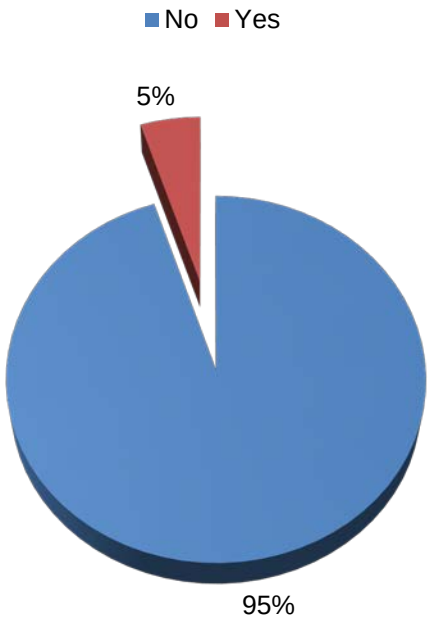
Has alcohol use had a harmful effect on you or a family member in the past two years?



Base: Yes (n=147), No (n=496), Sample Size = 643

(Community = Burleigh / Morton)

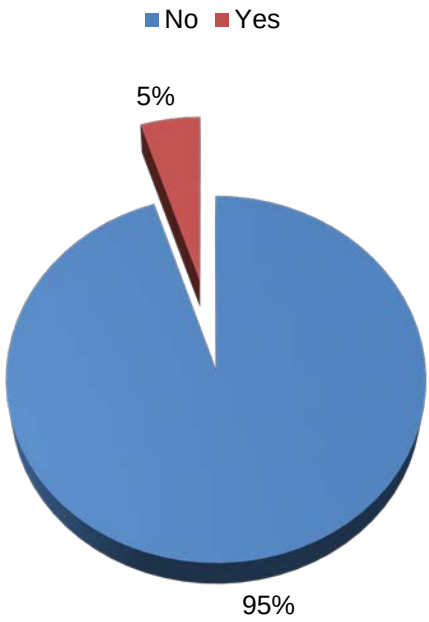
Have you ever wanted help with a prescription or non-prescription drug use?



Base: Yes (n=33), No (n=611), Sample Size = 644

(Community = Burleigh / Morton)

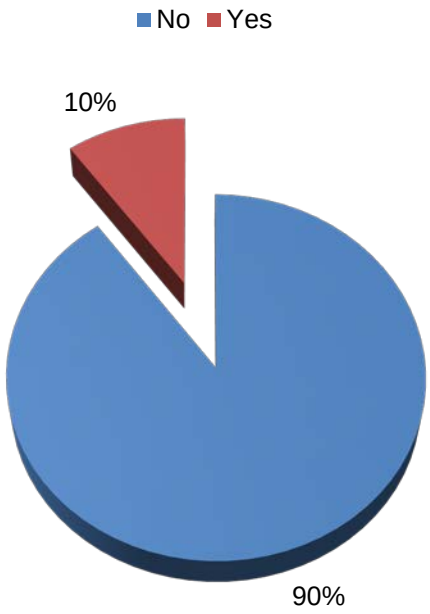
Has a family member or friend ever suggested that you get help for substance use?



Base: Yes (n=35), No (n=609), Sample Size = 644

(Community = Burleigh / Morton)

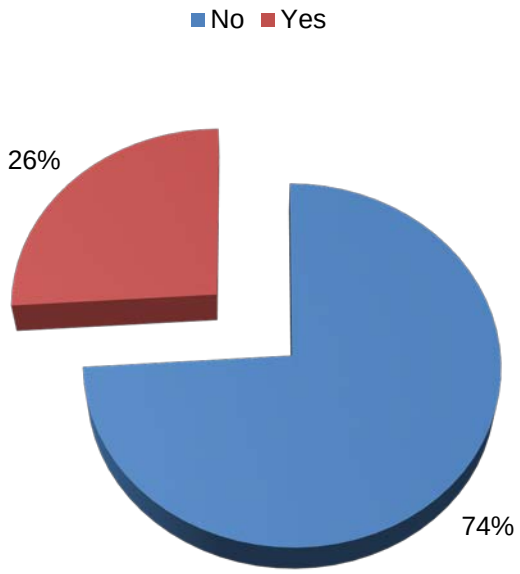
Has prescription or non-prescription drug use had a harmful effect on you or a family member in the past two years?



Base: Yes (n=64), No (n=581), Sample Size = 645

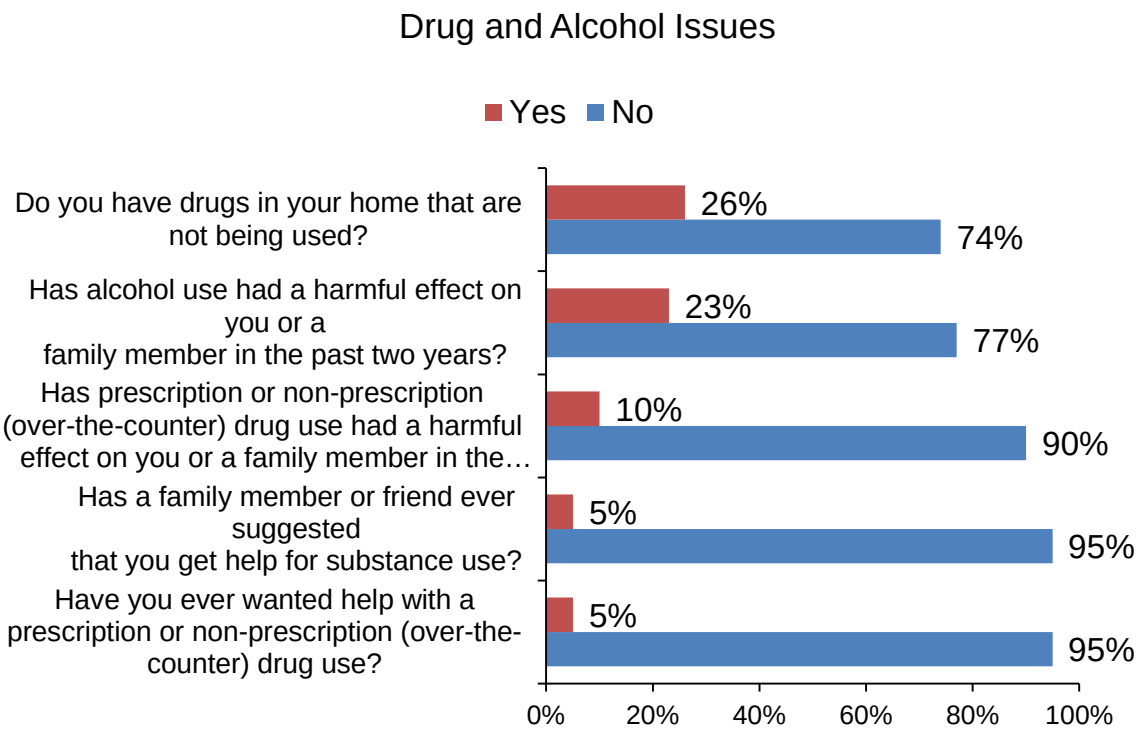
(Community = Burleigh / Morton)

Do you have drugs in your home that are not being used?



Base: Yes (n=165), No (n=480), Sample Size = 645

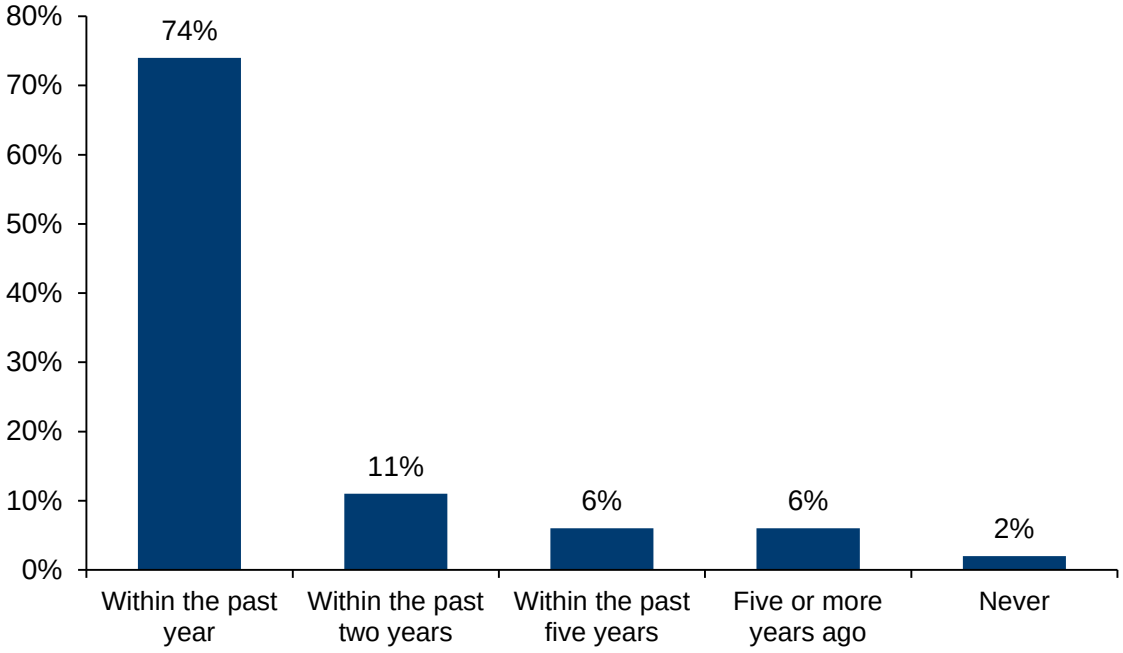
(Community = Burleigh / Morton)



Sample Size = Variable

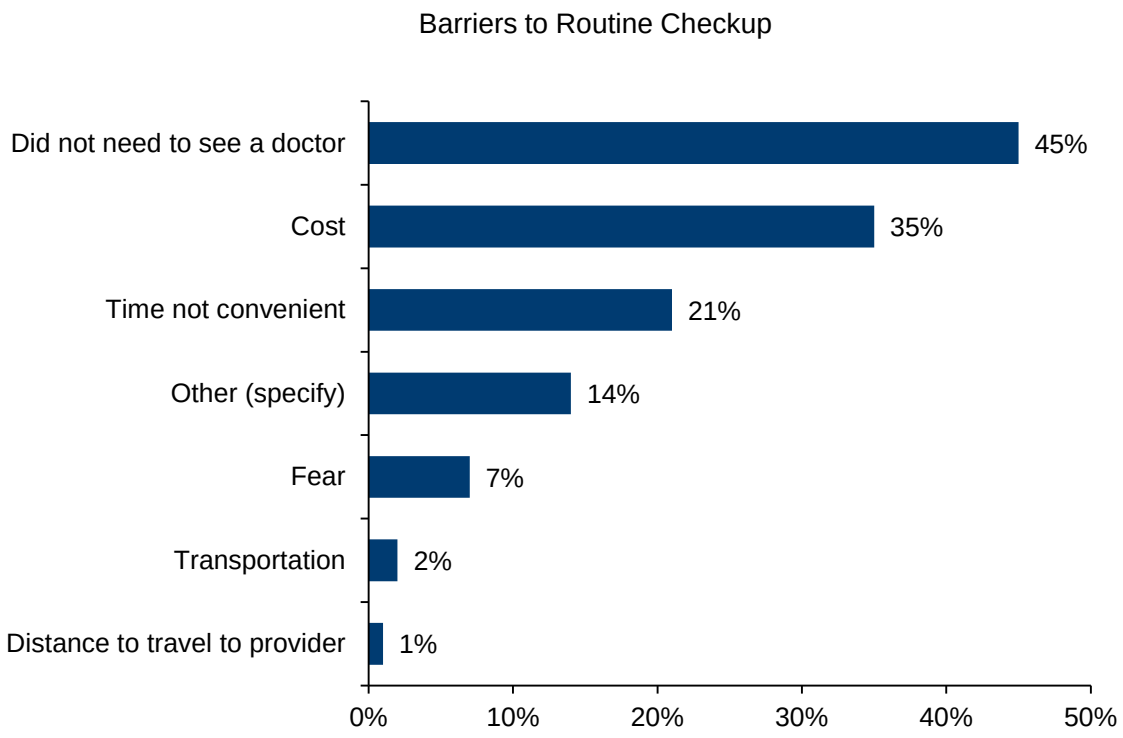
(Community = Burleigh / Morton)

How long has it been since you last visited a doctor or health care provider for a routine checkup?



Base: Within the past year (n=473), Within the past two years (n=72), Within the past five years (n=41), Five or more years ago (n=37), Never (n=12), Sample Size = 635

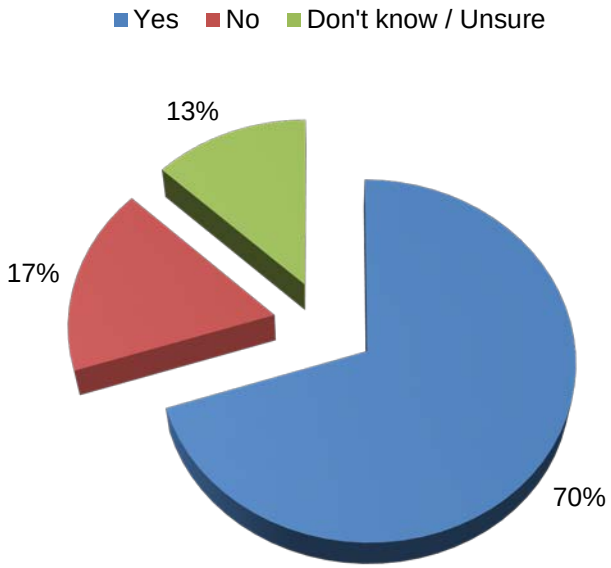
(Community = Burleigh / Morton)



Base: Distance to travel to provider (n=1), Cost (n=60), Fear (n=12), Transportation (n=3), Time not convenient (n=35), Did not need to see a doctor (n=76), Other (specify) (n=23), Sample Size = 170

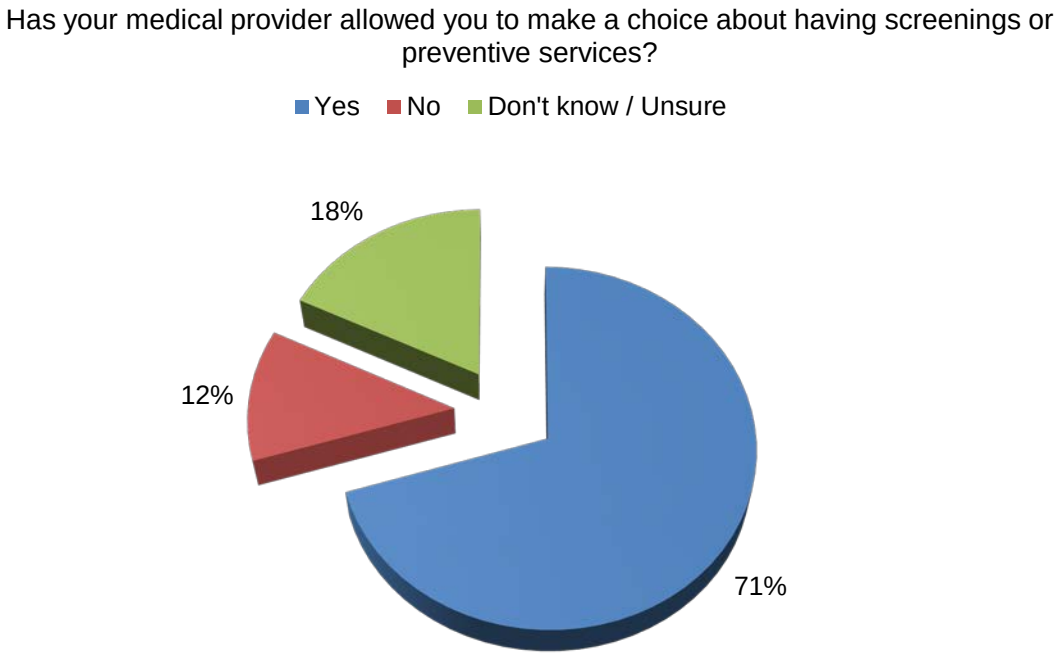
(Community = Burleigh / Morton)

Has your medical provider reviewed the risks and benefits of screenings and preventive services with you?



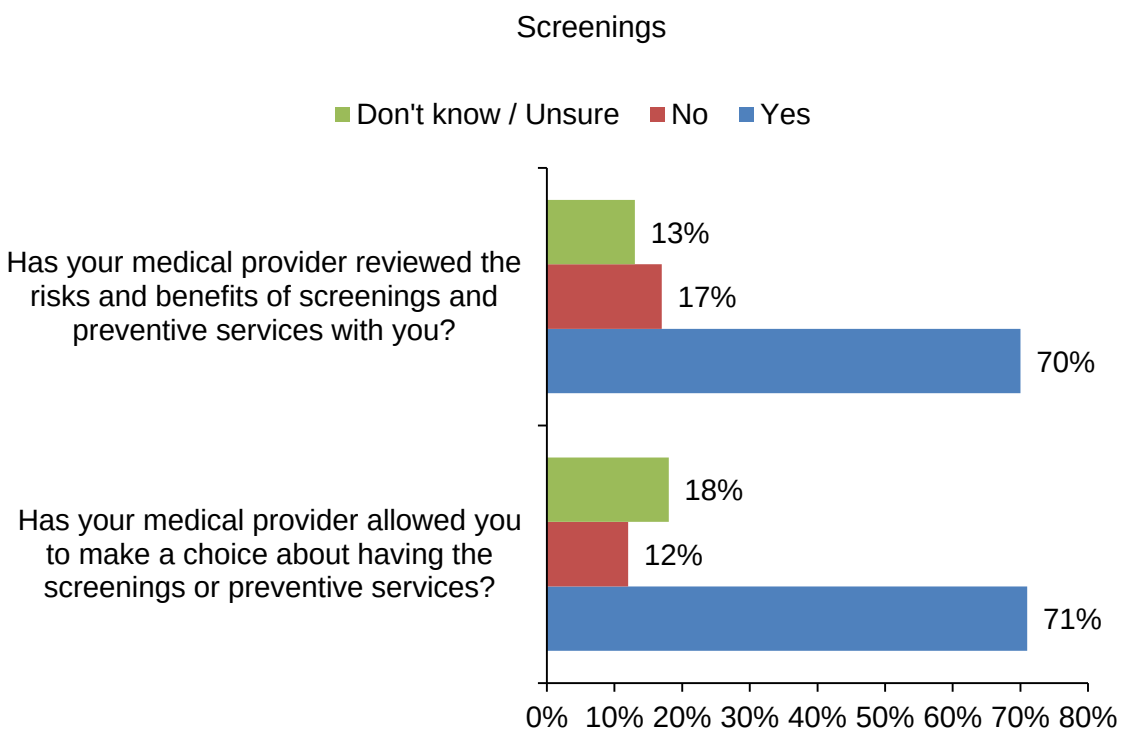
Base: Yes (n=452), No (n=107), Don't know / Unsure (n=84), Sample Size = 643

(Community = Burleigh / Morton)



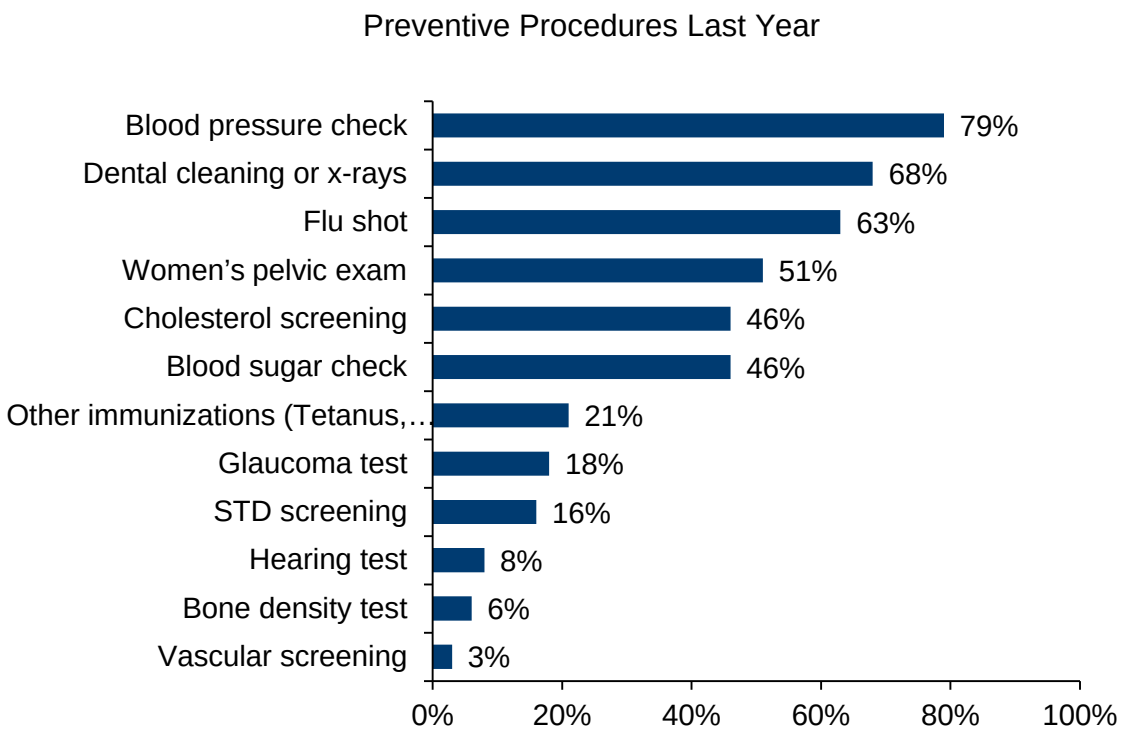
Base: Yes (n=453), No (n=76), Don't know / Unsure (n=113), Sample Size = 642

(Community = Burleigh / Morton)

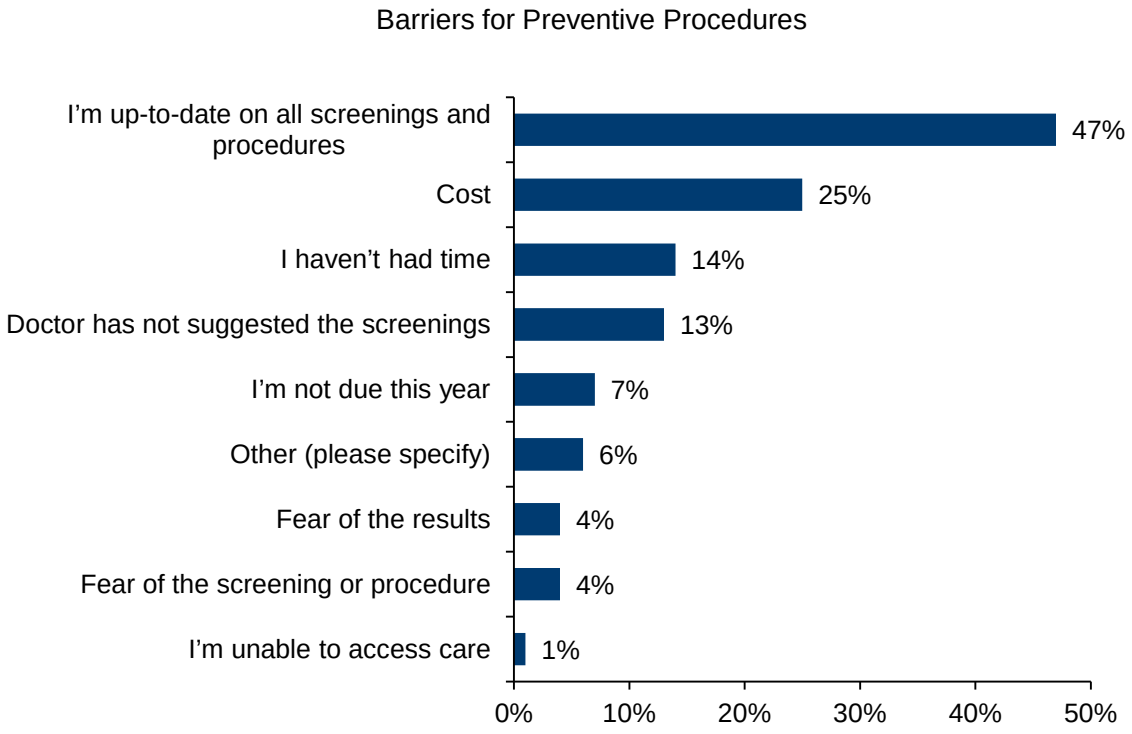


Sample Size = Variable

(Community = Burleigh / Morton)



Base: Blood pressure check (n=452), Blood sugar check (n=264), Bone density test (n=33), Cholesterol screening (n=264), Dental cleaning or x-rays (n=391), Flu shot (n=361), Other immunizations (Tetanus, Hepatitis A or B) (n=120), Glaucoma test (n=104), Hearing test (n=46), Women's pelvic exam (n=290), STD screening (n=91), Vascular screening (n=20), Sample Size = 572
(Community = Burleigh/ Morton)

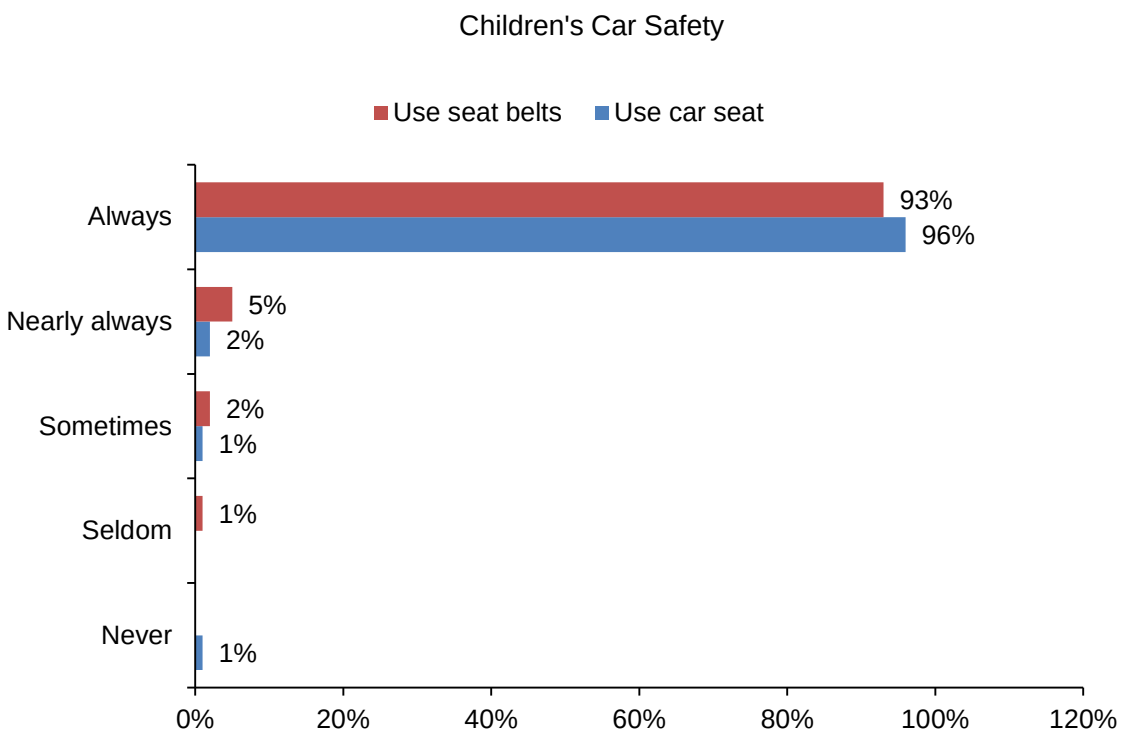


Base: I'm up-to-date on all screenings and procedures (n=302), Doctor has not suggested the screenings (n=85), Cost (n=158), I'm unable to access care (n=6), Fear of the screening or procedure (n=24), Fear of the results (n=24), I'm not due this year (n=46), I haven't had time (n=87), Other (please specify) (n=37), Sample Size = 636
(Community = Burleigh / Morton)

Do you have children under the age of 18 living in your household?

Base: Yes (n=312), No (n=332), Sample Size = 644

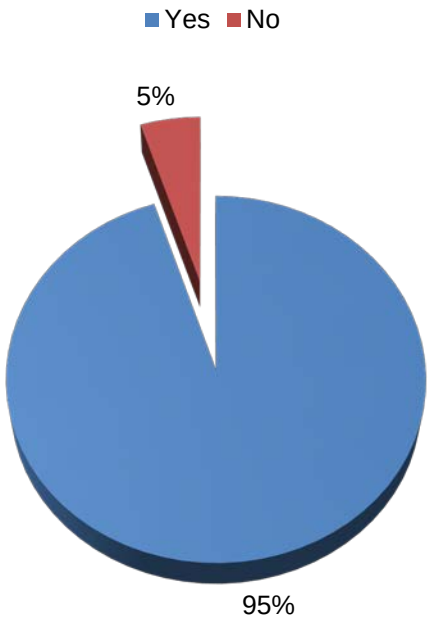
(Community = Burleigh / Morton)



Sample Size = Variable

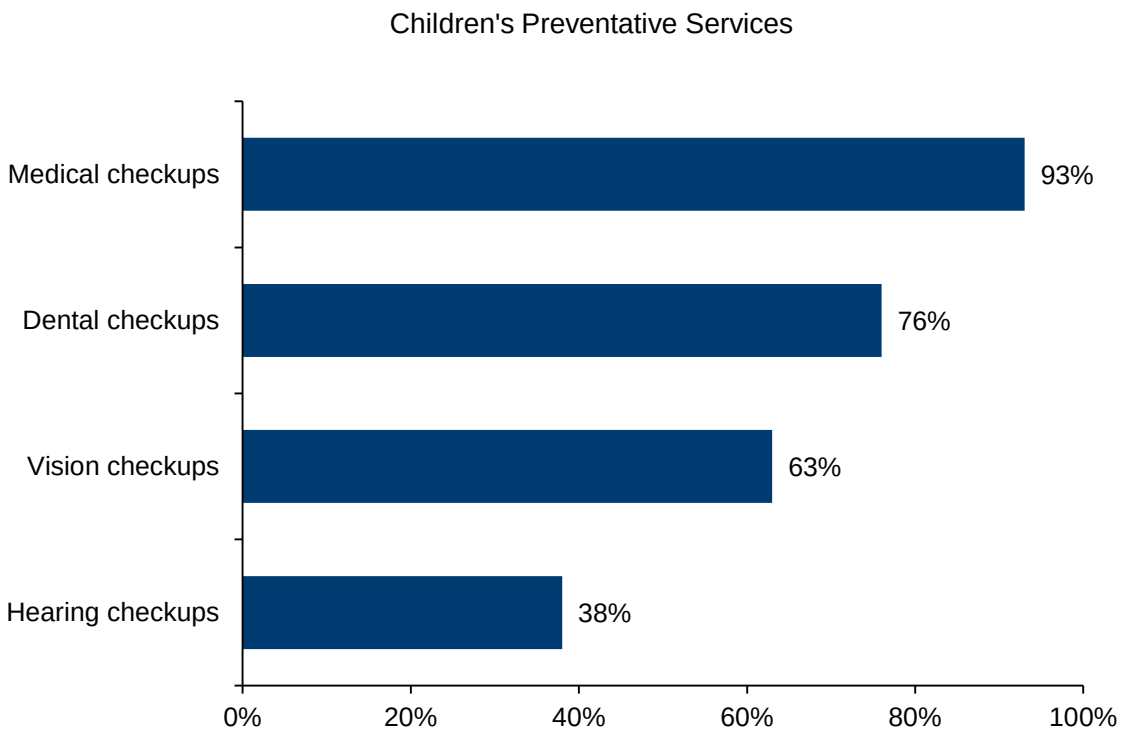
(Community = Burleigh / Morton)

Do you have healthcare coverage for your children or dependents?



Base: Yes (n=298), No (n=15), Sample Size = 313

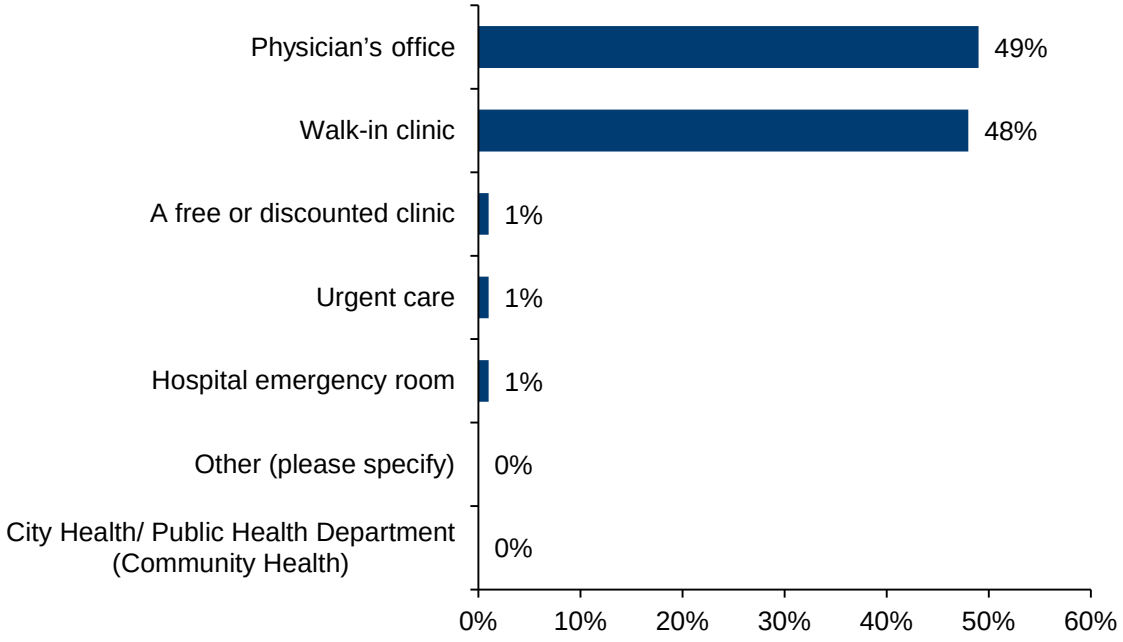
(Community = Burleigh / Morton)



Base: Dental checkups (n=234), Vision checkups (n=192), Hearing checkups (n=116), Medical checkups (n=285), Sample Size = 307

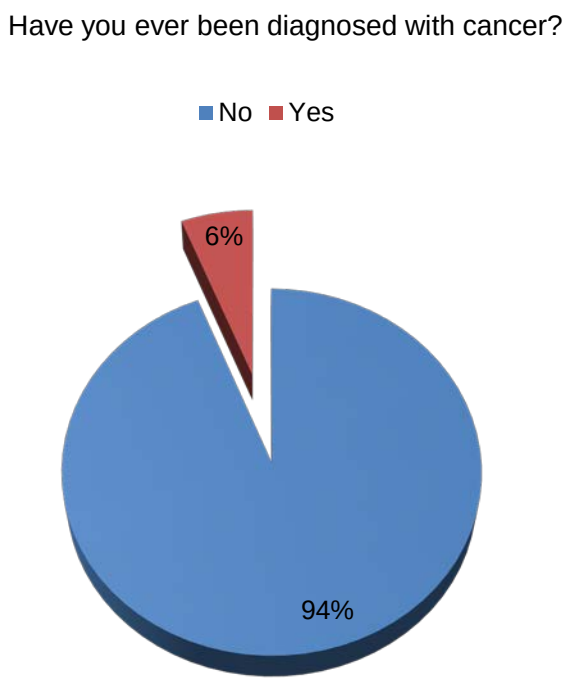
(Community = Burleigh / Morton)

Where do you most often take your children when they are sick and need to see a health care provider?



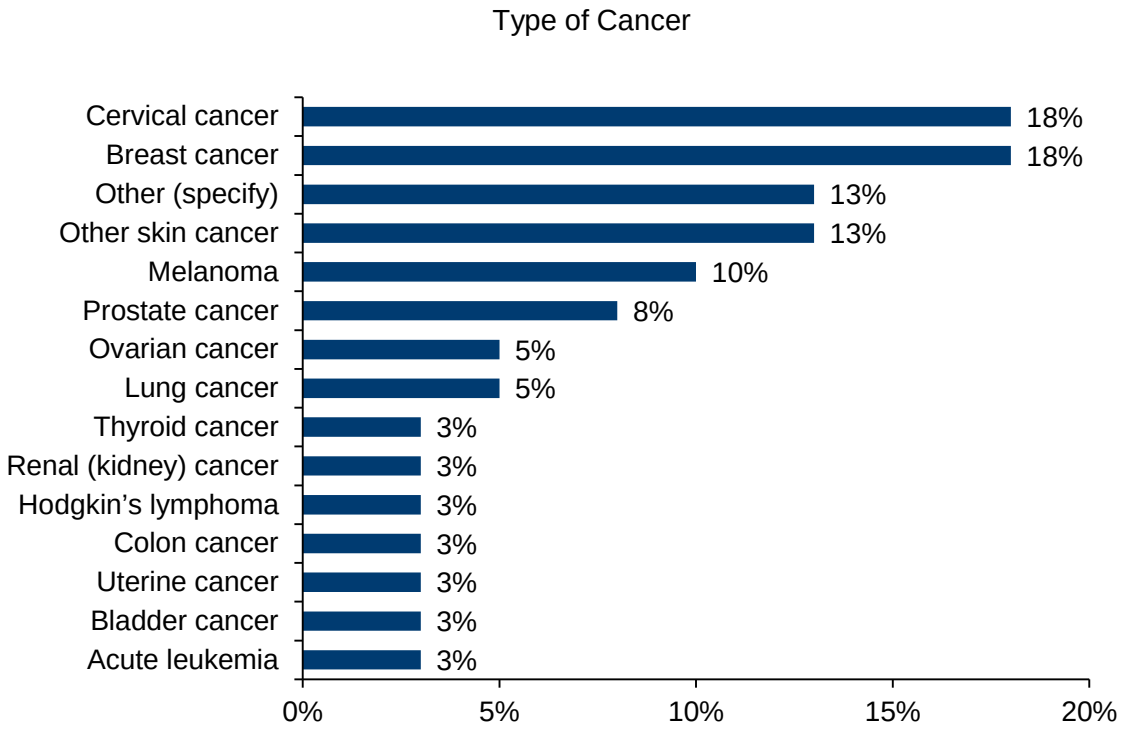
Base: Physician's office (n=154), Hospital emergency room (n=4), Urgent care (n=2), Walk-in clinic (n=149), City Health/ Public Health Department (Community Health) (n=1), A free or discounted clinic (n=2), Other (please specify) (n=1), Sample Size = 313

(Community = Burleigh / Morton)

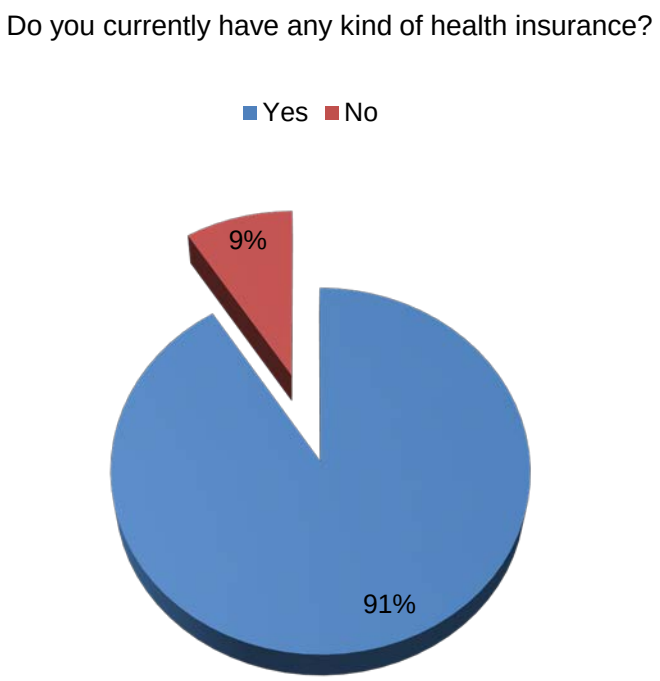


Base: Yes (n=39), No (n=606), Sample Size = 645

(Community = Burleigh / Morton)

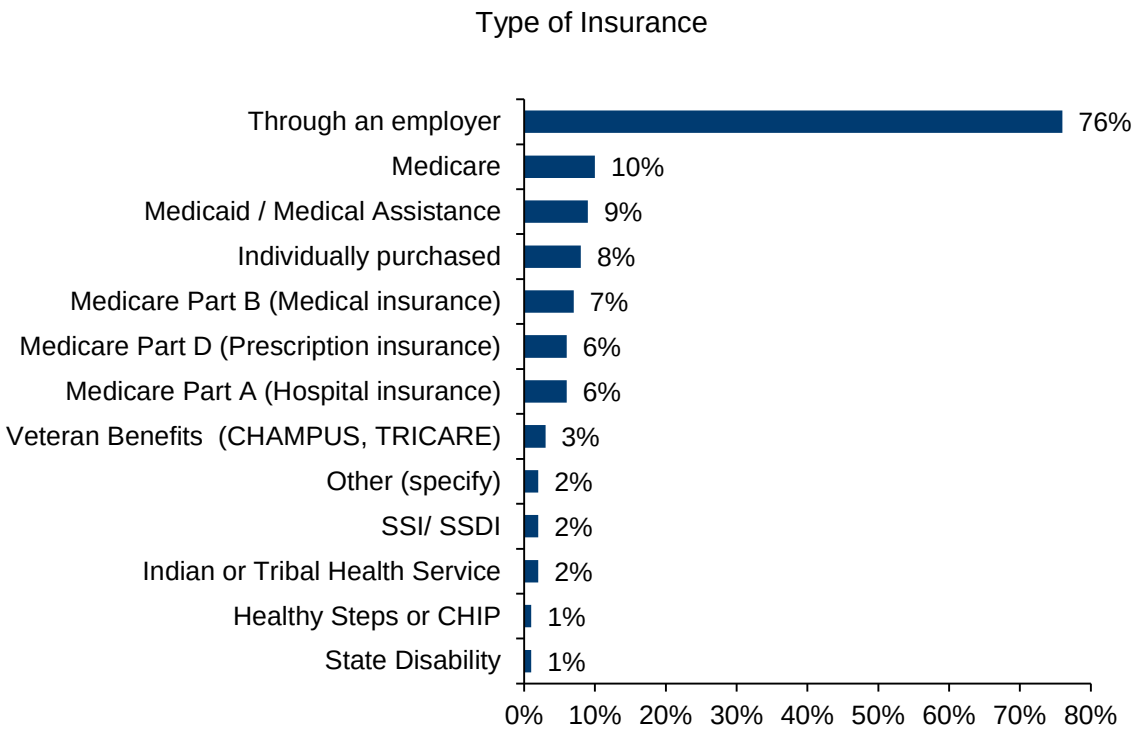


Base: Acute leukemia (n=1), Bladder cancer (n=1), Uterine cancer (n=1), Breast cancer (n=7), Cervical cancer (n=7), Colon cancer (n=1), Hodgkin's lymphoma (n=1), Lung cancer (n=2), Melanoma (n=4), Other skin cancer (n=5), Ovarian cancer (n=2), Prostate cancer (n=3), Renal (kidney) cancer (n=1), Thyroid cancer (n=1), Other (specify) (n=5), Sample Size = 39
(Community = Burleigh / Morton)

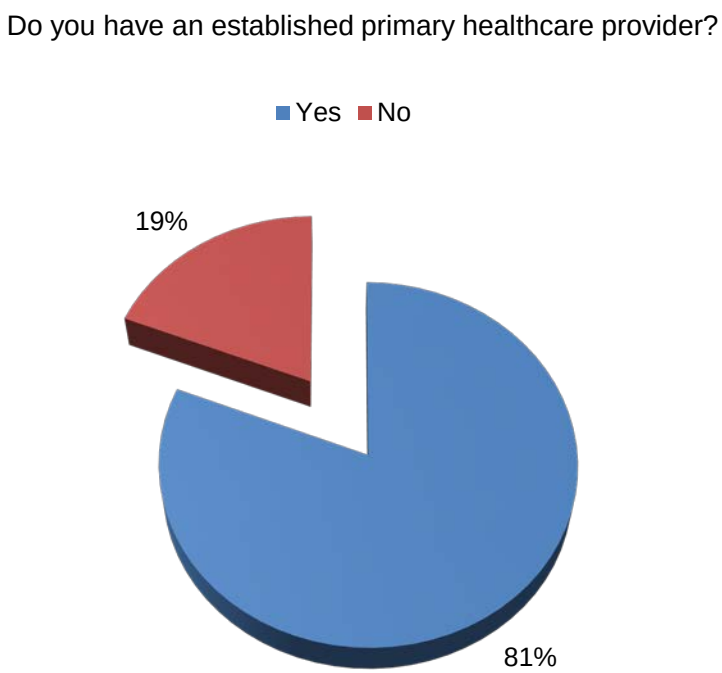


Base: Yes (n=586), No (n=58), Sample Size = 644

(Community = Burleigh / Morton)



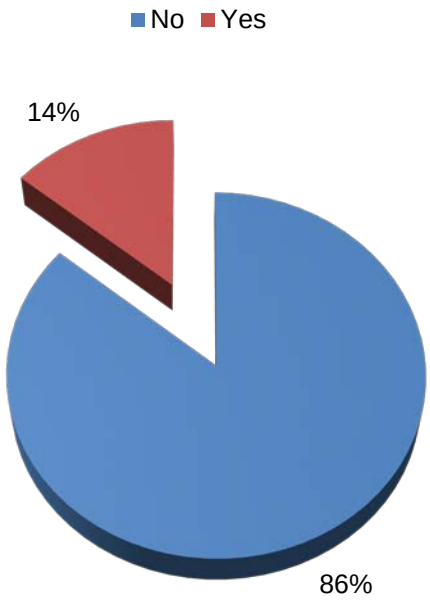
Base: Through an employer (n=443), Individually purchased (n=49), Indian or Tribal Health Service (n=11), Medicare (n=59), Medicare Part A (Hospital insurance) (n=36), Medicare Part B (Medical insurance) (n=42), Medicare Part D (Prescription insurance) (n=35), State Disability (n=3), SSI/ SSDI (n=9), Medicaid / Medical Assistance (n=51), Veteran Benefits (CHAMPUS, TRICARE) (n=20), Healthy Steps or CHIP (n=6), Other (specify) (n=12), Sample Size = 586
(Community = Burleigh / Morton)



Base: Yes (n=522), No (n=122), Sample Size = 644

(Community = Burleigh / Morton)

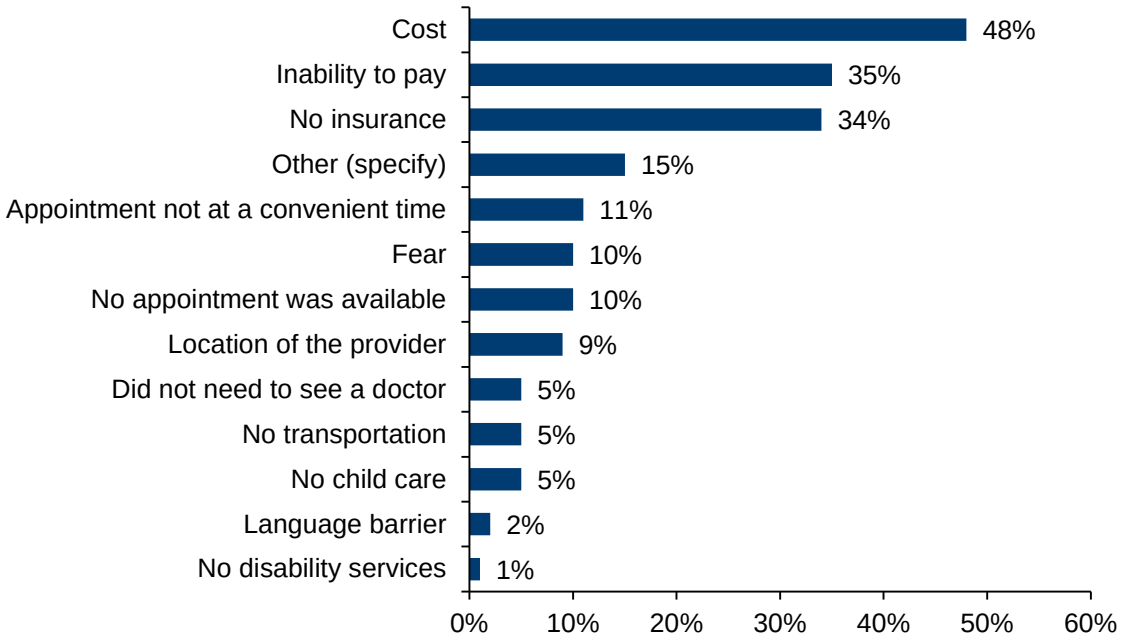
In the past year, did you or someone in your family need medical care, but did not receive the care they needed?



Base: Yes (n=92), No (n=553), Sample Size = 645

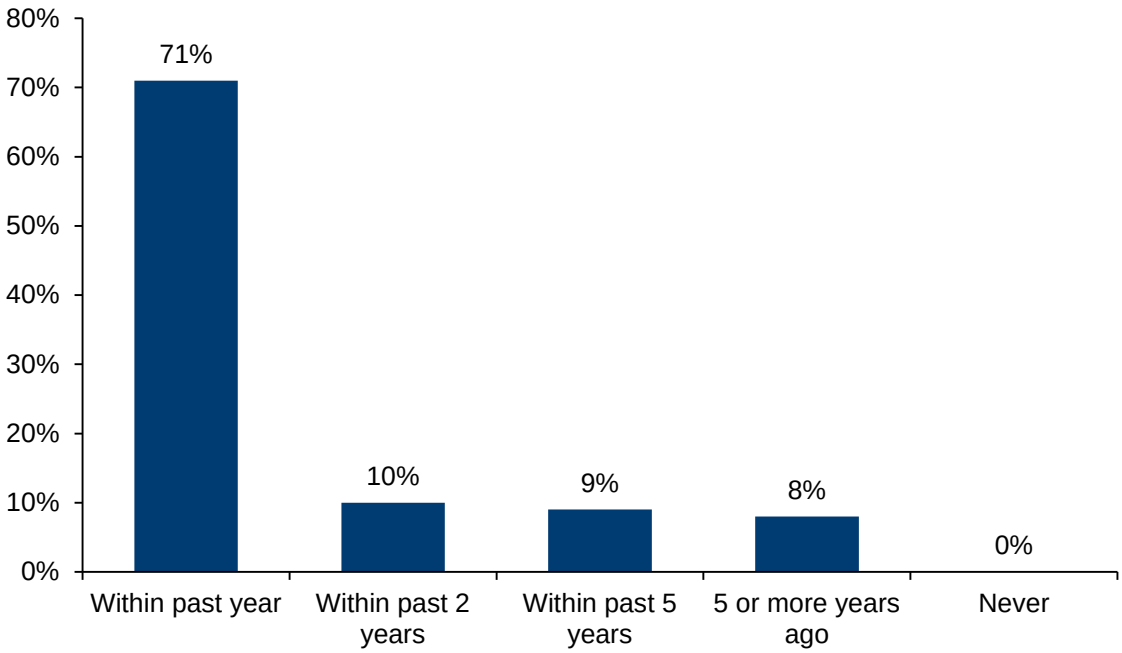
(Community = Burleigh / Morton)

Barriers to Receiving Care Needed



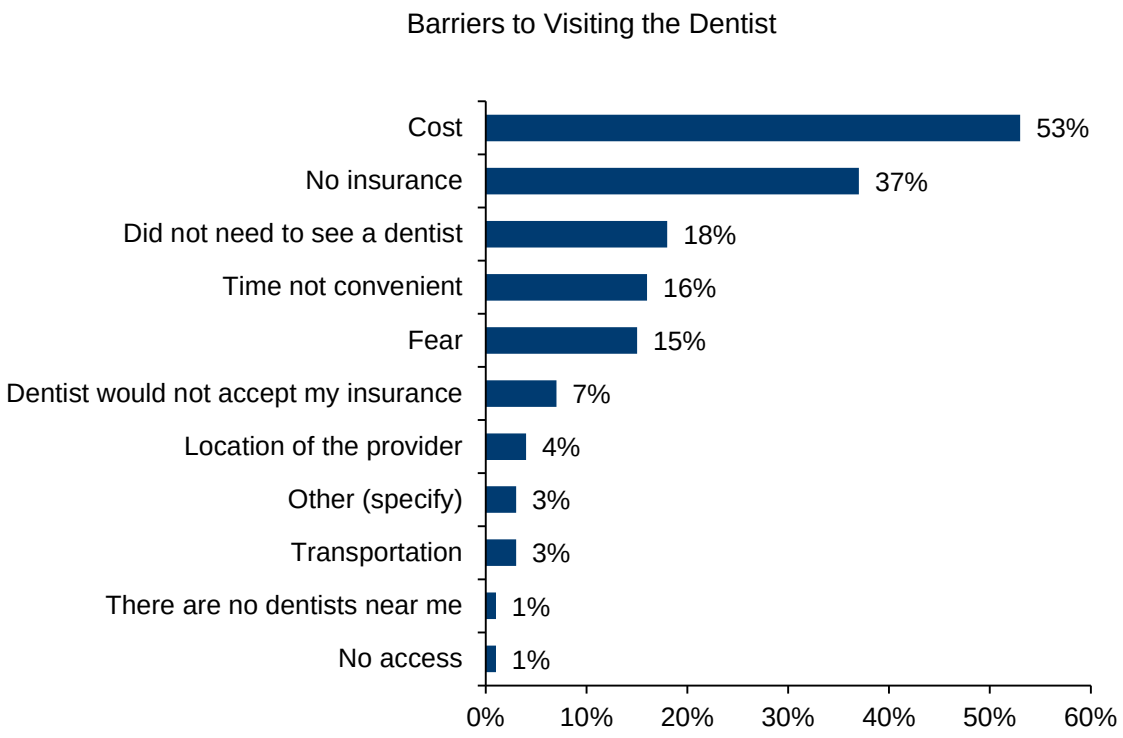
Base: Inability to pay (n=31), No child care (n=4), No appointment was available (n=9), Appointment not at a convenient time (n=10), No disability services (n=1), No insurance (n=30), Language barrier (n=2), No transportation (n=4), Location of the provider (n=8), Cost (n=42), Fear (n=9), Did not need to see a doctor (n=4), Other (specify) (n=13)
(Community = Burleigh / Morton)

How long has it been since you last visited a dentist?



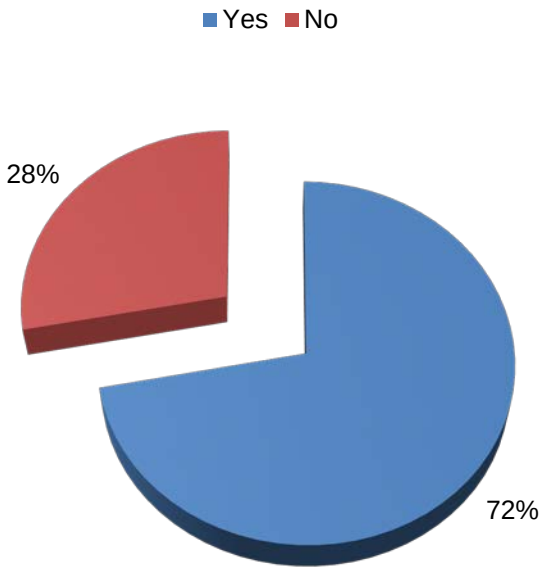
Base: Within past year (n=455), Within past 2 years (n=65), Within past 5 years (n=60), 5 or more years ago (n=54), Never (n=3), Sample Size = 637

(Community = Burleigh / Morton)



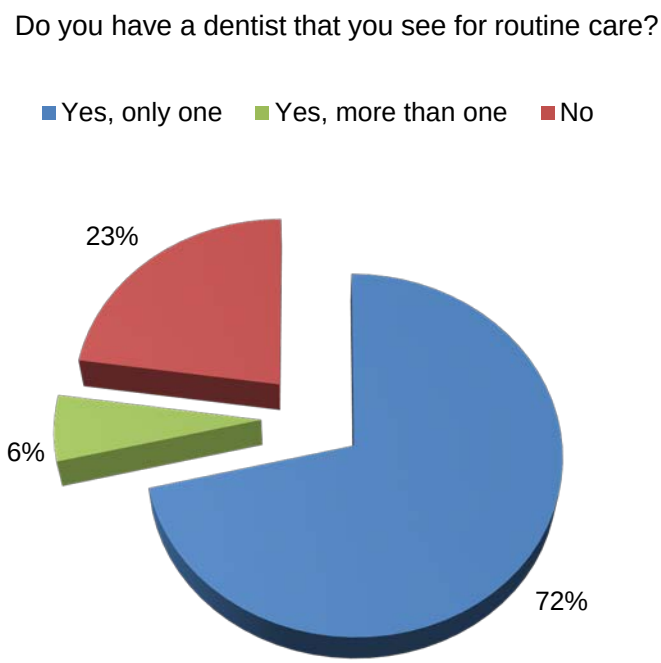
Base: No access (n=2), No insurance (n=70), Location of the provider (n=8), Cost (n=101), Fear (n=29), Transportation (n=5), Time not convenient (n=30), There are no dentists near me (n=2), Dentist would not accept my insurance (n=13), Did not need to see a dentist (n=34), Other (specify) (n=5), Sample Size = 190
(Community = Burleigh / Morton)

Do you have any kind of dental care or oral health insurance coverage?



Base: Yes (n=453), No (n=178), Sample Size = 631

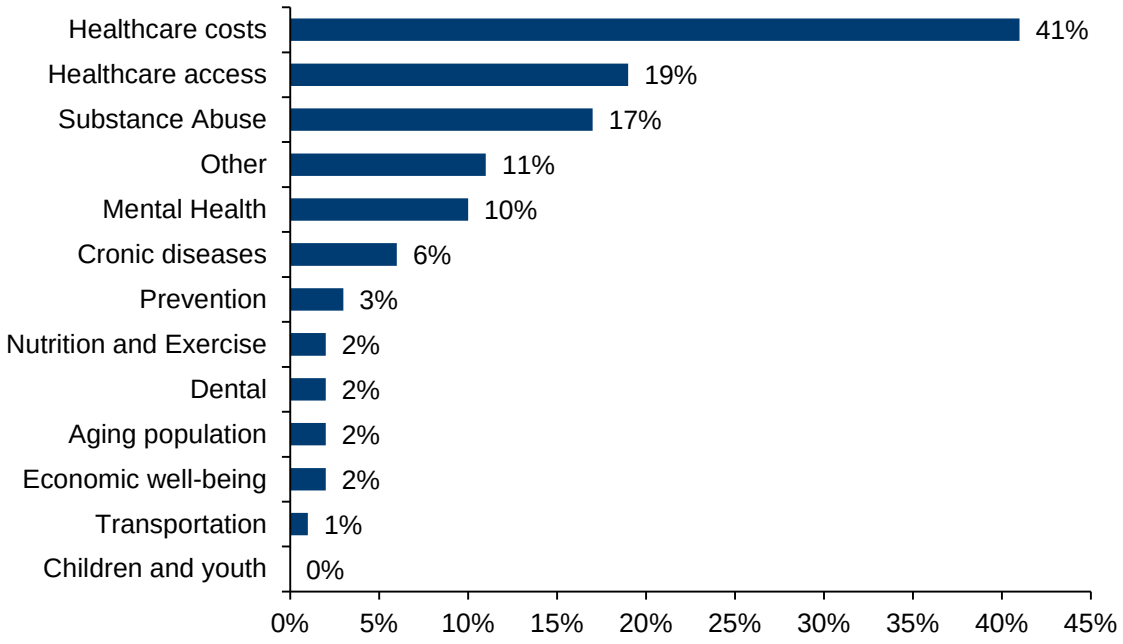
(Community = Burleigh / Morton)



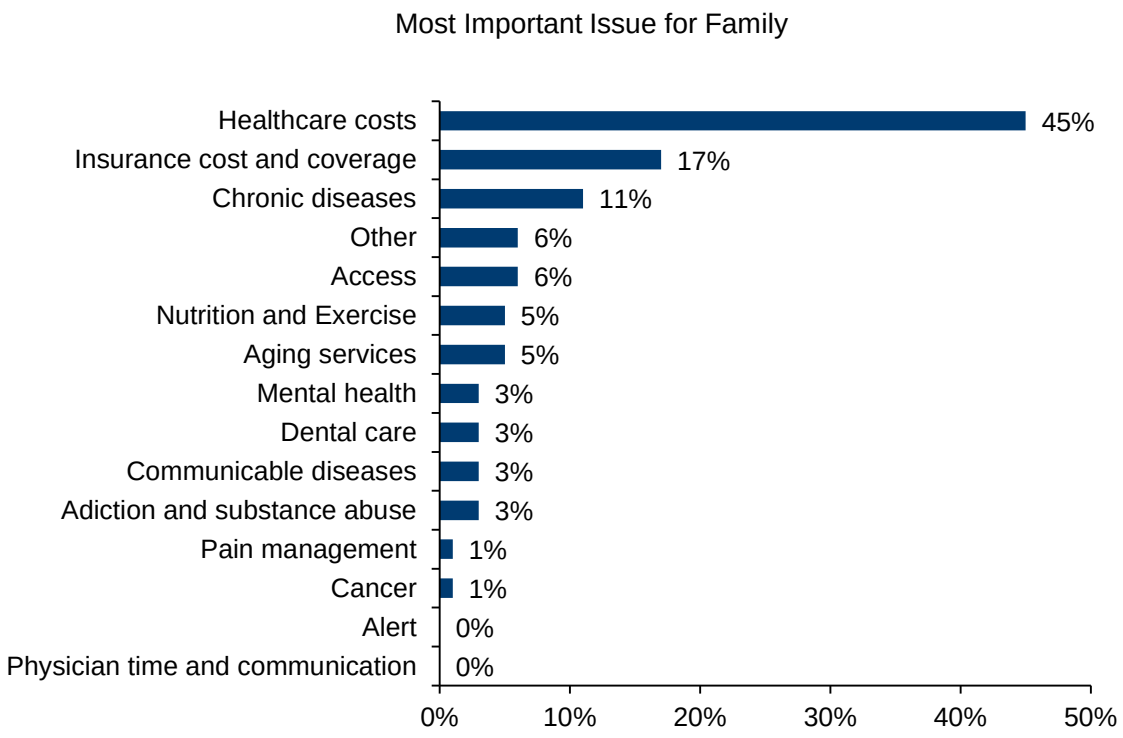
Base: Yes, only one (n=457), Yes, more than one (n=37), No (n=145), Sample Size = 639

(Community = Burleigh / Morton)

Most Important Community Issues

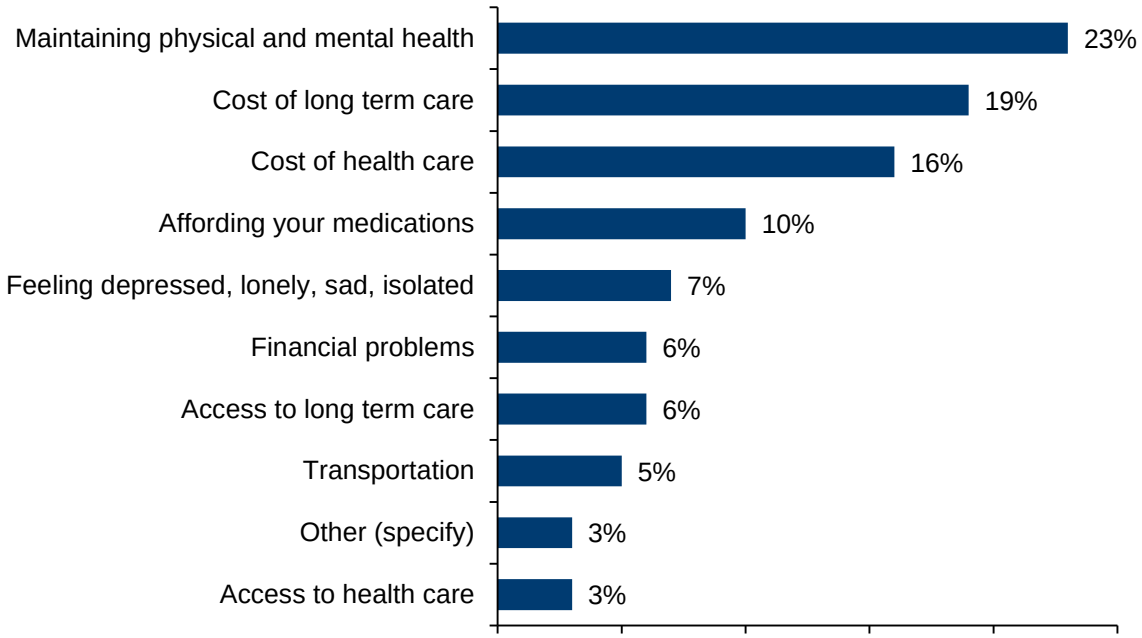


Base: Economic well-being (n=10), Transportation (n=5), Children and youth (n=1), Aging population (n=7), Healthcare access (n=85), Mental Health (n=45), Substance Abuse (n=74), Cronic diseases (n=25), Healthcare costs (n=184), Dental (n=10), Prevention (n=13), Nutrition and Exercise (n=11), Other (n=50), Sample Size = 508
(Community = Burleigh / Morton)



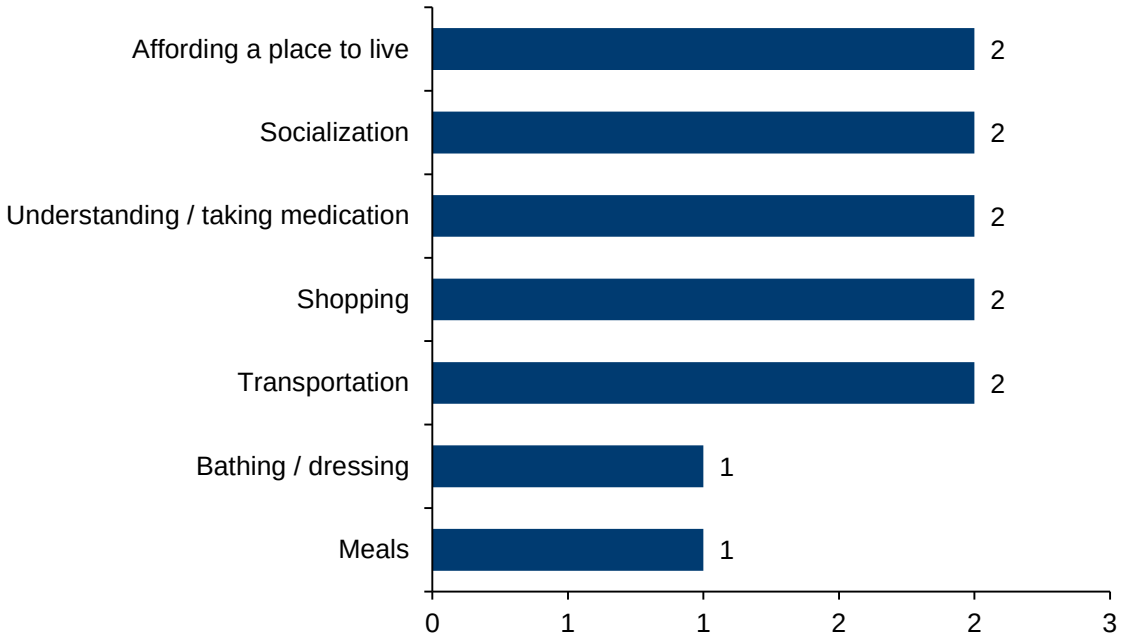
Base: Access (n=22), Adiction and substance abuse (n=12), Aging services (n=18), Cancer (n=4), Chronic diseases (n=40), Communicable diseases (n=12), Healthcare costs (n=169), Dental care (n=13), Nutrition and Exercise (n=20), Insurance cost and coverage (n=63), Mental health (n=13), Pain management (n=4), Physician time and communication (n=1), Alert (n=1), Other (n=21), Sample Size = 495
(Community = Burleigh / Morton)

What is your biggest concern as you age? (Age 65+)



Base: Access to health care (n=5), Cost of health care (n=24), Affording your medications (n=15), Maintaining physical and mental health (n=34), Feeling depressed, lonely, sad, isolated (n=11), Access to long term care (n=9), Cost of long term care (n=28), Financial problems (n=9), Transportation (n=8), Other (specify) (n=4), Sample Size = 54
(Community = Burleigh / Morton)

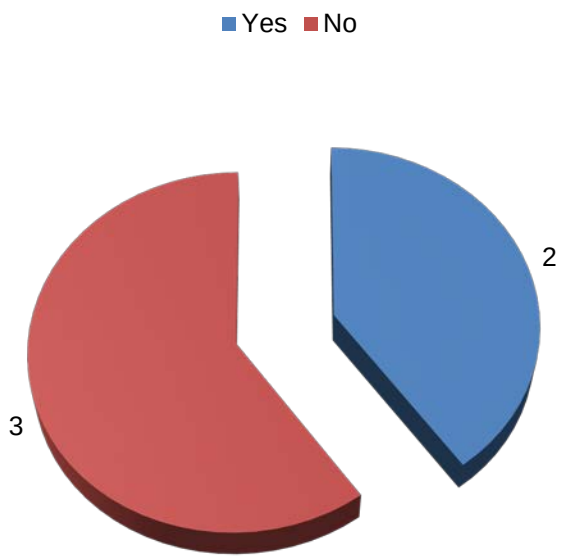
Which of these tasks do you need assistance with? (Age 65+)



Sample Size = 6

(Community = Burleigh / Morton)

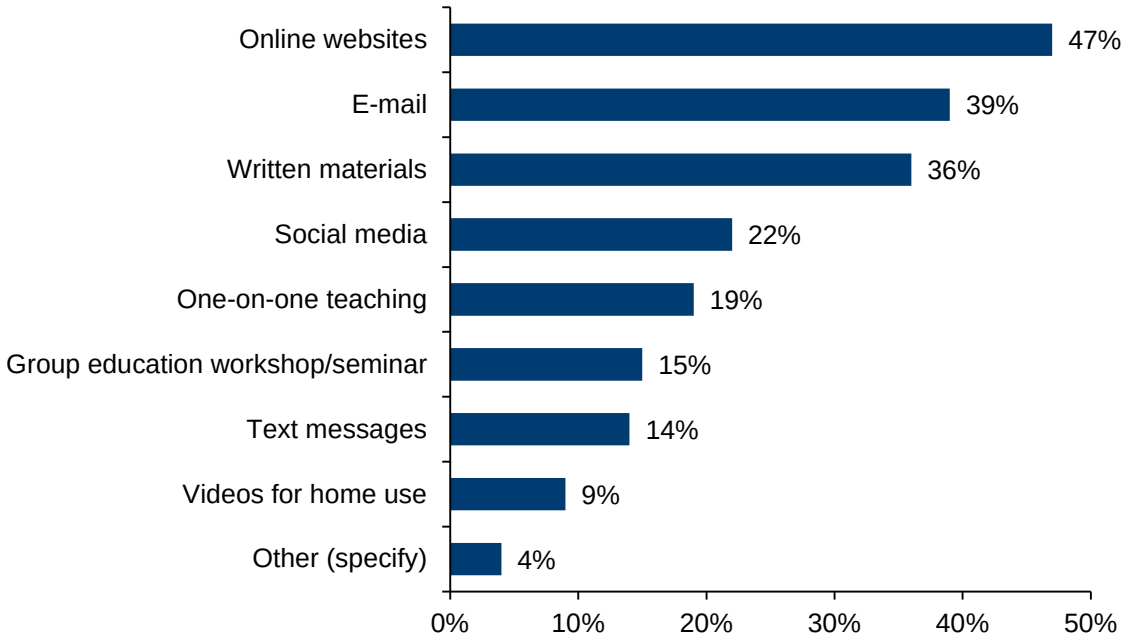
Do you know where to go to get help with the tasks you need assistance with? (Age 65+)



Sample Size = 5

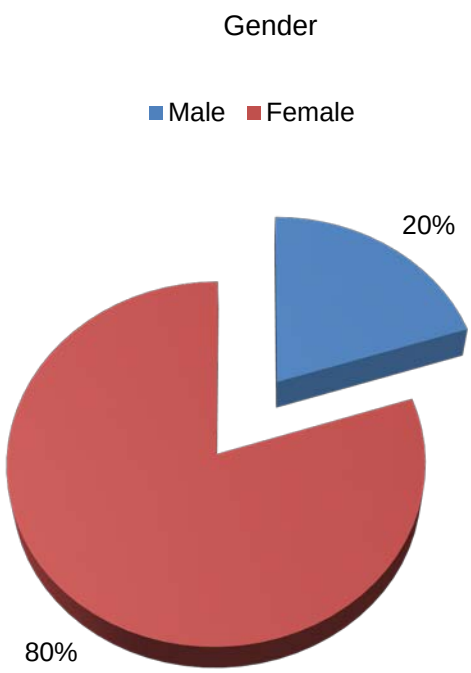
(Community = Burleigh / Morton)

What method(s) would you prefer to get health information?



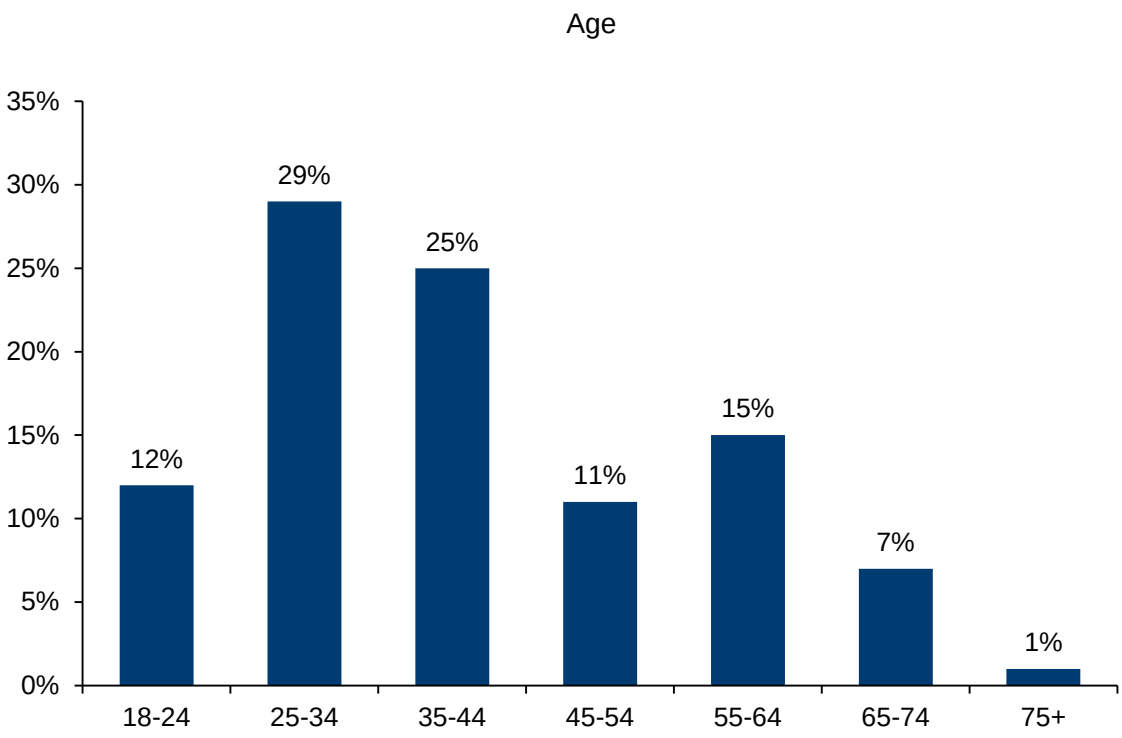
Base: Written materials (n=226), Videos for home use (n=56), Social media (n=141), Text messages (n=89), One-on-one teaching (n=120), E-mail (n=247), Group education workshop/seminar (n=95), Online websites (n=293), Other (specify) (n=25), Sample Size = 630

(Community = Burleigh / Morton)



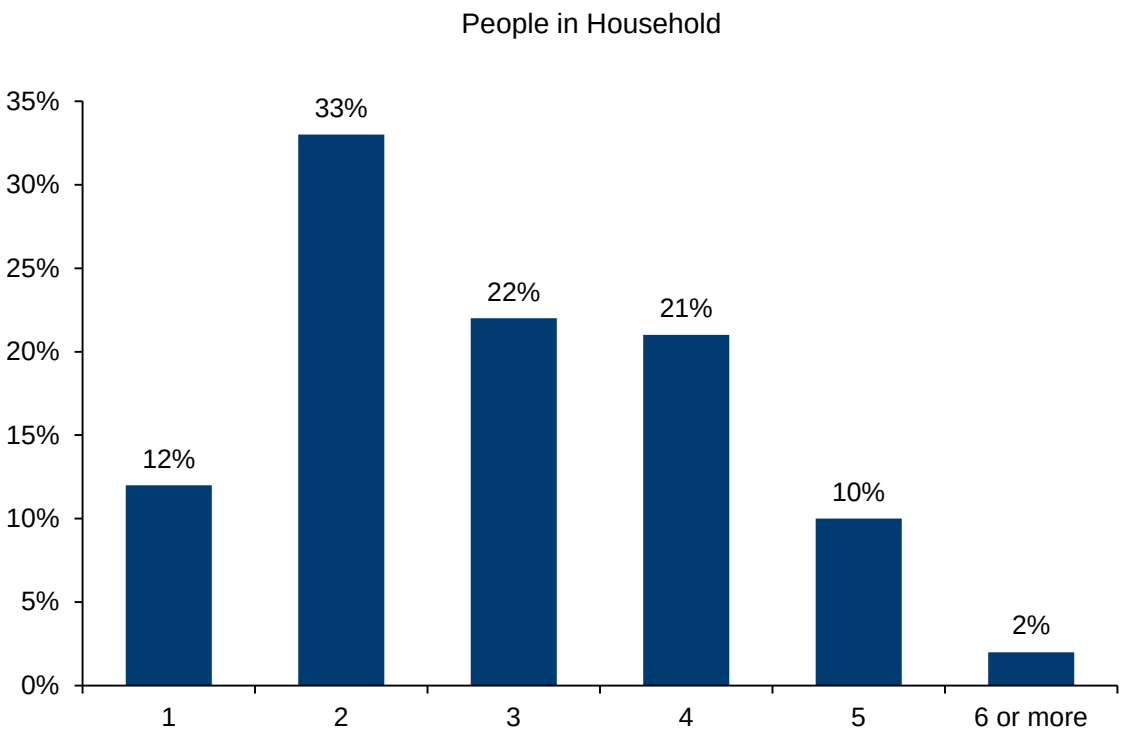
Base: Male (n=129), Female (n=511), Sample Size = 640

(Community = Burleigh / Morton)



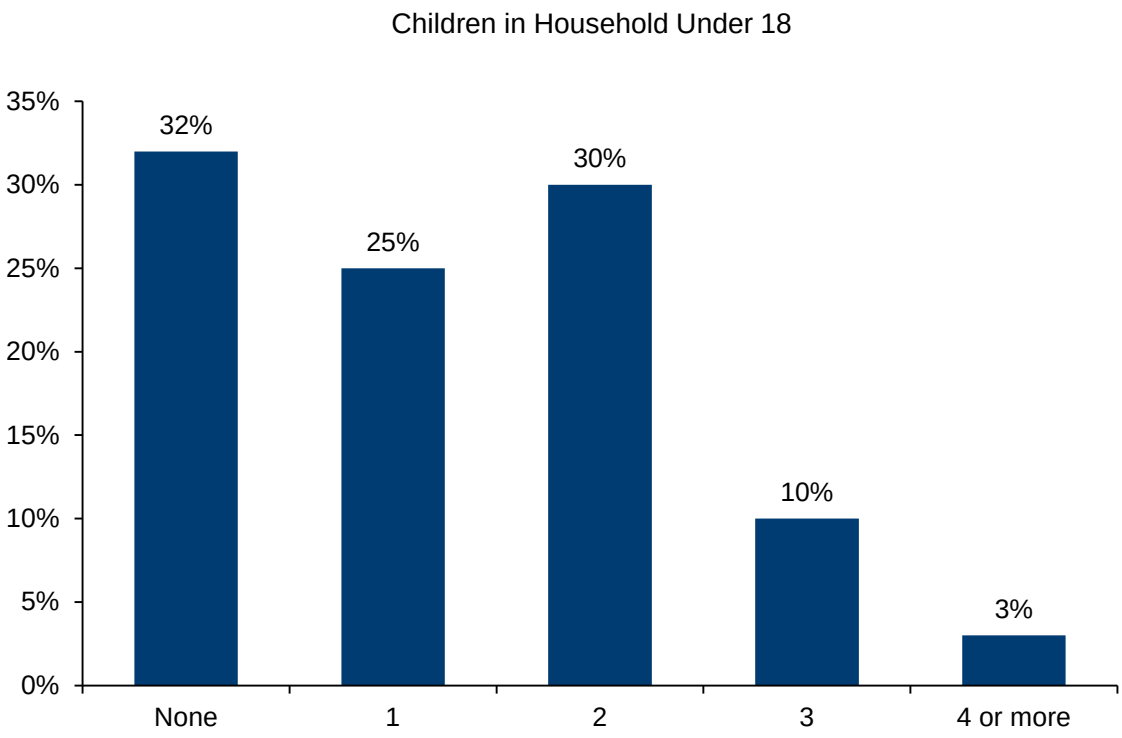
Base: 18-24 (n=76), 25-34 (n=186), 35-44 (n=158), 45-54 (n=74), 55-64 (n=95), 65-74 (n=47), 75+ (n=8), Sample Size = 644

(Community = Burleigh / Morton)



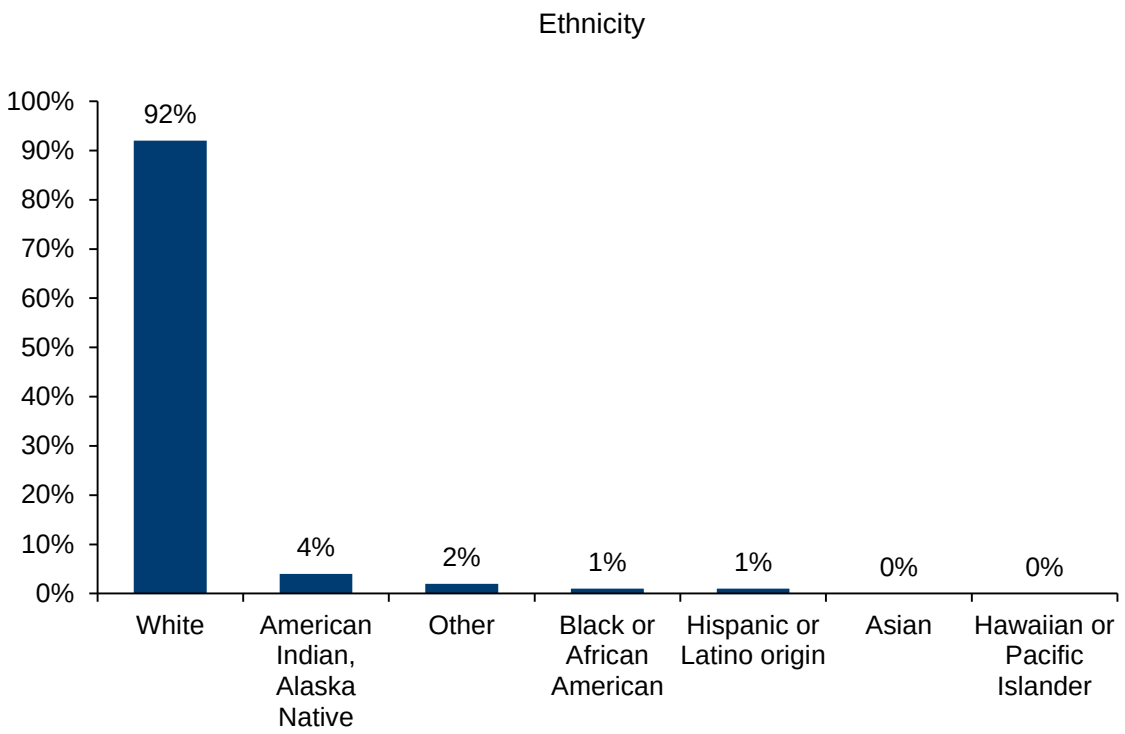
Base: 1 (n=74), 2 (n=212), 3 (n=144), 4 (n=133), 5 (n=62), 6 or more (n=16), Sample Size = 641

(Community = Burleigh / Morton)



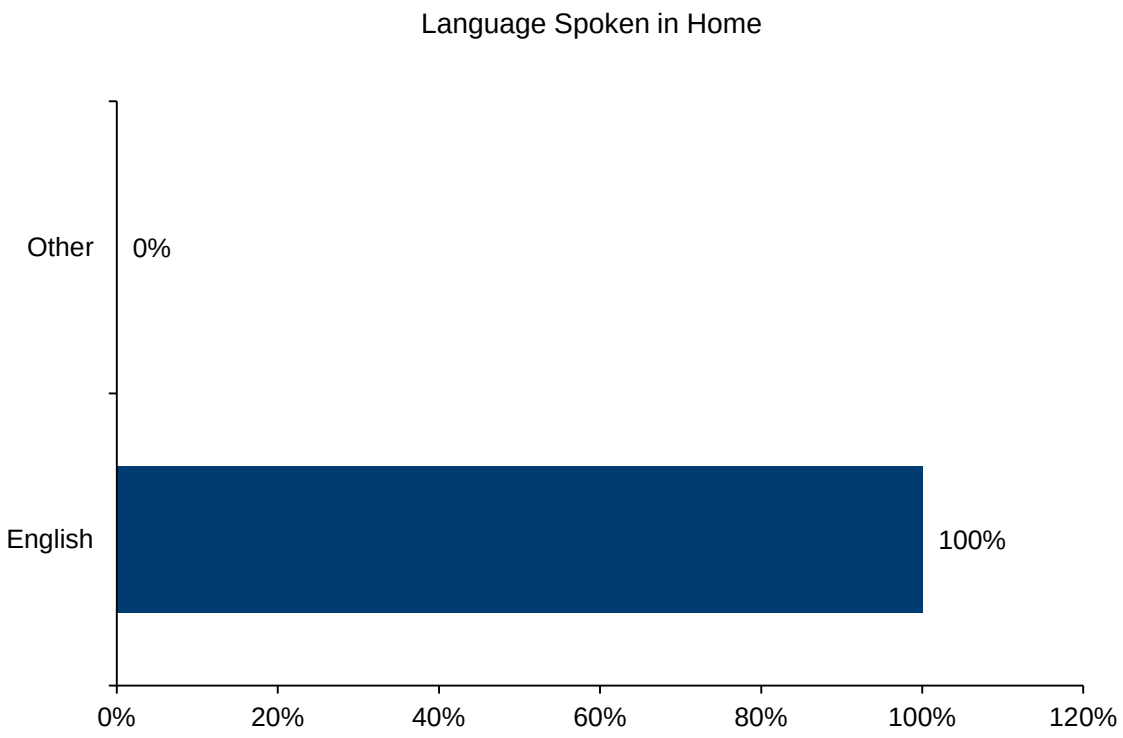
Base: None (n=146), 1 (n=115), 2 (n=141), 3 (n=47), 4 or more (n=14), Sample Size = 463

(Community = Burleigh / Morton)



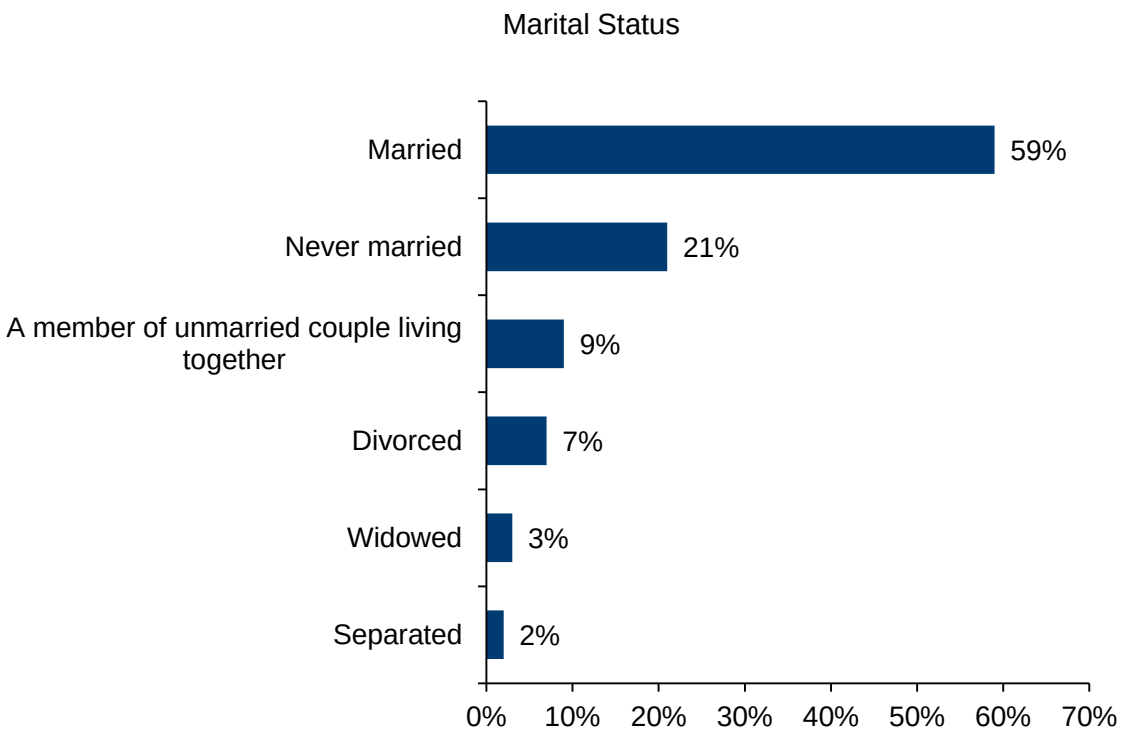
Base: White (n=588), Black or African American (n=5), Asian (n=3), American Indian, Alaska Native (n=26), Hawaiian or Pacific Islander (n=1), Hispanic or Latino origin (n=8), Other (n=10), Sample Size = 641

(Community = Burleigh / Morton)



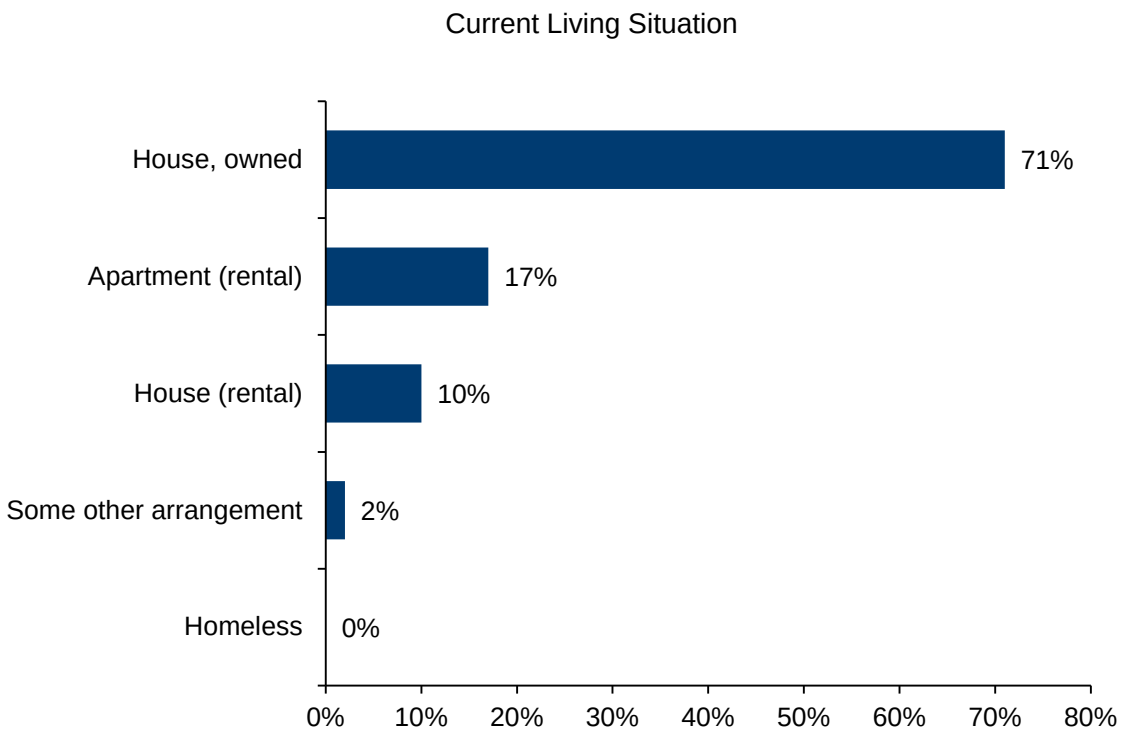
Base: English (n=640), Other (n=1), Sample Size = 641

(Community = Burleigh / Morton)



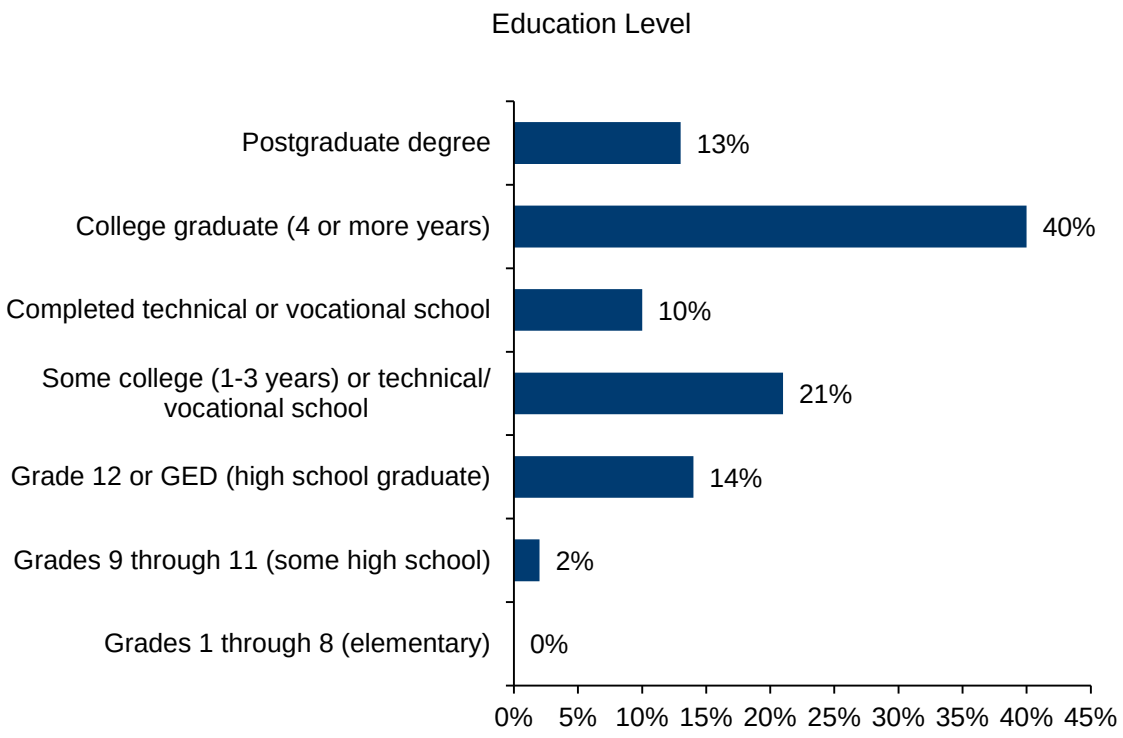
Base: Never married (n=133), Married (n=378), Divorced (n=45), Widowed (n=21), Separated (n=10), A member of unmarried couple living together (n=55), Sample Size = 642

(Community = Burleigh / Morton)

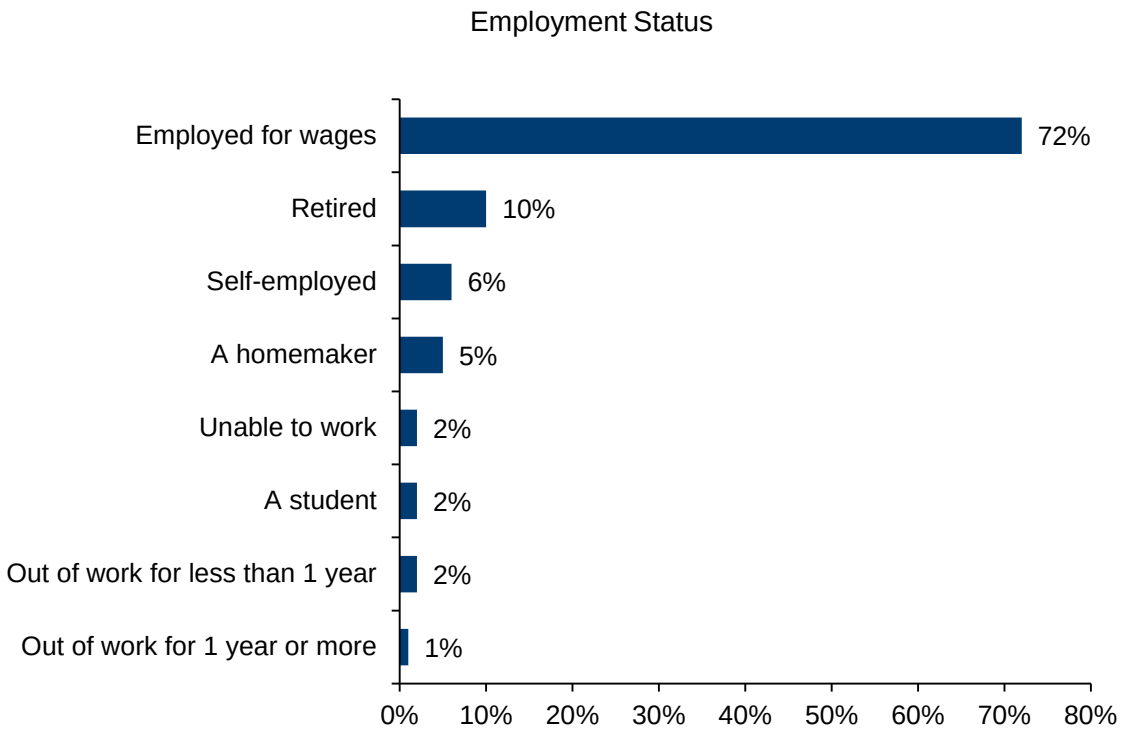


Base: House, owned (n=453), House (rental) (n=64), Apartment (rental) (n=108), Homeless (n=2), Some other arrangement (n=15), Sample Size = 642

(Community = Burleigh / Morton)

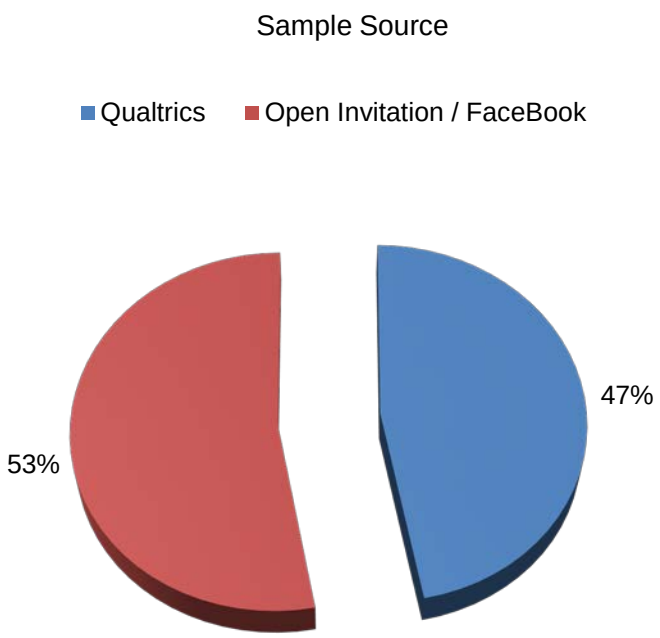


Base: Grades 1 through 8 (elementary) (n=3), Grades 9 through 11 (some high school) (n=11), Grade 12 or GED (high school graduate) (n=92), Some college (1-3 years) or technical/ vocational school (n=138), Completed technical or vocational school (n=62), College graduate (4 or more years) (n=256), Postgraduate degree (n=81), Sample Size = 643
(Community = Burleigh / Morton)



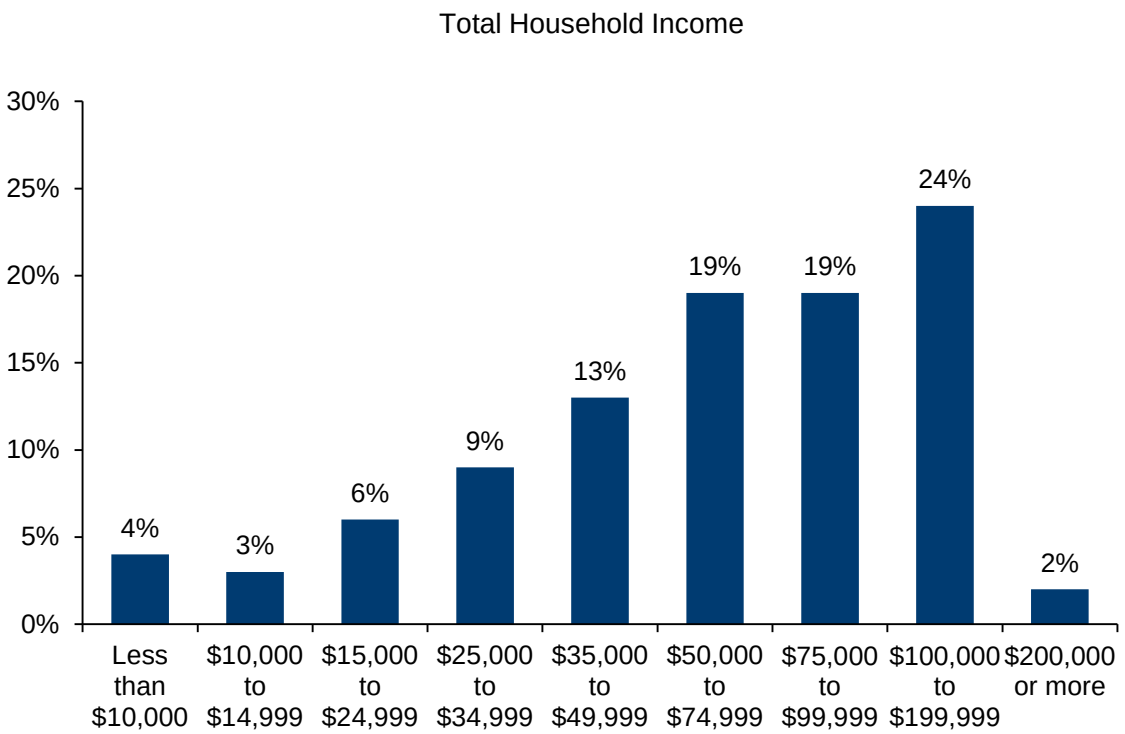
Base: Employed for wages (n=461), Self-employed (n=41), Out of work for less than 1 year (n=13), Out of work for 1 year or more (n=6), A homemaker (n=34), A student (n=12), Retired (n=66), Unable to work (n=10), Sample Size = 643

(Community = Burleigh / Morton)



Base: Qualtrics (n=300), Open Invitation / FaceBook (n=345), Sample Size = 645

(Community = Burleigh / Morton)



Base: Less than $10,000 (n=21), $10,000 to $14,999 (n=20), $15,000 to $24,999 (n=33), $25,000 to $34,999 (n=52), $35,000 to $49,999 (n=78), $50,000 to $74,999 (n=113), $75,000 to $99,999 (n=112), $100,000 to $199,999 (n=141), $200,000 or more (n=12), Sample Size = 582

(Community = Burleigh / Morton)

Bismarck-Burleigh Public Health

Burleigh County Community Health Profile

Authors:

Tracy K. Miller, PhD, MPH
State Epidemiologist

Kodi Pinks, MPH
Epidemiologist

March 2018

NORTH DAKOTA DEPARTMENT *of* HEALTH

TABLE OF CONTENTS

Data Sources i
Photograph Credits i

POPULATION DATA
Table 1: Population by Age Group 1
Table 2: Female Population and Percentage Female by Age 1
Table 3: Race 1
Table 4: Household Populations 2
Table 5: Population Change 2
Table 6: Marital Status of Persons Age 15 and Older 2
Table 7: Educational Attainment Among Persons 25+ 2
Table 8: Persons with Disability 3
Table 9: Income and Poverty Status by Age Group 3
Table 10: Family Poverty and Childhood and Elderly Poverty 3
Table 11: Age of Housing 3

VITAL STATISTICS DATA
Birth and Deaths Definitions 4
Table 12: Births 5
Table 13: Child Deaths 5
Table 14: Deaths and Age Adjusted Death Rate by Cause 5
Table 15: Leading Causes of Death by Age Group for County 6
Table 16: Leading Causes of Death by Age Group for North Dakota 6

ADULT BEHAVIORAL RISK FACTORS
Table 17:
- Adult Behavioral Risk Factors Definition 7
- Alcohol 8
- Arthritis 8
- Asthma 8
- Body Weight 8
- Cancer 8
- Cardiovascular 8

Table 18:
- Cholesterol 9
- Chronic Lung Disease 9
- Colorectal Cancer 9
- Diabetes 9
- Fruits and Vegetables 9
- General Health 9

Table 19:
- Health Care Access 10
- Hypertension 10
- Immunization 10
- Injury 10
- Oral Health 10
- Physical Activity 10
- Tobacco 10
- Women's Health 10

CRIME
Table 20: County 11
Table 21: North Dakota 11

CHILD RISK
Table 22: Child Indicators—Education 12
Table 23: Child Indicators—Economic Health 12
Table 24: Child Indicators—Families and Child Care 12
Table 25: Child Indicators—Juvenile Justice 12

Data Sources

The Demographic Section of this report comes from the US Census Bureau (www.census.gov). Most tables are derived either from the census estimates for 2015 or from the Community Population Survey aggregated over a several year period. The table header describes the specific years from which the data is derived. The tables present the number of persons and percentages which in almost all circumstances represent the category specific percentage of all persons referenced by the table (e.g., percentage of persons age 15 and older who are married). Age specific poverty rates represent the percentage of each age group in poverty (e.g., percentage of children under five years in poverty).

The **Vital Statistics** section of this report comes from the birth and death records collected by the North Dakota Department of Health Vital Records. This data is aggregated over a five year period. All births and deaths represent the county of residence not the county of occurrence. In order to maintain a person's confidentially, the number of events is blocked if fewer than six.

The **Adult Behavioral Risk Factor** section of this report is derived from the North Dakota Department of Health's Behavioral Risk Factor Surveillance Survey. The aggregated data (the number of years specified in the table) is continuously collected by telephone survey from persons 18 years and older residing in North Dakota. All data is self-reported data.

Data presented in the **Crime** section of this report is collected from the North Dakota Attorney General website located at: www.ag.nd.gov/Reports/BCIReports/CrimeHomicide/CrimeHomicide.htm.

Data presented in the **Child Health Indicators** section of this report is collected from the Kids Count Data Center website located at: www.datacenter.kidscount.org.

Photography Credits

Permission to use cover photos granted by:

- Scott Thomas Photography - Theodore Roosevelt National Park in Winter
  www.sthomasphotos.com/
- Jerry Blank – Lightening Storm north of Williston and Sunset over Little Missouri river
  www.jerryblank.us/gallery-nd.html
- ND Department of Commerce – Oil wells
  www.commerce.nd.gov/news/MediaGallery/
- ND Tourism Division – All other photos
  www.ndtourism.com/

POPULATION DATA

Table 1

Population by Age Group, 2016 Census Estimates				
Age Group	Burleigh County		North Dakota	
	Number	Percent	Number	Percent
0-9	12,901	13.7%	105,035	13.9%
10-19	11,446	12.1%	93,820	12.4%
20-29	13,322	14.1%	127,579	16.8%
30-39	13,630	14.4%	101,492	13.4%
40-49	10,770	11.4%	79,632	10.5%
50-59	12,446	13.2%	95,466	12.6%
60-69	10,479	11.1%	80,159	10.6%
70-79	5,447	5.8%	41,996	5.5%
80+	4,046	4.3%	32,773	4.3%
Total	94,487	100.0%	757,952	100.0%
0-17	21,820	23.1%	176,311	23.3%
65+	14,124	14.9%	109,999	14.5%

Table 2

Female Population and Percentage Female by Age, 2016 Census Estimates				
Age Group	Burleigh County		North Dakota	
	Number	Percent	Number	Percent
0-9	6,231	13.3%	51,145	13.9%
10-19	5,606	11.9%	45,349	12.3%
20-29	6,373	13.6%	58,619	15.9%
30-39	6,402	13.6%	47,001	12.7%
40-49	5,172	11.0%	37,992	10.3%
50-59	6,323	13.4%	46,809	12.7%
60-69	5,399	11.5%	39,397	10.7%
70-79	2,961	6.3%	22,236	6.0%
80+	2,545	5.4%	20,430	5.5%
Total	47,012	100.0%	368,978	100.0%
0-17	10,565	22.5%	85,921	23.3%
65+	7,902	16.8%	60,025	16.3%

Table 3

Race, Five Year Estimates (2012-2016)				
Race	Burleigh County		North Dakota	
	Number	Percentage	Number	Percentage
Total	90,560	100.0%	736,162	100%
White	83,296	92.0%	649,730	88.3%
Black	1,142	1.3%	14,761	2.0%
American Indian	3,404	3.8%	38,369	5.2%
Asian	689	0.8%	9,296	1.3%
Pacific Islander	51	0.1%	336	0.0%
Other	270	0.3%	5,691	0.8%
Multi-race	1,708	1.9%	17,979	2.4%

POPULATION DATA

Table 4

Household Populations, 2011 ACS Five Year Estimates	Burleigh County		North Dakota	
	Number	Percent	Number	Percent
Total	80,225	100.0%	666,783	100.0%
In Family Households	62,757	78.2%	509,097	76.4%
In Non-Family Households	14,715	18.3%	132,651	19.9%
Total In Households	77,472	96.6%	641,748	96.2%
Institutionalized*	1519	1.9%	9,675	1.5%
Non-institutionalized*	1234	1.5%	15,360	2.3%
Total in Group Quarters	2753	3.4%	25,035	3.8%

*2011 is the most recent data

Table 5

Population Change 2000-2015				
Census	Burleigh County	5 Year Change (%)	North Dakota	5 Year Change (%)
2000	69,416		642,200	
2005	74,126	6.8%	636,677	-0.9%
2010	81,308	9.7%	674,530	5.9%
2015	93,104	14.5%	756,927	12.2%

Table 6

Marital Status of Persons Age 15 and Older, 2016 ACS Five Year Estimates	Burleigh County		North Dakota	
Marital Status	Number	Percent	Number	Percent
Total Age 15+	73,081	100.0%	594,068	100.0%
Never Married	21,924	30.0%	189,508	31.9%
Now Married	39,318	53.8%	308,915	52.0%
Separated	438	0.6%	5,347	0.9%
Widowed	4,019	5.5%	33,862	5.7%
Divorced	7,381	10.1%	56,436	9.5%

Table 7

Educational Attainment Among Persons 25+, 2016 ACS Five Year Estimates	Burleigh County		North Dakota	
Education	Number	Percent	Number	Percent
Total	60,830	100.0%	477,607	100.0%
Less than 9th Grade	1864	3.1%	16,846	3.5%
Some High School	2,148	3.5%	21,188	4.4%
High school or GRE	14,419	33.9%	131,086	27.4%
Some College/Assoc. Degree	21,579	35.5%	173,933	36.4%
Bachelor's Degree	14,754	24.3%	97,890	20.5%
Post Graduate Degree	6,066	10.0%	36,664	7.7%

POPULATION DATA

Table 8

Persons with Disability, 2016 ACS Five Year Estimates				
Group	Burleigh County		North Dakota	
	Number	Percent	Number	Percent
Total	88,605	100.0%	720,312	100.0%
Any Disability	9,185	10.4%	77,651	10.8%
No Disability	79,420	89.6%	642,661	89.2%
Self Care Disability	1,520	1.8%	11,469	1.7%
0-17 with any disability	610	6.6%	5,618	7.2%
18-64 with any disability	4,304	46.9%	38,310	49.3%
65+ with any disability	4,271	46.5%	33,723	43.4%

Table 9

Income and Poverty Status by Age Group, 2016 ACS Five Year Estimates				
	Burleigh County		North Dakota	
Median Household Income	$66,057		$59,114	
Per Capita Income	$36,093		$33,107	
	Number	Percent	Number	Percent
Below Poverty Level	6,745	7.7%	79,314	11.2%
Under 5 Years	590	8.7%	7,618	9.6%
5 to 11 Years	711	10.5%	8,423	10.6%
12 to 17 Years	487	7.2%	5,349	6.7%
18 to 64 Years	4,241	62.9%	48,969	61.7%
65 to 74 Years	252	3.7%	3,532	4.5%
75 Years and Over	464	6.9%	5,423	6.8%

Table 10

Family Poverty and Childhood and Elderly Poverty, 2016 ACS Five Year Estimates				
	Burleigh County		North Dakota	
	Number	Percent	Number	Percent
Total Families	23,693	100.0%	183,466	100.00%
Families in Poverty	1,090	4.6%	12,659	6.90%
Families with Own Children	11,191	47.2%	84,714	46.17%
Families with Own Children in Poverty	895	3.8%	9,912	5.40%
Families with Own Children and Female Parent Only	2,588	10.9%	23,485	27.72%
Families with Own Children and Female Parent Only in Poverty	598	2.5%	8,408	4.58%
Total Known Children in Poverty	1,788	8.2%	21,390	12.1%
Total Known Age 65+ in Poverty	716	5.1%	8,955	8.1%

* Percent family poverty is percent of total families

Table 11

Age of Housing, 2016 ACS Five Year Estimates				
	Burleigh County		North Dakota	
	Number	Percent	Number	Percent
Housing Units: Total	39,774	100.0%	350,134	100.0%
1980 and Later	21,673	54.5%	149,657	42.7%
1970 to 1979	7,930	19.9%	67,069	19.2%
Prior to 1970	10,171	25.6%	133,408	38.1%

Vital Statistics Data

BIRTHS AND DEATHS DEFINITIONS

Formulas for calculating rates and ratios are as follows:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Vital Statistics Data

BIRTHS AND DEATHS

Table 12

Births, 2012-2016	Burleigh County		North Dakota	
	Number	Rate or Ratio	Number	Rate or Ratio
Live Births and Rate	6,520	16.0	54,644	16.3
Pregnancies and Rate	7,036	17.3	59,226	17.6
Fertility Rate		80.7		84.6
Teen Births and Rate	316	23.1	2,715	23.8
Teen Pregnancies and Rate	371	27.1	3,263	28.6
Out of Wedlock Births and Ratio	2,000	306.8	17,518	320.6
Out of Wedlock Pregnancies and Ratio	2,431	345.5	21,289	359.5
Low Birth Weight Birth and Ratio	420	64.4	3,448	63.1

Table 13

Child Deaths, 2012-2016	Burleigh County		North Dakota	
	Number	Rate or Ratio	Number	Rate or Ratio
Infant Deaths and Ratio	26	4.0	299	5.5
Child and Adolescent Deaths and Rate	22	22.3	235	28.8
Total Deaths and Crude Rate	3,362	827.0	30,152	896.6

Table 14

Deaths and Age Adjusted Death Rate by Cause, 2012-2016	Burleigh County		North Dakota	
	Number	Adj. Rate	Number	Adj. Rate
All Causes	3,375	641.0	30,303	674.8
Heart Disease	572	89.2	6,571	140.3
Cancer	727	110.4	6,215	142.1
Stroke	181	26.8	1,546	31.9
Alzheimer's Disease	385	58.0	2,130	41.2
COPD	142	20.1	1,623	35.2
Unintentional Injury	162	31.6	1,764	45.9
Diabetes Mellitus	86	14.0	908	20.6
Pneumonia and Influenza	77	12.1	791	16.5
Cirrhosis	36	7.1	429	11.6
Suicide	73	16.8	630	18.4
Hypertension	73	11.6	467	9.5

NR-Not Reportable

Table 15

Leading Causes of Death by Age Group for Burleigh County, 2012-2016			
Age	1	2	3
0-4	Congenital Anomaly 7	Sudden Infant Death*	Prematurity*
5-14	Unintentional Injury*	Cancer*	Suicide*
15-24	Unintentional Injury 16	Suicide 12	Heart*
25-34	Unintentional Injury 25	Cancer 7	Cerebrovascular Disease*
35-44	Unintentional Injury 15	Heart 13	Suicide 13
45-54	Cancer 45	Suicide 15	Heart 15
55-64	Cancer 131	Heart 50	Atherosclerosis 28
65-74	Cancer 173	Heart 83	COPD 28
75-84	Cancer 220	Heart 140	Alzheimer's Dz 83
85+	Alzheimer's Dz 283	Heart 267	Cancer 137

*Numbers less than six are not listed.

Table 16

Leading Causes of Death by Age Group for North Dakota, 2012-2016			
Age	1	2	3
0-4	Congenital Anomaly 53	Prematurity 50	Sudden Infant Death 45
5-14	Unintentional Injury 21	Suicide 6	Homicide*
15-24	Unintentional Injury 191	Suicide 127	Cancer 16
25-34	Unintentional Injury 211	Suicide 125	Heart 50
35-44	Unintentional Injury 184	Suicide 107	Heart 99
45-54	Cancer 350	Heart 282	Unintentional Injury 210
55-64	Cancer 1,094	Heart 646	Unintentional Injury 192
65-74	Cancer 1,563	Heart 902	COPD 348
75-84	Cancer 1,793	Heart 1,441	COPD 565
85+	Heart 3,141	Alzheimer's Dz 1,566	Cancer 1,261

*Numbers less than six are not listed.

ADULT BEHAVIORAL RISK FACTORS DEFINITION

The following three pages represent data received from the Adult Behavioral Risk Factor Surveillance Survey. Numbers given are point estimate percentages followed by 95% confidence intervals. Statistical significance can be determined by comparing confidence intervals between two geographic areas. To be statistically significant, confidence may not overlap. For example the confidence intervals 9.3 (8.3-10.2) and 10.8 (10.0-11.6) overlap (see picture below) so the difference between the two numbers is not statistically significant. That means that substantial uncertainty remains whether the apparent difference is due to chance alone (due to sampling variation) rather than representing a true difference in the prevalence of the condition in the two populations. The less they overlap, the more likely it is that the point estimates represent truly different prevalence's in the two populations.

ADULT BEHAVIORAL RISK FACTORS, 2011-2015

Table 17

ALCOHOL		Burleigh 2011-2015	North Dakota 2011-2015
Binge Drinking	Respondents who reported binge drinking (5 drinks for men, 4 drinks for women) one or more times in the past 30 days.	23.0 (20.8-25.2)	24.1 (23.3-24.9)
Heavy Drinking	Respondents who reported heavy drinking (more than 2 drinks per day for men, more than 1 drink per day for women) during the past 30 days.	5.9 (4.6-7.2)	6.7 (6.3-7.2)
Drunk Driving	Respondents who reported driving when they had too much to drink one or more times during the past 30 days.	2.9 (1.3-4.5)	3.4 (2.8-3.9)
ARTHRITIS			
Doctor Diagnosed Arthritis	Respondents who reported ever have been told by a doctor or other health professional that they had some form or arthritis.	25.0 (23.2-26.8)	24.6 (24.0-25.2)
Activity Limitation Due to Arthritis	Respondents who reported being limited in any usual activities because of arthritis or joint symptoms.	44.4 (39.4-49.4)	47.0 (45.2-48.9)
ASTHMA			
Ever Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma.	11.8 (10.3-13.3)	11.9 (11.3-12.4)
Current Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma and who still have asthma.	7.9 (6.7-9.2)	8.4 (7.9-8.9)
BODY WEIGHT			
Overweight, Not Obese	Respondents with a body mass index greater than or equal to 25 but less than 30 (overweight).	35.5 (33.2-37.7)	36.5 (35.7-37.3)
Obese	Respondents with a body mass index greater than or equal to 30 (obese).	30.0 (27.8-32.3)	30.3 (29.6-31.1)
Overweight or Obese	Respondents with a body mass index greater than or equal to 25 (overweight or obese).	65.5 (63.2-67.8)	66.8 (66.0-67.7)
CANCER			
Any Cancer	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had cancer (excluding skin cancer).	6.5 (5.6-7.4)	6.4 (6.1-6.7)
CARDIOVASCULAR			
Heart Attack	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a heart attack.	4.4 (3.6-5.2)	4.3 (4.0-4.5)
Angina	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had angina.	4.0 (3.3-4.7)	4.0 (3.7-4.2)
Stroke	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a stroke.	2.5 (1.9-3.1)	2.4 (2.2-2.6)
Cardiovascular Disease	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had any of the following: heart attack, angina or stroke.	7.8 (6.8-8.9)	7.5 (7.2-7.8)

ADULT BEHAVIORAL RISK FACTORS, 2011-2015

Table 18

CHOLESTEROL		Burleigh 2011-2015	North Dakota 2011-2015
Never Cholesterol Test	Respondents who reported never having a cholesterol test.	20.0 (17.3-22.7)	22.8 (21.8-23.8)
No Cholesterol Test in Past 5 Years	Respondents who reported never having a cholesterol test in the past five years.	24.2 (21.4-27.0)	27.2 (26.2-28.3)
High Cholesterol	Respondents who reported that they had ever been told by a doctor, nurse or other health professional that they had high cholesterol.	38.5 (35.7-41.4)	36.1 (35.1-37.1)
CHRONIC LUNG DISEASE			
COPD	Respondents who have ever been told by a doctor, nurse or other health professional ever told you that they have COPD (chronic obstructive pulmonary disease), emphysema, or chronic bronchitis.	4.6 (3.8-5.4)	4.7 (4.4-5.0)
COLORECTAL CANCER			
No Colorectal Cancer Screening within Recommended Timeframe	Respondents age 50 and older who reported not having a fecal occult blood test in the past two years.	36.5 (31.5-41.4)	40.0 (38.3-41.7)
DIABETES			
Diabetes Diagnosis	Respondents who reported ever having been told by a doctor that they had diabetes.	8.0 (6.8-9.1)	8.5 (8.2-8.9)
FRUITS AND VEGETABLES			
Five Fruits and Vegetables	Respondents who reported that they do not usually eat 5 fruits and vegetables per day.	15.1 (13.0-17.2)	13.9 (13.2-14.6)
GENERAL HEALTH			
Fair or Poor Health	Respondents who reported that their general health was fair or poor.	12.6 (11.1-14.1)	14.0 (13.5-14.6)
Poor Physical Health	Respondents who reported they had 8 or more days in the last 30 when their physical health was not good.	10.7 (9.4-12.1)	11.3 (10.8-11.8)
Poor Mental Health	Respondents who reported they had 8 or more days in the last 30 when their mental health was not good.	10.3 (8.9-11.8)	11.4 (10.9-12.0)
Activity Limitation Due to Poor Health	Respondents who reported they had 8 or more days in the last 30 when poor physical or mental health kept them from doing their usual activities.	13.4 (11.3-15.6)	13.6 (12.8-14.4)
Any Activity Limitation	Respondents who reported being limited in any way due to physical, mental or emotional problem.	33.0 (30.7-35.2)	31.3 (30.6-32.1)

ADULT BEHAVIORAL RISK FACTORS, 2011-2015

Table 19

HEALTH CARE ACCESS		Burleigh 2011-2015	North Dakota 2011-2015
Health Insurance	Respondents who reported not having any form or health care coverage.	9.2 (7.6-10.8)	10.8 (10.2-11.3)
Access Limited by Cost	Respondents who reported needing to see a doctor during the past 12 months but could not due to cost.	7.9 (6.4-9.3)	7.8 (7.3-8.3)
No Personal Provider	Respondents who reported that they did not have one person they consider to be their personal doctor or health care provider.	23.7 (21.4-26.0)	26.7 (25.9-27.5)
HYPERTENSION			
High Blood Pressure	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had high blood pressure.	29.1 (26.7-31.6)	29.9 (29.0-30.7)
IMMUNIZATION			
Influenza Vaccine	Respondents age 65 and older who reported that they did not have a flu shot in the past year.	41.6 (37.8-45.3)	40.1 (38.9-41.4)
Pneumococcal Vaccine	Respondents age 65 or older who reported never having had a pneumonia shot.	31.0 (27.3-34.8)	28.5 (27.3-29.7)
INJURY			
Falls	Respondents 45 years and older who reported that they had fallen in the past 12 months.	23.9 (20.4-27.4)	27.4 (26.2-28.7)
Seatbelt Use	Respondents who reported not always wearing their seatbelt.	64.9 (62.6-67.3)	61.4 (60.6-62.3)
ORAL HEALTH			
Dental Visit	Respondents who reported that they have not had a dental visit in the past year.	25.9 (22.2-29.6)	33.7 (32.4-35.0)
Tooth Loss	Respondents who reported they ever had a permanent tooth extracted.	9.9 (8.0-11.8)	14.3 (13.6-15.1)
PHYSICAL ACTIVITY			
No Leisure Physical Activity	Respondents who reported that they did not get the recommended amount of physical activity.	21.8 (19.8-23.7)	25.1 (24.4-25.8)
TOBACCO			
Current Smoking	Respondents who reported that they smoked every day or some days.	17.1 (15.1-19.0)	20.6 (19.9-21.4)
WOMEN'S HEALTH			
Pap Smear	Women 18 and older who reported that they have not had a pap smear in the past three years.	22.2 (16.4-28.0)	25.1 (23.1-27.1)
Mammogram Age 40+	Women 40 and older who reported that they have not had a mammogram in the past two years.	25.7 (21.0-30.4)	27.0 (25.4-28.6)

CRIME

Data presented on the North Dakota Attorney General website changed from previous years. In an effort to continue to provide this data, the variables are defined as follows which differs slightly from the 2010-2013 data:

- Rape: includes statutory rape and forcible rape
- Assault: only includes aggravated assault

Table 20

Burleigh County							
	2012	2013	2014	2015	2016	5 Year	5-Year Rate
Murder	1	2	1	1	2	7	1.5
Rape	37	30	40	58	53	218	48.1
Robbery	17	15	15	21	29	97	21.4
Assault	188	181	174	183	162	888	196.1
Violent crime	243	228	230	263	246	1,210	267.2
Burglary	372	392	266	417	551	1,998	441.2
Larceny	1,645	1,413	441	477	525	4,501	994.0
Motor vehicle theft	119	122	136	225	338	940	207.6
Property crime	2,136	1,927	843	1,119	1,414	7,439	1,642.8
Total	2,379	2,155	1,073	1,382	1,660	8,649	1,910.0

Table 21

North Dakota							
	2012	2013	2014	2015	2016	5 Year	5-Year Rate
Murder	20	14	19	21	17	91	2.5
Rape	243	237	389	428	365	1,662	44.9
Robbery	117	151	166	157	181	772	20.9
Assault	1,071	1,156	1,145	1,185	1,132	5,689	153.7
Violent crime	1,451	1,558	1,719	1,791	1,695	8,214	222.0
Burglary	2,200	2,656	2,490	3,212	3,051	13,609	367.8
Larceny	10,184	10,243	5,214	6,181	6,157	37,979	1,026.4
Motor vehicle theft	1,031	1,228	1,462	1,725	1,887	7,333	198.2
Property crime	13,415	14,127	9,166	11,118	11,095	47,826	1,292.5
Total	14,866	15,685	10,885	12,909	12,790	54,345	1,468.7

CHILD HEALTH INDICATORS

The following information is no longer available on the website:

High school dropouts (dropouts per 1000 persons Grades 9-12)
Children Ages 0-17 Impacted by Domestic Violence (Percentage of all children ages 0-17)
Offenses Against Person—Juvenile Court Referrals (Percentage of total juvenile court referrals)
Alcohol-Related Juvenile Court Referrals (Percentage of juvenile court referrals)

Table 22

Child Indicators: Education 2016	Burleigh County		North Dakota	
Children ages 3 to 21 enrolled in special education in public schools	1,551	11.8%	14,426	13.2%
Four-year high school cohort graduates	89.3%		87.3%	
Average expenditure per student in public school	$10,925		$11,945	

Table 23

Child Indicators: Economic Health 2016	Burleigh County		North Dakota	
TANF recipients ages 0-19	350	1.5%	4,649	2.4%
SNAP recipients ages 0-18	3,516	15.7%	37,758	20.5%
Eligible recipients of free or reduced price lunch	3,040	20.5%	37,928	32.6%
Medicaid recipients ages 0-20	5,776	23.0%	59,156	28.1%
Median income for families with children ages 0-17	$84,773		$75,818	
Children ages 0 to 17 living in low-income families (<200% of poverty)	4,812	24.1%	50,147	30.5%

Table 24

Child Indicators: Families and Child Care 2016	Burleigh County		North Dakota	
Women in labor force, by age of children (ages 0-17)	8,695	86.4%	59,532	79.4%
Children ages 0-17 living in a single parent family	4,477	21.7%	39,192	23.4%
Children in foster care	215	1.0%	2,381	1.3%
Victims of child abuse and neglect - services required (Percent of suspected victims)	263	24.7%	1,805	27.2%
Births to mothers receiving prenatal care beginning after first trimester or not at all	174	12.9%	1,612	14.2%

Table 25

Child Indicators: Juvenile Justice 2016	Burleigh County		North Dakota	
Children ages 10-17 referred to juvenile court	535	6.0%	3,471	4.9%

*LNE-Low Number Events

Custer Health

Morton County Community Health Profile

Authors:

Tracy K. Miller, PhD, MPH
State Epidemiologist

Kodi Pinks, MPH
Epidemiologist

March 2018

NORTH DAKOTA DEPARTMENT of HEALTH

TABLE OF CONTENTS

Data Sources i
Photograph Credits i

POPULATION DATA
Table 1: Population by Age Group 1
Table 2: Female Population and Percentage Female by Age 1
Table 3: Race 1
Table 4: Household Populations 2
Table 5: Population Change 2
Table 6: Marital Status of Persons Age 15 and Older 2
Table 7: Educational Attainment Among Persons 25+ 2
Table 8: Persons with Disability 3
Table 9: Income and Poverty Status by Age Group 3
Table 10: Family Poverty and Childhood and Elderly Poverty 3
Table 11: Age of Housing 3

VITAL STATISTICS DATA
Birth and Deaths Definitions 4
Table 12: Births 5
Table 13: Child Deaths 5
Table 14: Deaths and Age Adjusted Death Rate by Cause 5
Table 15: Leading Causes of Death by Age Group for County 6
Table 16: Leading Causes of Death by Age Group for North Dakota 6

ADULT BEHAVIORAL RISK FACTORS
Table 17:
- Adult Behavioral Risk Factors Definition 7
- Alcohol 8
- Arthritis 8
- Asthma 8
- Body Weight 8
- Cancer 8
- Cardiovascular 8

Table 18:
- Cholesterol 9
- Chronic Lung Disease 9
- Colorectal Cancer 9
- Diabetes 9
- Fruits and Vegetables 9
- General Health 9

Table 19:
- Health Care Access 10
- Hypertension 10
- Immunization 10
- Injury 10
- Oral Health 10
- Physical Activity 10
- Tobacco 10
- Women's Health 10

CRIME
Table 20: County 11
Table 21: North Dakota 11

CHILD RISK
Table 22: Child Indicators—Education 12
Table 23: Child Indicators—Economic Health 12
Table 24: Child Indicators—Families and Child Care 12
Table 25: Child Indicators—Juvenile Justice 12

Data Sources

The Demographic Section of this report comes from the US Census Bureau (www.census.gov). Most tables are derived either from the census estimates for 2015 or from the Community Population Survey aggregated over a several year period. The table header describes the specific years from which the data is derived. The tables present the number of persons and percentages which in almost all circumstances represent the category specific percentage of all persons referenced by the table (e.g., percentage of persons age 15 and older who are married). Age specific poverty rates represent the percentage of each age group in poverty (e.g., percentage of children under five years in poverty).

The **Vital Statistics** section of this report comes from the birth and death records collected by the North Dakota Department of Health Vital Records. This data is aggregated over a five year period. All births and deaths represent the county of residence not the county of occurrence. In order to maintain a person's confidentially, the number of events is blocked if fewer than six.

The **Adult Behavioral Risk Factor** section of this report is derived from the North Dakota Department of Health's Behavioral Risk Factor Surveillance Survey. The aggregated data (the number of years specified in the table) is continuously collected by telephone survey from persons 18 years and older residing in North Dakota. All data is self-reported data.

Data presented in the **Crime** section of this report is collected from the North Dakota Attorney General website located at: www.ag.nd.gov/Reports/BCIReports/CrimeHomicide/CrimeHomicide.htm.

Data presented in the **Child Health Indicators** section of this report is collected from the Kids Count Data Center website located at: www.datacenter.kidscount.org.

Photography Credits

Permission to use cover photos granted by:

- Scott Thomas Photography - Theodore Roosevelt National Park in Winter
  www.sthomasphotos.com/
- Jerry Blank – Lightening Storm north of Williston and Sunset over Little Missouri river
  www.jerryblank.us/gallery-nd.html
- ND Department of Commerce – Oil wells
  www.commerce.nd.gov/news/MediaGallery/
- ND Tourism Division – All other photos
  www.ndtourism.com/

POPULATION DATA

Table 1

Population by Age Group, 2016 Census Estimates				
Age Group	Morton County		North Dakota	
	Number	Percent	Number	Percent
0-9	4,244	13.8%	105,035	13.9%
10-19	3,539	11.5%	93,820	12.4%
20-29	4,261	13.8%	127,579	16.8%
30-39	4,307	14.0%	101,492	13.4%
40-49	3,508	11.4%	79,632	10.5%
50-59	4,197	13.6%	95,466	12.6%
60-69	3,557	11.5%	80,159	10.6%
70-79	1,869	6.1%	41,996	5.5%
80+	1,327	4.3%	32,773	4.3%
Total	30,809	100.0%	757,952	100.0%
0-17	7,150	23.2%	176,311	23.3%
65+	4,801	15.6%	109,999	14.5%

Table 2

Female Population and Percentage Female by Age, 2016 Census Estimates				
Age Group	Morton County		North Dakota	
	Number	Percent	Number	Percent
0-9	2,062	13.5%	51,145	13.9%
10-19	1,757	11.5%	45,349	12.3%
20-29	2,069	13.6%	58,619	15.9%
30-39	2,006	13.1%	47,001	12.7%
40-49	1,728	11.3%	37,992	10.3%
50-59	2,057	13.5%	46,809	12.7%
60-69	1,777	11.6%	39,397	10.7%
70-79	957	6.3%	22,236	6.0%
80+	856	5.6%	20,430	5.5%
Total	15,269	100.0%	368,978	100.0%
0-17	3,508	23.0%	85,921	23.3%
65+	2,615	17.1%	60,025	16.3%

Table 3

Race, Five Year Estimates (2012-2016)				
Race	Morton County		North Dakota	
	Number	Percentage	Number	Percentage
Total	29,633	100.0%	736,162	100%
White	27,565	93.0%	649,730	88.3%
Black	200	0.7%	14,761	2.0%
American Indian	1,020	3.4%	38,369	5.2%
Asian	37	0.1%	9,296	1.3%
Pacific Islander	0	0.0%	336	0.0%
Other	141	0.5%	5,691	0.8%
Multi-race	670	2.3%	17,979	2.4%

POPULATION DATA

Table 4

Household Populations, 2011 ACS Five Year Estimates	Morton County		North Dakota	
	Number	Percent	Number	Percent
Total	27,076	100.0%	666,783	100.0%
In Family Households	22,421	82.8%	509,097	76.4%
In Non-Family Households	4,150	15.3%	132,651	19.9%
Total In Households	26,571	98.1%	641,748	96.2%
Institutionalized*	462	1.7%	9,675	1.5%
Non-institutionalized*	43	0.2%	15,360	2.3%
Total in Group Quarters	505	1.9%	25,035	3.8%

*2011 is the most recent data

Table 5

Population Change 2000-2015				
Census	Morton County	5 Year Change (%)	North Dakota	5 Year Change (%)
2000	25,303		642,200	
2005	25,245	-0.2%	636,677	-0.9%
2010	27,471	8.8%	674,530	5.9%
2015	30,368	10.5%	756,927	12.2%

Table 6

Marital Status of Persons Age 15 and Older, 2016 ACS Five Year Estimates	Morton County		North Dakota	
Marital Status	Number	Percent	Number	Percent
Total Age 15+	24,140	100.0%	594,068	100.0%
Never Married	5,794	24.0%	189,508	31.9%
Now Married	14,315	59.3%	308,915	52.0%
Separated	121	0.5%	5,347	0.9%
Widowed	1,497	6.2%	33,862	5.7%
Divorced	2,438	10.1%	56,436	9.5%

Table 7

Educational Attainment Among Persons 25+, 2016 ACS Five Year Estimates	Morton County		North Dakota	
Education	Number	Percent	Number	Percent
Total	20,665	100.0%	477,607	100.0%
Less than 9th Grade	871	4.2%	16,846	3.5%
Some High School	770	3.7%	21,188	4.4%
High school or GRE	6,446	26.6%	131,086	27.4%
Some College/Assoc. Degree	7,350	35.6%	173,933	36.4%
Bachelor's Degree	3,868	18.7%	97,890	20.5%
Post Graduate Degree	1,360	6.6%	36,664	7.7%

POPULATION DATA

Table 8

Persons with Disability, 2016 ACS Five Year Estimates				
Group	Morton County		North Dakota	
	Number	Percent	Number	Percent
Total	29,084	100.0%	720,312	100.0%
Any Disability	2,791	9.6%	77,651	10.8%
No Disability	26,293	90.4%	642,661	89.2%
Self Care Disability	331	1.2%	11,469	1.7%
0-17 with any disability	265	9.5%	5,618	7.2%
18-64 with any disability	1,250	44.8%	38,310	49.3%
65+ with any disability	1,276	45.7%	33,723	43.4%

Table 9

Income and Poverty Status by Age Group, 2016 ACS Five Year Estimates				
	Morton County		North Dakota	
Median Household Income	$63,549		$59,114	
Per Capita Income	$34,715		$33,107	
	Number	Percent	Number	Percent
Below Poverty Level	2,521	8.7%	79,314	11.2%
Under 5 Years	81	3.2%	7,618	9.6%
5 to 11 Years	199	7.9%	8,423	10.6%
12 to 17 Years	251	10.0%	5,349	6.7%
18 to 64 Years	1,455	57.7%	48,969	61.7%
65 to 74 Years	274	10.9%	3,532	4.5%
75 Years and Over	261	10.4%	5,423	6.8%

Table 10

Family Poverty and Childhood and Elderly Poverty, 2016 ACS Five Year Estimates				
	Morton County		North Dakota	
	Number	Percent	Number	Percent
Total Families	8,011	100.0%	183,466	100.00%
Families in Poverty	409	5.1%	12,659	6.90%
Families with Own Children	3,499	43.7%	84,714	46.17%
Families with Own Children in Poverty	248	3.1%	9,912	5.40%
Families with Own Children and Female Parent Only	506	6.3%	23,485	27.72%
Families with Own Children and Female Parent Only in Poverty	214	2.7%	8,408	4.58%
Total Known Children in Poverty	531	7.4%	21,390	12.1%
Total Known Age 65+ in Poverty	535	11.1%	8,955	8.1%

* Percent family poverty is percent of total families

Table 11

Age of Housing, 2016 ACS Five Year Estimates				
	Morton County		North Dakota	
	Number	Percent	Number	Percent
Housing Units: Total	13,733	100.0%	350,134	100.0%
1980 and Later	5,612	40.9%	149,657	42.7%
1970 to 1979	3,075	22.4%	67,069	19.2%
Prior to 1970	5,046	36.7%	133,408	38.1%

Vital Statistics Data

BIRTHS AND DEATHS DEFINITIONS

Formulas for calculating rates and ratios are as follows:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Vital Statistics Data

BIRTHS AND DEATHS

Table 12

Births, 2012-2016	Morton County		North Dakota	
	Number	Rate or Ratio	Number	Rate or Ratio
Live Births and Rate	2,332	17.0	54,644	16.3
Pregnancies and Rate	2,494	18.2	59,226	17.6
Fertility Rate		92.8		84.6
Teen Births and Rate	135	33.3	2,715	23.8
Teen Pregnancies and Rate	132	32.6	3,263	28.6
Out of Wedlock Births and Ratio	757	324.6	17,518	320.6
Out of Wedlock Pregnancies and Ratio	896	359.3	21,289	359.5
Low Birth Weight Birth and Ratio	148	63.5	3,448	63.1

Table 13

Child Deaths, 2012-2016	Morton County		North Dakota	
	Number	Rate or Ratio	Number	Rate or Ratio
Infant Deaths and Ratio	12	5.2	299	5.5
Child and Adolescent Deaths and Rate	NR	14.7	235	28.8
Total Deaths and Crude Rate	1,337	973.4	30,152	896.6

Table 14

Deaths and Age Adjusted Death Rate by Cause, 2012-2016	Morton County		North Dakota	
	Number	Adj. Rate	Number	Adj. Rate
All Causes	1,341	592.8	30,303	674.8
Heart Disease	241	101.8	6,571	140.3
Cancer	286	121.3	6,215	142.1
Stroke	56	17.5	1,546	31.9
Alzheimer's Disease	118	48.5	2,130	41.2
COPD	63	22.7	1,623	35.2
Unintentional Injury	72	44.7	1,764	45.9
Diabetes Mellitus	41	18.1	908	20.6
Pneumonia and Influenza	34	14.6	791	16.5
Cirrhosis	22	13.3	429	11.6
Suicide	27	19.2	630	18.4
Hypertension	24	11.9	467	9.5

NR-Not Reportable

Table 15

Leading Causes of Death by Age Group for Morton County, 2012-2016			
Age	1	2	3
0-4	Prematurity*	Unintentional Injury*	Congenital Anomaly*
5-14	Cerebral Palsy*	No Reported Deaths	
15-24	Unintentional Injury 10	Suicide*	No Reported Deaths
25-34	Suicide 10	Unintentional Injury 8	Cancer*
35-44	Unintentional Injury 9	Heart 6	Cirrhosis*
45-54	Cancer 21	Unintentional Injury 8	Cirrhosis*
55-64	Cancer 43	Heart 16	Atherosclerosis 9
65-74	Cancer 87	Heart 34	COPD 10
75-84	Cancer 84	Heart 59	Cerebrovascular Disease 24
85+	Heart 119	Alzheimer's Disease 86	Cancer 48

*Numbers less than six are not listed.

Table 16

Leading Causes of Death by Age Group for North Dakota, 2012-2016			
Age	1	2	3
0-4	Congenital Anomaly 53	Prematurity 50	Sudden Infant Death 45
5-14	Unintentional Injury 21	Suicide 6	Homicide*
15-24	Unintentional Injury 191	Suicide 127	Cancer 16
25-34	Unintentional Injury 211	Suicide 125	Heart 50
35-44	Unintentional Injury 184	Suicide 107	Heart 99
45-54	Cancer 350	Heart 282	Unintentional Injury 210
55-64	Cancer 1,094	Heart 646	Unintentional Injury 192
65-74	Cancer 1,563	Heart 902	COPD 348
75-84	Cancer 1,793	Heart 1,441	COPD 565
85+	Heart 3,141	Alzheimer's Disease 1,566	Cancer 1,261

*Numbers less than six are not listed.

ADULT BEHAVIORAL RISK FACTORS DEFINITION

The following three pages represent data received from the Adult Behavioral Risk Factor Surveillance Survey. Numbers given are point estimate percentages followed by 95% confidence intervals. Statistical significance can be determined by comparing confidence intervals between two geographic areas. To be statistically significant, confidence may not overlap. For example the confidence intervals 9.3 (8.3-10.2) and 10.8 (10.0-11.6) overlap (see picture below) so the difference between the two numbers is not statistically significant. That means that substantial uncertainty remains whether the apparent difference is due to chance alone (due to sampling variation) rather than representing a true difference in the prevalence of the condition in the two populations. The less they overlap, the more likely it is that the point estimates represent truly different prevalence's in the two populations.

ADULT BEHAVIORAL RISK FACTORS, 2011-2015

Table 17

ALCOHOL		Morton 2011-2015	North Dakota 2011-2015
Binge Drinking	Respondents who reported binge drinking (5 drinks for men, 4 drinks for women) one or more times in the past 30 days.	22.0 (18.5-25.4)	24.1 (23.3-24.9)
Heavy Drinking	Respondents who reported heavy drinking (more than 2 drinks per day for men, more than 1 drink per day for women) during the past 30 days.	6.9 (4.8-8.9)	6.7 (6.3-7.2)
Drunk Driving	Respondents who reported driving when they had too much to drink one or more times during the past 30 days.	2.2 (0.2-4.2)	3.4 (2.8-3.9)
ARTHRITIS			
Doctor Diagnosed Arthritis	Respondents who reported ever have been told by a doctor or other health professional that they had some form or arthritis.	26.8 (23.7-29.9)	24.6 (24.0-25.2)
Activity Limitation Due to Arthritis	Respondents who reported being limited in any usual activities because of arthritis or joint symptoms.	40.4 (32.0-48.8)	47.0 (45.2-48.9)
ASTHMA			
Ever Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma.	11.6 (9.0-14.3)	11.9 (11.3-12.4)
Current Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma and who still have asthma.	8.7 (6.4-10.9)	8.4 (7.9-8.9)
BODY WEIGHT			
Overweight, Not Obese	Respondents with a body mass index greater than or equal to 25 but less than 30 (overweight).	36.7 (32.9-40.5)	36.5 (35.7-37.3)
Obese	Respondents with a body mass index greater than or equal to 30 (obese).	30.2 (26.7-33.7)	30.3 (29.6-31.1)
Overweight or Obese	Respondents with a body mass index greater than or equal to 25 (overweight or obese).	66.9 (63.0-70.8)	66.8 (66.0-67.7)
CANCER			
Any Cancer	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had cancer (excluding skin cancer).	7.6 (6.0-9.2)	6.4 (6.1-6.7)
CARDIOVASCULAR			
Heart Attack	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a heart attack.	4.5 (3.1-5.8)	4.3 (4.0-4.5)
Angina	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had angina.	4.7 (3.4-6.0)	4.0 (3.7-4.2)
Stroke	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a stroke.	3.0 (1.9-4.2)	2.4 (2.2-2.6)
Cardiovascular Disease	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had any of the following: heart attack, angina or stroke.	8.9 (7.0-10.8)	7.5 (7.2-7.8)

ADULT BEHAVIORAL RISK FACTORS, 2011-2015

Table 18

CHOLESTEROL		Morton 2011-2015	North Dakota 2011-2015
Never Cholesterol Test	Respondents who reported never having a cholesterol test.	19.3 (14.7-24.0)	22.8 (21.8-23.8)
No Cholesterol Test in Past 5 Years	Respondents who reported never having a cholesterol test in the past five years.	23.8 (19.0-28.6)	27.2 (26.2-28.3)
High Cholesterol	Respondents who reported that they had ever been told by a doctor, nurse or other health professional that they had high cholesterol.	37.1 (32.3-41.9)	36.1 (35.1-37.1)
CHRONIC LUNG DISEASE			
COPD	Respondents who have ever been told by a doctor, nurse or other health professional ever told you that they have COPD (chronic obstructive pulmonary disease), emphysema, or chronic bronchitis.	6.7 (4.7-8.8)	4.7 (4.4-5.0)
COLORECTAL CANCER			
No Colorectal Cancer Screening within Recommended Timeframe	Respondents age 50 and older who reported not having a fecal occult blood test in the past two years.	42.1 (34.4-49.7)	40.0 (38.3-41.7)
DIABETES			
Diabetes Diagnosis	Respondents who reported ever having been told by a doctor that they had diabetes.	7.0 (5.4-8.7)	8.5 (8.2-8.9)
FRUITS AND VEGETABLES			
Five Fruits and Vegetables	Respondents who reported that they do not usually eat 5 fruits and vegetables per day.	15.0 (11.4-18.5)	13.9 (13.2-14.6)
GENERAL HEALTH			
Fair or Poor Health	Respondents who reported that their general health was fair or poor.	14.9 (12.2-17.6)	14.0 (13.5-14.6)
Poor Physical Health	Respondents who reported they had 8 or more days in the last 30 when their physical health was not good.	11.5 (9.2-13.8)	11.3 (10.8-11.8)
Poor Mental Health	Respondents who reported they had 8 or more days in the last 30 when their mental health was not good.	11.7 (9.1-14.4)	11.4 (10.9-12.0)
Activity Limitation Due to Poor Health	Respondents who reported they had 8 or more days in the last 30 when poor physical or mental health kept them from doing their usual activities.	15.5 (11.4-19.5)	13.6 (12.8-14.4)
Any Activity Limitation	Respondents who reported being limited in any way due to physical, mental or emotional problem.	32.7 (29.1-36.4)	31.3 (30.6-32.1)

ADULT BEHAVIORAL RISK FACTORS, 2011-2015

Table 19

HEALTH CARE ACCESS		Morton 2011-2015	North Dakota 2011-2015
Health Insurance	Respondents who reported not having any form or health care coverage.	11.9 (8.9-14.8)	10.8 (10.2-11.3)
Access Limited by Cost	Respondents who reported needing to see a doctor during the past 12 months but could not due to cost.	7.6 (5.3-9.9)	7.8 (7.3-8.3)
No Personal Provider	Respondents who reported that they did not have one person they consider to be their personal doctor or health care provider.	22.1 (18.6-25.6)	26.7 (25.9-27.5)
HYPERTENSION			
High Blood Pressure	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had high blood pressure.	33.5 (29.1-37.8)	29.9 (29.0-30.7)
IMMUNIZATION			
Influenza Vaccine	Respondents age 65 and older who reported that they did not have a flu shot in the past year.	40.7 (34.6-46.8)	40.1 (38.9-41.4)
Pneumococcal Vaccine	Respondents age 65 or older who reported never having had a pneumonia shot.	31.7 (25.6-37.8)	28.5 (27.3-29.7)
INJURY			
Falls	Respondents 45 years and older who reported that they had fallen in the past 12 months.	32.8 (26.9-38.7)	27.4 (26.2-28.7)
Seatbelt Use	Respondents who reported not always wearing their seatbelt.	57.0 (53.0-61.1)	61.4 (60.6-62.3)
ORAL HEALTH			
Dental Visit	Respondents who reported that they have not had a dental visit in the past year.	35.8 (29.8-41.9)	33.7 (32.4-35.0)
Tooth Loss	Respondents who reported they ever had a permanent tooth extracted.	15.2 (11.5-18.9)	14.3 (13.6-15.1)
PHYSICAL ACTIVITY			
No Leisure Physical Activity	Respondents who reported that they did not get the recommended amount of physical activity.	26.6 (23.1-30.0)	25.1 (24.4-25.8)
TOBACCO			
Current Smoking	Respondents who reported that they smoked every day or some days.	25.5 (21.7-29.3)	20.6 (19.9-21.4)
WOMEN'S HEALTH			
Pap Smear	Women 18 and older who reported that they have not had a pap smear in the past three years.	21.6 (13.1-30.2)	25.1 (23.1-27.1)
Mammogram Age 40+	Women 40 and older who reported that they have not had a mammogram in the past two years.	21.3 (14.6-27.9)	27.0 (25.4-28.6)

CRIME

Data presented on the North Dakota Attorney General website changed from previous years. In an effort to continue to provide this data, the variables are defined as follows which differs slightly from the 2010-2013 data:

- Rape: includes statutory rape and forcible rape
- Assault: only includes aggravated assault

Table 20

Morton County							
	2012	2013	2014	2015	2016	5 Year	5-Year Rate
Murder	2	0	2	0	1	5	3.3
Rape	13	14	26	32	16	101	67.6
Robbery	5	5	4	6	5	25	16.7
Assault	40	42	45	46	41	214	143.3
Violent crime	60	61	77	84	63	345	231.1
Burglary	66	79	67	88	143	443	296.7
Larceny	489	565	325	541	528	2,448	1,639.7
Motor vehicle theft	50	56	53	101	120	380	254.5
Property crime	605	700	445	730	791	3,271	2,190.9
Total	665	761	522	814	854	3,616	2,422.0

Table 21

North Dakota							
	2012	2013	2014	2015	2016	5 Year	5-Year Rate
Murder	20	14	19	21	17	91	2.5
Rape	243	237	389	428	365	1,662	44.9
Robbery	117	151	166	157	181	772	20.9
Assault	1,071	1,156	1,145	1,185	1,132	5,689	153.7
Violent crime	1,451	1,558	1,719	1,791	1,695	8,214	222.0
Burglary	2,200	2,656	2,490	3,212	3,051	13,609	367.8
Larceny	10,184	10,243	5,214	6,181	6,157	37,979	1,026.4
Motor vehicle theft	1,031	1,228	1,462	1,725	1,887	7,333	198.2
Property crime	13,415	14,127	9,166	11,118	11,095	47,826	1,292.5
Total	14,866	15,685	10,885	12,909	12,790	54,345	1,468.7

CHILD HEALTH INDICATORS

The following information is no longer available on the website:

High school dropouts (dropouts per 1000 persons Grades 9-12)
Children Ages 0-17 Impacted by Domestic Violence (Percentage of all children ages 0-17)
Offenses Against Person—Juvenile Court Referrals (Percentage of total juvenile court referrals)
Alcohol-Related Juvenile Court Referrals (Percentage of juvenile court referrals)

Table 22

Child Indicators: Education 2016	Morton County		North Dakota	
Children ages 3 to 21 enrolled in special education in public schools	597	12.9%	14,426	13.2%
Four-year high school cohort graduates	81.6%		87.3%	
Average expenditure per student in public school	$10,958		$11,945	

Table 23

Child Indicators: Economic Health 2016	Morton County		North Dakota	
TANF recipients ages 0-19	124	1.6%	4,649	2.4%
SNAP recipients ages 0-18	1,313	17.9%	37,758	20.5%
Eligible recipients of free or reduced price lunch	1,439	30.3%	37,928	32.6%
Medicaid recipients ages 0-20	2,313	29.2%	59,156	28.1%
Median income for families with children ages 0-17	$90,278		$75,818	
Children ages 0 to 17 living in low-income families (<200% of poverty)	1,247	19.2%	50,147	30.5%

Table 24

Child Indicators: Families and Child Care 2016	Morton County		North Dakota	
Women in labor force, by age of children (ages 0-17)	2,757	87.2%	59,532	79.4%
Children ages 0-17 living in a single parent family	1,218	18.5%	39,192	23.4%
Children in foster care	17	0.2%	2,381	1.3%
Victims of child abuse and neglect - services required (Percent of suspected victims)	102	21.6%	1,805	27.2%
Births to mothers receiving prenatal care beginning after first trimester or not at all	53	10.3%	1,612	14.2%

Table 25

Child Indicators: Juvenile Justice 2016	Morton County		North Dakota	
Children ages 10-17 referred to juvenile court	176	6.1%	3,471	4.9%

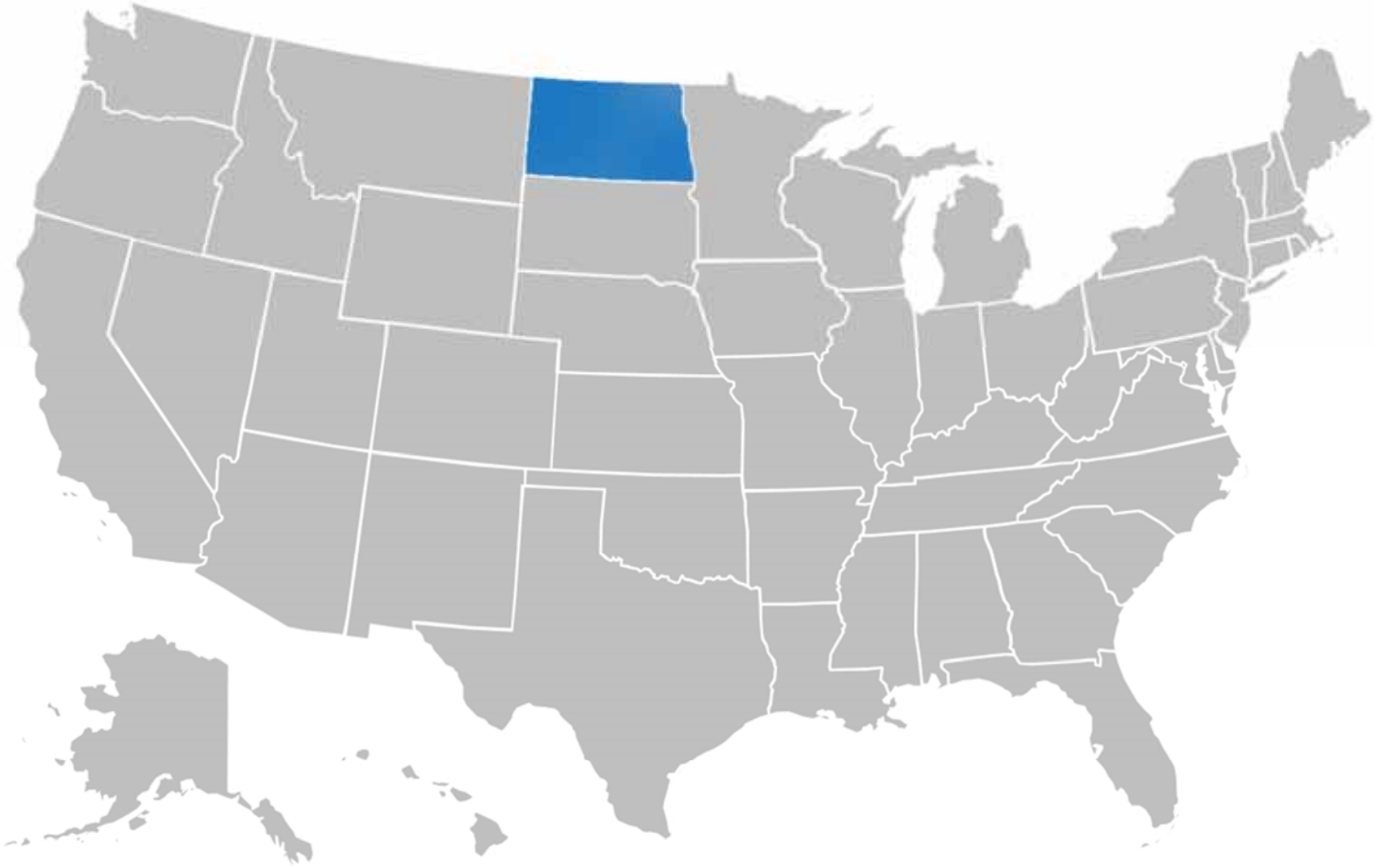
*LNE-Low Number Events

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

North Dakota



2018 County Health Rankings Report

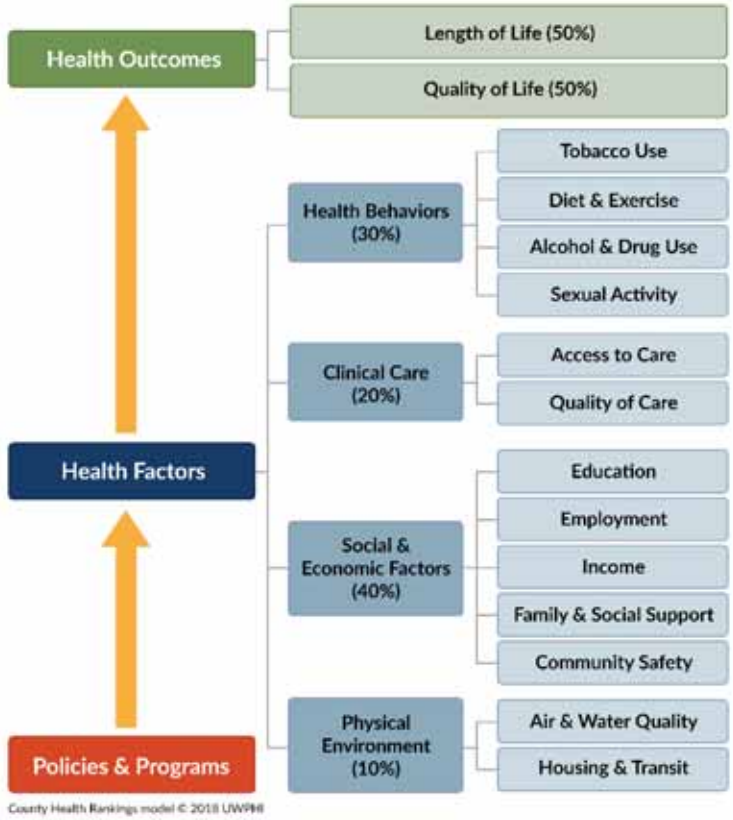
A collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

University of Wisconsin Population Health Institute
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Support provided by
Robert Wood Johnson Foundation

Introduction

Ranking the health of nearly every county in the nation (based on the model to the right), County Health Rankings & Roadmaps (CHR&R) illustrates what we know when it comes to what is keeping people healthy or making them sick and shows what we can do to create healthier places to live, learn, work and play. CHR&R brings actionable data, evidence, guidance and stories to communities to make it easier for people to be healthy in their neighborhoods, schools and workplaces.



Our country has achieved significant health improvements over the past century. We have benefited from progress in automobile safety, better workplace standards, good schools and medical clinics, and reductions in smoking and infectious diseases. But when you look closer, there are significant differences in health outcomes according to where we live, how much money we make or how we are treated. The data show that not everyone has benefited in the same way from these health improvements. There are fewer opportunities and resources for better health among groups that have been historically marginalized including people of color, people living in poverty, people with physical or mental disabilities, LGBTQ persons, and women.

This report explores the size and nature of health differences by place and race/ethnicity in North Dakota and how state and community leaders can take action to create environments where all residents have the opportunity to live their healthiest lives. Specifically, this report will help illuminate:

1. What health equity is and why it matters
2. Differences in health outcomes within the state by place and racial/ethnic groups
3. Differences in health factors within the state by place and racial/ethnic groups
4. What communities can do to create opportunity and health for all

The Robert Wood Johnson Foundation (RWJF) collaborates with the University of Wisconsin Population Health Institute (UWPHI) to bring this program to cities, counties, and states across the nation.

What Is Health Equity?

We live in a nation that prides itself on being a land of opportunity - a place where everyone has a fair chance to lead the healthiest life possible regardless of where we live, how we are treated, or the circumstances we were born into; this is the prospect of health equity. However, this is not always our reality. More often the choices we make depend on the opportunities we have, such as a quality education, access to healthy foods and living in safe, affordable housing in crime-free neighborhoods. These opportunities are not the same for everyone.

Health disparities emerge when some groups of people have more access to opportunities and resources over their lifetime and across generations. For example, when children live in families with higher incomes, they typically experience stable housing in safer neighborhoods, have access to better-resourced and higher quality schools, and are better prepared for living wage jobs leading to upward economic mobility and good health. When children live in families with lower incomes and do not have access to these same opportunities, they face challenges to gaining a foothold on the ladder to economic security that helps them thrive.

Differences in opportunity do not come about on their own or because of the actions of individuals alone. Often, they are the result of policies and practices at many levels that have created deep-rooted barriers to good health, such as unfair bank lending practices, school funding based on local property taxes, and policing and prison sentencing. The collective effect is that a fair and just opportunity to live a long and healthy life is not a reality for everyone. Now is the time to change how things are done.

Why Does It Matter?

Population projections indicate that our nation's youth are increasingly more racially and ethnically diverse. A healthy beginning is essential to a healthy future for our children and our nation.

Yet, child poverty rates remain high with nearly one in five living in poverty. And, in the majority of U.S. counties, rates for Black or Hispanic children are even higher than rates for White children.

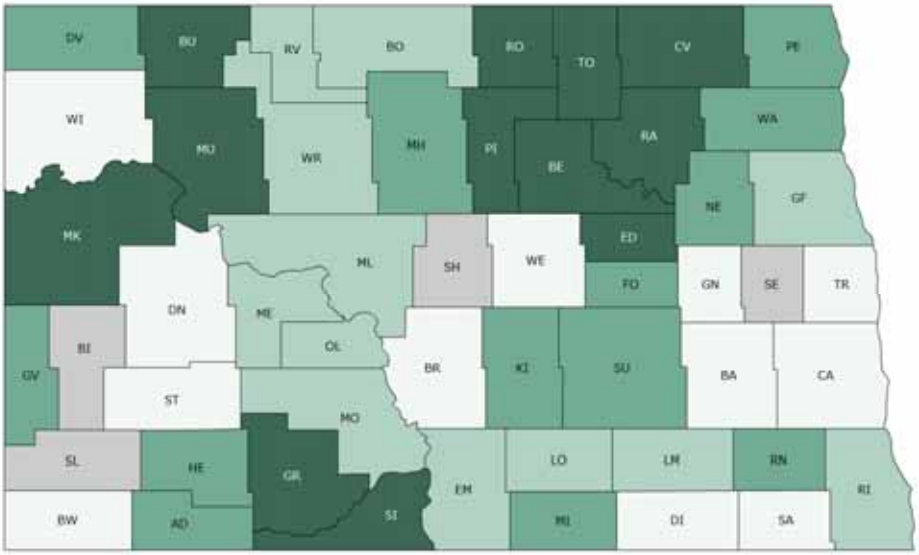
Investing in the health and well-being of ALL young people now and in years to come is vital to our nation's future success and prosperity.

Achieving health equity means reducing and ultimately eliminating unjust and avoidable differences in health and in the conditions and resources needed for optimal health by improving the health of marginalized groups, not by worsening the health of others. Our progress toward health equity will be measured by how health disparities change over time. This report provides data on differences in health and opportunities in North Dakota that can help identify where action is needed to achieve greater equity and offers information on how to move from data to action.

Differences in Health Outcomes within States by Place and Racial/Ethnic Groups

How Do Counties Rank for Health Outcomes?

Health outcomes in the County Health Rankings represent measures of how long people live and how healthy people feel. Length of life is measured by premature death (years of potential life lost before age 75) and quality of life is measured by self-reported health status (% of people reporting poor or fair health and the number of physically and mentally unhealthy days within the last 30 days) and the % of low birth weight newborns. Detailed information on the underlying measures is available at **countyhealthrankings.org**



The green map above shows the distribution of North Dakota's **health outcomes**, based on an equal weighting of length and quality of life. The map is divided into four quartiles with less color intensity indicating better performance in the respective summary rankings. Specific county ranks can be found in the table on page 12 at the end of this report.

How Do Health Outcomes Vary by Race/Ethnicity?

Length and quality of life vary not only based on where we live, but also by our racial/ethnic background. In North Dakota there are differences by race/ethnicity in length and quality of life that are masked when we only look at differences by place. The table below presents the five underlying measures that make up the Health Outcomes Rank. Explore the table to see how health differs between the healthiest and the least healthy counties in North Dakota, and among racial/ethnic groups.

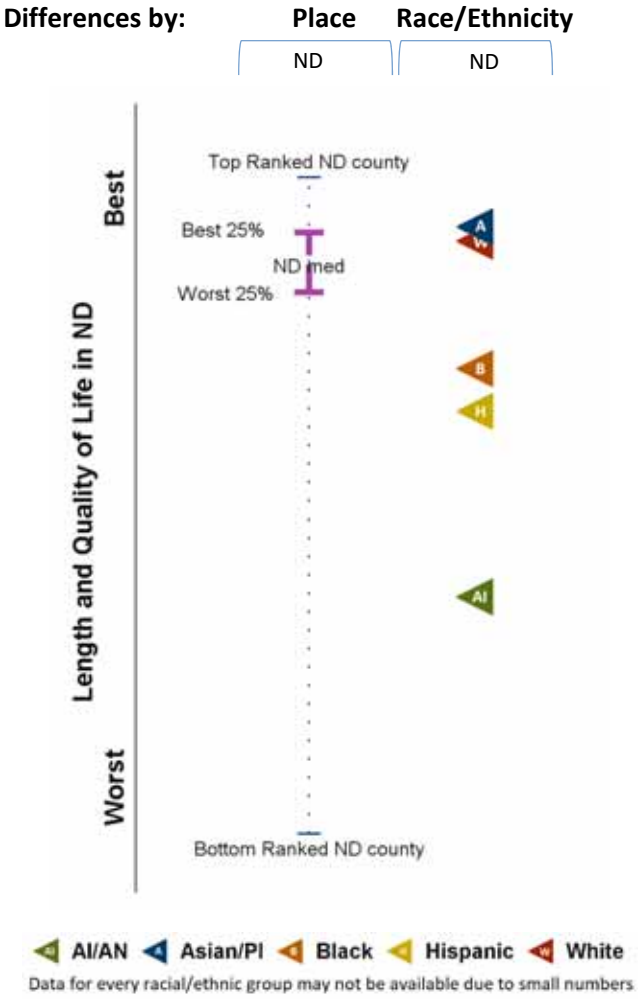
Differences in Health Outcome Measures among Counties and for Racial/Ethnic Groups in North Dakota

	Healthiest ND County	Least Healthy ND County	AI/AN	Asian/PI	Black	Hispanic	White
Premature Death (years lost/100,000)	6,200	30,500	18,800	3,400	6,900	6,300	5,900
Poor or Fair Health (%)	11%	32%	29%	N/A	28%	27%	13%
Poor Physical Health Days (avg)	2.5	5.7	5.9	N/A	4.5	3.8	2.7
Poor Mental Health Days (avg)	2.4	4.9	3.6	N/A	2.3	5.9	3.0
Low Birthweight (%)	4%	8%	7%	7%	9%	6%	6%

American Indian/Alaskan Native (AI/AN), Asian/Pacific Islander (Asian/PI)

N/A = Not available. Data for all racial/ethnic groups may not be available due to small numbers

Health Outcomes in North Dakota



AI/AN -American Indian/Alaskan Native/Native American
Asian/PI - Asian/Pacific Islander

The graphic to the left compares measures of length and quality of life by place (Health Outcomes ranks) and by race/ethnicity. To learn more about this composite measure, see the technical notes on page 13.

In North Dakota, **measures of length and quality of life** indicate:

- American Indians/Alaskan Natives are most similar in health to those living in the least healthy quartile of counties.
- Asians/Pacific Islanders are most similar in health to those living in the healthiest quartile of counties.
- Blacks are most similar in health to those living in the least healthy quartile of counties.
- Hispanics are most similar in health to those living in the least healthy quartile of counties.
- Whites are most similar in health to those living in the middle 50% of counties.

(Quartiles refer to the map on page 4.)

Across the US, values for measures of length and quality of life for Native American, Black and Hispanic residents are regularly worse than for Whites and Asians. For example, even in the healthiest counties in the US, Black and American Indian premature death rates are about 1.5 times higher than White rates. Not only are these differences unjust and avoidable, they will also negatively impact our changing nation's future prosperity.

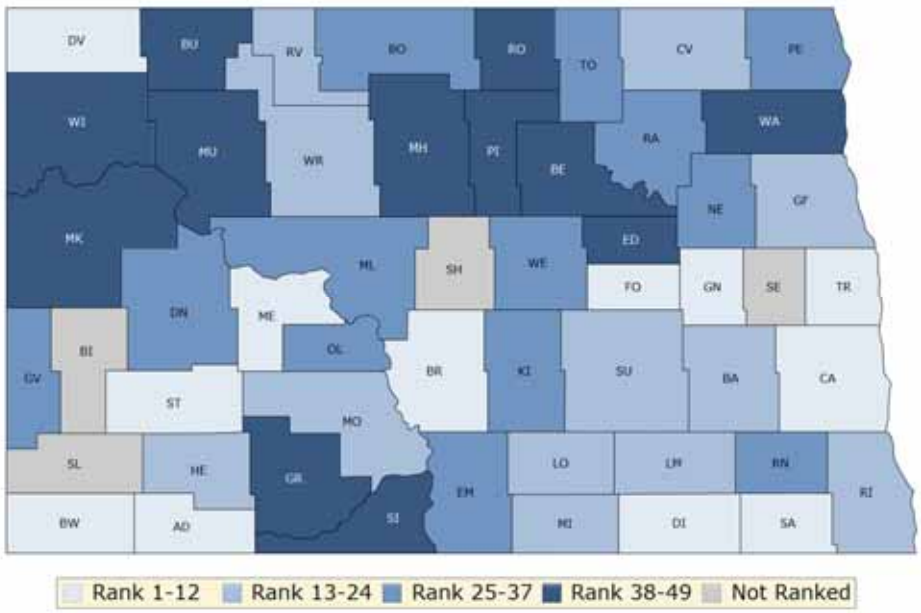
Changing the Course in Kansas City

A decade ago, public health officials identified an 8-year gap in life expectancy between the city's White and Black populations. Segregation and discrimination over the past century fueled this disparity, but community residents and city leaders joined forces to tackle tough conversations on race, stem the violence, increase educational opportunities, improve access to care and ensure economic justice. Today the disparity in life expectancy has been reduced to 6.9 years. Learn more at rwjf.org/prize.

Differences in Health Factors within States by Place and Racial/Ethnic Groups

How Do Counties Rank for Health Factors?

Health factors in the County Health Rankings represent the focus areas that drive how long and how well we live, including health behaviors (tobacco use, diet & exercise, alcohol & drug use, sexual activity), clinical care (access to care, quality of care), social and economic factors (education, employment, income, family & social support, community safety), and the physical environment (air & water quality, housing & transit).



The blue map above shows the distribution of North Dakota's **health factors** based on weighted scores for health behaviors, clinical care, social and economic factors, and the physical environment. Detailed information on the underlying measures is available at **countyhealthrankings.org.** The map is divided into four quartiles with less color intensity indicating better performance in the respective summary rankings. Specific county ranks can be found in the table on page 12.

What are the Factors That Drive Health and Health Equity?

Health is influenced by a range of factors. However, social and economic factors, like connected and supportive communities, good schools, stable jobs, and safe neighborhoods, are foundational to achieving long and healthy lives. These social and economic factors also influence other important drivers of health and health equity. Social and economic factors impact our ability to make healthy choices, afford medical care or housing, and even manage stress leading to serious health problems. The choices we make are based on the choices we have.

Across the nation, there are meaningful differences in social and economic factors among counties and among racial/ethnic groups. Even within counties, policies and practices marginalize many racial and ethnic groups, keeping them from resources and supports necessary to thrive. Limited access to opportunities is what creates disparities in health, impacting how well and how long we live.

How Do Social and Economic Opportunities for Health Vary in North Dakota?

Social and economic factors vary depending on where we live and by our racial/ethnic background. The following four data graphics illustrate differences among counties and by racial/ethnic groups in social and economic opportunities for health in North Dakota. These graphics show that it is important to explore differences by place and race/ethnicity in order to tell a more holistic story about the health of your community.

This report explores state-wide data. To dive deeper into your county data, visit Use the Data at www.countyhealthrankings.org

Consider these questions as you look at the data graphics throughout this report:

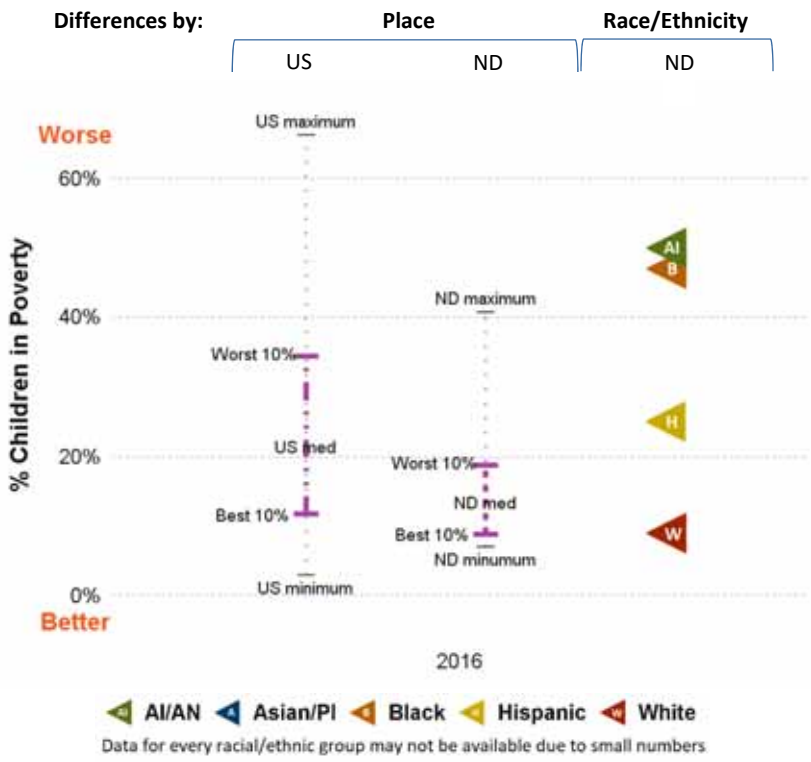
- What differences do you see among counties in your state?
- What differences do you see by racial/ethnic groups in your state?
- How do counties in your state compare to all U.S. counties?
- What patterns do you see? For example, do some racial/ethnic groups fare better or worse across measures?

Children in Poverty

Poverty limits opportunities for quality housing, safe neighborhoods, healthy food, living wage jobs, and quality education. As poverty and related stress increase, health worsens.

The graphic to the right shows:

- In North Dakota, 12% of children are living in poverty compared to the U.S. rate of 20%.
- Children in poverty rates among North Dakota counties range from 7% to 41%.
- Children in poverty rates among racial/ethnic groups in North Dakota range from 9% to 50%.



US and state values and the state minimum and maximum can be found in the table on page 14

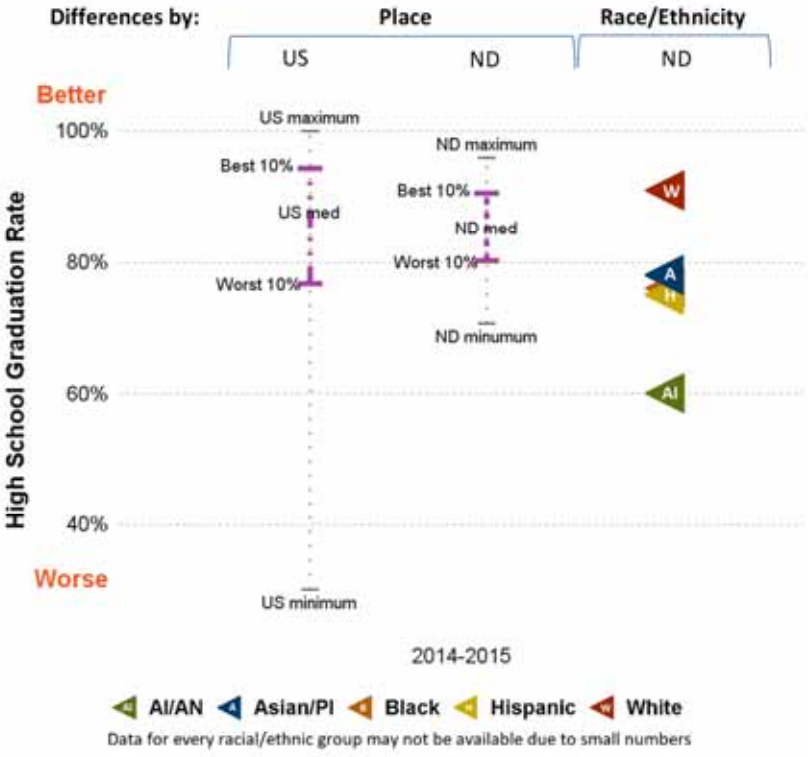
American Indian/Alaskan Native/Native American (AI/AN) Asian/Pacific Islander (Asian/PI)

High School Graduation

Higher rates of educational achievement are linked to better jobs and higher incomes resulting in better health. Education is also connected to lifespan: on average, college graduates live nine years longer than those who didn't complete high school.

The graphic to the right shows:

- North Dakota's high school graduation rate is 85% compared to the U.S. rate of 83%.
- High school graduation rates among North Dakota counties range from 71% to 96%.
- High school graduation rates among racial/ethnic groups in North Dakota range from 60% to 91%.

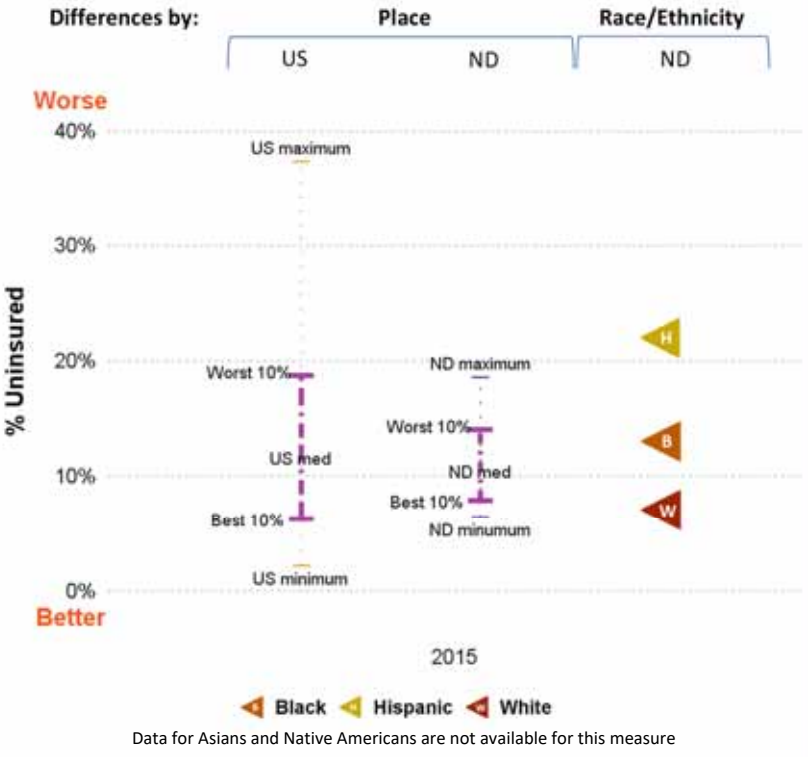


Health Insurance

Health insurance helps individuals and families access needed primary care, specialists, and emergency care. Those without insurance are often diagnosed at later, less treatable disease stages and at higher costs than those with insurance.

The graphic to the right shows:

- The uninsured rate in North Dakota is 9% compared to the U.S. rate of 11%.
- Uninsured rates among North Dakota counties range from 6% to 19%.
- Uninsured rates among racial/ethnic groups in North Dakota range from 7% to 22%.

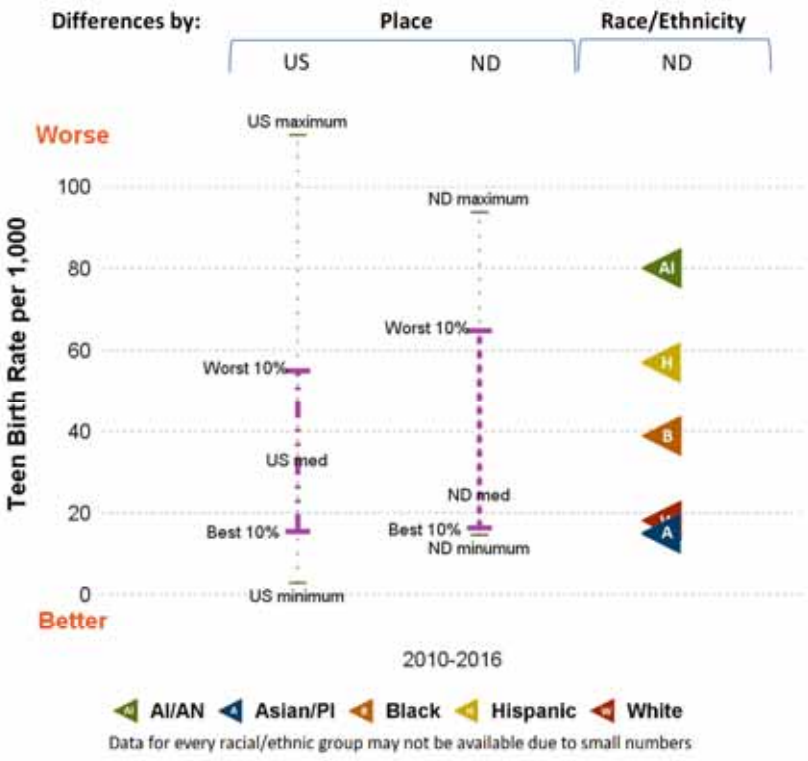


Teen Births

Teenage motherhood is more likely to occur in communities with fewer opportunities for education or jobs. Teen mothers are less likely to complete high school and face challenges to upward economic mobility. In turn, their children often have fewer social and economic supports and worse health outcomes.

The graphic to the right shows:

- The teen birth rate in North Dakota is 25 births per 1,000 female population, ages 15-19, compared to the U.S. rate of 27 per 1,000.
- Teen birth rates among North Dakota counties range from 15 to 94 per 1,000.
- Teen births for racial/ethnic groups in North Dakota range from 15 to 80 per 1,000.



US and state values and the state minimum and maximum can be found in the table on page 14

American Indian/Alaskan Native/Native American (AI/AN) Asian/Pacific Islander (Asian/PI)

Spartanburg County Closing the Gap

Community leaders in Spartanburg County, SC took a good hard look at their data in 2008 and discovered they had the worst teen birth rate in the whole state. Deciding to face this issue head on, they brought together teens, providers, parents, and partners to create solutions - a warm welcoming teen center, accessible and respectful reproductive health care, and open discussions about sexuality. Recent data show improvements - rates have receded by 50% from 2010 to 2016 for all 15-19 year olds. And while disparities in teen births among racial/ethnic groups in SC continue, the gap has closed for teen births among Black and White females in Spartanburg County (in 2016, 23.3 per 1,000 and 23.9 per 1,000, respectively). Learn more at rwjf.org/prize.

What Communities Can Do to Create Opportunity and Health for All

This report shows some of the differences in opportunity for people in North Dakota based on where they live and their race or ethnicity. But how can you turn this information into action? Below are some evidence-informed approaches to consider as your community moves forward:

Invest in education from early childhood through adulthood to boost employment and career prospects

- Strengthen parents' skills, including ways to foster children's learning and development in home and community settings
- Undertake policy initiatives to improve pre-K-12 education in the classroom, school, district or state level, focusing on raising school attendance and high school graduation rates
- Implement community and school-based supports that will improve access to and quality of early childhood care and education, beginning in infancy
- Offer alternative learning models and technology to help students develop social and work-ready skills
- Support higher education opportunity for all through college application assistance and financial aid

Increase or supplement income and support asset development in low income households

- Increase public and private sector wages and offer benefits for low-income earners through living wages and paid leave
- Expand elibigility for earned-income tax credits and increase credit amount
- Assist parents by expanding refundable child care tax credits and increasing child care subsidies

Ensure that everyone has adequate, affordable health care coverage and receives culturally competent services and care

- Make health care services accessible and available in community, school, and clinical settings, including medical, dental, vision, mental health care, and long-term care
- Increase access to sex education and contraceptives in school, clinic, and community settings
- Increase patients' health-related knowledge via efforts to simplify health education materials, improve patient-provider communication, and increase literacy
- Provide culturally-sensitive care coordination and system navigation, including language interpretation and care tailored to patients' norms, beliefs, and values

Foster social connections within communities and cultivate empowered and civically engaged youth

- Establish positive relationships among youth and adult mentors and provide youth with leadership opportunities in schools, community groups, and local governments
- Create safe places to convene, such as community centers, with activities, programs, and supportive technologies for all ages and abilities
- Support information sharing, collaboration and networking to inform decision-making using social media and in-person approaches

To learn more about specific strategies that can support your work, visit **What Works for Health,** a living resource of evidence-informed policies and programs to make a difference locally. You can search for policies and programs that have been tested or implemented in communities like yours, or adapt strategies that have been tested elsewhere but seem like a good 'fit'. You can also learn about each strategy's likely impact on disparities.
Visit countyhealthrankings.org/whatworks

Communities Driving Local Change

We can work together to reshape the policies, programs, and practices that have marginalized some and, without action, will perpetuate health disparities. We can create environments where people are treated fairly, where everyone has a voice in decisions that affect them, and where all have a chance to succeed.

The 35 RWJF Culture of Health Prize winners are prime examples of making this a reality. For examples of how several communities, such as the below are cultivating a shared belief in good health for all, visit www.rwjf.org/prize.

- Columbia Gorge Region, OR/WA
- Richmond, VA
- Chelsea, MA
- Santa Monica, CA

Moving With Data to Action

County Health Rankings & Roadmaps offers a range of community supports including data, evidence, guidance and stories to support communities moving from awareness to action. Visit our website to learn more – **countyhealthrankings.org.**

- CHR&R provides a snapshot of a community's health and a starting point to explore ways to improve health and increase health equity. Use the Data will help you learn more about the data and find other sources as you begin to assess your needs and resources and focus on what's important.

- Our Partner Center helps changemakers in all sectors make connections and leverage collective power to put ideas into action.

- Our Action Center provides step-by-step guidance to help communities assess their needs, drive local policy and systems changes, and evaluate the impacts of their health improvement efforts. Our team of community coaches are available to communities across the nation to guide local collaborations and individuals to accelerate learning and action.

Guidance in the Action Center focuses on areas like:

- Working together is at the heart of making meaningful change. When people share a vision and commitment to improve health, it can yield better results than working alone. CHR&R's Work Together guide can help you build and sustain partnerships that reflect the diversity of your community. Together you can identify the challenges and solutions that can make a difference.

- Taking time to choose policies and programs that have been shown to work and that are a good fit for your community will maximize your chances of success. CHR&R's Choose Effective Policies & Programs guide can help you explore and select strategies to address priority issues.

- Once you have decided what you want to do, the next step is to make it happen. CHR&R's guide to Act on What's Important can help your community build on strengths, leverage available resources, and respond to unique needs.

- What you say and how you say it can motivate people to take the right action at the right time. CHR&R's Communicate guide can help you to develop strategic messages and deliver those messages effectively.

2018 County Health Rankings for the 49 Ranked Counties in North Dakota

County	Health Outcomes	Health Factors
Adams	29	10
Barnes	9	13
Benson	48	47
Billings	NR	NR
Bottineau	18	34
Bowman	1	5
Burke	43	39
Burleigh	12	1
Cass	8	4
Cavalier	41	18
Dickey	3	7
Divide	25	6
Dunn	7	37
Eddy	45	40
Emmons	23	31
Foster	32	11
Golden Valley	34	25
Grand Forks	24	14
Grant	39	42
Griggs	4	12
Hettinger	35	21
Kidder	36	30
LaMoure	14	17
Logan	20	23
McHenry	26	38
McIntosh	37	22
McKenzie	42	44
McLean	16	35
Mercer	15	2
Morton	13	19
Mountrail	44	46
Nelson	28	32
Oliver	21	33
Pembina	27	36
Pierce	46	43
Ramsey	40	29
Ransom	30	26
Renville	19	20
Richland	22	16
Rolette	47	49
Sargent	6	9
Sheridan	NR	NR
Sioux	49	48
Slope	NR	NR
Stark	10	8
Steele	NR	NR
Stutsman	31	15
Towner	38	27
Traill	2	3
Walsh	33	41
Ward	17	24
Wells	5	28
Williams	11	45

Stay Up-To-Date with County Health Rankings & Roadmaps

For the latest updates on our Rankings, community support, RWJF Culture of Health Prize communities, and more visit countyhealthrankings.org/news. You can see what we're featuring on our webinar series, what communities are doing to improve health, and how you can get involved!

Technical Notes and Glossary of Terms

What is health equity? What are health disparities? And how do they relate?

Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty and discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.

Health disparities are differences in health or in the key determinants of health such as education, safe housing, and discrimination, which adversely affect marginalized or excluded groups.

Health equity and health disparities are closely related to each other. Health equity is the ethical and human rights principle or value that motivates us to eliminate health disparities. Reducing and ultimately eliminating disparities in health and its determinants of health is how we measure progress toward health equity.

Braveman P, Arkin E, Orleans T, Proctor D, and Plough A. What is Health Equity? And What Difference Does a Definition Make? Robert Wood Johnson Foundation. May 2017

How do we define racial/ethnic groups?

In our analyses by race/ethnicity we define each category as follows:

- Hispanic includes those who identify themselves as Mexican, Puerto Rican, Cuban, Central or South American, other Hispanic, or Hispanic of unknown origin.
- American Indian/Alaskan Native includes people who identify themselves as American Indian or Alaskan Native and do not identify as Hispanic. This group is sometimes referred to as Native American in the report.
- Asian/Pacific Islander includes people who identify themselves as Asian or Pacific Islander and do not identify as Hispanic.
- Black includes people who identify themselves as black/African American and do not identify as Hispanic.
- White includes people who identify themselves as white and do not identify as Hispanic.

All racial/ethnic categories are exclusive so that one person fits into only one category. Our analyses do not include people reporting more than one race, as this category was not measured uniformly across our data sources.

We recognize that “race” is a social category, meaning the way society may identify individuals based on their cultural ancestry, not a way of characterizing individuals based on biology or genetics. A strong and growing body of empirical research provides support for the notion that genetic factors are not responsible for racial differences in health factors and very rarely for health outcomes.

How did we compare county ranks and racial/ethnic groups for length and quality of life?

Data are from the same data sources and years listed in the table on page 15. The mean and standard deviation for each health outcome measure (premature death, poor or fair health, poor physical health days, poor mental health days, and low birthweight) are calculated for all ranked counties within a state. This mean and standard deviation are then used as the metrics to calculate z-scores, a way to put all measures on the same scale, for values by race/ethnicity within the state. The z-scores are weighted using CHR&R measure weights for health outcomes to calculate a health outcomes z-score for each race/ethnicity. This z-score is then compared to the health outcome z-scores for all ranked counties within a state; the identified-score calculated for the racial/ethnic groups is compared to the quartile cut-off values for counties with states. You can learn more about calculating z-scores on our website under Rankings Methods.

How did we select evidence-informed approaches?

Evidence-informed approaches included in this report represent those backed by strategies that have demonstrated consistently favorable results in robust studies or reflect recommendations by experts based on early research. To learn more about evidence analysis methods and evidence-informed strategies that can make a difference to improving health and decreasing disparities, visit What Works for Health.

Technical Notes:

- In this report, we use the terms disparities, differences, and gaps interchangeably.
- We follow basic design principles for cartography in displaying color spectrums with less intensity for lower values and increasing color intensity for higher values. We do not intend to elicit implicit biases that “darker is bad”.
- In our graphics of state and U.S. counties we report the median of county values, our preferred measure of central tendency for counties. This value can differ from the state or U.S. overall values.

2018 County Health Rankings for North Dakota: Measures and National/State Results

Measure	Description	US	ND	ND Minimum	ND Maximum
HEALTH OUTCOMES					
Premature death	Years of potential life lost before age 75 per 100,000 population	6,700	6,600	3,300	30,500
Poor or fair health	% of adults reporting fair or poor health	16%	14%	11%	32%
Poor physical health days	Average # of physically unhealthy days reported in past 30 days	3.7	3.0	2.5	5.7
Poor mental health days	Average # of mentally unhealthy days reported in past 30 days	3.8	3.1	2.4	4.9
Low birthweight	% of live births with low birthweight (< 2500 grams)	8%	6%	3%	10%
HEALTH FACTORS					
HEALTH BEHAVIORS					
Adult smoking	% of adults who are current smokers	17%	20%	14%	38%
Adult obesity	% of adults that report a BMI ≥ 30	28%	32%	27%	40%
Food environment index	Index of factors that contribute to a healthy food environment, (0-10)	7.7	9.1	5.4	9.6
Physical inactivity	% of adults aged 20 and over reporting no leisure-time physical activity	23%	24%	19%	34%
Access to exercise opportunities	% of population with adequate access to locations for physical activity	83%	75%	4%	88%
Excessive drinking	% of adults reporting binge or heavy drinking	18%	26%	18%	27%
Alcohol-impaired driving deaths	% of driving deaths with alcohol involvement	29%	48%	0%	100%
Sexually transmitted infections	# of newly diagnosed chlamydia cases per 100,000 population	478.8	427.2	70.1	1,492.5
Teen births	# of births per 1,000 female population ages 15-19	27	25	15	94
CLINICAL CARE					
Uninsured	% of population under age 65 without health insurance	11%	9%	6%	19%
Primary care physicians	Ratio of population to primary care physicians	1,320:1	1,330:1	1,960:0	240:1
Dentists	Ratio of population to dentists	1,480:1	1,550:1	3,890:0	650:1
Mental health providers	Ratio of population to mental health providers	470:1	610:1	930:0	180:1
Preventable hospital stays	# of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	49	49	34	103
Diabetes monitoring	% of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring	85%	87%	30%	100%
Mammography screening	% of female Medicare enrollees ages 67-69 that receive mammography screening	63%	69%	45%	82%
SOCIAL AND ECONOMIC FACTORS					
High school graduation	% of ninth-grade cohort that graduates in four years	83%	85%	71%	96%
Some college	% of adults ages 25-44 with some post-secondary education	65%	73%	49%	80%
Unemployment	% of population aged 16 and older unemployed but seeking work	4.9%	3.2%	2.0%	11.0%
Children in poverty	% of children under age 18 in poverty	20%	12%	7%	41%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	5	4.3	3.5	7.7
Children in single-parent households	% of children that live in a household headed by a single parent	34%	28%	7%	67%
Social associations	# of membership associations per 10,000 population	9.3	15.7	5.9	47.5
Violent crime	# of reported violent crime offenses per 100,000 population	380	260	0	469
Injury deaths	# of deaths due to injury per 100,000 population	65	68	47	186
PHYSICAL ENVIRONMENT					
Air pollution – particulate matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	8.7	7.5	6.0	9.0
Drinking water violations	Indicator of the presence of health-related drinking water violations. Yes - indicates the presence of a violation, No - indicates no violation.	NA	NA	No	Yes
Severe housing problems	% of households with overcrowding, high housing costs, or lack of kitchen or plumbing facilities	19%	11%	4%	24%
Driving alone to work	% of workforce that drives alone to work	76%	80%	56%	85%
Long commute – driving alone	Among workers who commute in their car alone, % commuting > 30 minutes	35%	14%	7%	54%

2018 County Health Rankings: Ranked Measure Sources and Years of Data

	Measure	Source	Years of Data
HEALTH OUTCOMES			
Length of Life	Premature death	National Center for Health Statistics – Mortality files	2013-2015
Quality of Life	Poor or fair health	Behavioral Risk Factor Surveillance System	2016
	Poor physical health days	Behavioral Risk Factor Surveillance System	2016
	Poor mental health days	Behavioral Risk Factor Surveillance System	2016
	Low birthweight	National Center for Health Statistics – Natality files	2010-2016
HEALTH FACTORS			
HEALTH BEHAVIORS			
Tobacco Use	Adult smoking	Behavioral Risk Factor Surveillance System	2016
Diet and Exercise	Adult obesity	CDC Diabetes Interactive Atlas	2014
	Food environment index	USDA Food Environment Atlas, Map the Meal Gap	2015
	Physical inactivity	CDC Diabetes Interactive Atlas	2014
	Access to exercise opportunities	Business Analyst, Delorme map data, ESRI, & U.S. Census Files	2010 & 2016
Alcohol and Drug Use	Excessive drinking	Behavioral Risk Factor Surveillance System	2016
	Alcohol-impaired driving deaths	Fatality Analysis Reporting System	2012-2016
Sexual Activity	Sexually transmitted infections	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2015
	Teen births	National Center for Health Statistics – Natality files	2010-2016
CLINICAL CARE			
Access to Care	Uninsured	Small Area Health Insurance Estimates	2015
	Primary care physicians	Area Health Resource File/American Medical Association	2015
	Dentists	Area Health Resource File/National Provider Identification file	2016
	Mental health providers	CMS, National Provider Identification file	2017
Quality of Care	Preventable hospital stays	Dartmouth Atlas of Health Care	2015
	Diabetes monitoring	Dartmouth Atlas of Health Care	2014
	Mammography screening	Dartmouth Atlas of Health Care	2014
SOCIAL AND ECONOMIC FACTORS			
Education	High school graduation	EDFacts	2014-2015
	Some college	American Community Survey	2012-2016
Employment	Unemployment	Bureau of Labor Statistics	2016
Income	Children in poverty	Small Area Income and Poverty Estimates	2016
	Income inequality	American Community Survey	2012-2016
Family and Social Support	Children in single-parent households	American Community Survey	2012-2016
	Social associations	County Business Patterns	2015
Community Safety	Violent crime	Uniform Crime Reporting – FBI	2012-2014
	Injury deaths	CDC WONDER mortality data	2012-2016
PHYSICAL ENVIRONMENT			
Air and Water Quality	Air pollution – particulate matter*	Environmental Public Health Tracking Network	2012
	Drinking water violations	Safe Drinking Water Information System	2016
Housing and Transit	Severe housing problems	Comprehensive Housing Affordability Strategy (CHAS) data	2010-2014
	Driving alone to work	American Community Survey	2012-2016
	Long commute – driving alone	American Community Survey	2012-2016

*Not available for AK and HI.

Report Authors

University of Wisconsin-Madison
School of Medicine and Public Health
Department of Population Health Sciences
Population Health Institute

Marjory Givens, PhD, MSPH
Amanda Jovaag, MS
Julie Willems Van Dijk, PhD, RN, FAAN

Suggested citation: University of Wisconsin Population Health Institute. County Health Rankings 2018.

Research Assistance:
Courtney Blomme, RD
Keith Gennuso, PhD
Elizabeth Pollock, PhD
Joanna Reale
Jennifer Robinson
Matthew Rodock, MPH
Anne Roubal, PhD, MS

Alison Bergum, MPA
Lael Grigg, MPA
Bomi Kim Hirsch, PhD
Jessica Rubenstein, MPA, MPH
Jessica Solcz, MPH
Kiersten Frobom

Data:
Centers for Disease Control and Prevention: National Center for Health Statistics
Dartmouth Institute for Health Policy & Clinical Practice
Measure of America

Outreach Assistance:
Kate Kingery, MPA
Kitty Jerome, MA
Kate Konkle, MPH
Raquel Bournhonesque, MPH
Ericka Burroughs-Girardi, MA, MPH
Aliana Havrilla, MPIA
Antonia Lewis, MPH
Karen Odegaard, MPH
Justin Rivas, MPH, MIPA
Attica Scott, MS
Jerry Spegman, JD
Janna West Kowalski, MS

Astra Iheukumere, MPA, MBA

Carrie Carroll, MPA
Olivia Little, PhD
Devarati Syam, PhD

Communications & Website Development:
Burness
Forum One
Kim Linsenmayer, MPA
Matthew Call
Komal Dasani, MPH
Lindsay Garber, MPA
Samuel Hicok
James Lloyd, MS

Robert Wood Johnson Foundation

BISMARCK/MANDAN ASSET MAP

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
Economic Well Being	Homelessness 4.44 Housing that accepts people with chemical dependency, mental health problems, criminal history or victims of domestic violence 4.33 Affordable housing 3.87 Hunger 3.64	28% Report running out of food and not having enough money to get more	Children in poverty – 11% in Morton 9% in Burleigh	Homelessness resources: • Abused Adult Resource Center, 218 W. Broadway Ave., Bismarck • Ruth Meiers Hospitality House, 1800 E. Broadway Ave., Bismarck • Welcome House, 1902 E. Thayer. Ave. BismarckAID, Inc., 314 W. Main St., Mandan • Community Action Program, 2105 Lee Ave., Bismarck • Salvation Army, 601 S. Wash. St., Bismarck • Youthworks, 221 W. Rosser Ave., Bismarck Housing resources: • Burleigh Co. Housing Authority, 410 S. 2nd St., Bismarck • Morton Co. Housing Authority, 1500 – 3rd Ave. NW, Mandan • ND Housing Finance Agency, 2624 Vermont Ave., Bismarck • Standing Rock Housing Authority, 1333 – 92nd St., Ft Yates, ND • Dakota Foundation, 600 S. 2nd St., Bismarck • Ruth Meiers New Beginnings, 1800 E. Broadway Ave., Bismarck • Ruth Meiers Hospitality House, 1800 E. Broadway Ave., Bismarck • Community Action Program, 2105 Lee Ave., Bismarck • Native American Development Center, 205 N 24th Street, Bismarck • ND Hsg. Finance Agency, 2624 Vermont Ave., Bismarck • Pam's House, PO Box 500, Bismarck • New Awakenings Apts., PO Box 500, Bismarck • VA Supportive Housing, 619 Riverwood Dr., Bismarck • Supportive Housing for Veteran Families, 2105 Lee Ave., Bismarck • AID, Inc., 314 W. Main St., Mandan • Community Works, 200 – 1st Ave. NW, Mandan • Money Follows the Person Housing (ND Dept. of Human Services), 600 E. Blvd. Ave., Bismarck • Salvation Army, 601 S. Wash. St., Bismarck • Welcome House, 1902 E. Thayer Ave., Bismarck • Low Income housing:

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
				o Breton Hts. Apts., 4001 Lockport St., Bismarck o Alberta Hts. Apts., 4111 Lockport St., Bismarck o Park Century Apts., 2800 Gateway Ave., Bismarck o Ithica Hts. Apts., 2820 Ithica Dr., Bismarck o Brandon Hts. Apts., 580 Brandon Pl., Bismarck o Westgate Apts., 2810 Gateway Ave., Bismarck o Heritage Apts., 112 N. 5th St., Bismarck o Century East Apts., 1715 & 1823 Mapleton Ave., Bismarck o Calgory Apts., 3310, 3420 & 3540 N. 19th St., Bismarck o Century East Apts. II & III, 2939 & 3001 Ohio St., Bismarck o Washington Hts. Apts., 2801, 2809, 2835 & 2843 Hawken St., Bismarck Hunger resources: • Carrie's Kids, 1223 S. 12th St., Bismarck • United Way, 515 N. 4th St., Bismarck • Great Plains Food Bank, 721 Memorial Hwy., Bismarck • The Banquet at Trinity Lutheran Church, 502 N 4th, Bismarck • Spirit of Life Church Food Pantry, 801 – 1st St. SE, Mandan • Ministry on the Margins, 201 N. 24th St., Bismarck • All Nations Assembly of God, 121 – 48th Ave. SE, Bismarck • Bismarck Emergency Food Pantry, 725 Memorial Hwy, Bismarck • Community Action Program, 2105 Lee Ave., Bismarck • Corpus Christi Church, 1919 N. 2nd St., Bismarck • Crystal River Ministry Center, 924 N. 11th St., Bismarck • Faith Center, 2303 E. Divide, Bismarck • Helping Hands Food Pantry, 1826 – 8th St. N., Bismarck • Salvation Army, 601 S. Wash. St., Bismarck • Hope on the Horizon, 529 Memorial Hwy., Bismarck • Love Your Neighbor Food Pantry – 4909 Shelburne St., Bismarck • River of Hope, 1996 – 43rd Ave. N., Bismarck • Heaven's Helpers Soup Café – 220 N. 23rd St., Bismarck • United Tribes Technical College Community Meal, 3315 Univ. Dr., Bismarck

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need

				• Abundance of Grace Food Pantry, 4209 Old Red Trail, Mandan
				• Riverside School, 406 S. Anderson St., Bismarck
				• SNAP, 415 E. Rosser Ave., Bismarck
				• WIC, 2400 E. Bdwy St., Bismarck
				• Grocery Stores:
				  o Dan's Supermarket, 835 S. Wash. St., Bismarck
				  o Dan's Supermarket, 3101 N. 11th St., Bismarck
				  o Dan's Supermarket, 1190 Turnpike Ave. Bismarck
				  o Dan's Supermarket, 3103 Yorktown Dr. Bismarck
				  o Dan's Supermarket, 500 Burlington St. SE, Mandan
				  o BisMan Food Co-op, 711 E. Sweet Ave., Bismarck
				  o Asian Market, 220 W. Front Ave., Bismarck
				  o Walmart, 1400 Skyline Blvd., Bismarck
				  o Walmart, 1000 Old Red Trail NW, Mandan
				  o Walmart, 2717 Rock Island Place, Bismarck
				  o Target, 600 Kirkwood Mall, Bismarck
				  o Sam's Club, 2821 Rock Island Pl., Bismarck
				  o Cashwise Foods, 1144 E. Bismarck Expressway, Bismarck

Children and Youth	Cost of quality child care 3.97 Substance abuse 3.97 Childhood obesity 3.94 Teen suicide 3.86 Cost of services for at-risk youth 3.79 Bullying 3.78 Availability of quality child care 3.69 Availability of services for at-risk youth 3.69		Teen births 30 in Morton County compared to 27 statewide HS graduation rates 82% in Morton County and 86% in Burleigh County	Child Care resources: • Child Care Resource & Referral, 1616 Capitol Way, Bismarck • Head Start, 720 N. 14th St., Bismarck • Burleigh Co. Social Services, 415 E. Rosser Ave., Bismarck • Morton Co. Social Services, 200 – 2nd Ave., Mandan Drug, Alcohol & Smoking resources: • ACS Crisis Residential, 3230 E. Thayer Ave., Bismarck • ADAPT, Inc., 1720 Burnt Boat Dr., Bismarck • Alcoholics Anonymous, 232-9930 (many locations to choose from) • Heartview Foundation, 101 E. Broadway Ave., Bismarck • Lutheran Social Services, I-94, Bismarck • New Freedom Center, 905 E. Interstate Ave., Bismarck • Pathways to Freedom, 418 E. Rosser Ave., Bismarck

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
	Teen tobacco use 3.54			• Sanford Health Behavioral Health, 414 N. 7th St., Bismarck • CHI St. Alexius, 900 E. Broadway Ave., Bismarck • Village Family Services, 107 W. Main Ave., Bismarck • West Central CD Program, 1237 W. Divide Ave., Bismarck • Whole Person Recovery Center, 1138 Summit Blvd., Bismarck • Bismarck Burleigh Public Health, 500 E. Front Ave., Bismarck • Custer Health, 403 Burlington St. SE, Mandan, ND • First Link, 4357 – 13th Ave. S., Bismarck • Teen Challenge, 1406 -2nd St. NW, Mandan • Hope Manor, PO Box 1301, Bismarck • Bismarck-Mandan Face it Together, no physical address) Obesity resources: • Bismarck Parks & Recreation, 400 E. Front Ave., Bismarck • Mandan Parks & Recreation, 2600 – 46th Ave. SE, Mandan • Capitol Ice Complex, 221 E. Reno Ave., Bismarck • Cops & Kids Fishing Program, 221 N. 5th St., Bismarck • MHA Nation, 404 Frontage Rd., New Town, ND • Native American Development Center, 205 N. 24th St., Bismarck • Aquastorm Swim Team, 1601 Canary Ave., Bismarck • Bis-Man Tennis Association, PO Box 1984, Bismarck • Bismarck Midget Football, Bismarckyouthfootball@gmai.com • Bismarck Soccer League, 919 S. 7th St., Bismarck • Fast Pitch Softball, PO Box 891, Bismarck • BLAST Program, 400 E. Front Ave., Bismarck • Bobcats Youth Hockey, 1200 N. Washington St., Bismarck • Boy Scouts, 1929 N. Washington St., Bismarck • Girl Scouts, 735 Airport Rd., Bismarck • Charles Hall Youth Services, 513 E. Bismarck Expressway, Bismarck • Dakota United Soccer Club, 919 S. 7th St., Bismarck • Great Plains Track & Field, 400 E. Front Ave., Bismarck • YMCA, 1608 N. Washington St., Bismarck

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
				• VFW Sports Center, 1200 N. Wash. St., Bismarck • Legion Skating Rink, S. Wash. St., Bismarck • Tatley Skating Rink, Airport Rd & Michigan Ave., Bismarck Resources for at-risk youth: • Dakota Boys & Girls Ranch, 1227 N. 35th St., Bismarck • Dakota Family Services, 1227 N. 35th St., Bismarck • Dakota Zoo, 600 Riverside Park Rd., Bismarck • Gateway to Science, 1810 Schafer St., Bismarck • Girl Scouts, 735 Airport Rd., Bismarck • Boy Scouts, 1929 N. Wash. St., Bismarck • Head Start, 720 N. 14th St., Bismarck • Mountain Plains Youth Services, 225 W. Rosser Ave., Bismarck • Open Door Community Center, 1140 S. 12th St., Bismarck • Youthworks, 217 W. Rosser Ave., Bismarck • Bismarck Police Youth Bureau, 221 N. 5th St., Bismarck • Carrie's Kids, 1223 S. 12th, Bismarck
Aging Population	Cost of LTC 4.07 Cost of memory care 4.05 Cost of in-home services 3.69			Resources for the Aging Population: • AARP, 107 W Main Ave. #125, Bismarck, ND • Burleigh Co. Social Services, 415 E. Rosser Ave., Bismarck • Good Samaritan Home Care, 309 N. Mandan St., Bismarck • Gracefully Aging, 1200 Missouri Ave., Bismarck • Long Term Care Association, 1900 N. 11th St., Bismarck • Lutheran Social Services, 1616 Capitol Way, Bismarck • Sanford Home Care, 910 – 18th St. NW, Mandan • Meals on Wheels, 721 Ave. A., Bismarck • Spectrum Home Care, 1006 E. Central Ave., Bismarck • Visiting Angels, 1102 S. Wash St., Bismarck • Support Systems, Inc., 1929 N. Wash. St., Bismarck • Missouri Slope Care Center, 2425 Hillview Ave., Bismarck • Enable, 1836 Raven Dr., Bismarck • Volunteer Caregiver Exchange, 600 S. 2nd St., Bismarck • Baptist Health Care Center, 3400 Nebraska Dr., Bismarck

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
				• Brandon Hts. Village, 580 Brandon Pl., Bismarck • Crescent Manor, 410 S. 2nd St., Bismarck • Edgewood Vista, 3124 Colorado LN, Bismarck & 3406 Dominion St., Bismarck • Good Samaritan Society, 309 N. Mandan St., Bismarck & 301 Lorrain Dr., Bismarck • Maple View East, 2625 N. 19th St., Bismarck • Maple View North, 4217 Montreal St., Bismarck • Marillac Manor, 1016 N. 28th St., Bismarck • Patterson Place, 420 E. Main Ave., Bismarck • Primrose Retirement Community, 1144 College Dr., Bismarck • St. Vincent's Care Center, 1021 N. 26th St., Bismarck • St. Gabriel's Community, 4580 Coleman St., Bismarck • The Terrace, 901 E. Bowen Ave., Bismarck • Touchmark, 1000 W. Century Ave., Bismarck • Valley View Heights, 2500 Valleyview Ave., Bismarck • BBPH Home Health Program, 500 E. Front Ave., Bismarck • CHI St Alexius Palliative Care, 310 N. 9th St., Bismarck • Custer Health, 403 Burlington St. SE, Mandan • Alzheimer's Assn., 406 W. Main St., Mandan • Vulnerable Adults Aging Services, 600 E. Blvd. Ave., Bismarck • Vulnerable Adult Protective Service, 1237 W. Divide Ave., Bismarck • Protection & Advocacy, 400 E. Bdwy. Ave., Bismarck • AID Inc. (transportation), 314 W. Main St., Mandan • Capital Area Transit (transport.), 3750 E. Rosser Ave., Bismarck
Safety	Abuse of prescription drugs 4.27 Culture of excessive and binge drinking 3.74 Domestic violence 3.71 Presence of street drugs 3.71	26% report having drugs in their home that are not being used	Alcohol impaired driving deaths 332% in Burleigh and 61% in Morton	Abuse of Prescription Drugs/Binge Drinking/Street Drugs resources: • Bismarck Police Dept., 700 S. 9th St., Bismarck • Mandan Policy Dept., 205 – 1st Ave. NW, Mandan Domestic Violence resources: • Abused Adult Resource Center/Pam's House, 218 W. Broadway Ave., Bismarck • Ruth Meier's Hospitality House, 1100 E. Blvd. Ave., Bismarck

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
	Child abuse and neglect 3.64 Sex trafficking 3.63 Criminal activity 3.50			• Vulnerable Adults Aging Services, 600 E. Blvd. Ave., Bismarck • Vulnerable Adult Protective Service, 1237 W. Divide Ave., Bismarck • Protection & Advocacy, 400 E. Bdwy. Ave., Bismarck • Welcome House, 1912 E. Thayer Ave., Bismarcksoup Criminal Activity resources: • Bismarck Police Dept., 700 S. 9th St., Bismarck • Mandan Policy Dept., 205 – 1st Ave. NW, Mandan Child Abuse/Neglect resources: • West Central Human Service Center, 1237 W. Divide Ave., Bismarck • Bismarck Police Dept., 700 S. 9th St., Bismarck • Mandan Policy Dept., 205 – 1st Ave. NW, Mandan • God's Child Project, 721 Memorial Highway, Bismarck Sex Trafficking resources: • Sanford Victims of Sexual Abuse, 300 N. 7th St., Bismarck • CHI St. Alexius SANE, 900 E. Bdwy. Ave., Bismarck
Healthcare Access	Availability of mental health providers 4.27 Availability of behavioral health 4.23 Access to affordable prescription drugs 3.67 Access to affordable healthcare 3.66 Access to affordable health insurance coverage 3.65 Coordination of care between providers and services 3.64	41% report healthcare costs as the most important community issue 19% report health care access as the most important community issue		Mental Health/Behavioral Health resources: • Burleigh Co. Social Services, 415 E. Rosser Ave., Bismarck • Dakota Boys & Girls Ranch, 1227 N. 35th St., Bismarck • CHI St. Alexius EAP, 1310 E. Main Ave., Bismarck • Mental Health Assn., 523 N. 4th St., Bismarck • Partnerships Program (W Central Health Services Center), 1237 W. Divide Ave., Bismarck • Pride, Inc., 1200 Missouri Ave., Bismarck • Sanford Health providers, 300 N. 7th St., Bismarck • CHI St. Alexius providers, 900 E. Broadway, Bismarck • The Village, 107 W. Main Ave., Bismarck • West Central Human Service Center, 1237 W. Divide Ave., Bismarck • Veterans Administration, 2700 State St., Bismarck • Northland Community Health Center Bismarck 914 S. 12th St. Suite 101 Bismarck 58504

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
	Availability of non-traditional hours 3.56			Affordable Prescription Drugs resources: • Prescription Connection, 1701 S. 12th St., Bismarck • ND RX Card, NorthDakotaRXCard.com • ND Prescription Drug Repository Program, 1906 E. Broadway Ave., Bismarck • Needy Meds, NeedyMeds.org • Partnership for Prescription Assistance, PPARX.org • ND Assn. for the Disabled, 1014 S. 12th St., Bismarck Affordable Healthcare resources: • Northland Community Health Center Bismarck 914 S 12th St. Suite 101 Bismarck, ND 58504 • Medicaid, 600 E. Blvd. Ave., Bismarck • Sanford Patient Navigators, 300 N. 7th St., Bismarck • Custer Family Planning, 701 E. Rosser Ave., Bismarck • Joanne's Clinic, 1800 E. Bdwy. Ave., Bismarck • UND Ctr. for Family Medicine, 701 E. Rosser Ave., Bismarck • First Choice Clinic, 1120 College Dr., Bismarck • Blue Cross Member Advocate Program, 1-800-342-4718 • Caring for Children, 600 E. Blvd. Ave., Bismarck • Sanford's Community Care Program, 300 N. 7th St., Bismarck • CHI St. Alexius' Community Care Program, 900 E. Bdwy, Bismarck • Sanford's Medical Home Program, 300 N. 7th St., Bismarck • Mid Dakota Clinic Medical Home Program, 9th & Rosser, Bismarck • Sanford Case Managers/Social Workers/Parish Nurses, 300 N, 7th St., Bismarck • CHI St. Alexius Case Management/ Social Workers, 900 E. Broadway, Bismarck • Bridging the Dental Gap, 1223 S. 12th St., Bismarck • Ronald McDonald Mobile Clinic, 609 N. 7th St., Bismarck • Bismarck-Burleigh Public Health, 500 E. Front Ave., Bismarck • Custer Health, 403 Burlington St. SE, Mandan • Aid, Inc., 314 W. Main St., Mandan • Burleigh Co. Senior Adults, 315 N. 20th St., Bismarck

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
				• Burleigh Veterans Services, 221 N. 5th St., Bismarck • Prescription Connection, 1701 S. 12th St., Bismarck • Salvation Army, 601 S. Wash. St., Bismarck • United Tribes Technical College, 3315 University Dr., Bismarck • Jerene's Wish/Warford Orthodontics, 1145 W. Turnpike Ave., Bismarck • ND Assn. for the Disabled, 1014 S. 12th St., Bismarck • Experience Health ND (ND Dept. of Health), 600 E. Blvd. Ave., Bismarck Affordable Insurance Coverage resources: • ND Department of Insurance, 600 E. Blvd. Ave., Bismarck • Medicaid – Burleigh Co. Human Services, 415 E. Rosser Ave., Bismarck • Homeless Coalition, 1684 Capitol Way, Bismarck • Prime Care Select, 900 E. Bdwy. Ave., Bismarck • Bridging the Dental Gap, 1223 S. 12th St., Bismarck Availability of Non-Traditional Hours resources:
Wellness		Only 44% report getting 5 or more fruits and vegetable per day 30% self-reported overweight 38% self-report obese level 52% self-report getting moderate activity 3 or more times/week 26% report high cholesterol 22% report hypertension 19% report asthma 17% report arthritis 11% report diabetes	Adult obesity 29% Burleigh, 33% Morton	Sanford Health Dietitians 300 N 7th St Bismarck CHI St. Alexius Dietitians 900 E Broadway Bismarck Sanford Wellness Center Exercise Physiologist/specialists Sanford Health Providers 300 N 7th St. Bismarck CHI St Alexius providers 900 E Broadway Bismarck

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
		26% have not seen a doctor or healthcare provider in the past year 37% have not had a flu shot in the past year 27% have not seen a dentist within the past year		
Mental Health and Substance abuse	Drug use and abuse 4.53 Alcohol use and abuse 4.19 Depression 3.90 Suicide 3.89 Dementia and Alzheimer's Disease 3.63	49% report anxiety and stress 42% report depression 13% report panic attacks 18% report currently using tobacco 21% report exposure to second hand smoke in their home 18% currently smoke cigarettes 42% report binge drinking at least once per month 26% report having drugs in their home that they are not using	Adult smoking 16% Burleigh, 17% Morton 22% excessive drinking ion Burleigh and 23% in Morton	Drug / Alcohol Abuse resources: • Ideal Option 549 Airport Road Bismarck • ACS Crisis Residential, 3230 E. Thayer Ave., Bismarck • ADAPT, Inc., 1720 Burnt Boat Dr., Bismarck • Alcoholics Anonymous, 232-9930 (many locations to choose from) • Heartview Foundation, 101 E. Broadway Ave., Bismarck • Lutheran Social Services, I-94, Bismarck • New Freedom Center, 905 E. Interstate Ave., Bismarck • Pathways to Freedom, 418 E. Rosser Ave., Bismarck • Sanford Health Behavioral Health, 414 N. 7th St., Bismarck • CHI St. Alexius, 900 E. Broadway Ave., Bismarck • Village Family Services, 107 W. Main Ave., Bismarck • West Central CD Program, 1237 W. Divide Ave., Bismarck • Whole Person Recovery Center, 1138 Summit Blvd., Bismarck • Bismarck Burleigh Public Health, 500 E. Front Ave., Bismarck • Custer Health, 403 Burlington St. SE, Mandan • First Link, 4357 – 13th Ave. S., Bismarck • Teen Challenge, 1406 -2nd St. NW, Mandan • Hope Manor, PO Box 1301, Bismarck • Bismarck-Mandan Face it Together, no physical address Mental Health resources: • Burleigh Co. Social Services, 415 E. Rosser Ave., Bismarck • Dakota Boys & Girls Ranch, 1227 N. 35th St., Bismarck • CHI St. Alexius EAP, 1310 E. Main Ave., Bismarck

Identified concern	Key stakeholder survey	Resident survey	Secondary data	Community resources available to address the need
				• Mental Health Assn., 523 N. 4th St., Bismarck • Partnerships Program (W Central Health Services Center), 1237 W. Divide Ave., Bismarck • Pride, Inc., 1200 Missouri Ave., Bismarck • Sanford Health providers, 300 N. 7th St., Bismarck • CHI St. Alexius providers, 900 E. Broadway, Bismarck • The Village, 107 W. Main Ave., Bismarck • West Central Human Service Center, 1237 W. Divide Ave., Bismarck • Veterans Administration, 2700 State St., Bismarck Dementia/Alzheimer's resources: • Alzheimer's Assn., 406 W. Main St., Mandan