

# 2024 Rice County Community Health Assessment

A summary report on the health status of residents in Rice County, Minnesota

RICE COUNTY PUBLIC HEALTH

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# Introduction

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Every five years since the passage of the Local Public Health Act in 1976, Minnesota Community Health Boards have been required to engage in an assessment of the health of residents in their county. To complete a community health assessment, local public health collaborators compile, analyze and summarize data from a variety of sources. Collaborators then use this information to identify health priorities. The community health assessment is followed with a community health improvement plan. The community health improvement plan restates the priorities and delineates strategies to address them.

In Rice County, a number of agencies and organizations engage in various processes to identify and describe issues of importance to the community. This assessment adds to, and draws on those strategic processes as a means to collect, analyze, and use data to prioritize issues and make decisions.

Rice County Public Health also has a strategic practice to increase the agency’s use of data related to social determinants as a way of continuing the conversation about equity and what drives health. This assessment intends to help make clear the association between the conditions of community and our health.

For this reason, the 2024 Rice County Community Health Assessment has four sections:

- **People:** Describes who we are, where we have come from, and where we might be going. This section also begins to assess the cost of our experiences with disease.
- **Opportunity:** Describes how our health is related to our opportunities for education, employment, income, housing and transportation. This section also begins to expose the differential power community members have in Rice County.
- **Nature:** Describes how our health is shaped by our connections to and our interactions with the world around us.
- **Belonging:** Describes how our early life experiences and our sense of belonging in community helps or hinders us from reaching our highest health potential.

Many of the issues found in this report could be described in one or more section. Editorial decisions were made as to where best include content.

A community health improvement plan will be developed by Rice County Public Health, in collaboration with community partners, and submitted to the Minnesota Department of Health.

*For additions or comments about the contents of this report, please contact Sara Coulter MPH, RD, Clinic & Community Supervisor at Rice County Public Health ([sara.coulter@ricecountymn.gov](mailto:sara.coulter@ricecountymn.gov)).*

## Data Sources

This assessment draws on numerous national, state and local sources of data collected on factors known to influence health. Where possible, qualitative data has been included. Data presented is the most recently available data at the time. The works cited section contains a complete list of sources.

In addition to these secondary data sources, Rice County Public Health administers a survey instrument, with support from the Minnesota Department of Health's Center for Health Statistics. The survey has been revised over the years and draws from existing sources such as the Behavioral Risk Factor Surveillance System (BRFSS) survey and from other county-level surveys in Minnesota. The survey was formatted by the survey vendor, Survey Systems, Inc. of New Brighton, MN, as a scannable, self-administered English-language questionnaire.

In 2023, a two-stage sampling strategy was used for obtaining a probability sample of adults living in Rice County. For the first stage of sampling, a random sample of Rice County residential addresses was purchased from a national sampling vendor (Marketing Systems Group of Horsham, PA). Address-based sampling was used so that all households would have an equal chance of being sampled for the survey. Marketing Systems Group obtained the list of addresses from the United States Postal Service. For the second stage of sampling, the "most recent birthday" method of within-household respondent selection was used to specify one adult from each selected household to complete the survey.

At times, data is presented by two strata, northern Rice County and southern Rice County. These were defined by ZIP code boundaries. Northern Rice County was defined by addresses in the following zip codes: 55018 (Dennison), 55019 (Dundas), 56052 (Kilkenny), 55046 (Lonsdale), 56069 (Montgomery), 55057 (Northfield), 55046 (Veseli), 55088 (Webster) and southern Rice County was defined by addresses in the following zip codes: 55021 (Faribault), 55946 (Kenyon), 55049 (Medford), 55052 (Morristown), 55053 (Nerstrand), 55087 (Warsaw).

Rental housing was included in sampling and college dormitories were not. An initial survey packet was mailed to 1,600 sampled households that included a cover letter, the survey instrument, and a postage-paid return envelope on November 27, 2023. One week after the first survey packets were mailed (December 5), a reminder postcard was sent to all sampled households, reminding those who had not yet returned a survey to do so, and thanking those who had already responded. Two weeks after the reminder postcards were mailed (December 19), another full survey packet was sent to all households that had still not returned the survey. The remaining completed surveys were received over the next six weeks, with the final date for the receipt of surveys being January 31, 2024.

Completed surveys were received from 435 adult residents of Rice County; thus, the overall response rate was 27.2 percent (435/1,600). Unfortunately, no completed surveys were received from any adults aged 18-24, so the final data represent adults aged 25 and older.

To ensure that the survey results are representative of the Rice County adult population aged 25 and older, the data were weighted when analyzed. The weighting accounts for the sample design by adjusting for the number of adults living in each sampled household. The weighting also includes a post-stratification adjustment so that the gender and age distribution of the survey respondents mirrors the gender and age distribution (age 25+) of the adult population in Rice County according to United States Census Bureau, American Community Survey 2022 estimates.

## Limitations

This community health assessment presents findings on many important health topics but not on every possible topic nor for every possible person. Data is limited for some populations, such as people with disabilities, the LGBTQ+ community, and some ethnic and cultural groups. This lack of data makes it challenging to report the experiences of these populations. Efforts have been made to describe differences between subpopulations, when possible, but differences between subpopulations can be as great as differences between population groups. More work is needed to address these gaps.

Much of the data has drawn from secondary sources and the limitations of those sources are described elsewhere.

## Acknowledgements

Rice County Public Health Director, Deb Purfeerst, would like to extend a special thank you to Sara Coulter, Rice County Public Health Clinic & Community Supervisor who takes the lead role in the community health assessment and community health improvement process for Rice County Public Health.

## Health and how it is Created

The World Health Organization defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 1946). This definition allows for the concept of health as the gateway to the human experience. When we are healthy, we are more able to interact with our classmates, coworkers, family and friends. When we are healthy, we are more able to actively participate in civic life.

Previously, personal choice has been emphasized as key to health. However, personal choice only makes up about 30 percent of the factors that create health. Other factors include access to and quality of clinical care (20%), social and economic factors (40%) and physical environment (10%) (University of Wisconsin Population Health Institute, 2019).

## Health Equity, Health Disparities and Rice County

Disparities in health have increasingly become an area for concern in public health. A health disparity is a higher burden of illness, injury, disability, or mortality experienced by one group relative to another. For example, research has documented disparities in the prevalence of chronic diseases of

subpopulations defined by education, income, race and ethnicity, and English proficiency. Disparities also exist by age, ability, gender, gender identity, religious identity etc. Often time's people identify with several groups experiencing disparities and this intersectional identification amplifies the unfair disadvantages the person experiences.

Health equity is a state of health whereby everyone has a fair opportunity to attain their full health potential and no one is disadvantaged in achieving it due to unfair or unjust barriers. Examples of unfair or unjust barriers include communication barriers, lack of financial resources, limited access to health insurance, lack of culturally competent health care and poor working conditions. Barriers also include fear of discrimination and policies or ordinances that unfairly target specific groups. Because groups of people experience disadvantages or continue to experience the ramifications of historical injustices, disparities in health are evident.

Staff at Rice County Public Health are working with our communities to collaborate and take action to address health inequities. By walking alongside our neighbors to find workable solutions that address those disadvantages, we aim to play a role in our community's resilience and hope, and thus fulfill our mission to protect, promote and improve the health of all Rice County residents.

Described in this report, where data is available, are disparities of health as experienced by race, gender identity, sexual orientation and income.

# People

## Location

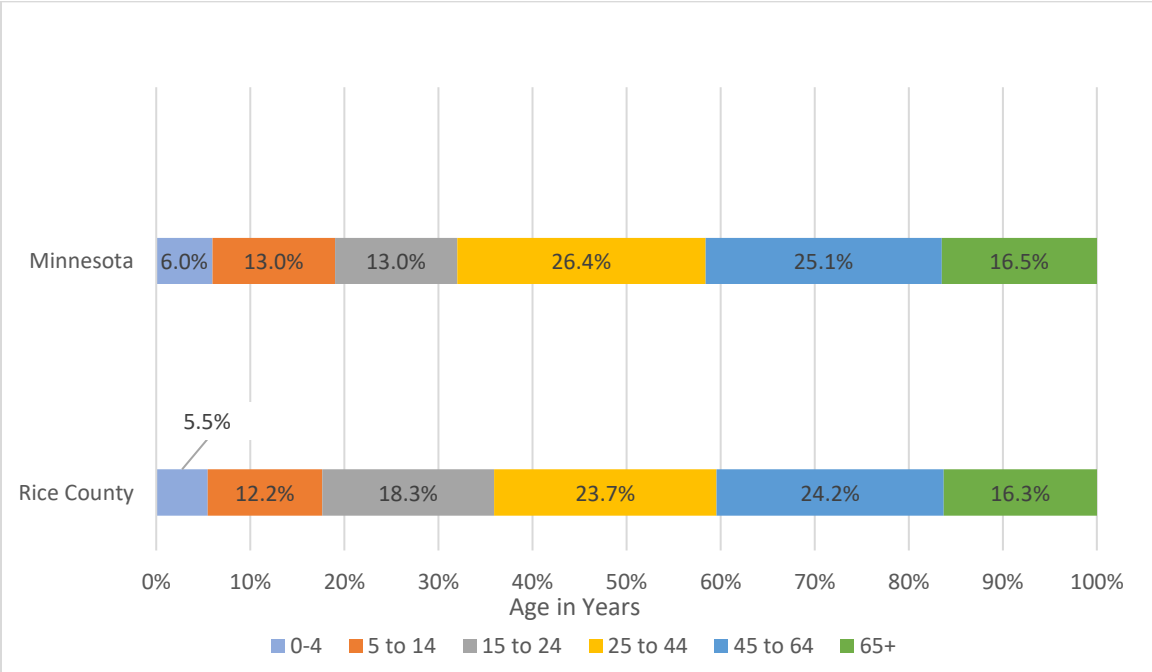
Rice County is located 50 miles south of the Minneapolis and St. Paul metropolitan area. The county’s 516 square miles contain seven cities and 14 townships. The two largest cities in the county are Faribault and Northfield. The county was organized on March 5, 1853, and is governed by five commissioners elected from five districts in the county (Rice County, 2024).

## Population

In 2022, the most recent year available, the total estimated population in Minnesota was 5,801,769 and Rice County was estimated to be at 68,525, making it the 15<sup>th</sup> most populous county in the state. Crow Wing ranked 14<sup>th</sup> at 69,275 community members, and Clay County ranked 16<sup>th</sup> with 67,814 community members (Minnesota State Demographic Center: Department of Administration, 2023).

In 2022, the median age in Rice County was 37.3 years old, compared to the state at 39.0 (United States Census Bureau, 2024). Figure 1 shows the population of Rice County and Minnesota by age group.

Figure 1: Rice County and Minnesota Population Estimates by Age, 2022



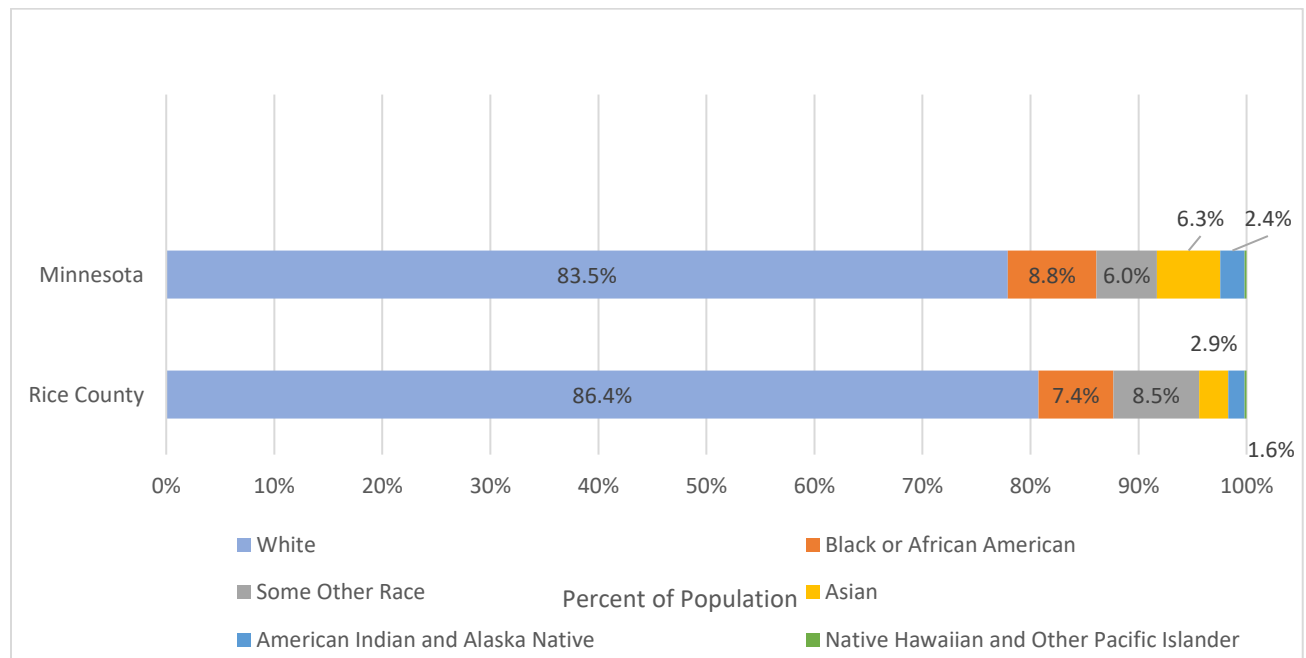
Source: United States Census Bureau

The population structure of Rice County can also be looked at as a ratio of the number of children, birth to under 15, who are dependent on the working-age population aged 15-64. A low dependency ratio indicates that there are more people working who can support the dependent population. The higher the ratio, the greater the burden carried by working-age people. In 2022, the Rice County child dependency ratio was 34.4 for every 100 working-age people, in 2017 it was 25.2. In addition, in 2022, the senior dependency ratio was 25.9 seniors for every 100 working-age people in Rice County, compared to 22.6 seniors for every 100 working-age people in 2017 (United States Census Bureau, 2022). It is interesting to note that while the child dependency ratio has been relatively steady over time, the senior dependency ratio has been increasing and is expected to continue increasing. In 2010, the senior dependency ratio was 18.3. The increase may largely be explained by the fact that life expectancy continues to rise.

The average household size (all people occupying a household unit) and family size in Rice County (2.55 and 3.11 people respectively) is comparable to the rest of the state at 2.40 and 3.01 people respectively (United States Census Bureau, 2022).

Across the state and within Rice County, about 93 percent of people identify as being of one race. The largest racial groups in Rice County are white, followed by Black/African American and some other race. Ethnically, 9.2 percent of Rice County community members identify as Hispanic or Latine (the majority identifying as Mexican), compared to the state at 5.7 percent (United States Census Bureau, 2022). Figure 2 compares the race alone or in combination identities of Minnesota and Rice County.

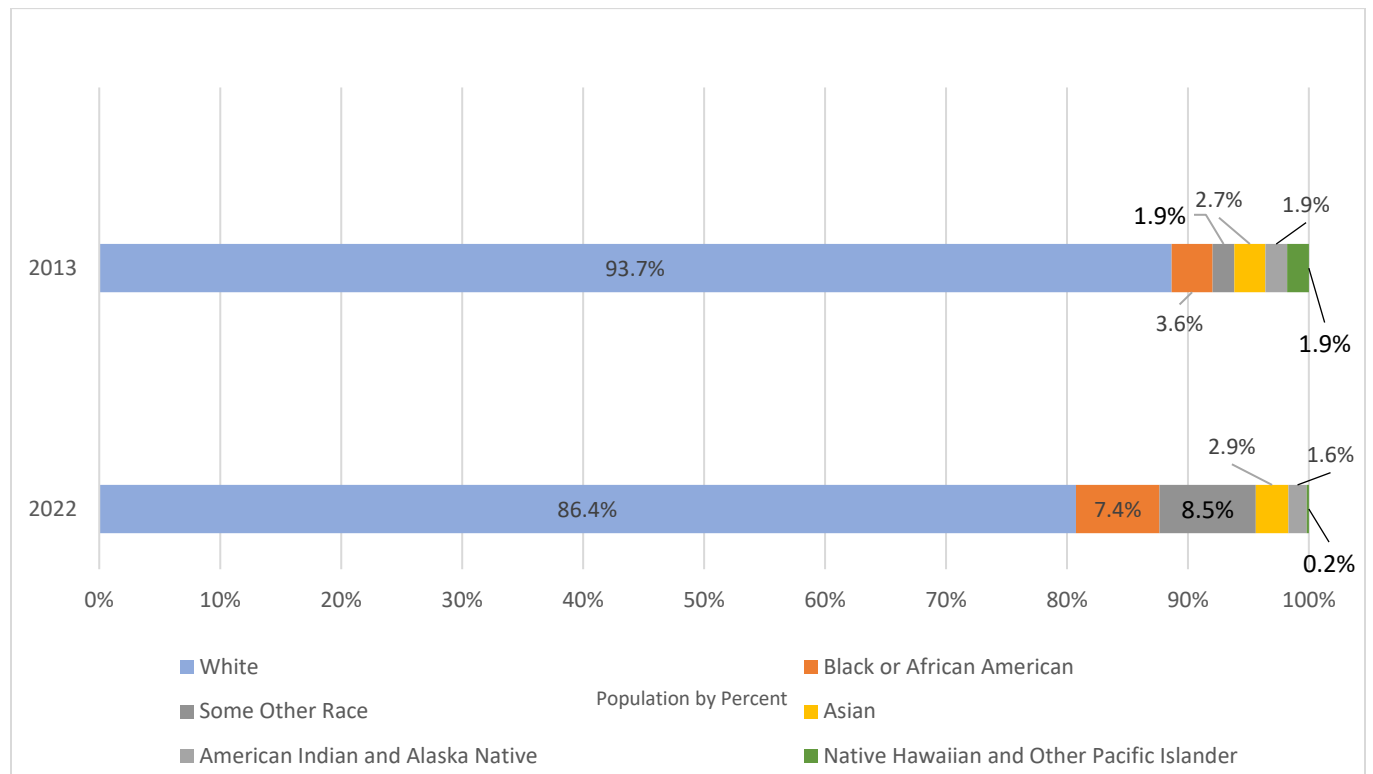
**Figure 2: Minnesota and Rice County by Race Alone or In Combination with One or More Other Races, 2022**



Source: United States Census Bureau

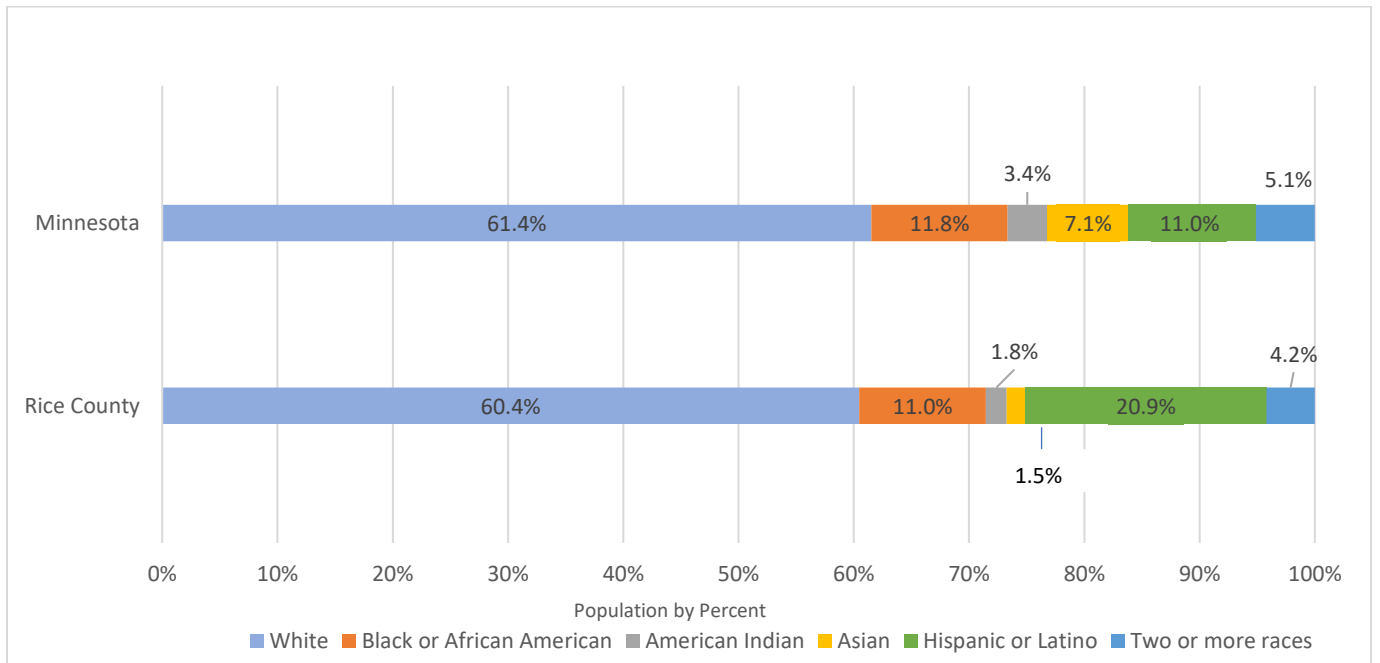
While the current composition of Rice County’s population is predominantly white, the prevalence of minorities continues to increase, particularly among Black or African American and “Some Other Race” populations (see Figure 3). In 2013, Rice County’s population was 93.7 percent white, and by 2022, the total percentage of the population identifying as white decreased to 86.4 percent (United States Census Bureau, 2022). All other race populations have increased in Rice County over the last 10 years. Likewise, the people of Rice County who identify as of Hispanic or Latine ethnicity rose from 7.7 percent in 2013 to 9.2 percent in 2022 (United States Census Bureau, 2022). Most recent Census data estimates for 2022 report that 9.1 percent of Rice County community members are foreign born, an increase from the 2017 estimate at 7.9 percent (United States Census Bureau, 2022). The diversity of Rice County is most evident among our school-aged population (see Figure 4 and Figure 5) (Minnesota Department of Education, 2024).

**Figure 3: Rice County Race/Ethnicity, 2013 and 2022**



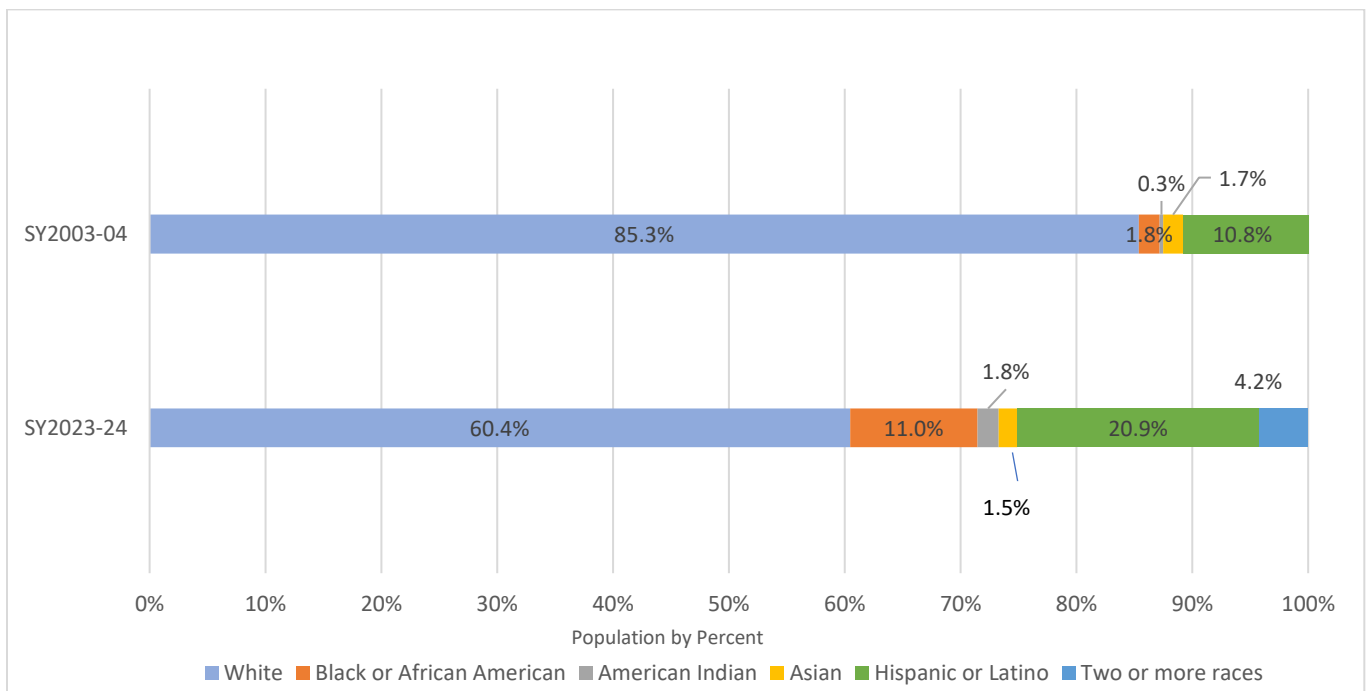
Source: United States Census Bureau

**Figure 4: Kindergarten to 12th Grade Student Population by Race/Ethnicity, School Year 2023-2024**



Source: Minnesota Report Card

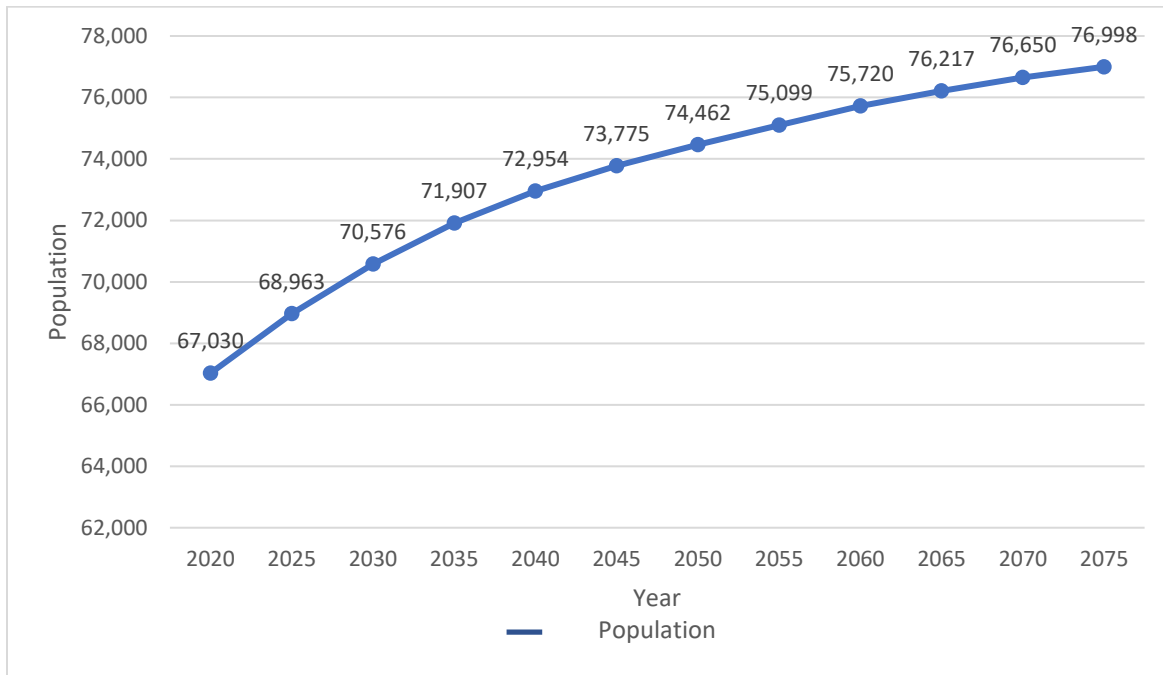
**Figure 5: Rice County’s Kindergarten to 12th Grade Population by Race/Ethnicity, School Year 2003-04 and 2023-2024**



Source: Minnesota Report Card

Two-thirds of Minnesota’s 87 counties are projected to decline in population, yet the Rice County population is projected to rise through 2050 (Figure 6) (Minnesota State Demographic Center, 2023).

**Figure 6: Rice County Population Projection Through 2050**



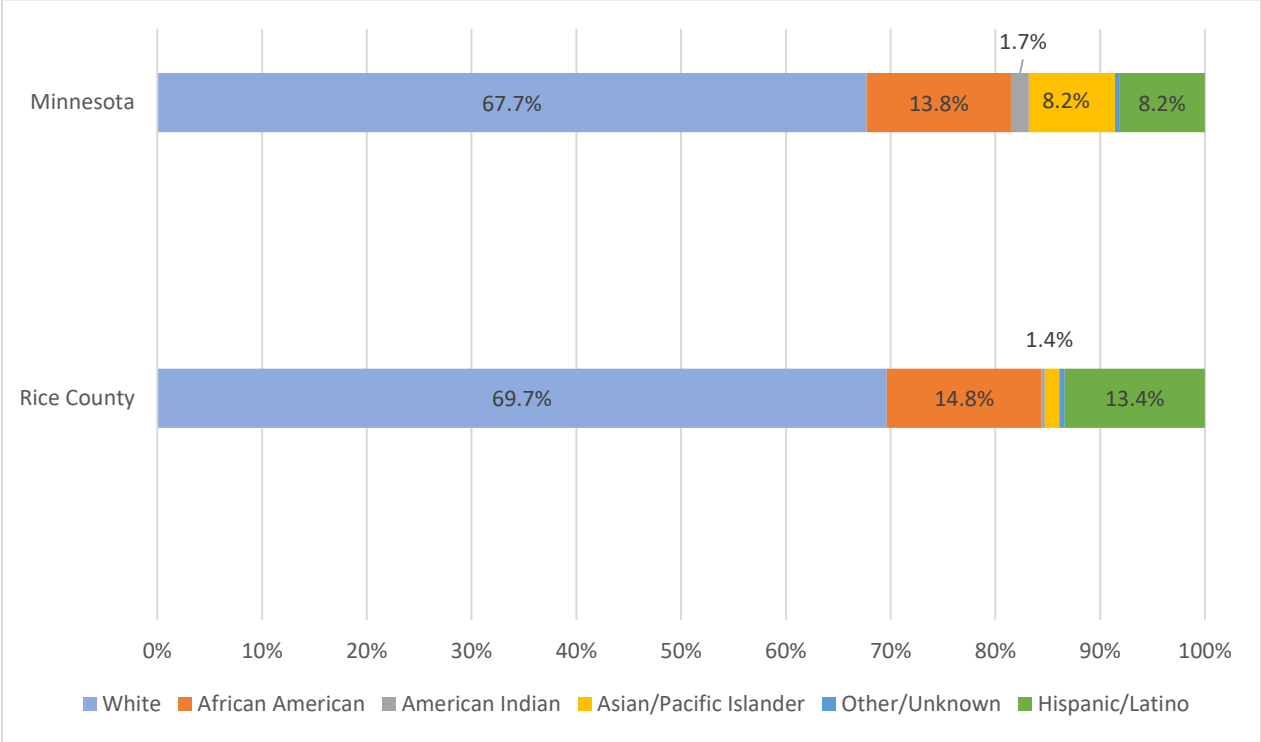
Source: Minnesota State Demographic Center

## Natality

The birth rate of Rice County in 2020, the most recent year of data available at the time of this writing, was 9.6 live births per one thousand population. During the same year, the birth rate in Minnesota was 11.2 per one thousand population (Minnesota Department of Health, 2020).

Further evidence of the demographic shifts mentioned above is found in an examination of the race/ethnicity of women giving birth (see Figure 7). Just over 30 percent of births in Rice County are to people of color, and while this is similar to the state, variations are seen in the specific race or ethnicity of the mother (Minnesota Department of Health, 2020).

**Figure 7: Race/Ethnicity of Mothers Giving Birth by Location, 2020**



Source: Minnesota County Health Tables, 2020

## Mortality

The death rate in Rice County is slightly higher than the state at 8.8 deaths per one thousand population, compared to the state at 9.3 per one thousand population (Minnesota Department of Health, 2020). Leading causes of death in both the state and Rice County are shown in Table 1. Between 2016 and 2020, cancer was the leading cause of death for both (Minnesota Department of Health, 2020). Each leading cause of death is discussed further in this report.

**Table 1: Age Adjusted Cause-Specific Premature (<75 yrs) Death Rates for 10 Leading Causes per 100,000 Persons by Location, 2016-2020**

	<b>Minnesota</b>	<b>Rice County</b>
Cancer	70.6	72.4
Heart Disease	34.9	29.4
COVID-19	COVID, as a newly emerged infectious disease in 2020, does not have information for calculating five-year rates.	
Unintentional Injury	28.7	25.7
Chronic Lower Respiratory Disease	10.6	9.8
Stroke	7.7	7.8
Diabetes	9.2	7.4
Chronic Liver Disease	8.9	6.5
Hypertension	2.9	--
Alzheimer's	2.0	--

Source: Minnesota County Health Tables, 2020

## Conclusion of People

The people of Rice County are largely working age and are increasingly diverse by race. The population is expected to increase, but much of that due to international migration. Death touches us all, and cancer is Rice County's leading cause of death.

# Opportunity

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Opportunity is defined as a set of circumstances that makes it possible to do something. Minority populations in Rice County are limited in their opportunity to reach their highest health potential due to historical and current unjust distributions of power and resources. This context has resulted in race and ethnicity being strong indicators of health. In Rice County, our Latine and East African immigrant families, friends and neighbors disproportionately struggle with academic success, employment and income, access to health care, transportation and housing, all of which limits their opportunity to be healthy.

Rice County has limited data by immigrant status, disability, and gender. It is included where it is known to be available. While we are working for better data, we also want to raise up the strengths of these communities. The diversity of Rice County's population is one of our greatest assets.

## Education

While few people think of education as a crucial path to health, the two are much related, even when other factors like income are included. Education increases access to resources and opportunities. With increased education, job opportunities may expand, including pay increases and benefits like health insurance, healthier working conditions, and social connections. Education also affects generational health as children of more educated parents tend to be healthier and do better in school.

Rice County residents are served by independent school districts, charter schools, several private schools, one community college and two private colleges. In 2023, the percent of the population ages 25 years and older, with less than a high school education, was higher in Rice County than in Minnesota, 7 percent versus 5.7 percent, respectively (United States Census Bureau, 2023).

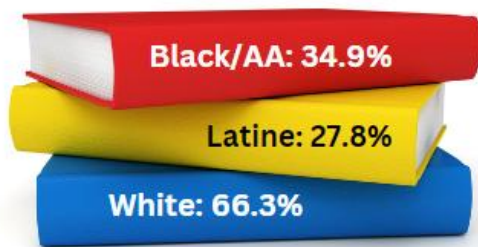
During the 2023-2024 school year, English learners made up 13.3 percent of all pre-kindergarten to 12<sup>th</sup> grade students in Rice County, compared to 9.7 percent of students in Minnesota (Minnesota Department of Education, 2024). English learners at Faribault Public Schools made up 25.3 percent of their student body alone. In Rice County, 22.2 percent of children were receiving special education, which was higher than the Minnesota average of 18.5 percent (Minnesota Department of Education, 2024). During the same school year, 48.7 percent of Rice County students were eligible for free or reduced-price meals compared to 71.7 percent at Faribault Public Schools, and 42.4 percent in Minnesota (Minnesota Department of Education, 2024).

The Minnesota public school system uses “a standards-based education system (which) promotes equity by establishing a baseline of knowledge and skills that all students, regardless of their background, should master as part of their education” (Minnesota Department of Education, 2024). Standards testing starts in third grade. According to the Minnesota Department of Education, academic achievement, defined as the number of students demonstrating they are at grade level, is calculated by

dividing the number of students at “meets standards” or “exceeds standards” on state tests, by the number of students in the tested grade. This is referred to as proficiency data.

Third grade reading proficiency data was gathered by income (using free or reduced-price meals as a proxy for low income) and by race or ethnicity from Northfield Public Schools and Faribault Public Schools and the data was averaged for the county. While there are seven independent school districts in the county, these are two districts with a majority of the district falling within Rice County. In the 2023-24 school year, 31.9 percent of low-income third graders were proficient in reading compared to 68.9 percent of the third-grade student body not qualifying for free/reduced price meals (Minnesota Department of Education, 2024). Both districts had data reportable by two racial categories and Faribault had by three, including Black/African American. Among third graders, 66.3 percent of white students, 27.8 percent of Latine students and 34.9 percent of Black/African American students tested as proficient in their grade level (see Figure 8).

**Figure 8: Rice County Third Graders Reading at or Above Grade Level by Race/Ethnicity, 2019**



Source: Minnesota Department of Education, Minnesota Report Card

In 2023, the four-year graduation rate in Rice County was 84.5 percent compared to Minnesota at 83.3 percent (Minnesota Department of Education, 2024). Three districts in Rice County had data reportable by two or more racial categories for four-year graduation rates, which showed that 89.9 percent of white students, 77.6 percent of Black/African American students and 64.3 percent of Latine students graduated within four years (Minnesota Department of Education, 2024).

## Employment

Employment provides us with a source of income and connects us to social support, while offering a sense of purpose, meaning and belonging in the community. It gives us opportunities for success and is the main way most people in Minnesota access health insurance. Employment, especially adequate employment, enables safe housing choices, access to healthy food, education and quality child-care.

Unemployment on the other hand, limits a family’s income, which can affect their insurance status and stress level, as well as whether or not the individual will access health care. All of this can have a negative impact on an individual’s physical and mental health. In 2023, the unemployment rate was 2 percent in Rice County, compared to 3 percent in Minnesota (United States Census Bureau, 2023).

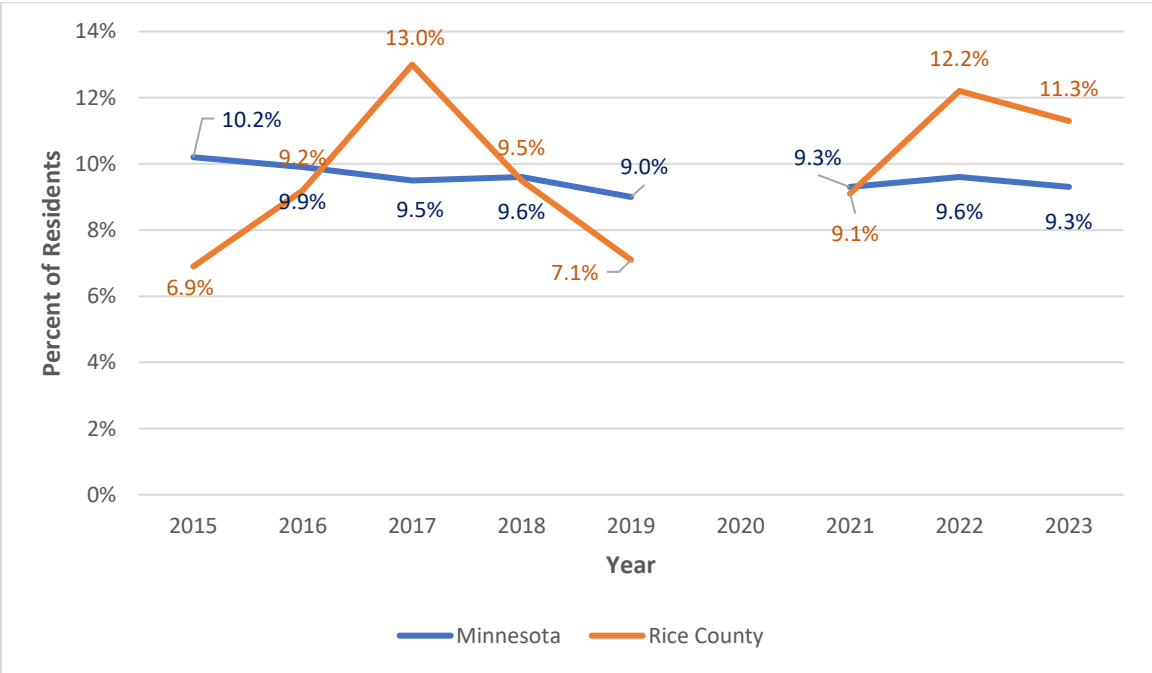
# Income

Income is one of the strongest and most consistent predictors of health. On average, if we make more money, our overall health is better (Minnesota Department of Health, 2017). It affects where we live and how long we live there. It also affects the quality of our home, what schools we attend, our ability to access recreation, the food we put on our tables and the childcare we access. In 2023, the mean per capita income was \$46,530 in Minnesota and \$35,983 in Rice County (Center for Health Statistics, 2019).

Poverty often limits opportunity. Poor health can also lead to poverty in a cycle of disadvantage that can play out over a lifetime and through generations of families. Children who grow up in families that experience chronic stress due to poverty have a greater risk of developing long-term health problems and are more likely to remain in poverty as adults (Minnesota Department of Health, 2019).

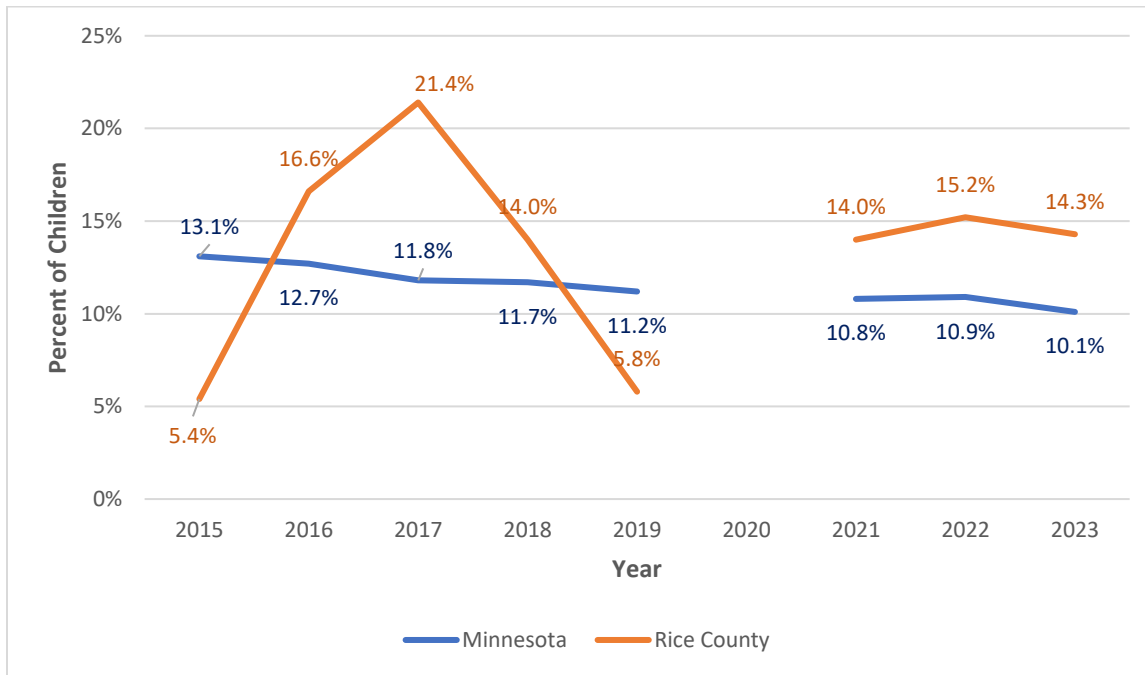
Figure 9 shows the percent of Rice County and Minnesota residents living in poverty over time (United States Census Bureau, 2024). Figure 10 shows the percent of children under 18 years old who live in poverty in Rice County and Minnesota (United States Census Bureau, 2024).

**Figure 9: Residents Living in Poverty by Location, 2015-2023**



Source: United States Census Bureau

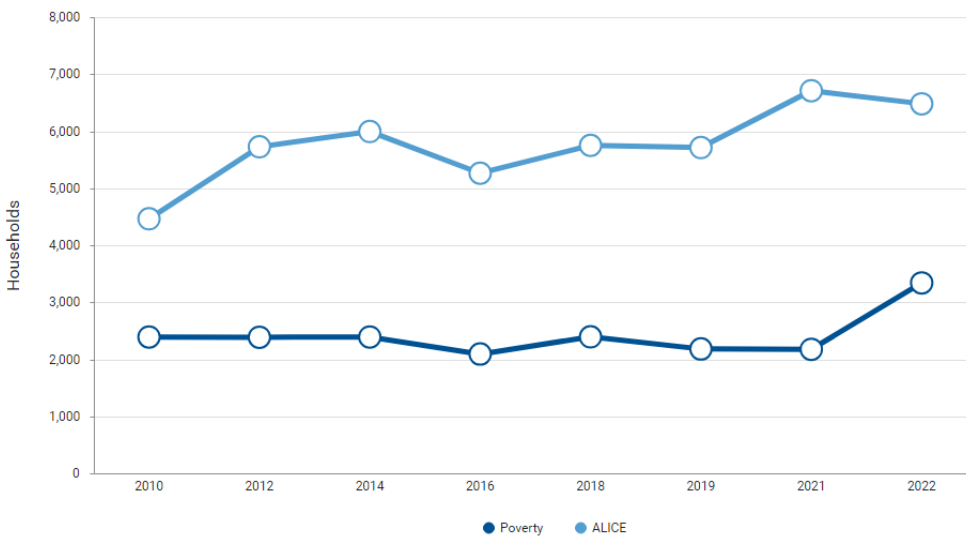
**Figure 10: Children Aged 0-18 Living in Poverty by Location, 2015-2023**



Source: United States Census Bureau

ALICE (Asset Limited, Income Constrained, Employed) populations are those just above the federal poverty level but earning less than what it costs to make ends meet. In Rice County, 27 percent of households are ALICE compared to the state at 26 percent (United Way of Northern New Jersey, 2024). Figure 11 shows how financial hardship has changed over time in Rice County.

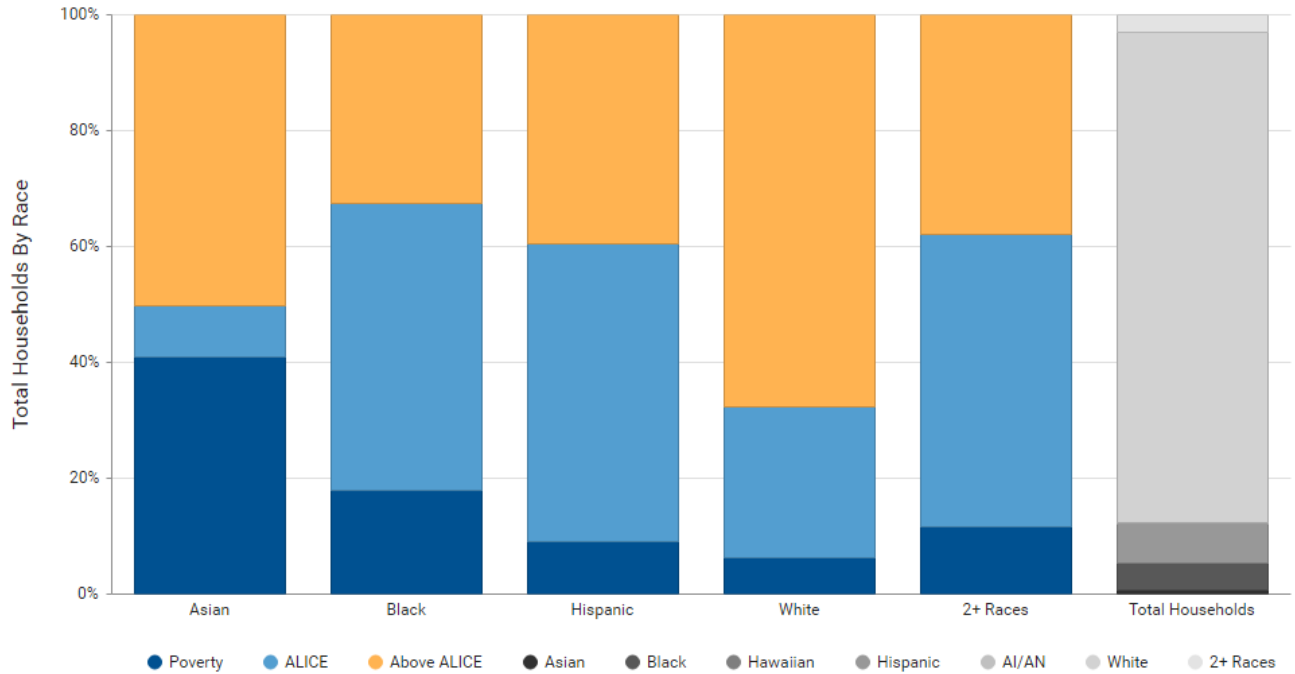
**Figure 11: Number of Households in Poverty or ALICE, Rice County 2010-2022**



Source: United for ALICE

Households of color are disproportionately ALICE households as shown in Figure 12 (United Way of Northern New Jersey, 2024).

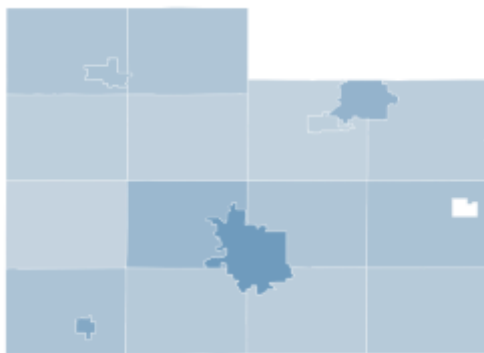
**Figure 12: ALICE Households by Race/Ethnicity, Rice County 2022**



Source: United for ALICE

There is also variation in ALICE households by location. On Figure 13, the darker the area, the higher the percentage of ALICE households.

**Figure 13: Financial Hardship by Location in Rice County, 2022**



Source: United for ALICE

Table 2 shows the percentage of households below ALICE by location in Rice County (United Way of Northern New Jersey, 2024).

**Table 2: Percent Below ALICE Threshold by Location in Rice County, 2022**

Name	Total Households	% Below ALICE Threshold
Bridgewater township	705	19
Cannon City township	457	27
Dundas city	603	21
Erin township	287	21
Faribault city	8853	53
Forest township	420	20
Lonsdale city	1529	29
Morristown city	363	45
Morristown township	307	28
Northfield city	5954	38
Northfield township	288	22
Richland township	151	24
Shieldsville township	336	18
Walcott township	429	22
Warsaw township	520	24
Webster township	597	27
Wells township	725	35
Wheatland township	447	27
Wheeling township	179	29

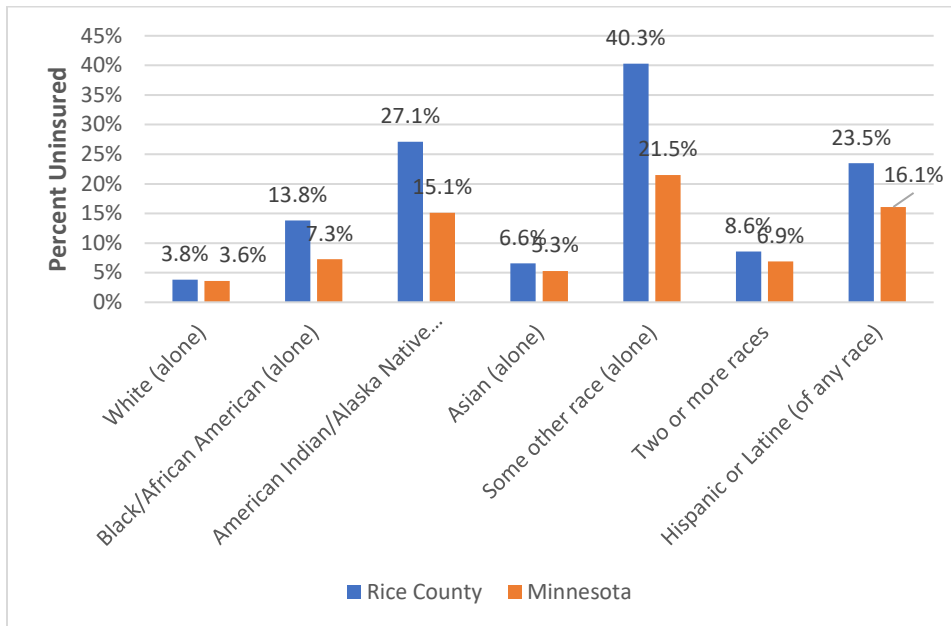
Source: United for ALICE

## Access to Health Insurance

Insurance status is often correlated to employment status discussed above. People with part time, contract or low paying jobs may not have access to health insurance or may lack adequate coverage, making it difficult for them or their families to get needed care. People who are uninsured or underinsured tend to delay care, and be sicker, before seeing a doctor and have a harder time recovering. In 2023, two percent of Rice County community members were uninsured, compared to six percent in 2016 (Rice County Public Health, 2016; Rice County Public Health, 2023). This is lower than the nation with ten percent of people uninsured (University of Wisconsin Population Health Institute, 2024).

Figure 14 shows the percent of uninsured community members by race. Note that the burden of uninsurance falls disproportionately on minority community members in both Rice County and across Minnesota (United States Census Bureau, 2024).

**Figure 14: Estimated Percent of Uninsured Community members by Race and Location, 2018-2022**



Source: Health Insurance Coverage Status: American Community Survey 5-year Estimate 2018-2022

## Access to Medical Care

Insurance status and the availability of medical providers are factors that affect access to medical care. Not accessing medical care when it is needed can lead to worse health outcomes for individuals.

Rice County has a lower ratio of primary care physicians available compared to the state. In 2021, there were 1,160 Rice County community members for every one primary care provider, compared to Minnesota at 1,130 community members for every one primary care provider (University of Wisconsin Population Health Institute, 2024).

Child and Teen Checkups (C&TC) is the name for Minnesota's Early and Periodic Screening, Diagnosis and Treatment Program. C&TC is a comprehensive child health program provided to children and teens from newborn through age 20 who are enrolled in Medical Assistance (MA) or MinnesotaCare. The program found that only 45 percent of the Rice County population enrolled in MA or MinnesotaCare had a complete wellness check in 2023. This number has been steadily declining since 2021 when it was at 48 percent (Minnesota Department of Human Services, 2023).

According to the 2023 Rice County Community Health Survey, 23.5 percent of community members delayed accessing medical care in the past 12 months at a time when they thought they needed medical care (Rice County Public Health, 2023). This is much greater than the percent who reported delaying mental health care which was at 14.8 percent. According to those who reported a delay in accessing care, the rank order reasons for delaying care were as follows:

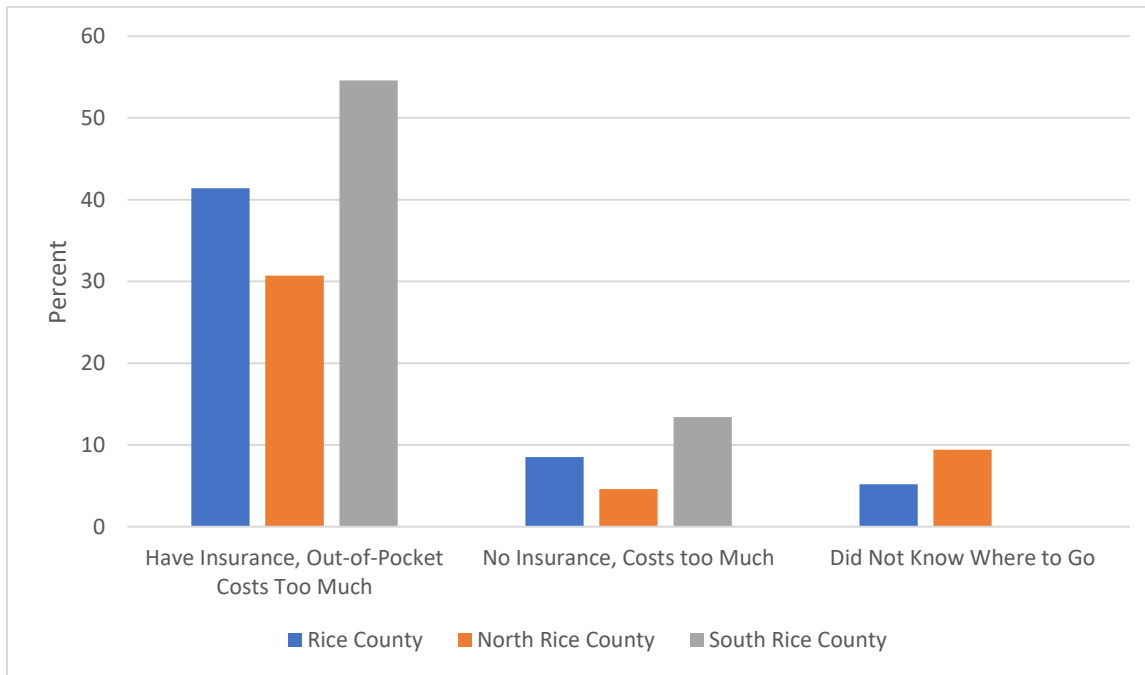
1. I have insurance, but my out-of-pocket costs are still too much (41.4%, a decrease from 63.9% in 2016)
2. I could not get an appointment as soon as I wanted (40.6%)
3. Other (28.5%)
4. I don't have insurance, so my medical care costs too much (8.5%, an increase from 4.2% in 2016)
5. I did not know where to go (5.2%)
6. I had transportation problems (0.8%)

The third most common reported reason was “Other” at 28.5 percent and written in responses included, “Wait it out”, “Tough it out” and “Thought it would go away” as well as “Could not leave work”, lack of access to specialists, and mistrust of the systems.

**There were some differences based on geographic location for reasons community members delayed accessing medical care.**

Figure 15 shows the differences for specific reasons why community members delayed care by location.

**Figure 15: Why Rice County Community Members Delayed Medical Care by Location, 2023**



Source: 2023 Rice County Community Health Survey

English proficiency also affects access to care, patient safety, quality of care, the patient’s experience and health outcomes. From a 2024 opinion survey of Rice County medical providers, write in comments included “create bridging opportunities for people to understand different cultures” and having “community health workers and cultural liaisons at Allina and Mayo and NfH.”

## Access to Dental Care

Factors influencing oral health include participation in preventative dental care, availability of providers, cost of visits and care, and insurance status. According to the Minnesota Student Survey, 80 percent of Rice County students saw a dentist for a check-up, exam or teeth cleaning, or other dental work in the last year (Olmsted County Public Health Services, 2024). The remaining 20 percent of students saw a dentist over a year ago or have never seen a dentist. In 2022, there were 1,740 community members for every dentist in Rice County. In the state, there were 1,290 community members for every dentist (University of Wisconsin Population Health Institute, 2024).

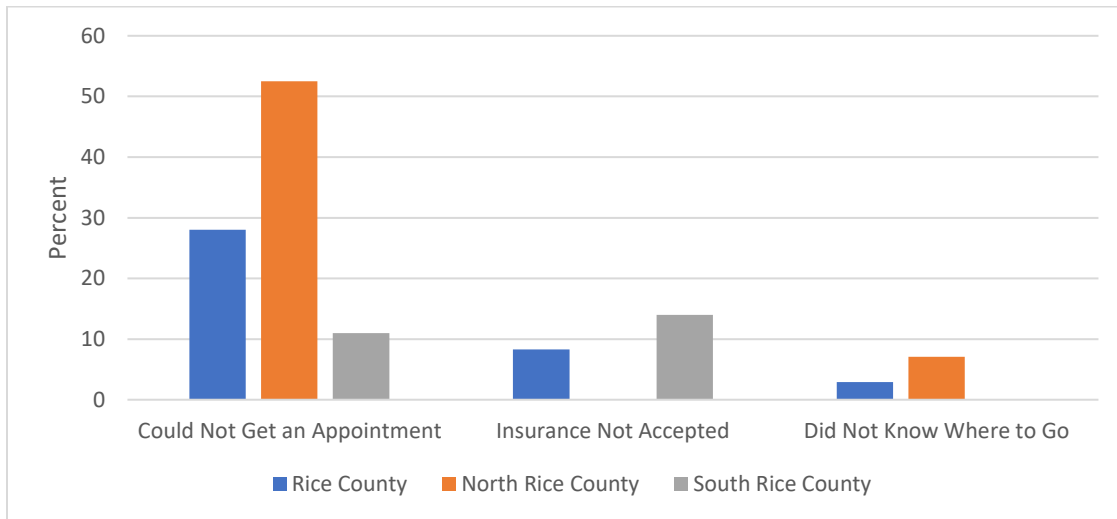
According to the 2023 Rice County Community Health Survey, 20 percent of community members delayed accessing dental care in the past 12 months at a time when they thought they needed it (13.9 percent in northern Rice County and 28.5 percent in southern Rice County) (Rice County Public Health, 2023). According to those who reported a delay in accessing care, the rank order reasons for delaying care were as follows:

1. I have insurance, but my out-of-pocket costs are still too much (37.6%)
2. Could not get an appointment (28%)
3. I don't have insurance, so my medical care costs too much (26.7%)
4. Other (16.4%)
5. Dentist would not accept insurance (8.3%)
6. Did not know where to go (2.9%)
7. I had transportation problems (1.4%)

The fourth most common response to the survey question asking about reasons dental care was delayed was "Other" at 16.4 percent. Responses that were written into the survey included not wanting to go, not having time, and provider leaving.

There were some differences based on geographic location for reasons community members delayed accessing dental care. Figure 16 shows the differences for those specific reasons.

**Figure 16: Reasons for Delaying Dental Care by Location, 2023**



Source: 2023 Rice County Community Health Survey

## Access to Mental Health Services

Mental health is an area that has been garnering more attention in recent years. More people are seeing that mental health is just as important as physical health. Yet stigma prevents some from seeking care. The limited number of providers available also affects whether or not people receive mental health care when it is needed.

In 2023, there were 490 Rice County community members for every one mental health provider, while Minnesota had 300 community members for every one mental health provider (University of Wisconsin Population Health Institute, 2024).

According to the 2023 Rice County Community Health Survey, 14.8 percent of community members delayed receiving mental health care when they thought they needed it (Rice County Public Health, 2023). This is an increase from 2016 when it was 8.6 percent (Rice County Public Health, 2016). This is much lower than the percent who reported delaying medical care which was at 23.5 percent. The top responses indicated on the survey for why community members delayed receiving care were as follows:

1. Out of pocket costs were too much (37.8%)
2. Other (34.1%)
3. Did not know where to go (27.8%)
4. Could not get an appointment (17.6%)
5. I don't have insurance, so my medical care costs too much (11.6%)

Some of the responses written into the survey for “Other” included “On going scheduling conflicts with work”, “No available therapists”, “Just waited to feel better on my own” and “Tough it

out” (Rice County Public Health, 2023). The response of, “did not know where to go” was five times higher than it was for medical care and nearly ten times higher than it was for dental care.

## Transportation

Transportation is key for our daily activities. It connects us to food, health care, employment, social and community opportunities. Transportation continues to evolve in Rice County, which aims to meet the needs of pedestrians, bicyclists, transit riders, and drivers.

Rice County workers ages 16 years and older overwhelmingly drive to work by car, truck, or van alone (78.4%), or car pool (11.3%) and 7.6 percent of Rice County’s population walk to work (United States Census Bureau, 2023). These numbers are similar to the state.

Rice County is reflective of the state percentages when it comes to vehicles per housing unit. Table 3 below shows the similarities between Minnesota and Rice County (United States Census Bureau, 2022).

**Table 3: Vehicles Available per Occupied Housing Unit by Location, 2018-2022**

	No Vehicle	One Vehicle	Two Vehicles	3+ Vehicles
Minnesota	6.6%	29.9%	39.8%	23.6%
Rice County	5.0%	27.3%	40.6%	27.1%

Source: United States Census Bureau

Minnesota’s Driver’s License for All law went into place October 1<sup>st</sup>, 2023. This law enabled more than 80,000 Minnesotans to apply for a driver’s license as it eliminated the need to show proof of legal presence in the United States to get a standard Minnesota class D driver’s license, instruction permit or standard identification (ID) card.

In 2024, Faribault was one of three communities in the state selected to receive the Multicultural Adult Driver’s Education grant from the Minnesota Department of Public Safety. This class helped immigrants newly eligible for a license under the law navigate the challenging system. Practicing for the road test requires the presence of a licensed driver and while the knowledge test is available in languages other than English, as well as by individual and group oral exam, the road skill test does not allow an interpreter to be present. In the absence of bilingual staff, hand signals are used in testing.

Three Rivers Community Action manages Rice County’s public transportation system, Hiawathaland Transit. In their 2021 Community Needs Assessment, they found that among all of their customers, the biggest transportation needs were having a reliable car or help with repairs. Customers stated that not having this was impacting their ability to maintain a job, find a better job and to transport children. Many older adults participating in their interviews stated that they need more flexible, short-notice transportation options (Three Rivers Community Action, 2021).

While transportation in general tends to focus on vehicles, efforts are being made in Rice County and across the nation to ensure that the conversation includes active transit such as walking and biking. Expanding the conversation sheds light on the role of the environment in residents' access to physical activity and the importance of safe pedestrian crossings, adequate lighting and signage, bus shelters, and traffic speeds and controls. While people driving less may be a goal of active transportation, it also looks to help the portion of the county population that cannot drive due to age, ability, vehicle access, or personal choice.

Rice County Public Health's Statewide Health Improvement Partnership (SHIP) collaborates with schools to organize bike and walk to school days. Rice County students participating in Bike to School Day has increased each year from 93 in 2016, to 150 in 2019, to more than 200 in 2024. SHIP also works with schools to offer Walk! Bike! Fun! Pedestrian and Bicycle Safety Curriculum and has educated over 250 youth on the importance of safe walking and biking habits since 2017.

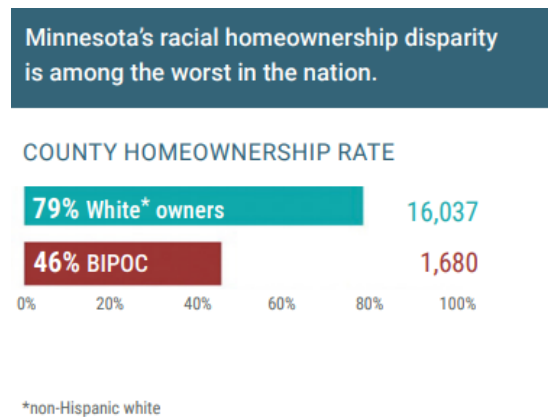
Short-term, low-cost, quick-build demonstration projects use temporary materials to show future road changes. Rice County SHIP helps implement such projects to improve walking and biking environments. Since 2019, 10 demonstration projects across Nerstrand, Lonsdale, Faribault, and Northfield have aided public agencies, community partners, and people walking, bicycling, taking transit, and driving to evaluate potential infrastructure improvements before investing in permanent changes. Rice County SHIP also partnered with Le Sueur County SHIP and the Region Nine Development Commission to implement the Safe Routes to School Planning process at Waterville-Elysian-Morristown School District with implementation in fall 2024.

## Housing

Stable housing allows community members to develop trust among neighbors, create long-lasting friendships, and build community. Homeownership is encouraged as a way for families to build financial and social stability. In 2023, 69 percent of housing in Rice County was owner occupied (Widseth, 2024). While homeownership is encouraged, diverse housing stock helps draw industries who are looking for workforce and affordable housing. The balanced homeownership rate is considered around 62 percent (Rice County Housing and Redevelopment Authority, 2024).

In Minnesota, there is significant disparity in homeownership by race. White Minnesotans are more than three times as likely to own a home as Black or African-American community members. The same disparity persists in Rice County (see Figure 17) (Minnesota Housing Partnership, 2023).

**Figure 17: Home Ownership Rate in Rice County, 2023**



Source: Minnesota Housing Partnership

According to a survey completed in 2015 by the Minnesota Department of Human Services, the majority of older adults own a single-family home (82%) and would like to stay in their home and community. If they are unable to live independently, they would prefer to stay with family, friends, or hire in home services.

Safe, affordable housing offers community members stability and control over their environment, which influences their physical and mental health. When housing costs exceed 30 percent of an individual's income, community members have difficulty covering the costs of other necessities, such as food, medical care, education and quality childcare. This can be especially difficult if living on a single or fixed income. Between 2018 and 2022, 18 percent of children in Rice County lived in single parent homes, compared to 20 percent in Minnesota (University of Wisconsin Population Health Institute, 2024).

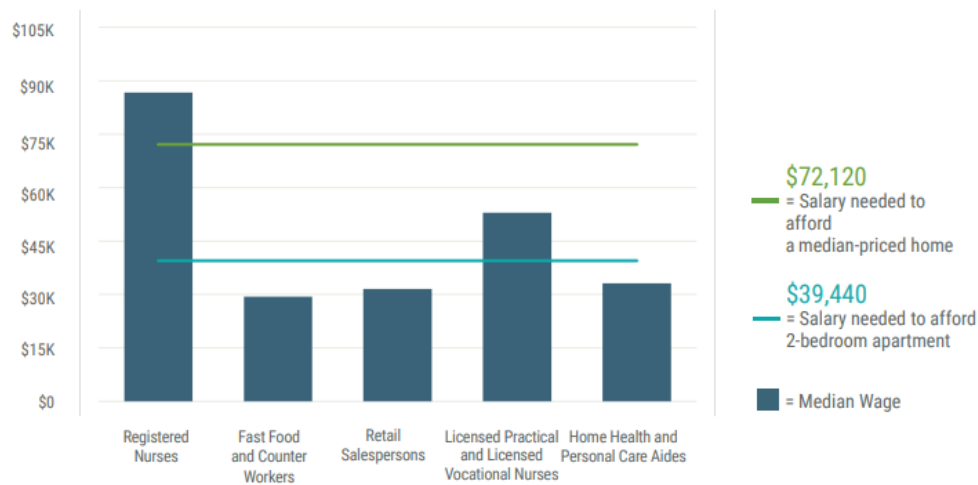
**Cost Burdened**

The Department of Housing and Urban Development defines a cost burdened renter household as one that pays 30 percent or more of their income on gross rent.

According to the National Low Income Housing Coalition, Rice County ranks fourth in Minnesota for housing expense, behind the Minneapolis-St. Paul-Bloomington area, Rochester and Duluth (National Low Income Housing Coalition, 2024). The median home value in Rice County is \$240,000, which is up 15 percent in over 5 years. Estimates are that 19 percent of owner households in Rice County are cost burdened. In order to afford a two-bedroom fair market rate home in Rice County (estimated at \$1,073 a month), a wage earner would need to make \$20.63 per hour. That is \$9.78 above the minimum wage for large employers (\$10.85) and \$11.78 above the minimum wage for other minimum wage categories (\$8.85) (National Low Income Housing Coalition, 2024). This means that the renter would need 1.9 full-time jobs at minimum wage to afford that same two-bedroom fair market rate home. Figure 18 shows the salary for jobs in the region, compared to the cost of housing in Rice County (National Low Income Housing Coalition, 2024).

**Figure 18: Salary for Rice County Regional Jobs vs the Cost of Housing in Rice County, 2023**

THE REGION'S MOST IN-DEMAND JOBS vs RICE'S COST OF HOUSING



Source: Minnesota Housing Partnership

In Rice County, affordable rent at 30 percent of the area median income is \$698 a month. The median monthly rental housing cost in Rice County is \$951. This is an increase of 11 percent over five years. Estimates show that 45 percent of renters are cost burdened (Minnesota Housing Partnership, 2023).

Homelessness makes it difficult to apply for a job, make connections in the community, and to build long-term relationships, which can lead to little social support. Through homelessness, a person's quality of sleep, nutrition, mental and physical health can suffer, and children are more likely to miss school. People who are homeless are three to four times more likely to die prematurely than those who have a home. Furthermore, people who are homeless are more vulnerable to trauma, which then reinforces that they are more likely to be homeless.

Minnesota annually completes a one-night Point-in Time count which includes emergency shelter, transitional housing and unsheltered counts of people. In 2022 Rice County's Point-in-Time count was 43. This is a decrease from 2018 when it ranged between 90 and 115 people (Institute for Community Alliances, 2024). The reasons for homelessness in Rice County include the following:

- Criminal history
- Credit problems/poor credit
- Poor rental history/evictions
- Medical or mental health issues
- Domestic violence
- Low income/low wage job

Many of the individuals who are homeless are also working or have some sort of steady income, but can never save up enough money to be able to pay the first month's rent and deposit for an

apartment. As noted above, high housing costs and lack of diverse housing stock makes it difficult for homeless individuals to move into stable housing.

### Neighborhood Safety

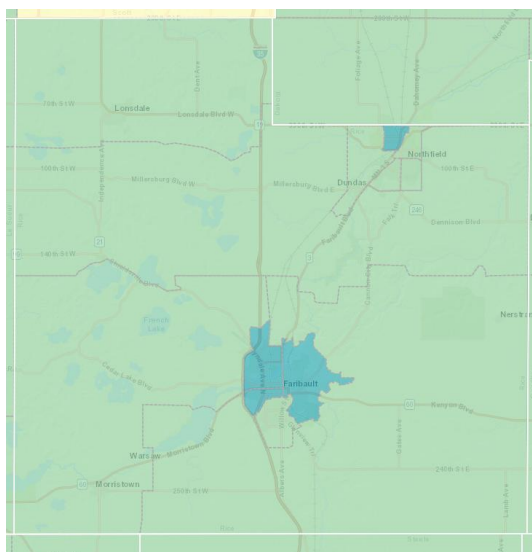
According to the 2023 Rice County Community Health Survey, 79 percent of northern Rice County residents report always feeling safe in their neighborhood compared to 45.6 percent of southern Rice County residents. About 83 percent of community members feel that it's not a problem or only a minor problem to find safe places to walk or bike.

### Lead in Housing

Lead-based paint was commonly used to paint home interiors and exteriors on homes built before 1978. It can also be found in many places within one's environment including soil, dust, and diesel. Lead exposure happens by breathing in the paint dust or accidentally consuming paint chips or other contaminated materials (Minnesota Department of Health, 2024). Elevated blood lead levels in young children are linked with learning problems, behavioral issues, and even death if exposure reaches critical levels. The younger a child is, the greater the risk as their bodies absorb lead more easily and their brains are still developing. In 2022 Minnesota implemented universal screening for all children aged 12 and 24 months.

In Rice County, 55.5 percent of housing units were built before 1980 compared to 54.1 percent in the state (Minnesota Department of Health, 2024). According to 2017-2021 data, the most recently available at the time of this writing, in Rice County there are four census tracts where the children living in those areas are one to two times more likely to have elevated blood lead levels than the average child living in Minnesota (Minnesota Department of Health, 2024).

**Figure 19: Childhood Lead Exposure 0.8-2.4% Higher than State Average, 2017-2021**



Source: Minnesota Public Health Data Access Portal

## Conclusion of Opportunity

The opportunity for everyone to access quality education, employment and income, health care, reliable transportation and safe affordable housing benefits our own and our neighbor's health. The persistent systemic inequities in social and economic opportunity result in worse health for some neighbors, while others benefit.

# Nature

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Countless research studies indicate that the way we design our cities, homes, and workplaces affect how we interact with nature and thus affect our health. Whole communities make decisions about how we should use nature, who is responsible for maintaining its cleanliness and how to resolve complex disputes surrounding its use. Such decisions have the power to determine who can access a healthy environment and who cannot and create disparities in health outcomes. Therefore, how we interact with the natural world affects one's likelihood of exposure and disease.

## Climate

The climate of Rice County is classified as mild continental. There are wide variations in temperature from summer (hot and humid) to winter (cold and snowy). Although the climate is essentially uniform throughout the county, variations in microclimate may occur because of differences in topography, vegetation, and soil (Rice County Environmental Services, 2024).

According to the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information (NCEI), Rice County has an average annual total precipitation of 35.45 inches (National Oceanic and Atmospheric Administration National Centers for Environmental Information, 2024). Precipitation in Rice County varies from season to season, and month to month. From 1991-2020, annual snowfall in Faribault averaged 43.3 inches per year. The amount of average precipitation in Rice County has been steadily trending upward since 1896. Over the past century (1896-2024), Rice County has seen an average increase of 6.29 inches of precipitation (National Oceanic and Atmospheric Administration National Centers for Environmental Information, 2024).

Average daily temperatures in Rice County range from 14.0° F in January to 71.3° F in July. In the winter months, the average daily minimum temperature is 8.4° F. The average daily maximum temperature in the summer is 80.1° F. On January 9, 1977, the lowest temperature on record in the county was recorded in Faribault at -40° F (Minnesota Department of Natural Resources, 2024). The highest temperature on record, 110° F, was recorded in Faribault on July 14, 1936. The average temperature is increasing, with Rice County having 10 days that were rated as extreme heat days between 2017-2020 (Minnesota Department of Health, 2024). According to the Minnesota Department of Health, extreme heat days are defined as "days that had a heat index over the 95<sup>th</sup> percentile of the baseline (based on the daily heat index for the years 1991-2020)" and these extreme heat events are expected to become "more common, more severe, and longer-lasting" as our climate continues to change.

Minnesota's climate is changing rapidly, and changes in climate are affecting our health, well-being, ways of life, and natural resources. Water quality and quantity is affected by increasing precipitation (flooding and erosion) and decreasing precipitation (reduced water levels in aquifers, lakes and wetlands, potential concentration of pollutants and wildfire dangers). The increasing temperatures of lakes and streams increases harmful algal blooms which negatively affect fish populations and

increase survivability and breeding of insects that carry pathogens causing sickness (United States Environmental Protection Agency, 2024).

## Water Quality

Groundwater quality is perhaps the best example for showing how and why land uses are interrelated.

### Drinking Water

Residents of Rice County obtain their water solely from ground water resources such as aquifers, or bodies of saturated rock or sediment through which water can move readily. Knowledge of the major aquifer systems is essential to the protection of Rice County's groundwater sources. The major primary aquifer system in the county is the Saint Peter Prairie du Chien-Jordan aquifer. The county also uses the Saint Lawrence-Franconia aquifer and the Galina aquifer. City wells tap into the Jordan Sandstone portion of the aquifer, while residential wells are generally shallower and tap into the water from glacial drifts (western townships) or the Saint Peter Sandstone portion (eastern townships).

City wells provide the groundwater resources for the majority of Rice County residents and water systems are required to provide drinking water that meets the standards of the Federal Safe Drinking Water Act. Groundwater is also used by large industries in the county. The cities of Faribault and Northfield have established Wellhead Protection Plans to manage potential sources of contamination to help provide an adequate and safe drinking water supply for community residents. Other county municipalities are currently working on the development of Wellhead Protection Plans.

In rural areas of the county, individual private wells serve as the source of ground water. The Minnesota Department of Health recommends private well owners test their household water supply. Test kits are available through Southeastern Minnesota Water Analysis Laboratory.

### Nitrates

Nitrate sources can include agricultural production, sewage treatment systems, fertilizer, and manure storage. Nitrates enter an aquifer from the ground surface so wells with shallow casing are more likely to be affected. Geology areas with sandy soils, fractured bedrock (northeast corner of Rice County) or shallow depths to groundwater are especially vulnerable to contamination.

The Nitrate-Nitrogen Risk Ranking Methods and Results Report identified 36 percent of Rice County land area as high risk for contamination of nitrates to the water table aquifer, 32 percent as moderate risk and 29 percent of Rice County as low-level risk based upon the most current available data (Minnesota Department of Health Drinking Water Protection, 2017). Natural processes can cause low levels of nitrate in drinking water—usually less than 3 mg/L. The health concern is with levels of nitrate over 10 mg/L. The 10mg/L is the level at which health impacts, such as methemoglobinemia (blue baby syndrome), can occur.

## *Arsenic*

Arsenic occurs naturally in rocks and soil across Minnesota and can dissolve into groundwater. Drinking water that contains arsenic can increase one's risk of cancer and other serious health effects. Unfortunately, there is no way to know the arsenic level in water before a well is drilled. Arsenic levels can vary between wells, even within a small area. You cannot taste, see, or smell arsenic in your water (Minnesota Department of Health, 2024).

The maximum level of arsenic the United States Environmental Protection Agency (EPA) allows in community water systems is 10 micrograms per liter ( $\mu\text{g}/\text{L}^*$ ). However, consuming water with arsenic at levels lower than the EPA standard over many years can still increase your risk of cancer. As a result, the EPA has set a goal of 0  $\mu\text{g}/\text{L}$  of arsenic in drinking water. According to the most current available data, in 2017, none of the water systems in Rice County exceeded the maximum contaminant level and the highest reported level was 4.76  $\mu\text{g}/\text{L}$  (Minnesota Department of Health, 2024).

## *Surface Water*

Surface water is generally used in a broad sense to refer to water located above ground or on the surface of the earth, such as lakes, rivers, ponds, streams, and reservoirs. Surface water is vulnerable to the same potential contaminants as groundwater. The Federal Clean Water Act requires states to adapt water quality standards for lakes, streams, and wetlands to support specific uses, such as drinking, fishing, and swimming. Water bodies that do not meet those standards are considered "impaired". Thus, they are not always suitable for drinking, fishing, or swimming. Seventeen lakes in Rice County are currently impaired for swimming and ten for fishing. A large number of stream sections are also impaired for use (Minnesota Pollution Control Agency, 2024).

## *Mercury in Fish*

Mercury is an element that occurs naturally in rocks, soil, water and air. It does not break down into less toxic substances. The majority of mercury found in Minnesota lakes and rivers come from the atmosphere. Emissions travel on the wind until they are met by rain or snow and enter water resources. Bacteria in lakes and rivers convert mercury to methyl mercury, which is absorbed by plankton and smaller fish. As larger fish consume the smaller fish, the methyl mercury is moved up the food chain. In humans, mercury affects the nervous system and kidneys. Developing fetuses, infants, children and youth are especially vulnerable because their nervous systems are still developing. Because of health concerns, federal, state, and local governments issue fish consumption advisories. The advisories may suggest that people, including pregnant women, avoid eating certain kinds or amounts of fish.

## **Outdoor Air Quality**

The Environmental Protection Agency (EPA) sets national air quality standards and the Minnesota Pollution Control Agency (MPCA) is responsible for their implementation and enforcement. The Air Quality Index measures five of the main outdoor air pollutants as "good" "moderate" "unhealthy for sensitive groups", "unhealthy", "very unhealthy", and "hazardous". Rice County has approximately 79 percent "good" days (Minnesota Pollution Control Agency, 2019). Statewide, Minnesota air meets all federal standards and nearly all health benchmarks maintaining a trend in reducing air pollution. In

2023, Minnesota had a record number (52) of air quality alert days. According to the Minnesota Pollution Control Agency, they were caused in large part by the above average number of wildfires across Canada and the United States. Differences in weather conditions and the frequency of natural events can cause the number of alert days to vary year to year. For example, increases in temperature and precipitation can lead to increases in particular matter, ozone levels, pollen, and mold.

It is well documented that poor air quality is associated with increased risk of asthma, lung disease, heart disease, cancer, heart attacks, and other serious illnesses. The most directly emitted pollutants in Rice County are generated from volatile organic compound emissions from businesses such as gas stations, dry cleaners, and auto body shops. These pollutants come from vehicles and equipment, residential wood burning, backyard fires, residential garbage and barrel burning, and factories (Rice County Environmental Services, 2024).

Young children, seniors, and people with pre-existing heart and lung conditions are more susceptible to the health impacts of air pollution. However, even healthy athletic adults can be harmed by breathing polluted air. Between 2011 and 2015, the death rate in Rice County that was attributable to fine particle air pollution, which was 118.8 deaths per 100,000 population, compared to the state at 112.58 deaths per 100,000 population (Minnesota Department of Health, 2024). Air pollutants can also cause damage to lake ecosystems, crops, and our climate (Rice County Environmental Services, 2024).

## Indoor Air Quality

### Radon

Radon is an odorless, colorless, and tasteless gas that occurs naturally in Minnesota soils. It enters homes through cracks or openings in walls or foundations and accumulates in the air we breathe. Radon gas decays into fine particles that are radioactive and, when inhaled, damages the lungs. Exposure to radon over a long period of time can lead to lung cancer. Radon is the leading environmental cause of cancer deaths in the United States, and the leading cause of lung cancer among non-smokers.

About two in five Minnesota homes have dangerous levels of radon gas, while in Rice County that number is three in five. The EPA recommends mitigation if the radon level is above 4 pCi/L. While the action level was set at 4 pCi/L, there is no safe level of exposure to radon, and so the EPA also recommends mitigation be considered for homes with levels between 2 and 4 pCi/L. The only way for community members to know the amount of radon in their home, is to test.

Approximately 320 properties are tested annually in Rice County. The average radon level of homes that have been tested is 5.8 pCi/L, with fewer homes being tested in southern Rice County. Radon test kits are available to people living in Rice County free of charge at the Rice County Public Health office.

## Health Behaviors

Over the past century, there has been a shift from the diagnosis and treatment of essential nutrient deficiencies and infectious diseases, to chronic diseases largely attributed to lifestyle behaviors and environmental conditions. A history of poor eating and physical activity patterns have a cumulative effect on our health. Preventable chronic diseases include cardiovascular disease, high blood pressure, type 2 diabetes, some cancers, and poor bone health.

### Weight Status

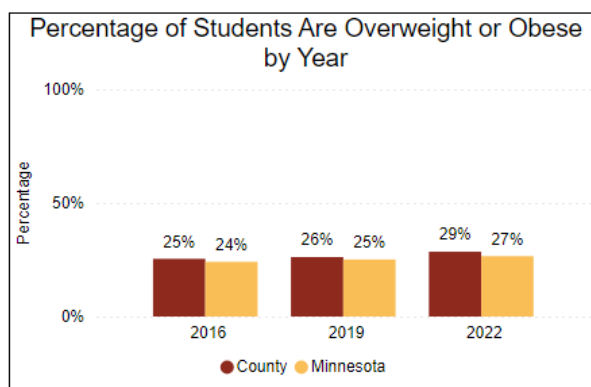
Individuals who are at a healthy weight, according to a calculated body mass index (BMI) between 18.5 and 24.9, are less likely to develop chronic diseases such as type 2 diabetes, heart disease, osteoarthritis, and some cancers. As explored earlier, these conditions are among Rice County's top 10 causes of premature death.

In a 2024 opinion survey of Rice County medical providers, they reported that obesity of children and adults in Rice County was a top moderate to serious health concern. Prevalence of an obesity diagnosis among adults 18 and over in Rice County is at 13 percent while prevalence of an obesity diagnosis as documented body mass index (BMI) of greater than 30 is at 38 percent (Minnesota EHR Consortium, 2024). When asked for self-reported height and weight, the 2023 Rice County Community Health Survey found that 73 percent of Rice County adults were overweight or obese (Rice County Public Health, 2023).

Reducing the proportion of children and adolescents with obesity (17.8 percent between 2013 and 2016) is a lead health indicator for Healthy People 2030 with a target of 15.5 percent (U.S. Department of Health and Human Services, 2024). Children and adolescents who are overweight or obese are at an increased risk for developing diabetes and heart disease; they are also likely to continue to be overweight or obese into adulthood, placing them at increased risk for serious chronic diseases.

According to the Minnesota Student Survey, the percent of Rice County students who were overweight or obese has climbed over the years from 25 percent in 2016, to 29 percent in 2022 (Figure 20) (Olmsted County Public Health Services, 2024).

**Figure 20: Percent of Rice County Students Who are Overweight or Obese by Year, 2016-2022**

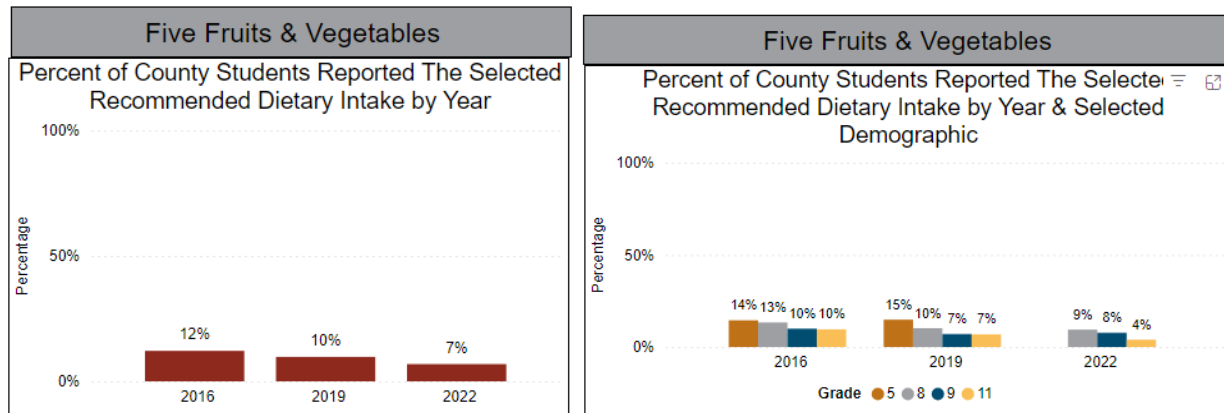


Source: Minnesota Student Survey

## Nutrition

According to the 2020-2025 Dietary Guidelines for Americans, it is recommended that half of your plate be fruit and vegetables, to make half of your grains be whole grains, to vary your protein, to consume low-fat or fat-free dairy and to choose foods and beverages with less added sugar, saturated fat and sodium (U.S. Department of Agriculture and U.S. Department of Health and Human Services, December 2020). According to the Minnesota Student Survey, the percent of Rice County students who eat five or more fruits or vegetables a day, has declined from 12 percent in 2016, 10 percent in 2019, to 7 percent in 2022 with decreasing intake by grade (Figure 21) (Olmsted County Public Health Services, 2024).

**Figure 21: Percent of Rice County Students Eating 5+ Fruits or Vegetables a day by Year and Grade**



Source: Minnesota Student Survey

The 2023 Rice County Community Health Survey found that only 35.8 percent of adults eat five or more fruits or vegetables a day, and this has worsened by 1 percent since 2021 (see Figure 22) (Rice County Public Health, 2023).

**Figure 22: Percent of Rice County Adults Eating 5+ Fruits or Vegetables a Day, 2023**



Source: Rice County Community Health Survey

Sugar sweetened beverages (SSBs), such as soda/pop, energy drinks, and sports drinks, are leading sources of added sugars in the American diet. High consumption is associated with weight gain/obesity, type 2 diabetes, heart disease, kidney diseases, non-alcoholic liver disease, tooth decay and cavities, and gout, a type of arthritis. Limiting SSBs intake can help individuals maintain a healthy weight (Centers for Disease Control and Prevention, 2022). The Minnesota Student Survey showed that 45 percent of Rice County students drank four or more SSBs in the last seven days, a negligible improvement since 2019 when it was 46 percent (Olmsted County Public Health Services, 2024).

### *Barriers to Nutrition*

Food insecurity is defined as having limited or uncertain access to nutritious foods. In 2018, 11.1 percent of the nation’s households were food insecure, compared to 12.8 percent in 2022. The Healthy People 2030 goal is to reduce household food insecurity to 6 percent (U.S. Department of Health and Human Services, 2024). According to the 2023 Rice County Community Health Survey, 6.1 percent of all Rice County residents (5.1 percent in northern Rice County and 7.5 percent in southern) and 13.3 percent of low-income residents “often” or “sometimes” worried about running out of food in the past 12 months before they had money to buy more (Rice County Public Health, 2023).

There are four food shelves in the county. The 2023 Rice County Community Health Survey found that 3.1 percent of residents reported using a community food shelf (1.5 percent in northern Rice County and 5.3 percent in southern Rice County) (Rice County Public Health, 2023). According to Feeding America, the Rice County food insecure population is 5,750 residents or 5.7 percent of the population, compared to Minnesota at 9.4 percent (Feeding America, 2022). Rice County residents face a \$4.53 per meal cost compared to Minnesota (\$4.23). An estimated 41 percent of Rice County residents, who are food insecure, are above major federal nutrition assistance program eligibility thresholds, and 59 percent are below them and therefore actually eligible (Feeding America, 2022).

### *Physical Activity*

It is recommended that children and adolescents ages 6 to 17 get 60 minutes or more of physical activity each day (U.S. Department of Health and Human Services, 2018). In 2022, only 18 percent of Rice County students taking the Minnesota Student Survey reported at least 60 minutes of physical activity daily (Olmsted County Public Health Services, 2024).

Among adults, the recommendation is at least 150 to 300 minutes of moderate-intensity aerobic activity, like brisk walking or fast dancing, each week. Adults also need muscle-strengthening activity, like lifting weights or doing push-ups, at least 2 days each week. According to the 2023 Rice County Community Health Survey, only 31.3 percent of adults engaged in at least 30 minutes of physical activity on five or more days of the week (Rice County Public Health, 2023). It is interesting to note that 57.3 percent reported more than the recommended two hours or less of screen time daily outside of the workday (Rice County Public Health, 2023).

In 2023, the Rice County Community Health Survey included the World Health Organization-5 Well-Being Index as a measure of current well-being in the last two weeks. Greater detail about the index is reported in the Mental Health section, where a score of 13 or greater indicates an increasing sense of well-being. The following shows what community members reported for physical activity:

- 0 days of moderate exercise per week, 57.1% had a WHO-5 raw score of 13 or greater
- 1-4 days of moderate exercise per week, 81.7% had a WHO-5 raw score of 13 or greater
- 5-7 days of moderate exercise per week, 91.9% had a WHO-5 raw score of 13 or greater

### Preventative Health Screening

It is important that community members participate in preventative health screenings to assess and reduce their risk for various diseases and conditions. One of the targets for Healthy People 2030 is to increase the proportion of adults who get recommended evidence-based preventative health care. Nationally, in the baseline year of 2015, 8.5 percent of adults aged 35 years and over received all of the recommended high priority appropriate clinical preventative services. Most recent data was at 5.3 percent with a target of 11.5 percent (U.S. Department of Health and Human Services, 2024).

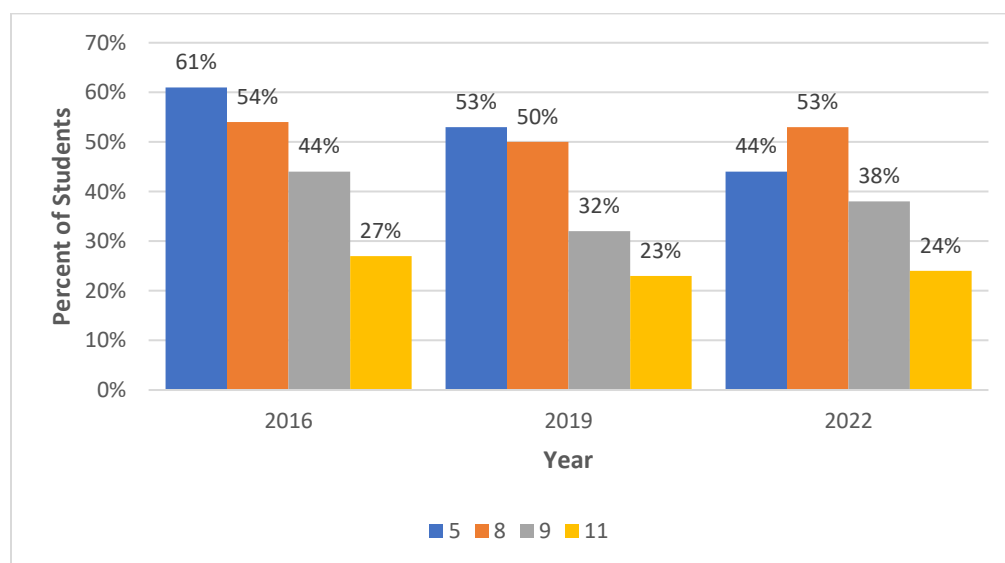
Seventy-three percent of Rice County community members reported having had an annual preventative health care exam in the past year. Five percent reported never having an exam, or having one five or more years ago.

### Sleep

The National Sleep Foundation recommends that teenagers aged 14-17 get between eight and ten hours of sleep each night. Sleep is essential for mental well-being, and insufficient sleep may lead to depression and memory problems. Insufficient sleep has also been linked to obesity (Beccuti & Pannain, 2011).

According to the 2022 Minnesota Student Survey, only 39 percent of Rice County students get the recommended amount of sleep for their age (Olmsted County Public Health Services, 2024). Figure 23 shows the adequacy of sleep over time and by grade level. Note the 17 percent drop in 5<sup>th</sup> graders between 2016 and 2022 (Olmsted County Public Health Services, 2024).

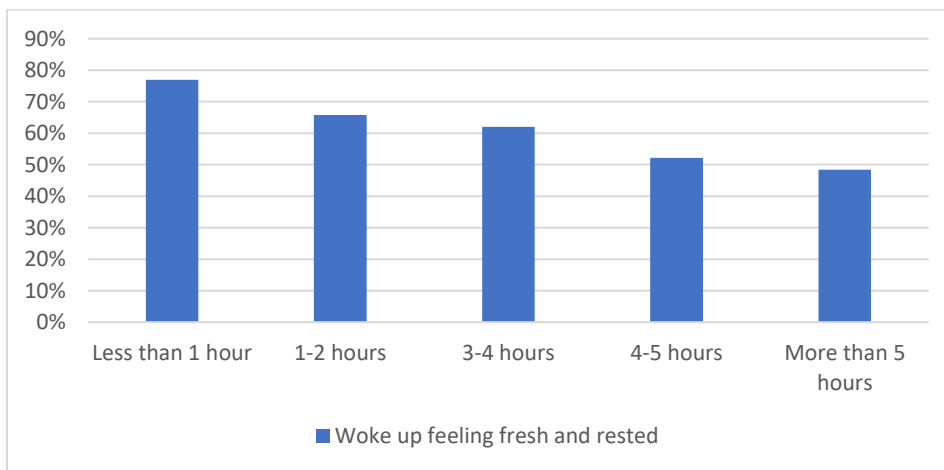
**Figure 23: Adequacy of Sleep among Rice County Student by Grade, 2016-2022**



Source: Minnesota Student Survey

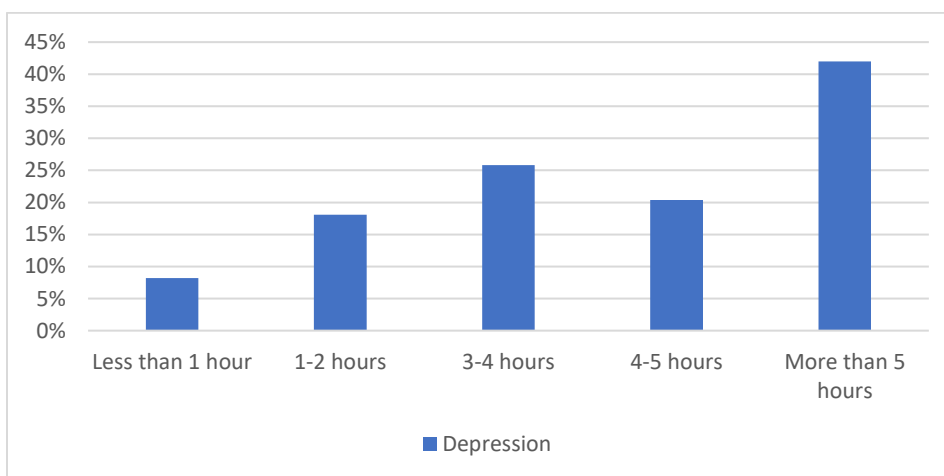
The 2023 Rice County Community Health Survey asked community members the frequency with which they woke up feeling fresh and rested over the last two weeks. Sixty-one percent of community members reported waking up fresh and rested more than half of the time (Rice County Public Health, 2023). It is interesting to note that with increasing amounts of screen time, there was a decrease in waking up feeling fresh and rested (see Figure 24), an increase in depression, (see Figure 25) and an increase in anxiety or panic attacks (see Figure 26). While these results do not indicate the nature of the relationship, the literature points to increasing screen time use being associated with poor sleep, depression and anxiety or panic attacks (Li, et al., 2022; Nagata, et al., 2022; Santos, et al., 2023).

**Figure 24: Percent of Community Members Who Woke Feeling Fresh and Rested by Screen Time Use (While Not at School or Work), 2023**



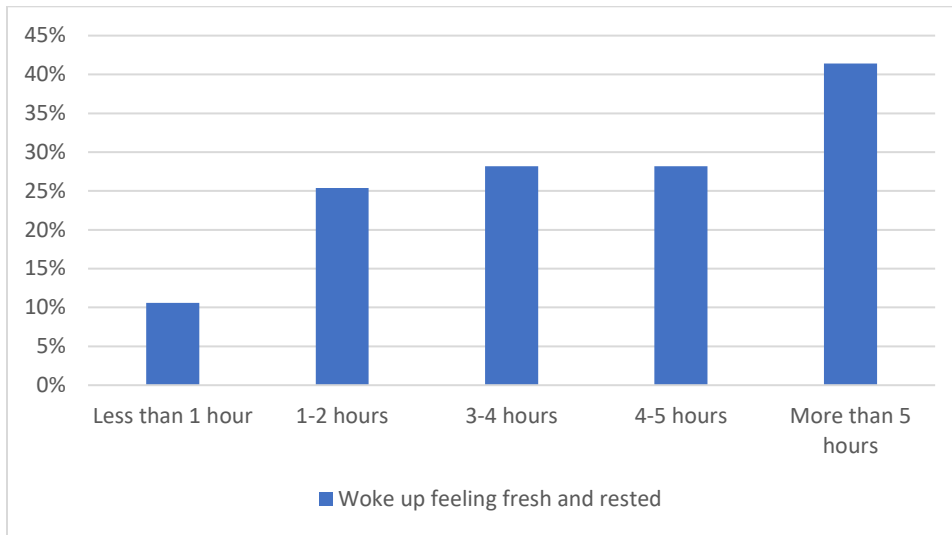
Source: Rice County Community Health Survey

**Figure 25: Percent of Community Members Told they have Depression by Screen Time Use (While Not at School or Work), 2023**



Source: Rice County Community Health Survey

**Figure 26: Percent of Community members Told they have Anxiety or Panic Attacks by Screen Time Use (While Not at School or Work), 2023**



Source: 2023 Rice County Community Health Survey

### Pregnancy and Birth

Most women have normal term pregnancies and give birth to a healthy infant. The opportunity for a healthy birth is increased by using contraception to space pregnancies or avoid unintended pregnancy, accessing early prenatal care, maintaining a healthy weight, remaining smoke free or quitting smoking, living in a smoke and drug free environment, and following nutritional and medical advice.

### Youth Sexual Activity

In 2022, 9.1 percent of Rice County ninth graders reported ever having had sexual intercourse (compared to 10.1 percent in 2019), while 27.6 percent of eleventh graders reported having ever had sexual intercourse (compared to 34.7 percent in 2019) (Minnesota Student Survey Interagency Team, 2022). In 2022, of the ninth-grade students who reported sexual activity, 14.8 percent reported not using a method to prevent pregnancy the last time they had sex, compared to 2.4 percent of eleventh graders.

### Teen Pregnancy

The United States has the highest rate of pregnancy and births among girls aged 15 to 19 in the industrialized world (Sedgh, Finer, Bankole, Eilers, & Singh, 2015). The 2020 (most recent available year at the time of writing) pregnancy rate per 1,000 females aged 15 to 19 in Rice County was lower than the pregnancy rate in Minnesota, at 7.8 and 13.0 pregnancies respectively (Minnesota Department of Health, 2020).

### Pregnancy Health Behaviors

Receiving adequate prenatal care is a way to decrease risk of poor birth outcomes such as prematurity and low birth weight (see **Error! Reference source not found.**). Adequate prenatal care is defined as prenatal care that starts within the first four months of pregnancy and includes at least 80

percent of recommended visits for gestation age. Healthy People 2030 has set a national goal for 80.5 percent of pregnant females to receive adequate prenatal care, and in 2022 the nation was at 74.9 percent, a decrease from the baseline of 76.4 percent (U.S. Department of Health and Human Services, 2024).

Rice County is seeing an increasing trend in the percent of women receiving adequate prenatal care. In 2023, 79.2 percent of women received adequate care compared to 72.6 in 2020 and 68.9 in 2021, likely low due to the COVID-19 pandemic (Olmsted County Public Health Services, 2024).

Individuals at a healthy weight prior to pregnancy are also less likely to experience complications during pregnancy. Complications include increased risk of miscarriage, gestational diabetes, preeclampsia, difficult vaginal delivery, and increased risks of birth defects for the baby. In 2021, seven out of ten low-income Rice County women participating in WIC reported a pre-pregnancy BMI greater than 25, meaning they are experiencing overweight or obesity. The same is true at the state level (Minnesota Department of Health, 2022).

Research has shown that babies born to women who smoke are at an increased risk of pre-term birth, birth defects, low birth weight and sudden infant death syndrome (Centers for Disease Control and Prevention, 2023). The percentage of births in Rice County where the mother smoked during pregnancy has been steadily decreasing since 2012 which was at 15.7 percent and 4.4 percent in 2023 (Olmsted County Public Health Services, 2024).

### Breastfeeding

Breastfeeding is one of the most highly effective preventative measures a mother can take to protect her own health and that of her infant. For this reason, breastmilk is the recommended sole source of nutrition for infants under 6 months of age, and breastfeeding is recommended to continue, along with appropriate complementary foods, for one year or longer (Centers for Disease Control and Prevention, 2024). Yet many women experience barriers to providing breastmilk for their babies, including:

- Lack of knowledge
- Social norms
- Poor family and social support
- Embarrassment
- Lactation problems
- Employment and child care
- Barriers related to health services

Table 4 shows the percent of breastfeeding initiation among all infants born in 2022 by race/ethnicity and location (Minnesota Department of Health, 2024).

**Table 4: Breastfeeding Initiation among All Infants by Race/Ethnicity and Cultural Identity by Location, 2022**

	All	East African	Hispanic All Races	White, Not Hispanic
Minnesota	90.1%	94.4%	90.1%	92.4%
Rice County	91.3%	88.5%	93.0%	89.8%

Source: Minnesota Department of Health WIC

Healthy People 2030 has an objective to increase the proportion of infants who are exclusively breastfed through 6 months of age to 42.4 percent and to increase the proportion of infants who are breastfed at one year to 54.1 percent (U.S. Department of Health and Human Services, 2024). Milk supply is the most common reason given for early weaning in the first year. Concerns about supply often lead to unnecessary formula supplementation, resulting in reduced milk supply and earlier-than-desired weaning.

Table 5 shows breastfeeding initiation and duration among low-income infants enrolled in WIC (Minnesota Department of Health, 2024).

**Table 5: Breastfeeding Initiation and Duration among WIC Infants by Location, 2022**

	Initiation	Two weeks	Two Months	Three Months	Six Months	12 months
Minnesota	83.5%	78.1%	64.6%	58.3%	46.1%	27.5%
Rice County	89.7%	85.9%	70.2%	63.2%	50.7%	30.4%

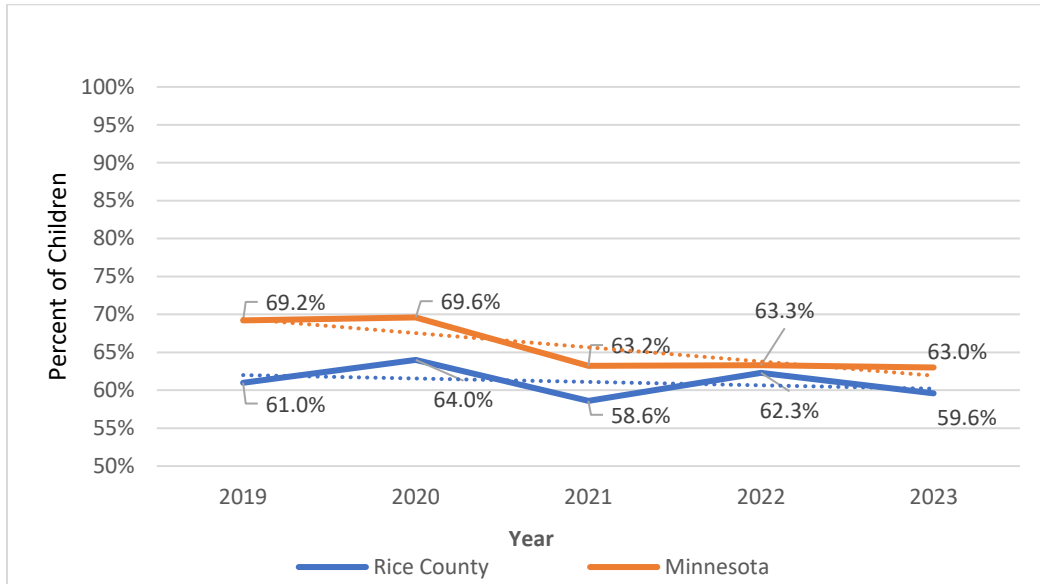
Source: Minnesota Department of Health WIC

### Childhood Immunizations

Getting vaccinated is one of the most effective ways of preventing infectious disease, disabilities, and death. In the United States, childhood and adolescent vaccines prevent many diseases, and have reduced the occurrence of most vaccine-preventable diseases by over 95 percent (United States Food and Drug Administration, 2024). Immunizations interact with the body’s natural defense system to safely develop immunity to a specific disease. If a high proportion of individuals receive immunizations, then their actions also help to protect those who are unable to receive vaccines, such as populations who are too young or cannot be vaccinated due to medical reasons (Minnesota Department of Health, 2024).

In 2023, only 59.6 percent of Rice County’s children aged 24-35 months were vaccinated with the seven vaccine childhood series including diphtheria/tetanus/pertussis (DTap), polio, measles/mumps/rubella (MMR), haemophilus influenzae type b (Hib), hepatitis b (HepB), chickenpox (varicella), and pneumococcal (PCV). This is below the state average at 63.0 percent (Minnesota Department of Health, 2024). Looking over time, Rice County and Minnesota’s vaccination rates for this series were highest in 2020 and have continued to decline since the start of the COVID-19 pandemic (Figure 27) (Minnesota Department of Health, 2024).

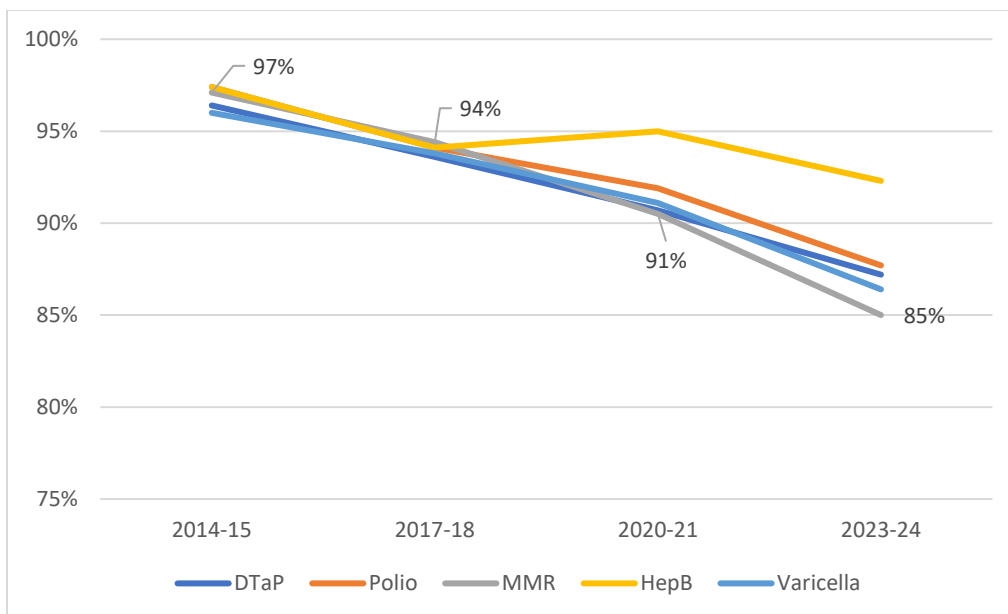
**Figure 27: Percent of Children Aged 24-35 Months Immunized with Complete Childhood Series by Location, 2019-2023**



Source: MDH School Immunization Data

Kindergarten vaccination rates have decreased in Rice County by 5-percentage-points for HepB and by as much as 12-percentage-points for MMR (Figure 28) (Minnesota Department of Health, 2024). This leaves many more of Rice County’s learners vulnerable to vaccine preventable disease.

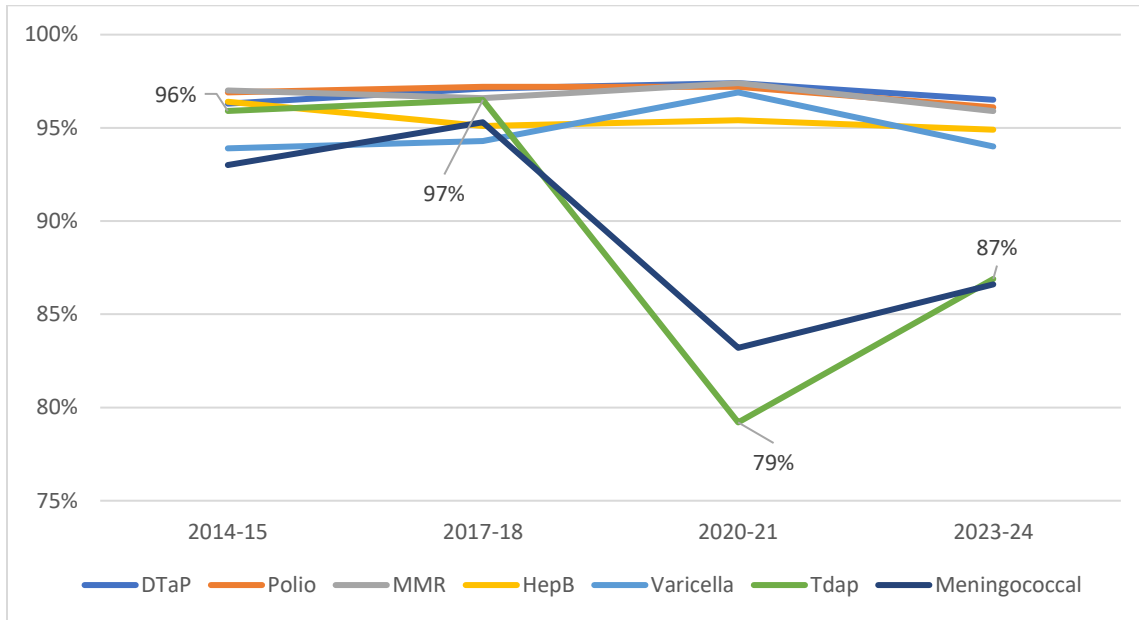
**Figure 28: Percent of Rice County Kindergarteners Immunized by Vaccine Type, School Year 2014-15 to 2023-24**



Source: MDH School Immunization Data

Figure 29 shows the percent of Rice County 7<sup>th</sup> grade students immunized by vaccine type. All of the rates in Rice County are higher than the state average (Minnesota Department of Health, 2024).

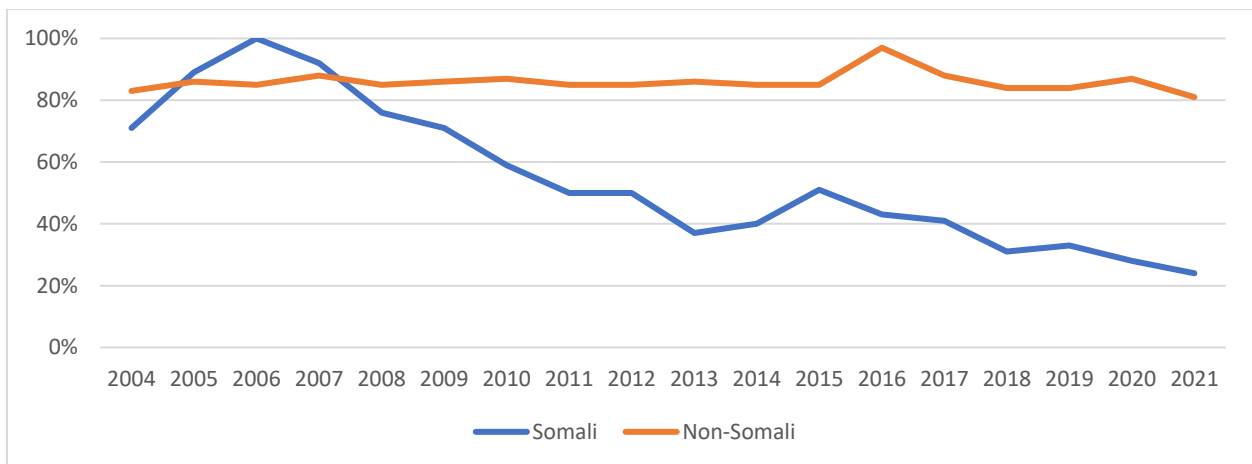
**Figure 29: Percent of Rice County 7th Grade Students Immunized by Vaccine Type, School Year 2014-15 to 2023-24**



Source: MDH School Immunization Data

Figure 30 compares the percent of Rice County’s Minnesota born children of Somali descent and children of non-Somali descent receiving the MMR vaccination by 24 months (Minnesota Department of Health, 2024).

**Figure 30: 1+ MMR Coverage Rates by 24 Months, by Somali Ethnicity and Birth Year (2004-2021)**



Source: Minnesota Immunization Information Connection

Human papillomavirus (HPV) is a virus which spreads through intimate skin-to-skin contact. Most of the time, the body clears the virus, yet some bodies do not naturally do this and may cause pre-cancers and cancers of the throat, mouth, cervix, vulva, vagina, penis, or anus, as well as genital warts. The CDC recommends on-time vaccination of 9- to 12-year-olds prior to HPV exposure as the best prevention (Minnesota Department of Health, 2024). Fifty percent of Rice County’s adolescents have received all of the recommended doses of HPV vaccine, compared to the state at 48 percent (Minnesota Department of Health, 2024).

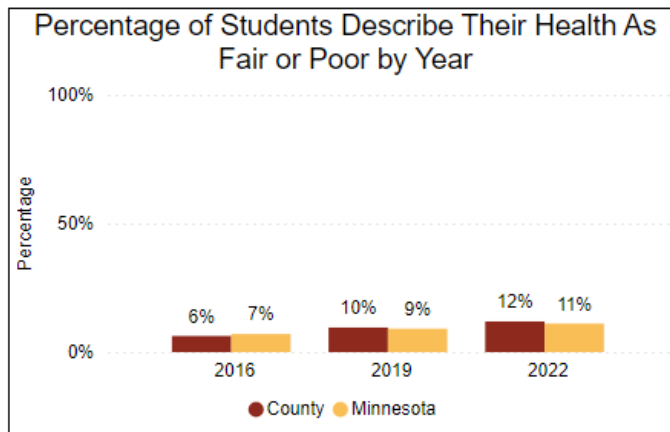
## Health Outcomes

### General health

General health status is a self-reported measure of how a person perceives his or her health at a point in time. It can also be used as an indicator of general health of a population. The 2023 Rice County Community Health Survey found that 88 percent of respondents reported their health as good or better (Rice County Public Health, 2023).

In 2022, twelve percent of Rice County students described their health as fair or poor, an increase over 2016 and 2019 (see Figure 31) (Olmsted County Public Health Services, 2024).

**Figure 31: Percentage of Rice County Students Describing Their Health as Fair or Poor, 2016-2022**



Source: Minnesota Student Survey

### Cancer

One in four Minnesotans die from cancer, making it the leading cause of death (Minnesota Department of Health, 2024). Cancer is a group of diseases involving uncontrolled growth and spread of abnormal cells. About four to five of every ten Minnesotans will be diagnosed with some type of cancer in their lifetime. Table 6 compares cancer incidence rates of the five most common in Rice County and Minnesota (Minnesota Department of Health, 2024).

**Table 6: Cancer Incidence Rates (per 100,000 people) by Type and Location, 2015-2019**

<b>Incidence (per 100,000 people)</b>	<b>Minnesota</b>	<b>Rice County</b>
All cancer types combined	440.7	440.9
Breast (female)	135.7	131.0
Lung and bronchus	52.3	60.6
Colorectal	32.6	35.5
Melanoma	35.0	37.8
Bladder	21.3	19.1

Source: Minnesota Public Health Data Access Portal

Tobacco is the leading single cause of cancer and accounts for 30 percent of cancer deaths. While genetics play a strong role in some cancers, many can be prevented through health behaviors such as cancer screenings, vaccinations, reducing workplace exposure (including radon), eating a healthy diet, and increased physical activity (Minnesota Department of Health, 2024).

### Heart Disease

Heart disease is a group of diseases that affect the heart and blood vessels. It is also the second leading cause of death in Minnesota (Minnesota Department of Health, 2024). Diseases include coronary artery disease, angina, heart attack, and congestive heart failure. Risk factors for heart disease are shown in

Table 7. There are modifiable risk factors which a person may be able to control, and unmodifiable factors, which are things a person cannot control. Modifiable risk factors for heart disease are discussed later in this report.

**Table 7: Risk Factors for Heart Disease**

- | <b>Modifiable</b>   | <b>Unmodifiable</b>  |
|---|--|
| <ul style="list-style-type: none"> <li>• High blood cholesterol</li> <li>• High blood pressure</li> <li>• Cigarette smoking</li> <li>• Diabetes</li> <li>• Overweight and obesity</li> <li>• Physical inactivity</li> <li>• Unhealthy diet</li> </ul> | <ul style="list-style-type: none"> <li>• Age</li> <li>• Sex</li> <li>• Race/ethnicity</li> <li>• Family history</li> </ul> |

Source: Minnesota Public Health Data Access Portal

According to the 2023 Rice County Community Health Survey, 5.1 percent of Rice County community members have been told by a doctor, nurse, or other health care professional that they have chronic heart disease (up from 4.6 in 2016), 31.8 percent (up from 23.6 percent in 2016) have been told

they have high blood cholesterol, and 37.9 percent (up from 27.8 percent in 2016) have been told they have high blood pressure (Rice County Public Health, 2023).

### **Chronic Lower Respiratory Disease**

Chronic lower respiratory disease is comprised of chronic obstructive pulmonary disease (COPD) and asthma. Chronic lower respiratory disease is the fourth leading cause of death in Rice County (see Table 1).

#### **Chronic Obstructive Pulmonary Disease**

COPD includes chronic bronchitis and emphysema, and lung diseases that increase difficulty breathing. Smoking tobacco is the leading cause of COPD. The symptoms of COPD can begin as early as age 40, and hospitalizations are more common among older populations. The prevalence of COPD is higher in males than females, whites than Blacks, and lower income adults are at higher risk (Minnesota Department of Health, 2024). The prevalence of COPD in Rice County is three percent (Minnesota EHR Consortium, 2024). Among working-age adults (aged 18-65) in Rice County, prevalence is at one percent and among our seniors (aged 65+) prevalence is at 9 percent (Minnesota EHR Consortium, 2024).

#### **Asthma**

Asthma is a chronic disease where a trigger can cause swelling and narrowing of the airways that make breathing difficult. There are many diverse asthma triggers, but they can also be specific to the individual. Triggers include pollutants, pollen, tobacco, wood smoke, cold air/weather changes, viral infections, chemical and scented products, strong emotions, aerobic exercise and more. Some triggers found in the home include dust mites, mold, pet dander and pests such as cockroaches and mice (Minnesota Department of Health, 2024).

Asthma affects one in 16 people in Rice County (Minnesota EHR Consortium, 2024). According to the 2022 Minnesota Student Survey, 13 percent of Rice County ninth graders have been told by a doctor or nurse that they have asthma (Olmsted County Public Health Services, 2024). State level student data shows that Black, American Indian, Pacific Islander and Hispanic or Latine students are more likely to report asthma than their white counterparts.

### **Diabetes**

Diabetes is the sixth leading cause of death in Rice County. It is a complex chronic disease characterized by high levels of glucose in the bloodstream. As symptoms worsen, complications may result, such as cardiovascular disease, kidney disease, or blindness. Optimal management, which includes controlling blood glucose (HbA1C < 8%), blood pressure (< 140/90mm Hg), lowering low-density lipoprotein cholesterol (< 100 mg/dL) and being tobacco free, can prevent or delay many complications from diabetes.

According to the 2023 Rice County Community Health Survey, 11.5 percent of Rice County community members have been told by a doctor, nurse, or other health care professional that they have diabetes, compared to 7.9 percent in 2016. Figure 32 shows the percent of the population with diabetes by household income (Rice County Public Health, 2023). Prevalence of type 2 diabetes diagnosis among Rice County community members is at 7 percent (Minnesota EHR Consortium, 2024).

**Figure 32: Rice County Population Told by a Health Care Professional They Have Diabetes by Income, 2023**



Source: Rice County Community Health Survey

**Stroke**

A stroke occurs when the blood supply to part of the brain is interrupted, thus depriving brain tissue of oxygen and nutrients. Within minutes, brain cells begin to die (Mayo Foundation for Medical Education and Research, 2019). Onset of a stroke is quite fast, and recognizing symptoms and seeking prompt medical treatment is essential to mitigate damages. Symptoms include trouble-walking, paralysis of the body or face, difficulty speaking, and headaches. Prevalence of a stroke diagnosis among Rice County adults is at 2 percent and includes: ischemic stroke; transient ischemic attacks (also called TIA or mini-stroke); brain bleed; other effects and complications of reduced blood flow to the brain; and other related diagnoses (Minnesota EHR Consortium, 2024).

**Infectious Disease**

Infectious disease cases are reportable by law to the Minnesota Department of Health (Minnesota Department of Health, 2024). Table 8 shows the reported infectious diseases in 2022. Some of the more prevalent infectious diseases in Rice County are sexually transmitted diseases, vaccine preventable diseases, and enteric infections.

**Table 8: Annual Reportable Infectious Disease by Location, 2023**

Disease Category	Rice County			Southeast			MN		
	Incidence	IR	Avg. IR	Incidence	IR	Avg. IR	Incidence	IR	Avg. IR
<b>Sexually Transmitted Disease</b>	<b>177</b>			<b>1,726</b>			<b>31,425</b>		
AIDS	1	1	1	8	2	1	158	3	2
Chancroid	0	0	0	0	0	0	0	0	0
Chlamydia	139	205	252	1,426	274	313	21,681	378	395
Gonorrhea	32	47	37	239	46	61	7,707	134	120
HIV	1	1	1	10	2	2	258	4	4
Syphilis (All Stages)	4	6	6	43	8	6	1,621	28	18
<b>Vaccine Preventable Disease</b>	<b>177</b>			<b>1,406</b>			<b>16,089</b>		
COVID-19 (Hospitalizations by Season)	132	194	0	1,028	197	0	11,347	198	0
Diphtheria	0	0	0	0	0	0	0	0	0
Influenza (Hospitalizations by Season)	42	62	41	340	65	48	4,445	77	51
Measles	0	0	0	0	0	0	0	0	0
Mumps	1	1	1	1	0	0	2	0	0
Pertussis	1	1	8	5	1	16	64	1	9
Polio (Paralytic)	0	0	0	0	0	0	0	0	0
Rubella	0	0	0	0	0	0	0	0	0
Tetanus	0	0	0	0	0	0	0	0	0
Varicella	1	1	8	32	6	5	231	4	6
<b>Vectorborne Infection</b>	<b>23</b>			<b>342</b>			<b>3,722</b>		
Anaplasmosis	0	0	2	32	6	6	508	9	9
Anaplasmosis-Ehrlichiosis (undetermined)	0	0	0	0	0	1	0	0	0
Babesiosis	1	1	1	10	2	1	73	1	1
Cache Valley Virus	0	0	0	0	0	0	0	0	0
Chikungunya	0	0	0	0	0	0	3	0	0
Dengue Fever	1	1	0	4	1	0	24	0	0
Ehrlichia chaffeensis	0	0	0	0	0	0	7	0	0
Ehrlichia ewingii	0	0	0	0	0	0	0	0	0
Ehrlichia muriseauclairensis	0	0	0	0	0	0	2	0	0
Jamestown Canyon	0	0	0	0	0	0	2	0	0
La Crosse Virus	0	0	0	0	0	0	1	0	0

Lyme Disease*	19	28	6	284	54	19	2,938	51	21
Malaria (Includes Non-Mn Residents)	1	1	0	5	1	1	90	2	1
Powassan	0	0	0	0	0	0	8	0	0
Rocky Mountain Spotted Fever	0	0	0	2	0	0	3	0	0
Tularemia	0	0	0	0	0	0	0	0	0
Typhus Fever (Fleaborne Murine)	0	0	0	0	0	0	0	0	0
West Nile Fever	1	1	1	5	1	0	63	1	1
Zika Virus	0	0	0	0	0	0	0	0	0
<b>Enteric Infection</b>	<b>29</b>			<b>381</b>			<b>3,687</b>		
Amebiasis	0	0	0	2	0	1	64	1	1
Botulism (foodborne)	0	0	0	0	0	0	0	0	0
Botulism (infant)	0	0	0	2	0	0	4	0	0
Campylobacteriosis	15	22	18	122	23	26	1,140	20	18
Cryptosporidiosis	1	1	3	78	15	17	476	8	7
Cyclosporiasis	0	0	1	11	2	3	77	1	1
E. coli O157	0	0	3	11	2	2	91	2	2
Giardiasis	1	1	10	41	8	9	445	8	10
Hemolytic Uremic Syndrome	0	0	0	0	0	0	0	0	0
Listeriosis	0	0	0	1	0	0	9	0	0
Salmonellosis	7	10	13	74	14	14	956	17	15
Shigellosis	1	1	2	3	1	1	84	1	3
STEC (excluding O157)	4	6	4	29	6	5	299	5	4
Trichinosis	0	0	0	0	0	0	0	0	0
Typhoid Fever	0	0	0	0	0	0	0	0	0
Vibrio (Including Vibrio Cholerae)	0	0	0	0	0	0	23	0	0
Yersiniosis	0	0	0	7	1	2	19	0	1

\*Lyme Disease incidence now includes confirmed and probable cases

Disease Category	Rice County			Southeast			MN		
	Incidence	IR	Avg. IR	Incidence	IR	Avg. IR	Incidence	IR	Avg. IR
<b>Invasive Infection</b>	<b>20</b>			<b>178</b>			<b>1,877</b>		
Haemophilus influenza	2	3	1	11	2	2	101	2	2
Meningitis (Neisseria meningitidis)	0	0	0	1	0	0	2	0	0
Neonatal Sepsis	1	1	0	3	1	0	34	1	1
Streptococcus Group A (Invasive)	4	6	6	59	11	5	625	11	5
Streptococcus Group B (Invasive)	7	10	9	60	12	10	574	10	10
Streptococcus pneumoniae	6	9	7	44	8	8	541	9	8
<b>Fungal Infection</b>	<b>4</b>			<b>39</b>			<b>317</b>		
Blastomycosis	2	3	1	7	1	1	99	2	1
Histoplasmosis	2	3	3	32	6	4	218	4	4
<b>Mycobacterium Infection</b>	<b>0</b>			<b>10</b>			<b>160</b>		
Hansen's Disease	0	0	0	0	0	0	0	0	0
Tuberculosis	0	0	2	10	2	3	160	3	3
<b>Other</b>	<b>3</b>			<b>15</b>			<b>156</b>		
Kawasaki Disease	0	0	1	0	0	0	22	0	0
Legionellosis	3	4	1	15	3	2	134	2	2
<b>Hepatitis</b>	<b>1</b>			<b>5</b>			<b>78</b>		
Hepatitis A	1	1	0	4	1	0	19	0	1
Hepatitis B (Non-perinatal)	0	0	0	0	0	0	8	0	0
Hepatitis B (Perinatal)	0	0	0	0	0	0	0	0	0
Hepatitis C	0	0	0	1	0	0	49	1	1
Hepatitis C (Perinatal)	0	0	0	0	0	0	2	0	0
<b>Zoonotic Infection</b>	<b>0</b>			<b>2</b>			<b>69</b>		
Brucellosis	0	0	0	0	0	0	2	0	0
Plague	0	0	0	0	0	0	0	0	0
Q Fever (Acute)	0	0	0	0	0	0	1	0	0
Q Fever (Chronic)	0	0	0	1	0	0	2	0	0
Rabies (Animal)	0	0	1	1	0	1	48	1	1
Rabies (Human)	0	0	0	0	0	0	0	0	0
Toxoplasmosis	0	0	0	0	0	0	16	0	0
<b>Grand Total</b>	<b>434</b>			<b>4,104</b>			<b>57,580</b>		

**Legend:**

**Southeast:** Minnesota Local Public Health Association Southeast Region  
**Incidence:** Total number of reported cases  
**IR:** Incidence Rate (Incidence divided by population and multiplied by 100,000)  
**Avg. IR:** The annual incidence rate average for the previous 10 years  
**Median IR:** The annual incidence rate median for the previous 10 years

42 percent of Rice County community members reported experiencing some loss related to the COVID-19 pandemic. Losses reported on included:

- Social connectedness/social support: 30.6%
- Job losses (lay off, furlough, hours reduction): 18.3% (15.4% in northern Rice County compared to 22.7% in southern Rice County)
- Quality of mental health: 20.7%
- Death of family member or friend: 16.1%
- Quality of physical health: 16%
- Financial stability: 11.1% (5% in northern Rice County compared to 20.1% in southern Rice County)

At the time of the Rice County Community Health Assessment survey, 76.5 percent of community members reported that they felt they had recovered from the effects of the COVID-19 pandemic (Rice County Public Health, 2023).

**Anemia**

Anemia is a key indicator of general nutrition status. Anemia in young children is usually due to iron deficiency and is characterized by fatigue, irritability, and cognitive difficulties. By the time anemia is detectable in a blood sample, it has been long standing and may have already caused growth and developmental delays. Table 9 shows the anemia rate by race in Rice County and Minnesota (Minnesota Department of Health, 2022).

**Table 9: Anemia in Infants and Children Participating in Rice County WIC by Location and Race, Oct 23 through Sept 2024**

	<b>Black/African American, Non-Hispanic</b>	<b>White, Non-Hispanic</b>	<b>Hispanic, all races</b>	<b>Total, all races</b>
Minnesota	17.1%	11.8%	13.6%	13.5%
Rice County	14.8%	14.3%	11.9%	13.4%

Source: Minnesota WIC Information System

**Maternal and Birth Related Outcomes**

**Severe Maternal Morbidity**

Severe maternal morbidity diagnoses include complications from infection, anesthesia, and surgery resulting in events like heart attack, stroke, aneurysm, embolism, hemorrhage, and more. These

negative health outcomes of labor and delivery may have short- and long-term health consequences for the mother. Prevalence of severe maternal morbidity diagnosis among all deliveries in Rice County is at 5 percent (Minnesota EHR Consortium, 2024).

### *Premature Birth*

A premature birth is one that occurs before 37 weeks of pregnancy. There are a number of factors that increase the risk of premature birth (Minnesota Department of Health, 2024). Some of those include:

- High blood pressure
- Diabetes
- Unhealthy weight status before pregnancy
- Inadequate weight gain during pregnancy
- Sexually transmitted infections
- Family history of premature birth
- Carrying twins or multiples
- Preterm labor
- Use of alcohol or nicotine during pregnancy
- Intimate partner violence
- Stress
- Having fewer than 18 months between pregnancies
- Late participation in prenatal care
- Poverty
- Race
- Maternal age

Table 10 shows the percent of premature births among the general population as well as among WIC participants as a proxy for income status (Minnesota EHR Consortium, 2024).

**Table 10: Premature Singleton Births by Income, 2021-2023**

	<b>General Population</b>	<b>WIC Participants</b>
Rice County	11.1%	8.6%

Source: EHR Natality Dashboard: Vital Statistics

### *Low Birth Weight*

A low-birth-weight baby is one who is born weighing less than 5 pounds 8 ounces. The following concerns increase the likelihood of having a low-birth-weight baby:

- Inadequate weight gain during the pregnancy
- Use of alcohol or nicotine during pregnancy
- Placental problems

- Chronic stress

Other possible risk factors include:

- Teen pregnancy and maternal age over 35 years
- Low income
- Exposure to air pollution and/or drinking water contaminated with lead

Table 11 shows the percent of low-birth-weight babies for the general population and uses WIC participation as a proxy for income status where the disparity by income becomes clearly evident (Minnesota Department of Health, 2020; Minnesota Department of Health, 2024). The average medical expenditure for low-birth-weight infants averages \$114,437 (Andrew L. Beam, 2020).

**Table 11: Low Birth Weight Singleton Births by Income and Location, Various Years**

	General population (2020)	Prenatal WIC participation (2022-2023)			
		Total WIC births	No prenatal participation	< 3 months participation	>= 3 months participation
Minnesota	4.3%	10.0%	13.0%	10.5%	7.8%
Rice County	4.3%	7.3%	12.3%	6.0%	5.9%

Source: County Health Tables 2020 and Minnesota WIC Reports and Data

### Neonatal Abstinence Syndrome

Neonatal abstinence syndrome (NAS) is the term used to describe a group of problems a newborn experiences when going through withdrawal from prenatal exposure to narcotics, most often associated with maternal opioid use. Newborns diagnosed with NAS exhibit symptoms including excessive crying, fever, tremors, diarrhea, and vomiting (Minnesota Department of Health, 2024). NAS requires hospitalization and treatment with medication to relieve symptoms; the medication is gradually tapered off until the baby adjusts to being opioid-free (Minnesota Department of Health, 2024).

From 2012-2016, there were 13 cases of NAS among those under one year of age in Rice County, which corresponds to a rate of 3.5 per 1,000 population. From 2018-2022, there were 10 NAS related cases, a rate of 2.9 per 1,000 population (Minnesota Department of Health, 2024). During the same period, there were 2,794 NAS cases in Minnesota, with an overall rate of 6.2 per 1,000 population (Minnesota Department of Health, 2024).

### Motor Vehicle Safety

87.3 percent of Rice County eleventh graders reported always wearing a seatbelt when driving or riding in a car, truck, or SUV (Minnesota Student Survey Interagency Team, 2022). The 2023 Rice

County Community Health Survey reported 95.5 percent of adult residents always wear their seat belt when in a vehicle (Rice County Public Health, 2023).

Impaired driving is extremely dangerous and could lead to a crash that causes serious injury or death. According to the Minnesota Student Survey, 5.1 percent of Rice County eleventh graders, compared to 5.5 percent of Minnesota eleventh graders have driven a motor vehicle at least one time after drinking alcohol in the last 12 months (Minnesota Student Survey Interagency Team, 2022). According to the 2023 Rice County Community Health Survey, 4.4 percent of Rice County adults drive after drinking too much alcohol. When looked at by region, 3.6 percent of Rice County adults in the northern portion of the county report this behavior, compared to 5.7 percent in the southern portion (Rice County Public Health, 2023).

Table 12 below displays the motor vehicle crash report for Rice County in 2022, the most recent year available at the time of writing (Minnesota Department of Public Safety, 2022).

**Table 12: Rice County Motor Vehicle Crash Report, 2022**

Total Crashes	Fatal Crashes	Injury Crashes	Property Damage Only Crashes	Number Killed	Number Injured
768	2	203	592	4	272

Source: Minnesota Department of Safety

Distracted driving accounts for eight percent of all fatal motor vehicle crashes in the United States (National Highway Traffic Safety Administration, 2021). Table 13 below displays eleventh graders who reported distracted driving behavior (Minnesota Student Survey Interagency Team, 2022).

**Table 13: Rice County 11th Grade Students Who Drive Distracted, 2022**

	How often do you handle your phone to do things like send or read text messages, take pictures, use social media, stream videos, or video chat?
I never do this	19.7%
Rarely/sometimes/often/always	41.3%

Source: Minnesota Student Survey

Table 14 below shows the percent of Rice County adults who reported “often” or “sometimes” engaging in distracted driving behaviors (Rice County Public Health, 2023).

**Table 14: Percent of Adults who Reported Distracted Driving Behaviors, 2023**

	How often do you drive distracted (i.e., read or send text messages, make or answer phone calls while holding the phone, eat, read, apply makeup or shave)?
Never	57.0%
Sometimes/often	43.0%

Source: Rice County Community Health Survey

## Conclusion of Nature

Our health is shaped by our relationship with the natural environment. As a community of neighbors, we make decisions that affect that relationship through development and preservation of natural spaces and thus we shape the health of the community.

# Belonging

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How we interact with other individuals, with our families, in the community, and in society affects our health across the lifespan. Humans are social creatures, and belonging creates meaning, purpose, and hope for the future (Minnesota Department of Health, 2017). A sense of belonging improves our relationships, connects us to more resources, bolsters our resilience, and increases our chances for success in education and the work force. A lack of healthy attachments has shown to increase risk of poor health outcomes such as chronic diseases. It also has a connection to deaths from suicide, homicide, drugs and alcohol.

“Healthy, positive relationships and lifelong inclusion in society interact to prevent disease, disability, injury, and premature death: they also create a high quality of life. **In many ways, not belonging is the true source of health inequity.** When prejudice and discrimination are a regular part of our lives, we hear a persistent message that “you don’t matter” (Minnesota Department of Health, 2017).

## Social Connectedness

People who are more involved in their community have better health. Being involved decreases social isolation, increases a sense of well-being and emotional health, reduces cognitive decline in older adults, and increases physical activity. In Rice County, there were 10.6 membership organizations (including civic, political, religious, sports and professional organizations) per 10,000 people, compared to the state at 12.6 and the nation at 9.2 membership organizations per 10,000 people (University of Wisconsin Population Health Institute: School of Medicine and Public Health, 2019).

The United States Surgeon General recently declared loneliness an epidemic and a threat to public health. Estimates suggest that about half of the United States population is experiencing loneliness. It is a normal human experience to feel temporarily lonely from time to time, and while loneliness is a subjective feeling, it is the sense that the connections we need in our life are greater than the connections we actually have.

During adolescence, young people not only need positive peer relationships, but also relationships with caring adults. A perception of being cared for or valued by peers and adults in the community is one way to evaluate the social connectedness of youth. In 2022, 5.9 percent of Rice County ninth graders felt that the adults in the community cared for them very much, 35.8 percent felt that adult relatives cared for them very much, and 62.0 percent believed their parents cared for them very much (Minnesota Student Survey Interagency Team, 2022). Without support from caring adults, the young adolescents may be at risk for unsafe behaviors.

38.5 percent of community members reported feeling lonely some of the time or often (Rice County Public Health, 2023). Interestingly, those aged 45-54 reported the lowest amounts of feeling

hardly ever or never feeling lonely (Rice County Public Health, 2023).

### Bullying

No matter what the setting is, bullying negatively affects the feeling of belonging and lifelong health. Bullying is intentional physical, verbal, or psychological tormenting, and can range from hitting, shoving, name-calling, threats, and mocking, to extorting money and treasured possessions. It also includes cyberbullying. Some kids bully by excluding others and spreading rumors. Some use email, social media, and text messages to taunt others or hurt another's feelings online.

Rice County students who reported being bullied, in any form, in the past 30 days, was 52 percent in 2022, an increase from 46 percent in 2019 (Olmsted County Public Health Services, 2024).

## Adverse Childhood Experiences

Early adversity has lasting impacts on health. The Adverse Childhood Experiences (ACE) Study is one of the largest investigations ever conducted to assess associations between childhood trauma and maltreatment, and later-life health and well-being (Centers for Disease Control and Prevention, 2021). ACEs are common and they contribute to stress. Prolonged activation of the stress response systems can negatively affect body and brain development. These, in turn, have the power to disrupt learning, behavior, the immune system, growth, and the way one's DNA is read and transcribed. Children living in a threatening environment are more likely to react violently and more likely to become depressed or anxious than children who grow up in a safe environment (Minnesota Department of Health, 2017).

Untreated trauma is a common thread connecting many of the problems facing individuals and society. Violence, poverty, crime, addiction, mental health issues, chronic medical issues, and lack of educational performance are linked to unresolved trauma and ACEs (Collins, et al., 2010). Realizing and working to support prevention and recovery can increase the feeling of belonging and improve health outcomes.

ACEs listed by the Centers for Disease Control and Prevention are shown below, along with the percent of Rice County students who reported personal experience (Centers for Disease Control and Prevention, 2021; Olmsted County Public Health Services, 2024).

#### Abuse:

- Emotional: A parent/adult in your home has ever used non-physical behaviors that are meant to control, isolate, or frighten you. This may include regular swearing, insults, and put-downs (13% in 2022, stable from 2019)
- Physical: A parent/adult in your home ever hit/beat/kicked/physically hurt you (11% in 2022, down from 12% in 2019)
- Sexual:
  - Any relative/family member ever pressured, tricked, or forced you to do something sexual or done something sexual against your wishes (4% in 2022, up from 3% in 2019)

- 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 (8% in 2022, up from 5% in 2019 and 3% in 2016)

#### Neglect:

- Emotional: no Rice County student data available
- Physical: no Rice County student data available

#### Household Challenges:

- Mental illness in the household: 36% in 2022, up from 30% in 2019
- Substance abuse in the household:
  - Alcohol misuse: 10% in 2022, stable from 2019
  - Illegal drug misuse: 5% in 2022, stable from 2019
- Domestic violence: Parent/adult in your home ever slapped/hit/kicked/punched/beat each other: 6% in 2022, down from 7% in 2019
- Parent separation or divorce: No Rice County student data available
- Incarcerated household members: parents or guardians ever been to jail or prison (13% in 2022, decrease from 15% in 2019)

As the number of ACEs a child experiences increases, so do the health risks such as injury, mental illness, poor maternal health, and infectious and chronic disease (Centers for Disease Control and Prevention, 2021). Nearly two-thirds (61%) of adults have experienced at least one ACE (Centers for Disease Control and Prevention, 2021) and in 2022, 51 percent of Rice County students reported at least one ACE, and 26 percent reported two or more (Olmsted County Public Health Services, 2024).

## Abuse and Neglect

Child abuse is an ACE that can affect a child’s future health and behaviors. Removing a child from their home is only done when deemed necessary for the child’s safety, and when foster care can help alleviate the negative effects of the maltreatment experience (Minnesota Department of Human Services, 2023).

In Rice County in 2021, 167 children were placed in out-of-home care. The top three reasons for an out-of-home care placement in Rice County were caretaker alcohol or drug abuse, child physical or behavioral health, and alleged domestic violence or abuse. Across the state in 2021, there were 8.7 children in out-of-home care per 1,000 children under the age of 18. Rice County was higher at 10.9 per 1,000 children (Minnesota Department of Human Services, 2023).

Data from the 2023 Rice County Community Health Survey asked community member opinions about how much of a problem “parents with inadequate or poor parenting skills” is currently in Rice County. 73.9 percent of community members in southern Rice County and 50.4 percent in northern Rice County said it was a moderate to serious problem (Rice County Public Health, 2023).

## Intimate Partner, Domestic Violence, Sexual Violence

In response to the 2023 Rice County Community Health Survey question “Are you in a relationship where you are (or have ever been) physically hurt, threatened, or made to feel afraid?”, 2.1 percent of community members countywide stated “yes” they were in an abusive relationship (Rice County Public Health, 2023).

Five percent of Rice County ninth graders report being in a “casual or serious relationship where your partner ever physically hurt you on purpose” and 15.1 percent report being “in a casual or serious relationship where your partner ever verbally hurt or controlled you”, a significant increase from 9.8 in 2019 (Minnesota Student Survey Interagency Team, 2022).

## Alcohol, Tobacco, and Other Drugs

The misuse of alcohol, tobacco, and other drugs significantly contribute to costly social, physical, and mental health problems. Use of substances is associated with unintentional injury, violence, risky sexual behavior, and can lead to liver disease, cancer, heart disease, and neurological and psychiatric problems in addition to codependency.

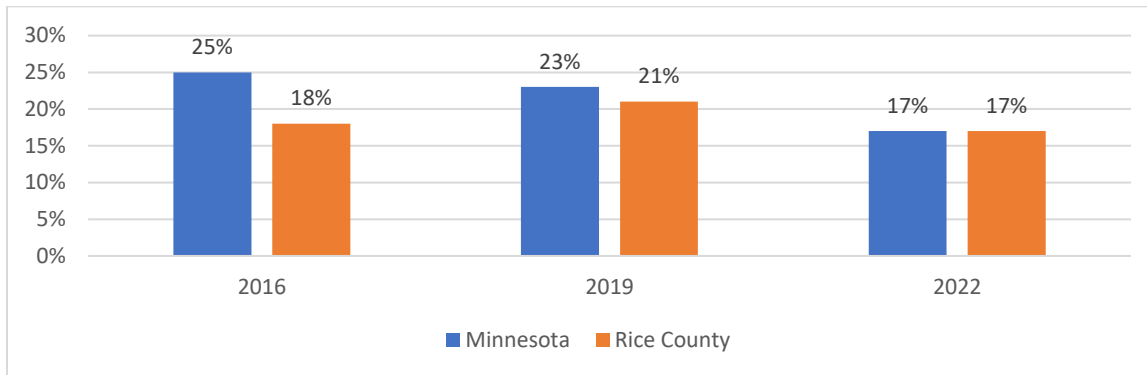
The 2022 Minnesota Student Survey showed that students were more likely to abuse substances if they experienced a medium to high amount of emotional distress. This was true across alcohol, tobacco, and other drugs (Minnesota Student Survey Interagency Team, 2022).

### Alcohol

The Healthy People 2030 goal is to reduce the proportion of adolescents reporting use of alcohol during the past 30 days from 9.4 percent (in 2019) to 6.3 percent (U.S. Department of Health and Human Services, 2024).

In 2022, 17 percent of students in Rice County reported drinking alcohol in the past twelve months, which was equal to the state and is a decrease from 2019 (Olmsted County Public Health Services, 2024). Figure 33 shows the percent of Rice County and Minnesota students who have reported drinking alcohol in the past twelve months. Overall, females, gender identity and sexual orientation minorities reported a higher percentage than males, cis-gender and heterosexuals (Olmsted County Public Health Services, 2024).

**Figure 33: Percent of Rice County and Minnesota Students Who Report Consuming Alcohol in the Past 12 Months by Year and Location**

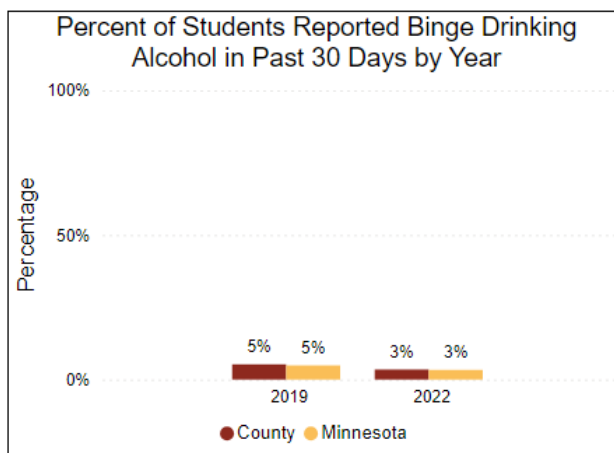


Source: Minnesota Student Survey

Binge drinking is associated with chronic health problems including liver disease, poor control of diabetes, cardiovascular disease, and may lead to different forms of violence. Binge drinking is defined for females as drinking four or more alcoholic beverages within two hours, and drinking five or more alcoholic beverages in a row for males.

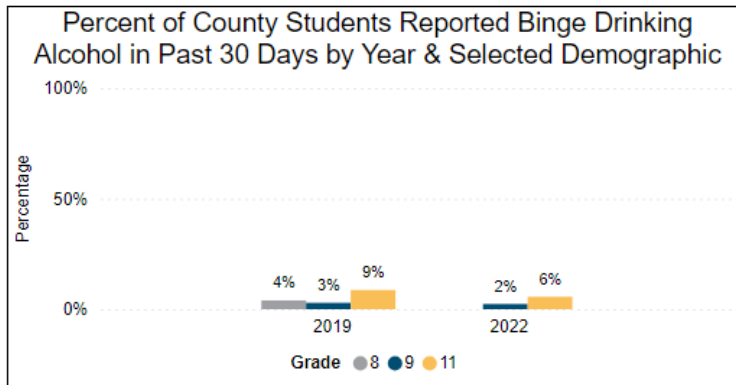
Research has shown that adolescents who binge drink are more likely to become heavy drinkers and to develop issues with alcohol abuse or alcohol disorders in adulthood (National Institutes of Health, 2015). The 2022 Minnesota Student Survey reports that 3 percent of students in Rice County binge drank on one or more days during the past 30 days. The percent reached 6 percent among eleventh graders as shown in Figure 34 and Figure 35 (Olmsted County Public Health Services, 2024).

**Figure 34: Percent of Rice County Students Who Reported Binge Drinking Alcohol in the Past 30 Days, by Year**



Source: Minnesota Student Survey

**Figure 35: Percent of Rice County Students Who Reported Binge Drinking Alcohol in the Past 30 Days, by Year and Grade**



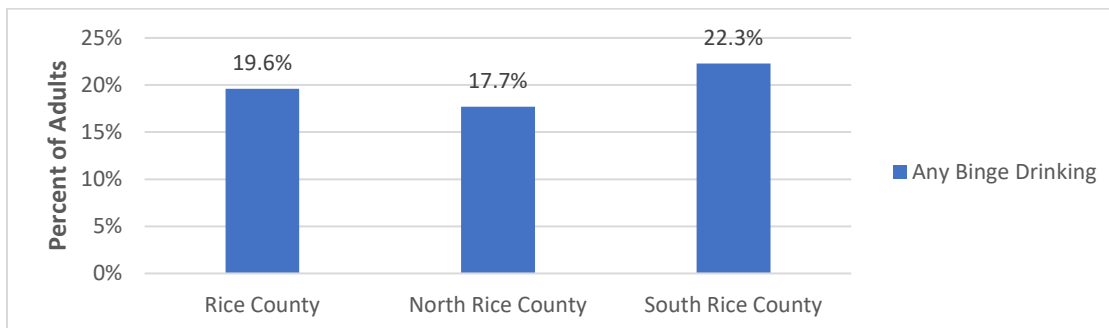
Source: Minnesota Student Survey

The 2022 Minnesota Student Survey found that of the Rice County youth who reported using alcohol in the past 30 days, 40 percent got it from a friend, 25 percent took it from their home, and 22 percent got it from their parents (Olmsted County Public Health Services, 2024).

In a 2024 opinion survey of Rice County medical providers, they reported that alcohol abuse of those aged 21 and over in Rice County was a top moderate, to serious health concern. Prevalence of an alcohol use diagnosis among adults in Rice County is at 3 percent (Minnesota EHR Consortium, 2024). The alcohol use diagnosis includes: alcohol use disorder; alcohol intoxication; alcohol-induced mental health disorders; alcohol-induced organ damage; alcohol withdrawal; and other related diagnoses.

According to Figure 36, 19.6 percent of Rice County adults report binge drinking in the previous 30 days (Rice County Public Health, 2023). In 2016 this was at 30 percent. The 2023 data also shows that a higher percent of adults in southern Rice County engage in binge drinking than in northern Rice County.

**Figure 36: Adult Binge Drinking by Location, 2023**



Source: Rice County Community Health Survey

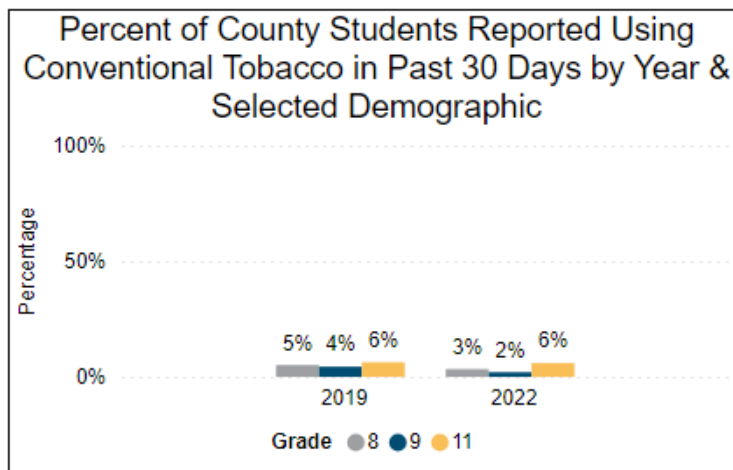
### Tobacco and Nicotine

Smoking cigarettes is the leading cause of preventable death, disease, and disability in the United States (U.S. Centers for Disease Control and Prevention, 2023). Smoking is addictive, increases the risks of heart disease, stroke, chronic obstructive pulmonary disease, asthma, and many types of

cancer (U.S. Centers for Disease Control and Prevention, 2024). Secondhand smoke has health consequences for those exposed including contributing to the deaths of over 40,000 nonsmoking adults and 400 infant deaths each year (U.S. Centers for Disease Control and Prevention, 2024).

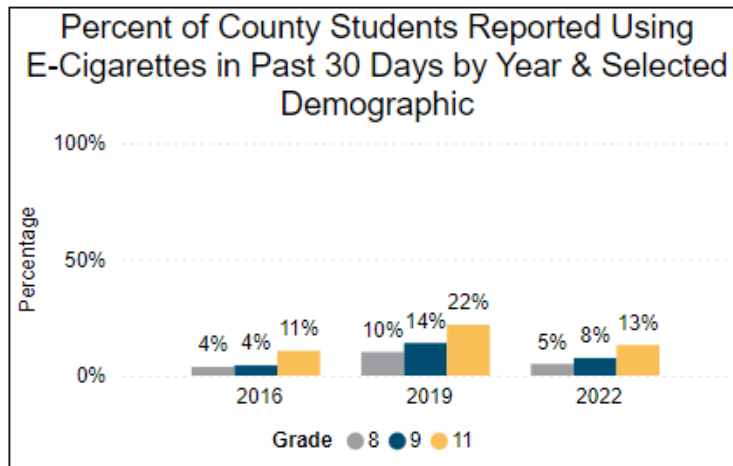
In December of 2019, under federal legislation known as Tobacco 21, it became illegal to sell any tobacco product to anyone under the age of 21. Despite the legal use age being 21, e-cigarettes are the most commonly used tobacco product among youth (see Figure 37 on conventional tobacco, Figure 38 on e-cigarettes, and Figure 39 on any tobacco use) (Olmsted County Public Health Services, 2024).

**Figure 37: Percent of Rice County Students Who Reported Using Conventional Tobacco in the Past 30 Days, by Year and Grade**



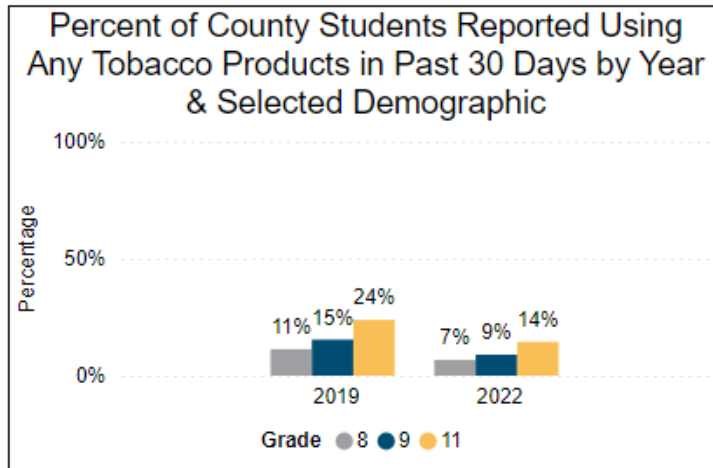
Source: Minnesota Student Survey

**Figure 38: Percent of Rice County Students Who Reported Using E-Cigarettes in the Past 30 Days, by Year and Grade**



Source: Minnesota Student Survey

**Figure 39: Percent of Rice County Students Who Reported Using Any Tobacco Products in the Past 30 Days, by Year and Grade**



Source: Minnesota Student Survey

Despite the fact that Minnesota law prohibits tobacco or tobacco related products from being sold to persons under 21 years old, 8 percent of youth across the state reported purchasing tobacco products themselves in 2020 (Minnesota Department of Health, 2020). Nearly 1 in 2 youth under age 18 who used e-cigarettes in the past 30 days reported obtaining their e-cigarettes from someone “who offered them to me”, 30.6 percent “asked someone to give me some”, and 27.8 percent “bought them from another person” (Minnesota Department of Health, 2020). Of the Rice County youth who reported using e-cigarettes in the past 30 days, the most common ways they obtained an e-cigarette, was from a friend, getting someone else to buy it for them, from family other than parents, or from a vape shop or other store selling only e-cigarettes (Olmsted County Public Health Services, 2024).

The Rice County adult cigarette smoking rate is 8 percent, a slight increase from 7.6 percent in 2021 (Rice County Public Health; Rice County Public Health, 2023). The Rice County adult cigar smoking rate is 2.5 percent, down from 11 percent in 2021, and e-cigarette smoking rate is 2.3 percent, up from 1.4 percent in 2021 (Rice County Public Health; Rice County Public Health, 2023). When considering all sources of tobacco use, 13.4 percent of community members are current users of tobacco. The northern (8.4%) and southern (20.4%) county regions show disproportionate use (Rice County Public Health, 2023).

Among adults who smoke cigarettes every day or some days, 29.2 percent have tried to quit in the last 12 months. Top reasons why the quit attempt was unsuccessful are reported to be:

1. Quit aids too expensive (34.1%)
2. Some other reason (28.9%)
3. Did not want to quit (28.4%)
4. Not sure where to go for help (15.1%)
5. Live with a smoker (11.4%)

## Cannabis

Cannabis is the most commonly used substance among Rice County youth. The Healthy People 2030 objective is to reduce the proportion of adolescents reporting use of cannabis during the past 30 days from 7.4 percent to 5.8 percent. In 2022, 10 percent of Rice County students had used cannabis in the past 12 months. When analyzed by grade, 18 percent of Rice County eleventh graders reported using cannabis in the past 12 months. This is up from 17 percent in 2019 (Olmsted County Public Health Services, 2024). Students who reported adequate sleep, adequate physical activity, feeling safe at home, being involved in after school activities, having an adult to talk to, and no ACES, all used at a lower percent (Olmsted County Public Health Services, 2024).

According to the 2023 Rice County Community Health Survey, 9.8 percent of Rice County adults reported recreational and non-medical use of cannabis, and 12.3 percent report being a current user of edible or beverage products with hemp-derived THC (Rice County Public Health, 2023). Prevalence of a cannabis use diagnosis among Rice County community members is at 1 percent (Minnesota EHR Consortium, 2024). The cannabis use diagnosis includes: cannabis use disorder; cannabis overdose (accidental or intentional); cannabis intoxication; cannabis-induced mental health disorders; and other related diagnoses.

## Illegal Drug Use

In a 2024 opinion survey of Rice County medical providers, they reported that illegal drug use in Rice County was a top moderate to serious health concern. Prevalence of a cocaine use diagnosis among adults in Rice County is at less than 1 percent (Minnesota EHR Consortium, 2024). Cocaine use diagnosis includes: cocaine overdose (accidental or intentional); cocaine intoxication; cocaine withdrawal; cocaine-induced mental health disorders; and other related diagnoses.

Prevalence of a hallucinogen use diagnosis among adults in Rice County is at less than 1 percent and includes hallucinogen use disorder, hallucinogen overdose (accidental or intentional), hallucinogen intoxication, hallucinogen-induced mental health disorders; and other related diagnoses involving LSD, psilocybin, or PCP (Minnesota EHR Consortium, 2024).

Prevalence of psychostimulant use diagnosis among adults in Rice County is at less than 1 percent and includes: psychostimulant use disorder; psychostimulant overdose (accidental or intentional); psychostimulant intoxication; psychostimulant withdrawal; psychostimulant-induced mental health disorders; and other related diagnoses involving methamphetamines, ecstasy, or MDMA.

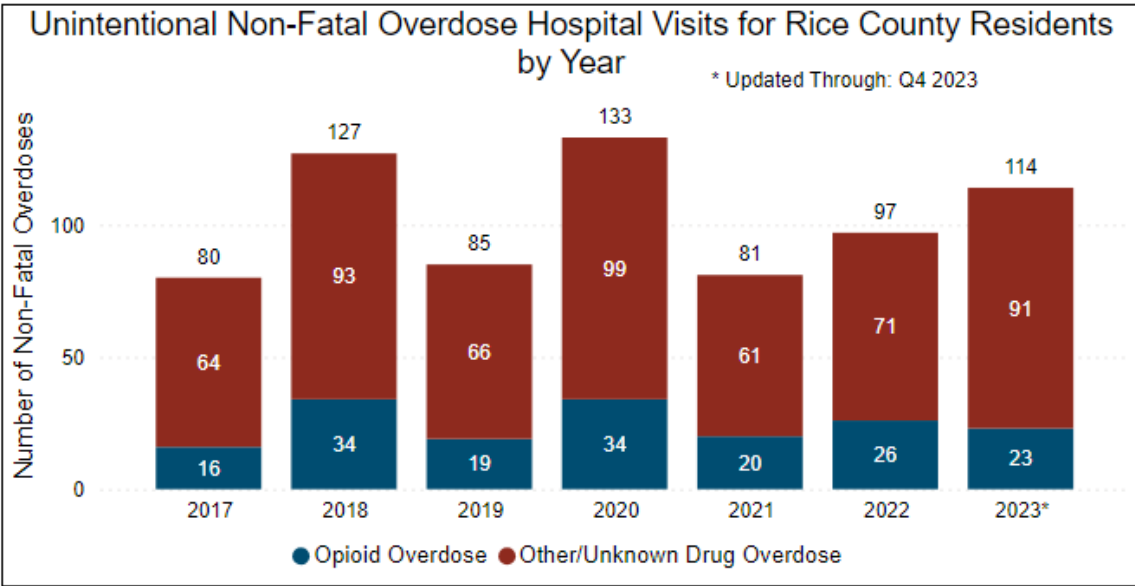
Prevalence of inhalants and sedative abuse diagnosis among adults in Rice County is at less than 1 percent and includes: use disorder; overdose (accidental or intentional); intoxication; induced mental health disorders; and other related diagnoses involving benzodiazepines, barbiturates, and hypnotics (Minnesota EHR Consortium, 2024).

# Opioid and Prescription Drug Use

Forty-seven percent of Rice County Community members feel that prescription drug abuse is a moderate or serious problem in Rice County (Rice County Public Health, 2023). Prevalence of an opioid use diagnosis among adults in Rice County is at 1 percent (Minnesota EHR Consortium, 2024). Opioid use diagnosis includes: opioid use disorder; opioid overdose (accidental or intentional); opioid intoxication; opioid-induced mental health disorders; opioid withdrawal; and other related diagnoses involving opioid medicines, opium, methadone, heroin, and fentanyl.

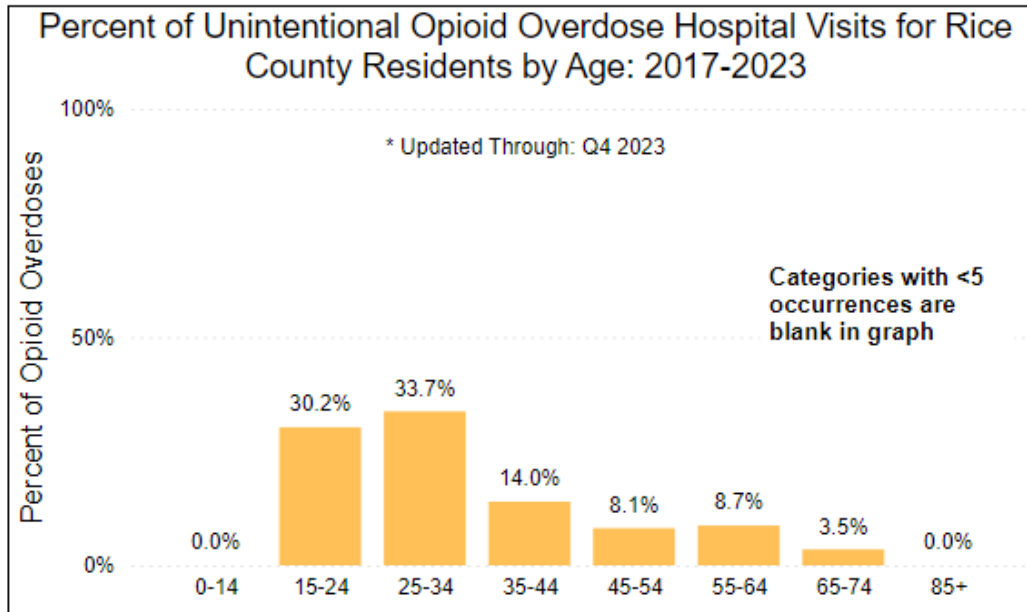
The charts below show the unintentional non-fatal overdose hospital visits for Rice County Community members between 2017 and 2023 (Figure 40) and breaks those overdoses down by age (Figure 41) (Olmsted County Public Health Services, 2024).

**Figure 40: Unintentional Non-Fatal Overdose Hospital Visits for Rice County Residents, 2017 to 2023**



Source: Southeast Minnesota Opioid Profile

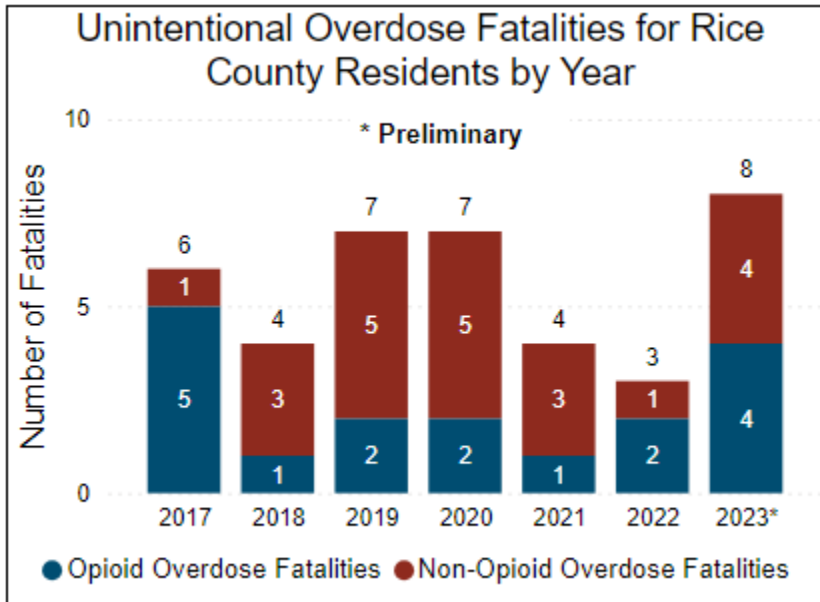
Figure 41: Unintentional Non-Fatal Overdose Hospital Visits for Rice County Residents by Age, 2017 to 2023



Source: Southeast Minnesota Opioid Profile

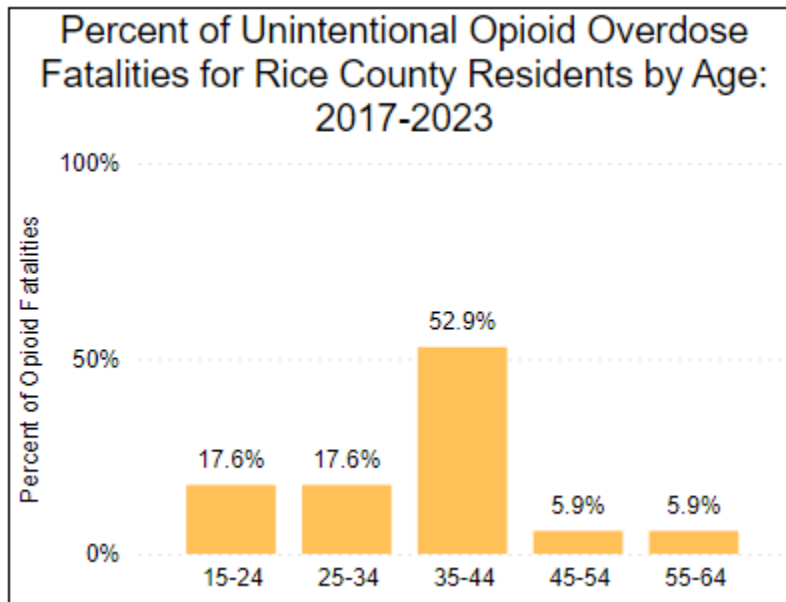
Figure 42 shows a breakdown of the unintentional overdose fatalities for Rice County residents by year and drug category and the next chart breaks those overdoses down by age (Figure 43) (Olmsted County Public Health Services, 2024). It is not often possible to determine where the drugs involved in the overdose deaths were obtained, and counterfeit pills are being produced with increasing accuracy, making it difficult to separate them from legally produced and distributed medications.

Figure 42: Unintentional Overdose Fatalities for Rice County Community members, 2017 to 2023



Source: Southeast Minnesota Opioid Profile

Figure 43: Unintentional Overdose Fatalities for Rice County Community members by Age, 2017 to 2023

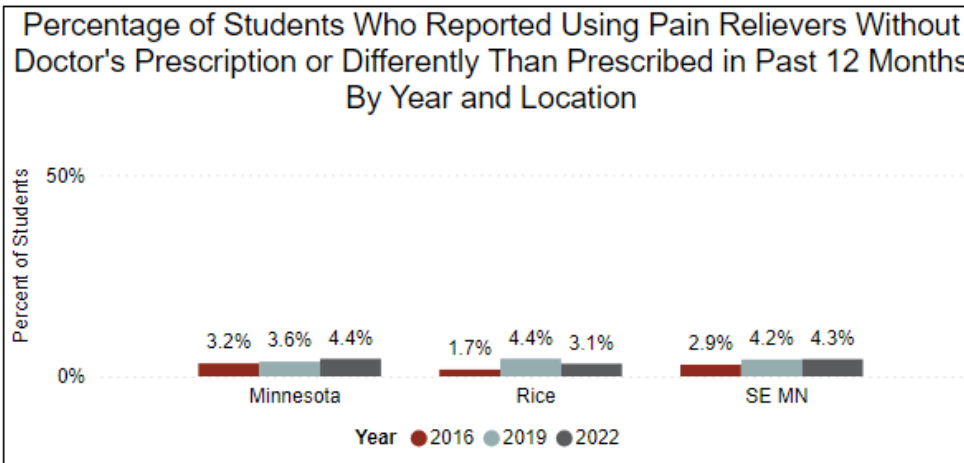


Source: Southeast Minnesota Opioid Profile

Opioid use has become an epidemic among all ages. Adolescent abuse of prescription drugs has continued to rise over the past five years throughout the United States. It is believed that two factors

have led to the increase in abuse: first, the increasing availability of prescription drugs from many sources, including the family medicine cabinet, the Internet, and doctors, and second, many adolescents believe that prescription drugs are safer to take than street drugs. In Rice County, three percent of students used a prescription pain reliever without a doctor’s prescription or used a prescription differently than how the doctor stated, compared to four percent in 2019 (see Figure 44) (Olmsted County Public Health Services, 2024).

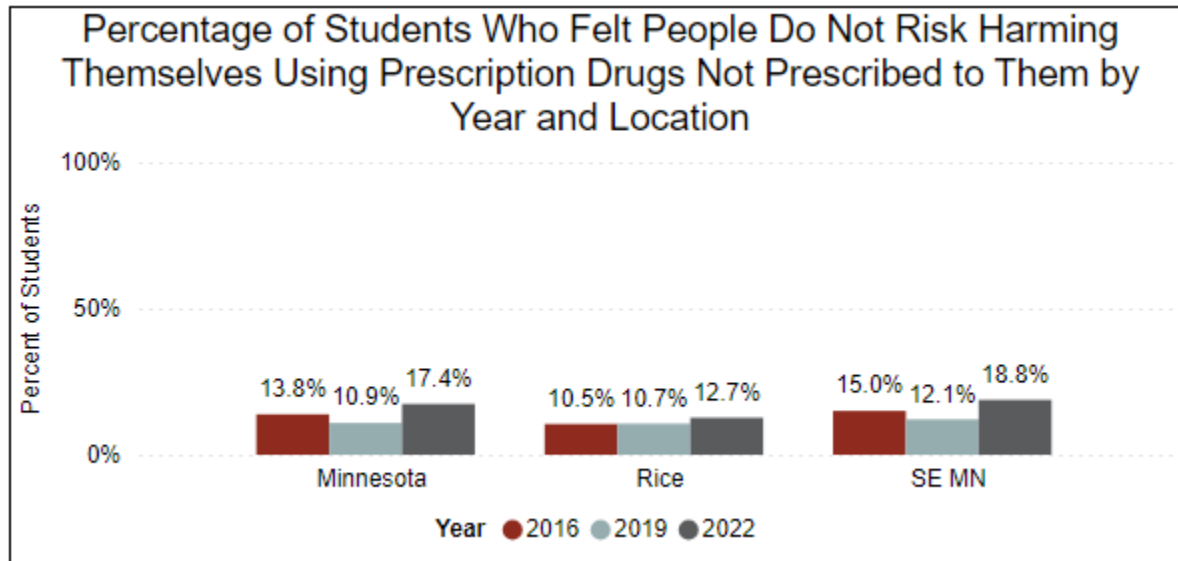
**Figure 44: Percentage of Students Who Reported Using Pain Relievers Without a Doctor’s Prescription or Differently than Prescribed in the Past 12 Months by Year and Location, 2016-2022**



Source: Minnesota Student Survey

It is also interesting to note that in 2016, 10.5 percent of Rice County students reported the perception that people have no risk to themselves while using a prescription drug not prescribed to them, with this number increasing to 12.7 percent in 2022 (Figure 45) (Olmsted County Public Health Services, 2024).

**Figure 45: Percentage of Students Who Felt People Do Not Risk Harming Themselves by Using Prescription Drugs Not Prescribed to Them by Year and Location, 2016-2022**



Source: Minnesota Student Survey

Opioid prescribers play a significant role in stopping the opioid overdose epidemic. Higher opioid prescribing rates put patients at risk for addiction and overdose. Table 15 shows the crude rate of opioids legally dispensed by location (Minnesota Board of Pharmacy, 2023).

**Table 15: Crude Rate of Opioid Prescriptions per 1,000 Community members by Location, 2023**

	All Opioids	Hydrocodone	Oxycodone	Fentanyl	Hydromorphone
Minnesota	362.2	98.4	155.1	5.1	18.3
Rice County	388.8	101.8	172.2	4.4	15.1

Source: Minnesota Board of Pharmacy

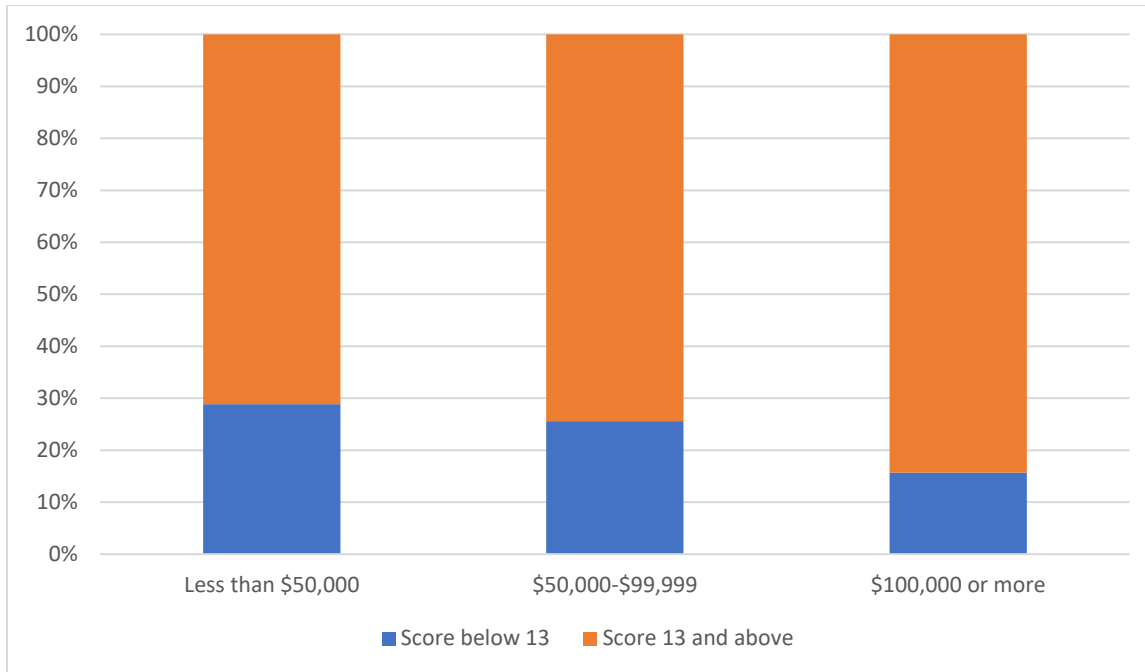
The Rice County Chemical and Mental Health Coalition, and other community partners, have been working to increase access and availability of naloxone for community members. Community members can now pickup naloxone kits at several Rice County pharmacies and community locations without a prescription, and financial assistance is available to help cover the costs. More education is needed on the availability of the resource as the 2023 Rice County Community Health Survey found that only 14.8 percent of adults in Rice County know how to obtain naloxone (Rice County Public Health, 2023).

## Mental Health

In a 2024 opinion survey of Rice County medical providers, they reported that mental health, depression and anxiety was a top serious health concern people of Rice County. In 2023, the Rice County Community Health Survey included the World Health Organization-5 Well-Being Index as a measure of current well-being in the last two weeks. The index asks about quality of life based on positive mood,

vitality, and general interest. A higher score on the index indicates better well-being and a score below 13 indicates poor well-being and is an indication for further evaluation (World Health Organization, 1998). 17.1 percent of northern Rice County community members reported a score below 13, compared to 25.4 percent of southern Rice County community members. The county as a whole came in at 20.4 percent experiencing poor wellbeing in the last two weeks. (Rice County Public Health, 2023). Figure 46 looks at the composite score by income.

**Figure 46: Percent of Rice County Community Members World Health Organization-5 Well-Being Index Scores by Income, 2023**



Source: Rice County Community Health Survey

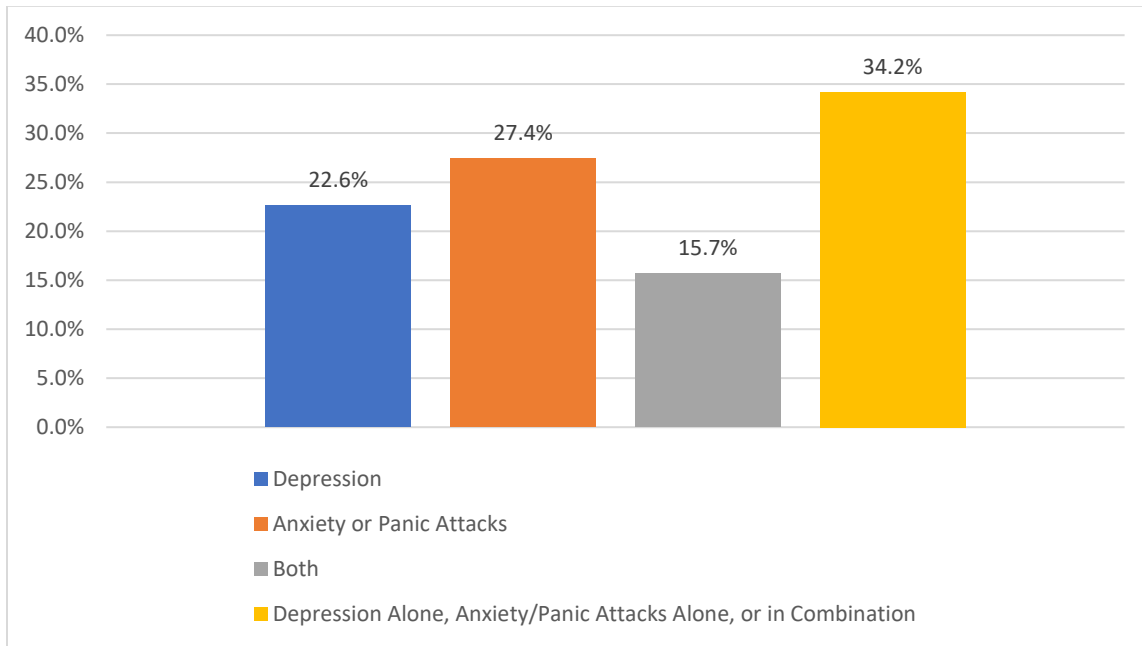
Just as with physical health, it is important that people are offered and participate in mental health screenings to assess risk factors for various mental health conditions. One of the targets for Healthy People 2030 is to increase the proportion of primary care visits where adolescents and adults are screened for depression (U.S. Department of Health and Human Services, 2024). Nationally, in the baseline year of 2016, 8.5 percent of primary care office visits included screening for depression in persons aged 12 years and over. In the most recent data, from 2019, it was at 9.1 percent. The target is 13.5 percent (U.S. Department of Health and Human Services, 2024).

Forty seven percent of Rice County community members reported having had a mental health screening in the past year. Thirty seven percent of people who live in Rice County reported never having an exam or having one five or more years ago (Rice County Public Health, 2023). When looking at those Rice County community members who scored less than a 13 on the World Health Organization-5 Well-Being Index, 38.8 percent reported never having an exam or having one five or more years ago (Rice County Public Health, 2023). While it is our sense that most people going in for clinical care in Rice

County are being screened by their provider, we are not sure if people always recognize that they are being screened. We also noted that more people reported having an annual preventative health care exam (73 percent) than having an annual mental health screening (47 percent) (Rice County Public Health, 2023).

Figure 47 shows the percent of Rice County population having been told by a doctor or other health care professional that they are experiencing depression, anxiety or panic attacks or both (Rice County Public Health, 2023).

**Figure 47: Percent of Rice County Population Told by a Doctor or Other Health Care Professional They Are Experiencing Depression, Anxiety or Panic Attacks, Alone or in Combination, 2023**



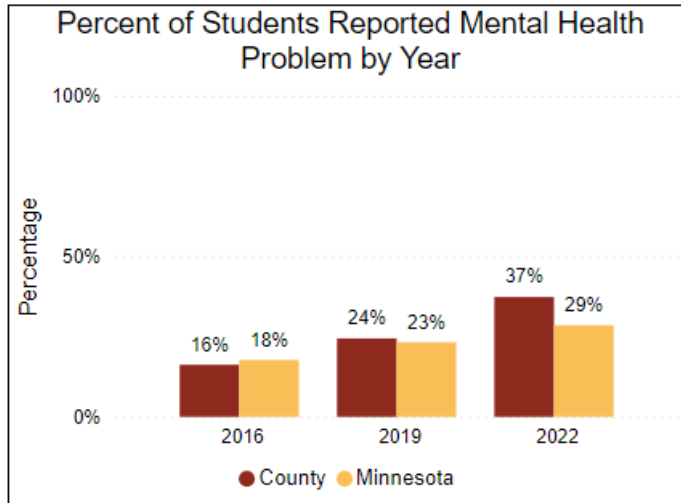
Source: Rice County Community Health Survey

Prevalence of an anxiety diagnosis among adults in Rice County is at 21 percent (Minnesota EHR Consortium, 2024). The anxiety diagnosis includes: generalized anxiety disorder; panic disorder; social anxiety disorder; obsessive-compulsive disorders; substance use-related anxiety disorders; specific phobias; and other related diagnoses. Prevalence of a depression diagnosis among adults in Rice County is at 17 percent (Minnesota EHR Consortium, 2024). The depression diagnosis includes: major depressive disorder; single depressive episodes; postpartum depression; and other related diagnoses. Prevalence of a post-traumatic stress disorder diagnosis among adults in Rice County is at 2 percent (Minnesota EHR Consortium, 2024).

From 2016 to 2022, the trend of students who reported a mental health problem has been significantly increasing, both in Rice County and the state, with Rice County students having consistently reported a mental health problem at higher percentages (Olmsted County Public Health Services, 2024). The 2022 Minnesota Student Survey found that 37 percent of Rice County ninth graders had a long-term

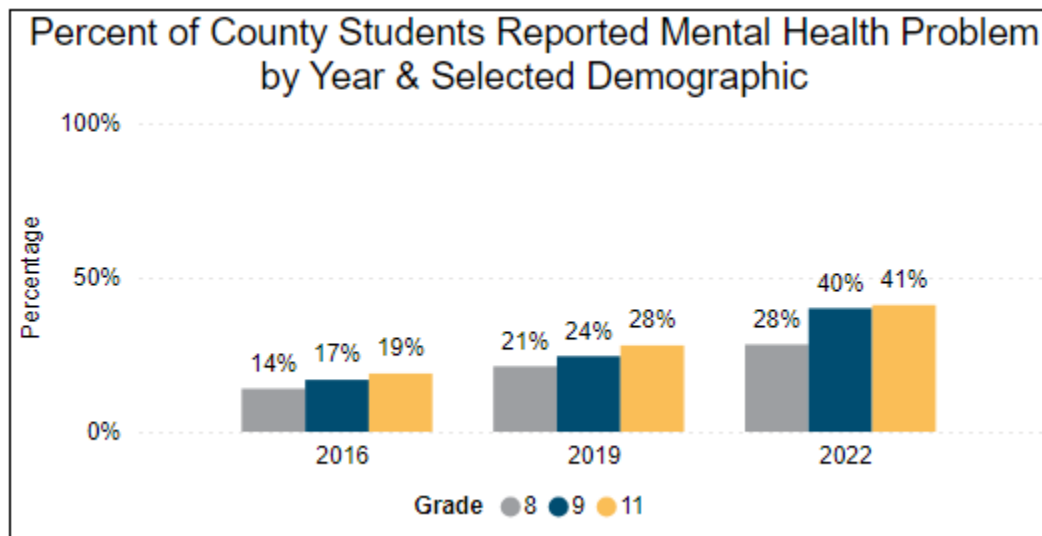
mental health, behavioral or emotional problems that have lasted six months or more (Figure 48) (Olmsted County Public Health Services, 2024). Figure 49 breaks the same data down by grade and year.

**Figure 48: Percent of Rice County Students Reporting a Long-Term Mental Health, Behavioral or Emotional Problems That Have Lasted Six Months or More, 2022**



Source: Minnesota Student Survey

**Figure 49: Percent of Rice County Students Reporting a Long-Term Mental Health, Behavioral or Emotional Problems That Have Lasted Six Months or More by Year and Grade, 2022**

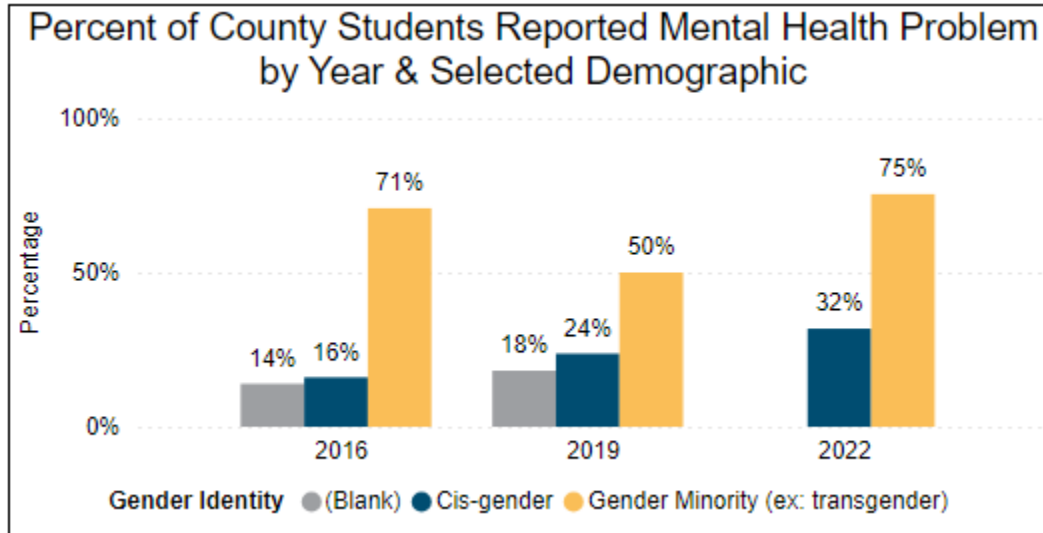


Source: Minnesota Student Survey

Seventy-five percent of students who identify as a gender minority reported having a mental health problem (compared to 32 percent of cis-gender) (Figure 50), 65 percent of students who identify as a sexual minority (compared to students who identify as heterosexual) (Figure 51) and 48 percent of

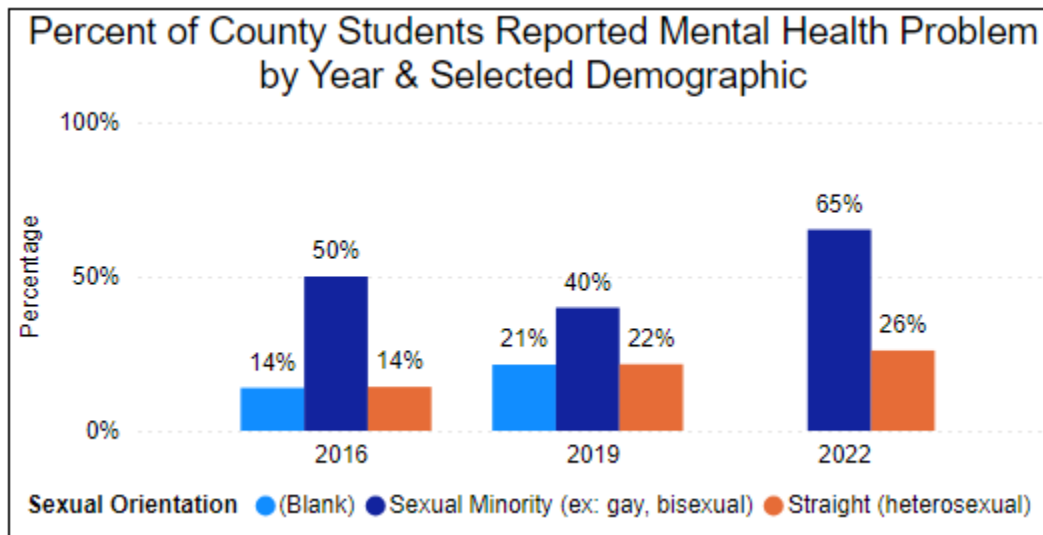
our students who are biologically female (compared to 26 percent of our male students) (Figure 52) (Olmsted County Public Health Services, 2024).

**Figure 50: Percent of Rice County Students Reporting a Long-Term Mental Health, Behavioral or Emotional Problems That Have Lasted Six Months or More by Gender Identity, 2022**



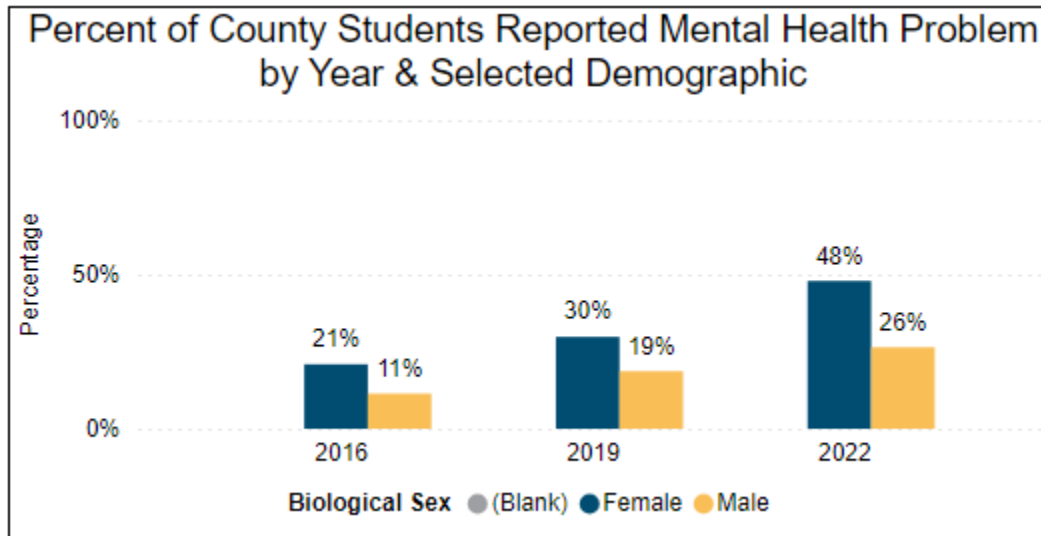
Source: Minnesota Student Survey

**Figure 51: Percent of Rice County Students Reporting a Long-Term Mental Health, Behavioral or Emotional Problems That Have Lasted Six Months or More by Sexual Orientation, 2022**



Source: Minnesota Student Survey

**Figure 52: Percent of Rice County Students Reporting a Long-Term Mental Health, Behavioral or Emotional Problems That Have Lasted Six Months or More by Biological Sex, 2022**



Source: Minnesota Student Survey

Not enough of our students reporting a mental health problem are accessing treatment. In 2022, 30 percent of Rice County students reported having ever been treated for a mental health, behavioral, or emotional problem, compared to 25 percent in the state (Olmsted County Public Health Services, 2024).

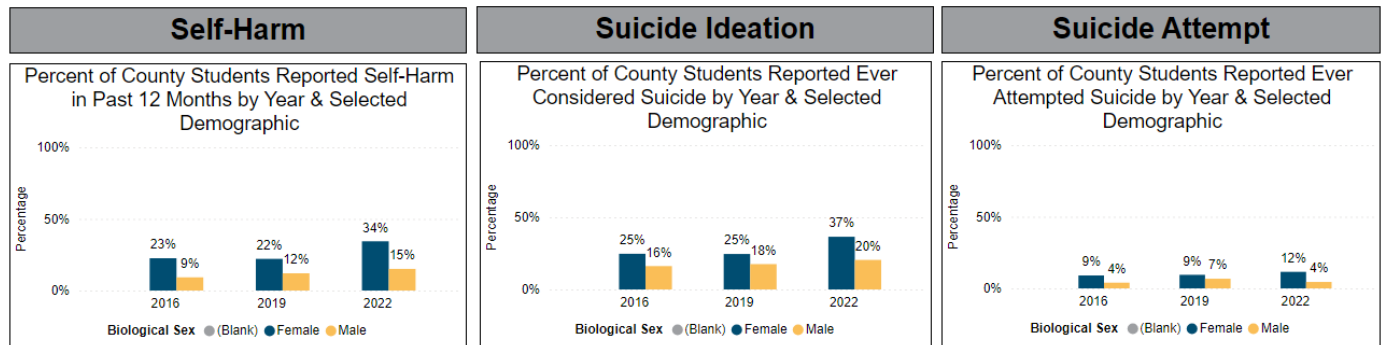
Prevalence of psychotic disorder diagnosis among Rice County community members is at less than 1 percent and includes: schizophrenia; paranoia; substance use-related psychotic disorders; postpartum psychosis; schizoaffective disorder, and other related diagnoses (Minnesota EHR Consortium, 2024).

## Suicide

Suicide most often occurs when health issues (such as mental health conditions, physical health or traumatic brain injuries) and environmental issues (access to lethal means to death, prolonged stress/stressful life events, or exposure to suicide) converge to cause one to experience hopelessness and despair. Depression is most often associated with suicide (American Foundation for Suicide Prevention, 2024).

Suicide ideation among both Rice County and Minnesota youth has increased over the years. In 2016 in Rice County, 21 percent of youth reported having seriously considered suicide in the last year, and by 2022 that number was at 29 percent (Olmsted County Public Health Services, 2024). Suicide attempts have remained relatively stable from 2016 to 2022 in both the state and Rice County between seven and eight percent (Olmsted County Public Health Services, 2024). A risk factor for self-harm, suicide ideation, and suicide attempt is being of female gender, and that holds true for Rice County's youth year over year (see Figure 53) (Olmsted County Public Health Services, 2024).

**Figure 53: Percent of Rice County Students Self-Harm, Suicide Ideation and Suicide Attempts by Year and Biological Sex, 2022**



Source: Minnesota Student Survey

Table 16 below shows the crude death rate of suicides by location (Minnesota Department of Health, 2024). Healthy People 2030 has a lead health indicator to reduce the age-adjusted rate of suicides per 100,000 population from the baseline of 14.1 in 2021 to 12.8 in 2030 (U.S. Department of Health and Human Services, 2024).

**Table 16: Crude Death Rates of Suicides by Location, 2015-2021**

	2015	2016	2017	2018	2019	2020	2021
<b>Minnesota</b>	17.9	16.8	17.2	16.0	18.4	17.7	18.9
<b>Rice County</b>	7.7	19.7	7.6	4.5	7.5	14.9	13.4

Source: Minnesota Department of Health

According to the 2023 Rice County Community Health Survey, just over three percent of community members have considered attempting suicide in the last year and 11.3 percent have considered attempting suicide more than a year ago (Rice County Public Health, 2023). Just over half of Rice County community members stated that they were aware of the 988 Suicide & Crisis Lifeline (56.7%).

## Crime

Data from the 2023 Rice County Community Health Survey asked community member opinions about how much of a problem “crime” is currently in Rice County. 56.2 percent of community members in southern Rice County and 21.9 percent in northern Rice County said it was a moderate to serious problem (Rice County Public Health, 2023).

Across the state, crime is down. From 2022 the total crime rate dropped 13 percent, violent crime dropped 7 percent, and property crime dropped 14 percent (Minnesota Bureau of Criminal Apprehension, 2024).

## Conclusion of Belonging

A sense of belonging is a human need, just like the need for food and shelter. ACEs, poor social connections, violence, substance abuse, and poor mental health all cause negative affects on the body. The good news is that the brain and the body want to heal. The brain is continually changing in response to the environment. If stress stops and is replaced by practices that build resilience, then the brain can slowly undo many of the stress-induced changes. There is well documented research on how individuals' brains and bodies become healthier through mindfulness practices, exercise, good nutrition, adequate sleep, and healthy social interactions. Feeling that you belong is most important in seeing value in life and in coping with intensely painful emotions. Belonging within the family and community is important for the success of the individual and the community.

# Community Health Needs Assessment Findings from Partners

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Rice County has a number of partners who work together to improve the health and well-being of county residents. Below are the health priorities identified by a few of those partners.

## Allina Health Faribault Medical Center and Owatonna Hospital

### 2023–2025 CHNA PRIORITIES

Based on the process described in this report, Faribault Medical Center and Owatonna Hospital will pursue the following priorities in 2023–2025:



**Mental health and substance use** encompasses overall mental, social and emotional well-being, including social connectedness; resilience; preventing, delaying or reducing harm associated with using substances; and access to the full continuum of mental health and addiction care and supports.



**Social determinants of health and health-related social needs** are the community-wide social, physical and economic conditions that influence health (e.g., neighborhood conditions, social cohesion, education and employment opportunities) and the individual-level material needs and circumstances that impact health and well-being (e.g., food security, literacy, access to safe and affordable housing, social isolation).



**Health and racial equity** refers to the elimination of differences in care and health outcomes and the availability of services, programs and medical care that are culturally specific, honoring and appropriate. Examples include efforts to address structural racism and discrimination, establishing a workforce who is representative of the community, access to programs and services provided in one's preferred language and representative of one's lived experience and staff trained in the provision of culturally inclusive care.

Additionally, Faribault Medical Center and Owatonna Hospital prioritized the following communities for the 2023–2025 CHNA cycle:

- People who identify as black, indigenous and/or people of color (BIPOC), specifically African Americans, persons of Hispanic descent/immigrants and East African Somali refugees
- Communities for whom English is not the primary spoken language
- Youth who identify as Lesbian, Gay, Bi-sexual, Trans, Queer and/or Questioning, Intersex, Asexual and other historically underserved sexual and gender identities (LGBTQIA+)
- People living at or near poverty

## Mayo Clinic Health System (2022)

### Community engagement work in Southeast Minnesota aligns with these priorities:

- Improve access to care
- Improve chronic disease prevention and management
- Improve mental well-being
- Improve social connection and inclusion
- Prevent substance abuse

# Priorities and Next Steps

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Rice County Public Health will host a community meeting in the spring of 2025. The purpose of this gathering will be to prioritize the top health related issues faced by the people of Rice County. The results of this prioritization will be published in our community health improvement plan and will guide the departments work with the community defining a vision for the community's health and how we will collaborate to get there.

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