Goodhue County 2018 Community Health Needs Assessment Survey Summary

Introduction

The 2018 Goodhue County Community Health Needs Assessment Survey was conducted to learn about the health of Goodhue County adults. A similar survey was previously conducted in 2015. The data presented in this summary offer 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 requested analyses from the Minnesota Department of Health to monitor differences based on demographic and health status categories found in the 2015 Survey. There were not enough responses from people of color in 2018 to monitor differences by race/ethnicity. There were also not enough responses from adults aged 18-24 in 2018, so the youngest age group analyzed in 2018 was 25-34, and the 2015 results were reanalyzed for comparison. Exploratory analyses were conducted on some new 2018 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 $25,000, $25,000-$34,999, $35,000-$49,999, $50,000-$74,999, and $75,000 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 2018 convenience sample of 116 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, particularly comparisons including respondents aged 25-34, where 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 survey data) 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

Goodhue County Health and Human Services 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 offer a starting point to identify potential health disparities between groups, and consider 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.

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, or at C.A.R.E. Clinic, or a food shelf, were more likely than the general adult population to have been **told by a health care professional that they are obese** and 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 55-65+, and from households making less than $25,000.

- **Asthma** was more often reported by respondents from the convenience sample, who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf, than the general adult population.

- **Diabetes** was more often reported among respondents with lower household incomes.

**Mental health**

- The reported **number of mentally unhealthy days** was higher among respondents with a history of mental illness and those with a household income under $25,000.

- **Depression** was more often reported among respondents who are female, those from households that make less than $25,000, and those who are obese. Respondents who participated in the convenience sample survey in in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf, were more likely than the general adult population to report depression.

- **Anxiety or panic attacks** were more often reported by respondents from the convenience sample than the general adult population.

**Access to care**

- Respondents from the convenience sample, who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf, were more likely than the general adult population to **have delayed or not sought both medical and mental health care**.
While the most common reason for delaying or not seeking medical care among the general adult population was respondents not thinking the issue was serious enough, among the convenience sample it was lack of insurance.

While the most common reason for delaying or not seeking mental health care among the general adult population was respondents not thinking the issue was serious enough, among the convenience sample it was not knowing where to go.

**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 $25,000 and those who are obese.

**Eating habits**

Eating a home-cooked meal at least seven times a week was most likely to be reported by respondents aged 25-34, followed by those aged 75 or older.

**Physical activity**

Respondents aged 25-34, those whose household income is between $50,000 - $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 - $74,999, and those 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.

Lack of time was identified most often as a big problem preventing respondents from being more physically active. Younger respondents and those with higher household incomes were most likely to say that lack of time is a big problem.

Respondents with lower household incomes and those who are obese 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, or at C.A.R.E. Clinic, or a food shelf, were more likely than the general adult population to say that cost is a big problem preventing them from being more physically active.
Respondents from the convenience sample and those whose household income is between $25,000 - $49,999 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 with lower household incomes were most likely to report current tobacco use of some kind. Respondents who participated in the convenience sample survey in in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf, were more likely than the general adult population to report current tobacco use.

- **Current cigarette smoking** was most likely to be reported among respondents with household incomes between $25,000 - $34,999 and those with household incomes between $50,000 - $74,999. Respondents who participated in the convenience sample were more likely than those in the general population to report that they currently smoke cigarettes.

- Respondents whose household income is less than $25,000 were the most likely to report currently using e-cigarettes. Hardly any respondents in higher income brackets reported e-cigarette use. Respondents who participated in the convenience sample were more likely than those in the general population to report e-cigarette use.

**Alcohol use**

- **Heavy drinking** was reported at a higher rate among respondents aged 35-44 and overweight respondents.

- **Binge drinking** was reported at a higher rate among males and overweight respondents.

**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. All comparisons to 2015 respondents have been adjusted to include only respondents age 25+ and thus may be slightly higher or lower than 2015 rates previously reported.

Overweight/Obesity

Obesity

Fifteen percent of respondents reported that they have been told by a health care professional that they are obese. That is the same as the rate in 2015.

Thirty-six 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-eight percent of respondents in 2015 were categorized as obese based on BMI.

Thirty-six percent of respondents were categorized as overweight but not obese, based on BMI, and 28% were categorized as not overweight or obese. These rates are similar to 2015 (35% and 27%, respectively).

Potential differences between population groups

- A quarter of respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf reported that they have been told by a health care professional that they are obese, compared to 33% of the convenience sample in 2015.

- Over half of the respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf were categorized as obese (57%), based on their calculated BMI. This rate was 39% for the convenience sample in 2015.

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-two percent of respondents reported that they have been told by a health care professional that they had high blood pressure/hypertension. Similarly, 31% of respondents reported high blood pressure/hypertension in 2015.

Potential differences between population groups

- The prevalence of high blood pressure increased with age. **Respondents aged 75+** were most likely to report high blood pressure/hypertension (66%) followed by respondents aged 65-74 (51%), aged 55-64 (46%), and 45-54 or 35-44 (21%-22%), in contrast to those aged 25-34 (0%). These results may indicate a slight increase in rates of high blood pressure/hypertension in the 35-44 age group (from 8% to 22%) since 2015. In 2015, respondents aged 75+, 65-74, 55-64, and 45-54 were more likely to report high blood pressure/hypertension (66%, 58%, 41% and 24%, respectively) in contrast to those aged 35-44 and 25-34 (8-10%).

- **Respondents of color** were less likely to report high blood pressure/hypertension compared with white respondents in 2015, but this could not be monitored in 2018 due to the smaller survey sample size.

- Respondents from **households that make less than $25,000** were almost twice as likely to report having high blood pressure/hypertension (46%) than residents from households that make $75,000 or more (24%). Similarly, in 2015 the rates were 47% and 21%, respectively.

- Respondents who are **obese or overweight** were more likely to report high blood pressure/hypertension (47% and 27%, respectively) compared with respondents who are not overweight or obese (16%). This is similar to 2015, when the high blood pressure/hypertension rates were 37% for obese respondents, 31% for overweight respondents, and 20% for respondents who were not overweight or obese.

High cholesterol or triglycerides

Twenty-six percent of respondents reported that they have been told by a health care professional that they had high cholesterol or triglycerides. This is somewhat lower than in 2015, when 32% of respondents reported having high cholesterol/triglycerides.
Potential differences between population groups

- Seventeen percent of respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf reported having high cholesterol/triglycerides. In 2015, 31% of the convenience sample reported the same.

Asthma

Eight percent of respondents reported that they have been told by a health care professional that they have asthma. This is somewhat lower than 2015, when 13% of respondents reported having asthma.

Potential differences between population groups

- Twenty-three percent of respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf reported that they have been told by a health care professional that they have asthma. Thirty-seven percent of the convenience sample in 2015 reported the same.

Heart trouble or angina

Ten percent of respondents reported that they have been told by a health care professional that they have heart trouble or angina, which is the same as the rate reported in 2015.

Diabetes and pre-diabetes

Eight percent of respondents reported that they have been told by a health care professional that they have diabetes, which is the same as the rate reported in 2015. Twelve percent reported that they have been told they have pre-diabetes, which is slightly higher than the rate in 2015 (9%).

Potential differences between population groups

- Adults with lower household incomes were more likely to report having diabetes than those with higher incomes. Over twice as many adults whose household income is below $25,000 reported having diabetes (17%) than the general adult population, while an even larger percent (21%) of those whose household income is between $25,000 and $34,999 have diabetes. Five percent of respondents with a household income above $75,000 reported having diabetes. In 2015, the highest rate of diabetes was reported by those adults whose
Goodhue County adults with a **household income less than $25,000** were more likely to have diabetes than the general adult population of Goodhue County.

![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.](chart)
Mental health

Any mental health problem

More than 1 in 4 respondents indicated a history of mental illness in 2018 (28%), as well as in 2015 (26%).

Potential differences between population groups

- More than half of the respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf reported having a history of mental illness (56%). In 2015, the rate among respondents in the convenience sample was 75%.

- Thirty-seven percent of respondents with a household income of less than $25,000 reported a history of mental illness, which is similar to the rate reported for that income group in 2015 (39%).

Goodhue County adults with a household income less than $25,000 were more likely to have a history of mental illness than the general adult population of Goodhue County.

![Graph showing history of mental illness in adults over time](image)

*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.*

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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.
**Mentally unhealthy days**

Forty percent of respondents reported their mental health was not good on one or more days during the past 30 days, up from 33% in 2015. On average, Goodhue County adults reported 3.7 mentally unhealthy days in the last 30 days, up from 2.5 days in 2015.

**Potential differences between population groups**

- Adults with a **history of mental illness** reported more mentally unhealthy days (7.5) compared with adults with no history of mental illness (2.2). Consistent with the overall trend, this was up from 2015, when those with a history of mental illness reported an average of 5.1 mentally unhealthy days and those with no history reported an average of 1.6 mentally unhealthy days.

- Adults with a **household income under $25,000** reported more mentally unhealthy days (8.6) compared with the general adult population (3.7). This was up from 2015, when those with a household income under $25,000 reported 4.4 mentally unhealthy days and the general adult population reported 2.5 mentally unhealthy days.

**Figure 3.** The average number of mentally unhealthy days in the last 30 days for Goodhue County adults age 25+ is increasing.

**Depression**

Twenty percent of respondents reported that they have been told by a health care professional that they had depression. This is similar to 19% of respondents in 2015.
Potential differences between population groups

- **Female** respondents were more likely to report depression (25%) compared with male respondents (14%). This was the same in 2015, when 25% of female respondents and 12% of male respondents reported depression.

- The prevalence of depression increased with lower incomes. **Respondents with household incomes less than $25,000** were most likely to report depression (33%), in contrast to those with household incomes of $75,000 or more (15%). Similarly, in 2015, respondents from households that made less than $25,000 were more likely to report depression (30%) in contrast to those from households that made $35,000 or more (16-18%).

- Respondents in the convenience sample who took the survey **in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf** were more likely to report depression (46%) compared to the general adult population of Goodhue County (20%). Similarly, in 2015, 67% of the convenience sample but only 19% of the general adult population reported depression.

- Respondents who are **obese** were more likely to report depression (25%) compared with those who are overweight (13%) and not overweight or obese (19%). Similarly, in 2015, 25% of respondents who were obese reported depression, but only 15% of those who were either overweight or not overweight or obese.

**Anxiety or panic attacks**

Seventeen 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 15% of respondents who reported the same in 2015.

Potential differences between population groups

- Respondents in the convenience sample who took the survey **in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf** were more likely to report anxiety or panic attacks (43%) than the general adult population of Goodhue County (17%). In 2015, 62% of respondents in the convenience sample reported having been told they had anxiety or panic attacks.

**Attitudes toward mental illness**

In both 2015 and 2018, respondents were asked whether they agreed or disagreed that people are generally caring and sympathetic to people with mental illness. In 2018, less than half (43%) of respondents agreed or strongly agreed. Similarly, 42% percent of respondents with a history of mental illness agreed in 2018, but none strongly agreed. In comparison, 63% of
respondents overall, and 54% of respondents with a history of mental illness, agreed or strongly agreed in 2015.

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. Sixty percent of all respondents agreed or strongly agreed. Fifty-three percent of respondents with a history of mental illness agreed or strongly agreed.

Also in 2018, respondents were asked whether they agreed or disagreed that people with mental illness do not try hard enough to get better. Ten percent of all respondents agreed or strongly agreed. Eight percent of respondents with a history of mental illness agreed or strongly agreed.
Access to care

Seeing a health professional for medical care

Sixty-four percent of respondents reported having a general health exam within the last year, which is the same as in 2015. Six percent of respondents indicated that their last general health exam was five or more years ago, and 2% reported that they have never had a general health exam.

Twenty-eight 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 higher than 2015 (20%). The most commonly reported reason for delaying getting medical care was respondents thinking that the issue was serious not enough (52%), followed by the cost of care (37%). These were also the most common reasons in 2015 (45% each).

Potential differences between population groups

- **Respondents of color** were more likely to delay or not get medical care in contrast to white respondents in 2015; however, because of low sample sizes this could not be analyzed in 2018.

- For respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf the most common reason for delaying medical care was lack of insurance (31%), followed by respondents thinking the issue was not serious enough (25%), and transportation problems (22%). In comparison, of respondents in the general adult population, 5% reported lack of insurance and 2% reported transportation issues as reasons for delaying care.

Seeing a health professional for mental health

Nine 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 2015 (7%). The most commonly reported reason for delaying or not getting mental health care was respondents thinking the issue was not serious enough (49%), followed by respondents feeling too nervous or afraid (32%), and cost (31%). The percent of respondents delaying or not seeking care because they felt too nervous or afraid increased from 16% in 2015 to 32% in 2018. Insurance coverage decreased as an issue from 30% reporting in 2015 that they delayed or did not seek help because it was not covered by insurance to 16% in 2018.
Potential differences between population groups

- Twenty-four percent of respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf reported delaying or not seeking mental health support in the last 12 months, which is similar to 22% who reported the same in the convenience sample in 2015. The most common reason for delaying or not seeking care among convenience sample respondents was not knowing where to go (23%), followed by respondents not being able to get an appointment (19%) and thinking the issue was not serious enough (19%).

![Graph showing the percentage of adults who delayed mental health care.](image)

*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*

**Seeing a health professional for dental care**

Seventy-five percent of respondents reported having a dental exam or cleaning within the last year, which is the same as in 2015. Eight percent of respondents indicated that their last general health exam was five or more years ago.

Thirteen percent of respondents reported that in the past 12 months they delayed or did not get dental care when they thought they needed it, which is slightly lower than 2015 (18%). The most commonly reported reason for delaying dental care was the cost of care (58%), followed by having no insurance (43%). These were also the most common reasons in 2015.
Potential differences between population groups

- Respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf were more likely to report that in the past 12 months they delayed or did not get dental care when they thought they needed it (35%), compared to 13% of the general adult population.

- For respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf the most common reason for delaying dental care was lack of insurance (36%), followed by cost of care (33%), and transportation problems (19%). In comparison, of respondents in the general adult population, only 1% reported transportation issues as reasons for delaying care.
Food security

Concerns about running out of food

Six 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 down from 11% in 2015.

Potential differences between population groups

- In 2015, respondents of color were more likely than white respondents to report that they “often” or “sometimes” worried that their food would run out before they had money to buy more, but this could not be monitored in 2018 due to the smaller survey sample size.

- Respondents whose household income is less than $25,000 were more likely to report that they “often” or “sometimes” worried that their food would run out before they had money to buy more (25%), followed by those whose household income is between $35,000 and $49,999 (15%). For respondents whose household income was between $25,000 and $34,999, 29% reported in 2015 that they “often” or “sometimes” worried that their food would run out, but only 1% reported the same in 2018.

- Respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf were much more likely than the general adult population to report that they “often” or “sometimes” worried that their food would run out before they had money to buy more in both 2018 (67%) and 2015 (85%).

- Respondents who are obese were more likely to report that they “often” or “sometimes” worried that their food would run out before they had money to buy more in both 2018 (10%) and 2015 (16%).

- Note that in 2018, obesity was more common (36%) than food insecurity (6%), and the vast majority of obese respondents (90%) did not indicate food insecurity. The obesity rate for those who “never” worried about running out of food was similar to the general adult population obesity rate in 2018 (36%) and 2015 (35%). However, the small percentage of respondents who did report concerns about running out of food were more likely to be obese.

- More than half of respondents who reported food insecurity were obese. In 2018, the obesity rate for respondents who “often” or “sometimes” worried that their food would run out was 62%, compared to a general adult population obesity rate of 36%. Similarly, the general adult population obesity rate was 38% in 2015; however, among respondents who
reported they “often” or “sometimes” worried that their food would run out, a higher percentage were obese (55%).

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.
Eating habits

Fruit and vegetable consumption

Over one-third of respondents (35%) reported eating five or more servings of fruits and vegetables (including juices) the prior day. About the same number (34%) reported eating between three and four servings, and a quarter reported eating between one and two servings. Six percent reported eating zero servings. In 2015, 38% of respondents reported eating five or more servings the prior day and 34% reported eating between three and four.

More than a third of Goodhue County adults age 25+ eat five or more servings of fruits and vegetables a day.

Potential differences between population groups

- Respondents who are overweight or obese were about as likely as the general population to report eating at least five servings of fruits and vegetables the prior day (both 33%). Respondents who are not overweight were only slightly more likely to report eating at least five servings as the general adult population (38%) and were the most likely to report eating three to four servings (48%).

- Respondents who “often” or “sometimes” worry that their food will run out before they have money to buy more are less likely to report eating five or more servings of fruits and vegetables the prior day. Eleven percent of respondents who “often” or “sometimes” worry that their food will run out reported eating at least five servings, compared to 37% of respondents who “never” worry. In 2015, these rates were 23% and 42%, respectively.
■ Respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf reported higher rates of eating at least five servings of fruits and vegetables the prior day (44%) than the general adult population of Goodhue County.

**Eating a home-cooked meal**

Over 99% 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 (48%). This was similar to 2015, when 98% of respondents reported eating a home-cooked meal at least once in a typical week, and 45% of respondents reported doing so seven or more times a week.

**Potential differences between population groups**

■ In 2015, respondents of color were more likely than white respondents to report eating a home-cooked meal seven or more times a week. A comparison to 2018 is not available due to the smaller survey sample size.

■ Respondents aged 25-34 were the most likely (59%) to report eating a home-cooked meal seven or more times in a typical week, followed by respondents aged 75 or older (53%), respondents aged 65-74 (48%), and respondents aged 55-65 (46%), and respondents aged both 45-54 and 35-44 (42%, each). In 2015, respondents aged 25-34 were also the most likely (58%) to report eating a home-cooked meal seven or more times in a typical week. The rate for those 75 or older increased from 2015 to 2018 (43% to 53%).
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. Sixty percent reported getting at least 30 minutes of moderate physical activity between 1 and 4 days a week, and 29% reported getting at least 30 minutes between five and seven days a week. These rates were similar to 2015.

**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 (42%). Respondents aged 55-65 were the least likely (20%). This is in contrast to 2015, when respondents aged 25-34 were the least likely to report getting at least 30 minutes of moderate physical activity at least five days a week (20%), and those aged 45-54 were the most likely (37%).

- 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 (40%) compared to those at other income levels, with those making between $25,000 and $34,999 the least likely to report the same (20%). In both 2015 and 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 (28% and 20%, respectively).

- 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 (37%), compared to 33% of overweight respondents and 20% of obese respondents. However, respondents who are not overweight were also the most likely to report not getting at least 30 minutes of moderate physical activity at all during a typical week (14%), compared to 10% of overweight respondents and 11% of obese respondents. In 2015, obese respondents were the most likely to report not getting at least 30 minutes of moderate physical activity at all during a typical week (17%).

**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 34% reported getting one to two days, and 37%
reported not getting at least 20 minutes of vigorous activity at all in a typical week. These rates were similar to 2015.

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 (40%), followed closely by those aged 45-54 (38%). In 2015, respondents aged 25-34 were the least likely to report getting at least 20 minutes of vigorous physical activity three or more days in a typical week (15%). 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 (17%), and were the most likely to report not getting any vigorous physical activity (58%). In 2015, respondents aged 75 or older were even more likely to report not getting any vigorous activity in a typical week (66%).

- 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 (36%) compared to those at other income levels, with those making between $35,000 and $49,999 the least likely to report the same (20%). Respondents whose household income is less than $25,000 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 (47%), which is lower than for the same group in 2015 (55%).

- Respondents who are **obese** were the least likely to report getting at least 20 minutes of vigorous physical activity at least three days a week (21%), compared to 32% of respondents who are not overweight and 36% of respondents who are overweight but not obese. Respondents who are obese were also the most likely to report zero days of 20 minutes of vigorous physical activity in a typical week (45%), which is similar to the rate for obese respondents in 2015 (48%).

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-seven percent of respondents said that lack of time is a big problem preventing them from being more active, followed by lack of self-discipline/willpower (22%), and cost of fitness programs, gym memberships, or admission fees (20%). Fear of injury (4%), not knowing where
to start (4%), and not having a safe place to exercise (2%), were the factors least likely to be identified as a big problem.

Potential differences between population groups

- Cost was most likely to be selected as a big problem preventing them from being more active (35%) by respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf. The convenience sample was more likely to say cost is a big problem than those in the general adult population (35% v. 20%). Those in the convenience sample (25%) were also more likely than the general adult population (7%) to say that not having anyone to exercise with is a big problem. Those in the convenience sample were less likely (14%) than the general adult population (27%) 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-four percent of respondents aged 25-34 and 41% of those aged 35-44 said lack of time is a big problem, compared to 2% of respondents aged 65-74 and 3% 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. Forty-four percent of respondents whose household income is $75,000 or higher said lack of time is a big problem, followed by 20% of those whose household income is $50,000 - $74,999. Less than 10% of all other income brackets said lack of time was 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. A quarter (25%) of respondents whose household income is below $25,000 said illness, injury, or disability is a big problem, followed by those with incomes between $25,000 - $34,999 (16%), and $35,000 - $49,999 (15%).

- 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 (14%), compared to respondents who are overweight (10%), and those who are not overweight (4%).

- While 7% of the general adult population 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 $35,000 - $49,999 said that not having anyone to exercise with is a big problem, followed by 15% of respondents with a household income between $25,000 - $34,999.
**Tobacco use**

**Any tobacco use**

Seventeen percent of respondents reported that they are a current user of some sort of tobacco product, which is slightly higher than the rate in 2015 (14%).

**Potential differences between population groups**

- Half of the respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf reported that they are a current tobacco product user. The rate for the convenience sample in 2015 was 54%.

- Respondents whose household income is less than $25,000 and between $25,000 and $34,999 were most likely to report being a current tobacco product user (30% and 29%, respectively). These rates are higher than in 2015, when only 1% of respondents whose household income is less than $25,000 reported being a current tobacco product user, and 12% of those whose household income is between $25,000 and $34,999 did the same.

**Smoking**

Seven percent of respondents reported that they are a current cigarette smoker, similar to 8% in 2015. Sixty-two percent reported that they have never been a cigarette smoker.

Among current cigarette smokers, a larger percentage reported having tried to quit smoking within the past 12 months in 2018 than in 2015 (57% v. 43%).

**Potential differences between population groups**

- Forty-eight percent of the respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf reported that they currently smoke cigarettes, which is similar to the rate for the convenience sample in 2015 (45%). Among those in the convenience sample who reported they currently smoke cigarettes, 71% reported having tried to quit in the last 12 months, compared to only 15% in the 2015 convenience sample.

- Respondents whose household income is between $25,000 and $34,999 and those whose household income is between $65,000 and $74,999 were the most likely to report being a current cigarette smoker (16% and 15%, respectively). Respondents whose household income is greater than $75,000 were the least likely to report being a current cigarette smoker.
smoker (4% in 2018 and 5% in 2015), and the most likely to report having never been a smoker (67% in both 2015 and 2018).

Adults who filled out a survey in the GCHHS lobby, C.A.R.E. Clinic, or a food shelf were much more likely to be a current cigarette smoker compared with the general adult population of Goodhue County.

![Graph showing smoking rates over time]

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 2015. Note, this survey only had adult respondents age 25 years and older. There were not enough responses from ages 18-24 to monitor rates of e-cigarette, vaping, and JUUL use for young adults.

Potential differences between population groups

- Fifteen percent of the respondents in the convenience sample who took the survey in the GCHHS lobby, or at C.A.R.E. Clinic, or a food shelf reported that they currently use e-cigarettes, which is similar to the rate for the convenience sample in 2015 (12%).

- Respondents whose household income is less than $25,000 were the most likely to report being a current e-cigarette user (17%), followed by those whose household income is between $25,000 and $34,999 (7%). Hardly any respondents in higher income brackets reported currently using e-cigarettes. In 2015, the highest rates of e-cigarette use was reported by those respondents whose household income was between $50,000 and $74,999 (5%).
Alcohol use

Heavy drinking

Ten 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 similar to the 2015 rate (11%).

Potential differences between population groups

- **Male and female** respondents reported similar rates of heavy drinking in the past 30 days: 10% for men and 11% for women. This is similar to 2015: 12% for men and 11% for women.

- Respondents aged **75 or older** and those aged **45-54** were the least likely to report heavy drinking in the past 30 days (4% and 6% respectively). Respondents aged 35-44 were the most likely to report heavy drinking in both 2018 (16%) and 2015 (20%).

- **Overweight respondents** were the most likely to report heavy drinking the last 30 days in 2018 (18%). Respondents who are not overweight were the least likely to report heavy drinking in the past 30 days (3%), but were the most likely to report heavy drinking in 2015 (14%).

Binge drinking

Twenty-six 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 down somewhat from 32% in 2015.

Potential differences between population groups

- **Male** respondents were more likely to report binge drinking in the past 30 days (32%) than female respondents (20%). The rate of reported binge drinking for male respondents decreased almost ten percentage points from 2015 to 2018 (41% to 32%).

- **Overweight respondents** were the most likely to report binge drinking in the past 30 days (38%). Respondents who are **not overweight** were less likely to report binge drinking in the past 30 days in 2018 (12%) than 2015 (28%).
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 2015. Thirty-four percent of respondents reported “sometimes” reading or sending texts while driving, which is somewhat higher than 2015 (29%).

Fifteen percent of respondents reported that they “often” make or answer phone calls while driving, which is the same as the rate reported in 2015. Fifty-eight percent of respondents reported “sometimes” making or answering phone calls, which is slightly lower than 2015 (61%).

Potential differences between population groups

- Respondents aged 25-34 were the most likely to report “sometimes” reading or sending texts while driving in both 2018 (61%) and 2015 (64%). All other age brackets reported “sometimes” reading or sending texts while driving at rates below 40%, in both 2018 and 2015. Only 1% of respondents aged 75 or older reported “sometimes” reading or sending texts while driving” and 13% reported having no cell phone.

Impaired driving

Among respondents who drive, 9% reported that they “sometimes” drive after perhaps having too much to drink. None of the respondents indicated they “often” drive after drinking. In 2015, 5% of respondents said that they “sometimes” drive after perhaps drinking too much.

Seatbelt use

Ninety-two percent of respondents indicated that they “always” wear a seatbelt when driving or riding in a vehicle, which is similar to the rate in 2015 (91%). Only 1% of respondents in both 2018 and 2015 reported that they “never” wear a seatbelt when driving or riding in a vehicle.
Survey Methodology

Survey Instrument

The survey instrument used for the project was adapted from surveys conducted in 2015 and 2016 in Goodhue, Freeborn, and Mower Counties. The county public health agencies and Mayo Clinic Health System worked together to select the survey content from the three 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, MN, 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, PA). Address-based sampling was used so that all households would have an equal chance of being sampled for the survey. Marketing Systems Group obtained the list of addresses from the U.S. 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 21 and 24, 2018, that included a cover letter, the survey instrument, and a postage-paid return envelope. One week after the first survey packets were mailed (October 1), 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 15), 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 November 26, 2018.

Completed Surveys and Response Rate

Completed surveys were received from 1,189 adult residents of Goodhue, Mower and Freeborn counties for an overall response rate of 24.8% (1189/4800). There were 413 completed surveys received from adult residents of Goodhue County. The county level response rates are as follows: Goodhue County: 26.0%; Mower County: 24.9%; Freeborn County: 23.4%. 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 U.S. Census Bureau American Community Survey 2013-17 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. This was a slight change from 2015, when the convenience sample only surveyed adults in the GCHHS lobby and not at the C.A.R.E. Clinic or food shelf locations.

While only 3% of the mailed survey responses were from people of color in 2018, 28% of the convenience sample of adults at GCHHS lobby, C.A.R.E. Clinic, and food shelves was people of color. While only 9% of the mailed survey responses were from people with a household income less than $25,000, 74% 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 $25,000. Because the survey respondents were not randomly selected, it is not appropriate to generalize this convenience sample to the entire low income population or the entire population of communities of color.
Convenience Sample Survey Administration

A total of 125 gift cards for $5 were purchased as incentives for people to complete the survey. There were 75 gift cards from Walmart and 50 from local grocery stores in Pine Island, Zumbrota, Kenyon, and Cannon Falls. Receptionists at GCHHS lobby and volunteers at C.A.R.E. Clinic and the food shelves initialed for gift cards distributed. GCHHS lobby customers and C.A.R.E. Clinic patients received Walmart gift cards. Food shelf clients received gift cards for their local grocery store. Surveys were all completed in October 2018.

Completed Convenience Sample Surveys

A total of 116 surveys were completed. C.A.R.E. Clinic returned 19 completed surveys. GCHHS lobby returned 56 completed surveys. Pine Island Sharing Shelves, Zumbrota Food Shelf, All Seasons Food Shelf (Kenyon), and Cannon Falls Food Shelf returned a total of 41 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 (88% of sample) and under-represent adults under age 25 (8% of sample) or over age 65 (6% of sample).