Polk-Norman-Mahnomen Community Health Services

2022-2024 COMMUNITY HEALTH ASSESSMENT

Last Updated: 2025-02-07

POLK NORMAN MAHNOMEN
community health services

FOR IMPLEMENTATION IN 2025-2029

TOGETHER WE CAN *Prevent. Promote. Protect.*

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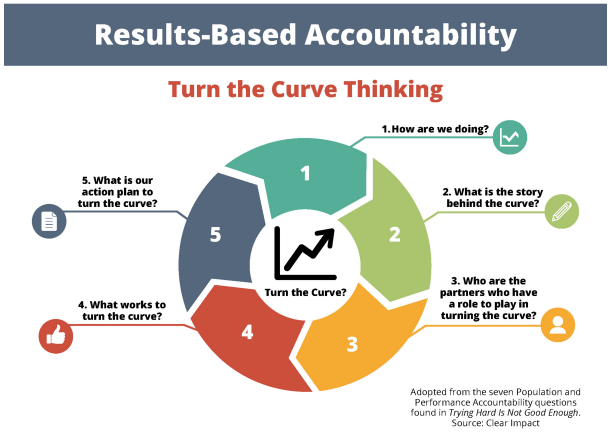
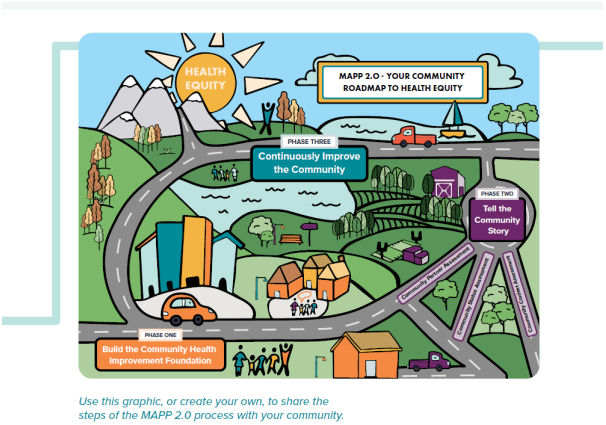
Introduction

The Polk-Norman-Mahnomen Community Health Board (PNM CHB), governed by seven-members, is a multi-county community health services (CHS) entity responsible to provide local governmental public health services. Through delegation and sharing agreements, all powers and duties are delegated to the two-member health departments, Polk County Public Health and Norman-Mahnomen Public Health. We are pleased to present the 2022-2024 Community Health Assessment (CHA) to better understand health issues facing the communities of Polk, Norman and Mahnomen Counties.

The Community Health Assessment provides a quantitative and qualitative data snapshot of the factors that impact health of the people living in the communities which the PNM CHB serves. Over the past two years, together with community partners, we have collaboratively supported partner Community Health Needs Assessments and Community Needs Assessments, while collecting and prioritizing data from local, state and national sources as well as input from public health surveys and conversations with community members who have knowledge or expertise in public health and/or are experience health inequities. PNM CHS followed a modified version of the Community Health Improvement Framework "Mobilizing Action for Planning and Partnership" (MAPP) to gather information and develop a Community Health Assessment (CHA) revealing the most pressing health needs across the service area. The data collected was limited by the availability of county-level data, community input, survey responses, and time. Through this framework, a structured, focused discussion through consideration of data, participant's reaction and responses, possible solutions and agreed future strategies was utilized among community health partners. Findings from the CHA are used to identify, develop, and target strategies to improve health challenges in the community. Facilitated by public health leaders and strategists, this framework, paired with Results Based Accountability, helps communities apply strategic thinking to prioritize public health issues and identify community driven solutions and resources for collective action. The Community Health Assessment is intended to be a living document which will be updated as additional data becomes available. We encourage the use of this assessment as a starting place for understanding the health of our communities, working to increase health and wellbeing, and planning for the future.





Use this graphic, or create your own, to share the steps of the MAPP 2.0 process with your community.

Thank you to the individuals, organization, and partners who have been involved throughout the health assessment and planning process. A special thank you to Patrick Olson, Data Analyst, for assisting PNM CHS with gathering data from a variety of state and national sources in the development of a more comprehensive Community Health Assessment to meet public health accreditation standards and measures, Assessment and Surveillance Foundational Public Health capability and inform meaningful local action.

Thank you to the community members and partners of Polk, Norman and Mahnomen Counties for participating in the community health surveys and conversations.

We welcome your continued feedback and engagement. Comments or questions regarding this report can be directed to: Sarah Reese, Polk-Norman-Mahnomen CHS Administrator at 218-281-3385.

Understanding Our CHA

Rationale Behind Our Choices

In today's world, we can easily experience information overload. The Census Bureau alone provides millions of data points available for public use. If we use all the available Census Bureau data, our Community Health Assessment (CHA) would not be meaningful because we would be overwhelmed with data. Additionally, relying solely on one data source like the Census Bureau would cause us to miss important details provided by other high-quality sources.

The art of data involves reducing noise (achieving consistency or understanding the reasons for inconsistencies among different data sources). By reducing noise, we can better identify high-quality sources that provide the essential components for a comprehensive CHA. We aimed to select outcomes of interest that provide trend data (evaluated over multiple years) to track our historical performance and improvements in key areas. However, some outcomes are only shown for one year because they may be projected outcomes (based on statistical models) or the outcome definition changed over time, making it inappropriate/unreliable to display them over multiple years.

We used the most up-to-date publicly available data for the following reasons:

- **Reproducibility**: While some data for our CHA required a data request, most of the report relies on publicly available data. This allows other community health boards and researchers to reproduce our work if they wish, aiding in fact-checking.
- **Transparency**: Using publicly available data allows us to be as transparent as possible.
- **Efficiency**: By using publicly available data, we can save time and resources for our federal and state data stewards.

An important note for our CHA is that, due to the small populations in our three counties, we can't always examine multiple factors at the same time. We know that health is affected by many things, but we don't always have detailed information or enough people to break down the data in many ways. For example, if we wanted to study lung cancer and compare it between men and women, we might not have enough data to do this accurately because there aren't enough people. While we might have enough data to look at rates of lung cancer for each county, we might not be able to analyze lung cancer rates by birth sex.

Public Health NW8 Hub

The Public Health NW8 Hub is a collective consortium between the CHBs of Quin and Polk-Norman-Mahnomen, working towards intergovernmental agreements to test an innovative shared service delivery model, a regional "Hub". The regional Hub provides coordinated foundational public health capability resources to consortium members where content expertise would lend support to regional efforts and local organizational professionals. The Data Analyst gathered secondary quantitative data obtained from national, state and local data sources. Data sources included, but were not limited to, the U.S. Census, Centers for Disease and Control Prevention (CDC), the Behavioral Risk Factor Survey (BRFSS), the Minnesota Student Survey and County Health Rankings. Local data obtained came from partners, such as healthcare and community action agency assessments and reports. Community health assessment data was utilized by Public Health to identify 50 community health issues. Community partners then were asked to select 1) what they considered to be the top ten issues currently impacting the community's health; 2) how they defined community; and 3) an example or story of an asset, resource or service in community that supports health and well-being in a survey emailed out by Public Health staff.

Top 10 Priority Health Issues:

1. Poverty
2. Access to mental health care
3. Mental health & well-being
4. Drug use/misuse & addiction
5. Chronic stress, anxiety and/or depression
6. Access to dental care
7. Employment & livable wages
8. Transportation options -multimodal
9. Access to affordable foods
10. Alcohol use/misuse and addiction

Data Interpretation

When looking at data, it's easy to assume one event causes another. For example, a rooster crowing doesn't cause the sun to rise; they're just associated. This is similar to health risk factors and medical conditions. Just because two things happen together doesn't mean one causes the other.

In health, many factors can influence conditions. For example, high rates of a health condition don't mean one specific factor is the cause. It could be due to a combination of lifestyle, environment, and genetics. By assessing how we are doing regarding multiple risk factors as well as the condition on interest, we can gain a comprehensive understanding and make better health decisions for our community.

Just like the rooster and the sun, health risk factors might be associated with certain conditions, but they don't necessarily cause them directly. Recognizing these associations helps us develop more effective health strategies with our communities. By examining our community's health from quanitative and qualitative data sources, we can understand the factors and stand behind the data elaborate, identify opportunities, and strategies that are locally relevant. The following terms help in navigating and understanding the report more effectively.

Data Terms/Definitions

Count

- A count represents the value of an observation. Counts are useful for assessing the economic impact of a community and determining if statistical analysis is reliable. According to (Centers for Disease Control and Prevention 2024c), counts less than 16 are considered unstable, meaning the results should be interpreted with caution. However, counts below 16 are still important because they provide us with a sense of how a community is currently doing. Counts shouldn't be compared among different communities, but they can be used to assess the community.

Proportion

- A proportion is a type of ratio that compares a part to the whole. It is expressed as a fraction or percentage and helps us understand the relative size of a subset within a larger population. For example, if 20 out of 100 people in a community have a certain health condition, the proportion is 20%.

Crude vs. Age-Adjusted Prevalence

- Crude Prevalence: Shows the overall condition in the general population but can be misleading if age distribution varies between communities. For example, an aging population may have a higher crude prevalence of heart disease simply because older adults can be more prone to this condition.
- Age-Adjusted Prevalence: Use this for comparing different communities as it accounts for age differences. It's like comparing apples to apples instead of apples to oranges. By adjusting for age, we ensure a fair comparison between communities.

Importance of Age-Adjusted Prevalence

Age-adjusted prevalence allows fair comparisons by considering age differences in populations.

Confidence Intervals (CI)

CIs can be interpreted in two main ways.

1. When looking at only one community. If a community had a CI of 5%-8%, this would mean we are 95% sure that the true number is as low as 5% and as high as 8% or somewhere in between.
2. When comparing two communities.

- If a community has a CI of 5%-8% and another community has a CI of 6%-9% for the same topic, these two communities are similar, and we cannot say one is definitely higher or lower than the other because the values overlap (6% falls between 5%-8%)

- If a community has a CI of 5%-8% and another community has a CI of 10%-15%, these two communities would be significantly different because the values don't overlap (5%-8% and 10%-15%) so we can say with 95% confidence that these values are different.

CHA Layout

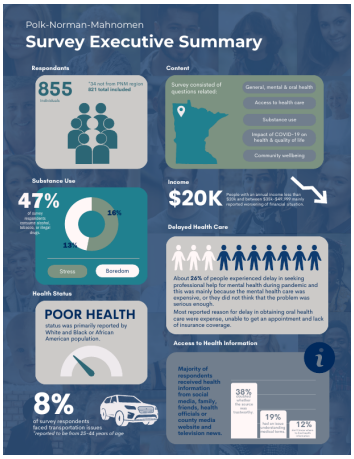
The CHA is organized into several sections: (**Introduction, Understanding Our CHA, Local Input, Demographics, Factors Influencing Health, Health Status, Health Behaviors, Health Conditions, Mental Health, Environmental Health References, and Together We Can Build A Better Future**)

Local Assessments

Polk-Norman-Mahnomen Community Health Survey (2022)

Polk-Norman-Mahnomen Community Health Services (CHS) conducted a survey consisting of questions related to general, mental, oral health, access to health care, impact of COVID-19 on health and quality of life, substance use and community wellbeing. The survey was completed by 855 adult individuals. Out of the 855 survey responses, 821 were included in the analysis as the remaining 34 respondents were not from the PNM region. Please see the summary below.

- "Poor" health status was primarily reported by White and Black or African American population.
- About 26% of people experienced delay in seeking professional help for mental health during the pandemic and this was mainly because the mental health care was expensive, or they did not think that the problem was serious enough.
- Most reported reason for delay in obtaining oral health care were expense, unable to get an appointment and lack of insurance coverage.
- 47% of survey respondents consume alcohol, tobacco, or illegal drugs. Stress (16%) and boredom (13%) are the primary reason for the increase in substance use since March 2020.
- Majority of respondents received health information from social media, family, friends, health officials or county media website and television news. However, about 37.63% doubted whether the source was trustworthy. 19% of people also had issue with understanding medical terms and about 12% did not know where to find health information.
- People with an annual income less than $20,000 and between $35,000-$49,999 mainly reported worsening of financial situation.
- About 8% of survey respondents faced transportation issues and they reported to be from 25-44 years of age.



Community Heath Needs Assessment & Community Needs Assessments Partner Inventory (2024)

This is an accumulation of most recent Community Health Needs Assessments (healthcare partners) and Community Needs Assessments (Community Action agencies) of our partners. It is not intended to be all encompassing; partners continue to have current and emerging priorities in response to the needs of community.

CHNA & CNA Partner Inventory

This document is an accumulation of most recent Community Health Needs Assessments *(healthcare partners)* and Community Needs Assessments *(Community Action agencies)* of our partners. It is not intended to be all encompassing; partners continue to have current and emerging priorities in response to the needs of community. *Links to full assessments are provided.*

	Mental Health & Wellbeing	Substance Use	Childcare	Housing	Poverty	Education	Transportation	Employment/Workforce	Food & Hunger	Obesity	Access to Care	Aging
Alluma	x	x		x	x	x	x	x	x		x	x
Altru Health	x	x	x					x		x	x	
Essentia Health Ada	x							x				
Essentia Health Fosston	x									x		
Inter-County Community Council			x	x			x	x			x	
MAHUBE-OTWA			x	x			x	x	x			x
Riverview Health	x	x								x		
Sanford Health	x										x	
Tri-Valley Opportunity Council			x	x	x		x	x				x
White Earth Nation Tribal Public Health	x	x		x		x			x			
PNM Public Health	x	x			x						x	

Polk-Norman-Mahnomen (CHS) Risk Assessment (2024)

The Polk-Norman-Mahnomen (PNM) Public Health Risk Assessment (2024) was conducted to identify and prioritize the most significant public health threats facing Polk, Norman, and Mahnomen Counties. The purpose of this assessment is to guide health and emergency response efforts, ensuring communities are better prepared for future hazards. The assessment combined quantitative data from a variety of sources, with qualitative insights gathered from stakeholder surveys and facilitated discussions. This dual approach ensures that both data and frontline perspectives inform public health strategies to strengthen resilience. Partners - The assessment was made possible through the collaboration of key stakeholders, including healthcare providers, long-term care facilities, behavioral health organizations, county and city emergency services, and emergency managers. Their expertise provided critical insights into the diverse challenges impacting the region.

Top 5 Public Health Hazards - Based on the survey results and facilitated discussions, the top five public health threats identified for Polk, Norman, and Mahnomen Counties are:

1. Critical Healthcare Staff Shortage – This hazard poses a significant challenge to the availability and delivery of healthcare services, especially in rural areas.
2. Behavioral Health Crisis (including Anxiety and Depression) – Rising rates of mental health issues require expanded resources to meet increasing demand.
3. Substance Abuse – Opioid and alcohol misuse continues to be a critical concern, with gaps in current resources and treatment options.
4. Ice Storm/Blizzard (including Extreme Cold) – Severe winter weather presents ongoing risks to infrastructure, transportation, and public safety.
5. Cyber Threats – Increasing cyberattacks on healthcare and public systems demand stronger cybersecurity measures to protect critical infrastructure.

Minnesota Student Survey

The Minnesota Student Survey (MSS) is an important source of information about the health, wellbeing, safety, and academic success of Minnesota's youth. The anonymous and confidential statewide school-based survey is administered every three years to students in grades 5, 8, 9 and 11. The survey includes questions about a wide variety of youth behaviors, including risk behaviors such as physical activity, nutrition, alcohol, tobacco and other drug use, mental health, school safety, relationships

and sexual activity, as well as positive behaviors and connection to family, school and community. Most Minnesota school districts actively participate in the MSS. While some schools or certain grades in Polk, Norman, and Mahnomen Counties were not involved in the 2022 MSS, many others contributed to its success. We encourage and invite all schools in Polk, Norman, and Mahnomen Counties to participate in the upcoming 2025 MSS. The survey results help bring the voices of young people into decisions about policy, programming, and services for our students.

Demographics

The state of Minnesota has a total land area of 79,631.54 per square (sq) mile. Polk-Norman-Mahnomen CHS area covers 3,401.65 sq miles, with Polk county having the largest land area (1,971.00 sq miles) followed by Norman county (872.79 sq miles) and Mahnomen county (557.87 sq miles) (Centers for Disease Control and Prevention/ Agency for Toxic Substances and Disease Registry/ Geospatial Research, Analysis, and Services Program 2022).

Minnesota has an average of 71.5 people living in each sq mile. In comparison, the Polk-Norman-Mahnomen CHS area has only 12.6 people per sq mile. Breaking it down further:

- Polk has 15.8 people per sq mile
- Norman has 7.4 people per sq mile
- Mahnomen has 9.7 people per sq mile

This means that in these three counties, people are much more spread out compared to the state average. The population density, or the number of people per sq mile, helps us understand how rural an area might be, although it is not the only factor. As shown on the following maps, Polk County has three Census Tracts that prevent it from being entirely rural.

Figure 1: Please click on either map above for the detailed rural report.

Population Size

The population of individuals age 65 and older is expected to grow over the next 10 years. This shifting demographic may result in shortages related to workforce, long term care housing, and supportive services.

The state of Minnesota had a population of 5,706,494 people. Polk-Norman-Mahnomen CHS had a total residential population of 43,044. This makes up 0.75% of Minnesota's population (43,044/5,706,494) (U.S. Census Bureau 2020b).

- Polk county is the largest of the three counties, with a population of 31,192 residents. This represents 72.47% of the total population (31,192 out of 43,044) for the Polk-Norman-Mahnomen CHS area. In relation to the state of Minnesota, Polk county accounts for 0.55% of the population (31,192 out of 5,706,494) (U.S. Census Bureau 2020b).
- Norman county has 6,441 residents, making up 14.96% (6,441 out of 43,044) of the Polk-Norman-Mahnomen CHS area (U.S. Census Bureau 2020b).
- Mahnomen county is the smallest, with a population of 5,411 residents. This is 12.57% (5,411 out of 43,044) of the Polk-Norman-Mahnomen CHS area, and 0.09% of the state population (5,411 out of 5,706,494) (U.S. Census Bureau 2020b).

Age Distribution

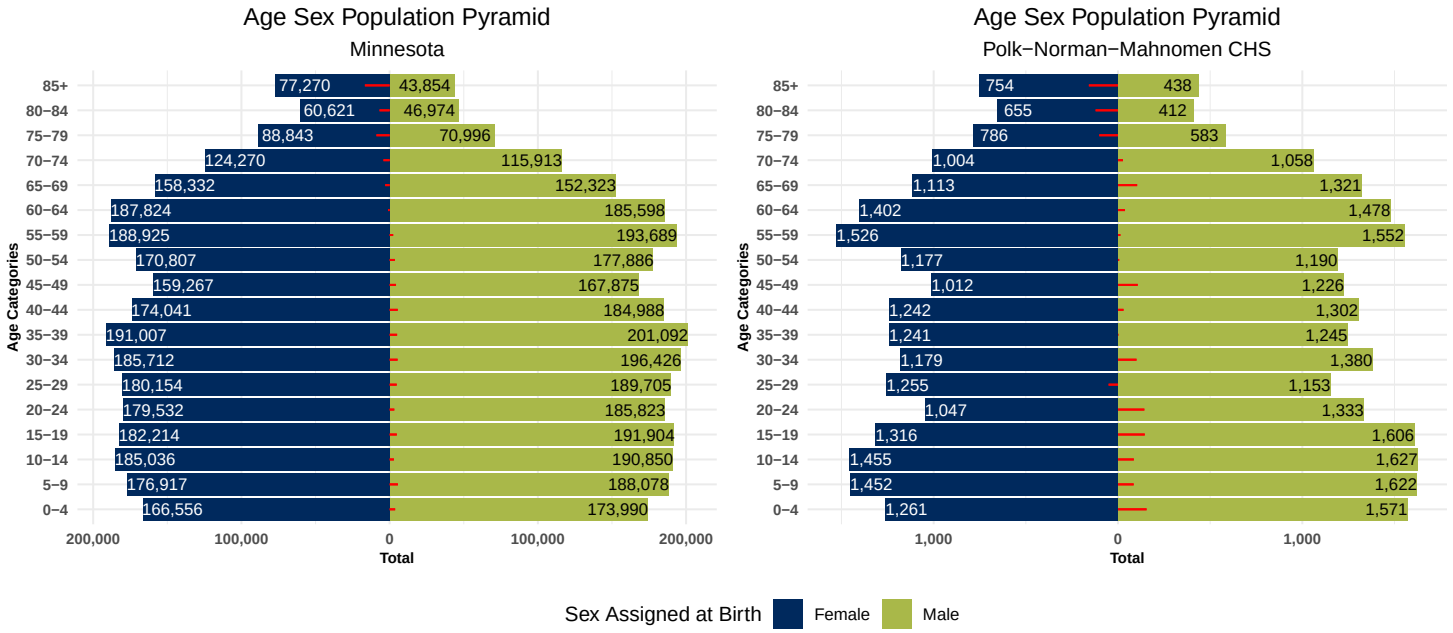
According to the (U.S. Census Bureau 2022), the median ages for the counties are:

- Polk County: 39.3 years
- Norman County: 43.7 years
- Mahnomen County: 35.1 years

For the state of Minnesota, the median age was 38.5 years, and the combined median age for Polk-Norman-Mahnomen CHS area was 39.4 years, though this figure should be interpreted with caution as it wasn't calculated from the raw data. Median age is used instead of the average age because it gives a clearer picture of the community's age. The median age is the middle point, so it isn't thrown off by very young or very old people. This way, we get a better idea of the typical age in the community. Mahnomen County has a younger population compared to Minnesota while Polk and Norman County have older populations compared to Minnesota with Polk county being the closest in age.

Sex Distribution

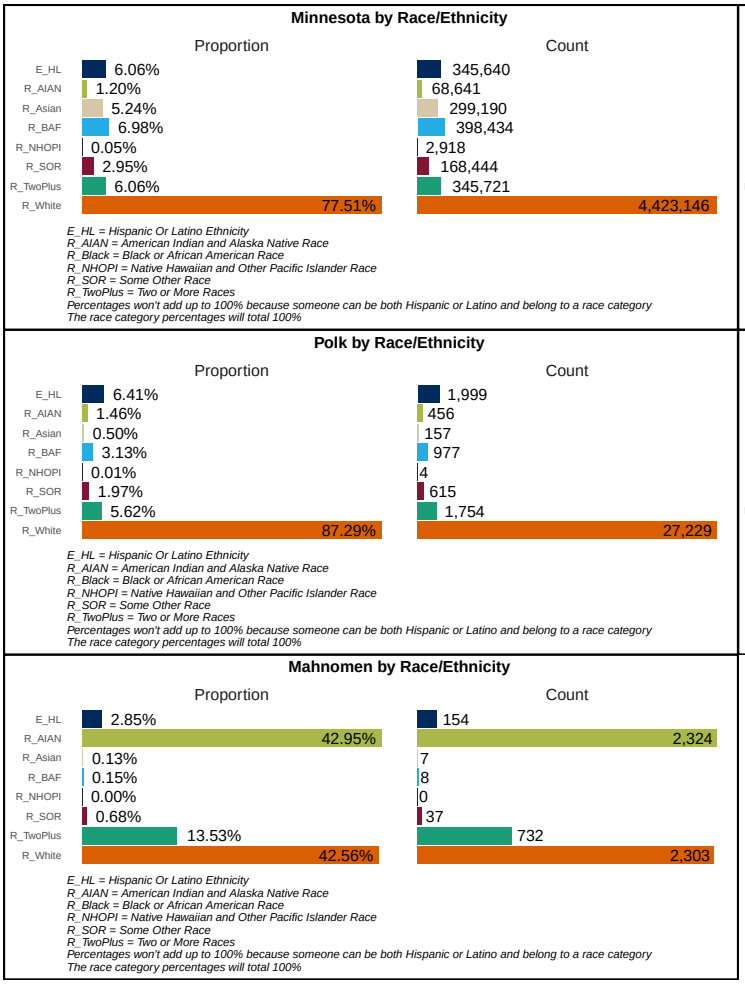
The Age Sex Population Pyramids below illustrate a generally balanced distribution of males and females across most age groups. You can determine the balance by examining the horizontal solid black midpoint line: a longer line indicates a greater difference between the male and female populations within that age group. The Age Sex Population Pyramids are based on the (U.S. Census Bureau 2022) estimates. While there is a lot to examine, comparing Minnesota to the Polk-Norman-Mahnomen CHS area reveals that the midpoint line is similar, except for the age groups 25-29, 65-69, and 70-74.

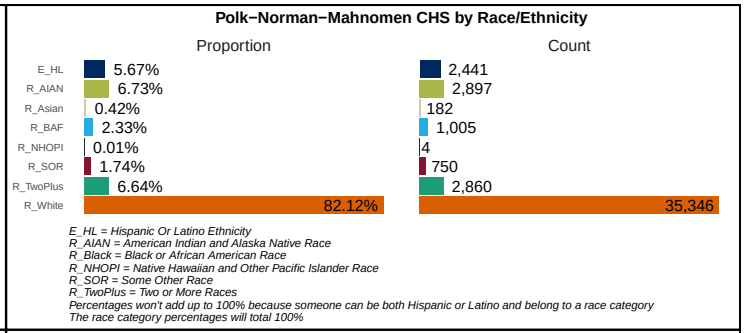


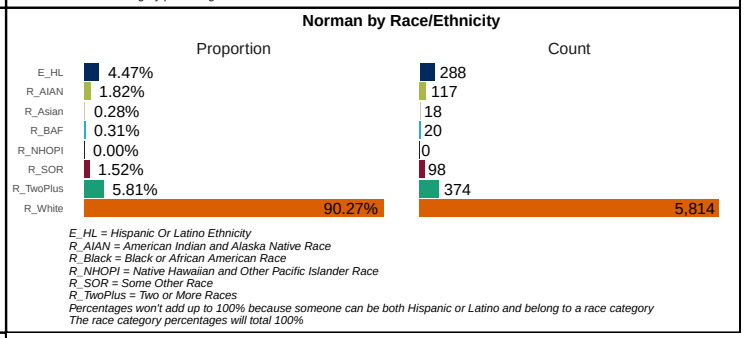
Race/Ethnicity

Based on the (U.S. Census Bureau 2020b) data, the White population represents the highest percentage in both Minnesota and the Polk-Norman-Mahnomen CHS area. Polk-Norman-Mahnomen CHS has a higher percentage of American Indian and Alaska Native residents, with Mahnomen County having the highest percentage among the three counties. The White Earth Nation contains 829,440 acres and encompasses all of Mahnomen County and portions of Becker, and Clearwater Counties. It's important to compare proportions rather than counts because proportions provide a relative measure that accounts for population size differences; Mahnomen County has more than double the percentage of residents identifying as Two or More Races compared to the state of Minnesota. The Black or African American and Asian population percentages are higher in Minnesota overall than the Polk-Norman-Mahnomen CHS. Additionally, Polk and Norman counties have similar racial demographic profiles.

When looking at ethnicity data from the (U.S. Census Bureau 2020a), Polk County has a slightly higher Latino/Hispanic population compared to Minnesota overall, whereas Norman and Mahnomen counties have lower percentages of Latino/Hispanic residents.







County Demographic Profiles (More information)

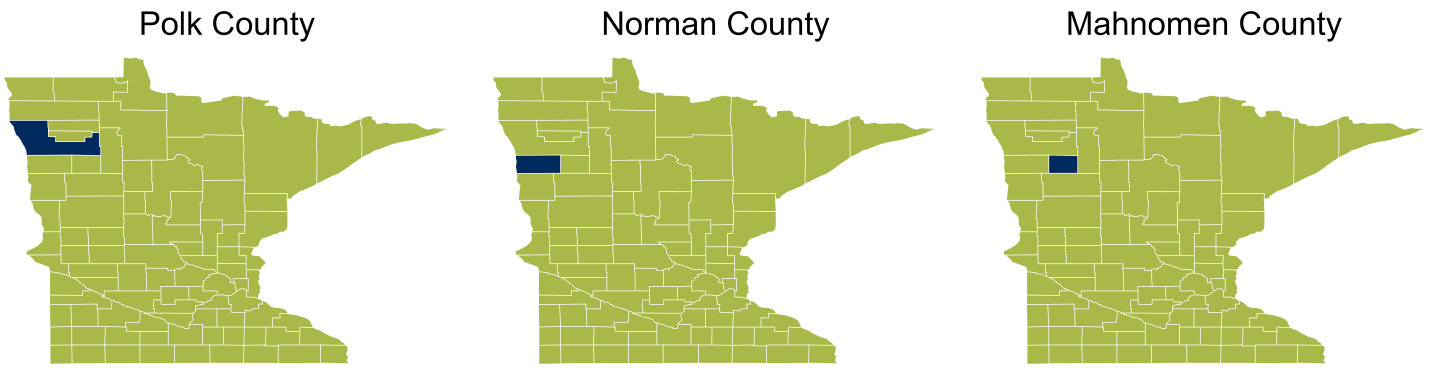


Figure 2: Please click on the corresponding map above for more detailed demographic information.

Factors Influencing Health

Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves requires hard work and smart lifestyle choices. Health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. These factors influencing health are also called the social determinants of health. The conditions in which we live explain in part why some individuals are healthier. Factors influencing our health have a major impact on people's health, well-being, and quality of life. The importance of all community members having equal opportunity to make choices that lead them to good health.

Social Vulnerability Index (SVI)

Social Vulnerability is the potential negative effects on communities caused by external stresses on human health. Such stresses include natural or human-causes, disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss. The CDC Social Vulnerability Index (SVI) groups fifteen census-derived factors into four themes that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. The SVI scale is 0 to 1 with 1 being the highest vulnerability.

Healthy People 2030 Goal: Increase social and community support. Ideally partners can work towards having the services and supports available to be considered a low vulnerability area.

Polk County has several notable statistics regarding its population and housing. There are approximately 6,290 individuals below poverty line. Among occupied housing units with an annual income of less than $75,000, around 2,870 are considered cost-burdened, spending more than 30% on their income on housing costs. Additionally, an estimated 1,379 residents aged 25 and older do not have a high school diploma. Polk County has about 1,450 uninsured individuals within the total civilian noninstitutionalized population. There are approximately 5,823 residents aged 65 and older. Lastly, around 261 households have more people than rooms available.

Table 1: Polk County's SVI Scores

Category	Score
Overall SVI	0.8256
Socioeconomic Status	0.593
Household Characteristics	0.6395
Racial and Ethnic Minority Status	0.7442
Housing Type/Transportation	0.9651

Polk County Interpretation:

- High Housing Cost Burden: A significant portion of households with incomes under $75,000 are spending more than 30% on housing, indicating financial strain.
- Education and Insurance Gaps: A notable number of residents lack a high school diploma and health insurance, which can limit economic opportunities and access to healthcare.
- Aging Population: With a large number of residents aged 65 and older, there may be increased demand for healthcare and senior services.
- High SVI Scores: The high scores in Housing Type/Transportation and Racial and Ethnic Minority Status suggest challenges in housing stability and potential disparities affecting minority groups.

Norman County also presents several key statistics. There are approximately 1,145 individuals below the poverty line. Among occupied housing units with an annual income of less than $75,000, around 518 are considered cost-burdened, spending more than 30% on their income on housing costs. Additionally, an estimated 320 residents aged 25 and older do not have a high school diploma. NormanCounty also has about 394 uninsured individuals within the total civilian noninstitutionalized population. There are approximately 1,373 residents aged 65 and older. Lastly, around 45 households have more people than rooms available.

Table 2: Norman County's SVI Scores

Category	Score
Overall SVI	0.6395
Socioeconomic Status	0.7326
Household Characteristics	0.5
Racial and Ethnic Minority Status	0.5465
Housing Type/Transportation	0.5698

Norman County Interpretation:

- Moderate Vulnerabilities: The scores indicate moderate levels of socioeconomic and housing vulnerabilities.
- Education and Insurance Needs: Similar to Polk County, there are gaps in education and health insurance coverage.
- Aging Population: The presence of a significant elderly population highlights the need for age-related services and support.

Mahnomen County statistics are also noteworthy. There are approximately 1,897 individuals below the poverty line. Among occupied housing units with an annual income of less than $75,000, around 452 are considered cost-burdened, spending more than 30% on their income on housing costs. Additionally, an estimated423 residents aged 25 and older do not have a high school diploma. Mahnomen County also has about 733 uninsured individuals within the total civilian noninstitutionalized population. There are approximately 928 residents aged 65 and older. Lastly, around 90 households have more people than rooms available.

Table 3: Mahnomen County's SVI Scores

Category	Score
Overall SVI	0.9884
Socioeconomic Status	1
Household Characteristics	0.9535
Racial and Ethnic Minority Status	1
Housing Type/Transportation	0.8023

Mahnomen County Interpretation:

- High Vulnerability: The highest SVI scores across all categories indicate severe vulnerabilities, particularly in socioeconomic status and racial/ethnic minority status.
- Significant Education and Insurance Gaps: A high number of residents lack a high school diploma and health insurance, exacerbating economic and health challenges.
- Aging Population: The elderly population, combined with other vulnerabilities, suggests a need for comprehensive support services.

The SVI project is a great start at figuring out what areas to invest in related to socioeconomic factors (Centers for Disease Control and Prevention/ Agency for Toxic Substances and Disease Registry/ Geospatial Research, Analysis, and Services Program 2022). However, it is not the only area we looked at.

Education

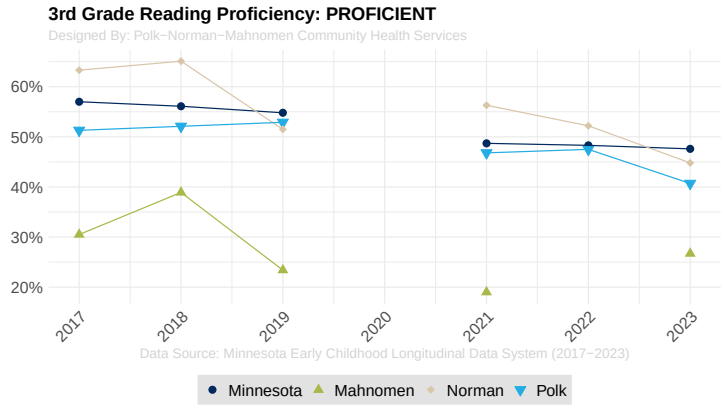
Education can be an important predictor of lifelong health. Graduating from high school is an important personal achievement and essential for an individual's social and economic advancement. Poverty may also increase the risk of developing chronic diseases, which can lead to an even lower income.

Healthy People 2030 Goal: Increase educational opportunities and help children and adolescents do well in school. Higher educational attainment is associated with; higher incomes, better employment options, increased social supports, and greater opportunities for healthier choices, all factors that can improve health outcomes and increase life expectancy. Lower education levels are associated with; low health literacy and higher levels of risky behaviors.

Minnesota, Norman, and Polk experienced a decline in reading proficiency from 2022 to 2023 for third graders. Mahnomen County's data was suppressed due to small counts, but the negative percentage change in the 'not proficient' reading status

indicates improvement in this area. Although interpreting a double negative is not as straight forward as interpreting being proficient, it suggests that Mahnomen has made progress in reading proficiency from 2022 to 2023. In terms of math proficiency, Minnesota, Polk, Norman, and Mahnomen all showed positive improvement from 2022 to 2023. Norman County had the largest increase, followed by Mahnomen. Each county has unique needs, and even small positive improvements is encouraging (Minnesota Early Childhood Longitudinal Data System 2017-2023).

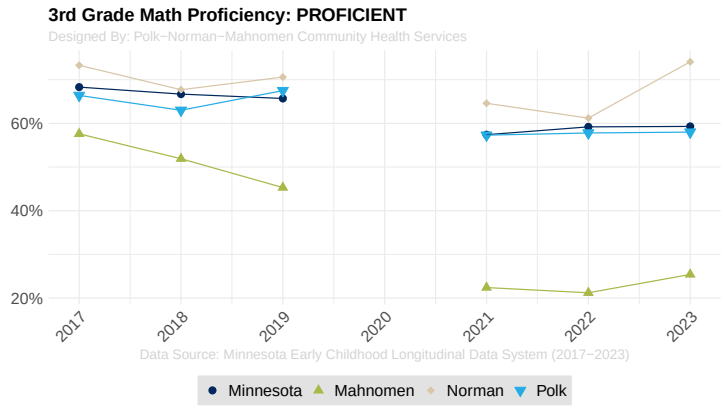
In Norman County, the four-year graduation rate was 94.6% in 2021 and 91.6% in 2022. Polk County had graduation rates of 83.3% in 2021 and 84.3% in 2022. Mahnomen County's high school graduation rates were 62.8% in 2021 and 55.9% in 2022 (The Annie E. Casey Foundation, KIDS COUNT Data Center 2023). High graduation rates are crucial as they reflect the effectiveness of the education system in preparing students for future success. Graduating from high school opens up more opportunities for higher education and employment, which can lead to better economic stability and overall quality of life. Lower graduation rates highlight areas where additional support and resources may be needed to help students succeed.



Year	Location	Reading Proficiency	% Change
2022	Minnesota	48.30%	
2023	Minnesota	47.60%	-0.70%
2022	Mahnomen	NA	
2023	Mahnomen	26.70%	–
2022	Norman	52.20%	
2023	Norman	44.80%	-7.40%
2022	Polk	47.50%	
2023	Polk	40.70%	-6.80%

Data Source: Minnesota Early Childhood Longitudinal Data System (2017-2023)

Figure 1: 3rd Grade Reading Proficiency: PROFICIENT



Year	Location	Math Proficiency	% Change
2022	Minnesota	59.20%	
2023	Minnesota	59.30%	0.10%
2022	Mahnomen	21.20%	
2023	Mahnomen	25.40%	4.20%
2022	Norman	61.20%	
2023	Norman	74.10%	12.90%
2022	Polk	57.80%	
2023	Polk	58.00%	0.20%

Data Source: Minnesota Early Childhood Longitudinal Data System (2017-2023)

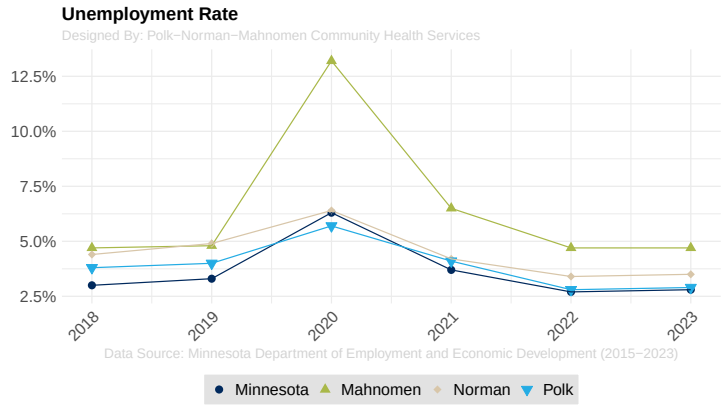
Figure 2: 3rd Grade Math Proficiency: PROFICIENT

Economic Stability

According to Healthy People 2030, people with steady employment are more likely to be healthy, but many people have trouble finding and keeping a job. People with disabilities, injuries, or physical conditions may be especially limited in their ability to work. In addition, many people with steady work still do not earn enough to afford the things they need to stay healthy (Healthy People 2030). Income shapes where we live, how stable our living arrangements are, what condition our home is in, what schools we attend, what types of recreation we take part in, and what kinds of foods we eat and more.

Overall, the changes in unemployment rates between 2022 and 2023 are minimal, with most areas showing a slight increase of 0.1% or no change at all (Minnesota Department of Employment and Economic Development 2015-2023). This stability suggests a relatively steady job market in our counties. For instance, Minnesota's unemployment rate increased marginally from 2.7% in 2022 to 2.8% in 2023, while Mahnomen's rate remained unchanged at 4.7%. Similarly, Norman and Polk counties experienced slight increases of 0.1%, indicating minor fluctuations in employment levels.

It's important to note that there was a increase in unemployment rates in 2020, likely due to the economic impact of the COVID-19 pandemic. The pandemic led to widespread job losses and economic disruptions, which were reflected in higher unemployment rates across many regions. Since then, the job market has been gradually recovering, as evidenced by the relatively stable rates in recent years.



Year	Location	Unemployment Rate	% Change
2022	Minnesota	2.70%	
2023	Minnesota	2.80%	0.10%
2022	Mahnomen	4.70%	
2023	Mahnomen	4.70%	0.00%
2022	Norman	3.40%	
2023	Norman	3.50%	0.10%
2022	Polk	2.80%	
2023	Polk	2.90%	0.10%

Data Source: Minnesota Department of Employment and Economic Development (2015-2023)

Figure 3: Unemployment Rate

Child Care

Critical to promoting livable communities and promoting development needs for children. Quality child care is a critical component in helping our most vulnerable children get a good start in life, and allow parents/guardians to stay working. Through various community conversations, child care gaps exist in access, availability, and affordability of care. The Minnesota Department of Employment and Economic Development has a comprehensive report detailing these gaps. Refer to figures 4 & 5 on page 3 and tables 3 & 4 on page 4 in the MN DEED report.

County Profiles (More Information)

The Department of Employment and Economic Development offers a comprehensive breakdown of additional data on population, education, labor force, income and cost of living, industry employment, and commuting patterns. These profiles provide valuable insights into the economic landscape of our three counties, aiding in effective planning. According to the profiles, all three counties—Polk, Norman, and Mahnomen—are projected to experience a decline in labor force from 2025 to 2035 (Minnesota Department of Employment and Economic Development 2024).

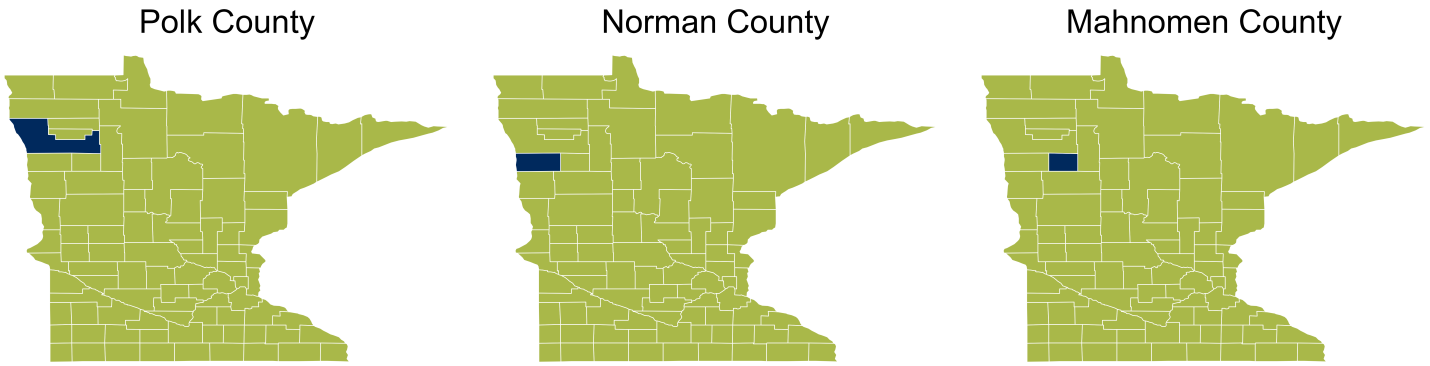


Figure 4: For detailed county profiles, please click on the corresponding map above.

Transportation and Crashes

The Office of Traffic Safety, a Division of the Minnesota Department of Public Safety, produces MN Motor Vehicle Crash Facts. Minnesota TZD is the state's cornerstone traffic safety program with an interdisciplinary approach to reducing traffic crashes, injuries, and deaths on Minnesota roads. There are TZD Coalitions in Polk and Norman Counties.

It is important to know any potential high crash areas in our counties. It is very encouraging that we don't see any red, purple, or blue on the maps developed by (Toward Zero Deaths 2023). It is even for a five-year time period, and we still don't see alarming signs of concern resulting in serious injury or death. This may reflect the effectiveness of our local road safety measures and community awareness. Continuing to prioritize safe driving practices will help maintain and improve these outcomes. The following maps show the location of fatal and serious injury crashes in each county. Information was put together by the Center for Transportation Studies at the University of Minnesota, as a part of MN Toward Zero Deaths (TZD).

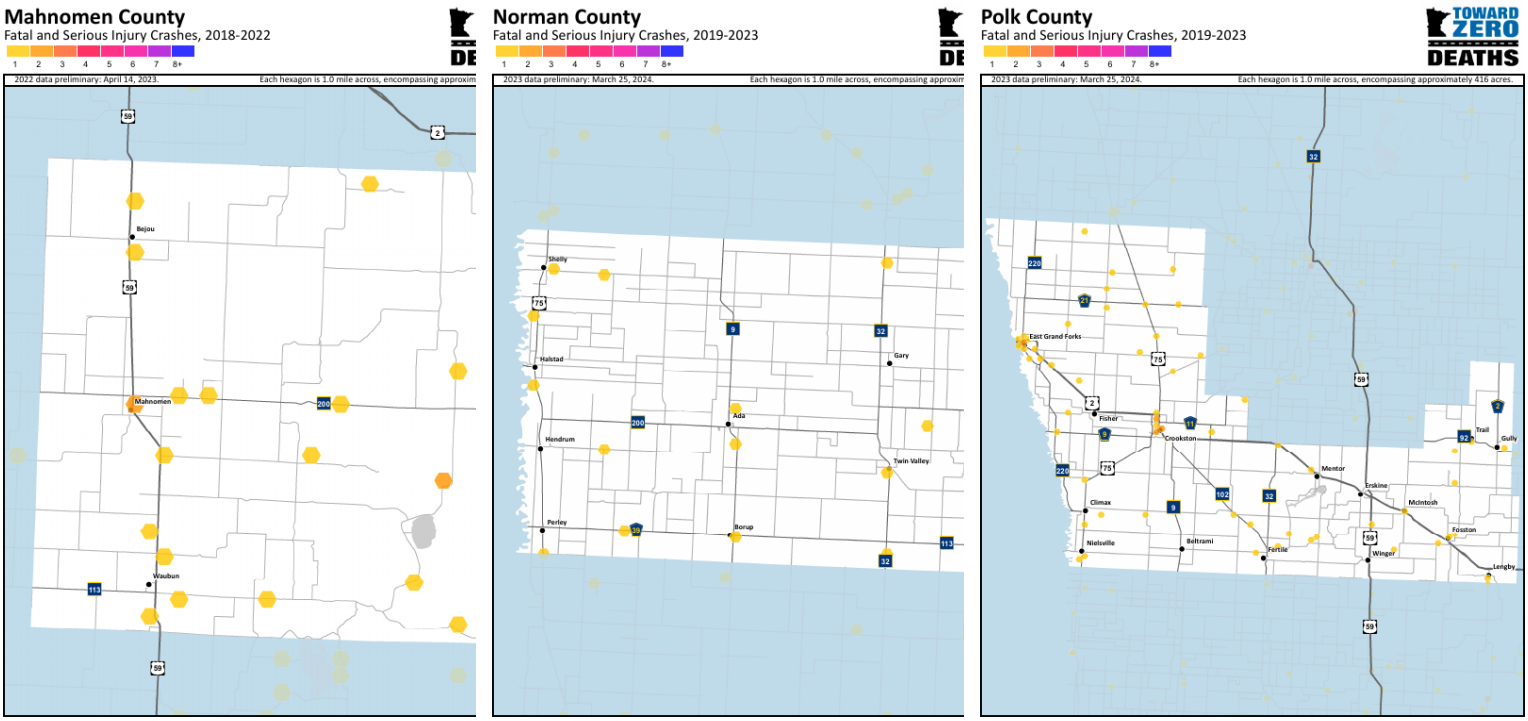
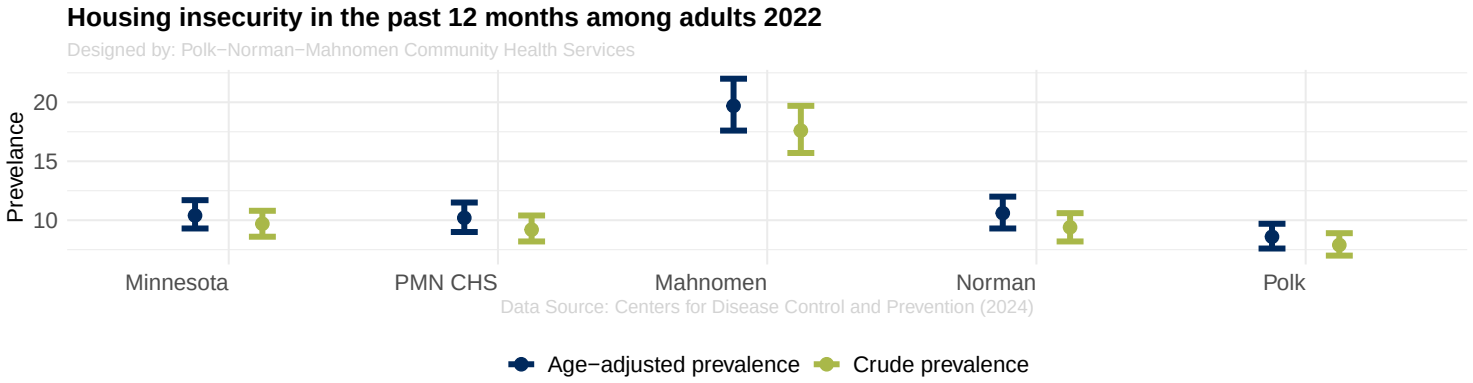


Figure 5: For more resources, please click anywhere on any of the maps

Housing Insecurity

Housing instability is a critical issue affecting many individuals and families. It encompasses a range of challenges, including difficulty paying rent, overcrowding, frequent moves, and the threat of eviction. These conditions can have profound impacts on

physical and mental health, educational outcomes, and overall well-being. Addressing house insecurity is essential for creating stable, healthy communities and ensuring that everyone has a safe, affordable place to call home. The house insecurity age-adjusted prevalence highlight the disparities in house insecurity across our three counties and the state of Minnesota. Mahnomen County has the highest disparity with about 1 in every 5 people having a house insecurity where Minnesota, Polk, and Norman have about 1 in every 10 people.



Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	8.6	9.7	10.8
Crude	PMN CHS	8.2	9.2	10.4
Crude	Mahnomen	15.7	17.6	19.7
Crude	Norman	8.2	9.4	10.6
Crude	Polk	7.0	7.9	8.9

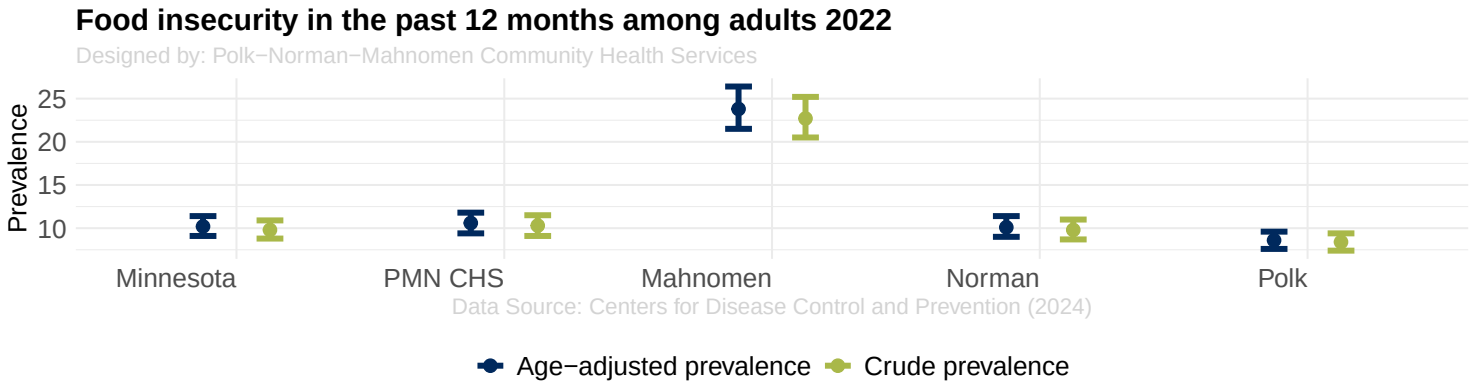
Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	9.3	10.4	11.7
Age-Adjusted	PMN CHS	9.0	10.2	11.5
Age-Adjusted	Mahnomen	17.6	19.7	22.0
Age-Adjusted	Norman	9.3	10.6	12.0
Age-Adjusted	Polk	7.6	8.6	9.7

Data Source: Centers for Disease Control and Prevention (2024b)

Figure 6: Housing insecurity in the past 12 months among adults 2022

Food Access

Food access is a fundamental aspect of community health and well-being. It refers to the availability and affordability of nutritious food for all individuals, regardless of their socioeconomic status. Adequate food access ensures that people can obtain the necessary nutrients to maintain a healthy lifestyle, which is crucial for physical and mental health, academic performance, and overall quality of life. However, many communities face significant barriers to food access, including food deserts, economic constraints, and limited transportation options. Addressing these challenges is essential to promote equity and ensure that everyone has the opportunity to lead a healthy, fulfilling life. Mahnomen County had significantly higher age-adjusted prevalence for food insecurity and food stamp usage in the past 12 months among adults compared to Polk County, Norman County, and the state of Minnesota. Polk County, Norman County, and Minnesota were similar.

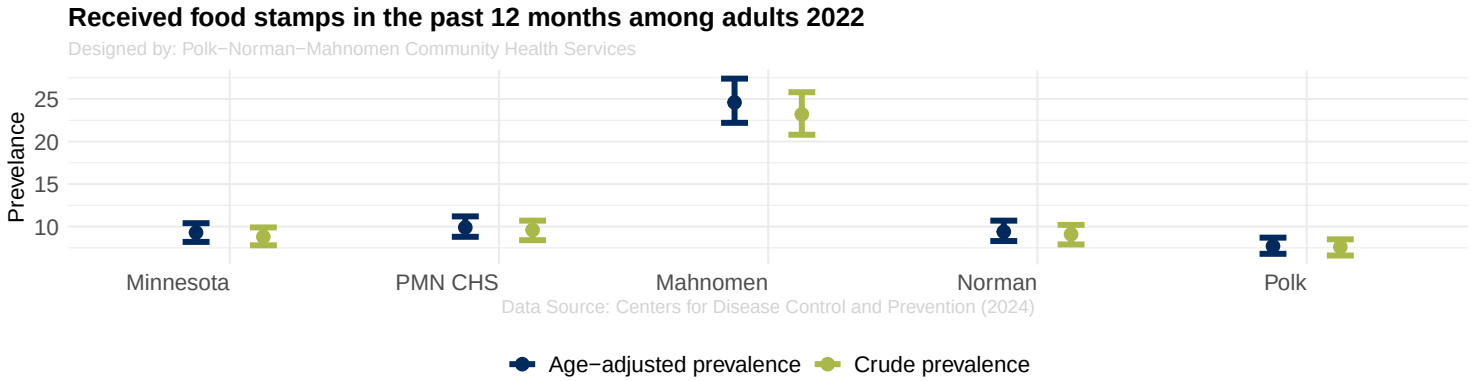


Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	8.8	9.8	10.9
Crude	PMN CHS	9.1	10.3	11.5
Crude	Mahnomen	20.5	22.7	25.2
Crude	Norman	8.7	9.8	11.0
Crude	Polk	7.4	8.4	9.4

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	9.1	10.2	11.4
Age-Adjusted	PMN CHS	9.4	10.6	11.8
Age-Adjusted	Mahnomen	21.5	23.8	26.4
Age-Adjusted	Norman	9.0	10.1	11.4
Age-Adjusted	Polk	7.6	8.6	9.6

Data Source: Centers for Disease Control and Prevention (2024b)

Figure 7: Food insecurity in the past 12 months among adults 2022



Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	7.8	8.8	9.9
Crude	PMN CHS	8.4	9.6	10.7
Crude	Mahnomen	20.8	23.2	25.8
Crude	Norman	7.9	9.1	10.2
Crude	Polk	6.6	7.6	8.5

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	8.2	9.3	10.4
Age-Adjusted	PMN CHS	8.8	9.9	11.2
Age-Adjusted	Mahnomen	22.2	24.6	27.4
Age-Adjusted	Norman	8.3	9.4	10.7
Age-Adjusted	Polk	6.8	7.7	8.7

Data Source: Centers for Disease Control and Prevention (2024b)

Figure 8: Received food stamps in the past 12 months among adults 2022

Healthcare and Dental Access

Access to comprehensive health care services, including primary care and dental care, is essential for maintaining overall health and well-being. Primary care providers play a critical role in early detection, prevention, and management of various health conditions. They offer a wide range of services, from routine check-ups and immunizations to managing chronic diseases and coordinating specialist care.

Similarly, dental services are vital for preventing and treating oral health issues, which can significantly impact overall health. Regular dental check-ups and cleanings help prevent cavities, gum disease, and other oral health problems. Dentists also provide essential education on maintaining good oral hygiene practices.

Improving access to these services can lead to better health outcomes for our communities. Efforts to increase the availability of primary care providers and dentists, especially in underserved regions, are crucial. This includes initiatives to attract and retain healthcare professionals in rural areas, expanding telehealth services, and ensuring affordable care for all residents. Through a partnership with Blue Cross Blue Shield of Minnesota/Blue Plus, the PNM Dental Innovation Coordinator works on population based dental access innovations and helps residents seeking dental services. As part of this initiative, locations across the three counties now partner with Children's Dental Services (CDS), a non profit dental health clinic, that offers onsite dental hygiene services. Increasing access to comprehensive, high-quality health care is a Healthy People 2030 Goal.

Population per Primary Care Provider (2022) - Minnesota: 1,133 people per primary care provider.

- Norman County: Data not available (NA).
- Polk County: 1,809 people per primary care provider.
- Mahnomen County: 5,414 people per primary care provider.

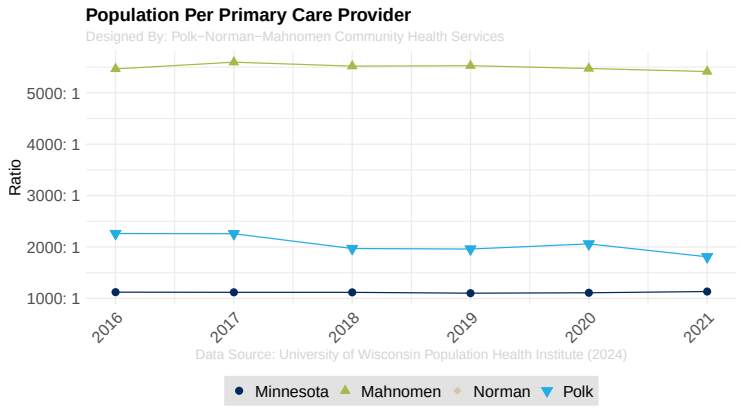
This indicates that, on average, Minnesota has 1,133 people per primary care provider, which suggests relatively good access to primary care across the state. Polk County has a higher ratio of 1,809 people per provider, indicating less access compared to the state average. Mahnomen County has the highest ratio with 5,414 people per provider, suggesting significantly less access to primary care services.

Population per Dentist (2022) - Minnesota: 1,287 people per dentist

- Mahnomen County: Data not available (NA)
- Norman County: 1,594 people per dentist
- Polk County: 2,195 people per dentist

This data suggests that, on average, Minnesota has 1,287 people per dentist, indicating relatively good access to dental care across the state. Norman County has a slightly higher ratio of 1,594 people per dentist, suggesting less access compared to the state average. Polk County has the highest ratio with 2,195 people per dentist, indicating significantly less access to dental care services.

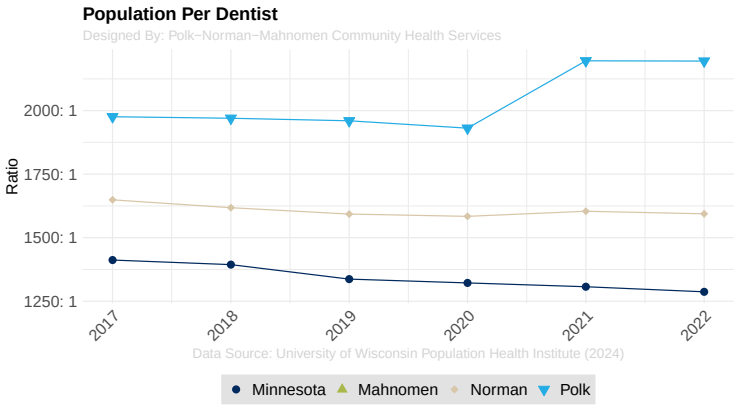
Even with potentially less access to primary care providers, the age-adjusted prevalence for having routine checkups is similar to the state average in Minnesota. About 3 out of 4 people are predicted to get their routine checkups. However, the consistency is not as strong for Medicaid beneficiaries receiving dental services. Assessing current performance is challenging due to lagging data and significant fluctuations in historical data.



Year	Location	Ratio
2021	Minnesota	1133: 1
2021	Mahnomen	5414: 1
2021	Norman	–
2021	Polk	1809: 1

Data Source: University of Wisconsin Population Health Institute (2024)

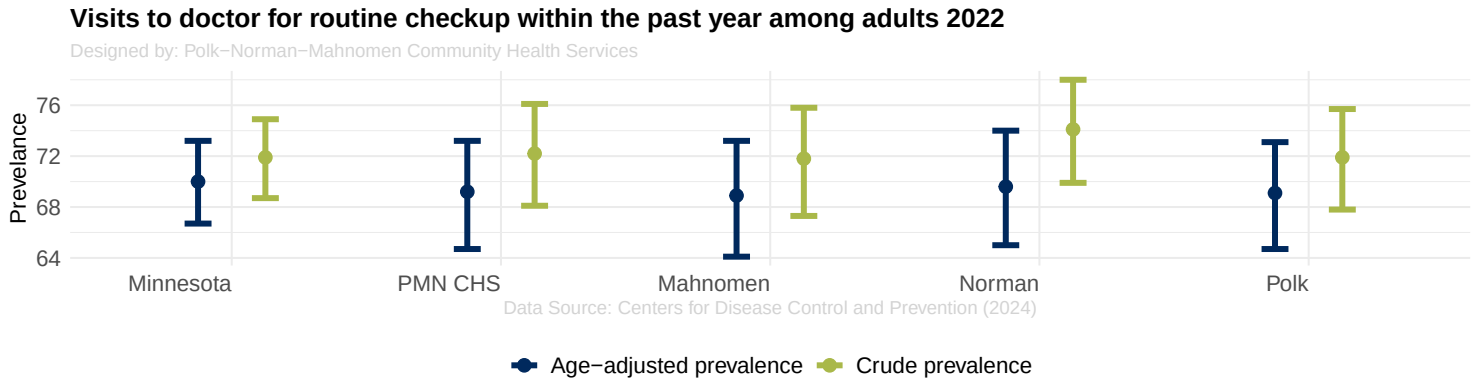
Figure 9: Population Per Primary Care Provider



Year	Location	Ratio
2022	Minnesota	1287: 1
2022	Mahnomen	–
2022	Norman	1594: 1
2022	Polk	2195: 1

Data Source: University of Wisconsin Population Health Institute (2024)

Figure 10: Population Per Dentist

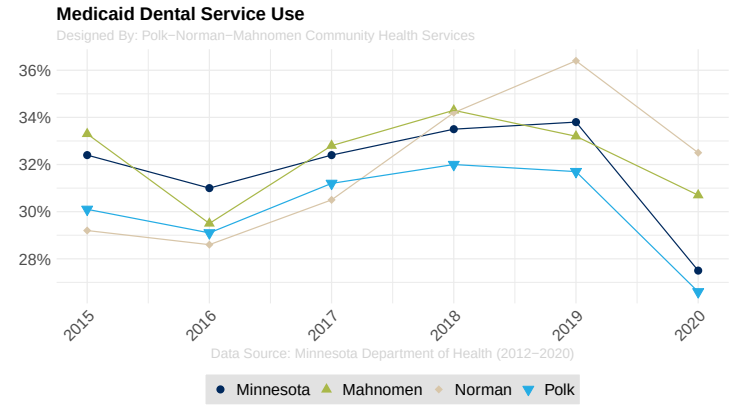


Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	68.7	71.9	74.9
Crude	PMN CHS	68.1	72.2	76.1
Crude	Mahnomen	67.3	71.8	75.8
Crude	Norman	69.9	74.1	78.0
Crude	Polk	67.8	71.9	75.7

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	66.7	70.0	73.2
Age-Adjusted	PMN CHS	64.7	69.2	73.2
Age-Adjusted	Mahnomen	64.1	68.9	73.2
Age-Adjusted	Norman	65.0	69.6	74.0
Age-Adjusted	Polk	64.7	69.1	73.1

Data Source: Centers for Disease Control and Prevention (2024b)

Figure 11: Visits to doctor for routine checkup within the past year among adults 2022



Year	Location	Medicaid Beneficiaries	% Change
2019	Minnesota	33.80%	
2020	Minnesota	27.50%	-6.30%
2019	Mahnomen	33.20%	
2020	Mahnomen	30.70%	-2.50%
2019	Norman	36.40%	
2020	Norman	32.50%	-3.90%
2019	Polk	31.70%	
2020	Polk	26.60%	-5.10%

Data Source: Minnesota Department of Health (2012-2020)

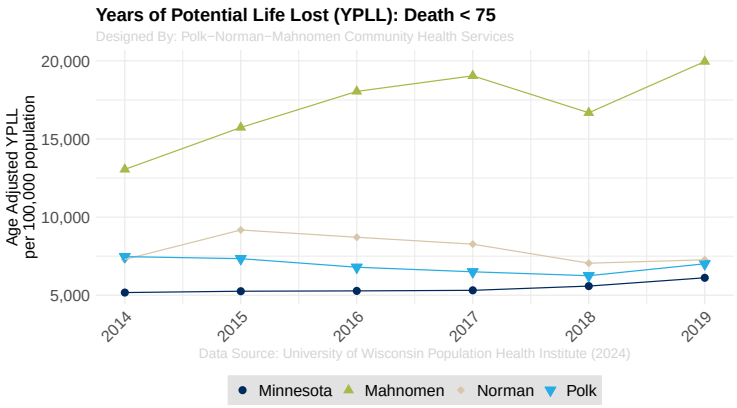
Figure 12: Medicaid Dental Service Use

Years of Potential Lost

A good measure for how our communities are doing is **years of potential life lost (YPLL)**. Premature death is defined as dying before the age of 75. When we look at potential life years lost (dying before 75), Mahnomen County's rate is almost three times higher than those of Polk County, Norman County, and the state of Minnesota.

There can be multiple reasons for why this is significantly higher in Mahnomen County. Factors such as access to healthcare, socioeconomic status, prevalence of chronic diseases, and lifestyle choices all play a role. Additionally, disparities in education, employment opportunities, and environmental conditions can contribute to higher rates of premature death.

The main point is that Mahnomen County's YPLL is alarmingly high, indicating a critical need for targeted interventions. Improving healthcare access, promoting healthy lifestyles, and addressing social determinants of health are essential steps to reduce premature deaths and improve overall community well-being. Addressing these issues requires a collaborative effort from local governments, healthcare providers, and community organizations. By focusing on preventive measures, early detection, and effective treatment of chronic conditions, we can work towards reducing the years of potential life lost and enhancing the quality of life for all of our residents.



Date Range	Location	Lower CI	YPLL	Higher CI
2019-2021	Minnesota	6,042	6,116	6,191
2019-2021	Mahnomen	15,200	19,956	24,713
2019-2021	Norman	4,878	7,267	9,657
2019-2021	Polk	5,969	7,012	8,057

Data Source: University of Wisconsin Population Health Institute (2024)

Figure 13: Years of Potential Life Lost (YPLL): Death < 75

Adverse Childhood Experiences

Adverse Childhood Experiences, or ACEs, are preventable, potentially traumatic events that occur in childhood (0-17 years) such as neglect, experiencing or witnessing violence, and having a family member attempt or die by suicide. Also included are aspects

of a child's environment that can undermine their sense of safety, stability, and bonding, such as growing up in a household with substance use; mental health problems; or instability due to parental separation or incarceration of a parent, sibling or other member of the household (Centers for Disease Control and Prevention 2024a). Adverse childhood experiences can increase a person's risk for chronic stress and adverse coping mechanisms and result in lifelong chronic illness such as depression, heart disease, obesity and substance abuse.

We were able to obtain ACE's data from Minnesota's Department of Education Minnesota Student Survey Reports 2013-2022 tool. The ACE'S data consisted of the following questions:

1. Do you live with anyone who drinks too much alcohol? See Table 4.
2. Do you live with anyone who is depressed or has any other mental health issues? See Table 5.
3. Do you live with anyone who uses illegal drugs or abuses prescription drugs? See Table 6.
4. Does a parent or other adult in your home regularly swear at you, insult you or put you down? See Table 7.
5. Has a parent or other adult in your home ever hit, beat, kicked or physically hurt you in any way? See Table 8.
6. Has any relative/family member ever pressured, tricked, or forced you to do something sexual or done something sexual to you? See Table 9.
7. Has anyone who was not a relative/family member ever pressured, tricked, or forced you to do something sexual or done something sexual to you against your wishes? Table 10
8. Have your parents or other adults in your home ever slapped, hit, kicked, punched or beat each other up? See Table 11.

Polk County's data remained fairly consistent when comparing 2019 to 2022 for the same grade levels. However, Table 8 indicates an increase in 11th graders living with someone who has mental health issues from 2019 to 2022. Interpreting this change is challenging. On one hand, preventing mental health issues is crucial. On the other hand, increased openness and reduced stigma around mental health might explain the rise, suggesting a more supportive environment.

Interpreting the data for Norman County and Mahnomen County is challenging due to their smaller populations. As noted in the "Understanding Our CHA" section, low data totals can complicate analysis. To address this, we can either combine grades or aggregate data across multiple years. However, due to limited time and data, we were unable to take this next step.

Table 4: Percent Who Lives with Anyone Who Drinks too much Alcohol

Location	Year	8th Grade	9th Grade	11th Grade
Polk County	2019	8.9%	10.2%	9.2%
Polk County	2022	9.2%	10.0%	11.6%
Norman County	2019	15.2%*	0	18.5%*
Norman County	2022	__	__	__
Mahnomen County	2019	10.9%*	6.5%*	18.9%*
Mahnomen County	2022	__	__	__

*Count < 18 __ No data available

Table 5: Percent Living with Someone with Mental Health Issues

Location	Year	8th Grade	9th Grade	11th Grade
Polk County	2019	22.9%	25%	27.3%
Polk County	2022	21.5%	26.0%	35.3%
Norman County	2019	34.3%	0	33.3%*
Norman County	2022	__	__	__
Mahnomen County	2019	21.8%*	39.0%	29.7%*
Mahnomen County	2022	__	__	__

*Count < 18 __ No data available

Table 6: Percent Who Lives with Anyone Using Illegal /Abusing Prescription Drugs

Location	Year	8th Grade	9th Grade	11th Grade
Polk County	2019	5.4%*	5.3%*	8.1%
Polk County	2022	2.2%*	4.4%*	4.2%*
Norman County	2019	7.7%	0	0
Norman County	2022	__	__	__
Mahnomen County	2019	3.7%*	12.0%*	10.8%*
Mahnomen County	2022	__	__	__

*Count < 18 __ No data available

Table 7: Percent with Verbally Abusive Adults at Home

Location	Year	8th Grade	9th Grade	11th Grade
Polk County	2019	14.1%	16.5%	13.7%
Polk County	2022	12.8%	14.1%	14.2%
Norman County	2019	14.9%*	0	22.2%
Norman County	2022	__	__	__
Mahnomen County	2019	23.2%*	23.4%	10.8%*
Mahnomen County	2022	__	__	__

*Count < 18 __ No data available

Table 8: Percent Physically Hurt by Household Adults

Location	Year	8th Grade	9th Grade	11th Grade
Polk County	2019	11.9%	10.2%	11.1%
Polk County	2022	10.6%	11.6%	8.4%*
Norman County	2019	19.7%*	0	11.5%*
Norman County	2022	__	__	__
Mahnomen County	2019	11.5%	14.7%	13.5%
Mahnomen County	2022	__	__	__

*Count < 18 __ No data available

Table 9: Percent With Family Member Who Pressured or Forced Sexual Activity

Location	Year	8th Grade	9th Grade	11th Grade
Polk County	2019	1.6%*	3.9%*	4.1%*
Polk County	2022	2.6%*	4.0%*	3.2%*
Norman County	2019	3.1%*	0	15.4%*
Norman County	2022	__	__	__
Mahnomen County	2019	0	4.1%*	5.4%*
Mahnomen County	2022	__	__	__

*Count < 18 __ No data available

Table 10: Percent With Non-Relative Who Pressured or Forced Sexual Activity.

Location	Year	8th Grade	9th Grade	11th Grade
Polk County	2019	3.8%*	6.0%*	7.4%*
Polk County	2022	8.4%	10.4%	7.9%*
Norman County	2019	1.5%*	0	7.4*
Norman County	2022	__	__	__
Mahnomen County	2019	2%*	8%*	8.1%*
Mahnomen County	2022	__	__	__

*Count < 18 __ No data available

Table 11: Percent with Parents/Adults in Home Who Physically Fought

Location	Year	8th Grade	9th Grade	11th Grade
Polk County	2019	7.7%	6.7%	8.5%
Polk County	2022	7.9%	6.8%*	11.1%*
Norman County	2019	16.7%*	0	22.2%*
Norman County	2022	__	__	__
Mahnomen County	2019	14.8%*	14.5%*	13.5%*
Mahnomen County	2022	__	__	__

*Count < 18 __ No data available

Health Status

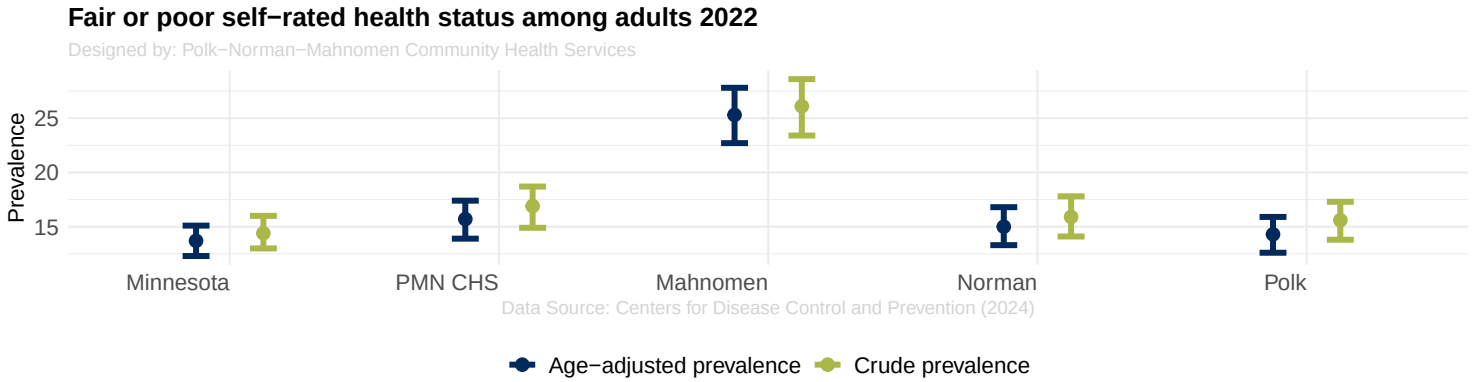
Health status is a comprehensive measure of the overall well-being of a community, encompassing various indicators that reflect the physical and mental health of its residents. Key factors in assessing health status include the rate of natural increase, prescription rates, child and teen checkups, prenatal care, and child immunizations.

The rate of natural increase provides insight into population growth and demographic trends, which can influence healthcare needs and resource allocation. Prescription rates can indicate the prevalence of chronic conditions and the community's access to necessary medications. Regular child and teen checkups are essential for early detection and prevention of health issues, ensuring that young individuals receive the care they need to thrive.

Prenatal care is crucial for the health of both mothers and babies, reducing the risk of complications during pregnancy and childbirth. Child immunizations are vital for preventing the spread of infectious diseases and protecting public health. By monitoring these indicators, we can better understand the health challenges facing our community and develop targeted interventions to improve health outcomes for all residents.

General, Physical and Mental Distress

Understanding the general, physical, and mental health status of a community is essential for identifying health needs and implementing effective interventions. This section provides an overview of the health status in Minnesota, with a focus on Polk, Norman, and Mahnomen counties. The data includes age-adjusted and crude prevalence rates for general health, physical health, and mental health, sourced from the CDC Places project. Mahnomen County has the highest prevalence in all three categories general, physical, and mental distress. Polk County and Norman County are similar to the state of Minnesota. About 1 in every 7 residents of Polk County or Norman County has poor or fair health while about 1 in every 4 Mahnomen residents have poor or fair health.

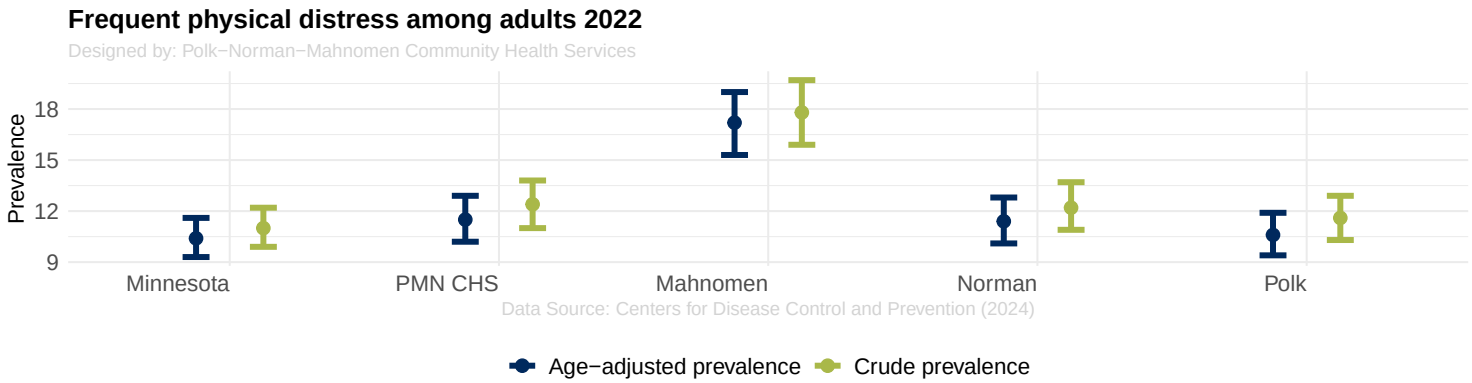


Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	13.0	14.4	16.0
Crude	PMN CHS	14.9	16.9	18.7
Crude	Mahnomen	23.4	26.1	28.6
Crude	Norman	14.1	15.9	17.8
Crude	Polk	13.8	15.6	17.3

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	12.3	13.7	15.1
Age-Adjusted	PMN CHS	13.9	15.7	17.4
Age-Adjusted	Mahnomen	22.7	25.3	27.8
Age-Adjusted	Norman	13.3	15.0	16.8
Age-Adjusted	Polk	12.6	14.3	15.9

Data Source: Centers for Disease Control and Prevention (2024b)

Figure 1: Fair or poor self-rated health status among adults 2022

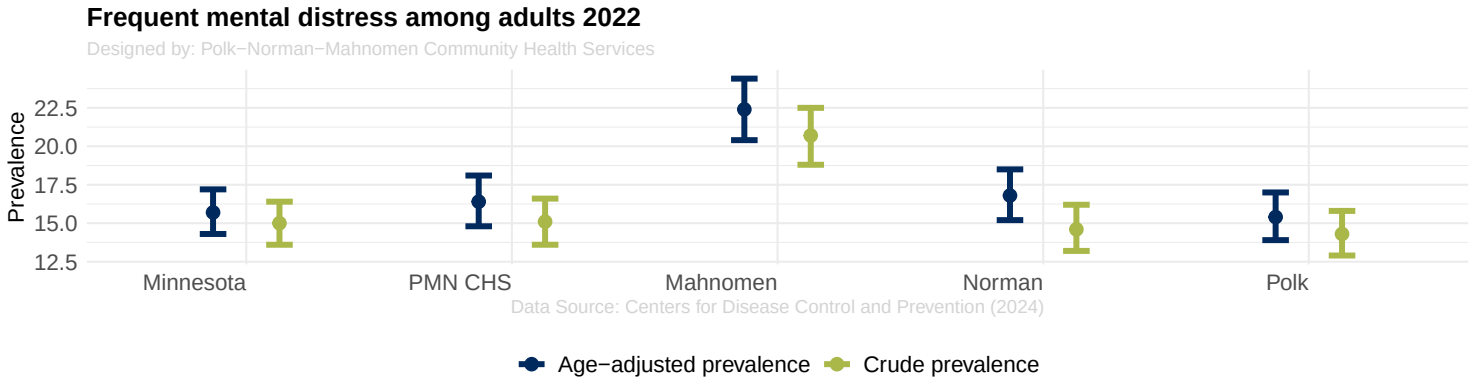


Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	9.9	11.0	12.2
Crude	PMN CHS	11.0	12.4	13.8
Crude	Mahnomen	15.9	17.8	19.7
Crude	Norman	10.9	12.2	13.7
Crude	Polk	10.3	11.6	12.9

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	9.3	10.4	11.6
Age-Adjusted	PMN CHS	10.2	11.5	12.9
Age-Adjusted	Mahnomen	15.3	17.2	19.0
Age-Adjusted	Norman	10.1	11.4	12.8
Age-Adjusted	Polk	9.4	10.6	11.9

Data Source: Centers for Disease Control and Prevention (2024b)

Figure 2: Frequent physical distress among adults 2022



Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	13.6	15.0	16.4
Crude	PMN CHS	13.6	15.1	16.6
Crude	Mahnomen	18.8	20.7	22.5
Crude	Norman	13.2	14.6	16.2
Crude	Polk	12.9	14.3	15.8

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	14.3	15.7	17.2
Age-Adjusted	PMN CHS	14.8	16.4	18.1
Age-Adjusted	Mahnomen	20.4	22.4	24.4
Age-Adjusted	Norman	15.2	16.8	18.5
Age-Adjusted	Polk	13.9	15.4	17.0

Data Source: Centers for Disease Control and Prevention (2024b)

Figure 3: Frequent mental distress among adults 2022

Rate of Natural Increase

The birth rate and death rate are fundamental demographic indicators that provide insights into the population dynamics of a region. The birth rate measures the number of live births per 1,000 people in a given year, while the death rate measures the number of deaths per 1,000 people in the same period. The difference between these two rates is known as the natural increase (or decrease, if deaths exceed births), which indicates the growth or decline of a population excluding migration.

Natural increase is a crucial component of population change, but it does not account for the movement of people into or out of a region. Migration can significantly impact population size and composition, often overshadowing natural increase. For instance, a region with a high birth rate and low death rate might still experience population decline if a large number of people move away. Conversely, areas with low natural increase might grow rapidly due to high levels of immigration.

In 2020, Polk County, Norman County, and Mahnomen County all experienced a natural decrease, likely due to the impact of COVID-19. The pandemic has significantly influenced both birth and death rates, with increased mortality and potential delays in births due to economic and health uncertainties.

Among these counties, Mahnomen consistently has the highest birth rate, reflecting a younger population or higher fertility rates. In contrast, Norman County has the highest death rate, which could be attributed to an older population or other health factors.

Over the years, Mahnomen County has generally maintained a positive natural increase, while Polk and Norman Counties have struggled with higher death rates (Minnesota Department of Health 2015-2020). These trends highlight the need for targeted public health interventions and policies to support population growth and health in these regions.

Looking ahead, it will be important to monitor these trends and implement measures to mitigate the long-term impacts of the pandemic. Public health initiatives, economic support, and healthcare improvements could help stabilize and improve the natural increase rates in these counties.

Table 1: Mahnomen County Natural Rate of Increase

Birth Rate	Death Rate	Natural Increase	Year
17.2	11.2	6	2015
20.9	11.2	9.7	2016
17.7	14.3	3.4	2017
16.3	12.7	3.6	2018
17.7	11.9	5.8	2019
14.3	14.4	-0.1	2020

Table 2: Norman County Natural Rate of Increase

Birth Rate	Death Rate	Natural Increase	Year
11.1	15.6	-4.5	2015
11.2	15.6	-4.4	2016
12.6	17.4	-4.8	2017
12.5	16.1	-3.6	2018
10.8	13.8	-3	2019
9.5	12.3	-2.8	2020

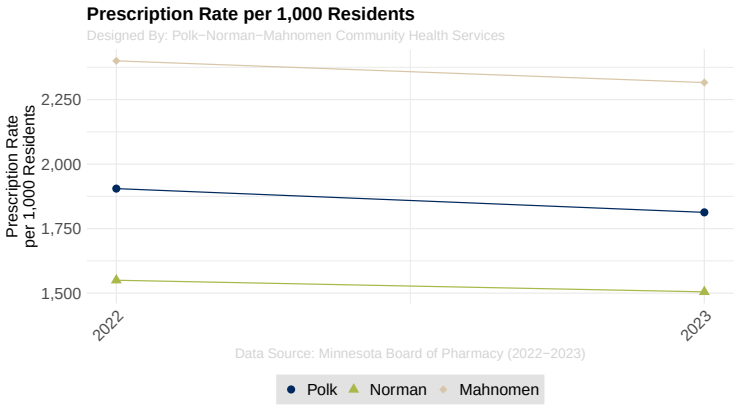
Table 3: Polk County Natural Rate of Increase

Birth Rate	Death Rate	Natural Increase	Year
13.2	11.4	1.8	2015
14.2	11.4	2.8	2016
13.7	10.8	2.9	2017
13.8	11.6	2.2	2018
11.7	11.8	-0.1	2019
12.1	13.7	-1.6	2020

Prescription Rate

Polk, Norman, and Mahnmoen did not experience a big change from 2022 to 2023 in prescription rates per 1,000 residents(Minnesota Board of Pharmacy 2022-2023). Prescription rates enable us to compare how our counties measure up against

each other. Out of the three counties, Mahnomen has the highest prescription rate per 1,000 residents.



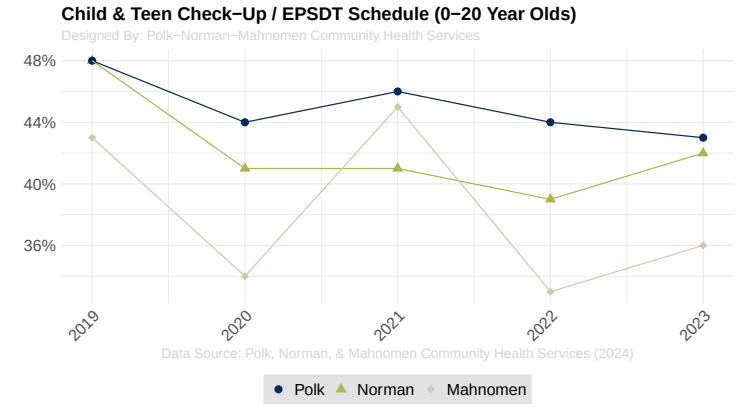
Year	Location	Prescription Rate
2022	Polk	1,905
2023	Polk	1,813
2022	Norman	1,550
2023	Norman	1,505
2022	Mahnomen	2,400
2023	Mahnomen	2,316

Data Source: Minnesota Board of Pharmacy (2022-2023)

Figure 4: Prescription Rate per 1,000 Residents

Child and Teen Checkup Outreach

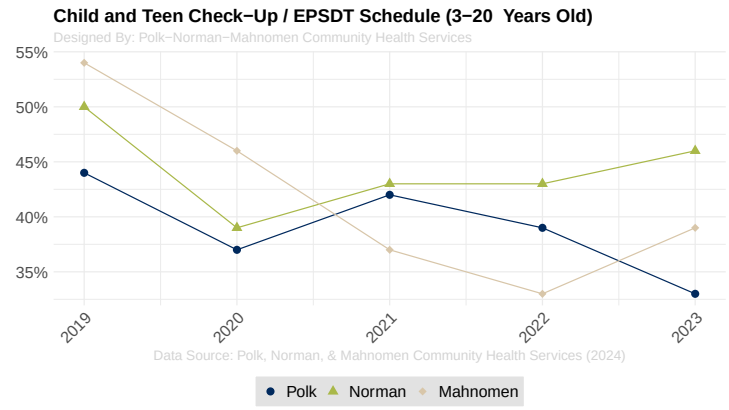
PNM CHS provides outreach for the preventive healthcare program Child and Teen Checkups. Child and Teen Checkups include well-child medical exams and dental care, at no cost to eligible children and teens. These checkups include specific screening components to improve the health of children and teens, and limit long-term outcomes of undetected health problems. Children and teens, birth through age 20 years, and enrolled in Medical Assistance (MA) are eligible to participate.



Year	Location	Percent	% Change
2022	Polk	44.00%	
2023	Polk	43.00%	-1.00%
2022	Norman	39.00%	
2023	Norman	42.00%	3.00%
2022	Mahnomen	33.00%	
2023	Mahnomen	36.00%	3.00%

Data Source: Polk, Norman, & Mahnomen Community Health Services (2024)

Figure 5: Child & Teen Check-Up / EPSDT Schedule (0-20 Year Olds)



Year	Location	Percent	% Change
2022	Polk	39.00%	
2023	Polk	33.00%	-6.00%
2022	Norman	43.00%	
2023	Norman	46.00%	3.00%
2022	Mahnomen	33.00%	
2023	Mahnomen	39.00%	6.00%

Data Source: Polk, Norman, & Mahnomen Community Health Services (2024)

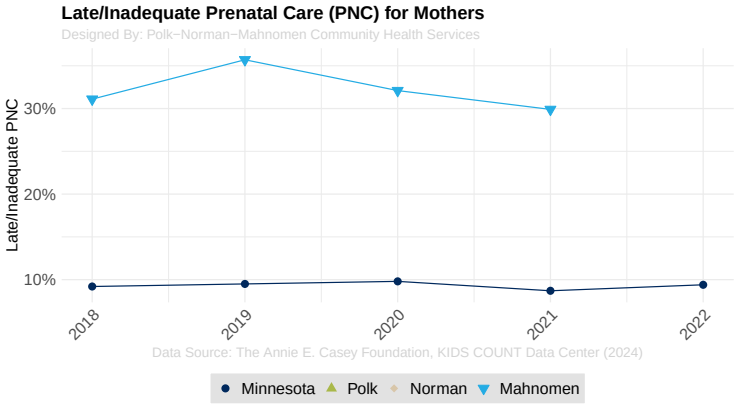
Figure 6: Child and Teen Check−Up / EPSDT Schedule (3−20 Years Old)

Prenatal Care

Prenatal care is essential for ensuring the health and well-being of both mothers and their babies. Adequate prenatal care helps monitor the progress of the pregnancy, identify and manage potential health issues, and provide important health education to expectant mothers.

In Minnesota, the percentage of mothers receiving late or inadequate prenatal care increased slightly from 8.7% in 2021 to 9.4% in 2022, representing a 0.7% increase. Data for Polk County and Norman County is not available for both years, likely due to suppression rules or the majority of births occurring out of state, possibly in North Dakota. Mahnomen County had a high rate of late or inadequate prenatal care at 29.9% in 2021, but data for 2022 is not available (The Annie E. Casey Foundation, KIDS COUNT Data Center 2024b). The Minnesota Department of Health is currently developing a new dashboard that should help address the data suppression limitations identified in the Kids Count data. Please check back in Q2 of 2025 for the most up-to-date information.

Prenatal care is essential for ensuring the health and well-being of both mothers and their babies. Adequate prenatal care helps to monitor the progress of the pregnancy, identify and manage potential health issues, and provide important health education to expectant mothers.



Year	Location	Late/Inadequate PNC	% Change
2021	Minnesota	8.70%	
2022	Minnesota	9.40%	0.70%
2021	Polk	NA	
2022	Polk	NA	–
2021	Norman	NA	
2022	Norman	NA	–
2021	Mahnomen	29.90%	
2022	Mahnomen	NA	–

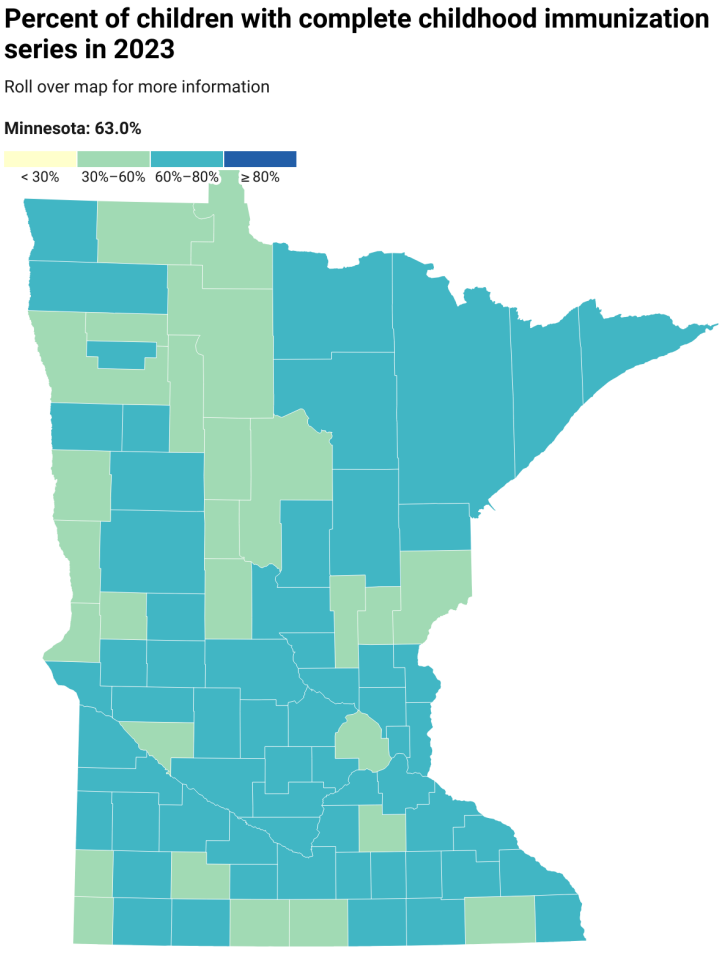
Data Source: The Annie E. Casey Foundation, KIDS COUNT Data Center (2024b)

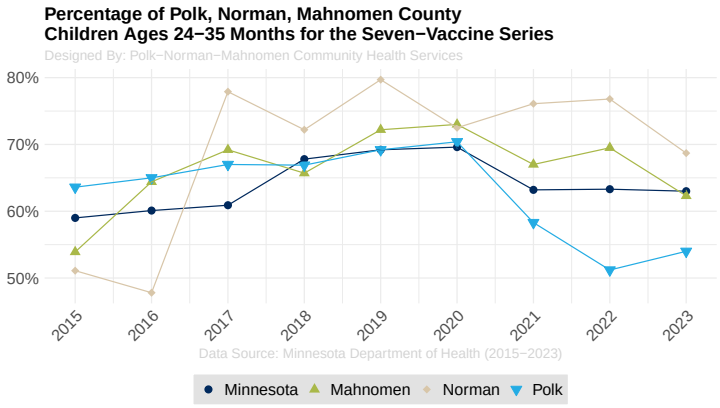
Figure 7: Late/Inadequate Prenatal Care (PNC) for Mothers

Childhood Immunizations

According to Minnesota Department of Health, childhood and adolescent vaccination rates decreased during the COVID-19 pandemic. Healthy People (HP) 2030 Goal is to increase vaccination rates. Infants and children need to get vaccinated to prevent diseases like hepatitis, measles, and pertussis. Teaching people about the importance of vaccines, sending vaccination reminders, and making it easier to get vaccines can help increase vaccination rates in children, adolescents, and adults. The following map and the next plot/table use the same data but just display it differently.

Minnesota, Norman County, and Mahnomen County all experienced declines in vaccination rates for the seven vaccine series, DTaP, Hep A, Hep B, Hib, MMR, PCV, Polio, Rotovirus, and Varicella. Polk County improved their vaccination rate for Varicella, Rotovirus, Polio, MMR, Hep B, DTaP, and the seven vaccine series.

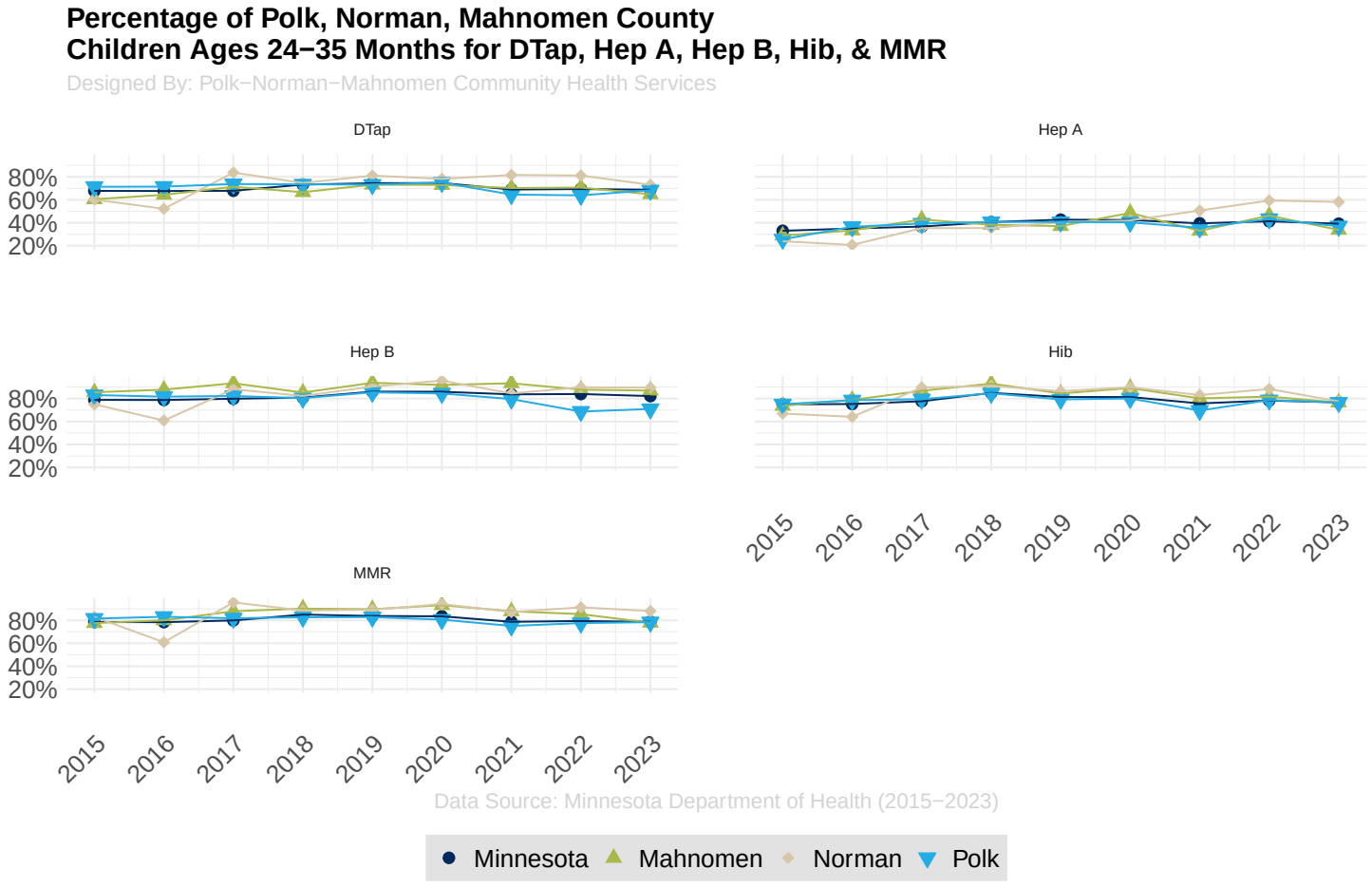




Year	Location	Percentage	% Change
2022	Minnesota	63.30%	
2023	Minnesota	63.00%	-0.30%
2022	Mahnomen	69.50%	
2023	Mahnomen	62.30%	-7.20%
2022	Norman	76.80%	
2023	Norman	68.70%	-8.10%
2022	Polk	51.20%	
2023	Polk	54.00%	2.80%

Data Source: Minnesota Department of Health (2015–2023)

Figure 8: Percentage of Polk, Norman, Mahnomen County Children Ages 24–35 Months for the Seven-Vaccine Series

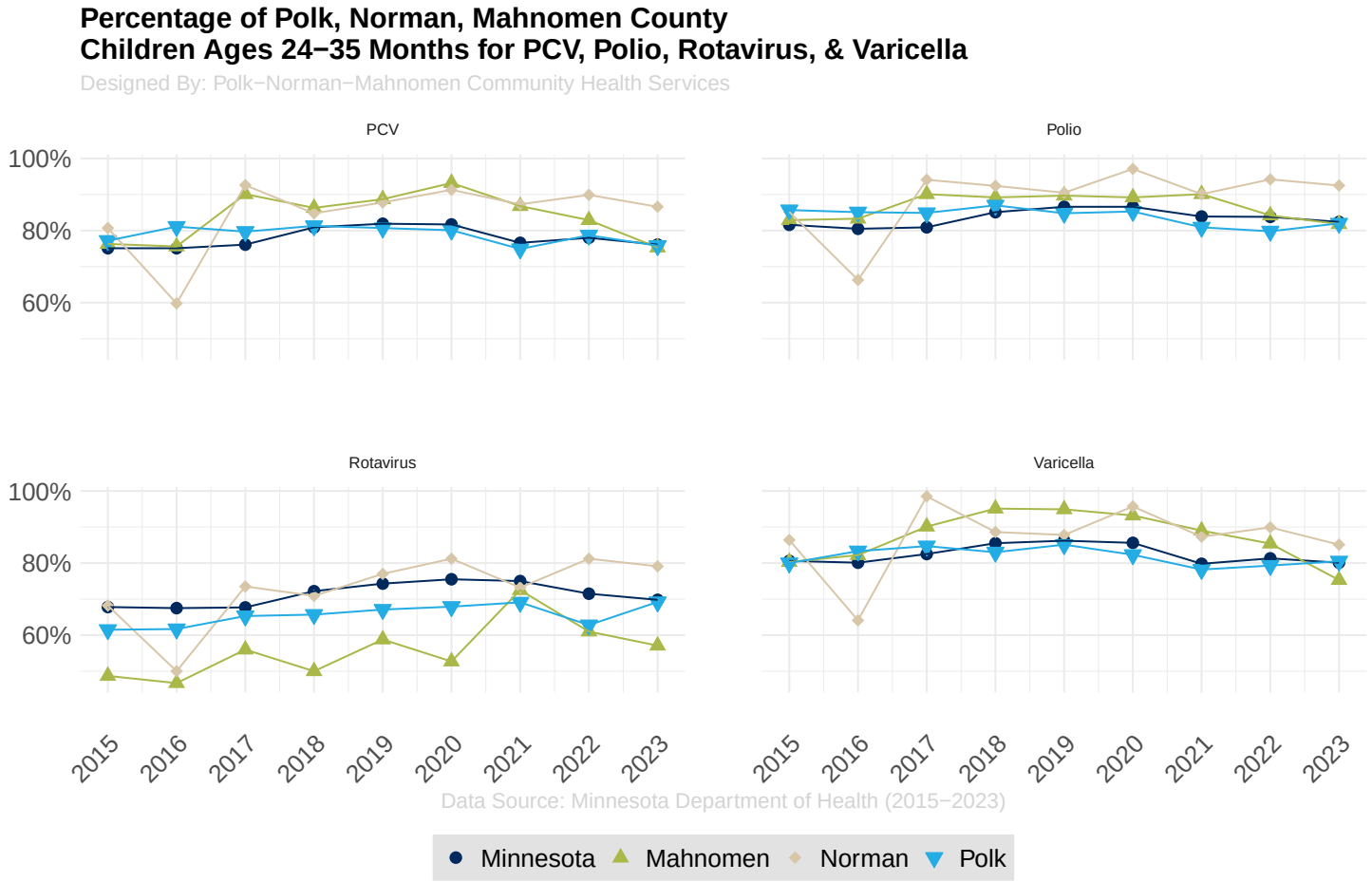


Year	Location	Vaccine	Percentage	% Change
2022	Minnesota	DTap	69.40%	
2023	Minnesota	DTap	68.80%	-0.60%
2022	Minnesota	Hep A	41.30%	
2023	Minnesota	Hep A	39.20%	-2.10%
2022	Minnesota	Hep B	84.00%	
2023	Minnesota	Hep B	82.20%	-1.80%
2022	Minnesota	Hib	78.30%	
2023	Minnesota	Hib	76.70%	-1.60%
2022	Minnesota	MMR	79.40%	
2023	Minnesota	MMR	78.70%	-0.70%
2022	Mahnomen	DTap	70.70%	
2023	Mahnomen	DTap	64.90%	-5.80%
2022	Mahnomen	Hep A	46.30%	
2023	Mahnomen	Hep A	33.80%	-12.50%
2022	Mahnomen	Hep B	87.80%	
2023	Mahnomen	Hep B	87.00%	-0.80%
2022	Mahnomen	Hib	81.70%	
2023	Mahnomen	Hib	76.60%	-5.10%
2022	Mahnomen	MMR	85.40%	
2023	Mahnomen	MMR	77.90%	-7.50%

Year	Location	Vaccine	Percentage	% Change
2022	Norman	DTap	81.20%	
2023	Norman	DTap	73.10%	-8.10%
2022	Norman	Hep A	59.40%	
2023	Norman	Hep A	58.20%	-1.20%
2022	Norman	Hep B	89.90%	
2023	Norman	Hep B	89.60%	-0.30%
2022	Norman	Hib	88.40%	
2023	Norman	Hib	77.60%	-10.80%
2022	Norman	MMR	91.30%	
2023	Norman	MMR	88.10%	-3.20%
2022	Polk	DTap	63.90%	
2023	Polk	DTap	68.40%	4.50%
2022	Polk	Hep A	43.40%	
2023	Polk	Hep A	37.00%	-6.40%
2022	Polk	Hep B	68.70%	
2023	Polk	Hep B	71.00%	2.30%
2022	Polk	Hib	78.70%	
2023	Polk	Hib	76.60%	-2.10%
2022	Polk	MMR	77.60%	
2023	Polk	MMR	78.40%	0.80%

Data Source: Minnesota Department of Health (2015−2023)

Figure 9: Percentage of Polk, Norman, Mahnomen County Children Ages 24−35 Months for DTap, Hep A, Hep B, Hib, & MMR



Year	Location	Vaccine	Percentage	% Change
2022	Minnesota	PCV	78.00%	
2023	Minnesota	PCV	76.10%	-1.90%
2022	Minnesota	Polio	83.80%	
2023	Minnesota	Polio	82.40%	-1.40%
2022	Minnesota	Rotavirus	71.50%	
2023	Minnesota	Rotavirus	69.80%	-1.70%
2022	Minnesota	Varicella	81.30%	
2023	Minnesota	Varicella	80.10%	-1.20%
2022	Mahnomen	PCV	82.90%	
2023	Mahnomen	PCV	75.30%	-7.60%
2022	Mahnomen	Polio	84.20%	
2023	Mahnomen	Polio	81.80%	-2.40%
2022	Mahnomen	Rotavirus	61.00%	
2023	Mahnomen	Rotavirus	57.10%	-3.90%
2022	Mahnomen	Varicella	85.40%	
2023	Mahnomen	Varicella	75.30%	-10.10%

Year	Location	Vaccine	Percentage	% Change
2022	Norman	PCV	89.90%	
2023	Norman	PCV	86.60%	-3.30%
2022	Norman	Polio	94.20%	
2023	Norman	Polio	92.50%	-1.70%
2022	Norman	Rotavirus	81.20%	
2023	Norman	Rotavirus	79.10%	-2.10%
2022	Norman	Varicella	89.90%	
2023	Norman	Varicella	85.10%	-4.80%
2022	Polk	PCV	78.70%	
2023	Polk	PCV	75.80%	-2.90%
2022	Polk	Polio	79.80%	
2023	Polk	Polio	82.00%	2.20%
2022	Polk	Rotavirus	62.80%	
2023	Polk	Rotavirus	69.20%	6.40%
2022	Polk	Varicella	79.30%	
2023	Polk	Varicella	80.50%	1.20%

Data Source: Minnesota Department of Health (2015−2023)

Figure 10: Percentage of Polk, Norman, Mahnomen County Children Ages 24−35 Months for PCV, Polio, Rotavirus, & Varicella

Health Behaviors

Behavioral factors play a crucial role in determining the overall health and well-being of a community. These factors include habits and behaviors that can either positively or negatively impact health outcomes. In this section, we will explore several key behavioral factors that significantly affect our population:

Binge Drinking Among Adults: Excessive alcohol consumption can lead to a range of health issues, including liver disease, cardiovascular problems, and increased risk of accidents and injuries. Understanding the prevalence of binge drinking helps us address its impact on public health.

Percentage of Mothers Who Smoke: Smoking during pregnancy poses serious risks to both the mother and the unborn child, including low birth weight, preterm birth, and developmental issues. Monitoring smoking rates among mothers is essential for promoting healthier pregnancies and better outcomes for infants.

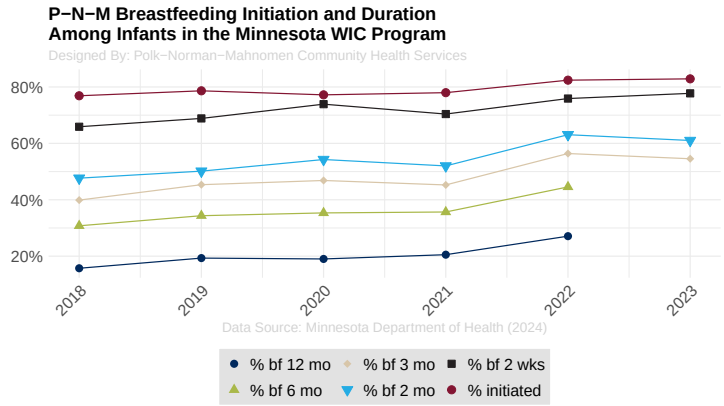
Current Cigarette Smoking Among Adults: Smoking remains a leading cause of preventable diseases and deaths. By examining current smoking rates, we can identify trends and target interventions to reduce smoking-related health problems.

STI/HIV: The prevalence of sexually transmitted infections (STIs) and HIV is a critical public health concern. Effective prevention, testing, and treatment strategies are necessary to control the spread of these infections and improve the health of affected individuals.

By analyzing these behavioral factors, we can gain valuable insights into the health challenges faced by our community and develop targeted strategies to promote healthier behaviors and improve overall health outcomes.

Breastfeeding

The Special Supplemental Nutrition Program for Women, Infants & Children (WIC) is a nutrition and breastfeeding program that helps eligible pregnant women, new mothers, babies and young children. WIC provides nutrition education and counseling, nutritious foods, and referrals to health and other social services. Polk-Norman-Mahnomen CHS participates in the Minnesota WIC Peer Breastfeeding Support Program. Peer counselors improve health by increasing breastfeeding initiation, exclusivity, and duration.



Year	Duration	Percentage
2023	% bf 12 mo	–
2023	% bf 6 mo	–
2023	% bf 3 mo	54.55%
2023	% bf 2 mo	61.02%
2023	% bf 2 wks	77.73%
2023	% initiated	82.88%

Data Source: Minnesota Department of Health (2024f)

Figure 1: P–N–M Breastfeeding Initiation and Duration Among Infants in the Minnesota WIC Program

Substance Use and Misuse

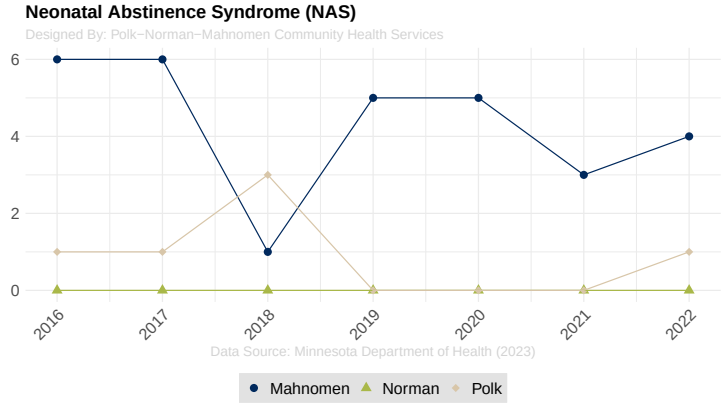
While most youth enjoy good health, some are at increased risk for behaviors that can lead to poor health outcomes. Notably, many adults with substance abuse disorders and addictions began their struggles during adolescence and young adulthood.

Mahnomen County stands out with the highest rates of Neonatal Abstinence Syndrome (NAS) at 52.3 per 1,000 live births and nonfatal drug overdoses at 9.8 per 1,000 residents. These rates are significantly higher than the state averages for Minnesota.

Comparing fatal drug overdose data across counties can be challenging due to its presentation as raw counts rather than rates. Instead of focusing solely on these counts, we should consider the profound impact each loss has on the community. Over approximately nine years, Minnesota lost 8,991 individuals to drug overdoses. Polk County experienced 34 fatalities, Norman

County had 4, and Mahnomen County lost 43. These numbers remind us that behind every statistic is a life, underscoring the importance of our work and the positive changes we strive to bring to our communities.

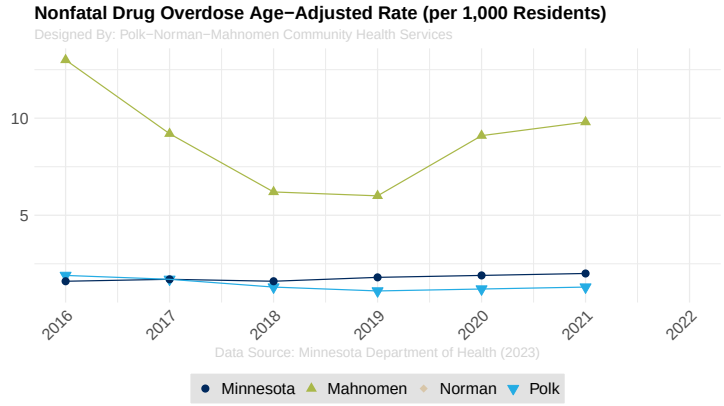
Beyond drug overdoses, other significant public health concerns include binge drinking and smoking. These behaviors also contribute to premature death and years of potential life lost. By examining data on binge drinking and smoking, we can better understand their impact on our communities and develop effective strategies to mitigate these risks.



Location	NAS Total 2016-2022	NAS Rate 2016-2022
Minnesota	2,791	6.20
Mahnomen	30	52.30
Norman	0	0.00
Polk	6	4.10

Data Source: Minnesota Department of Health (2023b)

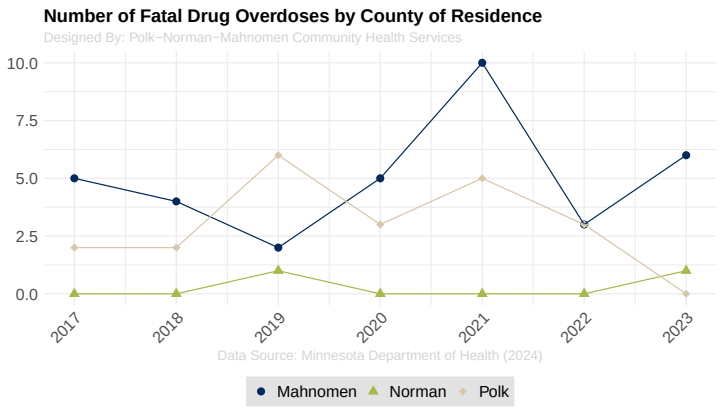
Figure 2: Neonatal Abstinence Syndrome (NAS)



Year	Location	Count	Age-Adjusted Rate
2022	Minnesota	8,359	NA
2021	Minnesota	11,506	2.00
2022	Mahnomen	25	NA
2021	Mahnomen	46	9.80
2022	Norman	NA	NA
2021	Norman	6	NA
2022	Polk	21	NA
2021	Polk	39	1.30

Data Source: Minnesota Department of Health (2023c)

Figure 3: Nonfatal Drug Overdose Age–Adjusted Rate (per 1,000 Residents)



Time Range	Location	Total Count
2017-2023	Minnesota	7,217
2017-2023	Mahnomen	35
2017-2023	Norman	2
2017-2023	Polk	21

Data Source: Minnesota Department of Health (2024b)

Figure 4: Number of Fatal Drug Overdoses by County of Residence

Polk-Norman-Mahnomen Environmental Scan

Between May and June of 2023, forty-two alcohol retailers were contacted to better understand what youth in our area are seeing about THC, and to provide information to county officials and legislators following cannabis legalization.

- All 42 establishments in the scan sold alcohol products (beer, wine, and/or hard liquor).
- 18 establishments were within 1000 feet of a school or park/playground.
- 36 advertised the sale of alcohol outside their establishment.
- 13 had exterior signage regarding minimum purchase age, while 35 had interior signage regarding purchase age. Only 5 had signage related to the health risks of drinking alcohol.
- Seven establishments were found to sell THC products (1 liquor store, 1 vape shop, 5 bars/bar and grills)

Successes

Relationship Building: Most retailers were welcoming and appreciative of the scan. Building and continuing relationships with alcohol and THC retailers will strengthen PNM prevention efforts. There was also a high interest in RBST, as a value add for the business and to increase positive engagement with public health and law enforcement.

Minimum Purchase Age

Most establishments had clear signage indicating only persons 21 years of age and older are allowed in the bar area and that they check identification. 80% of establishments had interior signage about minimum purchase age of alcohol.

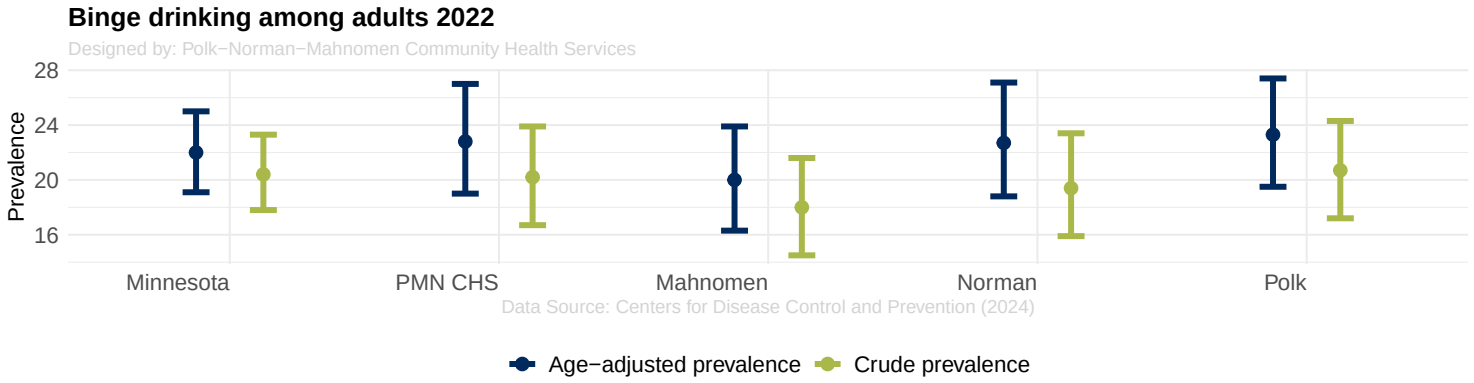
Polk County Opioid Funding Prioritization Survey

The Polk County Opioid Funding Prioritization Survey gathered input from community members to guide the allocation of over $3 million from the national opioid settlement. The survey, conducted from June 12 to July 24, 2023, received 137 responses, with a majority prioritizing prevention, treatment, and recovery support. Key areas identified for funding include primary prevention, community development, and treatment expansion. The survey also highlighted the importance of harm reduction strategies such as overdose reversal and social detox. The results have shaped the county's approach to addressing the opioid crisis over the next 18 years (Polk County 2023). If you are reading this on the computer and need more information, please click the following links for more information Polk-County-Opioid-Funding-Prioritization-Survey-Results Opioid Settlement Advisory Council.

Alcohol

Binge drinking is a public health concern that affects our communities and the state of Minnesota at similar rates. Approximately 1 in 5 individuals in Minnesota, including those in our three counties, engage in binge drinking. This widespread behavior poses

various health risks, including alcohol poisoning, injuries, and long-term health issues such as liver disease, heart disease, and cancer. Binge drinking can also lead to risky behaviors, such as unsafe sexual practices and impaired driving, which further endanger individuals and communities.



Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	17.8	20.4	23.3
Crude	PMN CHS	16.7	20.2	23.9
Crude	Mahnomen	14.5	18.0	21.6
Crude	Norman	15.9	19.4	23.4
Crude	Polk	17.2	20.7	24.3

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	19.1	22.0	25.0
Age-Adjusted	PMN CHS	19.0	22.8	27.0
Age-Adjusted	Mahnomen	16.3	20.0	23.9
Age-Adjusted	Norman	18.8	22.7	27.1
Age-Adjusted	Polk	19.5	23.3	27.4

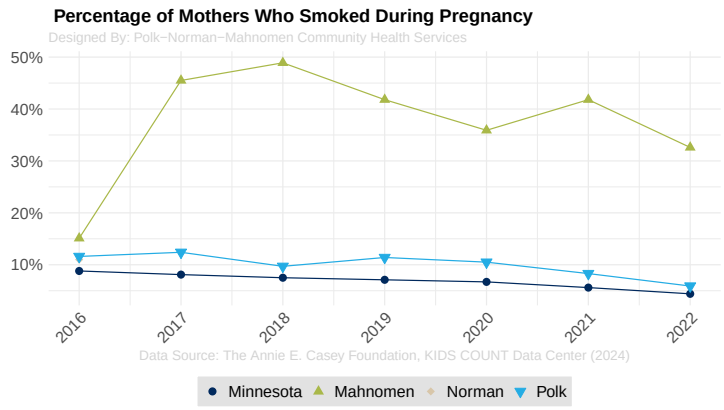
Data Source: Centers for Disease Control and Prevention (2024b)

Figure 5: Binge drinking among adults 2022

Smoking

Smoking remains a critical public health issue for local communities, impacting overall health and well-being. While Mahnomen County has historically had a higher percentage of mothers who smoked during pregnancy, it is encouraging to see a significant decline in this behavior from 2021 to 2022. Changing any habit is challenging, and maintaining these changes takes time, making this decrease particularly noteworthy.

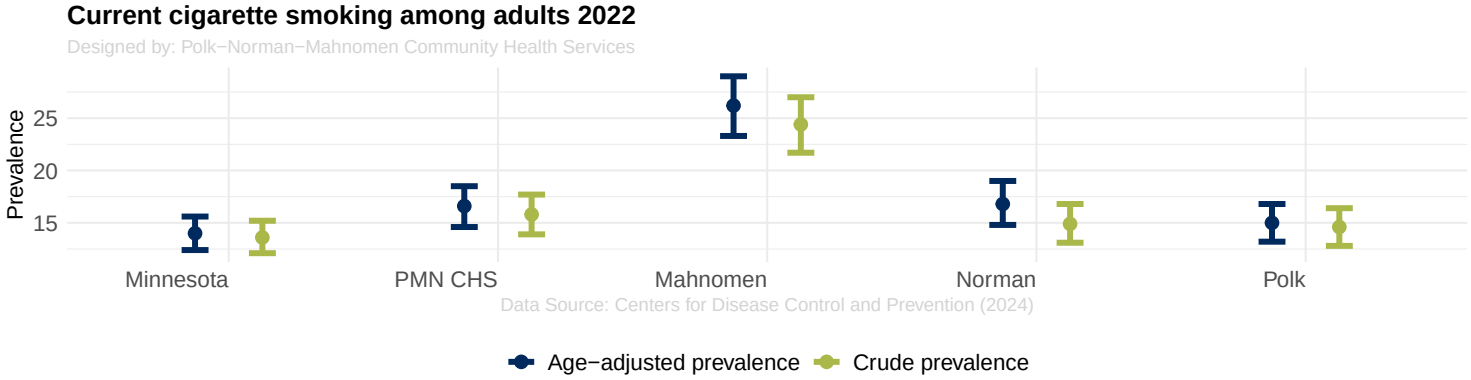
However, it is important to note that Mahnomen County also has a significantly higher smoking rate among all adults compared to the other counties. This higher prevalence of smoking poses various health risks, including respiratory diseases, cardiovascular diseases, and cancer. Addressing smoking rates remains a critical public health priority to improve overall community health and reduce the burden of smoking-related illnesses.



Year	Location	Mothers Who Smoked	% Change
2021	Minnesota	5.60%	
2022	Minnesota	4.40%	-1.20%
2021	Mahnomen	41.80%	
2022	Mahnomen	32.60%	-9.20%
2021	Norman	NA	
2022	Norman	NA	–
2021	Polk	8.30%	
2022	Polk	5.90%	-2.40%

Data Source: The Annie E. Casey Foundation, KIDS COUNT Data Center (2024a)

Figure 6: Percentage of Mothers Who Smoked During Pregnancy



Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	12.1	13.6	15.2
Crude	PMN CHS	13.9	15.8	17.7
Crude	Mahnomen	21.7	24.4	27.0
Crude	Norman	13.1	14.9	16.8
Crude	Polk	12.8	14.6	16.4

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	12.4	14.0	15.6
Age-Adjusted	PMN CHS	14.6	16.6	18.5
Age-Adjusted	Mahnomen	23.3	26.2	29.0
Age-Adjusted	Norman	14.8	16.8	19.0
Age-Adjusted	Polk	13.2	15.0	16.8

Data Source: Centers for Disease Control and Prevention (2024b)

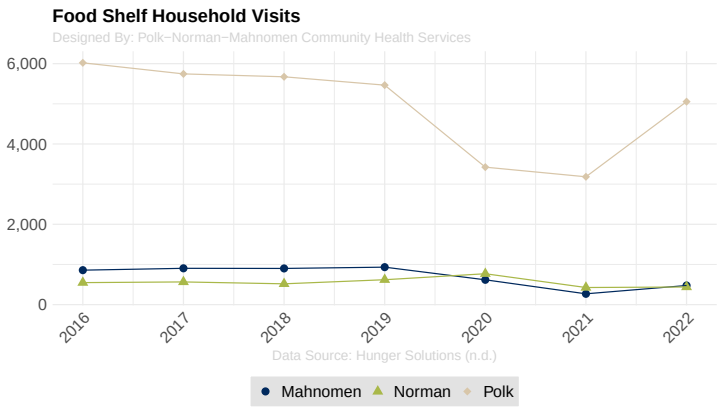
Figure 7: Current cigarette smoking among adults 2022

Food Shelf Household Visits

In 2022, food shelf visits in Polk, Norman, and Mahnomen counties reflected a need for food assistance.

- Polk County: Households made numerous visits to food shelves, highlighting the ongoing struggle with food insecurity in the area.
- Norman County: Similarly, there was a notable increase in food shelf visits, indicating that many families are facing economic challenges and require additional support.
- Mahnomen County: The county experienced a high number of food shelf visits, underscoring the severe need for food assistance among its residents.

These trends align with the broader state data, which saw a record high of 5.5 million food shelf visits in Minnesota and was driven by rising food prices and increased demand from seniors, adults, and children (Hunger Solutions 2022).



Year	Location	Household Visits	% Difference
2021	Mahnomen	269	–
2022	Mahnomen	476	76.95%
2021	Norman	426	–
2022	Norman	439	3.05%
2021	Polk	3,183	–
2022	Polk	5,054	58.78%

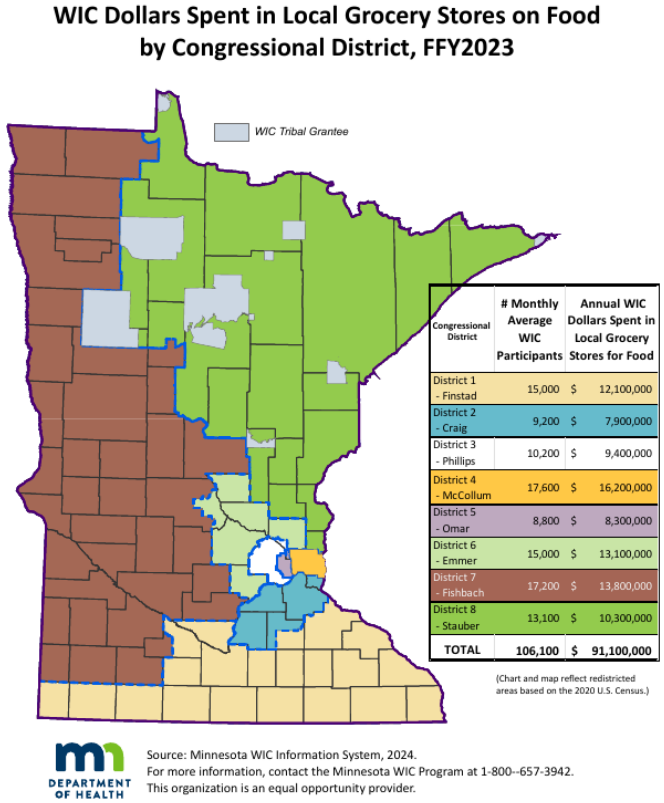
Data Source: Hunger Solutions (n.d.)

Figure 8: Food Shelf Household Visits

Farmer's Markets

Farmers markets offer a variety of programs to make fresh, local produce more accessible to everyone in the community. Programs like Market Bucks, which match SNAP/EBT spending dollar-for-dollar up to $10, help stretch food budgets and encourage healthy eating. The WIC Farmers Market Nutrition Program provides additional support for women, infants, and children, ensuring they have access to nutritious foods.

Local initiatives, such as the Power of Produce (PoP) program, offer incentives for children and seniors to engage with farmers markets, promoting lifelong healthy eating habits. These programs not only support individual health but also strengthen community ties and local economies.



Health Conditions

Addressing chronic health conditions is crucial for improving the overall well-being of our communities. Heart disease, cancer, sexually transmitted infections (STIs) including HIV, obesity, and diabetes are among the most significant health challenges we face today. These conditions not only impact individual health but also place a substantial burden on healthcare systems and society as a whole. Health conditions related to a mental health related condition(s) are not discussed in the mental health section.

Heart disease and cancer are the leading causes of death in Minnesota. Cancer, with its various forms, continues to affect many lives, highlighting the importance of early detection and treatment. STIs, including HIV, pose serious health risks and require comprehensive education and prevention strategies.

Obesity is a growing concern, contributing to numerous other health issues such as diabetes and heart disease. Diabetes itself is a major public health challenge, with both type 1 and type 2 diabetes requiring effective management to prevent complications.

By focusing on these key health conditions, we can develop targeted interventions and support systems to improve health outcomes and enhance the quality of life for individuals in our communities.

Heart Disease

Heart disease is a health concern that impacts our communities. The age-adjusted number of deaths per 100,000 residents due to heart disease from 2018 to 2022 varies across different locations. Mahnomen County has the highest rate at 196 deaths per 100,000 residents, which is notably higher than the state average for Minnesota at 121 deaths per 100,000 residents. Polk and Norman counties also report elevated rates, with 153 and 160 deaths per 100,000 residents, respectively.

Table 1: Age Adjusted Number of Deaths per 100,000 due to Heart Disease (2018-2022)

Location	Heart Disease
Minnesota	121
Polk	153
Norman	160
Mahnomen	196

Minnesota Department of Health (2024c)

Cancer

Cancer remains a significant public health challenge, affecting many individuals and communities. As of January 1, 2021, an estimated 316,110 Minnesota residents were living with a history of malignant cancer, representing 5.5% of the state's population. In our local counties, the prevalence is even higher. Polk County has 1,880 individuals (6.1% of the population) living with a history of cancer, Norman County has 470 individuals (7.3%), and Mahnomen County has 370 individuals (6.9%).

These statistics highlight the widespread impact of cancer and the importance of ongoing support and resources for those affected. Additionally, the age-adjusted rates of specific cancers, such as lung and breast cancer, provide further insight into the burden of this disease. For example, Mahnomen County has the highest age-adjusted rate of lung cancer at 62.7 per 100,000 people, while Polk County has the highest rate of breast cancer at 146.3 per 100,000 people.

By understanding the prevalence and impact of cancer in our communities, we can better tailor our efforts to support those affected and work towards reducing the incidence and mortality associated with this disease.

Table 2: Persons living with a history of of cancer by Location

Location	Number of Persons Living with a History of of Cancer	Percent of Population Living with a History of Cancer
Minnesota	3,16,110	5.5%
Polk	1,880	6.1%
Norman	470	7.3%
Mahnomen	370	6.9%

Minnesota Department of Health (2024a)

Table 3: Cancer Age Adjusted Rate per 100,000 people 2015-2019

Location	Lung Cancer	Breast Cancer
Minnesota	55.6	135.7
Polk	57.8	146.3
Norman	49.3	109.2
Mahnomen	62.7	133.7

Minnesota Department of Health (2023a)

Dementia

Dementia is a growing public health concern, particularly among older adults. In Minnesota, 11.9% of beneficiaries are living with dementia. This prevalence is slightly higher in Polk and Norman counties, where 12% of beneficiaries are affected. Mahnomen County has a slightly lower rate at 11.5%. These percentages highlight the impact of dementia on our communities. Addressing the needs of individuals with dementia and their caregivers is crucial for improving quality of life and providing adequate support. By focusing on early detection, effective management, and community resources, we can better support those affected by dementia and work towards reducing its burden.

Table 4: Prevalence of Dementia

Location	Percent of Beneficiaries with Dementia
Minnesota	11.9%
Polk	12%
Norman	12%
Mahnomen	11.5%

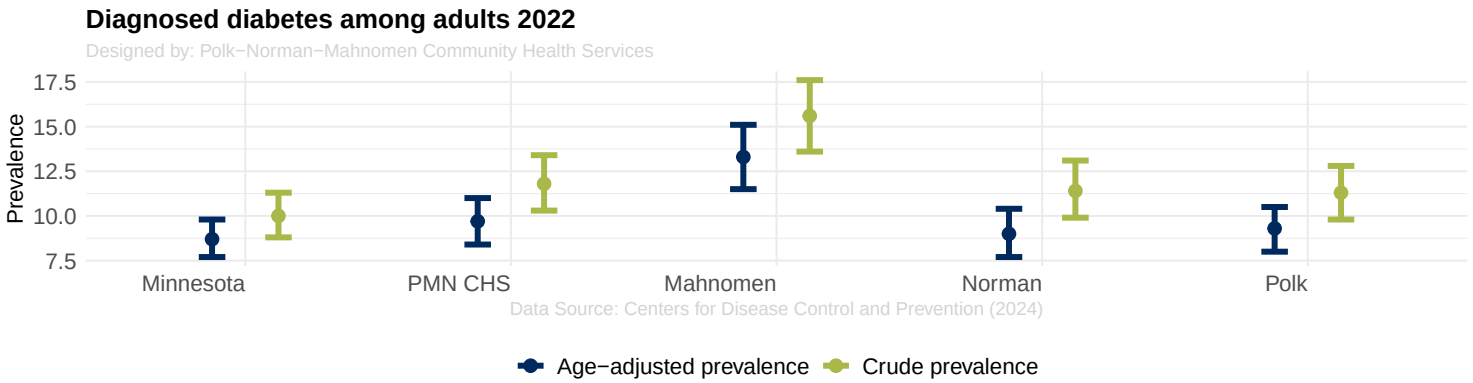
NORC at the University of Chicago (2024)

Diabetes

The age-adjusted prevalence for diabetes is similar between Minnesota, Norman, and Polk. However, Mahnomen does have a higher prevalence of diabetes than Polk County and Norman County. The hope would be that all three counties would be doing reasonably well in the optimal diabetic care. However, we are lower compared to Minnesota.

Optimal diabetic care consists of controlling ones blood pressure (less than 140/90 mmHg), maintaining ones HbA1c (< 8.0 mg/dL), taking a statin if its tollorated, a non-tobacco user, and being on a daily aspirin if the patient has ischemic vascular disease (Minnesota Department of Health 2018-2022). This care is specifically targeted at patients aged 18-75.

Similarly, the pattern observed in obesity among adults mirror those seen in diabetes prevalence. Mahnomen County, in particular, has a higher age-adjusted prevalence of no leisure-time physical activity and obesity compared to the rest of the group.

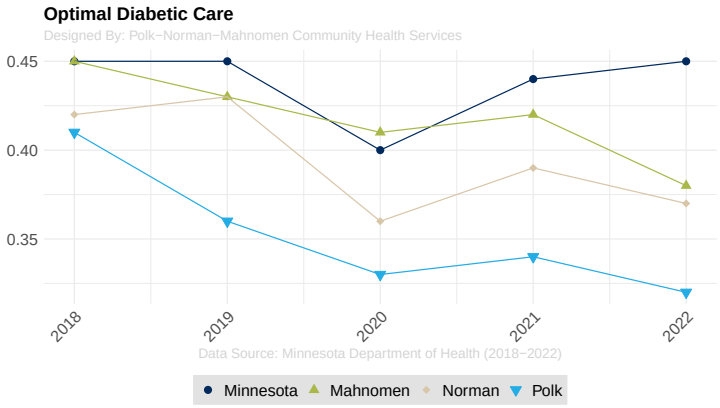


Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	8.8	10.0	11.3
Crude	PMN CHS	10.3	11.8	13.4
Crude	Mahnomen	13.6	15.6	17.6
Crude	Norman	9.9	11.4	13.1
Crude	Polk	9.8	11.3	12.8

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	7.7	8.7	9.8
Age-Adjusted	PMN CHS	8.4	9.7	11.0
Age-Adjusted	Mahnomen	11.5	13.3	15.1
Age-Adjusted	Norman	7.7	9.0	10.4
Age-Adjusted	Polk	8.0	9.3	10.5

Data Source: Centers for Disease Control and Prevention (2024b)

Figure 1: Diagnosed diabetes among adults 2022



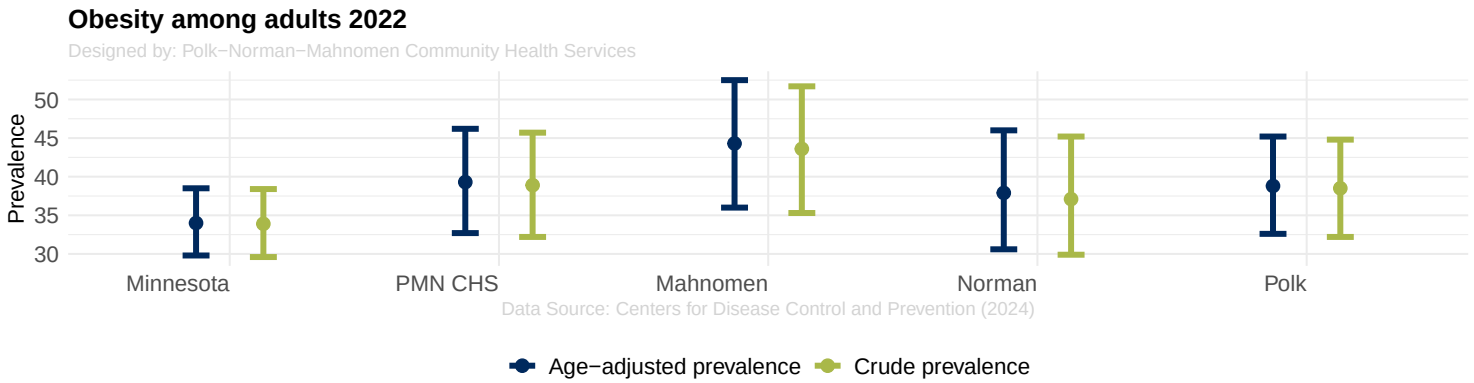
Year	Location	Optimal Care Rate
2022	Minnesota	0.45
2022	Mahnomen	0.38
2022	Norman	0.37
2022	Polk	0.32

Data Source: Minnesota Department of Health (2018-2022)

Figure 2: Optimal Diabetic Care

Obesity

Examining obesity is crucial because it is a major risk factor for numerous chronic diseases, including heart disease, diabetes, and certain cancers. Understanding the prevalence of obesity helps in developing targeted interventions to promote healthier lifestyles and prevent these conditions. Additionally, addressing obesity can improve overall quality of life and reduce healthcare costs for individuals and communities.



Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	29.6	33.9	38.4
Crude	PMN CHS	32.2	38.9	45.7
Crude	Mahnomen	35.3	43.6	51.7
Crude	Norman	29.9	37.1	45.2
Crude	Polk	32.2	38.5	44.8

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	29.8	34.0	38.5
Age-Adjusted	PMN CHS	32.7	39.3	46.2
Age-Adjusted	Mahnomen	36.0	44.3	52.5
Age-Adjusted	Norman	30.6	37.9	46.0
Age-Adjusted	Polk	32.6	38.8	45.2

Data Source: Centers for Disease Control and Prevention (2024b)

Figure 3: Obesity among adults 2022

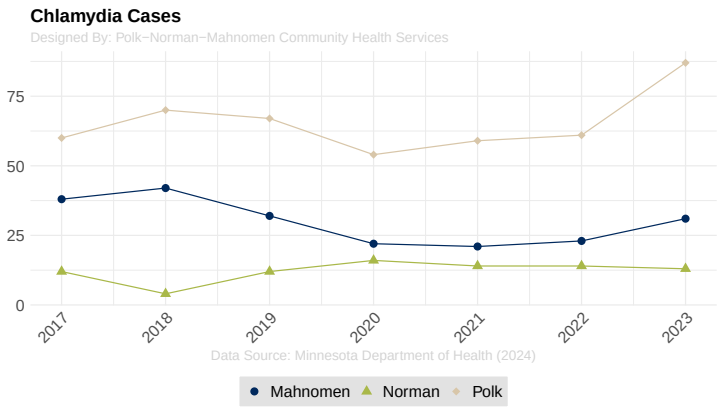
Influenza

Several influenza surveillance methods are used across the state of Minnesota. Data is summarized by influenza season (October – April), rather than calendar year. Please refer to page 2 Hospital Influenza Cases by Season and page 3 Deaths associated with influenza by season in this MDH Summery report.

STI/HIV

As we continue to address these behavioral factors, it's also crucial to focus on sexually transmitted infections (STIs) and HIV. These public health concerns require our attention to ensure effective prevention, testing, and treatment strategies. Let's now examine the data on STIs and HIV in our counties to understand their impact and how we can improve health outcomes in this area.

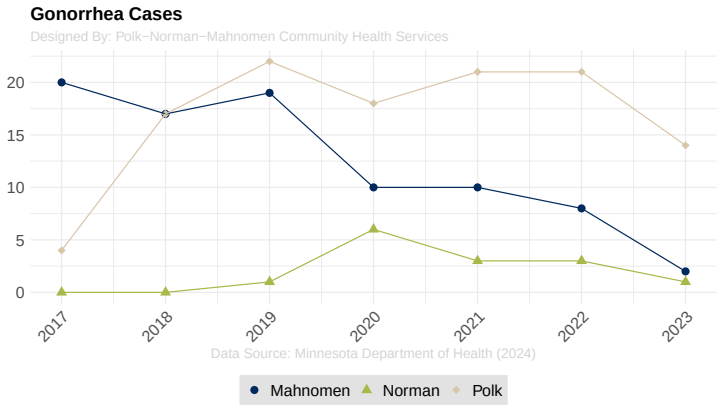
Chlamydia, Gonorrhea, and Syphilis data in this report should only be compared to the county it pertains to since these are counts. What is also difficult with counts even when looking at the impact internally, is counts don't factor in population growth or decline. However, counts do provide us with insight of the actual impact for if someone gets an STI or HIV. Polk County experienced an increase in Chlamydia cases from 2022 to 2023. Norman and Mahnomen nearly had no cases of gonorrhea in 2023. Syphilis, we see a decline in Polk County and an increase in Mahnomen County.



Year	Location	Chlamydia Cases Count
2023	Mahnomen	31.00
2023	Norman	13.00
2023	Polk	87.00

Data Source: Minnesota Department of Health (2024e)

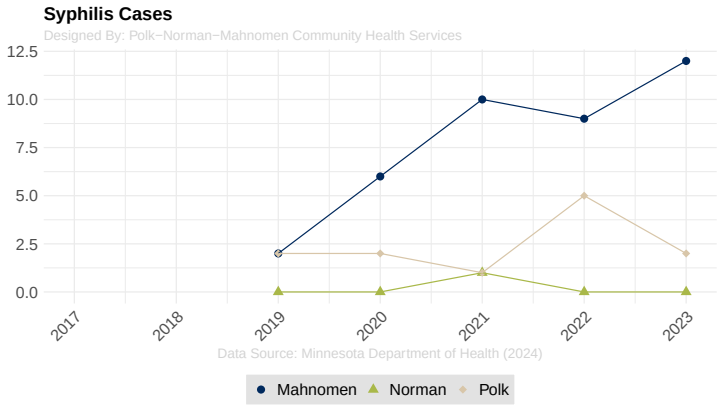
Figure 4: Chlamydia Cases



Year	Location	Gonorrhea Cases Count
2023	Mahnomen	2.00
2023	Norman	1.00
2023	Polk	14.00

Data Source: Minnesota Department of Health (2024e)

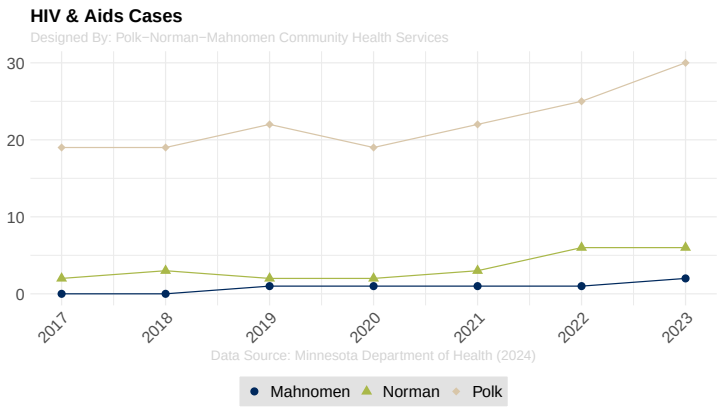
Figure 5: Gonorrhea Cases



Year	Location	Syphilis Cases Count
2023	Mahnomen	12.00
2023	Norman	0.00
2023	Polk	2.00

Data Source: Minnesota Department of Health (2024e)

Figure 6: Syphilis Cases



Year	Location	HIV & Aids Cases Count
2023	Mahnomen	2.00
2023	Norman	6.00
2023	Polk	30.00

Data Source: Minnesota Department of Health (2024e)

Figure 7: HIV & Aids Cases

Asthma

Asthma is a chronic disease of the airways that makes breathing difficult. Asthma causes inflammation or swelling, and a narrowing of the airways making it more difficult to breathe. Irritated cells in the airways make more mucus than usual narrowing the tiny airways. Mucus is a normally a protective, sticky liquid that helps shield your lungs from irritants like dust, bacteria and smoke.

During normal breathing, air flows freely in and out of the lungs. However, during an asthma attack or episode, swelling of the airway's lining increases, muscles surrounding the airways tighten, and thick mucus clogs the tiny airways making it difficult to breathe. Asthma affects people of all ages and while it can start in adulthood, it most often starts during childhood.

Children, teens, and adults now spend up to 90% of their time indoors, and at least 50% of that time is spent in their home. Because of the large amount of time spent indoors, the home environment is an important focus for reducing exposures to triggers of asthma. Triggers of asthma found in the home include allergens such as pet dander, mold, or pests as well as irritants such as scented cleaning products and second hand smoke (Minnesota Department of Health 2022).

Table 5: Asthma ED Visit Age-Adjusted Rates for 2019-2021 by County (per 10,000 Residents)

Location	Age-Adjusted
Minnesota	29.8
Polk	21.3
Norman	14.0
Mahnonmen	42.6

Minnesota Department of Health (2019-2021)

Mental Health

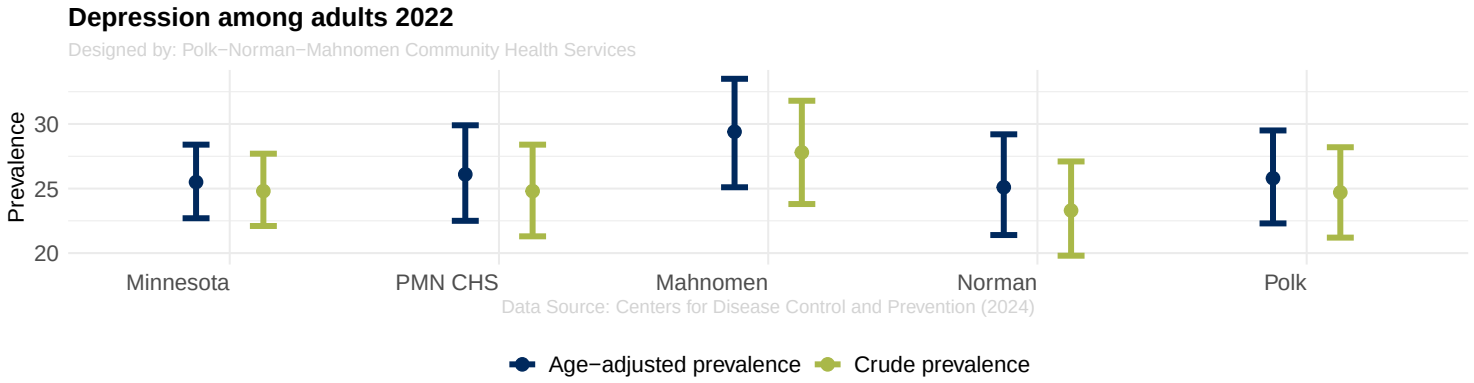
Depression/ Optimal Care for Depression/ Community Support/ Risky Behavior

Our three counties and the state of Minnesota show that roughly 1 in every 3 to 5 people is projected to experience depression. This high ratio is also reflected in the Minnesota Student Survey responses from 9th grade students. When asked how often they have felt down, depressed, or hopeless over the past two weeks, about 1 in every 3 to 5 reported feeling this way. Mahnomen County had the highest percentage of 9th graders responding 'yes' to this question.

A very encouraging sign is Polk, Norman, and Mahnomen counties appear to be doing well in screening for mental health and depression for patients 12-17 years of age. We are slightly lower than Minnesota but all three counties are over 80%. Early screening plays a crucial role in identifying and addressing mental health issues promptly, leading to better outcomes for our youth.

In terms of community support, Mahnomen County saw a positive change of 12.3% in students feeling that the community cared for them "quite a bit" or "very much." Conversely, Polk County experienced a 13.5% decrease in this sentiment.

The Minnesota Student Survey helps us identify early signs of possible problematic behavior in our youth. For instance, we can see that 60.8% of 11th graders in Polk County reported not using alcohol, marijuana, or drugs within the last year. Unfortunately, we currently lack data on how well Mahnomen and Norman counties are doing in this area.

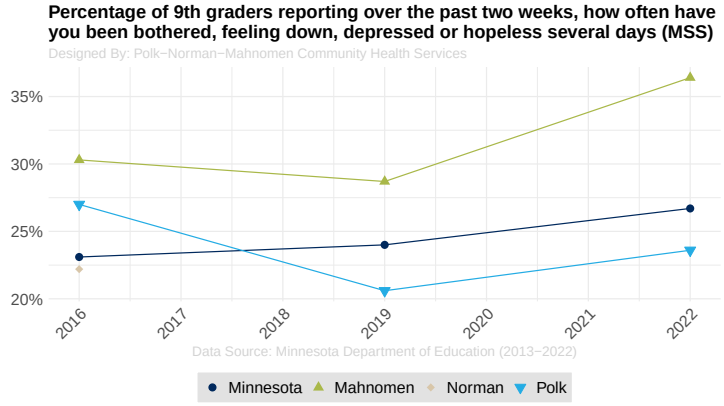


Type	Location	Low CI	Prevalence	High CI
Crude	Minnesota	22.1	24.8	27.7
Crude	PMN CHS	21.3	24.8	28.4
Crude	Mahnomen	23.8	27.8	31.8
Crude	Norman	19.8	23.3	27.1
Crude	Polk	21.2	24.7	28.2

Type	Location	Low CI	Prevalence	High CI
Age-Adjusted	Minnesota	22.7	25.5	28.4
Age-Adjusted	PMN CHS	22.5	26.1	29.9
Age-Adjusted	Mahnomen	25.1	29.4	33.5
Age-Adjusted	Norman	21.4	25.1	29.2
Age-Adjusted	Polk	22.3	25.8	29.5

Data Source: Centers for Disease Control and Prevention (2024b)

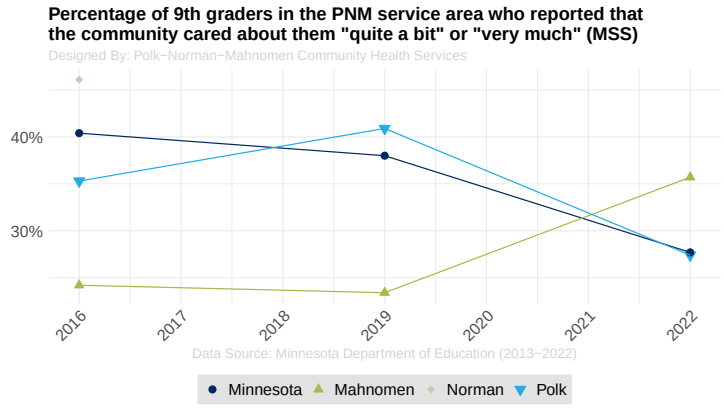
Figure 1: Depression among adults 2022



Year	Location	9th Graders Feeling Depressed	% Change
2019	Minnesota	24.00%	
2022	Minnesota	26.70%	2.70%
2019	Mahnomen	28.70%	
2022	Mahnomen	36.40%	7.70%
2019	Norman	NA	
2022	Norman	NA	–
2019	Polk	20.60%	
2022	Polk	23.60%	3.00%

Data Source: Minnesota Department of Education (2013-2022)

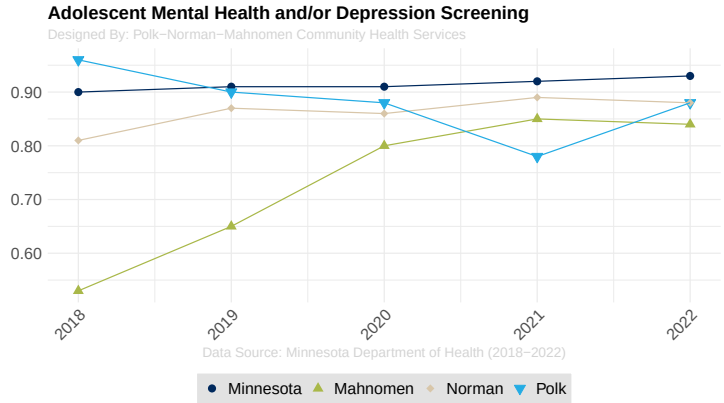
Figure 2: Percentage of 9th graders reporting over the past two weeks, how often have you been bothered, feeling down, depressed or hopeless several days (MSS)



Year	Location	9th Graders Community Cared	% Change
2019	Minnesota	38.00%	
2022	Minnesota	27.70%	-10.30%
2019	Mahnomen	23.40%	
2022	Mahnomen	35.70%	12.30%
2019	Norman	NA	
2022	Norman	NA	–
2019	Polk	40.90%	
2022	Polk	27.40%	-13.50%

Data Source: Minnesota Department of Education (2013-2022)

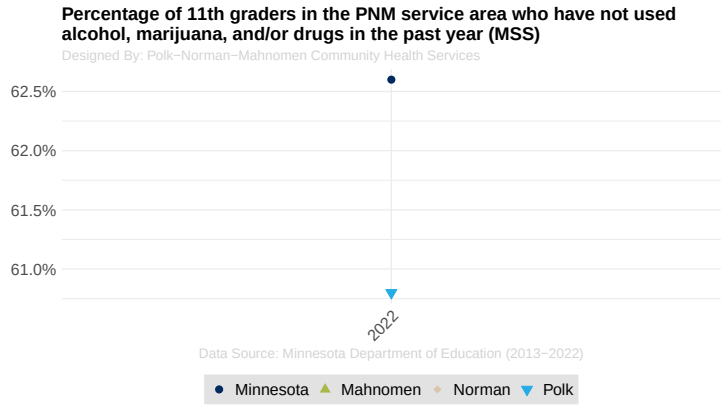
Figure 3: Percentage of 9th graders in the PNM service area who reported that the community cared about them “quite a bit” or “very much” (MSS)



Year	Location	Optimal Care Rate
2022	Minnesota	0.93
2022	Mahnomen	0.84
2022	Norman	0.88
2022	Polk	0.88

Data Source: Minnesota Department of Health (2018-2022)

Figure 4: Adolescent Mental Health and/or Depression Screening



Year	Location	11th Graders No Substance Use	% Change
2022	Minnesota	62.60%	0.00%
2022	Mahnomen	NA	–
2022	Norman	NA	–
2022	Polk	60.80%	0.00%

Data Source: Minnesota Department of Education (2013-2022)

Figure 5: Percentage of 11th graders in the PNM service area who have not used alcohol, marijuana, and/or drugs in the past year (MSS)

Suicide

Suicide is complex; there is no single cause of death by suicide. Suicide prevention efforts are based on evidence that most suicides are preventable, mental illness is treatable, and recovery is possible.

In 2022, 860 Minnesotans died from suicide, the highest total ever, and preliminary data indicates 815 died in 2023. This translates to an age-adjusted rate of 14.8 and 14.1 per 100,000, respectively. Preliminary figures for 2023 are based on projections made using Minnesota death certificates finalized as of May 1, 2024. Continuing a persistent trend, males had a higher suicide rate than females in 2022 and 2023. In 2022 and 2023, American Indian or Alaska Natives had a higher suicide rate than the most populous racial or ethnic groups in Minnesota. The largest percentage of suicide deaths in 2023, 47%, involved a firearm. Like previous years, suicide rates in rural areas in 2023 tended to be higher than urban areas. (Data Brief: Suicide Up in 2022, Down in 2023 In 2022 (2024), Minnesota Department of Health) Suicide 2021 data brief

From 2016-2021, there were fifty reported deaths by suicide in Polk, Norman and Mahnomen counties – making up 48% of the total deaths by suicide for the eight Northwest Minnesota county region. Firearms were the most common mechanism of injury accounting for suicide deaths. (Minnesota Department of Health)

Environmental Health

Certain environments can contain factors that impact our health. We may be unaware of the potential risks in our homes, work-places, schools, or other areas in our communities, which could increase our chances of developing medical conditions. Lack of awareness can be detrimental to our health. The following environmental indicators are not meant to alarm but to educate us about the environmental factors we may encounter in our communities, helping us become more informed and proactive.

Tickborne Disease Risk

As shown on the following map, Polk, Norman, and Mahnomen are identified as high-risk areas for tickborne diseases, including Lyme disease. During tick season, we should be proactive in preventative measures, such as using tick repellents and performing regular tick checks, to reduce the risk of infection. Our high-risk area underscores the importance of awareness to be proactive in our health practices. By staying informed and vigilant, we can better protect ourselves and our communities. Remember, early detection and prompt removal of ticks can lower the chances of disease transmission.

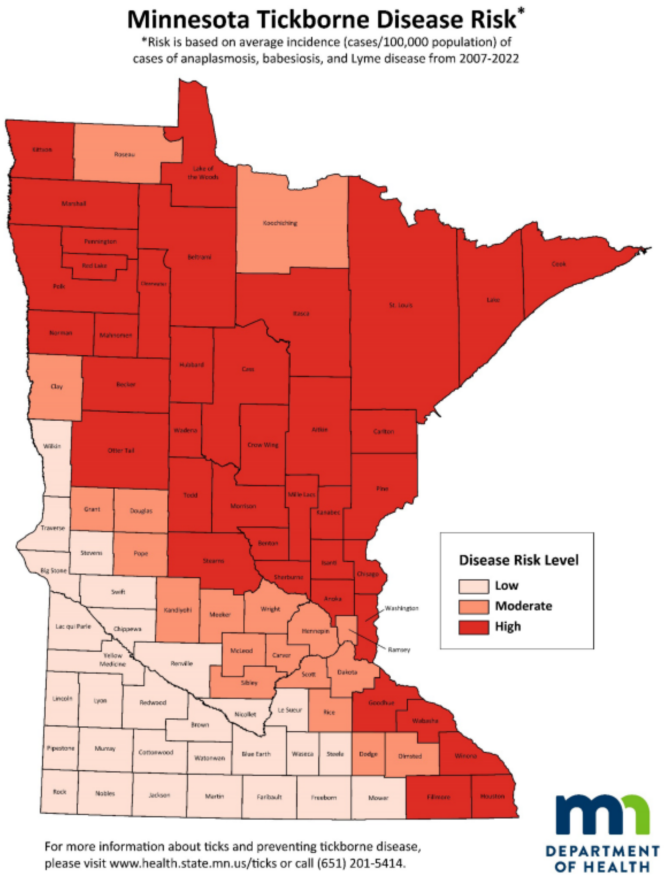


Figure 1: For more resources, please click anywhere on the map

Arsenic

Arsenic can be found in drinking water. Testing is vital in learning if your water has arsenic. The MDH recommendation is to test a private well at least once for arsenic. Chronic arsenic exposure has shown to be a risk factor for some cancers and also can impact a child's development. For both arsenic concentration categories (> 2 µg/L and > 10 µg/L), Mahnomen, Norman, and Polk counties had higher percentages of wells with arsenic compared to the state average for Minnesota.

Table 1: Private Wells Tested 2008-2021

Location	Percentage of Wells > 2 µg/L	Percentage of Wells > 10 µg/L
Minnesota	48.6% (34,920 / 71,831)	11.5% (8,264 / 71,831)
Mahnomen	77.5% (207 / 267)	41.9% (112 / 267)
Norman	73.6% (131 / 178)	42.7% (76 / 178)
Polk	58.9% (399 / 677)	20.8% (141 / 677)

Minnesota Department of Health (2008-2021)

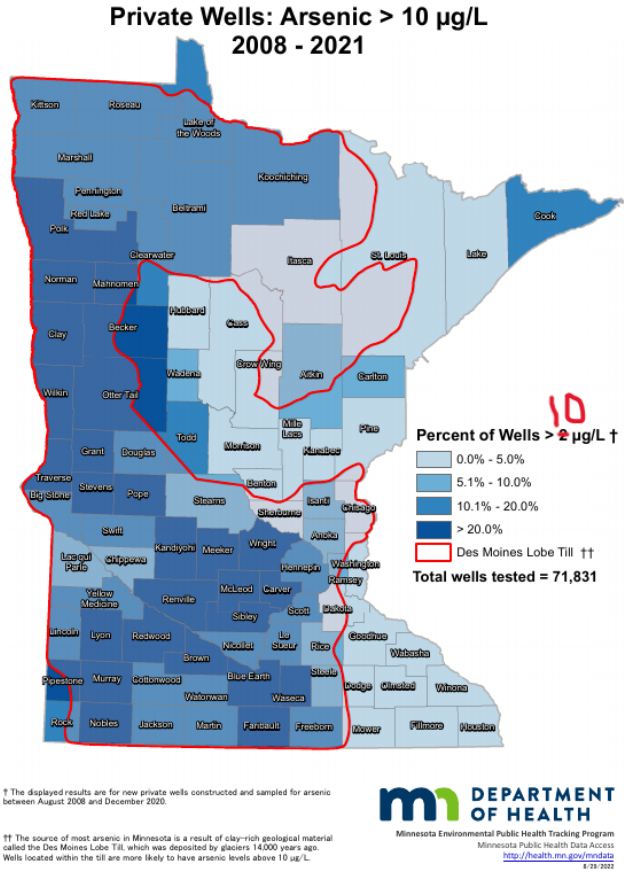


Figure 2: For more resources, please click anywhere on the map

Radon

Radon levels are measured in picocuries per liter (pCi/L). There is no safe level of exposure. According to the EPA, the lifetime risk of lung cancer death from radon exposure at the action level of 4 picocuries per liter (pCi/L) is estimated to be 7 deaths per 1,000 people for never-smokers, and 62 deaths per 1,000 people for current smokers. The only way to know if you have a radon problem is to test for radon.

From 2010 to 2020 (Minnesota Department of Health 2024d), Minnesota averaged 93.5 radon tests per 10,000 properties each year. In comparison, Mahnomen had 28.8 tests, Norman had 50.4, and Polk had 38.7 tests per 10,000 properties annually.

Regarding radon levels, 40.3% of properties tested in Minnesota had radon levels of 4 pCi/L or higher. In Polk, 70% of properties tested had high radon levels, while Norman had 56.6%, and Mahnomen had 57.7%.

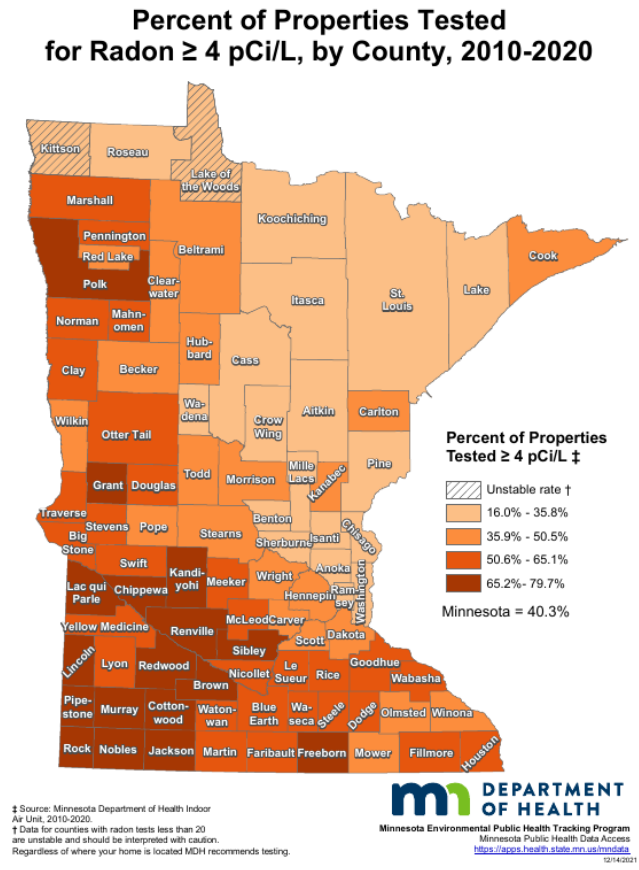


Figure 3: For more resources, please click anywhere on the map

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Together We Can Prevent. Promote. Protect.

Please reach out if you have any questions. Below are some extra community resources.

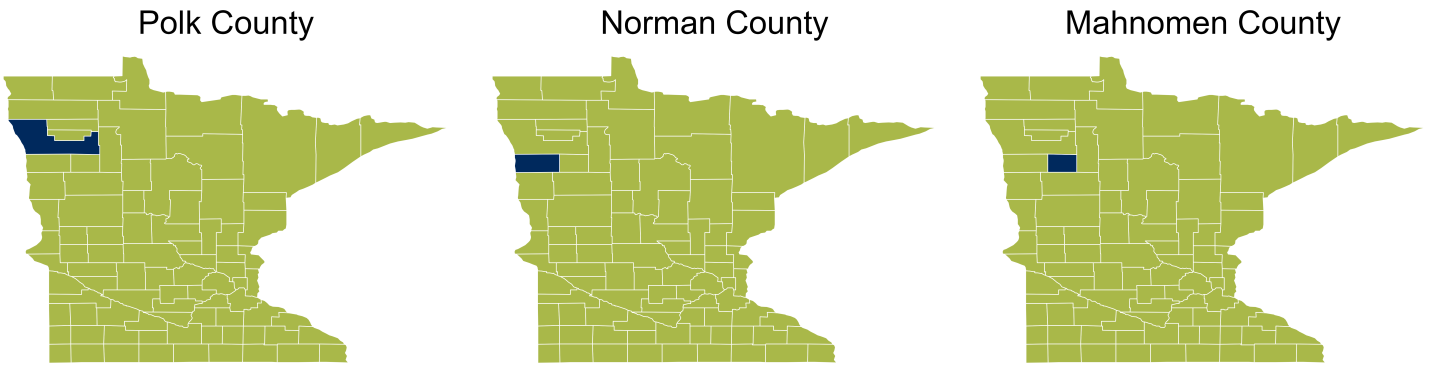

Figure 1: Please click anywhere on the county map to go to a resource page regarding the following topics.

- Housing Instability
- Food Insecurities
- Transportation
- Utility Needs
- Interpersonal Safety