Goodhue County 2021 Community Health Needs Assessment Survey Summary

Introduction

The 2021 Goodhue County Community Health Needs Assessment Survey was conducted to learn about the health of Goodhue County adults. Similar surveys were previously conducted in 2015 and 2018. The data presented in this summary offers some key highlights from the survey findings in the areas of obesity, chronic disease, mental health, access to care, healthy eating, food security, physical activity, tobacco and alcohol use, and driving behaviors. Goodhue County Health and Human Services (GCHHS) requested analyses from the Minnesota Department of Health to monitor differences based on demographic and health status categories found in the 2018 survey. There were not enough responses from people of color in 2018 or 2021 to monitor differences by race/ethnicity. There were also not enough responses from adults aged 18–24 in 2018 or 2021, so the youngest age group analyzed was 25–34. Exploratory analyses were conducted on some new 2021 survey questions to identify potential differences. This summary includes differences for the following demographic and health status categories on some key questions:

- Gender
- Age (adults ages 25–34, 35–44, 45–54, 55–64, 65–74, and 75+)
- Annual household income (less than $35,000, $35,000–$49,999, $50,000–$74,999, $75,000–$99,999, $100,000–$149,999, and $150,000 or more)
- History of mental illness
- Weight status based on self-reported BMI (not overweight or obese, overweight but not obese, and obese)

In addition, survey results were compared to a 2021 convenience sample of 130 adults who completed the same survey in settings where they receive services:

- Adults who filled out the survey in the GCHHS lobby, C.A.R.E. Clinic, or a food shelf

The percentages referenced in this summary are rounded to the nearest whole number.

Interpretation and limitations

In this summary, a threshold of 10 percentage points or more is used to identify potential differences between groups. However, caution should be used when interpreting the findings and reporting differences between population groups, as some estimates are based on the perceptions and experiences of relatively few individuals. Community residents, specifically from groups underrepresented in the survey, such as people of color and adults aged 24 and younger, should be engaged in reviewing and interpreting the survey results to ensure the findings align with the lived experience of Goodhue County residents. Additional data collection activities (e.g., interviews, focus groups, and other surveying) should be used to more closely examine the potential differences between groups suggested by these findings and topics of interest to community residents.

A note about health equity

GCHHS is interested in understanding health inequities in the county. The Minnesota Department of Health defines health equity as "the opportunity for every person to realize their health potential—the highest level of health possible for that person—without limits imposed by structural inequities."[1] Health inequities arise from disparities or differences in health between groups as a result of varying social, economic, environmental, geographic, and political conditions, also known as the social determinants of health. Certain health disparities are the consequence of genetic or biological differences between groups, while health inequities result from social conditions that can be changed through the implementation of policies and practices.

The data referenced in this summary and the full survey results offers a starting point to identify potential health disparities between groups and considers the need for additional research to better understand and address health inequities. As previously noted, there are limitations to these survey data. Therefore, the discussion focused on health inequities should be informed by other data collection activities, analysis of the factors that influence health in Goodhue County (e.g., geography, employment, and access to resources and services) and feedback from community residents, particularly groups who were not well represented among the survey respondents.

[1] Minnesota Department of Health. (2014). Advancing Health Equity Legislative Report. Retrieved from the Minnesota Department of Health website: https://www.health.state.mn.us/communities/equity/reports/index.html

Overall, potential differences between groups

This section highlights some potential differences between respondent groups that are described in greater detail in the following "key findings" section of the summary.

Overweight/obesity

- Respondents from the convenience sample, who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf, were about as likely as the general population of adults 25+ to have been **told by a health care professional that they are obese,** but more likely to have a self-reported **body mass index (BMI) that puts them in the obese category**.

Chronic conditions

- **High blood pressure/hypertension** was more often reported among respondents who are obese or overweight, aged 65+, and from households making $35,000–$49,999.
- **Asthma** was more often reported by respondents from the convenience sample, who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf, than the general population of adults 25+.
- **High cholesterol or triglycerides** was more often reported by respondents from the convenience sample, who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf.
- **Diabetes** was more often reported among respondents with household incomes between $100,000 and $149,000.

Mental health

- The reported **number of mentally unhealthy days** was higher among respondents from the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf; respondents who reported any history of mental illness; and respondents who only sometimes, rarely, or never get the social and emotional support they need.
- **Depression** was more often reported among respondents who are female, respondents from households that make less than $35,000, and respondents who rent rather than own their home. Respondents who participated in the convenience sample survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf were nearly twice as likely as the general population of adults 25+ to report depression.

- **Anxiety or panic attacks** were reported more than twice as often by respondents from the convenience sample, who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf, than the general population of adults 25+. Respondents from households that make less than $35,000 and those who rent rather than own their home were also more likely to report anxiety or panic attacks.

Access to care

- Respondents from the convenience sample, who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf, were more likely than the general population of adults 25+ to **have delayed or not sought both medical and mental health care**.

- Among both the general population of adults 25+ and the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf the most common reason for **delaying or not seeking medical care** was respondents not thinking the issue was serious enough.

- While the most common reason for **delaying or not seeking mental health care** among the general population of adults 25+ was respondents not thinking the issue was serious enough, among the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf it was being too nervous or afraid.

Food security

- Concerns about **running out of food** before having money to buy more were most often reported among respondents from households that make less than $35,000 and those who rent rather than own their home. Respondents from the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf were more likely than any subgroup within the general population of adults 25+ to report often or sometimes worrying about running out of food.

Eating habits

- **Eating a home-cooked meal at least seven times a week** was most likely to be reported by respondents aged 55–64, and least likely among those aged 45–54.

Physical activity

- Respondents aged 25–34, those whose household income is between $50,000 and $74,999, and those who are not overweight were the most likely to report getting at least 30 minutes of **moderate physical activity** at least five days a week.
- Respondents aged 25–34, those whose household income is between $50,000 and $74,999 or $150,000 or more, and those who are not overweight were the most likely to report getting at least 20 minutes of **vigorous physical activity** at least three days a week.
- **Lack of time** and **lack of self-discipline or willpower** were self-identified most often as a big problem preventing respondents from being more physically active. Respondents aged 35–44, those with the highest household incomes, and those who only sometimes receive the social or emotional support they need were most likely to say that lack of time is a big problem.
- Respondents with lower household incomes were most likely to identify **illness, injury, or disability** as a big problem preventing them from being more physically active.
- Respondents from the convenience sample, who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf, were more likely than the general population of adults 25+ to say that **cost** is a big problem preventing them from being more physically active.
- Respondents from the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf, and respondents aged 45–54 were most likely to identify **not having anyone to exercise with** as a big problem preventing them from being more physically active.

Tobacco use

- Respondents who participated in the convenience sample survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf, were more likely than the general population of adults 25+ to report **current tobacco use** of some kind.
- **Current cigarette smoking** was most likely to be reported among respondents with household incomes below $50,000 and those who rent rather than own their homes. Respondents who participated in the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf were more likely than those in the general population to report that they currently smoke cigarettes.

Alcohol use

- **Binge drinking** was reported at a higher rate among the general population of adults 25+ than the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf.

Driving behaviors

- Younger respondents were more likely to report that they **read or send texts** while driving.

Key findings

Caution should be used when interpreting any potential differences encompassing adults aged 25–34, as these estimates are based on the responses of a relatively small number of residents.

Overweight/obesity

Obesity

Nineteen percent of respondents reported that they have been told by a health care professional that they are obese. That is slightly more than the rate in 2018.

Thirty-five percent of respondents were categorized as obese based on their body mass index (BMI), which was calculated using respondents' self-reported weight and height. Thirty-six percent of respondents in 2018 were categorized as obese based on BMI.

Thirty-four percent of respondents were categorized as overweight but not obese, based on BMI, and 31% were categorized as not overweight or obese. These rates are similar to 2018 (36% and 28%, respectively).

Potential differences between population groups

- Nineteen percent of respondents in the convenience sample, who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf,** reported that they have been told by a health care professional that they are obese, compared to 25% of the convenience sample in 2018.
- Almost half of the respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** were categorized as obese (46%), based on their calculated BMI. This rate was 57% for the convenience sample in 2018.

Note: Throughout the rest of the report, results are sometimes disaggregated by whether respondents are obese, overweight but not obese, or not overweight or obese. This disaggregation for analysis is based on BMI calculations, using self-reported height and weight, and not based on whether respondents indicated that a health professional had diagnosed them as overweight or obese.

Chronic conditions

High blood pressure/hypertension

Thirty-one percent of respondents reported that they have been told by a health care professional that they had high blood pressure/hypertension. Similarly, 32% of respondents reported high blood pressure/hypertension in 2018.

Potential differences between population groups

- The prevalence of high blood pressure generally increased with age. **Respondents aged 65–74** were most likely to report high blood pressure/hypertension (61%) followed by respondents aged 75+ (58%), 55–64 (35%), and 45–54 (26%), in contrast to those aged 35–44 (8%) and 25–34 (6%). These results may indicate a decrease in rates of high blood pressure/hypertension in the 35–44 age group (from 22% to 8%) since 2018. In 2018, respondents aged 75+, 65–74, 55–64, 45–54, and 35–44 were all more likely to report high blood pressure/hypertension (66%, 51%, 46%, 26%, and 22%, respectively) than those aged 25–34 (0%).

- Respondents from **households that make $35,000–$49,999** were more likely to report having high blood pressure/hypertension (46%) than other respondents. Those with household incomes of $150,000 or more were less likely than other respondents to report hypertension (8%). These results are similar to 2018, when 46% of respondents with the lowest household income reported hypertension (46% for incomes under $25,000 and 43% for incomes from $25,000 to $34,999).

- Respondents who are **obese** were more likely to report high blood pressure/hypertension (45%) than all respondents (31%), those who are not overweight or obese (16%), or those who are overweight (28%). This is similar to 2018, when the high blood pressure/hypertension rates were 47% for obese respondents, 27% for overweight respondents, and 16% for respondents who were not overweight or obese.

High cholesterol or triglycerides

Thirty-two percent of respondents reported that they have been told by a health care professional that they had high cholesterol or triglycerides. This is somewhat higher than in 2018, when 26% of respondents reported having high cholesterol/triglycerides.

Potential differences between population groups

- Eighteen percent of respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** reported having been told by a health care professional that they had high cholesterol/ triglycerides, substantially less than the general population of adults 25+. In 2018, 17% of the convenience sample reported the same.

Asthma

Nine percent of respondents reported that they have been told by a health care professional that they have asthma. This is similar to 2018, when 8% of respondents reported having asthma.

Potential differences between population groups

- Twenty-two percent of respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** reported that they have been told by a health care professional that they have asthma. Twenty-three percent of the convenience sample in 2018 reported the same.

Heart trouble or angina

Eight percent of respondents reported that they have been told by a health care professional that they have heart trouble or angina, which is similar to the rate reported in 2018 (10%) and similar to the 2021 convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf (9%).

Diabetes and pre-diabetes

Nine percent of respondents reported that they have been told by a health care professional that they have diabetes, which is similar to the rate reported in 2018 (8%). Twelve percent reported that they have been told they have pre-diabetes, which is the same as the rate in 2018.

Potential differences between population groups

- Adults with **household incomes from $100,000 to $149,999** were more likely to report having diabetes than other respondents. Over twice as many adults with that income level reported having diabetes (22%) than the general population of adults 25+. Respondents with household incomes under $35,000 reported the next highest rate of diabetes, at 14%.

In 2018, the highest rate of diabetes was reported by those adults whose household income was below $25,000 (17%) or between $25,000 and $34,999 (21%).

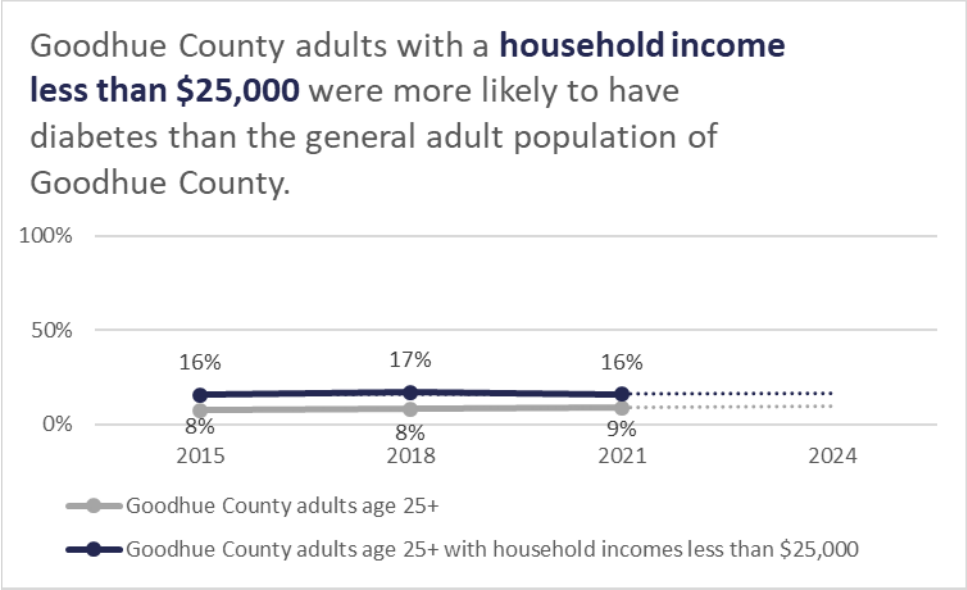

Figure 1. The diabetes rates for adults with a household income of less than $25,000 is a Community Health Objective in the 2018–2023 Goodhue County Community Health Improvement Plan, Priority 3: Engage Priority Populations.

Mental health

Any mental health problem

More than one in four respondents indicated a history of mental illness[2] in 2021 (30%), as well as in 2018 (28%).

Potential differences between population groups

- More than half of the respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** reported having a history of mental illness (53%). In 2018, the rate among respondents in the convenience sample was 56%.

[2] Respondents were categorized as having a history of mental illness if they reported that they had ever been told by a health care provider that they had depression, anxiety or panic attacks, or another mental health problem.

- Forty-one percent of respondents with a **household income of less than $35,000** reported a history of mental illness, which is similar to the rate reported for respondents with a household income of $25,000 or less in 2018 (37%).

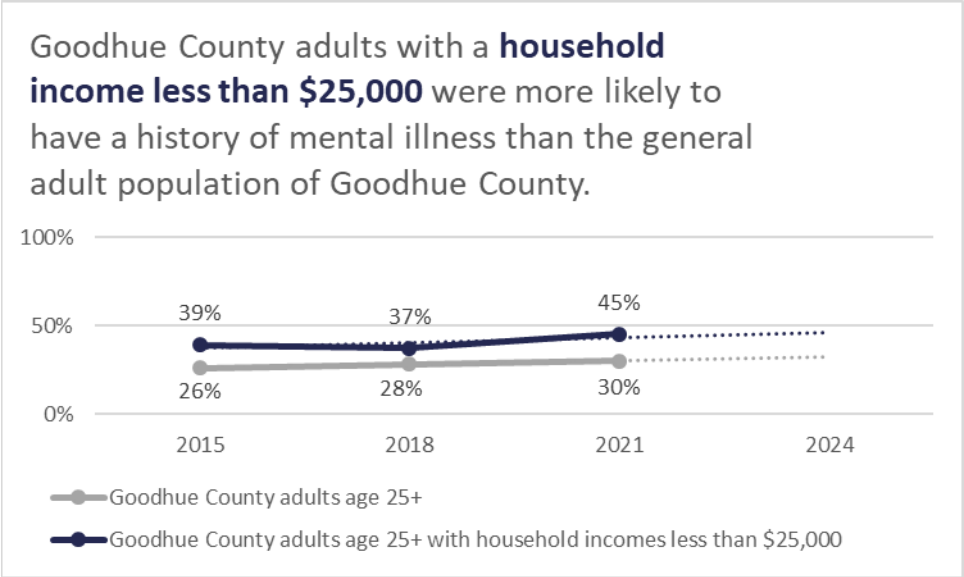

Figure 2. History of mental illness in adults is a Poverty-Related Disparity in the 2018–2023 Goodhue County Community Health Improvement Plan, Priority 1: Talk about the Impact of Poverty on Health.

- Respondents who report they always **get the social and emotional support they need**, and also those who report they never do, were less likely to have a history of mental illness (20% and 18%, respectively). Those who sometimes get the support they need were more likely to report a history of mental illness (47%).

- Nearly half (47%) of respondents who **rent** rather than own their home reported a history of mental health problems.

Mentally unhealthy days

Forty-eight percent of respondents reported their mental health was not good on one or more days during the past 30 days, up from 40% in 2018. Among respondents in the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf, 68% reported one or more mentally unhealthy days, a similar proportion as in 2018 (66%). Convenience sample respondents were much more likely to report their mental health was poor for all of the past 30 days (15%) compared to the general population of adults 25+ (4%).

Potential differences between population groups

- Adults with a **history of mental illness** were only slightly more likely to report any number of mentally unhealthy days, but they were much less likely to report having had zero mentally unhealthy days (34%) than those with no history of mental illness (61%).
- Similarly, respondents were more likely to report having 10–19 mentally unhealthy days when they also reported **getting the social and emotional support they need** only sometimes (21%), rarely (33%), or never (30%)—compared to 10% of respondents overall.
- Adults with a **household income between $75,000 and $99,999** were more likely to report one to nine mentally unhealthy days (48%) compared with the general population of adults 25+ (32%), and less likely to report zero days.
- Respondents generally reported similar numbers of mentally unhealthy days regardless of how much **moderate physical activity** they reported. Those reporting zero days of physical activity were the only group showing substantial difference versus the general population of adults 25+; they were less likely to report between one and nine mentally unhealthy days.
- Goodhue County adults age 25+ self-reported an average number of 3.8 mentally unhealthy days in the last 30 days which is similar to 2018. In contrast, respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** reported 9.1 mentally unhealthy days on average.

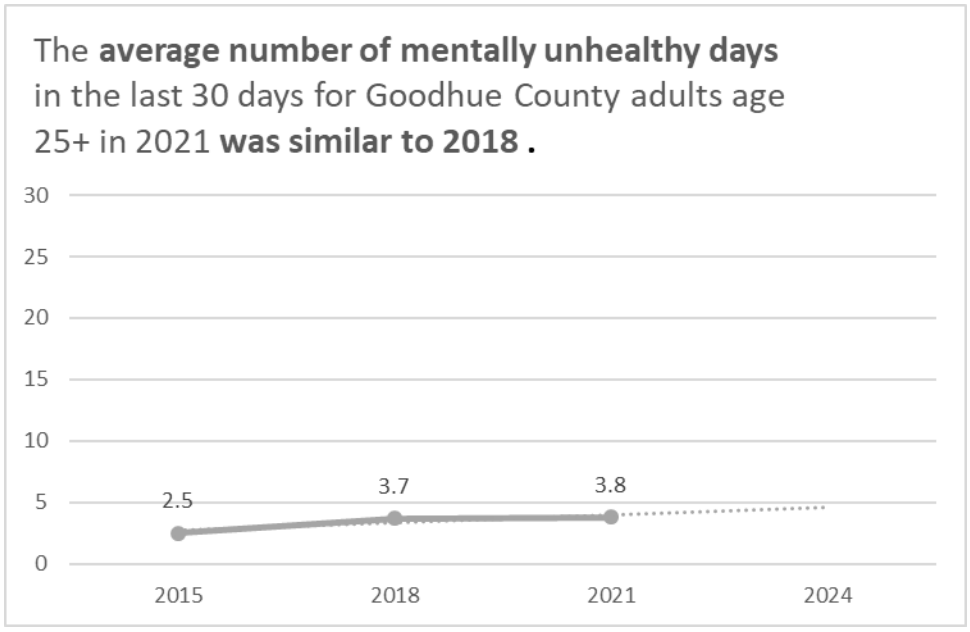

Figure 3. The average number of mentally unhealthy days for adults is a Community Health Objective in the 2018–2023 Goodhue County Community Health Improvement Plan, Priority 2: Reduce Barriers to Mental Health Care.

Depression

Twenty-four percent of respondents reported that they have been told by a health care professional that they had depression. This is similar to 20% of respondents in 2018.

Potential differences between population groups

- **Female** respondents were more likely to report depression (29%) than male respondents (19%). This was also true in 2018, when 25% of female respondents and 14% of male respondents reported depression.
- The prevalence of depression was highest among **respondents with household incomes less than $35,000** (38%), in contrast to those with household incomes from $50,000 to $74,999 (11%). Rates for respondents with household incomes of $35,000–$50,000 and above $75,000 were all similar to the general population of adults 25+ rate. This differs from 2018, when reported rates of depression were highest for respondents in households making less than $25,000 per year (33%), and decreased as household incomes increased.
- Respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** were almost twice as likely to report depression (47%) compared to the general population of adults 25+ (24%). Similarly, in 2018, 46% of the convenience sample but only 20% of the general population of adults 25+ reported depression.
- Respondents who are **obese** were more likely to report depression (31%) than those who are overweight (20%) and not overweight or obese (22%). Similarly, in 2018, 25% of respondents who were obese reported depression, but only 13% of those who were overweight and 19% of those who were not overweight or obese.
- Respondents who reported getting the **social and emotional support they need** only some of the time were more likely to report depression (40%).
- **Renters** were more likely to report depression (40%) than those respondents who own their homes (22%).

Anxiety or panic attacks

Twenty-one percent of respondents reported that they have been told by a health care professional that they had anxiety or panic attacks. This is slightly higher than 17% of respondents who reported the same in 2018.

Potential differences between population groups

- Respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** were much more likely to report anxiety or panic attacks (45%) than the general population of adults 25+ (21%). In 2018, 43% of respondents in the convenience sample reported having been told they had anxiety or panic attacks.

- Respondents with **household incomes under $35,000** were more likely to report anxiety or panic attacks (32%) than those at any other level of household income.

- **Females** were more likely to report anxiety or panic attacks (27%) than males (14%).

- Respondents who reported getting the **social and emotional support they need** only some of the time were more likely to report anxiety or panic attacks (37%) than those reporting any other levels of support.

- **Renters** were much more likely to report anxiety or panic attacks (43%) than those respondents who own their homes (18%).

Attitudes toward mental illness

In both 2018 and 2021, respondents were asked whether they **agreed or disagreed that people are generally caring and sympathetic to people with mental illness**. In 2021, 38% of respondents agreed or strongly agreed. Similarly, 42% of respondents with a history of mental illness agreed or strongly agreed in 2021. In comparison, 59% of respondents from the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf agreed or strongly agreed. All of these responses are similar to those in 2018.

Respondents were asked whether they **agreed or disagreed that they are more comfortable helping a person who has a physical illness than a person who has a mental illness** in both 2021 and 2018. Fifty-six percent of all 2021 respondents and 50% of respondents from the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf agreed or strongly agreed. In contrast, only 43% of respondents with a history of mental illness agreed or strongly agreed. This may show a decrease in stigma among those with mental illness since 2018, when more respondents with mental illness agreed or strongly agreed (53%). However, this may show an increase in stigma among the convenience sample from 37% feeling more comfortable helping a person with a physical illness than a person who has a mental illness in 2018 to 50% in 2021.

Respondents were also asked whether they **agreed or disagreed that people with mental illness do not try hard enough to get better**. Responses across different groups may show a

slight increase in stigma since 2018. Fourteen percent of all respondents agreed or strongly agreed, compared to 10% in 2018. Eleven percent of respondents with a history of mental illness agreed or strongly agreed, compared to 8% in 2018. And 18% of convenience sample respondents who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf agreed or strongly agreed, compared to 12% in 2018.

Access to care

Seeing a health professional for medical care

Sixty-six percent of respondents reported having a general health exam within the last year, which is about the same as in 2018. Four percent of respondents indicated that their last general health exam was five or more years ago, and 3% reported that they have never had a general health exam.

Twenty-one percent of respondents reported that in the past 12 months they delayed or did not get medical care when they thought they needed it, which is somewhat lower than 2018 (28%). The most commonly reported reason for delaying getting medical care was respondents thinking the issue was not serious enough (32%), followed by the cost of care (30%). These were also the most common reasons in 2018 (52% and 37%, respectively).

Potential differences between population groups

- For respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** the most common reason for delaying medical care was thinking the issue was not serious enough (32%), followed by difficulty getting an appointment (21%). Compared to respondents in the general population of adults 25+, convenience sample respondents were more likely to report lack of insurance (13% versus 1%) and transportation issues (13% versus 4%) as reasons for delaying care, but less likely to report cost as a reason (13% versus 30%).

Seeing a health professional for mental health

Thirteen percent of respondents who wanted to talk with or seek help from a health professional about mental health issues reported delaying or not seeking care in the last 12 months. This was slightly higher than the rate in 2018 (9%). The most commonly reported reason for delaying or not getting mental health care was respondents thinking the issue was not serious enough (38%), followed by other reasons (35%) and cost (31%). The percent of

respondents delaying or not seeking care because they felt too nervous or afraid decreased from 31% in 2018 to 16% in 2021, returning to the same value as in 2015. The 2021 survey also showed decreases in how many respondents reported not knowing where to go for care (4%, versus 18% in 2018) and mental health not being covered by insurance (4%, versus 17% in 2018). Insurance coverage decreased as an issue, from 30% reporting in 2018 that they delayed or did not seek help because it was not covered by insurance to 16% in 2021.

Potential differences between population groups

- Twenty-six percent of respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** reported delaying or not seeking mental health support in the last 12 months, which is similar to the 24% who reported the same in the convenience sample in 2018. The most common reason for delaying or not seeking care among convenience sample respondents was being too nervous or afraid (31%), followed by not knowing where to go and being unable to get an appointment (25% each). More convenience sample respondents reported feeling nervous or afraid in 2021 than in 2018 (15%), and fewer reported thinking the issue was not serious enough (9% in 2021 versus 19% in 2018).

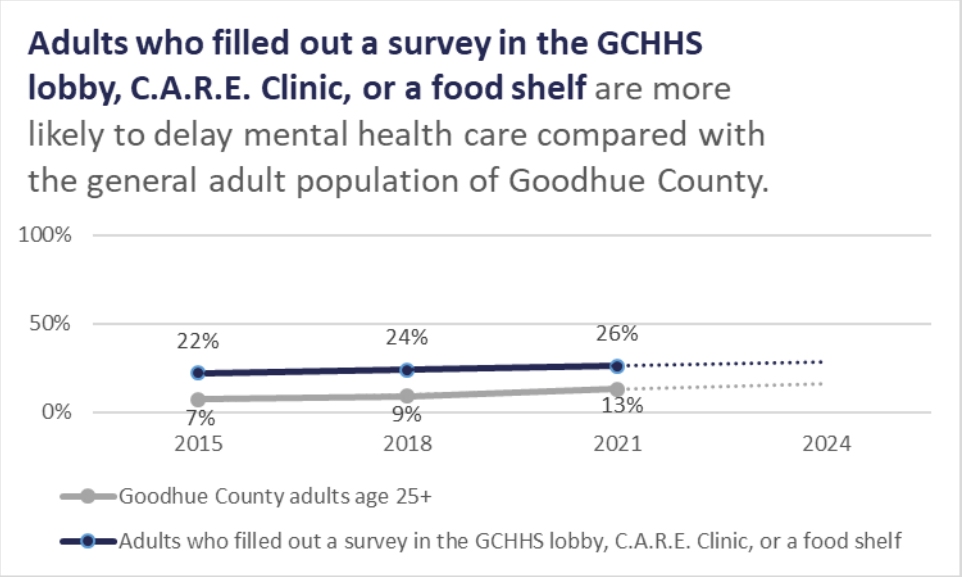

Figure 4. The percent of adults who delayed mental health care is a Community Health Objective in the 2018–2023 Goodhue County Community Health Improvement Plan, Priority 2: Reduce Barriers to Mental Health Care

COVID-19 vaccination

Eighty-nine percent of respondents reported receiving a COVID-19 vaccination at any point in the past.

Potential differences between population groups

- Only 36% of convenience sample respondents, who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf**, reported getting a COVID-19 vaccine.
- Respondents with a **household income below $35,000** were least likely to report vaccination (75%), and those with incomes above $150,000 were most likely (100%).

Food security

Concerns about running out of food

Nine percent of respondents indicated that during the past 12 months they "often" or "sometimes" worried that their food would run out before they had money to buy more, which is slightly higher than the 6% of respondents who did so in 2018.

Potential differences between population groups

- Respondents whose **household income is less than $35,000** were more likely to report that they "often" or "sometimes" worried that their food would run out before they had money to buy more (24%), followed by those whose household income is between $35,000 and $49,999 (16%).
- Respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** were much more likely than the general population of adults 25+ to report that they "often" or "sometimes" worried that their food would run out before they had money to buy more in both 2021 (62%) and 2018 (67%).
- The vast majority of **obese** respondents (89%) did not indicate food insecurity. The obesity rate among those who "never" worried about running out of food was similar to the general population of adults 25+ obesity rate in 2021 (35%) and 2018 (36%). Very few respondents indicated they "often" worried about food security in 2021. However, a majority of the small percentage of respondents who reported "often" or "sometimes" having concerns about running out of food were obese (57%). This is similar to 2018, when the obesity rate for respondents who "often" or "sometimes" worried that their food would run out was 62%, compared to an obesity rate among the general population of adults 25+ of 36%.

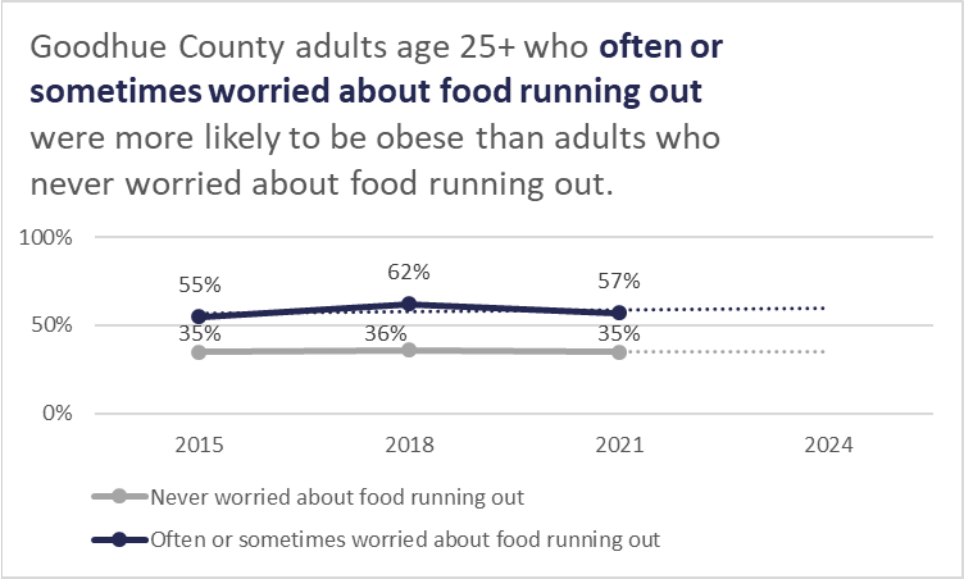

Figure 5. The obesity rate for adults who worry about food running out is a Poverty-Related Disparity in the 2018–2023 Goodhue County Community Health Improvement Plan, Priority 1: Talk about the Impact of Poverty on Health.

- Some **older** respondents were less likely to report that they "often" or "sometimes" worried that their food would run out before they had money to buy more. Six percent of respondents aged 65–74 indicated those worries, although no respondent aged 75+ did so.

- Respondents who are **renters** were much more likely than homeowners to report "often" or "sometimes" worrying that their food would run out. While only 5% of homeowners indicated those worries, 40% of renters did so.

- Respondents with a **history of mental health problems** reported they "often" or "sometimes" worried that their food would run out (17%), much more often than those with no mental health problems (5%).

Use of community food shelves

Four percent of respondents indicated that during the past 12 months they had used a community food shelf at least once. This is a similar response to 2018, when 3% reported food shelf use.

Potential differences between population groups

- Respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** were much more likely than the general population of adults 25+ to report food shelf use in the past 12 months in both 2021 (61%) and 2018

(66%). Note that this finding is likely affected by the data collection sites for the convenience sample—nearly half of convenience sample surveys were completed at food shelves—and so may not be comparable to the general population of adults 25+.

Eating habits

Fruit and vegetable consumption

Thirty-eight percent of respondents reported eating five or more servings of fruits and vegetables (including juices) the prior day. About the same number (37%) reported eating between three and four servings, and 23% reported eating between one and two servings. Two percent reported eating zero servings. In 2018, 34% of respondents reported eating five or more servings the prior day and 34% reported eating between three and four.

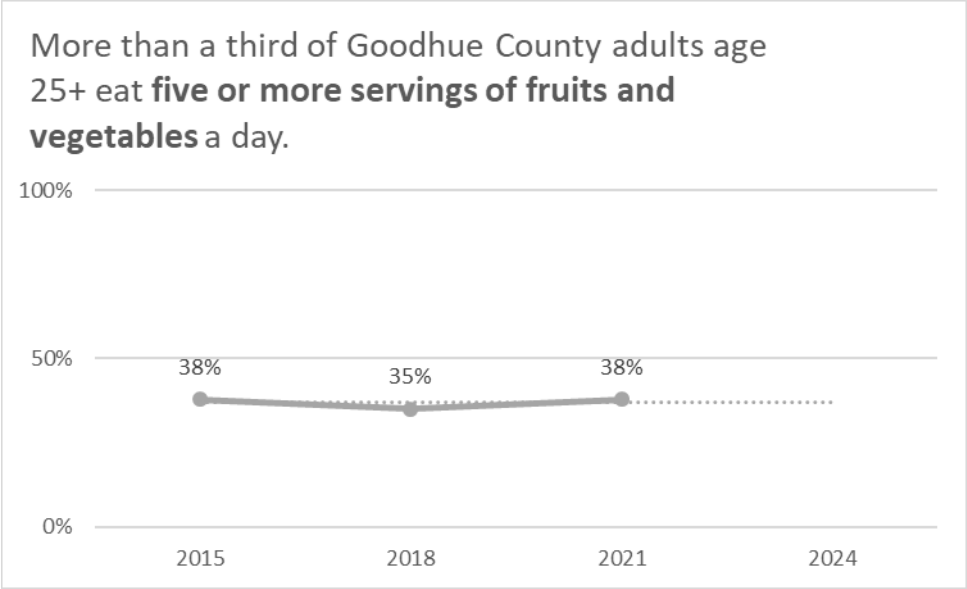

Figure 6. Adult fruit and vegetable consumption is a Community Health Objective in the 2018–2023 Goodhue County Community Health Improvement Plan, Priority 3: Engage Priority Populations.

Potential differences between population groups

- Respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** reported slightly higher rates of eating at least five servings of fruits and vegetables the prior day (41%) but lower rates of eating three to four servings a

day (21%) than the general population of adults 25+ of Goodhue County. However, convenience sample respondents were more likely to report they ate zero servings of fruits and vegetables yesterday (13%), compared to 2% in the general population of adults 25+.

- Respondents **aged 65–74** were less likely to report eating at least five servings of fruits and vegetables the prior day (28%). This group was also slightly more likely to report eating zero servings of fruits and vegetables (7%, versus 2% overall).

- **As income increases, fruit and vegetable consumption increases.** Overall, 76% of respondents reported at least three or more servings per day. Fewer of those with household incomes of less than $35,000 (61%) or $35,000–$49,999 (68%) reported three or more servings per day. More respondents with household incomes of $75,000–$99,999 (80%), $100,000–$149,999 (78%), and $150,000 or more (81%) reported eating three or more servings per day.

Eating a home-cooked meal

Over 98 percent of respondents reported eating a home-cooked meal at least once in a typical week. Almost half reported eating a home-cooked meal seven or more times a week (45%). This was similar to 2018, when 99% of respondents reported eating a home-cooked meal at least once in a typical week, and 48% of respondents reported doing so seven or more times a week. Respondents in the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf reported similar rates of eating home-cooked meals.

Potential differences between population groups

- Respondents aged **55–64** were the most likely (65%) to report eating a home-cooked meal seven or more times in a typical week, followed by respondents aged 65–74 (47%), respondents aged 35–44 (44%), and respondents aged both 25–34 (42%). In 2018, respondents aged 25–34 were the most likely (59%) to report eating a home-cooked meal seven or more times in a typical week. The rate increased for respondents aged 55–64 (46% to 65%) but decreased for those aged 25–34 (59% to 42%), 45–54 (42% to 29%), and 75 or older (53% to 39%) from 2018 to 2021.

Visiting a farmer's market

Respondents were asked how frequently they visit a farmer's market or fruit and vegetable stand during the growing season. A similar proportion of respondents visit at least once per month from the general population of adults 25+ (60%) and from the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf (56%). However,

respondents from the general population sample were more likely to visit at least once per week (22%) versus the convenience sample (13%).

In 2018, respondents from the general adult population were more likely to have visited a farmer's market at least once per month (73%), and about as likely to have visited weekly (24%). Responses from the 2018 convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf were similar to those in 2021.

Consuming sugary drinks

Respondents were asked how frequently they consume a variety of different sugary drinks. In general, rates of daily consumption are low. Respondents in the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf were less likely than those in the general population of adults 25+ to report never consuming sugary drinks.

Fruit drinks

Three percent of respondents in the general population of adults 25+ and 8% in the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf reported daily consumption of fruit drinks. The rate for the general population in 2018 was the same, but for the convenience sample was somewhat higher (15%).

More than three-quarters (78%) of the general population reported never consuming these drinks, versus 56% in the convenience sample. Respondents in the 2018 convenience sample were somewhat less likely to report never consuming fruit drinks (46%), while 2018 general population respondents were similar to 2018.

In 2021, respondents with household incomes below $35,000 were less likely to report never consuming fruit drinks (67%), and more likely to report drinking them two to four times per week (25%, versus 11% for the general population of adults 25+ overall).

Sports drinks

One percent of respondents in the general population of adults 25+ and 6% in the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf reported daily consumption of sports drinks. Rates were similar for both groups in 2018.

Seventy-six percent of the general population reported never consuming these drinks, versus 60% in the convenience sample. The rate was somewhat higher for the 2018 general adult population 25+ (81%), and similar to 2021 in the 2018 convenience sample.

Respondents in 2021 with household incomes below $35,000 were less likely to report consuming sports drinks once per week than the overall sample (5% versus 16%), and more likely to report drinking them five to six times per week (18% versus 3%).

Regular soda or pop

Thirteen percent of respondents in the general population of adults 25+ and 25% of the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf reported daily consumption of regular soda or pop. These rates are the same as in 2018.

Almost half (48%) of the general population reported never consuming these drinks, versus 26% in the convenience sample. This is slightly lower than in 2018 for the general population (54%) and similar to 2018 for the convenience sample (27%).

Respondents to the 2021 survey who had household incomes below $35,000 were less likely to report never consuming regular soda or pop (37%) and more likely to report drinking them five to six times per week (26% versus 5%). Respondents with household incomes over $150,000 were more likely to report never drinking regular soda or pop (69%). Although responses to this item had the most variation in terms of income of all the sugary drink responses, that variation did not indicate a consistent pattern.

Energy drinks

Four percent of respondents in the general population of adults 25+ and 3% in the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf reported daily consumption of energy drinks. Rates were similar for both groups in 2018.

The vast majority (88%) of the general population reported never consuming these drinks, versus 78% in the convenience sample. These rates are somewhat lower than in 2018 for both the general population (94%) and the convenience sample (85%).

Respondents in 2021 with household incomes below $35,000 were more likely to report consuming energy drinks five to six times per week (14% versus 3%). Those with incomes from $75,000 to $99,999 were more likely to report drinking them once per week (16% versus 4%).

Attitudes about fruits and vegetables

Cost of fruits and vegetables

Survey respondents were asked whether they viewed the cost of fruits and vegetables where they usually shop (i.e., whether they are too expensive) as a "big problem," a "small problem," or "not a problem." Thirty percent of respondents described the cost as either a big problem or a small problem. Respondents from the convenience sample, who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf, were much more likely to say the expense of fruits and vegetables was a problem (65%).

Difficulty of preparing fruits and vegetables

Survey respondents were asked whether they viewed the difficulty of preparing fruits and vegetables as a "big problem," a "small problem," or "not a problem." Seventeen percent of respondents described this difficulty as either a big problem or a small problem. Respondents from the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf were more likely to say the difficulty of preparing fruits and vegetables was a problem (29%).

Physical activity

Moderate physical activity

Almost 90% of respondents reported that they get at least 30 minutes of moderate physical activity (i.e., activities that cause only light sweating and a small increase in breathing or heart rate) at least once in a typical week. Fifty-nine percent reported getting at least 30 minutes of moderate physical activity between one and four days a week, and 30% reported getting at least 30 minutes between five and seven days a week. These rates were similar to 2018.

Potential differences between population groups

- Respondents aged **25–34** were more likely than other age groups to report getting at least 30 minutes of moderate physical activity five or more days a week (44%). Respondents aged 35–44 and 45–54 were the least likely (21% each). These percentages are similar to 2018.
- Respondents whose **household income is between $50,000 and $74,999** were the most likely to report getting at least 30 minutes of moderate physical activity five or more days a

week (47%) compared to those at other income levels, with those making between $35,000 and $49,999 the least likely to report the same (20%). In 2018, respondents whose household income was between $35,000 and $49,999 were the most likely to report that they do not get at least 30 minutes of moderate physical activity at all—zero days—in a typical week (20%). In 2021, respondents with household incomes below $35,000 were most likely to report zero days of activity (22%).

- Respondents who are **not overweight** were the most likely to report getting at least 30 minutes of moderate physical activity five or more days a week (46%), compared to 25% of overweight respondents and 21% of obese respondents. Respondents who are not overweight were also the least likely to report not getting at least 30 minutes of moderate physical activity at all during a typical week (2%), compared to 7% of overweight respondents and 23% of obese respondents. In 2018, respondents who were not overweight were the most likely to report not getting at least 30 minutes of moderate physical activity at all during a typical week (14%), slightly more than overweight (10%) and obese (11%) respondents.

- Respondents with a **history of mental health problems** were less likely to report five or more days of moderate physical activity per week (20%) compared to the general population of adults 25+ (30%).

- Respondents who sometimes or rarely **get the social or emotional support they need** were also less likely to report five or more days of moderate physical activity per week (19% and 17%, respectively) compared to the general population of adults 25+ (30%). Those who rarely get the support they need were the most likely to report zero days of moderate physical activity (26%) compared to the general population of adults 25+ (11%).

Vigorous physical activity

Twenty-nine percent of respondents reported that they get at least 20 minutes of vigorous physical activity (i.e., activities that cause heavy sweating and a large increase in breathing or heart rate) at least three days a week, while 30% reported getting one to two days and 41% reported not getting at least 20 minutes of vigorous activity at all in a typical week. These rates were similar to 2018.

Potential differences between population groups

- Respondents aged **25–34** were the most likely to report getting at least 20 minutes of vigorous physical activity three or more days in a typical week (57%), followed closely by those aged 35–44 (35%). In 2018, respondents aged 25–34 were less likely to report getting

at least 20 minutes of vigorous physical activity three or more days in a typical week, but still the most likely group (40%). Respondents aged **75 or older** were the least likely to report getting at least 20 minutes of vigorous physical activity three or more days in a typical week (12%) and were the most likely to report not getting any vigorous physical activity (74%). Respondents aged 75 or older were much more likely to report not getting any vigorous activity in a typical week in 2021 than in 2018 (58%).

- Respondents whose **household income is between $50,000 and $74,999** were the most likely to report getting at least 20 minutes of vigorous physical activity three or more days a week (43%) compared to those at other income levels, with those making between $35,000 and $49,999 the least likely to report the same (16%). Respondents whose household income is less than $35,000 were the most likely to report that they did not get at least 20 minutes of vigorous physical activity at all during a typical week (64%).

- Respondents who are **overweight but not obese** were the most likely to report getting at least 20 minutes of vigorous physical activity at least three days a week (41%), compared to 27% of respondents who are not overweight and 21% of respondents who are obese. Respondents who are obese were the most likely to report zero days of 20 minutes of vigorous physical activity in a typical week (50%), which is slightly higher than the rate for obese respondents in 2018 (45%).

- Respondents with a **history of mental health problems** were less likely to report three or more days of vigorous physical activity per week (19%) and more likely to report zero days (55%).

- Respondents who sometimes or rarely **get the social or emotional support they need** were less likely to report three or more days of vigorous physical activity per week (14% and 18%, respectively) and more likely to report zero days (54% and 59%).

Factors preventing physical activity

Respondents were asked whether different factors prevented them from being more physically active. Respondents rated the different factors as a "big problem," a "small problem," or "not a problem."

Twenty-two percent of respondents said that **lack of time** is a big problem preventing them from being more active, the same percentage as **lack of self-discipline or willpower**. The **cost** of fitness programs, gym memberships, or admission fees was another commonly indicated problem (19%). **Fear of injury** (4%) and not having a **safe place to exercise** (2%) were the factors least likely to be identified as a big problem. These responses are similar to those from 2018.

Potential differences between population groups

- Cost was most likely to be selected as a big problem preventing them from being more active (39%) by respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf**. The convenience sample was more likely to say cost is a big problem than those in the general population of adults 25+. Those in the convenience sample (20%) were also more likely than the general population of adults 25+ (10%) to say that long-term illness, injury, or disability was a big problem. Those in the convenience sample were somewhat less likely (13%) than the general population of adults 25+ (22%) to say that lack of time was a big problem.

- **Younger respondents** were more likely to say that lack of time is a big problem preventing them from being more physically active. Forty-seven percent of respondents aged 35–44 said lack of time is a big problem, compared to 6% of respondents aged 65–74 and 6% of those aged 75+.

- Respondents with **higher household incomes** were more likely to say that lack of time is a big problem preventing them from being more physically active. Thirty-three percent of respondents whose household income is $150,000 or higher said lack of time is a big problem.

- Respondents with **lower household incomes** were more likely to say that illness, injury, or disability is a big problem preventing them from being more physically active. Almost a quarter (24%) of respondents whose household income is below $35,000 said illness, injury, or disability is a big problem.

- Respondents who are **obese** were the most likely to say that illness, injury, or disability is a big problem preventing them from being more physically active (19%), compared to respondents who are overweight (7%), and those who are not obese or overweight (2%).

- While 7% of the general population of adults 25+ said that not having someone to exercise with is a big problem preventing them from being more physically active, 17% of respondents whose **household income is between $100,000 and $149,999** said that not having anyone to exercise with is a big problem.

- Respondents who sometimes **get the social or emotional support they need** were more likely to cite lack of time (42%), cost (31%), and having no one to exercise with (20%, versus 7% overall) as big problems.

Tobacco use

Any tobacco use

Twenty percent of respondents reported that they are a current user of some sort of tobacco product, which is slightly higher than the rate in 2018 (17%).

Potential differences between population groups

- Nearly half (46%) of the respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** reported that they are a current tobacco product user. The rate for the convenience sample in 2018 was 50%.
- Most respondents were similarly likely to report current tobacco use regardless of household income level. Only those whose **household income is greater than $150,000** were the exception; none of those respondents are current tobacco users. This differs from 2018, when those whose household income was less than $25,000 or between $25,000 and $34,999 were most likely to report being a current tobacco product user (30% and 29%, respectively).

Smoking

Eleven percent of respondents reported that they are a current cigarette smoker, similar to 7% in 2018. Sixty-three percent reported that they have never been a cigarette smoker.

Among current cigarette smokers, a much smaller percentage reported having tried to quit smoking within the past 12 months in 2021 than in 2018 (36% versus 57%).

Potential differences between population groups

- Thirty-six percent of the respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** reported that they currently smoke cigarettes, which is more than the general population of adults 25+ but less than the rate for the convenience sample in 2018 (48%). Among those in the convenience sample who reported they currently smoke cigarettes, 50% reported having tried to quit in the last 12 months, compared to 71% in the 2018 convenience sample.
- Respondents whose **household income is less than $35,000** and those whose household income is between **$35,000 and $49,999** were the most likely to report being a current cigarette smoker (26% and 23%, respectively). No respondents whose household income is

greater than $150,000 reported being a current cigarette smoker, and this group was most likely to report having never been a smoker (86%).

- **Older respondents** were slightly more likely to be former smokers (39% of those aged 65–74 and 37% of those aged 75 or older). Respondents aged 25–24 (15%) and aged 45–54 (16%) were least likely to be former smokers.

- Respondents who are **renters** were much more likely than homeowners to report being current smokers (40% versus 8%) and were less likely than homeowners to have never smoked (43% versus 65%).

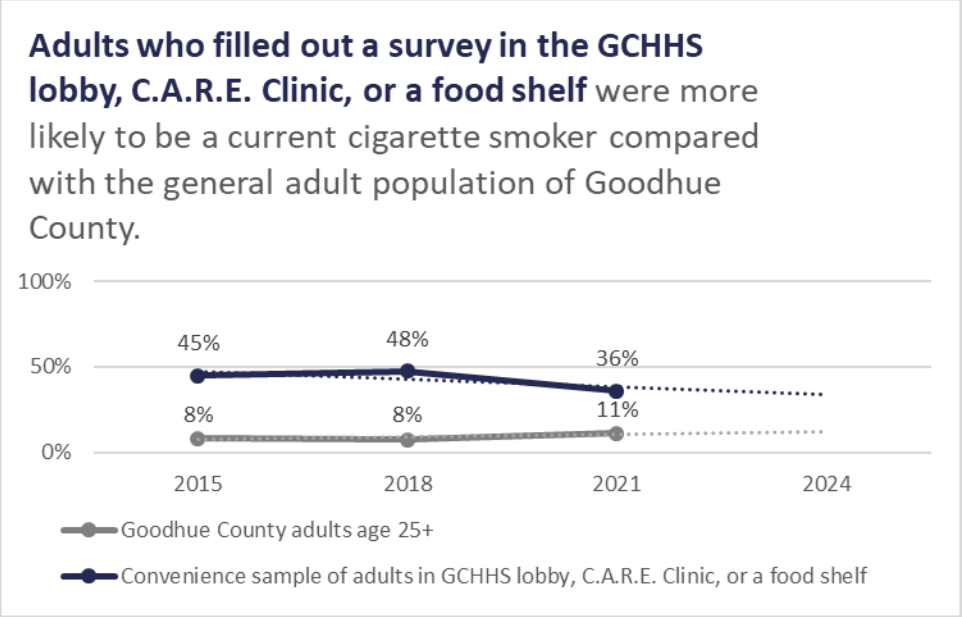

Figure 7. The adult smoking rate is a Poverty-Related Disparity in the 2018–2023 Goodhue County Community Health Improvement Plan, Priority 1: Talk about the Impact of Poverty on Health.

E-cigarettes, vaping, and JUUL

Two percent of respondents reported being a current user of e-cigarettes, including vaping pens, JUUL, or similar. This is the same as in 2018. Note, in both years the survey only had adult respondents ages 25 years and older. There were not enough responses from ages 18 to 24 to monitor rates of e-cigarette, vaping, and JUUL use for young adults.

In 2021, respondents who reported using e-cigarettes were also asked if they were a tobacco user at the time they first used an e-cigarette. Seventy-three percent of general population of adults 25+ respondents reported they were, while 88% of the convenience sample who took the survey in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf did so.

Potential differences between population groups

- Fourteen percent of the respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** reported that they currently use e-cigarettes, which is similar to the rate for the convenience sample in 2018 (15%) and higher than the general adult population age 25+ (2%).

Alcohol use

Heavy drinking

Fifteen percent of respondents reported heavy drinking in the past 30 days (i.e., 60 or more drinks for males and 30 or more drinks for females). This is somewhat higher than the 2018 rate (10%).

Potential differences between population groups

- Respondents from the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** were somewhat less likely to report heavy drinking in the past 30 days (7%).

Binge drinking

Thirty-four percent of respondents reported binge drinking in the past 30 days (i.e., five or more drinks in a day for males and four or more drinks in a day for females). This is up somewhat from 26% in 2018.

Potential differences between population groups

- Respondents from the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** were less likely to report binge drinking in the past 30 days (22%).

- **Male** respondents were somewhat more likely to report binge drinking in the past 30 days (37%) than female respondents (31%). The rate of reported binge drinking for female respondents increased more than ten percentage points from 2018 to 2021 (20% to 31%).

- **Respondents who are not overweight or obese** were the most likely to report binge drinking in the past 30 days (41%), a substantial increase from 2018 (12%).

Driving behaviors

Distracted driving

Among respondents who drive, only 1% of respondents reported that they "often" read or send texts while driving, which is the same rate reported in 2018. Twenty-nine percent of respondents reported "sometimes" reading or sending texts while driving, which is somewhat lower than 2018 (34%).

Ten percent of respondents reported that they "often" make or answer phone calls while driving, which is slightly less than in 2018 (15%). Sixty-three percent of respondents reported "sometimes" making or answering phone calls, which is slightly higher than 2018 (58%).

Potential differences between population groups

- Respondents aged **25–34**, **35–44, and 45–54** were all more likely to report "sometimes" reading or sending texts while driving (42%, 42%, and 44%, respectively). This differs from 2018, when 61% of respondents aged 25–34 reported "sometimes" reading or sending texts, while other age brackets did so at rates below 40%. Only 3% of respondents aged 75 or older reported "sometimes" reading or sending texts while driving.

- Respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** were more likely to report never reading or sending texts while driving (78%) and less likely to report doing so "sometimes" (19%). The same is true of responses about making or answering phone calls while driving: convenience sample respondents reported doing so "sometimes" much less often (39% versus 63%), and never doing so much more often (52% versus 26%).

Seatbelt use

Ninety-two percent of respondents indicated that they "always" wear a seatbelt when driving or riding in a vehicle, which is the same as in 2018. Only 1% of respondents in both 2021 and 2018 reported that they "never" wear a seatbelt when driving or riding in a vehicle.

Home safety

Radon testing

In 2021, respondents were asked whether their household air has ever been tested for the presence of radon. Thirty-nine percent of respondents indicated their home has been tested for radon.

Potential differences between population groups

- Respondents in the convenience sample who took the survey **in the GCHHS lobby, at C.A.R.E. Clinic, or at a food shelf** were less likely to report radon testing (10%).
- Respondents with **household incomes under $35,000 or between $35,000 and $49,999** were less likely to report radon testing (17% and 26%, respectively). Those with household incomes above $150,000 were most likely to report radon testing (64%).
- Respondents who are **renters** were much less likely to report home radon testing (3%) than homeowners (44%).

Survey methodology

Survey instrument

The survey instrument used for the project was adapted from the joint survey conducted in 2018 in Goodhue, Mower, and Freeborn Counties. The county public health agencies and Mayo Clinic Health System worked together in 2018 to select the survey content from the counties' previous surveys with technical assistance from the Minnesota Department of Health Center for Health Statistics. The survey was formatted by the vendor, Survey Systems, Inc. of Shoreview, Minnesota, as a scannable, self-administered English-language questionnaire.

Sample

A two-stage sampling strategy was used for obtaining probability samples of adults living in Goodhue, Mower, or Freeborn Counties. For the first stage of sampling, a random sample of residential addresses for each county was purchased from a national sampling vendor (Marketing Systems Group of Horsham, Pennsylvania). 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 US 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.

Survey administration

An initial survey packet was mailed to 4,800 sampled households in Goodhue, Mower, and Freeborn counties on September 30, 2021, that included a cover letter, the survey instrument, and a postage-paid return envelope. One week after the first survey packets were mailed (October 11), a 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 (October 25), 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 December 23, 2021.

Completed surveys and response rate

Completed surveys were received from 934 adult residents of Goodhue, Mower, and Freeborn Counties for an overall response rate of 19.5% (934/4800). There were 318 completed surveys received from adult residents of Goodhue County. The county level response rates are as follows: Goodhue County: 19.9%; Mower County: 18%; Freeborn County: 19.4%. So few

respondents aged 18–24 returned completed surveys that results are reported only for adults aged 25 and over.

Data entry and weighting

The responses from the completed surveys were scanned into an electronic file by Survey Systems, Inc.

To ensure that the county-level survey results are representative of the adult population of each county, 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 of the adult population aged 25 and over in each county according to US Census Bureau American Community Survey 2015-2019 five-year estimates.

Convenience sample methodology

Convenience sample survey instrument

The same survey instrument used for the random-sample mailed survey was used to survey a convenience sample of adults in the GCHHS lobby, C.A.R.E. Clinic, and food shelves.

Convenience sample

In order to reach adults who have typically been under-represented in mailed survey results, a convenience sample approach was used. Receptionists at GCHHS lobby and C.A.R.E. Clinic and food shelf volunteers distributed copies of the survey to adults waiting for services. GCHHS hired an interpreter from Hispanic Outreach to interpret the survey for C.A.R.E. Clinic clients who spoke Spanish. The interpreter was at C.A.R.E. Clinic a total of seven hours in November 2021.

While only 2% of the mailed survey responses were from people of color in 2021, 21% of the convenience sample of adults at GCHHS lobby, C.A.R.E. Clinic, and food shelves was people of color. While only 15% of the mailed survey responses were from people with a household income less than $35,000, 80% of the convenience sample adults who completed a survey at GCHHS lobby, C.A.R.E. Clinic, and food shelves had a household income of less than $35,000. Because the survey respondents were not randomly selected, it is not appropriate to generalize this convenience sample to the entire population of people with a low income or the entire population of communities of color.

Convenience Sample Survey Administration

A total of 129 gift cards for $5 were distributed as incentives for people to complete the survey. There were 67 gift cards from Walmart in Red Wing and the rest were from local grocery stores: 30 from Family Fare in Cannon Falls and Red Wing, 13 from Nilssen's in Zumbrota, ten from Island Market in Pine Island, and nine from Kenyon Markey in Kenyon. Receptionists at GCHHS lobby and volunteers at C.A.R.E. Clinic and the food shelves initialed for gift cards distributed. C.A.R.E. Clinic patients received Walmart gift cards. Food shelf clients received gift cards for their local grocery store. GCHHS lobby customers received their choice of Walmart or local grocery store gift cards. Surveys were all completed between October 2021 and January 2022.

Completed convenience sample surveys

A total of 130 surveys were completed. C.A.R.E. Clinic returned 14 completed surveys. GCHHS lobby returned 57 completed surveys. Pine Island Sharing Shelves returned ten completed surveys, Zumbrota Area Emergency Food Shelf returned 17 completed surveys, All Seasons Food Shelf (Kenyon) returned four completed surveys, Red Wing Area Food Shelf returned 14 completed surveys, and Cannon Falls Food Shelf returned 14 completed surveys. A response rate cannot be calculated because this was a convenience sample; everyone who wished to fill out a survey could do so.

Convenience sample data entry and weighting

The responses from the completed surveys were scanned into an electronic file by Survey Systems, Inc. The data were not weighted for gender or age when analyzed. As a result, the convenience sample over-represents the responses of females (76% of sample) and under-represents adults under age 25 (6% of sample).