COMMUNITY HEALTH IMPROVEMENT PLAN:

Mental Health Data Profile

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Prepared By:
Olmsted County Public Health Services (OCPHS)
Epidemiology, Surveillance, and Preparedness
2100 Campus Drive SE, Suite 100
Rochester, MN 55904-4722
(507) 328-7500
www.olmstedcounty.gov

This report has been approved by the following individuals:

Meaghan Sherden, Associate Director	7/26/2023
Name and Title	Date

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Overview

Introduction:

Community Health Assessment and Planning Process

The Community Health Assessment and Planning (CHAP) process is about improving the health and well-being of residents in Olmsted County. Every three years, the community conducts a joint health needs assessment to determine Olmsted County's health priorities; formulate a plan to address the needs; and publish an annual progress report. Olmsted County Public Health Services, Mayo Clinic, and Olmsted Medical Center engage with diverse partners across our community to lead this process.

About the Data Profile

The purpose of this Data Profile is to provide a deeper dive into the Community Health Improvement Plan (CHIP) priority, mental health. By providing quantitative data from a variety of data sources, as well as factors that contribute to the health priority, this document will help assist Olmsted County partners with strategy selection for the 2024 – 2026 CHIP. Specifically, the report will help identify a population indicator for the mental health priority, along with showcasing specific data-driven needs that community partners can impact.

A link to the 2022 Community Health Needs Assessment (CHNA) is here.

Summary

This report presents the state of mental health in Olmsted County. Updated local and national data was used to detail the current mental health, mental illness and emotional distress, suicide, and mental health treatment trends in Olmsted County. Demographic disparities are detailed as well as differences based on social determinants of health.

Methods of Analysis

Population:

This report includes data on mental health for Olmsted County residents with comparison to Minnesota and the United States where possible.

Data Source(s):

Centers for Disease Control and Prevention's (CDC) Behavior Risk Factor Surveillance System (BRFSS): The BRFSS is the nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world.

Centers for Disease Control and Prevention's (CDC) WONDER: Online database that utilize a rich ad-hoc query system for the analysis of public health data.

Community Health Needs Assessment Survey (CHNA): An anonymous mailed survey to adult residents of Olmsted County conducted every three years.

County Health Rankings: A University of Wisconsin program that provides data, evidence, guidance, and examples to build awareness of the multiple factors that influence health and support leaders in growing community power to improve health equity.

Minnesota Student Survey (MSS): An anonymous statewide school-based survey conducted every three years for 5th, 8th, 9th, and 11th graders.

National Syndromic Surveillance Program (NSSP): Includes death certificate data for Olmsted County residents submitted to the National Vital Statistics System (NVSS). If fatality occurred in WI, IA, ND, or another state without a data agreement with Minnesota Department of Health (MDH), it is not found within the dataset.

Rochester Epidemiology Project (REP): A collaboration of clinics, hospitals, and other medical facilities in Minnesota and Wisconsin and involves community members who have agreed to share their medical records for research.

Methods:

CHNA and MSS: When analyzing the two surveys conducted among Olmsted County residents (CHNA and MSS), independent Z-Tests for percentages (using unpooled proportions) were computed in WinCross to pinpoint significant differences found within the data, using a 95% confidence interval. Throughout the report, a notation symbol signals a significant difference in the data. Data suppression occurred anytime the number of responses was less than 20 and no conclusion was drawn based off those small groups. In addition, only statistically significant findings were included in the report.

Odds Ratios: Of the demographics and indicators with statistically significant relationships to mental health, odds ratios were calculated to determine the strength of the relationship. Odds ratios represent the odds that an outcome will occur in one situation more than another. For this report's purposes, odds ratios were used to determine within demographics and indicators which group mental health issues were more likely to be present in.

Secondary Data: Data reported via the secondary sources of REP, NSSP, County Health Rankings and CDC was cited directly from source - no internal analysis was conducted.

Demographics

The following are demographics of Olmsted County, pulled from the 2022 Olmsted County Community Indicators that uses 2021 data from the U.S. Census Bureau.

- In 2021, 163,436 people lived in Olmsted County; this is a 12% increase over the past 10 years.
- The majority of Olmsted County residents identify as white alone (77.8%).
    - 6.8% identify as Black or African American alone.
    - 6.3% identify as Asian alone.
    - 6.1% two or more races.
    - 2.5% some other race alone.
    - American Indian and Alaska Native alone and Native Hawaiian and other Pacific Islander alone make up less than 1% of Olmsted County's population.
- 20.6% of the population is under 14 years old, 39.6% of the population is 19 to 44 years old, 29.3% of the population is 45 to 69, and 10.5% is 70 and over.
- 11% of the population is foreign born.
- 14.3% of residents speak a language other than English at their home.
- Olmsted County has a higher educational rate than Minnesota and the United States, and at least 75% of people have attained a high school diploma.
    - 47.1% of Olmsted County adults have at least a bachelor's degree.
- The median household income in Olmsted County is $84,656.
- The homeownership rate in Olmsted County is 70.9%.
- The unemployment rate in Olmsted County is 3.2%.

Definitions

CHNA Indicator Definitions:

Access to Care: Access to health care is defined as "the timely use of personal health services to achieve the best health outcomes." For this assessment, residents answered if they had ever experienced delays in medical, dental, or mental health care.

Body Mass Index (BMI): BMI is a calculation using a person's sex, height, weight, and age in years to determine underweight, normal weight, overweight, and obese.

Community Mobility: Community mobility enables safe, convenient, and comfortable travel and access for users of all ages and abilities, regardless of their mode of transportation. For this assessment, residents answered if lack of transportation ever limited their ability to complete errands or work, attend appointments or social events, or limited their child's ability to attend care.

Community Inclusiveness: An inclusive community does everything it can to respect all its citizens. It assures that all citizens have equitable outcomes and promotes equal treatment and opportunity. For this assessment, residents answered if they had ever been in a situation where they felt unwelcome or unaccepted at least once in a year.

Community Resiliency: Community resiliency is a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and recover from adverse situations. This assessment uses a composite measure that combines residents' ratings of their ability to respond to an adverse situation and their perception of the community's ability to respond to and recover from an adverse situation.

Emotional Distress (Adults): The World Health Organization (WHO) Five Well-being Index, also known as WHO-5, is a scale that helps capture the mental health and well-being of those who may or may not self-report mental health issues, such as depression or anxiety. The scale ranges from zero to 100; an index score is calculated based on individual responses to five questions. A score closer to zero indicates poorer quality of life/mental health. A score closer to 100 represents higher quality of life/mental health. More information on the index is found in the link below. For the WHO Well-being variable, we compared those who scored 50 and below to those who scored 51 and above. https://www.corc.uk.net/outcome-experience-measures/the-world-health-organisation-five-well-being-index-who-5/

Independence: Is the index of measured factors impacting the quality of independent living such as activities of daily life (eating, bathing, dressing/undressing, and moving around the house), preparing meals, shopping for personal items, managing medications, managing money, and doing housework. Residents who answered that they had no difficulty completing these activities are considered independent.

Health Insurance/Insurance Coverage: Insurance coverage refers to health insurance, prescription, mental health, and dental care insurance, which may include insurance from both private and public payers. The health insurance indicator examines whether or not a resident has a health insurance policy that covers prescription or dental health insurance coverage.

Health Status: Residents indicated if their health status was "Excellent", "Very Good", "Good", "Fair", or "Poor".

Socially Connected: Social connectedness measures how people come together to support each other as individuals, neighbors, and communities. For this assessment, residents who indicated that they agreed people in their neighborhood know each other, can be trusted, and will help each other were socially connected.

MSS Definitions:

Adverse Childhood Experiences (ACEs): An Adverse Childhood Experience (ACE) describes a traumatic experience in a person's life occurring before the age of 18. As the number of ACEs increases, the risk for

health problems increases in a strong and graded fashion in areas such as alcohol use, substance abuse, depression, anxiety, and smoking. The ACE score is a measure of cumulative exposure to adverse childhood conditions. Exposure to any single ACE condition is counted as one point. If a person experienced none of the conditions in childhood, the ACE score is zero. Points are then totaled for a final ACE score. It is important to note that the ACE score does not capture the frequency or severity of any given ACE in a person's life, focusing instead on the number of ACE conditions experienced. In addition, the ACE conditions used in the ACE survey reflect only a select list of experiences.

The nine ACEs used in this profile are:

- Problematic drinking or alcoholism of a household member.
- Illegal street or prescription drug use by a household member.
- Mental illness of a household member.
- Household member emotional abuse towards child.
- Household member physical abuse towards child.
- Domestic violence between adult household members.
- Sexual abuse towards child from non-family member.
- Sexual abuse towards child from family member.
- Incarcerated guardian.

Any Emotional Distress: Students who indicated ever being bothered by any of the following over the two weeks prior to the survey (several days, more than half the days, nearly every day):

- Little interest or pleasure in doing things.
- Feeling down, depressed, or hopeless.
- Feeling nervous, anxious or on edge.
- Not being able to stop or control worrying.

Cisgender: For this assessment, gender identify is broken out into two categories: cisgender only and not cisgender only. Cisgender only includes those who reported that they only identify as the gender that matches their sex assigned at birth. Not cisgender only includes those who reported any of the following: agender, transgender, genderfluid, nonbinary, two spirit, questioning/unsure, and/or identity not listed.

Health Status: Students indicated if their health status was "Excellent", "Very Good", "Good", "Fair", or "Poor".

Negative Behaviors: Students who indicated doing any of the following in the 12 months prior to the survey:

- Ran away from home.
- Damaged or destroyed property.
- Hit or beat up another person.
- Took something from a store without paying for it.

Positive School Environment: Students who agreed or strongly agreed to all of the following:

- If something interests me, I try to learn more about it.
- I think things I learn at school are useful.
- Being a student is one of the most important parts of who I am.
- Overall, adults at my school treat students fairly.
- Adults at my school listen to the students.
- The school rules are fair.
- At my school, teachers care about students.
- Most teachers at my school are interested in me as a person.

Mental Health Definitions:

Mental Health: Mental health includes our emotional, psychological, and social well-being. It involves effective functioning in daily activities and helps determine how we handle stress, relate to others, and make choices (American Psychological Association). Mental health is important at every stage of life, from childhood and adolescence through adulthood. Over the course of your life, if you experience mental health issues, your thinking, mood, and behavior could be affected. Many factors contribute to mental health issues, including (Mental Health.gov):

- Biological factors, such as genes or brain chemistry.
- Life experiences, such as trauma or abuse.
- Family history of mental health problems.

Emotional Distress: Students who reported experiencing the following:

- Little interest or pleasure doing things.
- Feeling down, depressed, or hopeless.
- Feeling nervous, anxious, or on edge.
- Not being able to stop or control worrying.

Two dichotomized variables were created. The first dichotomized variable is students experiencing any emotional distress (scores 1-12) compared to those experiencing zero emotional distress. The second dichotomized variable was created to assess severity of emotional distress with students experiencing zero to low levels of emotional distress (scores 0-6) compared to those experiencing medium to high levels of emotional distress (scores 7-12).

Mental Illness: Mental illnesses are medical/health conditions that involve changes in emotion, thinking or behavior, or any combination of these. Mental illnesses are associated with distress and/or problems in social, work, or family activities; affecting how we think, feel and act (American Pscyhological Association).

Findings

MENTAL HEALTH AND EMOTIONAL DISTRESS

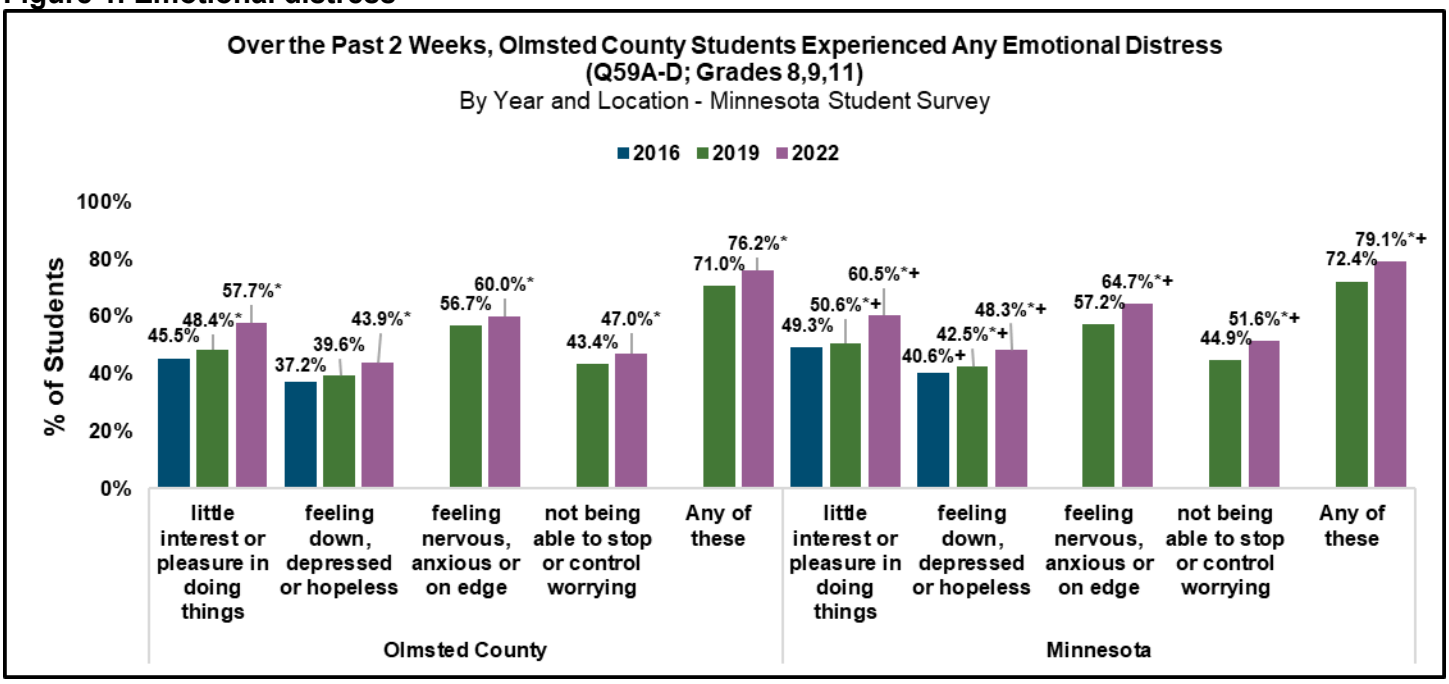
Mental Health & Emotional Distress: Adolescents

In 2022, 76.2% of Olmsted County students in grades 8, 9 and 11 were emotionally distressed having reported they experienced at least one of the following in the two weeks prior to the survey:

- Little interest or pleasure in doing things.
- Feeling down, depressed, or hopeless.
- Feeling nervous, anxious, or on edge.
- Not being able to stop or control worrying.

Adolescent experience with emotional distress significantly increased from 71.0% in 2019 to 76.2% in 2022. In addition, the portion of students reporting they experienced each individual emotional distress question increased significantly from 2019 to 2022, as shown in Figure 1. A significantly lower portion of Olmsted County students experienced each aspect of emotional distress compared to Minnesota students as a whole.

Figure 1. Emotional distress

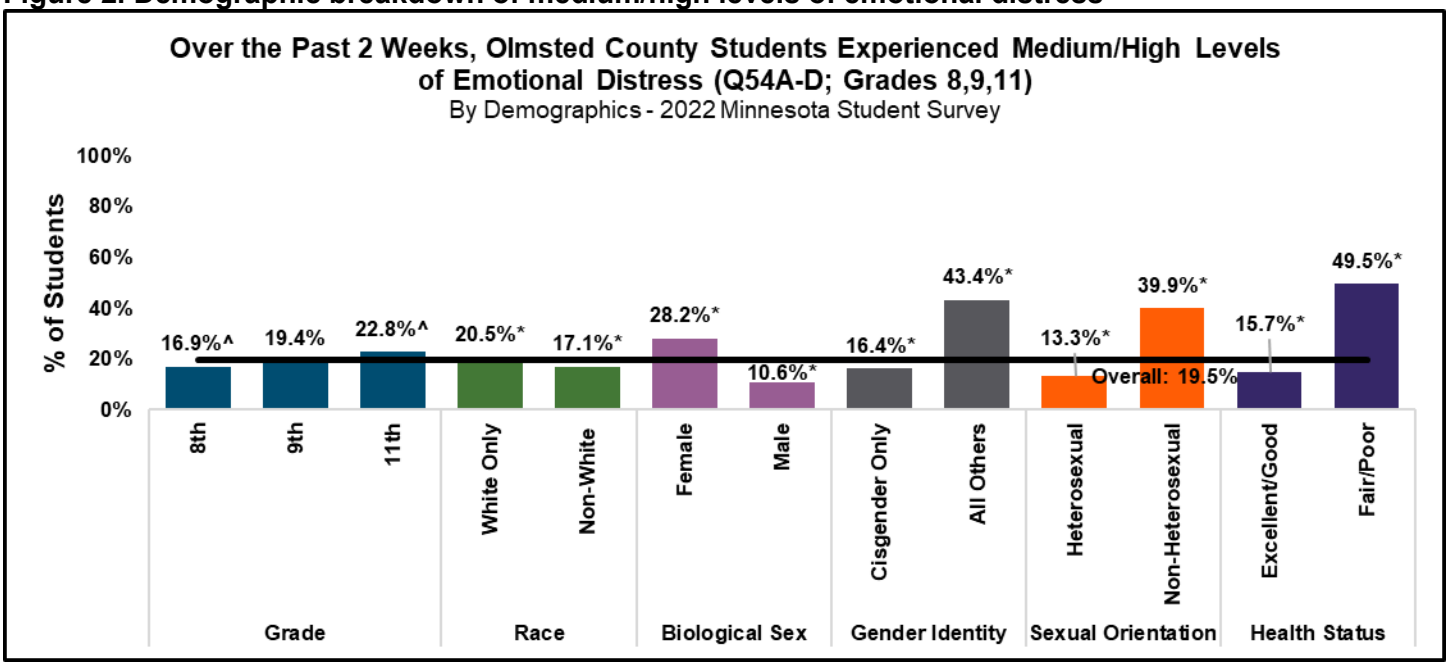


*Statistically significant difference from previous year for same question
+Statistically significant difference from other location for same question

While Figure 1 shows students reporting *any* emotional distress by individual assessment question, this section looks at students who experienced *medium to high levels* of emotional distress in 2022. Overall, 19.5% of Olmsted County students experienced medium to high levels of emotional distress in 2022 which is significantly higher than Olmsted County students in 2019 (15.3%). Minnesota students overall (21.8%) experienced significantly higher rates of medium to high emotional distress in 2022 compared to Olmsted County students (19.5%).

As shown in Figure 2, one of the greatest differences was in sexual orientation. In the two weeks prior to the survey, 13.3% of Olmsted County students identifying as heterosexual reported experiencing medium/high levels of emotional distress compared to 39.9% of those who identified as non-heterosexual. Students in fair/poor health reported higher levels of medium/high emotional distress compared to students in excellent/good health. Females and students identifying as a gender other than cisgender also experienced higher levels of medium/high emotional distress.

Figure 2. Demographic breakdown of medium/high levels of emotional distress



*Statistically significant difference from other groups in demographic category
^Statistically significant difference between 8th and 11th grade students

Table 1 shows additional analysis between experiencing medium/high emotional distress and other social determinants of health. Each can be interpreted as, “of those who missed school at least once in the past 30 days, 21.8% reported experiencing medium/high emotional distress in the two weeks prior to the survey compared to those who did not miss school at least once in the past 30 days, 11.6% reported experiencing medium/high emotional distress in the two weeks prior to the survey.” Of this list, the social determinants of health with the highest odds ratios, signaling a strong relationship to medium/high emotional distress, were:

- Feeling safe at home.
- Feeling safe at school.
- Ever being treated for mental health problem.
- Having an adult they can talk to.
- Receiving adequate hours of sleep on school nights.

Another important finding to note is the significant increase in medium/high emotional distress for each additional number of ACEs.

Table 1. Percentage of students who report experiencing medium/high levels of emotional distress in the two weeks prior to the survey
(All differences in the table are statistically significant. Indicators highlighted in bold had the highest odds ratios)

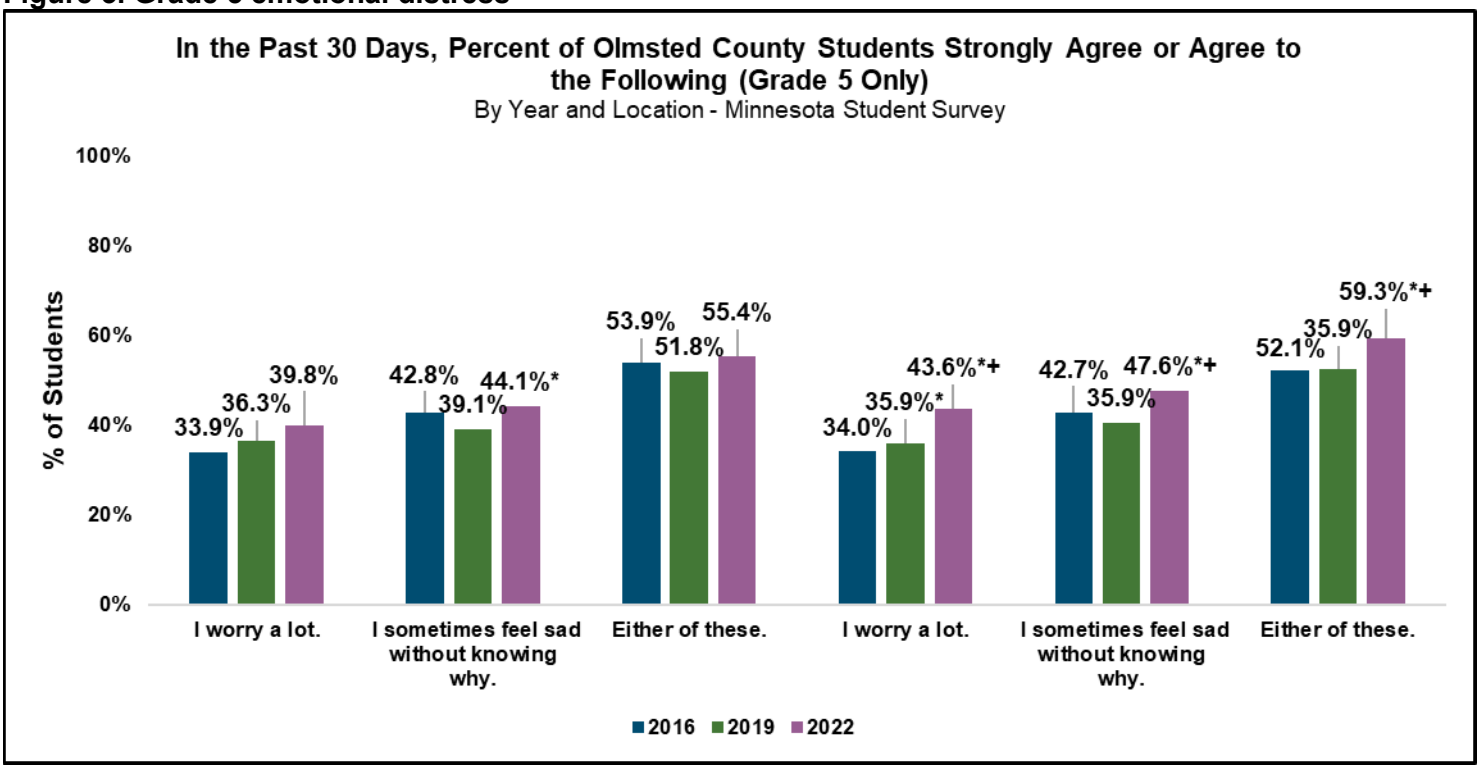
	No	Yes			
Missed school in past 30 days	11.6%	21.8%			
Negative behaviors in past 12 months	15.8%	30.8%			
Positive school environment	23.4%	9.8%			
Feel safe at school	**45.3%**	**15.6%**			
Feel safe at home	**49.7%**	**17.9%**			
Bullied in past 30 days	10.9%	29.9%			
Have a physical disability	17.6%	29.9%			
Ever treated for mental health problem	**12.8%**	**38.9%**			
Skipped a meal in past 30 days	19.0%	36.8%			
Have an adult they can talk to	**45.2%**	**16.4%**			
Experienced relationship violence	15.6%	42.5%			
Ever had an incarcerated guardian	17.6%	31.4%			
Used any tobacco products in past 30 days	17.6%	40.7%			
Have binge drank in past 12 months	18.7%	43.4%			
Used any drugs in past 12 months	16.7%	37.8%			
Physical activity meets recommendations (7 days/week)	21.4%	11.6%			
Adequate hours of sleep on school nights	**25.4%**	**9.6%**			
	None	**1**	**2**	**3**	**4 or >**
Number of Adverse Child Experiences (ACEs)	9.0%	21.7%	37.5%	44.3%	59.4%
	Normal or underweight	**Over-weight**			
Body Mass Index (BMI)	18.2%	24.0%			

Students in 5th grade were asked similar emotional distress questions. In the last 30 days, how much do you agree with the following statements:

- I worry a lot.
- I sometimes feel sad without knowing why.

In 2022, 39.8% of Olmsted County 5th grade students indicated *strongly agree* or *agree* with the statement "I worry a lot." This was not a statistically significant increase from 2019 and remains significantly lower than Minnesota (43.6%). In 2022, 44.1% of 5th grade students indicated *strongly agree* or *agree* with the statement "I sometimes feel sad without knowing why." This significantly increased from 2019 (39.1%) to 2022 (44.1%) but is also significantly lower than Minnesota (47.6%). When combining the two questions, 55.4% of 5th grade students in 2022 *agreed* or *strongly agreed* to at least one of the age-specific emotional distress questions and significant disparities were found for biological sex and health status. Female students were more likely to *agree* or *strongly agree* with one of the statements than males (66.0% compared to 45.1%) and those with fair/poor health were more likely to *agree* or *strongly agree* with one of the statements than those with excellent/very good/good health (88.7% compared to 53.3%).

Figure 3. Grade 5 emotional distress



*Statistically significant difference from previous year for same question
+Statistically significant difference from other location for same question

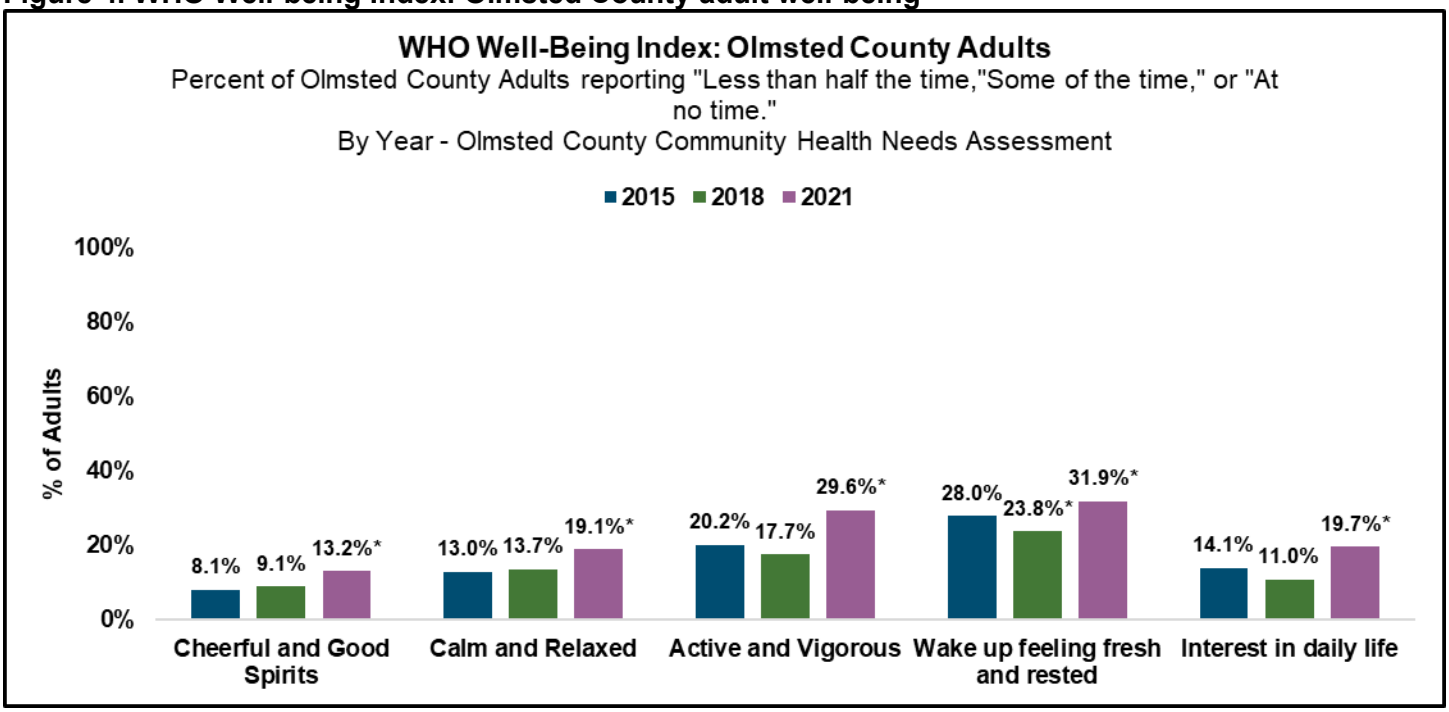
Mental Health & Emotional Distress: Adults

The Olmsted County CHNA Community Survey measures well-being by asking how often adults have experienced the following in the two weeks prior to the survey:

- Cheerful and good spirits.
- Calm and relaxed.
- Active and vigorous.
- Wake up feeling fresh and rested.
- Interest in daily life.

The percent of adults who responded, “less than half the time”, “some of the time”, or “at no time”, indicating poorer well-being, by measure and by year are shown in Figure 4. Statistically significant increases among measures occurred in 2021 when compared to 2015 and 2019.

Figure 4. WHO Well-being Index: Olmsted County adult well-being

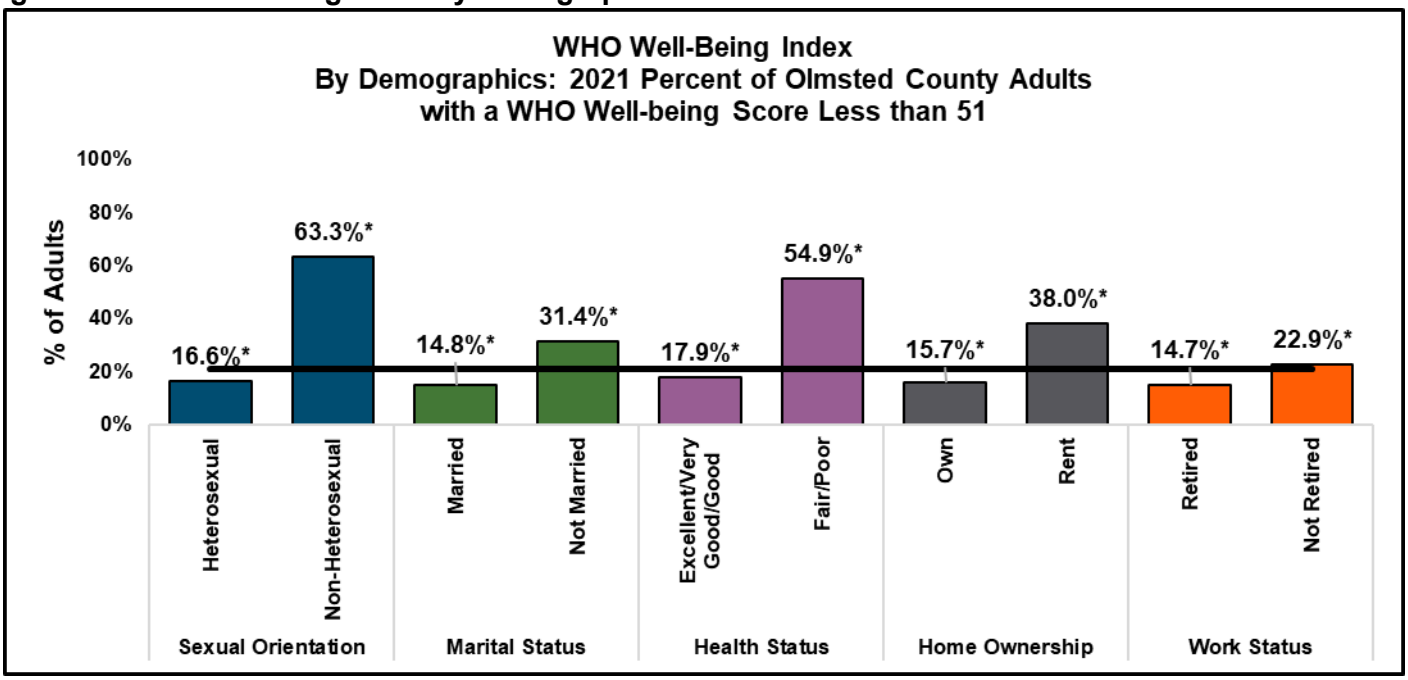


*Statistically significant from prior years

Each of the five questions above feed into calculating the World Health Organization (WHO) Well-being Index. In 2021, 20.8% of residents scored below 51 which indicates lower quality of life/mental health compared to those scoring 51 or above which indicates higher quality of life/mental health (see Definitions section for details on the index). This was a significant increase from 2018 (13.2%). Below is a list of statistically significant demographic differences that exist among adults with WHO Well-being Scores below 51. Disparities with the highest differences are also shown in Figure 5. Each bullet can be interpreted as, “of those who are non-heterosexual, 63.3% reported a WHO Well-being score below 51 compared to of those who are heterosexual,16.6% reported a WHO Well-being score below 51.”

- Non-heterosexual (63.3%) compared to heterosexual adults (16.6%).
- Married (14.8%) compared to not married adults (31.4%).
- Fair/poor health (54.9%) compared to excellent/very good/good health (17.9%).
- Having a disability (45.6%) compared to not having a disability (11.7%).
- Education status of no college (31.3%) compared to some college (17.5%).
- Rochester zip code (22.9%) compared to non-Rochester zip code (14.7%).
- Household income of <$35,000 (43.8%) compared to household income $35,000+ (17.7%).
- Single household income earner (31.9%) compared to two or more household income earners (15.4%).

Figure 5. WHO Well-being Index by demographic



*Statistically significant difference between demographic indicators

Table 2 shows additional analysis between all adults having WHO Well-being Scores less than 51 and other social determinants of health. Each can be interpreted as, “of adults experiencing financial stress, 40.1% had a WHO Well-being score less than 51 compared to those not experiencing financial stress, 11.0% had a WHO Well-being score less than 51.”

Of this list, the social determinants of health with the highest odds ratios, signaling a strong relationship to WHO Well-being Scores less than 51, were:

- Experiencing food insecurity.
- Ability to independently perform activities of daily living.
- Meeting physical activity guidelines.
- Having multiple chronic conditions.

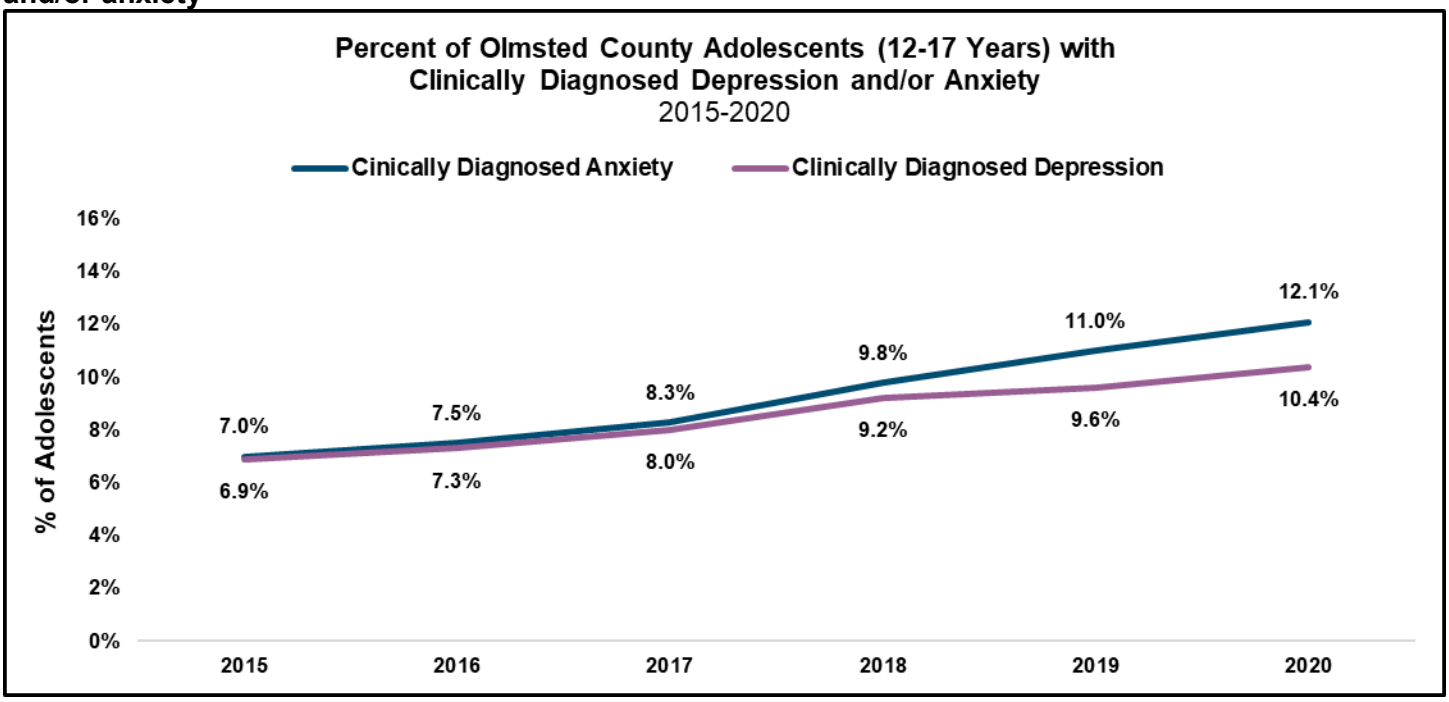
Table 2. Percentage of Olmsted County adults with a WHO Well-being score less than 51
(All differences in the table are statistically significant)

	Yes	No
Experience financial stress	40.1%	11.0%
Have a mental health condition	39.3%	11.3%
Used tobacco in the last 30 days	35.2%	19.1%
Used drugs in the last 30 days	35.8%	18.5%
Has timely personal health services (access to care)	15.0%	33.2%
Lack of transportation in community (community mobility)	59.6%	18.9%
Have diabetes	38.9%	19.1%
Experience food insecurity	**70.3%**	**18.0%**
Have multiple chronic conditions	25.8%	17.6%
Meet physical activity guidelines	**16.2%**	**24.7%**
Independently perform activities of daily living	**18.1%**	**60.7%**

Mental Illness: Adolescents

According to the Rochester Epidemiology Project (REP), the percentage of adolescents with clinically diagnosed anxiety and depression have slowly increased from 2015-2020. In 2015, approximately 7% of adolescents were diagnosed with either anxiety and/or depression and by 2020, rates were 12.1% for anxiety and 10.4% for depression. Demographic REP data for depression show that in 2020, females had a higher rate of depression at 13.3% compared to males at 7.5%.

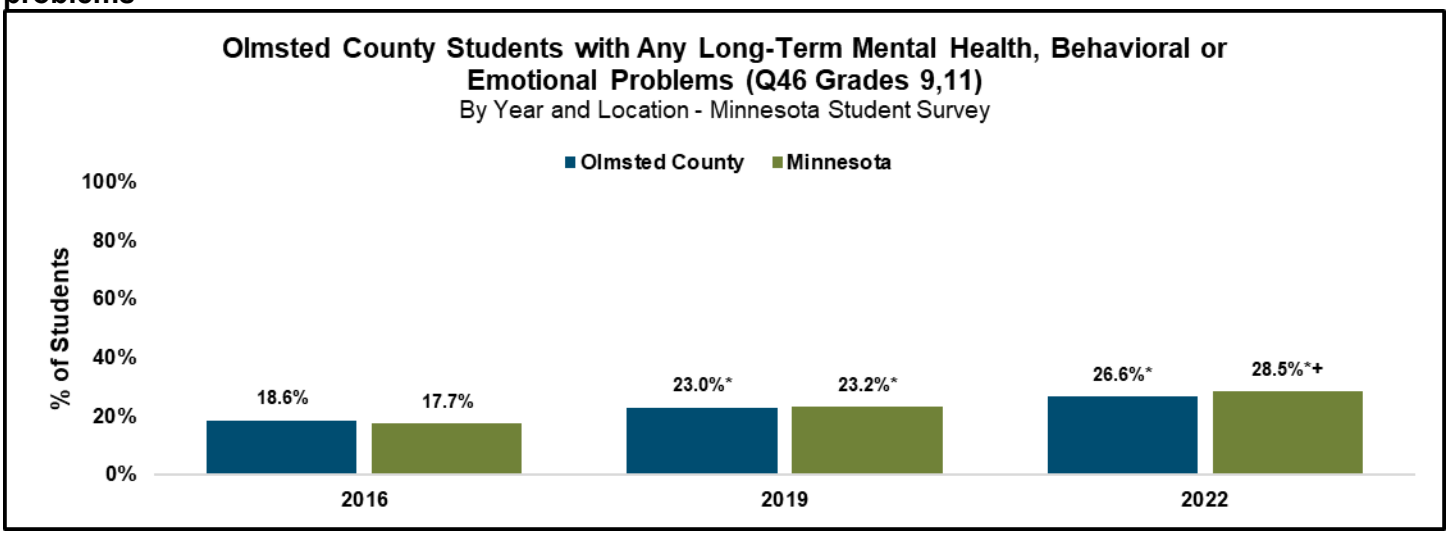
Figure 6. Percent of Olmsted County adolescents (12-17 Years) with clinically diagnosed depression and/or anxiety



Source: Rochester Epidemiology Project

When looking at adolescent self-report data from the 2022 Minnesota Student Survey (Figure 7), 26.6% of Olmsted County students reported that they have any long-term mental health, behavioral, or emotional problems - a significant increase each survey year in both Olmsted County and Minnesota. However, Olmsted County had a significantly lower rate than Minnesota in 2022.

Figure 7. Olmsted County students with any long-term mental health, behavioral, or emotional problems

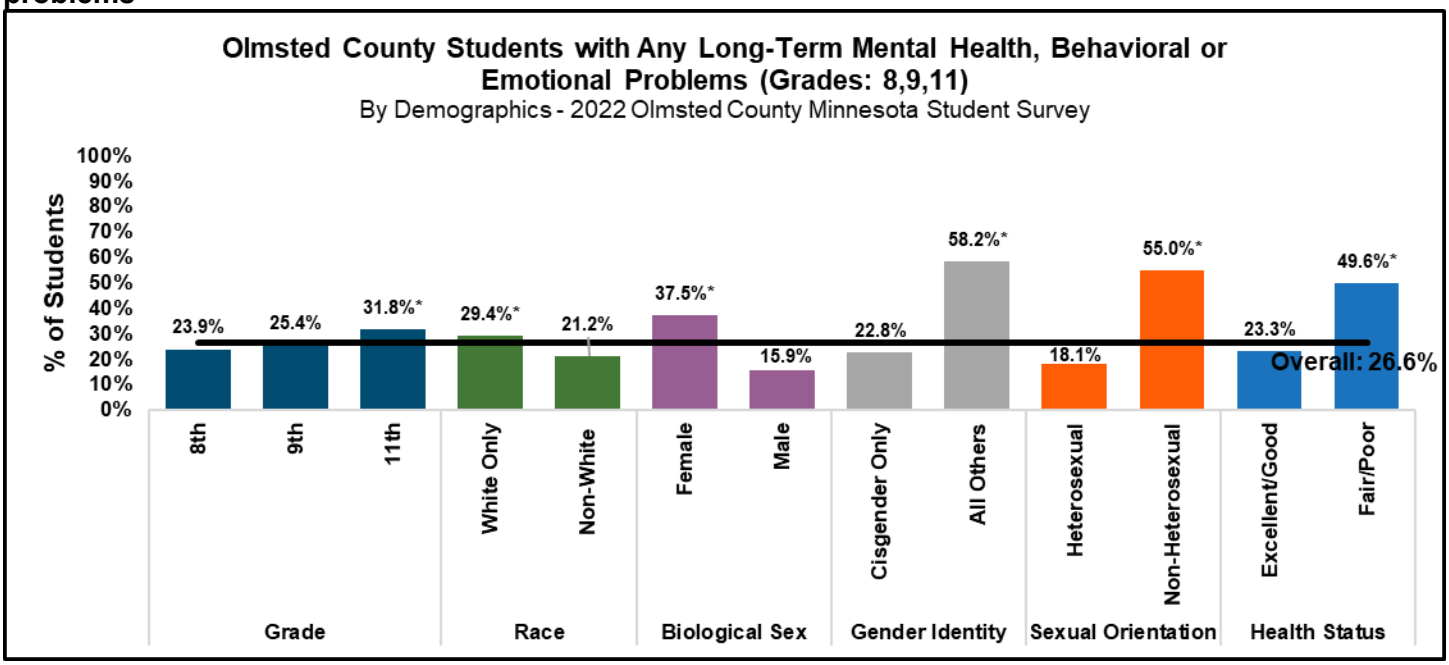


*Statistically significant difference from previous year for same question
+Statistically significant difference from other location for same question

There are several disparities for having any long-term mental health problem, shown in Figure 8, and listed below.

- 11th graders reported any long-term mental health problems significantly more than 8th or 9th graders (31.8% of 11th graders compared to 23.9% of 8th and 25.4% of 9th graders).
- Students who identified as white only reported any long-term mental health problems significantly more than non-white students (29.4% compared to 21.2%).
    - White students were significantly more likely to report any long-term mental health problems than those who identified only as Asian (14.4%) or only as Black (11.8%).
    - Students who reported multiple races reported the highest percentage of any long-term mental health problem at 35.5%, which was significantly greater than students who identified as white only.
- Other differences in demographics were found in:
    - Biological sex: females (37.5%) have higher rates compared to males (19.9%).
    - Gender identity: cisgender students have lower rates (22.8%) than all others (58.2%).
    - Sexual orientation: non-heterosexual students (55.0%) have higher rates than heterosexual (18.1%).
    - Health status: students in fair/poor health (49.6%) have higher rates than students in excellent/good health (23.3%).

Figure 8. Olmsted County students with any long-term mental health, behavioral, or emotional problems



*Statistically significant difference from other groups in demographic category

Table 3 shows additional analysis between any mental health problems and other social determinants of health. Each social determinate of health listed below is a significant difference and can be interpreted as: “of those who missed school at least once in the past 30 days, 17.7% reported having a long-term mental health, behavioral, or emotional problem compared to those who did not miss school at least once in the past 30 days, 29.2% reported experiencing having a long-term mental health, behavioral, or emotional problem.”

Of this list, the social determinants of health with the highest odds ratios, signaling a strong relationship to medium/high emotional distress, were:

- Ever being treated for mental health problem.
- Feeling safe at home.
- Feeling safe at school.
- Receiving adequate hours of sleep on school nights.
- Having an adult they can talk to.

Another important finding to note is the significant increase in medium/high emotional distress for each additional number of ACEs.

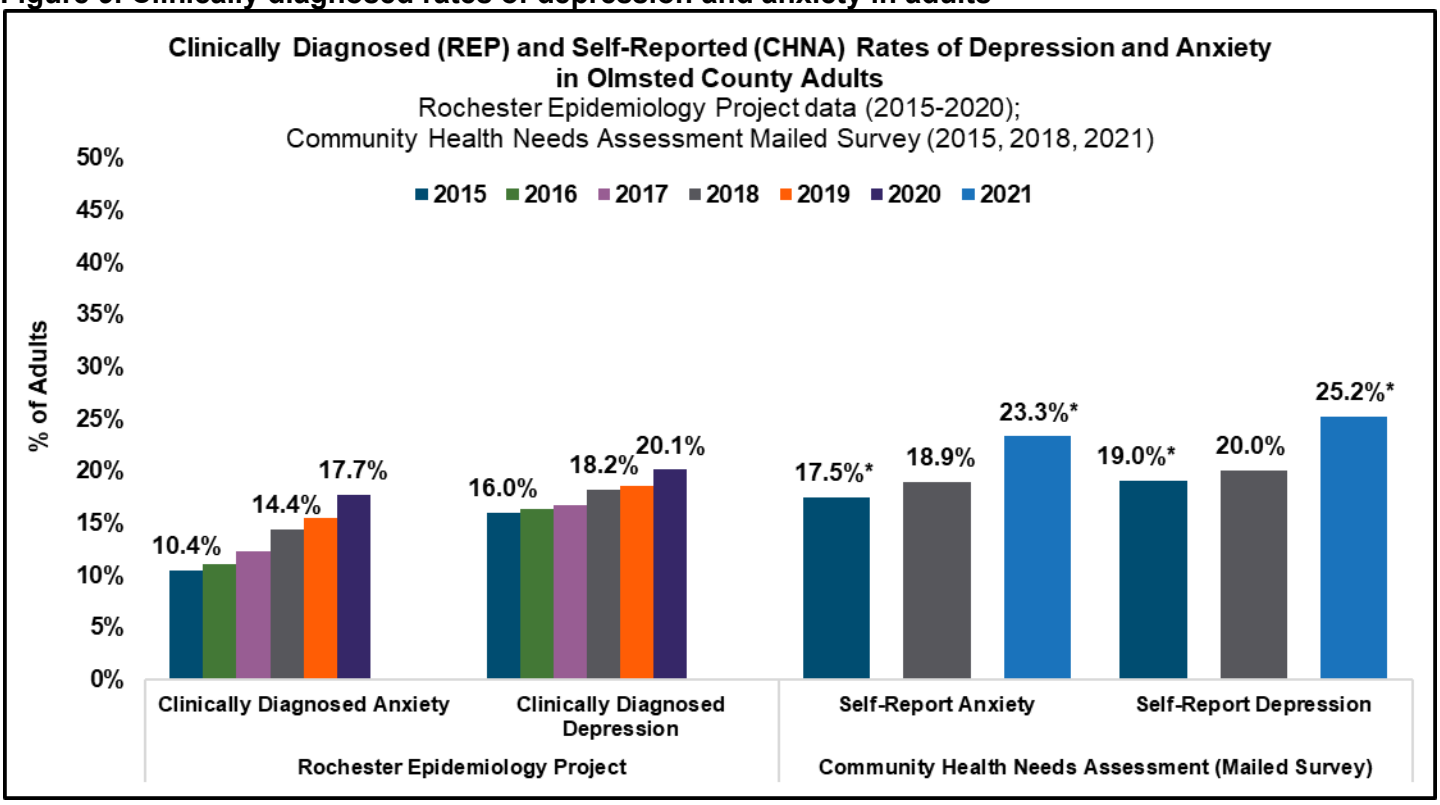
Table 3. Percentage of students who have long-term mental health, behavioral, or emotional problems (All differences in the table are statistically significant; Indicators highlighted in bold had the highest odds ratios)

	No	Yes			
Missed school in past 30 days	17.7%	29.2%			
Negative behaviors in past 12 months	23.0%	40.5%			
Experienced relationship violence	22.4%	56.6%			
Experienced emotional distress in past 2 weeks	6.2%	33.9%			
Positive school environment	30.2%	17.6%			
Feels safe at school	**50.2%**	**22.8%**			
Feels safe at home	**56.4%**	**25.1%**			
Bullied in the last 30 days	15.5%	39.6%			
Have a physical disability	23.5%	44.6%			
Treated for mental health problems	**11.8%**	**71.2%**			
Skipped meal in past 30 days	26.1%	52.6%			
Have an adult they can talk to	40.8%	25.2%			
Ever had an incarcerated guardian	25.0%	41.9%			
Used any tobacco products in past 30 days	25.2%	53.0%			
Have binge drank in past 12 months	26.6%	50.0%			
Used any drugs in past 12 months	23.8%	50.1%			
Physical activity meets recommendations (7 days/week)	28.7%	18.8%			
Adequate hours of sleep on school nights	**33.0%**	**17.7%**			
	None	**1**	**2**	**3**	**4 or >**
Number of Adverse Child Experiences (ACEs)	12.4%	34.6%	56.8%	55.6%	68.5%

Mental Illness: Adults

In Figure 9 below, data on the left side from the Rochester Epidemiology Project indicates an upward trend in the percent of Olmsted County adults diagnosed by a health care professional with clinical depression and/or anxiety; data on the right side of Figure 9 shows a similar trend in adults self-reporting they have anxiety and/or depression through the Community Health Needs Assessment Survey, with or without a clinical diagnosis from a health care professional. Olmsted County self-reported rates of depression are similar to Minnesota self-reported rates. In 2021 according to the Centers for Disease Control and Prevention's (CDC) Behavior Risk Factor Surveillance System (BRFSS), 20.5% of Minnesota adults self-reported a form of depression.

Figure 9. Clinically diagnosed rates of depression and anxiety in adults

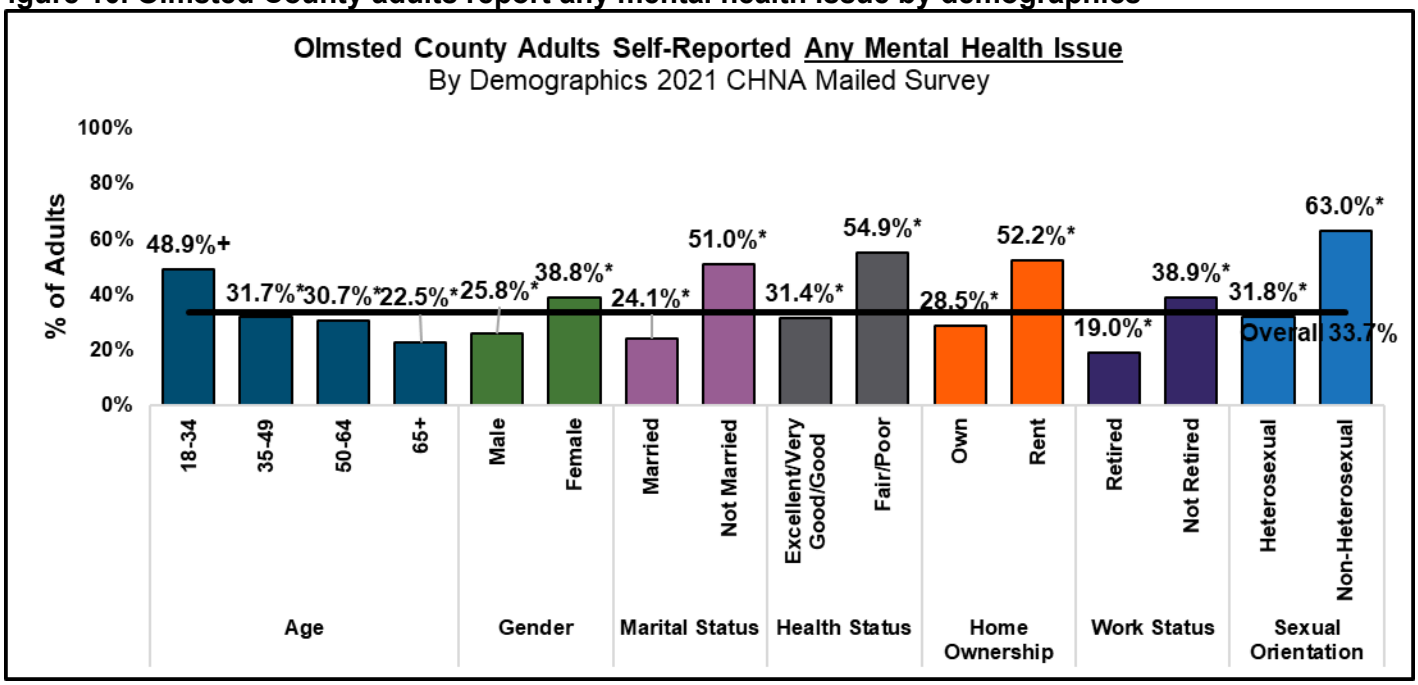


*Statistically significant difference from previous year for same question

When looking at adults who reported any mental health issue, anxiety and/or depression, there were disparities among demographic indicators. Across all mental health diagnoses (any mental health issue, anxiety, and depression) the following demographic differences were significant:

- Adults ages 18-34 years experienced significantly higher rates than older residents.
- Females had higher rates than males.
- Non-married adults had rates more than double those of married adults.
- Disabled adults reported mental health issues at rates three times higher than those not reporting a disability.
- Adults in fair or poor health reported rates of mental health issues more than double that of adults in excellent/very good/good health.
- Non-heterosexual adults reported the highest rates of mental issues, two times that of their heterosexual peers.
- Financial demographics were also indicative of higher levels of mental illness for the following groups:
    - Renters compared to homeowners.
    - Households earning less than $35,000 per year compared to those earning that or more.
    - Single income earner households compared to two or more household income earners.

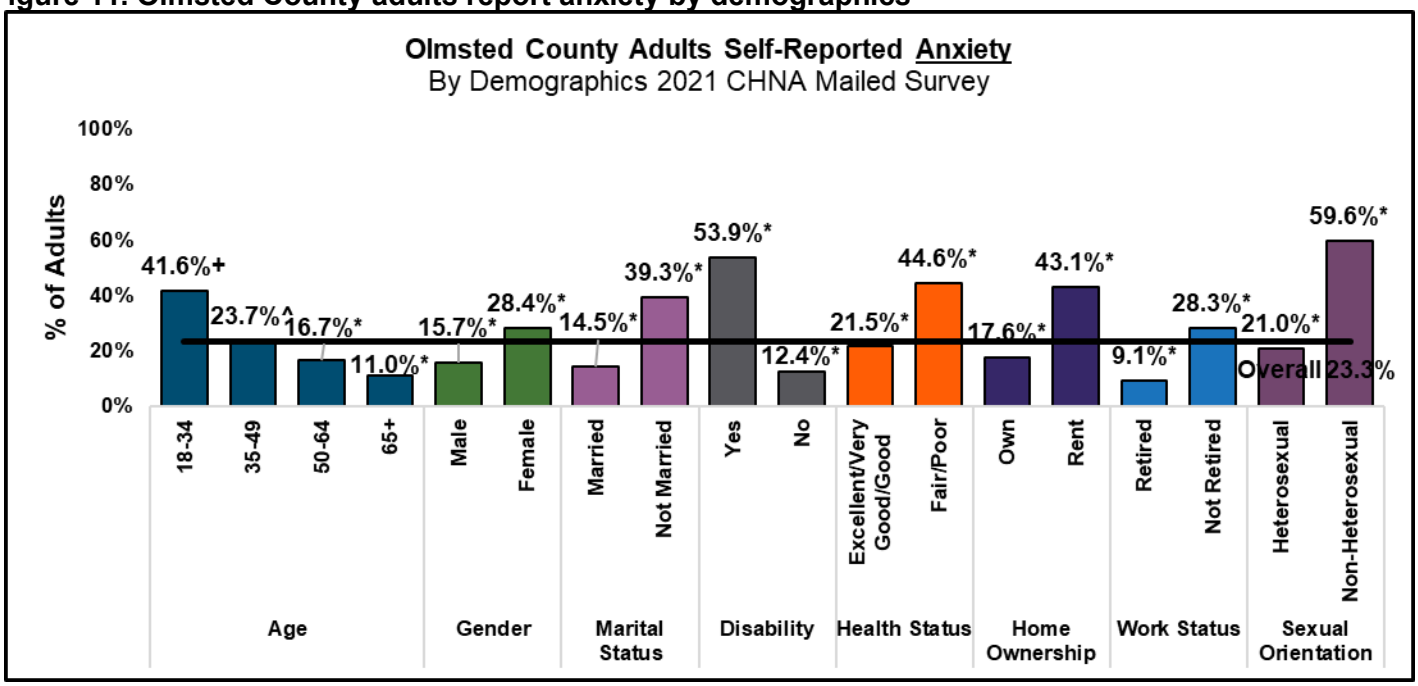
Figure 10. Olmsted County adults report any mental health issue by demographics



*Statistically significant difference between demographic categories
+Statistically significant difference between 18-34 and all other age categories

Figure 11 shows the biggest demographic differences in adults who self-reported anxiety.

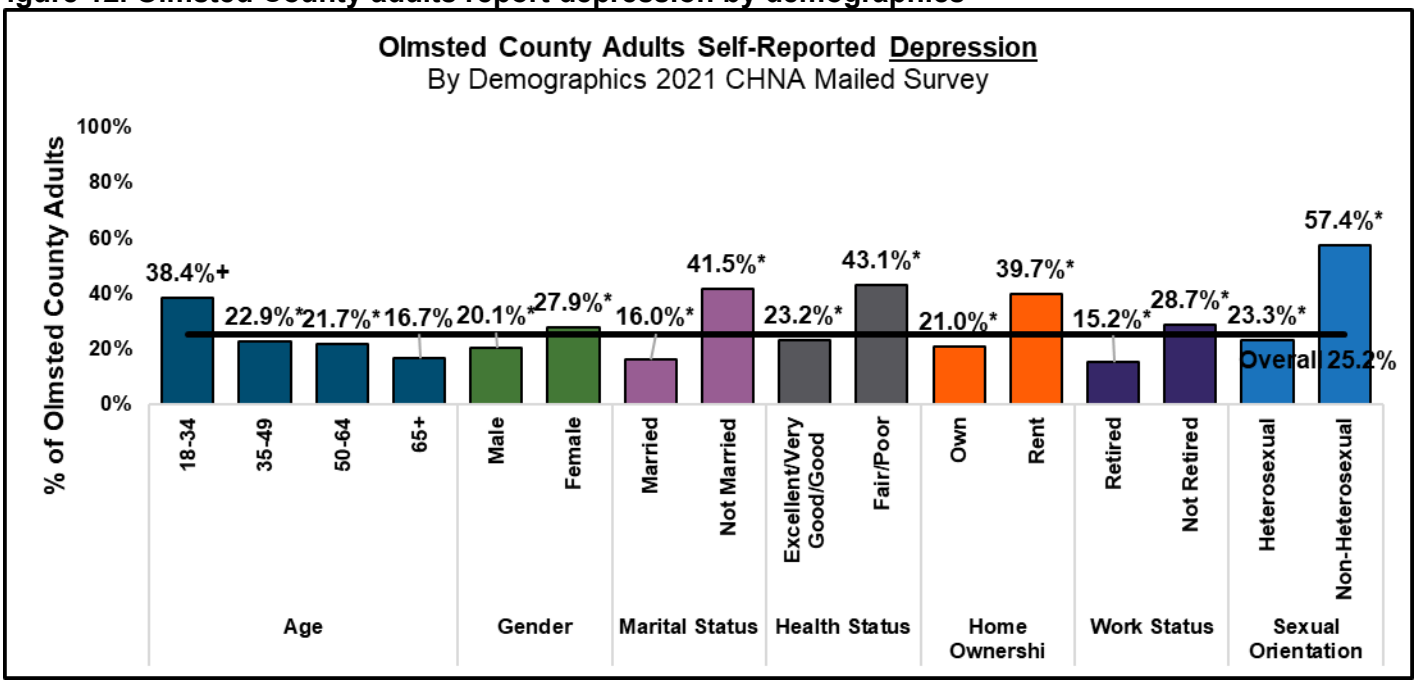
Figure 11. Olmsted County adults report anxiety by demographics



*Statistically significant difference between demographic categories
+Statistically significant difference between 18-34 and all other age categories
^Statistically significant difference between 35-49 and 50-64 age categories

Figure 12 shows the biggest demographic differences in adults who self-reported depression.

Figure 12. Olmsted County adults report depression by demographics



*Statistically significant difference between demographic categories
+Statistically significant difference between 18-34 and all other age categories

Finally, Table 4 shows relationships between those with any mental health issue, anxiety and/or depression with other social determinants of health and can be interpreted as, “among adults experiencing financial stress, 51.0% reported having a mental health issue, anxiety, and/or depression compared to adults who did not experience financial stress, 25.0% reported having a mental health issue, anxiety, and/or depression.”

Of this list, the social determinants of health with the highest odds ratios, signaling a strong relationship to self-reporting any mental health issue, anxiety and/or depression were:

- Multiple chronic conditions.
- Access to care.
- Community mobility.
- Financial stress.
- Drug use.

Table 4. Percentage of adults reporting any mental health issue, anxiety, and/or depression
(All differences in the table are statistically significant)

	Any Mental Health Issue		Anxiety		Depression	
	Yes	**No**	**Yes**	**No**	**Yes**	**No**
Experience financial stress	**51.0%**	**25.0%**	**41.7%**	**14.1%**	**37.7%**	**18.8%**
Negative WHO wellbeing index score (<51)	64.2%	26.1%	50.1%	16.7%	53.5%	18.0%
Used tobacco in the last 30 days			35.8%	22.1%	38.8%	23.4%
Used drugs in the last 30 days	**50.9%**	**29.9%**	**40.4%**	**19.2%**	**38.2%**	**22.8%**
Has timely personal health services (access to care)	**25.2%**	**52.3%**	**16.2%**	**39.3%**	**18.3%**	**40.1%**
Report positive community inclusiveness	28.1%	45.1%	16.6%	37.0%	20.8%	33.5%
Lack of transportation in community (community mobility)	**25.0%**	**7.9%**	**43.9%**	**24.7%**	**45.0%**	**26.7%**
Report positive community resiliency	31.7%	47.9%	21.0%	41.2%	22.8%	41.8%
Distracted driving	44.2%	30.6%	31.8%	20.9%		
Experience food insecurity	60.2%	32.4%	56.8%	21.7%	53.4%	23.8%
Living in an unhealthy home			36.7%	20.9%		
Have multiple chronic conditions	**52.5%**	**21.9%**	**33.7%**	**16.7%**	**41.9%**	**14.5%**
Recommended physical activity	27.2%	39.2%	18.9%	27.1%	18.2%	31.1%
Seniors feel independent			9.6%	29.2%		
Independently perform activities of daily living	32.3%	61.3%	21.8%	53.0%	23.3%	56.9%
Report social connectedness	28.2%	44.5%	17.2%	35.5%	21.0%	33.5%

SUICIDE IDEATION, SUICIDE ATTEMPTS, SUICIDE, AND SELF-HARM

Suicide Ideation

According to National Syndromic Surveillance Program data, there were 1,396 incidents of suicide ideation treated by hospitals among all Olmsted County residents in 2022. Males and females were equally represented in suicide ideation reports. More than 50% of suicide ideation incidents were among residents ages 18-44 years and 80% were among white residents.

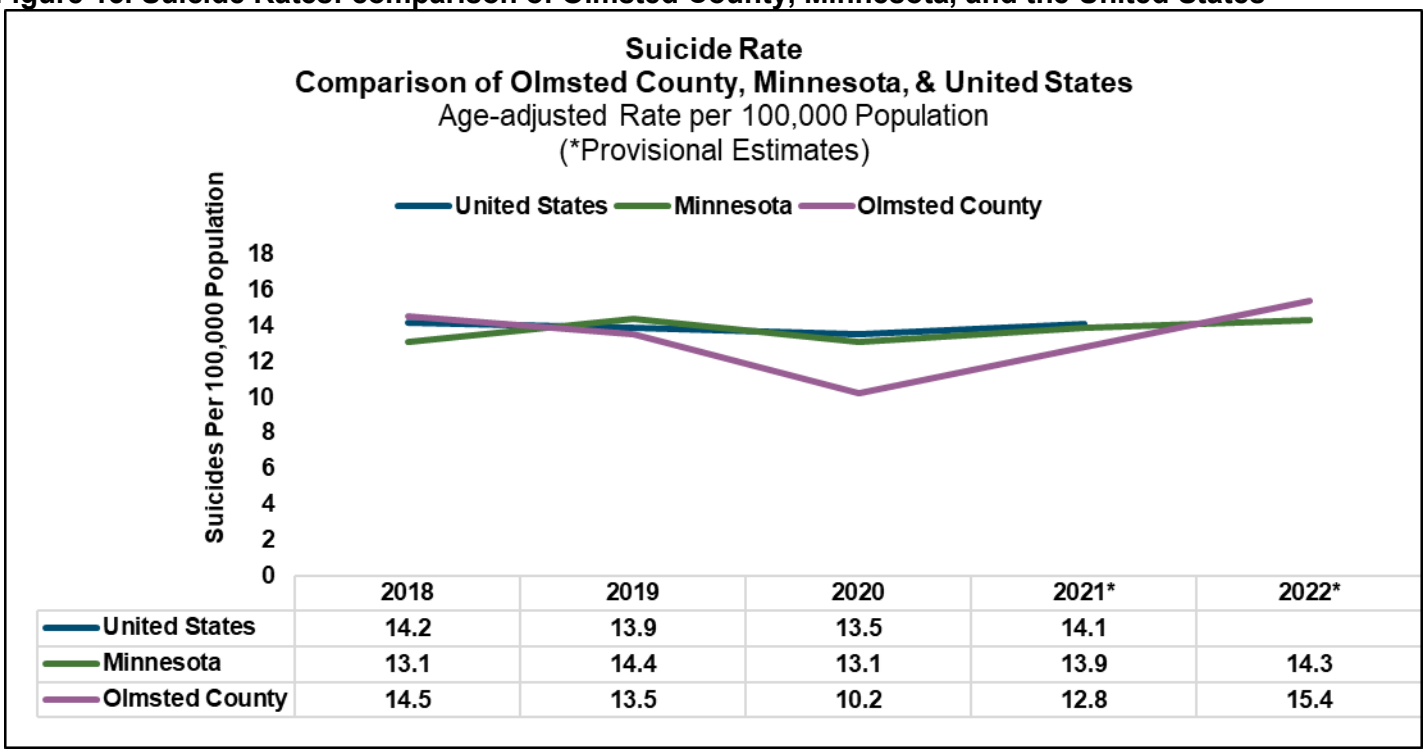
Suicide Attempts

In 2022, Olmsted County hospitals treated 140 suicide attempts. Whereas more males die of suicide (see Suicide below), more females attempt suicide (60% compared to 40% males). Suicide attempts also impact younger Olmsted County residents at a higher rate than suicide deaths with 32% of suicide attempts among residents <18 years. Residents ages 18-44 years make up the largest group of suicide attempts at 47%. Consistent with suicide ideation and suicide deaths, 79% of suicide attempts are among white residents.

Suicide

As shown in Figure 13, in 2022, Olmsted County's suicide rate reached the highest it has been in the past five years at 15.4 per 100,000 population. Minnesota's rate also increased to 14.3 per 100,000 population. The United States' 2022 rate has not yet been released, but the 2021 rate was 14.1 per 100,000 population (CDC, NSSP). In 2020, Olmsted County's suicide rate reached a five-year low of 10.2 per 100,000 residents but trended back up in 2021 and 2022 to pre-pandemic levels and surpassing the 2018 rate and is now greater than Minnesota.

Figure 13. Suicide Rates: comparison of Olmsted County, Minnesota, and the United States

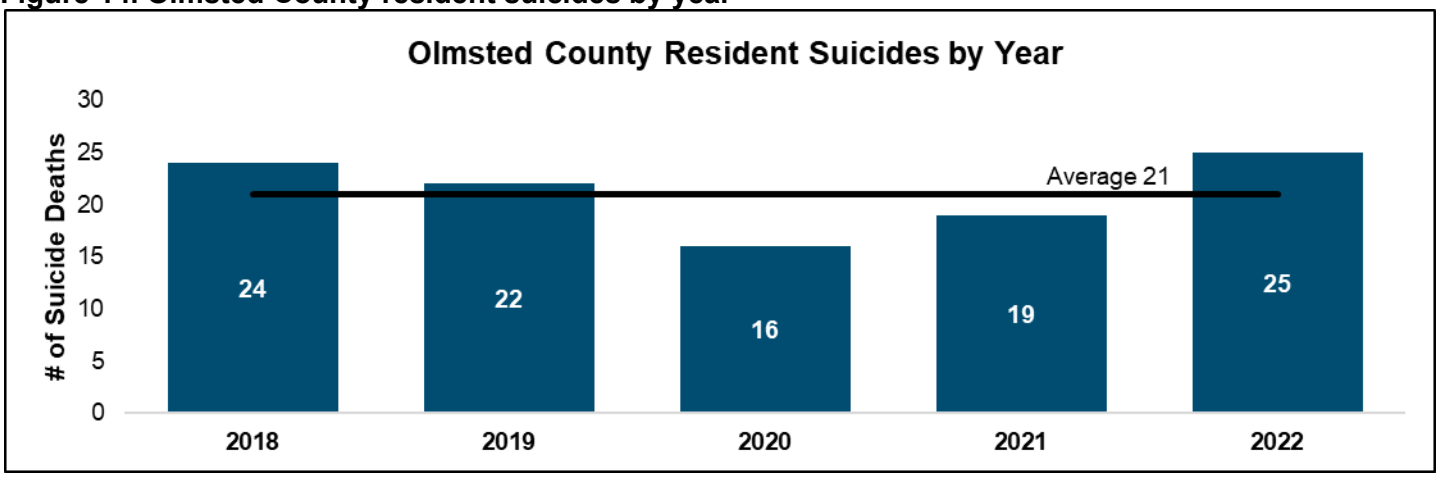


	2018	2019	2020	2021*	2022*
United States	14.2	13.9	13.5	14.1	
Minnesota	13.1	14.4	13.1	13.9	14.3
Olmsted County	14.5	13.5	10.2	12.8	15.4

Sources: Minnesota and U.S. Sources: Centers for Disease Control and Prevention: Quarterly Provisional Estimates for Mortality Dashboard (cdc.gov) and WISQARS Data Visualization (cdc.gov).
Olmsted County Sources: Minnesota Center for Vital Statistics (2018-2020) and Early Notification of Community-Based Epidemics (ESSENCE) (2021-2022).

As shown in Figure 14, in 2022, suicide deaths among Olmsted County residents returned to pre-pandemic levels at 25 deaths, greater than the average of 21 resident suicides occurring per year from 2018-2022. Note: Only suicides among Olmsted County residents were reported – suicides occurring in Olmsted County among people who were NOT Olmsted County residents are excluded. There are disparities in age and gender related to suicide. Of the suicides from 2018-2022, 45% were among residents ages 18-44 years and 35% were among residents 45-64 years. The majority of suicides are among males (79%). Almost half of suicides (46%) were among single residents with 28% among married residents and 19% among divorced residents.

Figure 14. Olmsted County resident suicides by year

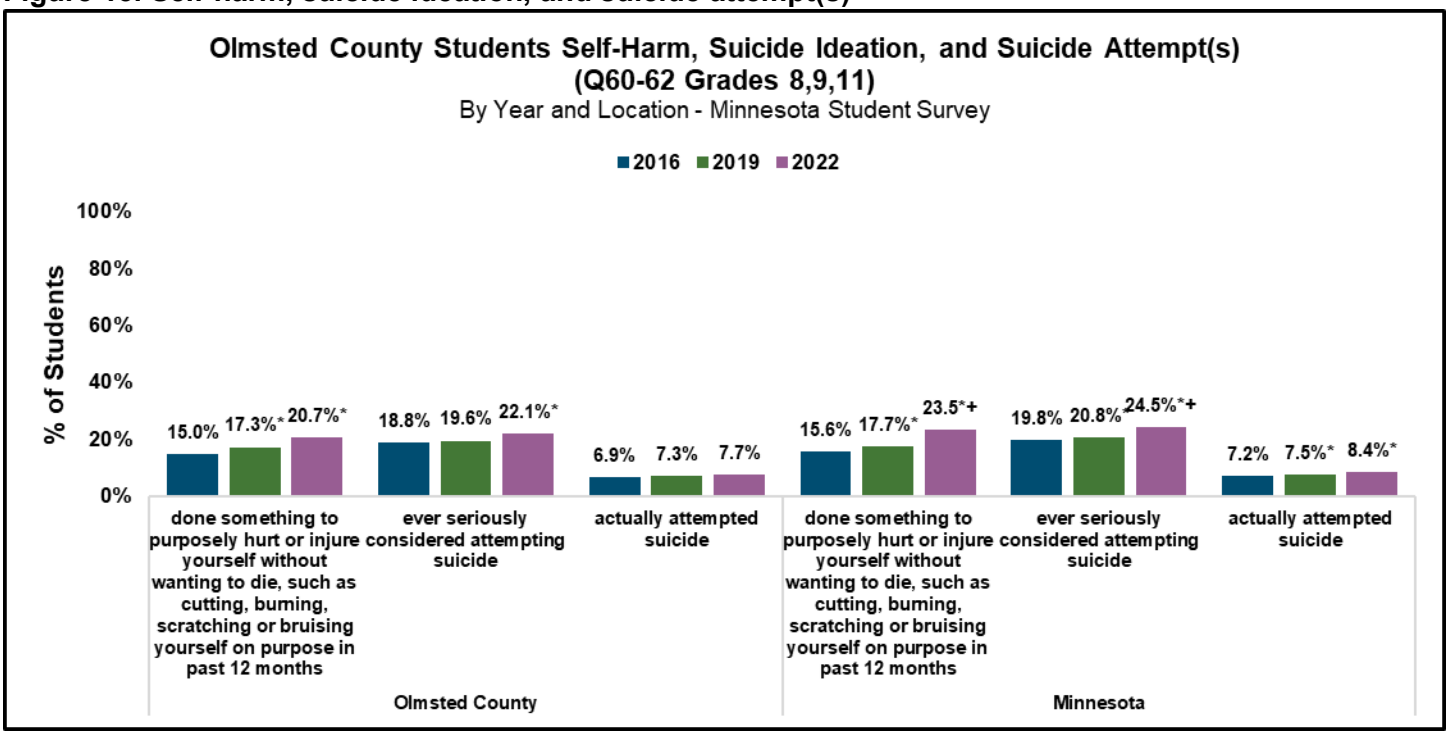


Source: National Syndromic Surveillance Program (NSSP)

Self-Harm, Suicide Ideation and Suicide Attempt(s): Adolescents

In 2022, 20.7% of 8th, 9th, and 11th grade students reported in the 12 months prior to the survey they had done something to purposely hurt or injure themselves without wanting to die, and 22.1% reported serious consideration of attempting suicide (referred to in the figures and tables below as "Suicide Ideation"). Both indicators increased significantly for Olmsted County students from 2019 to 2022 but remained significantly lower than Minnesota. There was not a significant increase in Olmsted County in students reporting attempted suicide; reported suicide attempts among students was 7.7% in 2022, which is similar to 2019 at 7.3%.

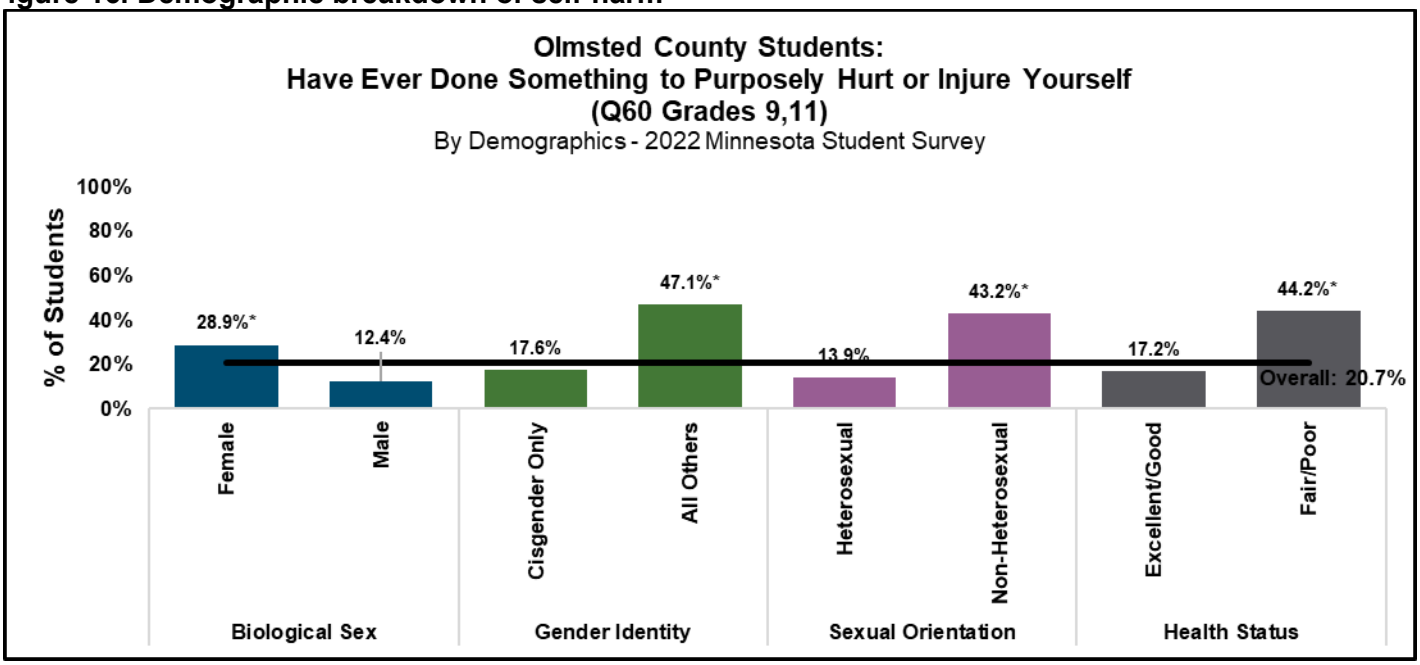
Figure 15. Self-harm, suicide ideation, and suicide attempt(s)



*Statistically significant difference from previous year for same question
+Statistically significant difference from other location for same question

As shown in Figure 16, students identifying as female (28.9%), non-cisgender (47.1%), non-heterosexual (43.2%), or fair/poor health (44.2%) were all significantly more likely to report self-harm than their demographic peers.

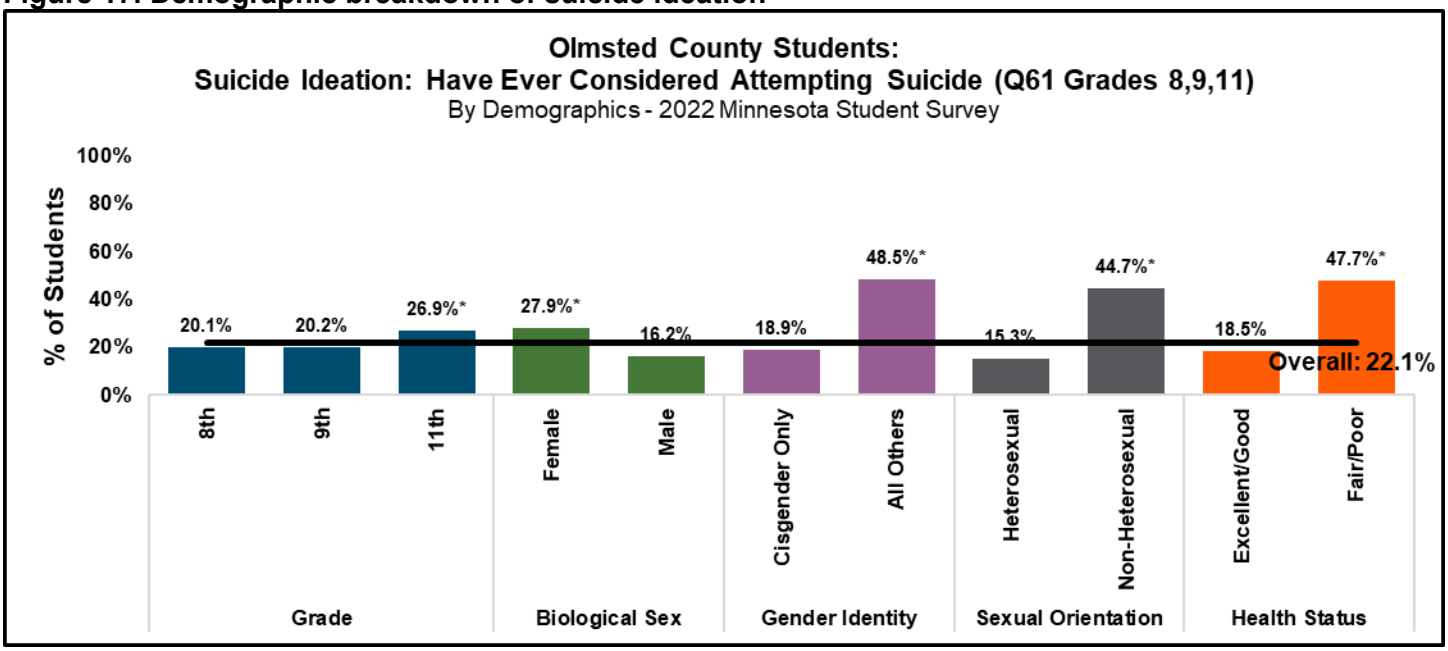
Figure 16. Demographic breakdown of self-harm



*Statistically significant difference from other groups in demographic category

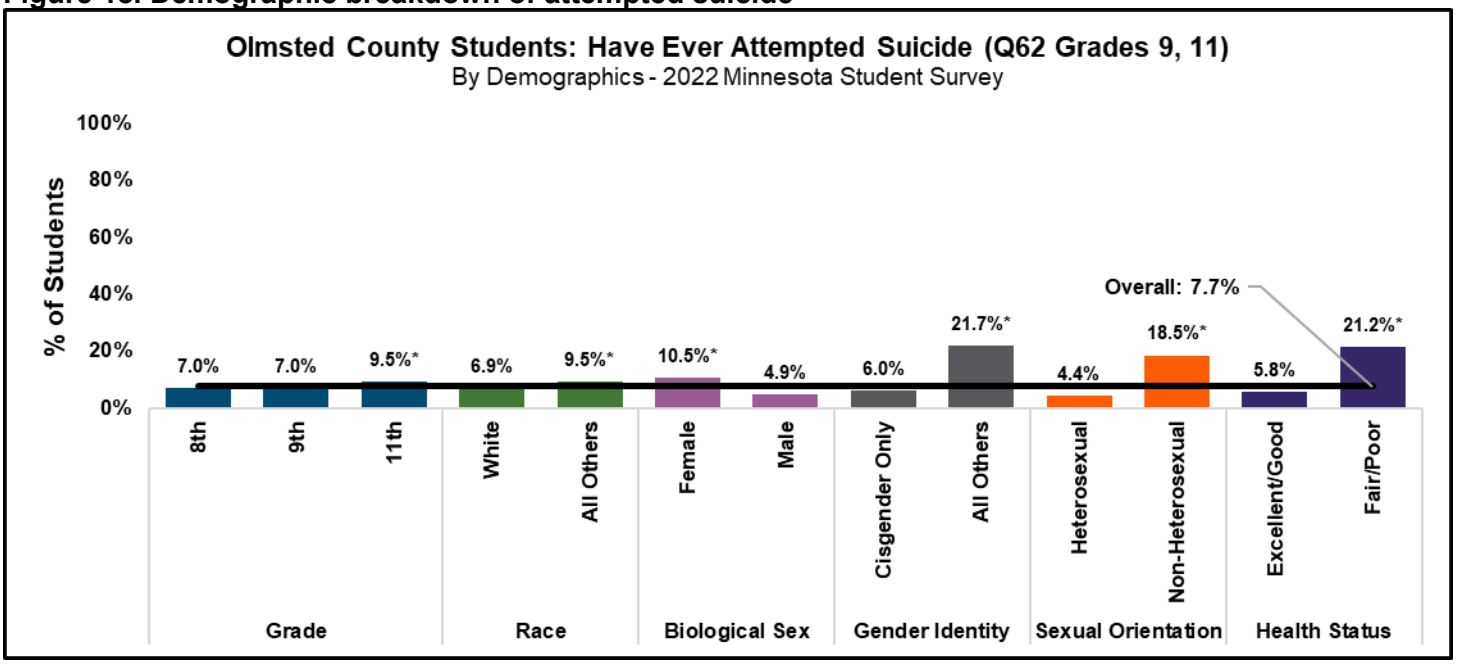
Similar disparities to self-harm were found within both students who considered attempting suicide and those who attempted suicide. The largest disparities were seen among students identifying as other than cisgender, non-heterosexual, or were in fair/poor health. In 2022, 48.5% of Olmsted County students identifying as a gender other than cisgender reported having ever considered attempting suicide compared to 18.9% of cisgender students. In addition, 21.7% of students who identify as a gender other than cisgender reported ever attempting suicide compared to 6.0% of those who identified as cisgender.

Figure 17. Demographic breakdown of suicide ideation



*Statistically significant difference from other groups in demographic category

Figure 18. Demographic breakdown of attempted suicide



*Statistically significant difference from other groups in demographic category

In addition, Table 5 shows relationships for self-harm, suicide ideation, and suicide attempt(s) with other social determinants of health and can be interpreted as, “of those who missed school at least once in the past 30 days, 23.0% reported self-harm compared to those who did not miss school at least once in the past 30 days, 12.6% reported self-harm.”

Of this list, the social determinants of health with the highest odds ratios, signaling a strong relationship to self-harm, suicide ideation and/or suicide attempt(s), were:

Self-Harm:	**Suicide ideation**	**Suicide Attempt(s)**
• Emotional distress. • Relationship violence. • Bullying. • Tobacco use. • Binge drinking.	• Emotional distress. • Tobacco use. • Relationship violence. • Binge drinking. • Drug use.	• Binge drinking. • Tobacco use. • Relationship violence. • Negative behaviors • Drug use.

Another important finding to note is the significant increase in self-harm, suicide ideation and suicide attempt(s) for each additional number of ACEs.

Table 5. Percentage of students who reported self-harm, suicide ideation, and/or suicide attempt(s)
(All differences in the table are statistically significant)

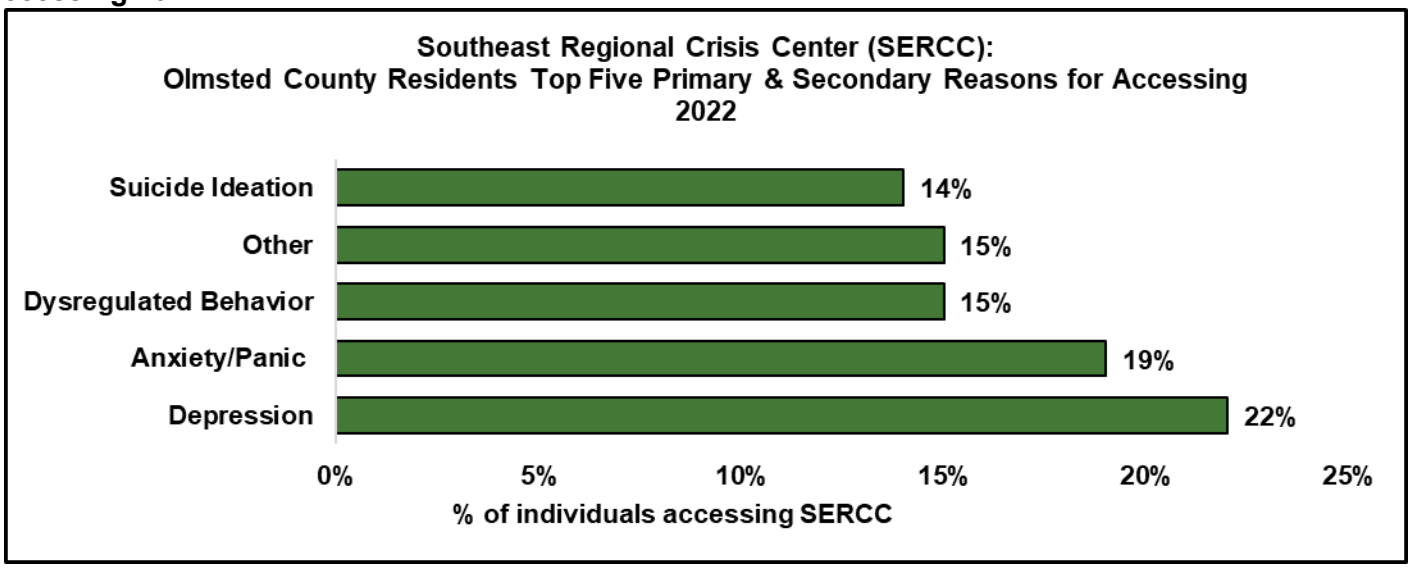
	Self-Harm		**Suicide Ideation**		**Suicide Attempt(s)**	
	No	**Yes**	**No**	**Yes**	**No**	**Yes**
Missed school in past 30 days	12.6%	23.0%	15.8%	23.9%	4.3%	8.7%
Negative behaviors in past 12 months	14.8%	38.7%	15.8%	40.5%	**3.7%**	**19.9%**
Experienced emotional distress in past 2 weeks	**2.4%**	**26.5%**	**3.5%**	**28.0%**	1.4%	9.6%
Positive school environment	24.6%	10.9%	26.5%	11.1%	9.5%	3.2%
Feel safe at school	44.9%	17.0%	47.7%	18.2%	22.0%	5.3%
Feel safe at home	55.4%	18.8%	54.7%	20.4%	28.7%	6.6%
Bullied in past 30 days	**9.8%**	**34.0%**	11.8%	34.4%	2.9%	13.1%
Have a physical disability	19.0%	29.8%	20.6%	30.6%	7.1%	11.1%
Ever treated for mental health problem	13.7%	41.0%	14.3%	45.5%	4.2%	18.2%
Skipped a meal in past 30 days	19.9%	47.1%	21.3%	50.0%	7.2%	26.5%
Have an adult they can talk to	45.1%	17.7%	50.2%	18.6%	22.1%	6.0%
Experienced relationship violence	**15.5%**	**50.0%**	**16.7%**	**52.6%**	**4.5%**	**25.6%**
Ever had an incarcerated guardian	18.1%	36.7%	19.1%	40.7%	5.9%	18.8%
Gambled in past 12 months	18.7%	25.7%	20.2%	26.4%	6.8%	9.6%
Used any tobacco products in past 30 days	**17.9%**	**51.5%**	**18.8%**	**57.8%**	**5.7%**	**30.6%**
Have binge drank in past 12 months	**19.5%**	**53.6%**	**20.7%**	**57.3%**	**6.5%**	**43.2%**
Used any drugs in past 12 months	17.0%	42.7%	**17.7%**	**48.4%**	**4.9%**	**25.1%**
Physical activity meets recommendations (7 days/week)	22.5%	13.2%	24.2%	13.7%	8.5%	4.5%
Adequate hours of sleep on school nights	26.9%	10.3%	28.7%	11.2%	10.0%	4.1%
Number of Adverse Child Experiences (ACEs)	**None**	**1**	**2**	**3**	**4 or >**	
Self-Harm	9.0%	20.8%	40.1%	55.3%	66.5%	
Suicide Ideation	9.4%	22.9%	43.3%	53.0%	75.6%	
Suicide Attempt	2.3%	6.0%	12.2%	20.7%	47.0%	
Body Mass Index (BMI)	**Normal or under-weight**	**Over-weight**	**Obese**			
Self-Harm	19.9%	24.6%				
Suicide Ideation	20.5%	28.7%	27.5%			

Community Mental Health Resources

Community Mobile Response & Southeast Regional Crisis Center. Community Mobile Response provides qualified counselors to answer any problem 24 hours a day, 365 days a year by phone. The Southeast Regional Crisis Center (SERCC) is a 24/7 walk-in mental health facility designed specifically for people experiencing a mental health crisis for the region. The center provides a calm, safe and welcoming environment. Clients receive immediate help from compassionate staff who are experts in crisis, trauma, and mental health care.

In 2022, the Community Mobile Crisis Response Hotline received 1,766 calls and transferred 616 calls to the Mobile Response team. A total of 580 individuals were served at SERCC through Mobile Response in Olmsted County. Of those served, 272 entered crisis residential services, 523 were referred to stabilization services in the community, and 146 received clinic bridging services through the SERCC. Of the 331 SERCC residential enrollments, 203 were adults and 128 were youth. The average length of stay for adults was 5.9 days and 6.5 days for youth. Youth between the ages of 10-18 years are the largest group accessing SERCC services (38%). Reasons for accessing SERCC are found in Figure 19.

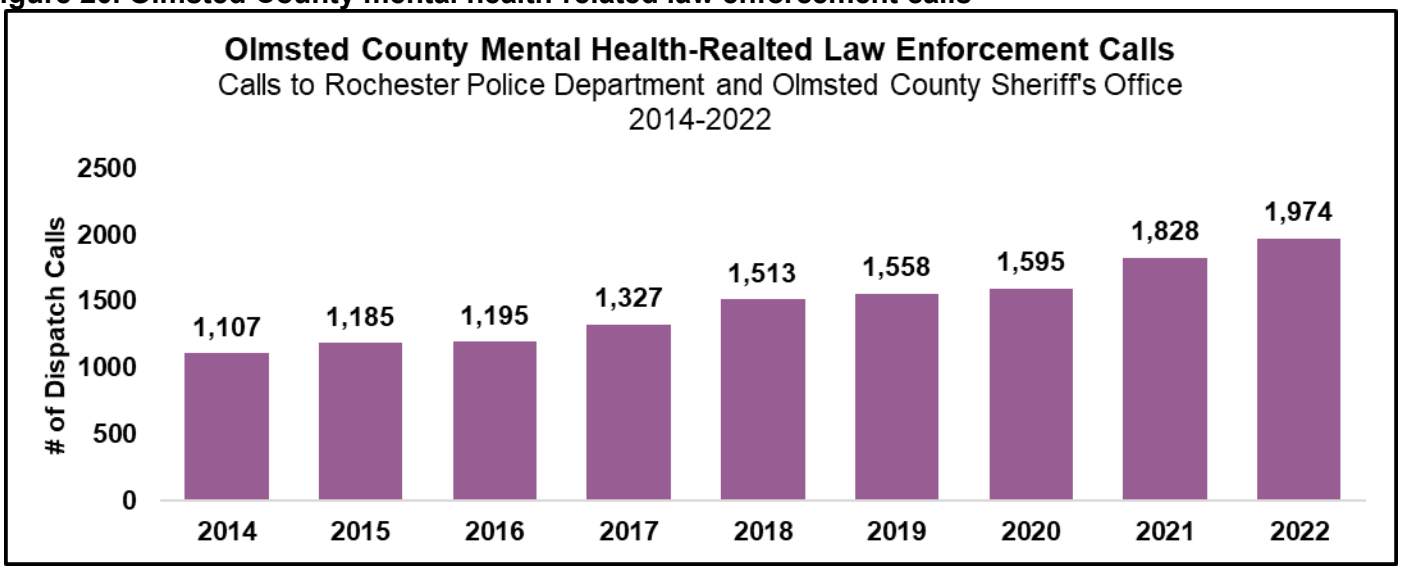
Figure 19. Southeast Regional Crisis Center (SERCC): top five primary & secondary reasons for accessing 2022



Note: Dysregulated Behavior is an inability to regulate and/or control one's emotions.

Mental Health-Related Calls and Community Outreach Team. From 2014-2022, the number of mental health-related calls (person in crisis calls) received by both Rochester Police Department and Olmsted County Sherriff's Office have steadily increased every year. As shown in Figure 20, in 2014 there were 1,107 calls compared to 1,974 calls in 2022 – an increase of 78%. In late 2020, there was an expansion of Olmsted County's Community Outreach Team (COT), a team of social workers that either co-respond with law enforcement or on their own to psych calls received from dispatch. From January 1, 2021 to May 10, 2023, the team responded to 3,319 calls. Among the calls COT responded to during this time, 29% of clients were transported to the emergency department, 11% were reconnected to a social worker the client was already seeing, 3% were transported to SERCC, 1% were referred to Crisis Stabilization Services, 1% were taken to detox, and 1% were arrested and taken to jail. Of note, since COT's expansion, 71% (810) of clients served were diverted from the emergency department (diverted percent only calculated for clients appropriate for emergency department at time of call which was half of all clients) compared to 74% admitted to the emergency department in 2018 when law enforcement had limited on-site social work resources.

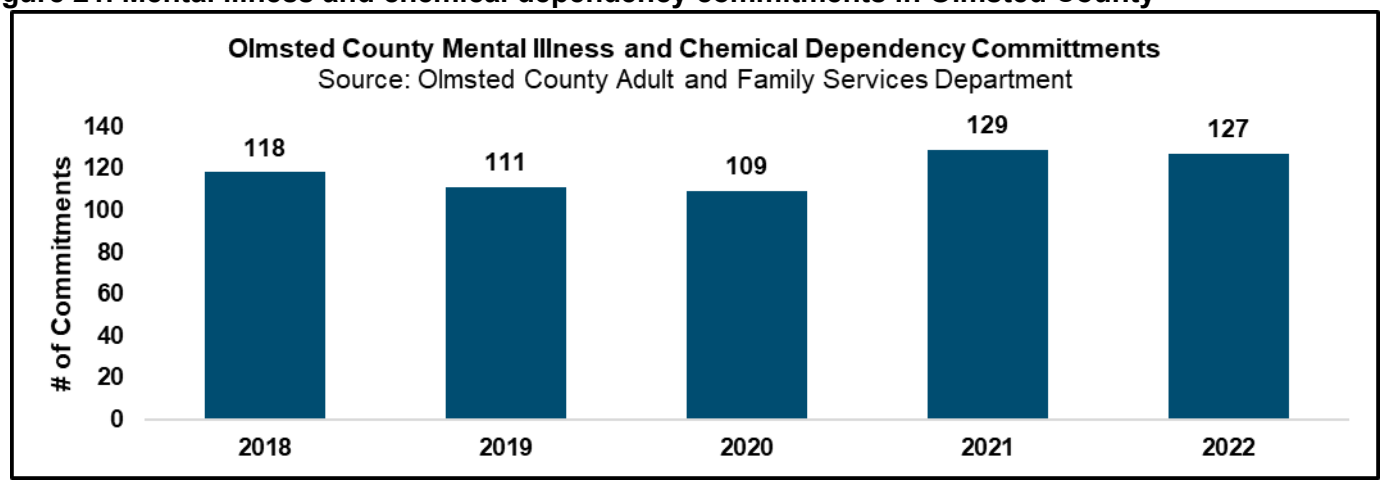
Figure 20. Olmsted County mental health-related law enforcement calls



Dialectical Behavior Therapy (DBT). The Olmsted County DBT Program is a nationally certified intensive outpatient program that serves adult men and women. DBT is an evidenced-based practice shown to be the most effective form of treatment available for reducing suicide and self-injury and improving the quality of life for persons with Borderline Personality Disorder and/or other mental health diagnoses. Olmsted County's Adult Behavioral Health provided DBT to an average of 47.4 residents over age 18 per year from 2018-2022.

Commitments. Commitments are court-ordered inpatient treatment for persons over 16 years of age in Minnesota who are mentally ill, chemically dependent, developmentally disabled, or sexually dangerous. When looking at mental health and chemical dependency commitments, in 2022, Olmsted County's Adult Behavioral Health Unit reported 127 filed for commitment, similar to the 129 filed in 2021. Total commitments filed from 2021-2022 was 256 compared to 220 for 2019-2020. Commitments by year is shown below in Figure 21.

Figure 21. Mental illness and chemical dependency commitments in Olmsted County

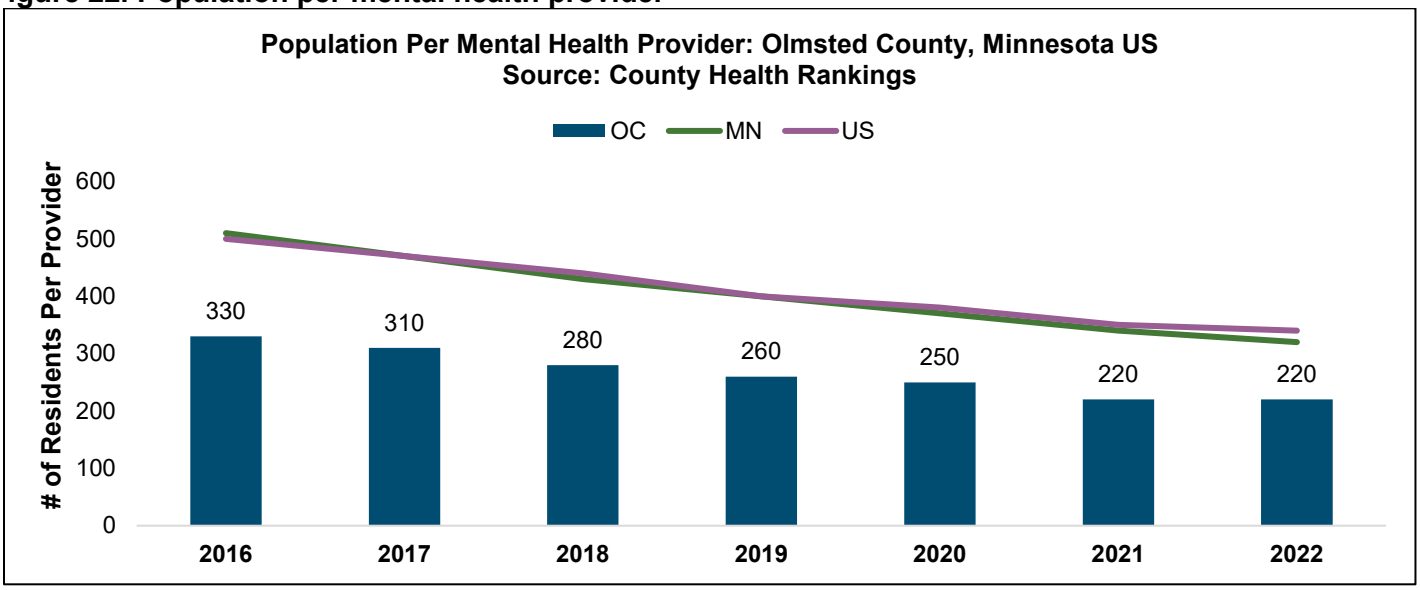


Inpatient Psychiatric and Chemical Dependency. In 2023 at the time of this report, for inpatient chemical dependency beds there are 22 detox beds, 50 halfway house beds (30 for men, 20 for women), and 244 inpatient treatment beds (170 for men, 74 for women). Regarding inpatient psychiatric beds, there are 16 inpatient state-run psych beds at the Rochester Community Behavioral Health Hospital for individuals under full civil commitment and 55 adult inpatient psychiatric beds at Mayo Clinic.

Mental Health Providers

Having an appropriate number of mental health providers in a community is key to treating mental illness. According to County Health Rankings, the number of Olmsted Count residents per registered mental health provider has consistently lowered since 2016, which is positive because it means there are more mental health providers serving Olmsted County than in past years. Olmsted County's ratio is lower than both Minnesota's and the US, which is good. However, this indicator does not address specific caseload or capacity of mental health providers and may also include providers who are licensed but not currently practicing.

Figure 22. Population per mental health provider

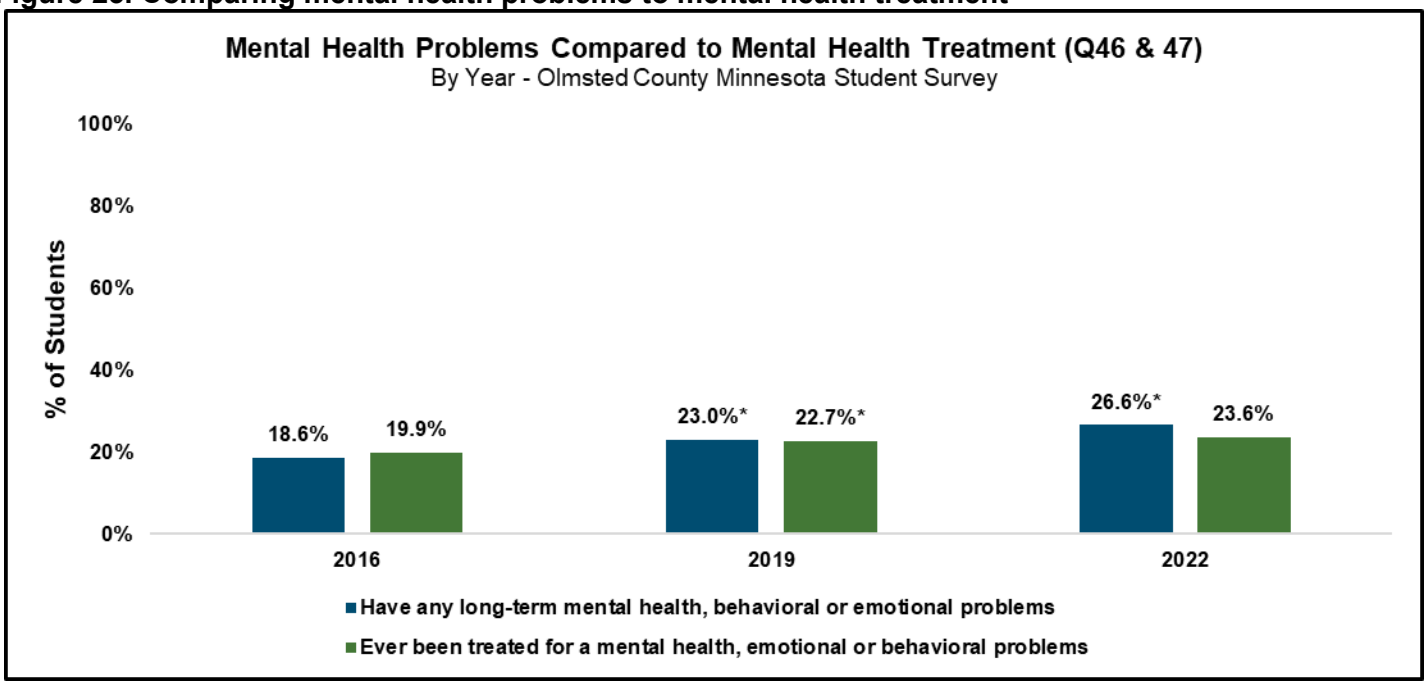


Source: County Health Rankings

Mental Health Treatment: Adolescents

In 2022, 26.6% of adolescents reported a long-term mental health, behavioral or emotional problem but only 23.6% reported ever being treated (Figure 23). Olmsted County experienced a significant increase in students reporting long-term mental health problems, but not a significant increase in students reporting treatment for mental health problems.

Figure 23. Comparing mental health problems to mental health treatment

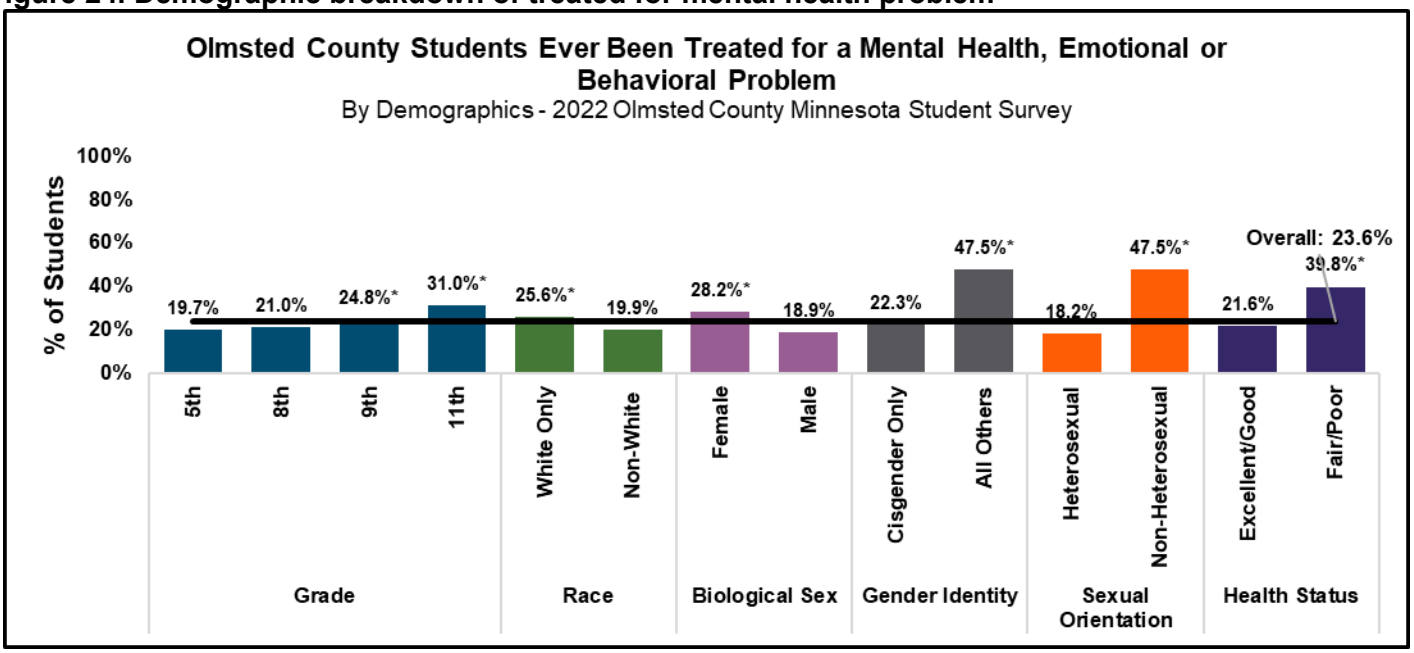


*Statistically significant difference from same question in previous year

With a significant increase for Olmsted County and Minnesota in students reporting a long-term mental health problem in 2022, Minnesota also saw a significant increase in students who had ever been treated for a mental health problem. However, as seen in the Figure 23, the increase from 2019 to 2022 in Olmsted County students ever being treated for a mental health problem was not statistically significant.

As seen in Figure 24, demographic disparities within mental health treatment include grade, race, biological sex, gender identity, sexual orientation, and health status. Most demographic disparities mirror the disparities for reporting a mental health problem. In 2022, 9th graders were significantly more likely to report being treated for mental health problems than 5th or 8th graders, and 11th graders were more likely than any other grade to report treatment for a mental health problem. The greatest disparities were found in gender identity and sexual orientation. Of students who identified as non-heterosexual, 47.5% reported ever having been treated for a mental health problem compared to 18.2% of those who identified as heterosexual.

Figure 24. Demographic breakdown of treated for mental health problem



*Statistically significant difference from other groups in demographic category

Table 6 shows additional analysis between mental health treatment and other social determinants of health. Each can be interpreted as, “of those who missed school at least once in the past 30 days, 26.3% reported ever being treated for a mental health, emotional, or behavioral problem compared to those who did not miss school at least once in the past 30 days, 15.8% reported ever being treated for a mental health, emotional, or behavioral problem.”

Of this list, the social determinants of health with the highest odds ratios, signaling a strong relationship to ever been treated for a mental health, emotional or behavioral health problem, were:

- Emotional distress.
- Relationship violence.
- Binge drinking.
- Drug use.
- Tobacco use.

Another important finding to note is the significant increase in medium/high emotional distress for each additional number of ACEs.

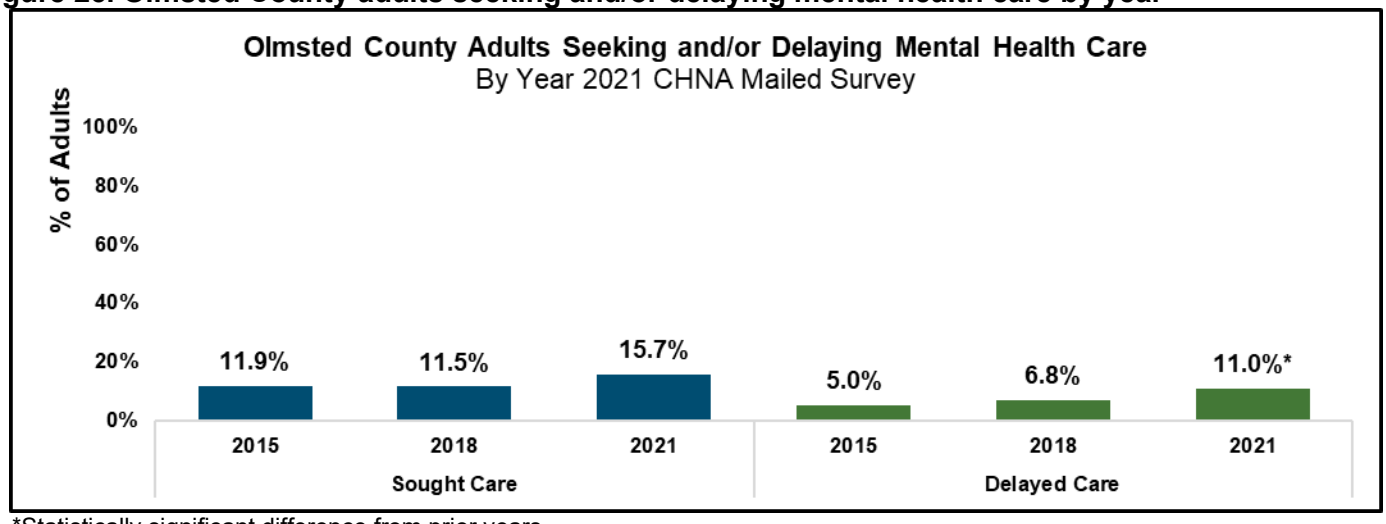
Table 6. Percentage of students who have ever been treated for a mental health, emotional, or behavioral problem
(All differences in the table are statistically significant)

	No	Yes			
Missed school in past 30 days	15.8%	26.3%			
Negative behaviors in past 12 months	22.4%	35.7%			
Experienced emotional distress in past 2 weeks	**9.7%**	**30.6%**			
Positive school environment	26.2%	18.5%			
Feel safe at school	38.1%	21.3%			
Feel safe at home	38.5%	22.6%			
Bullied in past 30 days	16.8%	30.5%			
Involved in after school activities	20.2%	24.5%			
Have a physical disability	21.7%	34.8%			
Skipped a meal in past 30 days	23.2%	36.8%			
Experienced relationship violence	**21.5%**	**50.0%**			
Ever had an incarcerated guardian	23.5%	38.1%			
Used any tobacco products in past 30 days	**23.7%**	**49.1%**			
Have binge drank in past 12 months	**24.9%**	**53.5%**			
Used any drugs in past 12 months	**22.3%**	**47.5%**			
Physical activity meets recommendations (7 days/week)	24.8%	19.0%			
Adequate hours of sleep on school nights	27.5%	18.0%			
	None	**1**	**2**	**3**	**4 or >**
Number of Adverse Child Experiences (ACEs)	14.5%	32.5%	45.9%	49.7%	48.2%
	Normal or underweight	**Over-weight**	**Obese**		
Body Mass Index (BMI)	23.8%	-	29.6%		

Mental Health Treatment: Adults

According to the 2021 CHNA, 15.7% of adults reported seeking a mental health professional. However, 11% of adults reported delaying or foregoing mental health care – a significant increase compared to 2018 (7%) and 2015 (5%).

Figure 25. Olmsted County adults seeking and/or delaying mental health care by year

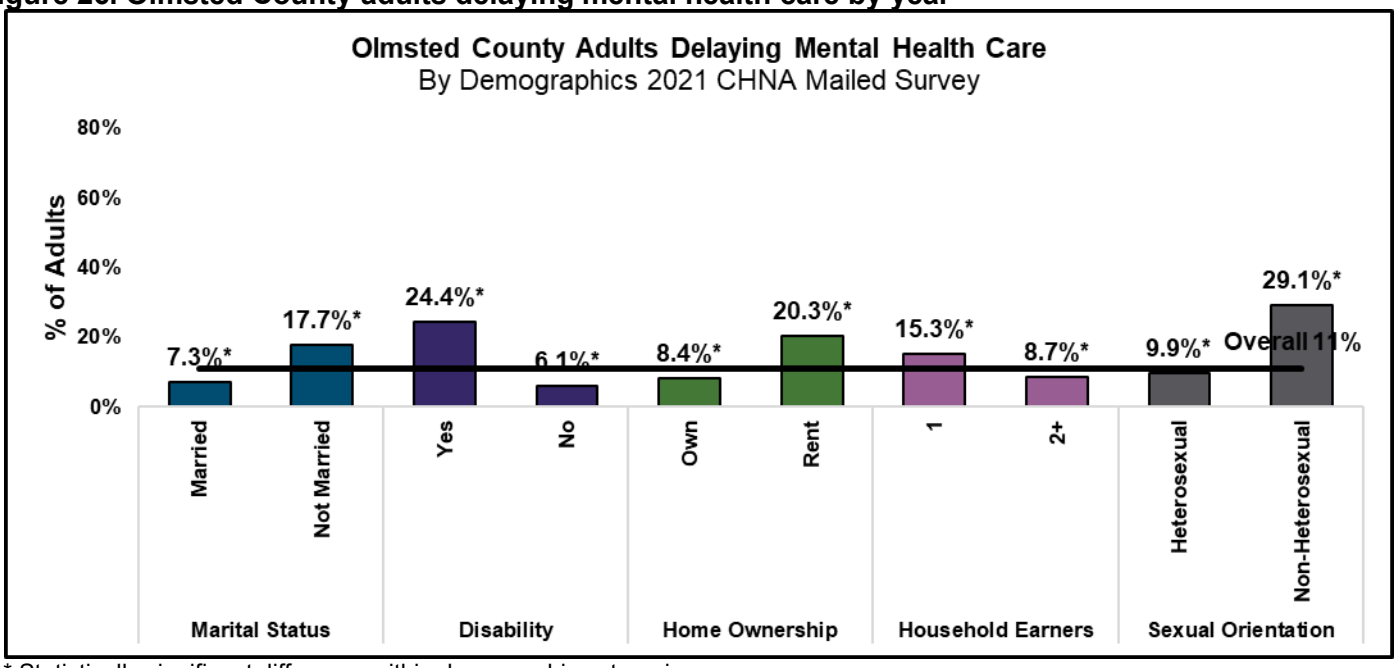


*Statistically significant difference from prior years

Referring to Figure 26, demographic disparities also exist with adults who delay seeking mental health care. According to the 2021 Community Health Needs Assessment, disparities include not being married, having a disability, renting your home, one household earner, and identifying as non-heterosexual. The top four reasons

overall for delaying care were: they could not get an appointment (44.2%), care costs too much (34.6%), they did not know where to go (29.3%), or they had work, family, or other obligations (20.8%).

Figure 26. Olmsted County adults delaying mental health care by year



* Statistically significant difference within demographic categories

Table 7 shows relationships among adults delaying mental health care with other social determinants of health and can be interpreted as, “among adults who experienced financial stress, 19.4% reported delayed mental health care compared to those adults who did not experience financial stress, 6.4% reported delayed mental health care.”

Of this list, the social determinants of health with the highest odds ratios (and only those >1.00), signaling a strong relationship to adults who delayed mental health care, were:

- Mental health condition.
- Financial stress.
- Drug use.
- Multiple chronic conditions.

Table 7. Percentages of adults who delayed mental health care by social determinant of health indicator

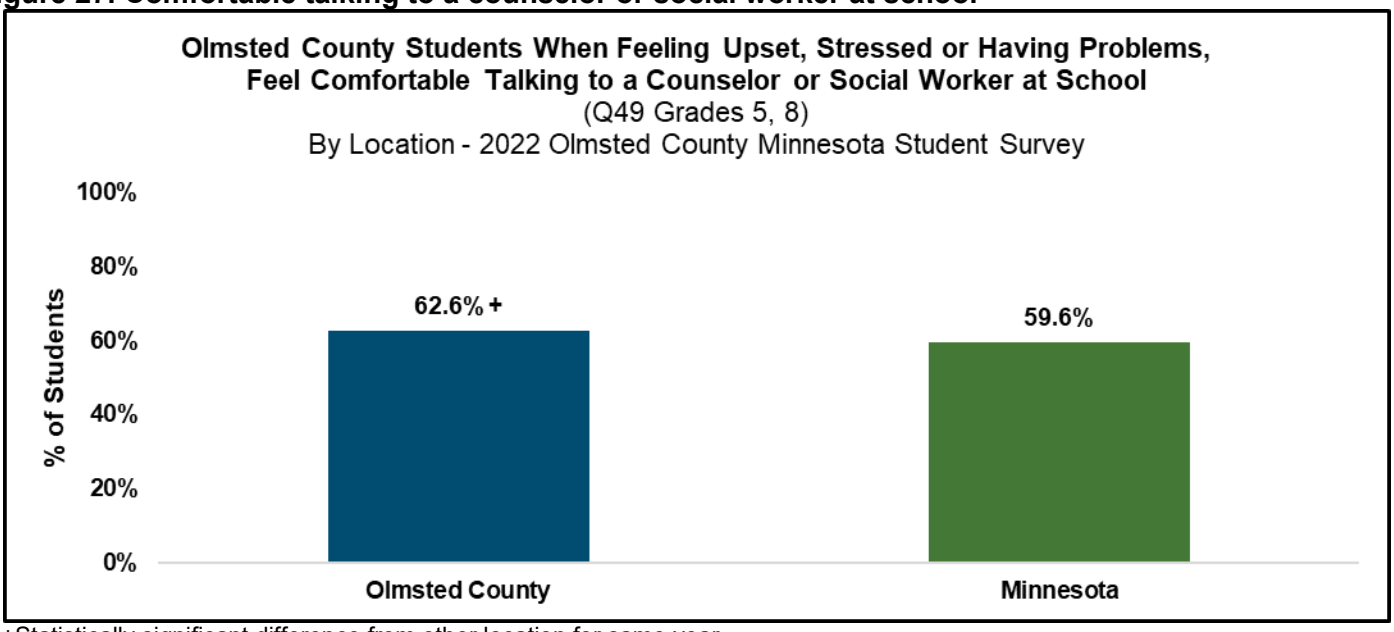
(All differences in the table are statistically significant)

	Yes	No
Experience financial stress	**19.4%**	**6.4%**
Have a mental health condition	**26.5%**	**3.1%**
Negative WHO Wellbeing Index Score (<51)	28.1%	6.6%
Used drugs in the last 30 days	**18.0%**	**9.8%**
Report positive community inclusiveness	7.2%	18.2%
Report positive community resiliency	9.3%	23.3%
Have multiple chronic conditions	**14.1%**	**8.7%**
Recommended physical activity	6.3%	14.9%
Report social connectedness	8.2%	16.7%

Mental Health Treatment: Social Connections

According to the CDC, people with social connection in terms of having stable and supportive relationships "are more likely to make healthy choices and to have better mental and physical health outcomes. They are also better able to cope with hard times, stress, anxiety, and depression" (CDC: How Does Social Connectedness Affect Health, 2023). In 2022, a question was added to the 5th and 9th grade version of the Minnesota Student Survey assessing social connectedness with adult social supports at school. Students in Olmsted County were significantly more likely to report feeling comfortable talking to a counselor or social worker than students in Minnesota as a whole (62.6% compared to 59.6%) as shown in Figure 27.

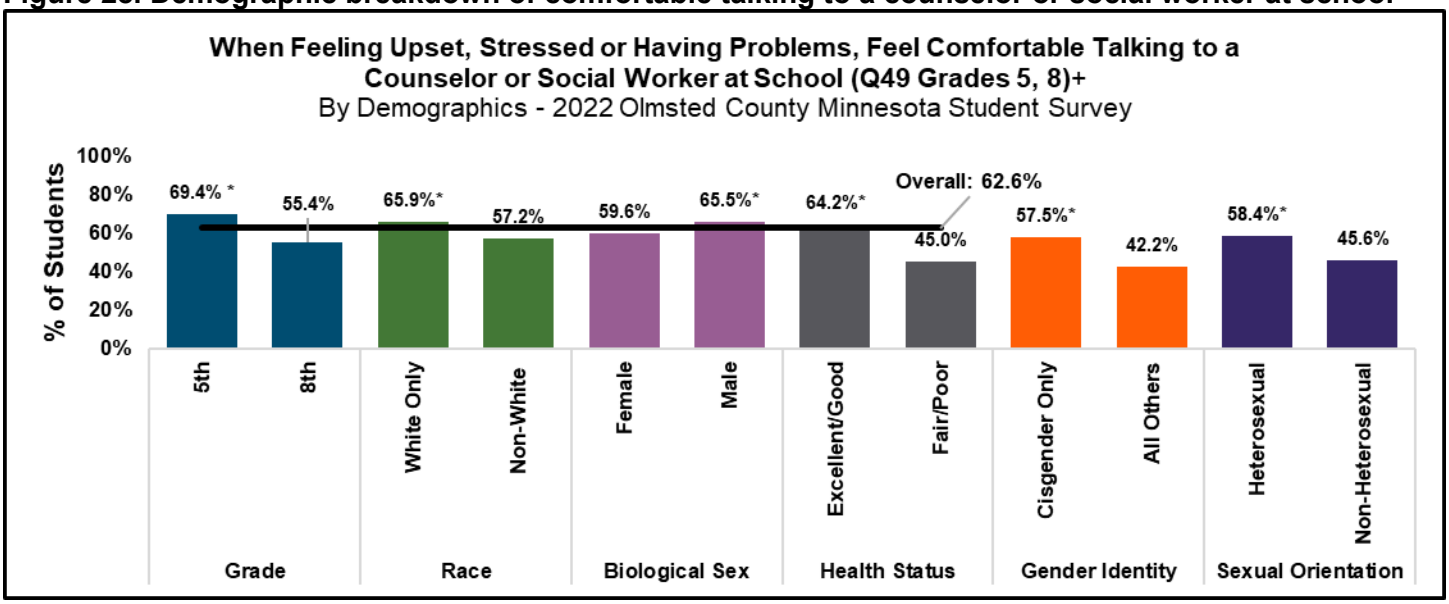
Figure 27. Comfortable talking to a counselor or social worker at school



+Statistically significant difference from other location for same year

When looking at disparities, there continues to be a similar pattern to other mental health questions. Students in 5th grade were significantly more likely to report feeling comfortable talking to a counselor or social worker than 8th graders (69.4% compared to 55.4%). Students identifying as cisgender and heterosexual indicated they felt more comfortable talking to a counselor or social worker than those who did not identify as cisgender or heterosexual. It is important to note that 5th graders were not asked the gender identity or sexual orientation questions, thus the demographics in Figure 28 are based on only 8th graders.

Figure 28. Demographic breakdown of comfortable talking to a counselor or social worker at school



*Statistically significant difference from other groups in demographic category
+Note: 5th graders do not answer questions about gender identify or sexual orientation, so they are excluded from the respective percentages above

Table 8 shows additional analysis between being comfortable talking to a counselor and other social determinants of health. Each can be interpreted as, “of those who missed school at least once in the past 30 days, 60.7% reported feeling comfortable or somewhat comfortable talking to a counselor or social worker at school when they are feeling upset, stressed, or having problems compared to those who did not miss school at least once in the past 30 days, 67.2% reported feeling comfortable or somewhat comfortable talking to a counselor or social worker at school when they are feeling upset, stressed, or having problems.”

Of this list, the social determinants of health with the highest odds ratios (and only those >1.00), signaling a strong relationship to adults who delayed mental health care, were:

- Experience any emotional distress.
- Relationship violence.
- Negative behaviors.
- Bullied.
- Incarcerated parent/guardian.

Table 8. Percentage of students who feel comfortable or somewhat comfortable talking to a counselor or social worker at school when they are feeling upset, stressed, or having problems
(All differences in the table are statistically significant)

	No	Yes			
Missed school in past 30 days	67.2%	60.7%			
Negative behaviors in past 12 months	**59.1%**	**40.6%**			
Experienced emotional distress in past 2 weeks	**75.0%**	**47.3%**			
Positive school environment	51.1%	80.9%			
Feel safe at school	40.6%	66.1%			
Feel safe at home	43.5%	64.0%			
Bullied in past 30 days	**70.1%**	**56.4%**			
Ever treated for mental health problem	63.9%	57.9%			
Have an adult they can talk to	23.1%	65.6%			
Ever experienced relationship violence	56.6%	35.6%			
Ever had an incarcerated guardian	**55.7%**	**45.9%**			
Physical activity meets recommendations (7 days/week)	12.6%	19.2%			
Adequate hours of sleep on school nights	55.5%	70.3%			
	None	**1**	**2**	**3**	**4 or >**
Number of Adverse Child Experiences (ACEs)	61.5%	51.4%	29.3%	38.2%	42.9%

CONNECTIONS WITH OTHER CHIP PRIORITIES

The three Olmsted County Community Health Improvement Plan priorities for 2024-2026 are Mental Health, Access to Care, and Drug Use. This specific report outlines mental health which is inextricably linked with drug use and access to care as evidenced in the statistically significant indicator tables where frequently drug use and access to care were found to be negatively associated with mental health. For more detailed information on how mental health is linked with the other two priorities, please refer to the respective data profiles.

Conclusion

Top Three Olmsted County Mental Health Trends:

1. Mental health illness and emotional distress have steadily increased for both adults and adolescents in the past five years.
2. Disparities exist in Olmsted County residents who experience mental health illnesses, especially among the non-heterosexual and non-cisgender populations.
3. Community mental health providers and services are experiencing increased volume of mental health-related calls and services provided.

Overall, clinically diagnosed anxiety and depression increased among both adults and adolescents from 2015-2020. Rates of depression for Olmsted County are similar to Minnesota. Adults reported higher levels of mental illness through the 2021 Community Health Needs Assessment mailed survey and adolescents reported higher levels of emotional distress, long-term mental health problems, self-harm and ever considering suicide in the 2022 Minnesota Student Survey. Although suicide numbers trended slightly up, they are now back to pre-pandemic levels. The slight increase in student suicide attempts was not significant and the rate remains lower than Minnesota.

In 2021, a higher percentage of adults reported seeking mental health care, but a higher proportion also reported delaying mental health care according to the Community Health Needs Assessment mailed survey. The number of providers to resident ratio in Olmsted County continues to decline. Additional community services have been added in the past three years such as the Southeast Regional Crisis Center (SERCC) and an expansion of Olmsted County's Community Outreach Team that serve those experiencing mental health crises.

Consistent demographic and social determinant of health disparities across adults and adolescents reporting mental health issues (any mental health issue, anxiety, and depression) are listed below. The demographic group listed reported statistically significant higher levels of mental health issues.

Adults

Demographic Disparities	**Social Determinants of Health Disparities**
• Ages 18-34 years. • Females. • Not married. • Disabled. • Fair/poor health status. • Non-heterosexual. • Rochester zip codes. • Renters. • Working residents. • Households with income less than $35,000. • Households with a single income earner.	• Experience financial stress. • WHO Scores less than 50. • Using drugs in the past 30 days. • Has timely personal health services (access to care). • Community inclusiveness. • Lack of transportation in community (community mobility). • Community resiliency. • Experiencing food insecurity. • Having multiple chronic conditions. • Recommended physical activity. • Independently perform activities of daily living. • Social connectedness.

Adolescents

Demographic Disparities	Social Determinants of Health Disparities
• 11th graders. • Females. • Non-cisgender. • Non-heterosexual. • Fair/poor health.	• Missed school in past 30 days. • Not having a positive school environment. • Not feeling safe at school. • Not feeling safe at home. • Been bullied in past 30 days. • Having a physical disability. • Ever treated for mental health problem. • Do not meet physical activity recommendation of seven days per week. • Skipped meal in past 30 days. • Do not meet recommendation for hours of sleep on school nights. • Cannot talk to adult about problems. • Experienced emotional distress in past two weeks. • Have experienced relationship violence. • Have ever had an incarcerated guardian. • Tobacco use. • Drug use. • Binge drinking. • Negative behaviors. • ACEs.

2021 Community Health Needs Assessment – Statistically Significant Student Mental Health Crosstabs

Olmsted County Public Health Services

Note: Numbers in parentheses note which groups had statistically significant difference with the group identified in the row.
For example, looking at the 4th row under "Grade": (8,9) indicates that there were statistically significant differences between those in 11th grade and both those in 8th grade (8) and those in 9th grade (9) for the factors in question.

* - Fifth grade not asked # - Ninth and eleventh grade not asked ^ - Fifth and eighth grade not asked	Mental Health Problems*	Mental Health Treatment	Uncomfortable Talking to Counselor or Social Worker#	Experienced Emotional Distress*	Self-harm*	Suicide Ideation*	Attempted Suicide*
Grade							
5th							
8th			X				
9th		X (5,8)					
11th	X (8,9)	X (5,8,9)		X (8)		X (8,9)	X (8,9)
Race							
White Only	X	X					
Non-white			X	X			X
Ethnicity							
Hispanic							
Non-Hispanic							
Biological Sex							
Female	X	X	X	X	X	X	X
Male							
Gender Identity*							
Cisgender Only							
Non-Cisgender	X	X	X	X	X	X	X
Sexual Orientation*							
Heterosexual							
Non-Heterosexual	X	X	X	X	X	X	X
Health Status							
Excellent/Very Good/Good Health							
Fair/Poor Health	X	X	X	X	X	X	X

*- Fifth grade not asked # - Ninth and eleventh grade not asked ^ - Fifth and eighth grade not asked	Mental Health Problems	Mental Health Treatment	Uncomfortable Talking to Counselor or Social Worker#	Experienced Emotional Distress*	Self-harm	Suicide Ideation	Attempted Suicide
Missed school in past 30 days							
No							
Yes	X	X	X	X	X	X	X
Positive school environment							
No	X	X	X	X	X	X	X
Yes							
Feel safe at School							
Disagree	X	X	X	X	X	X	X
Agree							
Feel safe at home							
Disagree	X	X	X	X	X	X	X
Agree							
Bullied in past 30 days							
No							
Yes	X	X	X	X	X	X	X
Involved in after school activities							
No							
Yes		X					
Have a physical disability							
No							
Yes	X	X		X	X	X	X
Treated for mental health problem							
No							
Yes	X		X	X	X	X	X
Meeting physical activity recommendation							
No	X	X	X	X	X	X	X
Yes							
Skipped meal in past 30 days							
No							
Yes	X	X		X	X	X	X
Positive school environment							
No	X	X	X	X	X	X	X
Yes							

*- Fifth grade not asked # - Ninth and eleventh grade not asked ^ - Fifth and eighth grade not asked	Mental Health Problems	Mental Health Treatment	Uncomfortable Talking to Counselor or Social Worker#	Experienced Emotional Distress*	Self-harm	Suicide Ideation	Attempted Suicide
Feel safe at school							
Disagree	X	X	X	X	X	X	X
Agree							
Feel safe at home							
Disagree	X	X	X	X	X	X	X
Agree							
Bullied in past 30 days							
No							
Yes	X	X	X	X	X	X	X
Involved in after school activities							
No							
Yes		X					
Have a physical disability							
No							
Yes	X	X		X	X	X	X
Treated for mental health problem							
No							
Yes	X		X	X	X	X	X
Meeting physical activity recommendation							
No	X	X	X	X	X	X	X
Yes							
Skipped meal in past 30 days							
No							
Yes	X	X		X	X	X	X
Meeting fruit and vegetable recommendation*							
No			X				
Yes							
Meeting sleep recommendation							
No	X	X	X	X	X	X	X
Yes							
Can talk to adult about problems							
No	X		X	X	X	X	X
Yes							

*- Fifth grade not asked # - Ninth and eleventh grade not asked ^ - Fifth and eighth grade not asked	Mental Health Problems	Mental Health Treatment	Uncomfortable Talking to Counselor or Social Worker#	Experienced Emotional Distress*	Self-harm	Suicide Ideation	Attempted Suicide
Experienced emotional distress in past two weeks*							
No							
Yes	X	X	X		X	X	X
Experienced relationship violence*							
No							
Yes	X	X		X	X	X	X
Ever had incarcerated guardian*							
No							
Yes	X	X	X	X	X	X	X

*- Fifth grade not asked # - Ninth and eleventh grade not asked ^ - Fifth and eighth grade not asked	Mental Health Problems	Mental Health Treatment	Uncomfortable Talking to Counselor or Social Worker#	Experienced Emotional Distress	Self-harm	Suicide Ideation	Attempted Suicide
Gambled in past 12 months*							
No							
Yes				X	X	X	X
Used any tobacco products in past 30 days*							
No							
Yes	X	X		X	X	X	X
Binge drank in past in past 12 months*							
No							
Yes	X	X		X	X	X	X
Negative behaviors in past 12 months*							
No							
Yes	X	X	X	X	X	X	X
Used any drugs in past 12 months*							
No							
Yes	X	X		X	X	X	X
Positive sexual health^							
No							
Yes							
Body Mass Index (BMI)*							
Normal or underweight (1)							
Overweight (2)				X (1)	X (1)	X (1)	
Obese (3)		X (1)				X (1)	
Adverse Childhood Experiences (ACEs)*							
0							
1	X (0)	X (0)	X (0)	X (0)	X (0)	X (0)	X (0)
2	X (0,1)	X (0,1)	X (0,1)	X (0,1)	X (0,1)	X (0,1)	X (0,1)
3	X (0,1)	X (0,1)	X (0,1)	X (0,1)	X (0,1,2)	X (0,1)	X (0,1,2)
4+	X (0,1,2,3)	X (0,1)	X (0)	X (0,1,2)	X (0,1,2,3)	X (0,1,2,3)	X (0,1,2,3)

2021 Community Health Needs Assessment – Statistically Significant Adult Mental Health Crosstabs

Olmsted County Public Health Services

	WHO Well-being Score Less than 51	Any Mental Health Issue	Anxiety	Depression	Delayed Mental Health Care
Age					
18-34 (1)		X (2,3,4)	X (2,3,4)	X (2,3,4)	X (3,4)
35-49 (2)			X (4)		X (4)
50-64 (3)					
65+ (4)					
Race/Ethnicity					
White, Non-Hispanic					
All others					
Gender					
Male					
Female		X	X	X	
Children in household					
Yes					
No					
Birthplace					
U.S.					
Non-U.S.					
Marital status					
Married					
Not Married	X	X	X	X	X
Disability					
Yes	X	X	X	X	X
No					
Education					
No college	X				
Some college					
Residence (Based on zip code)					
Rochester	X		X		
Non-Rochester					
Household income					
<$35K	X	X	X	X	
$35K+					
Health status					
Excellent/Very good/Good					
Fair/Poor	X	X	X	X	
Home ownership					
Own					
Rent	X	X	X	X	X
Work status					
Retired					
Not retired	X	X	X	X	
# of household income earners					
1	X	X	X	X	X
2+					

	WHO Well-being Score Less than 51	Any Mental Health Issue	Anxiety	Depression	Delayed Mental Health Care
Sexual orientation					
Heterosexual					
Non-heterosexual	X	X	X	X	X
Financial stress					
Yes	X	X	X	X	X
No					
Mental health					
Yes	X			X	X
No					
WHO Wellbeing (Less than 51)					
Yes		X	X	X	X
No					
Tobacco use					
Yes	X		X	X	
No					
Binge drinking					
Yes					
No					
Drug use					
Yes	X	X	X	X	X
No					
Access to care					
Yes					
No	X	X	X	X	
Community inclusiveness					
Yes					
No		X		X	X
Community mobility					
Yes					
No	X	X	X	X	
Community resiliency					
Yes					
No		X	X	X	X
Diabetes					
Yes	X				
No					
Distracted driving					
Yes		X	X		
No					
Food secure					
Yes					
No	X	X	X	X	
Fruit and vegetable consumption					
Yes					
No					
Healthy homes					
Yes					
No			X		

	WHO Well-being Score Less than 51	Any Mental Health Issue	Anxiety	Depression	Delayed Mental Health Care
Healthy homes – no radon					
Yes					
No					
Hypertension					
Yes					
No					
Insurance coverage					
Yes					
No					
Multiple chronic conditions					
Yes	X	X	X	X	X
No					
Overweight/obesity					
Yes					
No					
Physical activity					
Yes					
No	X	X	X	X	X
Safe from fear and violence					
Yes					
No					
Seat belt use					
Yes					
No					
Senior independence					
Yes					
No			X		
Independence					
Yes					
No	X	X	X	X	
Social connectedness					
Yes					
No		X	X	X	X

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