Public Health
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Greene County

COMMUNITY HEALTH ASSESSMENT

2023

ABSTRACT

This Community Health Assessment is a systematic collection, assembly, analysis, and dissemination of information about the health of our community. It highlights major health and social issues affecting the health status and quality of life in Greene County.

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Foreword

The 2023 Greene County, Ohio, Community Health Assessment (CHA) is a compilation of data and statistics that represent the health of Greene County residents.

Data were collected from a mail survey that was distributed to a random sample of Greene County residents ages 19 and older from November 2022 through January 2023. In addition to the surveys, numerous focus groups were conducted in Greene County communities.

We appreciate the time that residents took to participate in the surveys and focus groups. The data obtained provide insight into the areas of health in which we thrive as a community and where there is an opportunity for improvement.

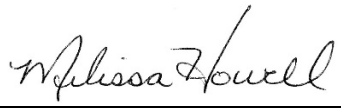
The CHA is a tool that Greene County Public Health, the area health systems, social service agencies, non-profits, Boards and Commissions, municipalities, and individuals can use for data-driven decision making.

Thank you to all of Greene County for assisting with this assessment. Your continued support since we began doing assessments in 1995, has allowed us to prioritize community resources for focused health improvement.

Feel free to contact Greene County Public Health for any assistance with the interpretation of this document.

This community health assessment belongs to the people of Greene County. Let's continue to work towards a better quality of life and a healthier community!

Sincerely,



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Health Commissioner
Greene County Public Health

Acknowledgments

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Greene County Public Health

Greene County Community Health Assessment Workgroup:

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Beavercreek Township Board of Trustees
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CareSource
Central State University
City of Xenia
Clark State Community College
Council on Rural Services
Dayton Children's Hospital
Fairborn Municipal Court
Family and Children First Council
Five Rivers Health Center - Xenia
Greene CATS Public Transit
Greene County Board of County Commissioners
Greene County Board of Developmental Disabilities
Greene County Council on Aging
Greene County Department of Job and Family Services
Greene County Drug-Free Coalition
Greene County Educational Service Center
Greene County Emergency Management Agency
Greene County Housing
Greene County Parks & Trails
Greene County Public Health
Kettering Health Greene Memorial
Layh & Associates, Inc.
Mental Health & Recovery Board of Clark, Greene & Madison Counties
Ohio State University Extension Office
Soin Medical Center – Kettering Health
TCN Behavioral Health Services
United Way of the Greater Dayton Area
Village of Yellow Springs

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Project Management, Secondary Data, Data Collection, and Report Development
Hospital Council of Northwest Ohio

The Hospital Council of Northwest Ohio (HCNO) is a 501(c)3 non-profit regional hospital association located in Toledo, Ohio. They facilitate community health assessments and planning processes in 50+ counties in Ohio, Michigan, and Oregon. Since 2004, they have used a process that can be replicated in any county that allows for comparisons from county to county, within the region, the state, and the nation. HCNO works with coalitions in each county to ensure a collaborative approach to community health improvement that includes multiple key stakeholders, such as those listed above. All HCNO project staff have their Master of Public Health (MPH) degree, with emphasis on epidemiology, policy, and health education.

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The 2023 Greene County Health Assessment is available on the following websites:

Greene County Public Health
https://www.gcph.info/about/accreditation

Hospital Council of Northwest Ohio
http://www.hcno.org/community-services/community-health-assessments/

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FOCUS GROUP RESULTS

APPENDICES

Executive Summary

This executive summary provides an overview of health-related data for Greene County adults (ages 19 and older) who participated in a county-wide health assessment survey from November 2022 through January 2023. The findings are based on self-administered surveys using a structured questionnaire. The questions were modeled after the survey instrument used by the Centers for Disease Control and Prevention for their national and state Behavioral Risk Factor Surveillance System (BRFSS). The Hospital Council of Northwest Ohio (HCNO) collected the data, guided the health assessment process, and integrated sources of primary and secondary data into the final report.

Public Health Accreditation Board (PHAB)

National public health accreditation status through the Public Health Accreditation Board (PHAB) requires community health assessments (CHAs) to be completed at least every five years. The purpose of the community health assessment is to learn the health of the population, identify areas for health improvement, identify contributing factors that impact health outcomes, and identify community assets and resources that can be mobilized to improve population health.

PHAB standards highly recommend that national models of methodology are utilized in compiling CHAs. The 2023 CHA was completed using the National Association of County and City Health Officials (NACCHO) Mobilizing Action through Partnerships and Planning (MAPP) process. MAPP is a community-driven planning process for improving community health. This process was facilitated by HCNO in collaboration with various local agencies representing a variety of sectors.

This assessment includes a variety of data and information from various sources, focusing on primary data at the county level. Supporting data, such as secondary data, demographics, health disparities (including age, sex, and income-based disparities), and social determinants of health*, can be found throughout the report. For a more detailed approach on primary data collection methods, please see the section below.

**Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks (Source: Social Determinants of Health, Healthy People 2030).*

Primary Data Collection Methods

DESIGN

This community health assessment was cross-sectional in nature and included a written survey of adults within Greene County. In addition to the general adult survey mailing, Growing Healthy Together Greene County determined it would be beneficial to oversample the African American population. Data summary graphs incorporated data for African American adults, in comparison to white adults, to identity disparities among the African American community. From the beginning, community leaders were actively engaged in the planning process and helped define the content, scope, and sequence of the study. Active engagement of community members throughout the planning process is regarded as an important step in completing a valid needs assessment. Comparisons to local, state, and national data were made, along with alignment to the Healthy People 2030 target objectives, when applicable.

INSTRUMENT DEVELOPMENT

One survey instrument was designed and pilot tested for adults in this study. As a first step in the design process, health education researchers from the University of Toledo and staff members from HCNO met to discuss potential sources of valid and reliable survey items that would be appropriate for assessing the health status and health needs of adults. The investigators decided to derive the majority of the survey items from the BRFSS. This decision was based on being able to compare local data with state and national data.

The project coordinator from HCNO conducted a series of meetings with Growing Healthy Together Greene County. During these meetings, HCNO and Growing Healthy Together Greene County reviewed and discussed banks of potential survey questions from the BRFSS survey. Based on input from Growing Healthy Together Greene County, the project coordinator composed a draft of the survey containing 106 items. Institutional Review Board (IRB) approval is granted to HCNO from Advarra in Columbia, Maryland.

SAMPLING

The sampling frame for the adult survey consisted of adults ages 19 and over living in Greene County. There were 132,515 persons ages 19 and over living in Greene County. The investigators conducted a power analysis to determine what sample size was needed to ensure a 95% confidence level with a corresponding margin of error of 6% (i.e., we can be 95% sure that the "true" population responses are within a 6% margin of error of the survey findings). A sample size of at least 266 adults was needed to ensure this level of confidence. The random sample of mailing addresses was obtained from Melissa Global Intelligence in Rancho Santa Margarita, California.

PROCEDURE

Prior to mailing the survey, the project team mailed an advance letter in September 2022 to 3,200 adults in Greene County: 2,000 to the general population and 1,200 to the African American population. This advance letter was personalized; printed on Growing Healthy Together Greene County letterhead; and signed by Melissa Howell, Health Commissioner, Greene County Public Health; Daniel Tyron, President, Indu and Raj Soin Medical Center, Greene Memorial Hospital; John LaRock, Superintendent, Greene County Board of Developmental Disabilities; Beth Rubin, Director, Greene County Job and Family Services; Terry Graves-Strieter, Superintendent, Greene County Educational Service Center; Greta Mayer, CEO, Mental Health and Recovery Board of Clark, Greene, and Madison Counties. The letter introduced the county health assessment project and informed the readers that they may be randomly selected to receive the survey. The letter also explained that the respondents' confidentiality would be protected and encouraged the readers to complete and return the survey promptly if they were selected.

In November 2022 (six weeks following the advance letter), a mailing procedure was implemented to maximize the survey return rate. The mailing included a personalized, hand-signed cover letter (on Growing Healthy Together Greene County letterhead) describing the purpose of the study, a questionnaire printed on white paper, a self-addressed stamped return envelope, and a $2 incentive. Approximately three weeks after the first mailing, a second wave mailing included another personalized cover letter encouraging them to reply, another copy of the questionnaire, and another reply envelope. Surveys returned as undeliverable were not replaced with another potential respondent.

The response rate for the mailing was 16% (n=505: CI=± 4.35). This return rate and sample size mean that the responses in the health assessment should be representative of the entire county.

Note: "n" refers to the total sample size, "CI" refers to the confidence interval.

DATA ANALYSIS

Individual responses were anonymous. Only group data was available. All data was analyzed by health education researchers at the University of Toledo using Statistical Product and Service Solutions (SPSS) 28.0. Crosstabs were used to calculate descriptive statistics for the data presented in this report. To be representative of Greene County, the adult data collected was weighted by age, sex, race, and income using Census data (Note: income data throughout the report represents annual household income). Multiple weightings were created based on this information to account for different types of analyses. For more information on how the weightings were created and applied, see Appendix III. Additional 2020 Census 5-year estimates are included in Appendix V – Demographics and Household Information.

DEMOGRAPHIC COMPARISONS

When determining income comparison thresholds, researchers concluded it would be best to use the same income thresholds used by other public health organizations for comparison purposes. The CDC, which administers the BRFSS, and America's Health Rankings both use $25,000 and below as the lower income threshold. For this reason, researchers concluded "Income <$25K" and "Income $25K Plus" were appropriate thresholds to compare households with lower household incomes to households with higher household incomes.

Researchers determined "Under 30", "30 – 64 Years", and "65 and Over" were appropriate thresholds to compare respondents based on age. For sex comparisons, although "Trans male/Trans man", "Trans female/Trans woman", and "Genderqueer/Gender non-conforming" were included as a response options, there were not enough responses within these categories. Therefore, researchers determined it would only be appropriate to compare males to females for statistical purposes.

See Appendix VI: Demographic and Household Information and Appendix III: Weighting Methods for further information regarding 2020 U.S. Census Bureau ACS 5-year estimates, 2021 Federal Poverty Thresholds, and Greene County respondent demographics.

SPECIFIC POPULATIONS THAT EXPERIENCE DISPARITIES

Health disparities (including age, sex, and income-based disparities) can be identified throughout each section of the2023 Greene County Health Assessment. Income-based disparities are particularly prevalent in Greene County. For example, the prevalence of chronic conditions (e.g., diabetes, high blood pressure, high blood cholesterol, asthma, arthritis, etc.), were higher among those with annual household incomes under $25,000 compared to the general population.

As part of the community health improvement plan (CHIP) process, the Growing Healthy Together Greene County will identify specific populations that face disparities as part of the prioritization phase of the process.

INEQUITIES IN THE FACTORS THAT CONTRIBUTE TO HEALTH CHALLENGES (INCLUDING SOCIAL DETERMINANTS OF HEALTH):

Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks *(Source: Social Determinants of Health, Healthy People 2030)*. Growing Healthy Together Greene County created an entire section within survey development to focus on SDOH specific questions. For example, the SDOH section includes information relating to transportation, neighborhood safety, and food insecurity, which contribute to health challenges among Greene County adults. For example, adults with lower household incomes (<$25K) were less likely to describe their neighborhood as extremely or quite safe compared to those with higher household incomes (>$25K). Please see SDOH section for further breakdowns of SDOH data.

LIMITATIONS

As with all health assessments, it is important to consider the findings in light of all possible limitations. First, the Greene County adult assessment had a high response rate. However, if any important differences existed between the respondents and the non-respondents regarding the questions asked, this would represent a threat to the external validity of the results (the generalizability of the results to the population of Greene County). If there were little to no differences between respondents and non-respondents, then this would not be a limitation.

Furthermore, while the survey was mailed to random households in Greene County, those responding to the survey were more likely to be older. For example, only 26 respondents were under the age of 30. While weightings are applied during calculations to help account for this sort of variation, it still presents a potential limitation (to the extent that the responses from these 26 individuals might be substantively different from the majority of Greene County residents under the age of 30).

It is important to note that although several questions were asked using the same wording as the Centers for Disease Control and Prevention (CDC) questionnaires, the data collection method differed. The CDC adult data was collected using a set of questions from the total question bank, and participants were asked the questions over the telephone rather than through a mailed survey.

Although the collection of self-reported data is a common method of research in the field of public health, which is utilized by the BRFSS administered by the CDC, it is also important to consider the possible limitations.
There is the potential for respondents to answer dishonestly for their answers to be more socially acceptable, or respondents may not have the ability to accurately assess themselves.

Lastly, caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Secondary Data Collection Methods

HCNO collected secondary data from multiple websites whenever possible. HCNO utilized sources such as the Behavioral Risk Factor Surveillance System (BRFSS), numerous CDC webpages, U.S. Census data, Healthy People 2030, and other national and local sources. All primary data in this report is from the 2023 Greene County Health Assessment (CHA). All other data is cited accordingly.

Key Report Sections

The following sections throughout the report are clarified below. Detailed information regarding definitions (i.e., binge drinker) can be found in appendix II (Acronyms and Terms) of this report.

Data Summary: The data summary consists of key findings from each individual section within the report. This section offers a quick snapshot of data that can be found within the corresponding section of the report. A more comprehensive list of indicators can be found in the report. Please refer to the table of contents regarding placement of the full section.

Trend Summary: The summary tables consist of data from the 2023 Greene County Community Health Assessment and the previous 2019 assessment. Additional state and national adult data are included for comparison purposes. The trend summary tables highlight all sections found in the report.

Individual Sections: Each individual adult section consists of data from adults ages 19 and older in Greene County. The individual sections fall under four main categories: health care access, health behaviors, chronic disease, and social conditions. The social conditions section consists of topics such as food insecurity, adverse childhood experiences, COVID-19, etc. Please reference the table of contents to review placement of individual sections.

Appendix: The appendices are included at the end of this report. Detailed information is included in the appendix regarding information sources, demographics of survey respondents, acronyms and terms, etc.

Mobilizing for Action through Planning & Partnerships (MAPP) Process Overview

National Public Health Accreditation status through the Public Health Accreditation Board (PHAB) requires Community Health Assessments (CHAs) to be completed at least every five years. The purpose of the community health assessment is to learn about the health of our community, including health issues and disparities, contributing factors that impact health outcomes, and community assets and resources that can be mobilized to improve population health.

This 2023 CHA was developed using the Mobilizing Action through Partnerships and Planning (MAPP) process, which is a nationally adopted framework developed by the National Association of County and City Health Officials (NACCHO) (see Figure 1.1). MAPP is a community-driven planning process for improving community health and is flexible in its implementation, meaning that the process does not need to be completed in a specific order. This process was facilitated by HCNO in collaboration with a broad range of local agencies, to which makes up the Growing Healthy Together Greene County committee. The Community Health Improvement Process (CHIP) follows the CHA process, which will involve the following six phases:

1. Organizing for success and partnership development
During this first phase, community partners organize the planning process and develop the planning partnership. The purpose of this phase is to structure a planning process that builds commitment, engages participants as partners, and uses participant's time efficiently, and results in a plan that can be realistically implemented.

2. Visioning
During the second phase, visioning guides the community through a collaborative process that leads to a shared community vision and common values.

3. The four assessments
Each of the four assessments generates valuable information. The results of the assessments are particularly valuable when looking at the results as a whole. The four assessments include: The Community Health Status Assessment (CHSA), the Local Public Health System Assessment (LPHSA), the Forces of Change (FOC) Assessment, and the Community Themes and Strengths Assessment (CTSA).

Figure 1.1 The MAPP Framework

4. Identifying strategic issues
The process to formulate strategic issues occurs during the prioritization process of the CHA/CHIP. Growing Healthy Together Greene County will consider the results of the assessments, including data collected from community members (primary data) and existing statistics (secondary data) to identify key health issues. Upon identifying the key health issues, an objective ranking process is used to prioritize health needs for the CHIP.

5. Formulate goals and strategies
Following the prioritization process, a gap analysis is completed in which Growing Healthy Together Greene County members identify gaps within each priority area, identify existing resources and assets, and potential strategies to address the priority health needs. Following this analysis, various goals, objectives, and strategies are presented to Growing Healthy Together Greene County to meet the prioritized health needs.

6. Action cycle
Growing Healthy Together Greene County will begin implementation of strategies as part of the next community health improvement cycle. Both progress data to track actions taken as part of the CHIP's implementation and health outcome data (key population health statistics from the CHA) are continually tracked through ongoing meetings. At the end of the CHIP cycle, partners review progress to select new and/or updated strategic priorities based on progress and the latest health statistics.

2019 Ohio State Health Assessment (SHA)

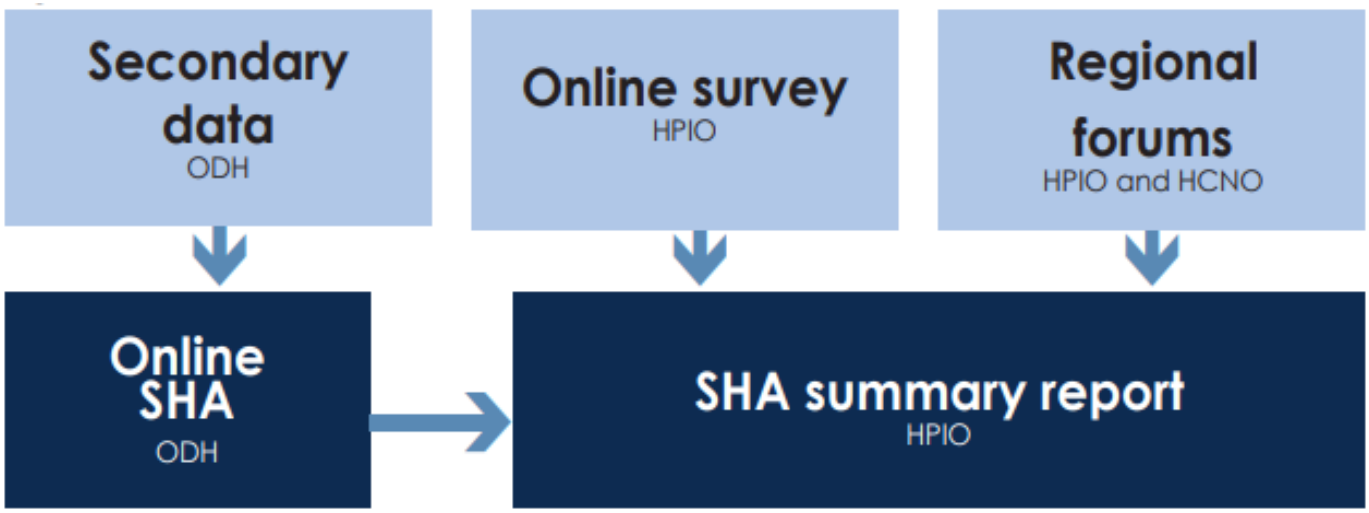
The 2019 Ohio State Health Assessment (SHA) provides data needed to inform health improvement priorities and strategies in the state. This assessment includes over 140 metrics, organized into data profiles, as well as information gathered through five regional forums, online surveys completed by over 300 stakeholders, and advisory and steering committee members who represented 13 state agencies, including sectors beyond health.

Similar to the 2019 Ohio SHA, the 2023 Greene County Community Health Assessment (CHA) examined a variety of metrics from various areas of health including, but not limited to, health behaviors, chronic disease, access to health care, and social determinants of health. Additionally, the CHA studied themes and perceptions from local public health stakeholders from a wide variety of sectors. **Note: This symbol will be displayed in the trend summary when an indicator directly aligns with the 2019 Ohio SHA.**

The interconnectedness of Ohio's greatest health challenges, along with the overall consistency of health priorities identified in this assessment, indicates many opportunities for collaboration between a wide variety of partners at and between the state and local level, including physical and behavioral health organizations and sectors beyond health. It is our hope that this CHA will serve as a foundation for such collaboration.

To view the 2019 Ohio State Health Assessment, please visit: https://odh.ohio.gov/wps/portal/gov/odh/explore-data-and-stats/interactive-applications/2019-Online-State-Health-Assessment

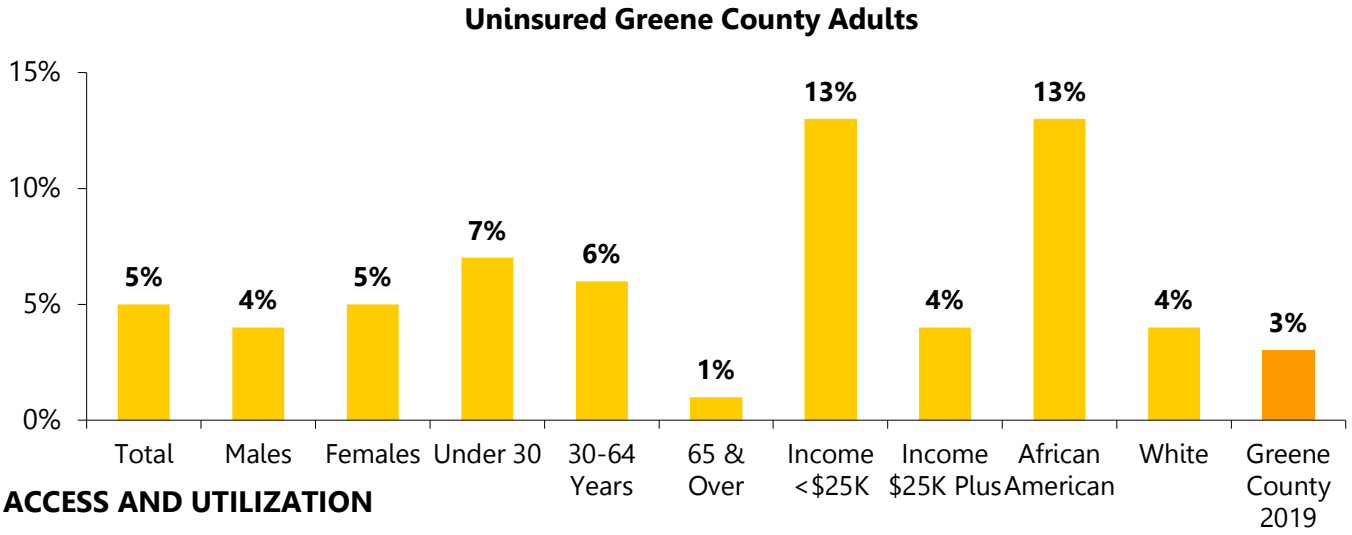
FIGURE 1.1 | Components of the 2019 SHA



**Acronyms:*
HCNO – Hospital Council of Northwest Ohio
HPIO – Health Policy Institute of Ohio
ODH – Ohio Department of Health

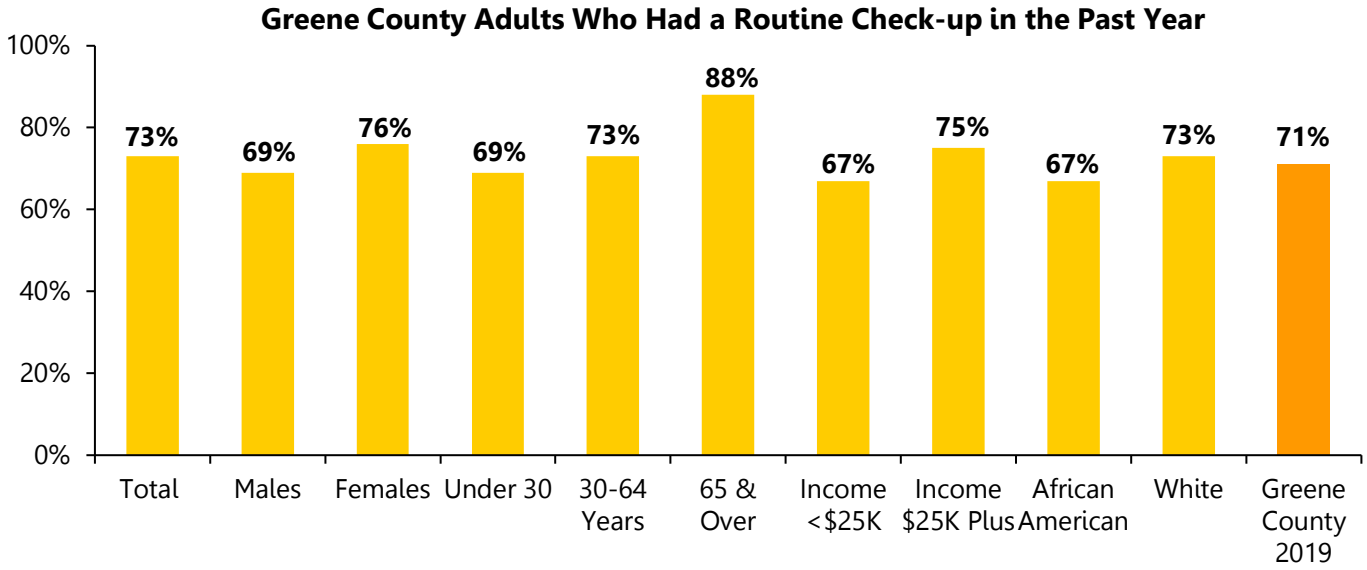
HEALTH CARE COVERAGE

Five percent (5%) of Greene County adults were without health care coverage in 2023. The top sources of health care coverage included employer (42%), Medicare (19%), and someone else's employer (15%).



ACCESS AND UTILIZATION

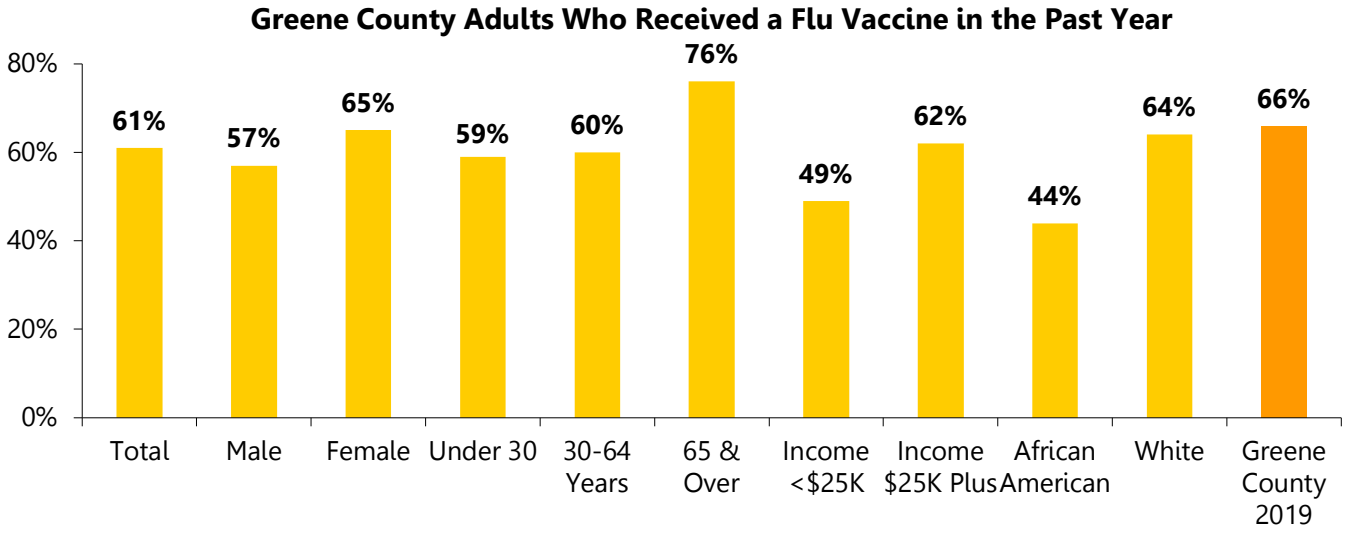
Nearly three-quarters (73%) of Greene County adults had visited a doctor for a routine checkup in the past year. Eighty-three percent (83%) of adults had at least one person they thought of as their personal doctor or health care provider. Almost one quarter (22%) of adults reported cost/no insurance as a reason for not getting medical care in the past year.



Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

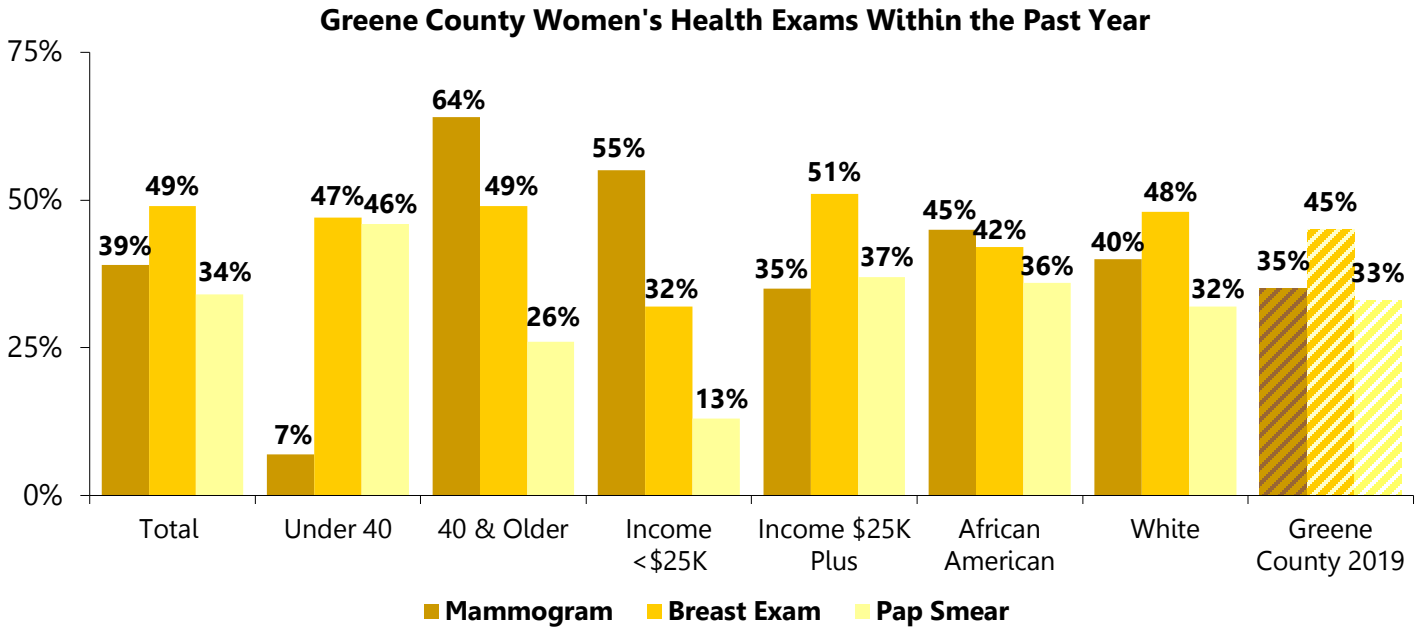
PREVENTIVE MEDICINE

Sixty-one percent (61%) of adults received a flu vaccine in the past year. Over one-third (35%) of adults had a pneumonia vaccine in their lifetime, increasing to 77% of those ages 65 and over. Four out of five (80%) adults had received a COVID-19 vaccine in their lifetime.



WOMEN'S HEALTH

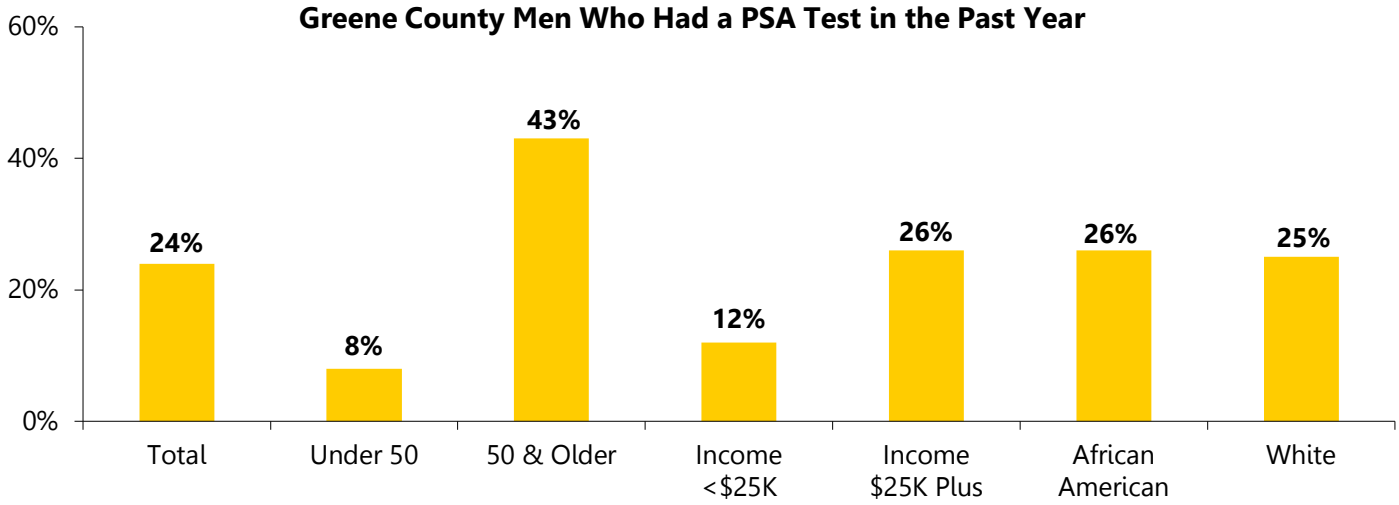
Sixty-four percent (64%) of Greene County women over the age of 40 reported having a mammogram in the past year. Nearly half (49%) of all women in Green County had a clinical breast exam in the past year, and 72% of women ages 21 to 65 had a Pap smear to detect cancer of the cervix in the past three years.



Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

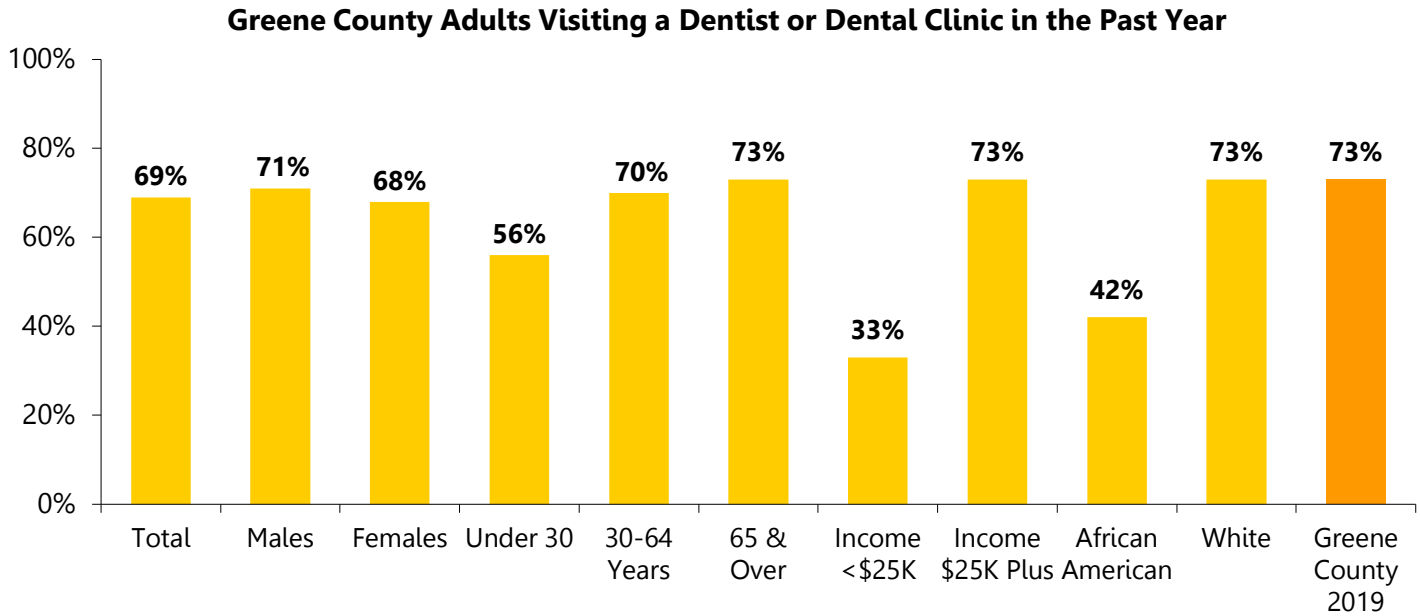
MEN'S HEALTH

Nearly one-quarter of Greene County males had a PSA Test in the past year to detect cancer in the prostate, increasing to 43% of males ages 50 and older. Greene County males reported experiencing the following: erectile dysfunction (25%), enlarged prostate (BPH) (12%), low testosterone (10%), incontinence (6%), and a concerning test from a colonoscopy (4%).



ORAL HEALTH

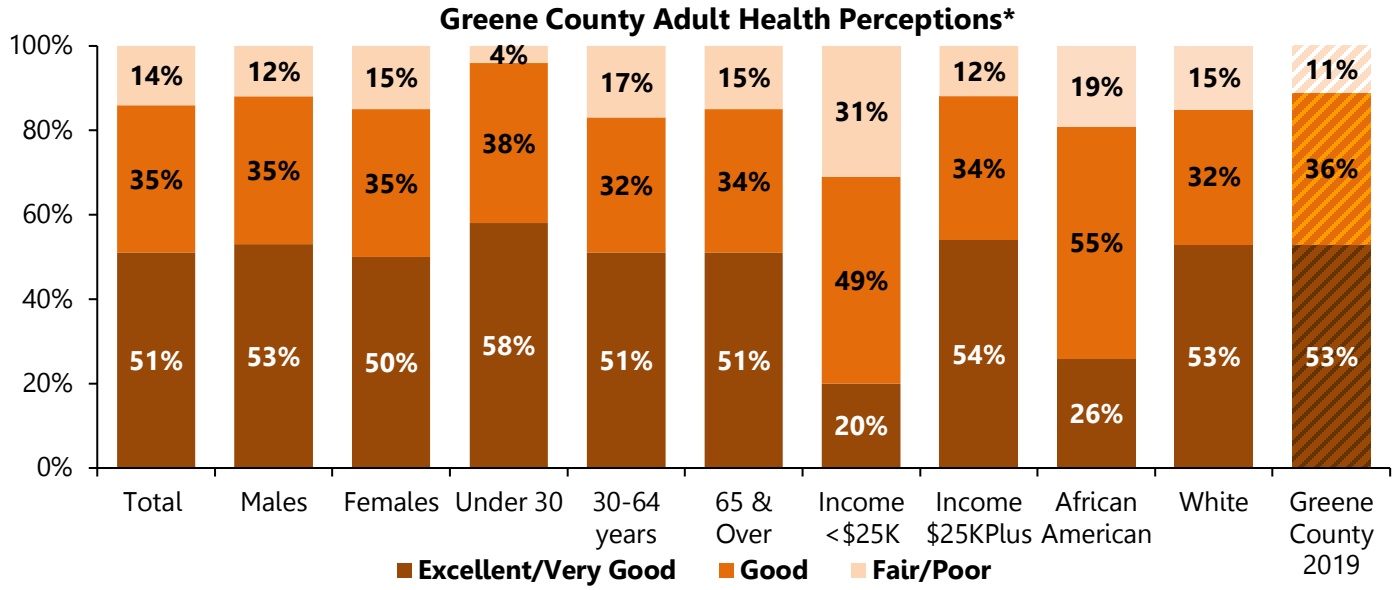
Sixty-nine percent (69%) of Greene County adults had visited a dentist or dental clinic in the past year. Adults who had not received dental care in the past year reported the following reasons for not visiting a dentist in the past year: cost (47%); fear, apprehension, nervousness, pain, disklike going (31%); and no reason to go/had not thought of it (18%).



Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

HEALTH STATUS PERCEPTIONS

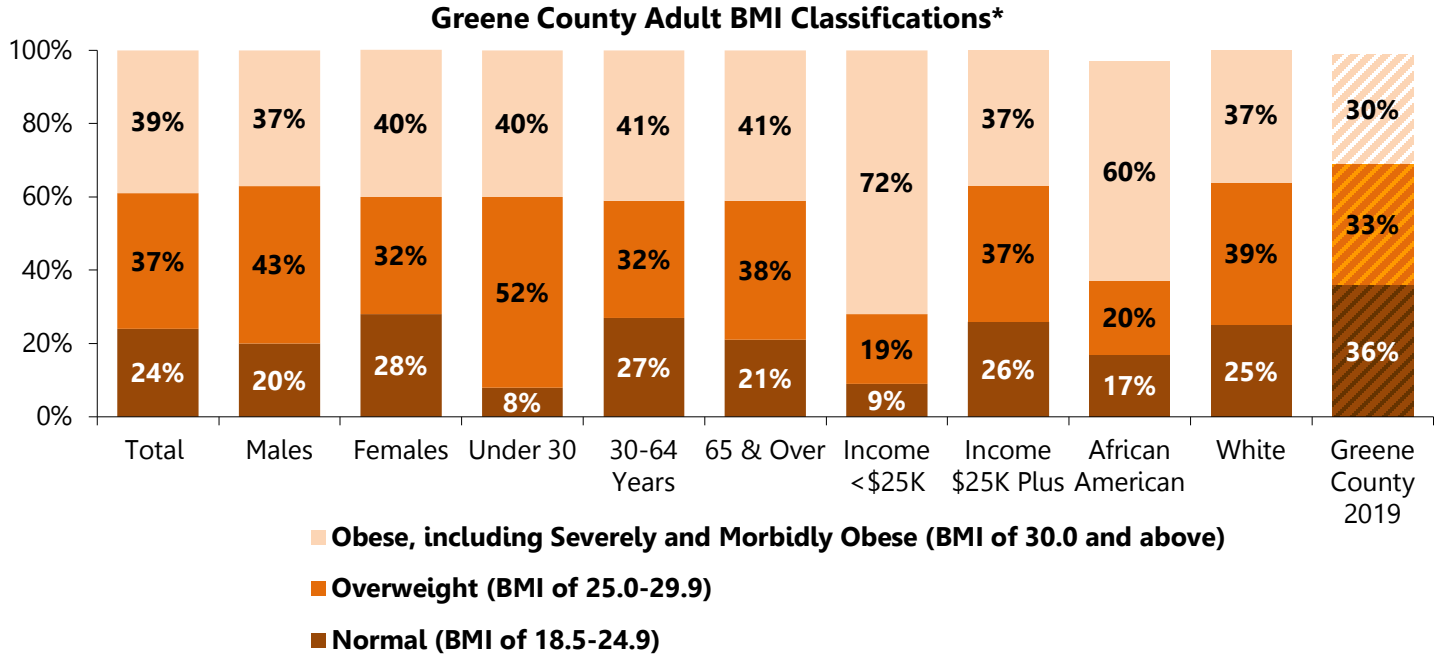
Over half (51%) of Greene County adults rated their health status as excellent or very good. Conversely, 14% of adults described their health as fair or poor, increasing to 31% of those with incomes less than $25,000.



**Respondents were asked: "Would you say that in general your health is excellent, very good, good, fair or poor?"*

WEIGHT STATUS

Over three-quarters (76%) of Greene County adults were either overweight (37%) or obese (including severely and morbidly obese) (39%) by body mass index (BMI), putting them at elevated risk for developing a variety of diseases.

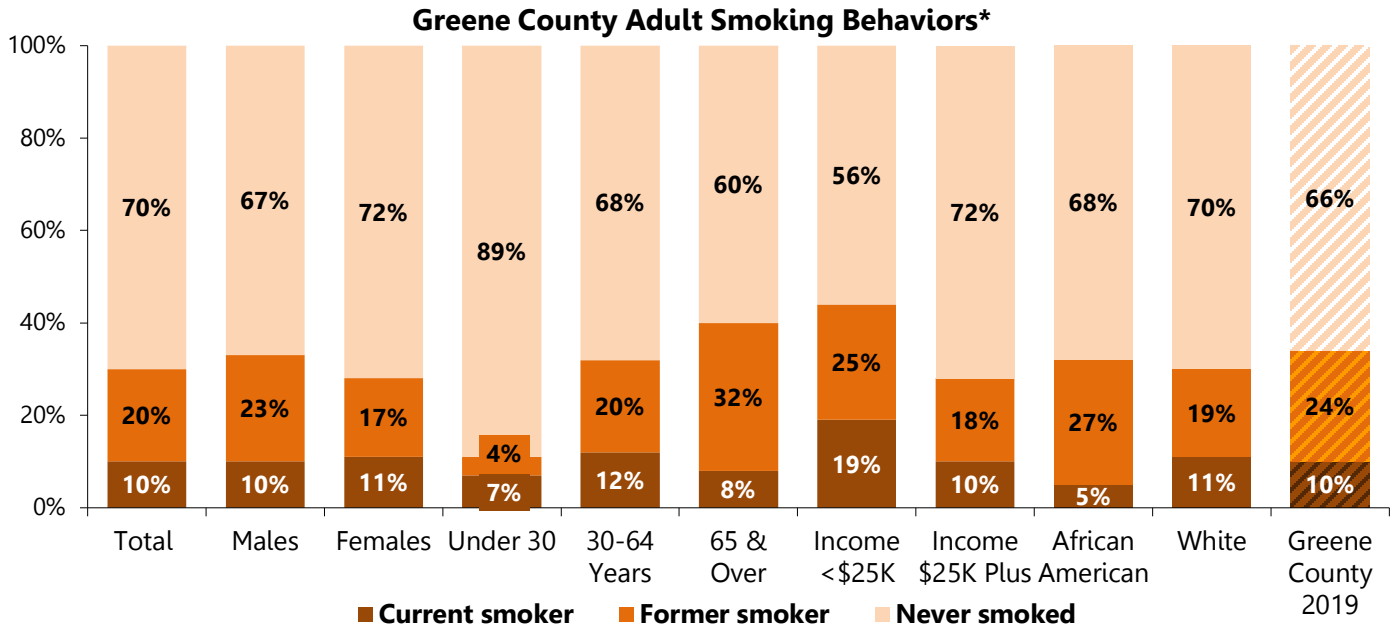


**Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight.*

Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

TOBACCO USE

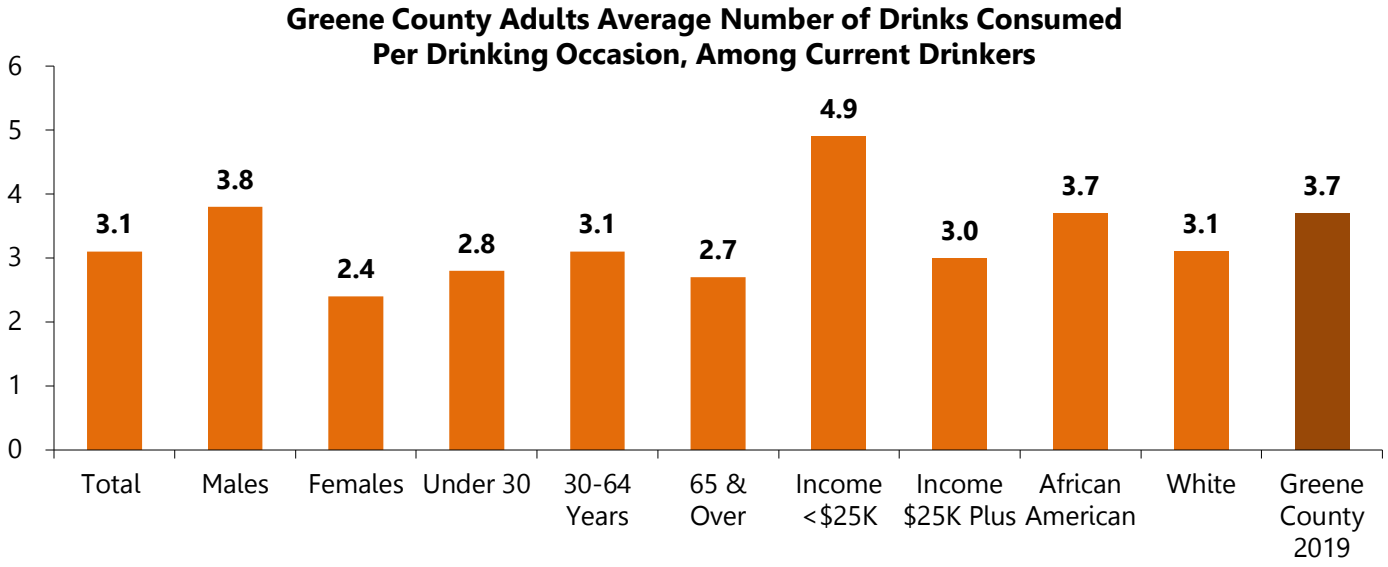
Ten percent (10%) of Greene County adults were current smokers, and 20% were considered former smokers. Six percent (6%) of adults were current electronic vapor product users (those who indicated using an electronic vapor product in their lifetime and currently used it some or all days).



**Respondents were asked: "Have you smoked at least 100 cigarettes in your entire life? If yes, do you now smoke cigarettes every day, some days or not at all?"*

ALCOHOL CONSUMPTION

Fifty-eight percent (58%) of Greene County adults had at least one alcoholic drink in the past month and would be considered current drinkers. On average, Greene County current drinkers had 3.1 drinkers per drinking occasion. Almost one-quarter (22%) of all adults reported they had five or more alcoholic drinks (for males) or four or more drinks (for females) on an occasion in the last month and would be considered binge drinkers.

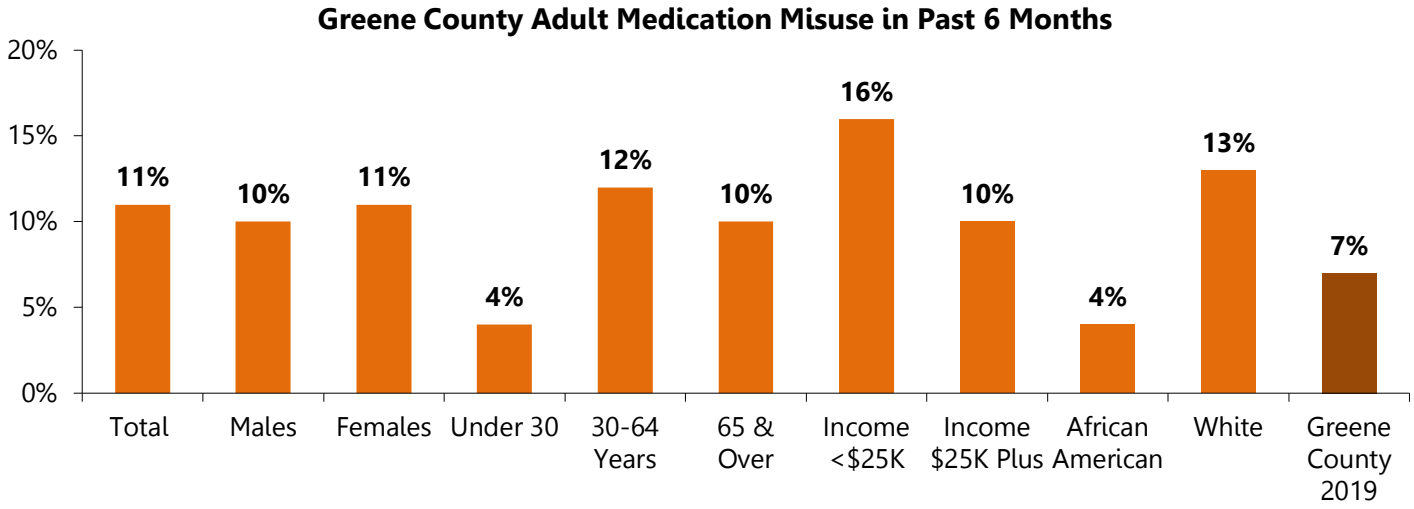


**Percentages may not equal 100% as some respondents answered, "don't know"*

Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

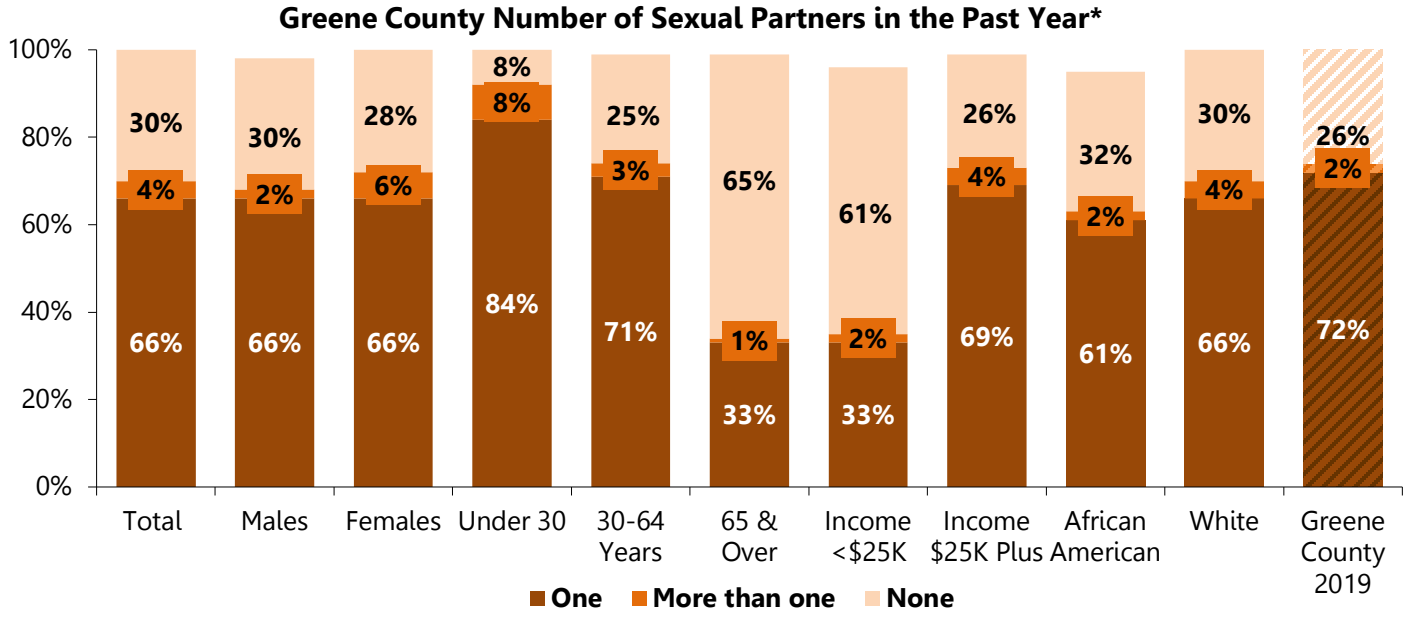
DRUG USE

Approximately one-in-ten (11%) of adults had used medication not prescribed for them or took more than prescribed to feel good or high and/or more active or alert during the past six months. Four percent (4%) of Greene County adults reported they had used recreational marijuana or hashish in the past six months, increasing to 8% of adults under the age of 30 and 8% of adults with incomes less than $25,000.



SEXUAL BEHAVIOR

Seventy percent (70%) of Greene County adults had sexual intercourse in the past year. Four percent (4%) of adults reported they had intercourse with more than one partner in the past year. Seven percent (7%) of Greene County adults indicated they were not using any method of birth control. Nearly one-quarter (24%) of adults had ever been forced or coerced to have any sexual activity when they did not want to.



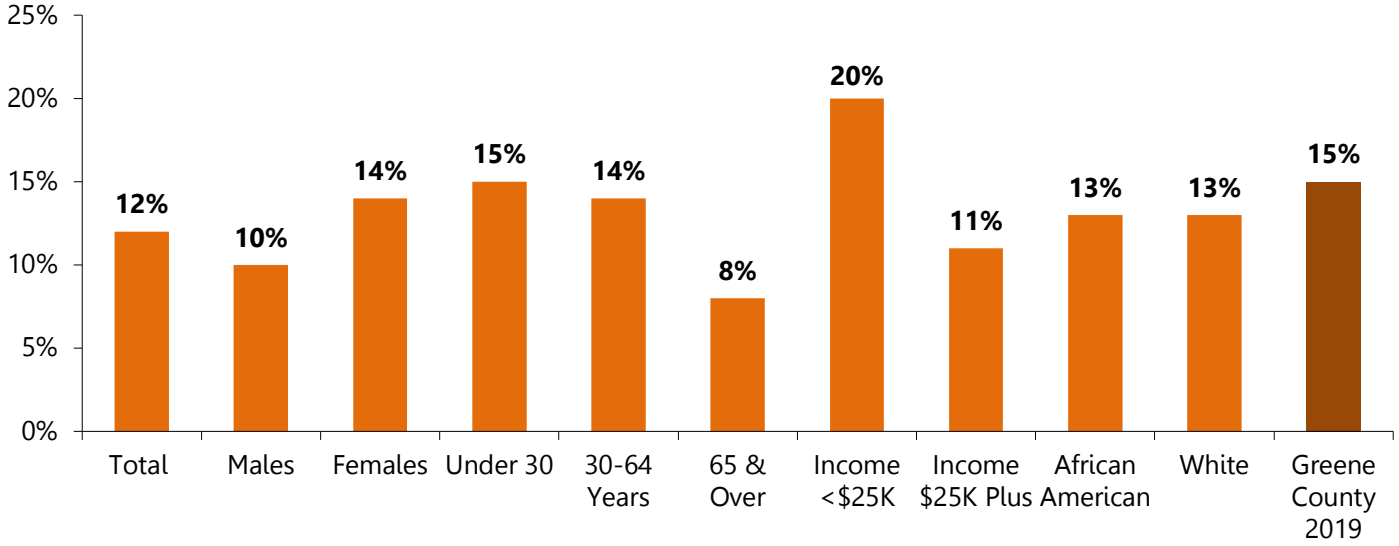
**Respondents were asked: "During the past 12 months, with how many different people have you had sexual intercourse?"*

Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

MENTAL HEALTH

In the past year, 12% of Greene County adults had a period of two or more weeks when they felt so sad or hopeless nearly every day that they stopped doing usual activities. In the past year, 4% of adults considered attempting suicide, and no (0%) adults reported attempting suicide in the past year.

Greene County Adults Feeling Sad or Hopeless for Two or More Weeks in a Row



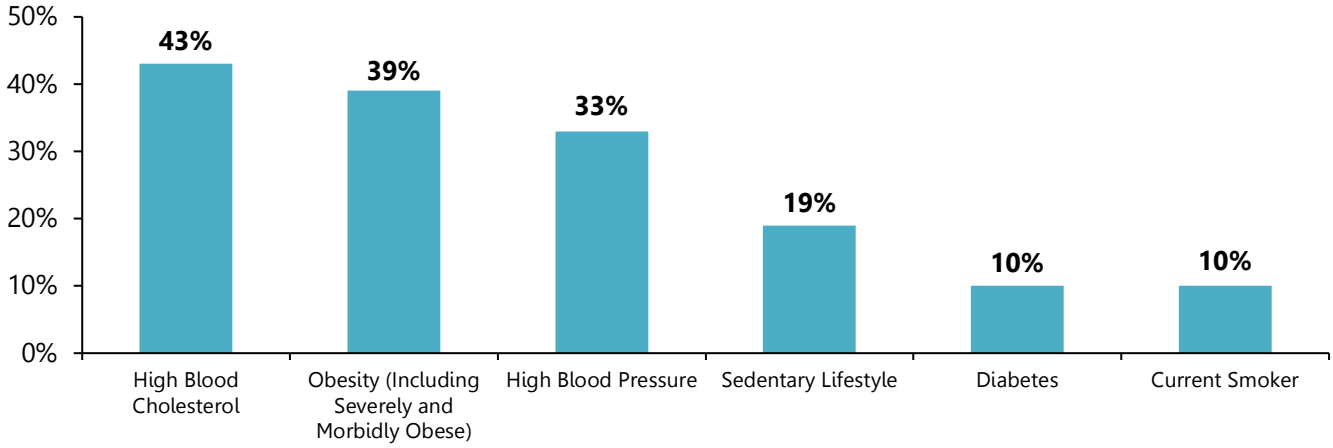
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Data Summary | Chronic Disease

CARDIOVASCULAR HEALTH

Forty-three percent (43%) of adults had ever been diagnosed with high blood cholesterol, 33% of adults had ever been diagnosed with high blood pressure, 30% were obese, 19% had sedentary lifestyles, 10% were ever diagnosed with diabetes, and 10% were current smokers – six known risk factors for heart disease and stroke. Four percent (4%) of adults had survived a heart attack and 2% had survived a stroke at some time in their life.

Greene County Adults with CVD Risk Factors



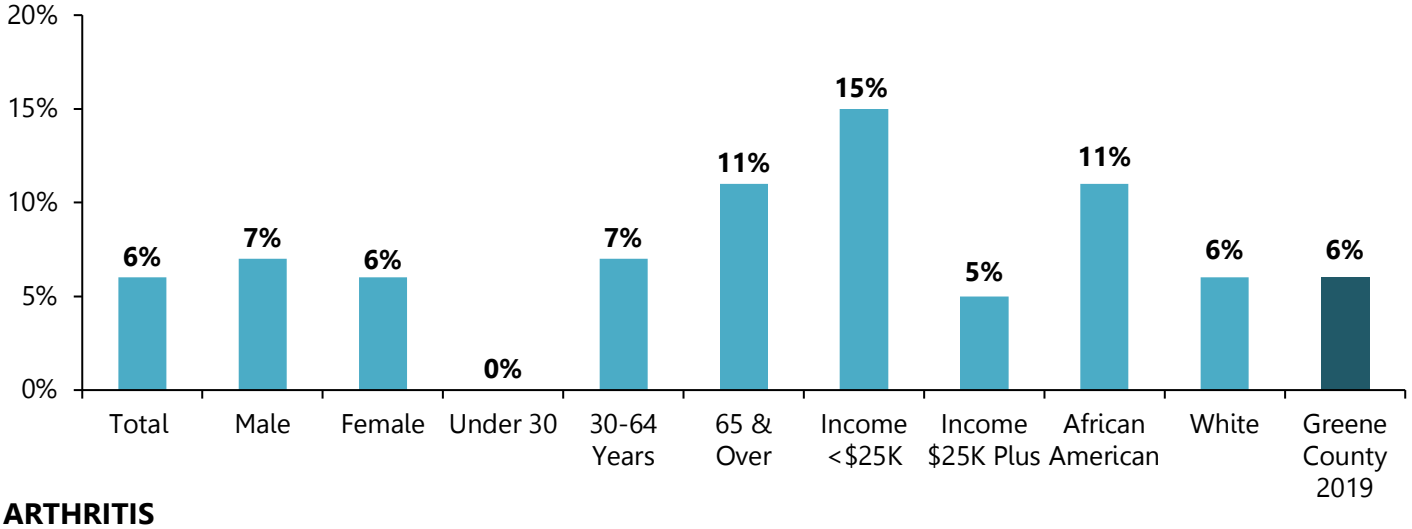
CANCER

Fifteen percent (15%) of Greene County adults were diagnosed with cancer at some point in their lives, increasing to 36% of those over the age of 65.

ASTHMA AND OTHER RESPIRATORY DISEASE

Six percent (6%) of adults had ever been diagnosed with COPD, emphysema, or chronic bronchitis, increasing to 15% of adults with incomes below $25,000. Nearly one-fifth (19%) of Greene County adults had ever been diagnosed with asthma.

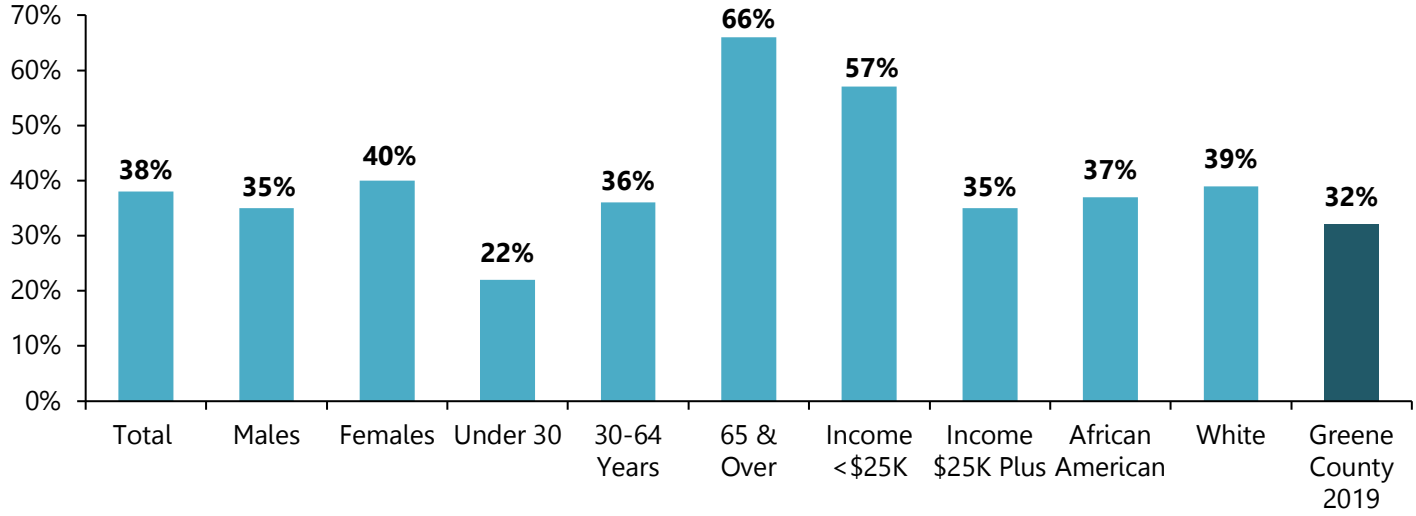
Greene County Adults Diagnosed with COPD, Emphysema, or Chronic Bronchitis



ARTHRITIS

Thirty-eight percent (38%) of Greene County adults had ever been diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

Greene County Adults Diagnosed with Arthritis*

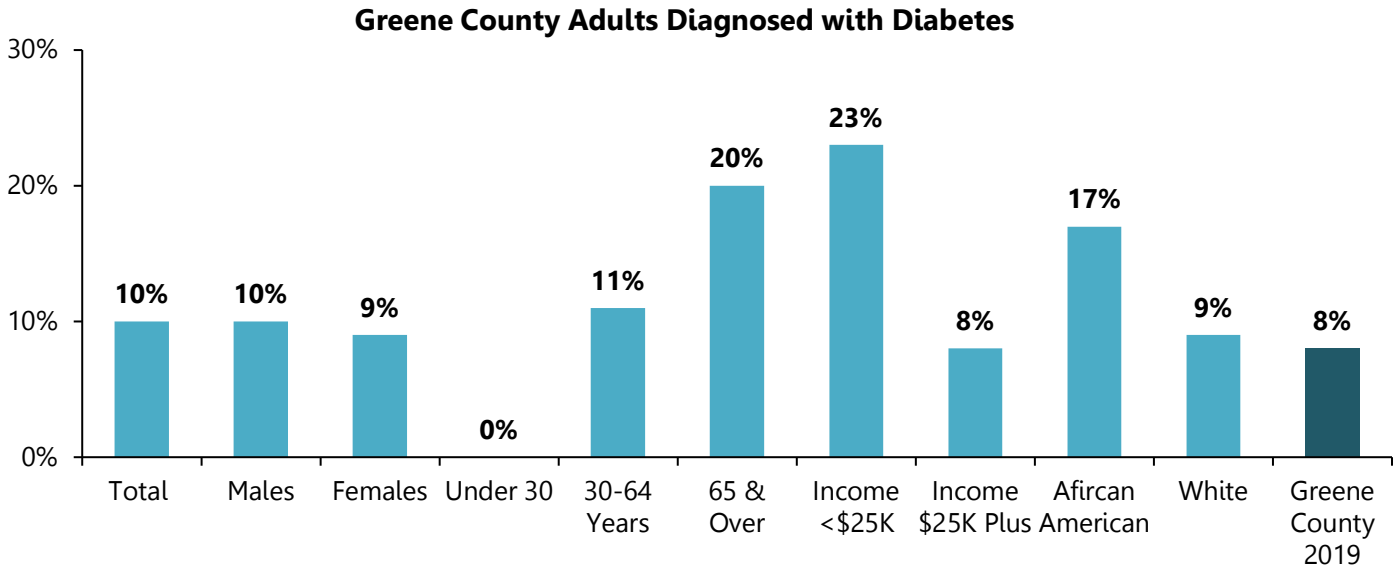


**Respondents were asked: "Have you ever been told by a doctor, nurse or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?"*

Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

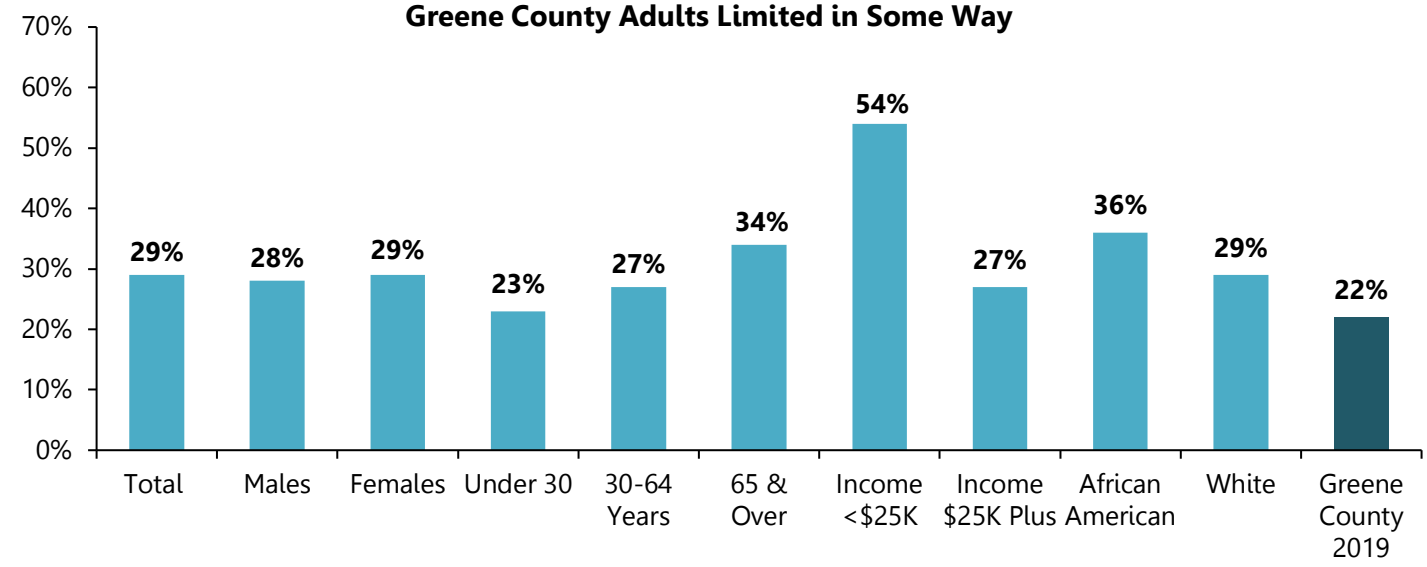
DIABETES

Ten percent (10%) of Greene County adults had ever been diagnosed with diabetes, increasing to 23% of adults with incomes below $25,000. Seven percent (7%) of adults had been diagnosed with pre-diabetes.



QUALITY OF LIFE

Over one-quarter (29%) of Greene County adults reported they were limited in some way because of a physical, mental, or emotional problem. The most limiting health problems were back or neck problems (47%); arthritis/rheumatism (40%); stress, depression, anxiety, and emotional problems (38%); chronic pain (35%); and walking problems (33%).

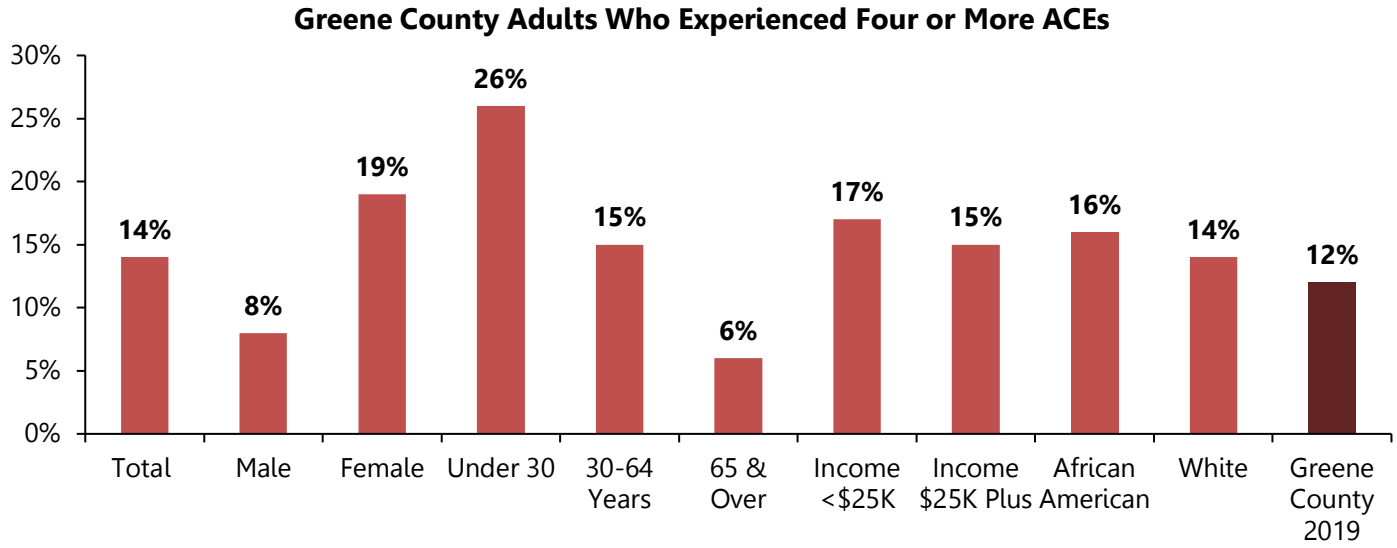


Note: for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Data Summary | Social Conditions

SOCIAL DETERMINANTS OF HEALTH

Fourteen percent (14%) of Greene County adults had four or more adverse childhood experiences (ACEs). Twelve percent (12%) of adults experienced at least one food insecurity issue in the past year. Seven percent (7%) of adults need help meeting general daily needs in the past month, increasing to 18% of adults with incomes below $25,000. Greene County adults described their neighborhood as extremely safe (27%), quite safe (53%), and slightly/not safe (9%).



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

ENVIRONMENTAL HEALTH

Greene County adults reported the following as the top four issues that threatened their health in the past year: insects (6%), mold/moisture issues (5%), air quality (5%), and temperature regulation (4%). Fourteen percent (14%) of adults reported they had a disaster plan in preparation of a disaster. As a result of the COVID-19 pandemic, adults indicated the following top issues that negatively impacted their or their family's well-being: change in mental health/behavior (18%), change in physical health (13%), and financial instability (11%).

MATERNAL AND INFANT HEALTH

In 2020, there was a total of 1,692 live births – of which 168 were preterm births and 115 were low birth weight births.

Trend Summary

Adult Indicators	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Health Care Coverage				
Uninsured	3%	**5%**	6%	7%
Access and Utilization				
Had at least one person they thought of as their personal doctor or health care provider	85%	**83%**	86%	84%
Visited a doctor for a routine checkup in the past year	71%	**73%**	77%	76%
Visited a doctor for a routine checkup five or more years ago	4%	**6%**	5%	5%
Preventive Medicine				
Had a pneumonia vaccination (age 65 and over)	67%	**77%**	71%	71%
Had a flu vaccine in the past year (age 65 and over)	74%	**61%**	66%	67%
Women's Health				
Had a mammogram within the past two years (age 40 and older)	71%	**73%**	71%*	72%*
Had a Pap smear within the past three years (age 21-65)	69%	**72%**	77%*	78%*
Men's Health				
Had a PSA test within the past two years (age 40 and over)	N/A	**47%**	32%*	32%*
Oral Health				
Visited a dentist or dental clinic in the past year	73%	**69%**	65%*	66%*
Health Status Perceptions				
Rated health as excellent or very good	53%	**51%**	51%	53%
Rated health as fair or poor	14%	**14%**	17%	15%
Rated physical health as not good on four or more days (in the past 30 days)	21%	**27%**	21%	20%
Average days that physical health not good in past month	3.5	**4.7**	4.2**	3.1**
Rated mental health as not good on four or more days (in the past 30 days)	30%	**32%**	31%	29%
Average days that mental health not good in past month	4.5	**4.8**	5.2**	4.5**
Poor physical or mental health kept them from doing usual activities, such as self-care, work, or recreation (on at least one day during the past 30 days)	29%	**36%**	N/A	N/A

Note: 2023 Indicators in green font indicate improvement from 2019, indicators in red indicate a decline from 2019, and indicators in black font indicate no change from 2019

Indicates alignment with the Ohio State Health Assessment (SHA)

**2020 BRFSS*

***2019 BRFSS data as compiled by 2022 County Health Rankings*

Adult Indicators	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Weight Status				
Obese, including severely and morbidly obese (BMI of 30.0 and above)	30%	**39%**	38%	34%
Overweight (BMI of 25.0 – 29.9)	33%	**37%**	33%	34%
Tobacco Use				
Current smoker (currently smoke some or all days)	10%	**10%**	18%	14%
Former smoker (smoked 100 cigarettes in lifetime & now do not smoke)	24%	**20%**	25%	25%
Current e-cigarette user (vaped on some or all days)	1%	**6%**	8%	7%
Alcohol Consumption				
Current Drinker (drank alcohol at least once in the past month)	66%	**58%**	53%	53%
Binge drinker (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days)	22%	**22%**	17%	15%
Drove after having perhaps too much alcohol to drink (in the past month)	3%	**2%**	N/A	N/A
Cardiovascular Disease				
Had angina or coronary heart disease	2%	**2%**	5%	4%
Had a heart attack or myocardial infarction	4%	**4%**	5%	4%
Had a stroke	2%	**2%**	4%	3%
Had high blood pressure	30%	**33%**	36%	32%
Had high blood cholesterol	37%	**43%**	37%	36%
Had blood cholesterol checked within past 5 years	84%	**84%**	85%	85%
Asthma and Other Respiratory Diseases				
Ever been told they have asthma	18%	**19%**	15%	15%
Ever diagnosed with chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis	6%	**6%**	9%	6%
Arthritis				
Ever diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia	32%	**38%**	30%	25%
Diabetes				
Ever been told by a doctor they have diabetes (not pregnancy-related)	8%	**10%**	12%	11%
Had been diagnosed with pre-diabetes or borderline diabetes	8%	**7%**	2%	2%

Note: 2023 Indicators in green font indicate improvement from 2019, indicators in red font indicate a decline from 2019, and indicators in black font indicate no change from 2019

Indicates alignment with the Ohio State Health Assessment (SHA)

HEALTH CARE ACCESS

Health Care Coverage
Access and Utilization
Preventive Medicine
Women's Health
Men's Health
Oral Health

Note for population: "adults" are defined throughout the report as those ages 19 and older living in Greene County

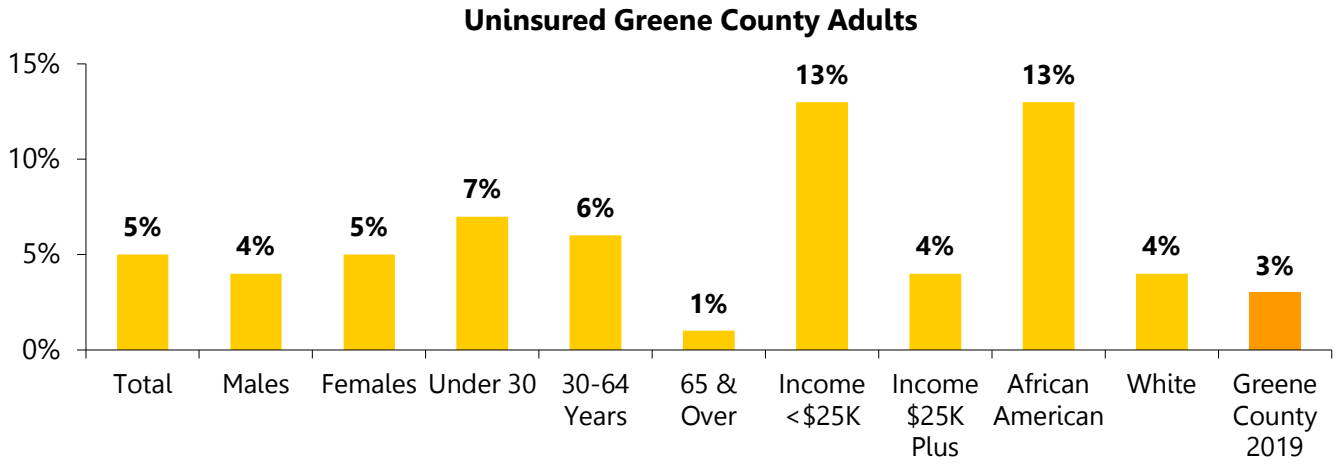
Health Care Access: Health Care Coverage

8,352 Greene County adults were uninsured.

Health Care Coverage

- In 2023, 95% of Greene County adults had health care coverage, leaving 5% who were uninsured.

The following graph shows the percentage of Greene County adults who were uninsured. An example of how to interpret the information in the graph includes: 5% of all Greene County adults were uninsured, including 1% of adults ages 65 and over and 13% of African Americans.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Uninsured	3%	5%	6%	7%

The following table shows the uninsured rate among Greene County adults according to the 2021 U.S. Census.

Uninsured Greene County Adults – 2021 U.S. Census	% Uninsured
Total	
Greene County Adults age 19+	6%
Sex	
Males	5%
Females	6%
Age	
19-25	8%
26-64	8%
65+	1%
Household Income	
<$25,000	6%
$25,000 Plus	5%
Race	
African American*	4%
White*	6%

**Race is alone, not in combination with any other races*
(Source: 2021 U.S. Census ACS 1-Year Estimates)

Healthy People 2030
Access to Health Services (AHS)

Objective	Greene County 2023	Ohio 2021	U.S. 2021	Healthy People 2030 Target
AHS-01: Persons under the age of 65 with health care insurance	100% age 20-24 92% age 25-34 95% age 35-44 98% age 45-54 91% age 55-64	93% age 18-24 86% age 25-34 92% age 35-44 94% age 45-54 96% age 55-64	88% age 18-24 85% age 25-34 88% age 35-44 90% age 45-54 94% age 55-64	92%*

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.
**Healthy People 2030 objective is: Increase the proportion of people with health insurance. Age group not specified.*
(Sources: 2021 BRFSS, Healthy People 2030 Objectives)

- Greene County adult health care coverage included the following:
  - Medical (97%)
  - Prescription coverage (90%)
  - Preventive health (87%)
  - Immunizations (86%)
  - Dental (75%)
  - Vision/eyeglasses (74%)
  - Mental health (66%)
  - Outpatient therapy (66%)
  - Durable medical equipment (47%)
  - Hearing (44%)
  - Alcohol and drug treatment (36%)
  - Home care (30%)
  - Breast feeding support (28%)
  - Hospice (28%)
  - Skilled nursing/assisted living (27%)
  - Air ambulance (25%)
  - Transportation (21%)

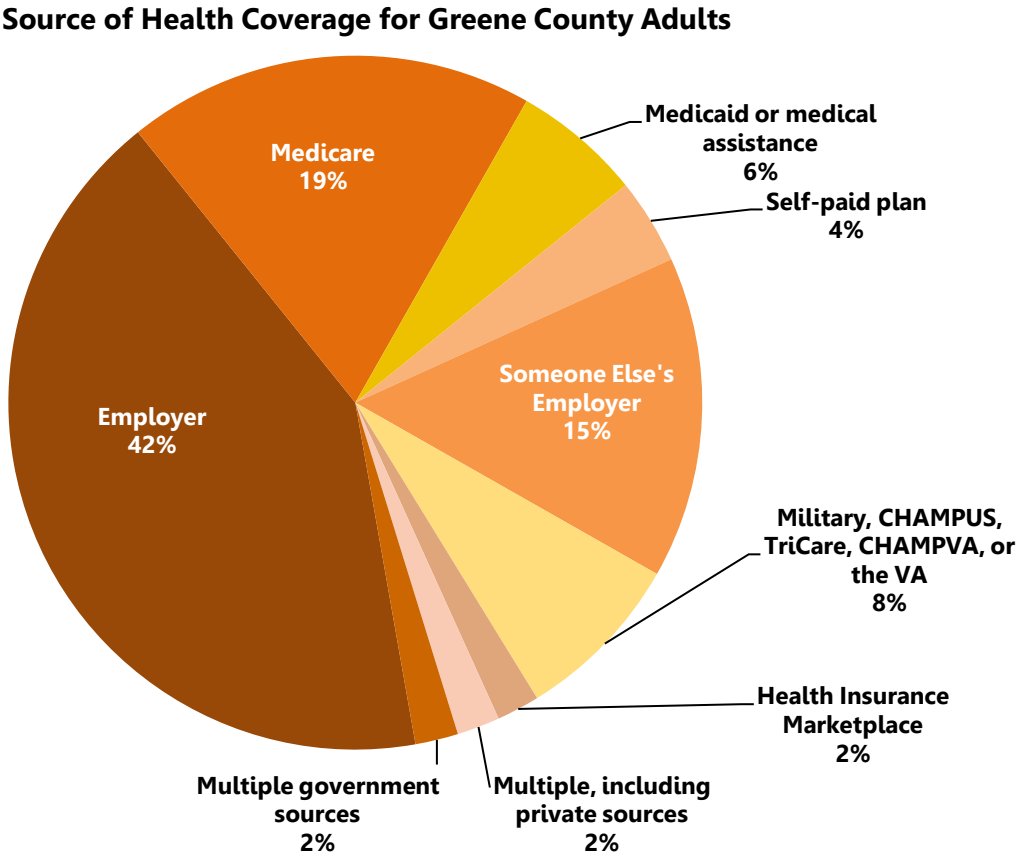
The following table shows what is included in Greene County adults' insurance coverage.

Health Coverage Includes:	Yes	No	Don't Know
Medical	97%	<1%	3%
Prescription Coverage	90%	5%	5%
Preventive Health	87%	3%	10%
Immunizations	86%	2%	12%
Dental	75%	21%	4%
Vision/Eyeglasses	74%	22%	4%
Mental Health	66%	2%	32%
Outpatient Therapy	66%	2%	32%
Durable Medical Equipment	47%	3%	50%
Hearing	44%	12%	44%
Alcohol and Drug Treatment	36%	4%	60%
Home Care	30%	5%	65%
Breast Feeding Support	28%	4%	68%
Hospice	28%	3%	69%
Skilled Nursing/Assisted Living	27%	5%	68%
Air Ambulance	25%	5%	70%
Transportation	21%	9%	70%

Health Care Coverage, *continued*

- The following types of health care coverage were used: employer (42%); Medicare (19%); someone else's employer (15%); military, CHAMPUS, TriCare, CHAMPVA, or the VA (8%); Medicaid or medical assistance (6%); self-paid plan (4%); health insurance marketplace (2%); multiple sources, include private (2%); and multiple government sources (2%).

The pie chart below shows sources of Greene County adults' health care coverage.



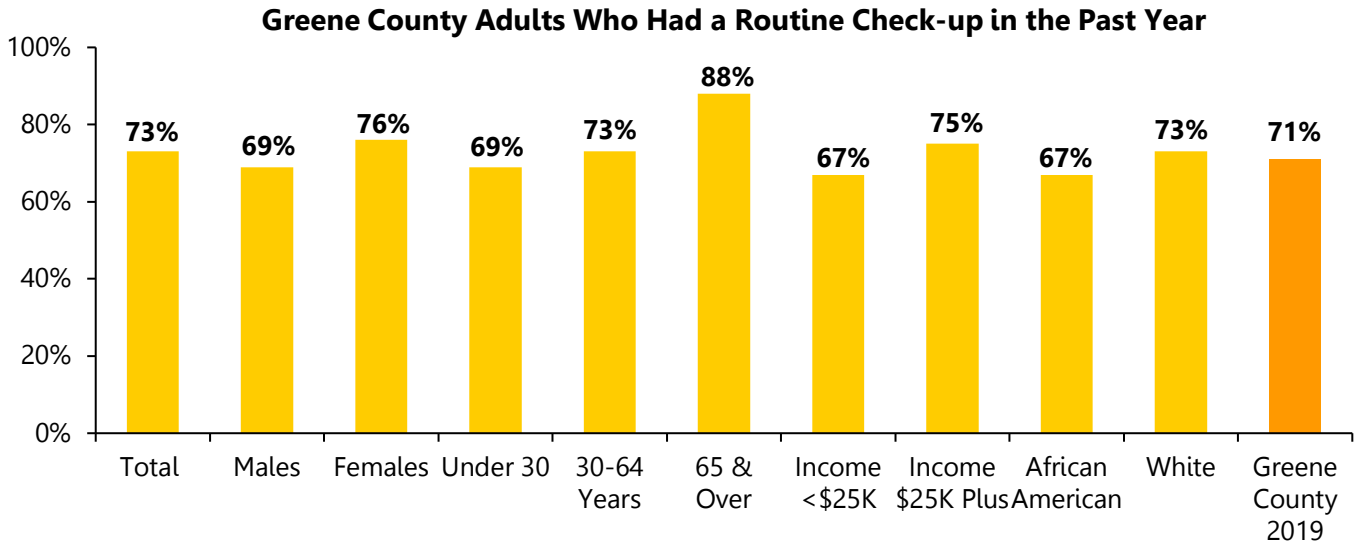
Health Care Access: Access and Utilization

10,023 Greene County adults visited a doctor for a routine checkup five or more years ago.

Access and Utilization

- Nearly half (49%) of Greene County adults reported they had one person they thought of as their personal doctor or health care provider. Thirty-four percent (34%) of adults had more than one person they thought of as their personal health care provider, and 17% did not have one at all.
- Nearly three-quarters (73%) of Greene County adults visited a doctor for a routine checkup in the past year, increasing to 88% of adults over the age of 65.
- Six percent (6%) of adults visited a doctor for a routine checkup five or more years ago.

The following graph shows the percentage of Greene County adults who had a routine check-up in the past year. An example of how to interpret the information on the graph includes: 73% of all Greene County adults had a routine check-up in the past year, including 67% of adults with incomes below $25,000 and 88% of adults ages 65 years and older.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Had at least one person they thought of as their personal doctor or health care provider	85%	83%	86%	84%
Visited a doctor for a routine checkup in the past year	71%	73%	77%	76%
Visited a doctor for a routine checkup five or more years ago	4%	6%	5%	5%

Access and Utilization, *continued*

- Adults usually visited the following places for health care services and advice:
  - Doctor/health care provider's office (83%)
  - Urgent care center (32%)
  - Family and friends (29%)
  - Internet (27%)
  - Hospital emergency room (22%)
  - In-store health clinic (20%)
  - Telemedicine (12%)
  - Chiropractor (11%)
  - Alternative therapies (10%)
  - Public health clinic or community health center (6%)
  - Department of Veteran's Affairs (VA) (4%)
  - Call 9-1-1/use an ambulance service (2%)
  - Health department (1%)
  - Fire department (<1%)
  - Emergency ambulance service (<1%)
  - Some other kind of place (2%)

- Three percent (3%) of adults indicated they had no usual place for health care services.

- More than half (51%) of Greene County adults reported the following top reasons that prevented them from getting medical care in the past year:
  - No need to go (47%)
  - Cost/no insurance (22%)
  - Too long of a wait for an appointment (17%)
  - COVID-19 (11%)
  - Could not get time off work (9%)
  - Office was not open when they could get there (8%)
  - Worried they might find something wrong (8%)
  - Inconvenient appointment times (6%)
  - Do not trust or believe doctors (5%)
  - Discrimination/concerned they would be treated differently (4%)
  - Frightened of the procedure or doctor (4%)
  - Too embarrassed to seek help (4%)
  - Concerned about privacy (3%)
  - No child care (3%)
  - Provider would not take their insurance (3%)
  - Difficult to find/no transportation (2%)
  - Too long of a wait in waiting room (2%)
  - Can access medical records online (1%)
  - Distance (1%)
  - Language barrier (<1%)
  - Some other reason (13%)

- Adults preferred to access information about their health or health care services from the following:
  - Doctor/health care provider (86%)
  - Internet searches (35%)
  - Medical Portal (29%)
  - Family member or friend (25%)
  - Text messages (6%)
  - Social media/networks (5%)
  - Advertisings or mailings from hospitals, clinics, or doctor's offices (4%)
  - Newspaper articles or radio/television news stories (4%)
  - Faith-based community/church (2%)
  - Billboards (1%)
  - Other community services (1%)
  - Other ways (2%)

Availability of Services

The following table shows the percentage of Greene County adults, or someone in their family or household, who looked for and were able to access specific assistance programs and services.

Greene County Adults Able to Access Assistance Programs/Services

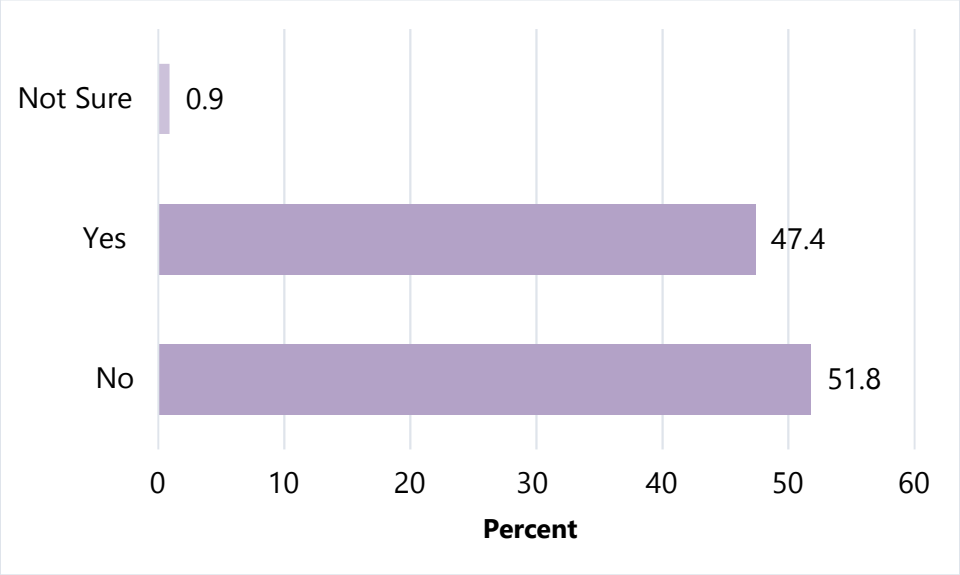
Types of Programs	Have looked but have NOT found a specific program	Have NOT needed a specific program	Have looked and have found a specific program	Have NOT looked for a specific program
Depression, anxiety, or some mental health problem	9%	62%	20%	9%
Weight problem	7%	76%	7%	10%
Assist in-care for the elderly (either in home, out of home, or adult day care)	5%	83%	8%	4%
Assistance with in-home care for an elderly or disabled adult	5%	84%	6%	5%
Nutritional services	5%	82%	7%	6%
Assisted living program for an elderly or disabled adult	3%	88%	3%	6%
Assist in-care for the disabled (either in home or out of home)	3%	86%	6%	5%
Assistance with out-of-home placement for an elderly or disabled adult	3%	89%	3%	5%
Disability	2%	88%	5%	5%
Mental health/addiction/gambling	2%	88%	5%	5%
Tobacco cessation	2%	93%	<1%	5%
Cancer support group/counseling	1%	91%	2%	6%
Detoxification for alcohol and/or drugs	1%	93%	2%	4%
Disabled adult program	1%	91%	2%	6%
End-of-Life/Hospice Care	1%	89%	6%	4%
Family planning	1%	89%	6%	4%
Marital/family problems	1%	89%	4%	6%
Drug abuse	<1%	96%	<1%	3%
Alcohol abuse	0%	92%	2%	6%
Gambling abuse	0%	97%	0%	3%

Telehealth

The following information shows telehealth utilization and experiences among Greene County adults ages 60 and over. Data was collected in June 2021 using a 77-question mailed survey created by Miami University. The data indicates:

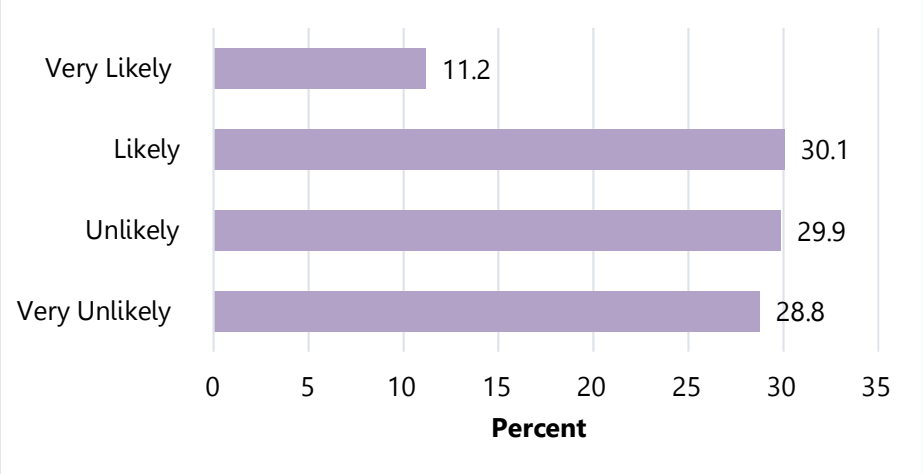
- Just under half (47.4%) of the sample population reported ever having had an online appointment with a health care provider.

Ever had a virtual or online appointment with a health care provider



- Less than half (41.3%) of the sample population reported being likely or very likely to schedule an online appointment in the future.

Likelihood of scheduling an online appointment with a health care provider in the future



(Source: Greene County Council on Aging, 2021 Community Survey Findings)

Telehealth, *continued*

The following information shows telehealth utilization and experiences among Greene County adults ages 60 and over. Data was collected in June 2021 using a 77-question mailed survey created by Miami University. The data indicates:

- The most frequently endorsed benefits of online appointments with health care providers were not needing to travel (80%), limiting contact with people who have something like a cold or the flu (79.1%), and saving time (71.9%).

Benefits of virtual or online appointments with a health care provider			
	No, % (n)	**Yes, % (n)**	**Not Sure, % (n)**
You don't need to travel to the health care provider's office	10.0 (105)	80.0 (792)	10.0 (110)
It limits your contact with people who may have something like a cold or the flu	11.8 (122)	79.1 (785)	9.1 (101)
It saves you time	14.3 (146)	71.9 (714)	13.8 (147)
It allows you to seek care from a health care provider who is located in another city or state	25.2 (252)	53.4 (537)	21.4 (218)
It allows family members or friends to attend the appointment with you	31.4 (305)	49.4 (504)	19.2 (197)

Note: Percentages are weighted to reflect the sample population; sample numbers (n) are not weighted.

- The two most commonly endorsed barriers to online appointments with health care providers were concerns about privacy (30.2%) and the quality of care received (44.3%).

Factors that prevent online appointments with health care providers			
	No, % (n)	**Yes, % (n)**	**Not Sure, % (n)**
You don't have a computer or other device, like a tablet or smartphone	82.7 (824)	13.3 (139)	3.9 (44)
You have limited or no internet access	82.1 (820)	14.2 (151)	3.6 (37)
You have concerns about privacy	65.0 (644)	30.2 (307)	4.9 (56)
You have concerns about the quality of care provided	47.4 (472)	44.3 (446)	8.3 (89)
You find technology difficult to use	66.1 (638)	27.5 (300)	6.4 (69)
You don't know if your health insurance will cover the visit	56.5 (557)	23.6 (250)	19.9 (201)

Note: Percentages are weighted to reflect the sample population; sample numbers (n) are not weighted.

(Source: Greene County Council on Aging, 2021 Community Survey Findings)

Health Care Access: Preventive Medicine

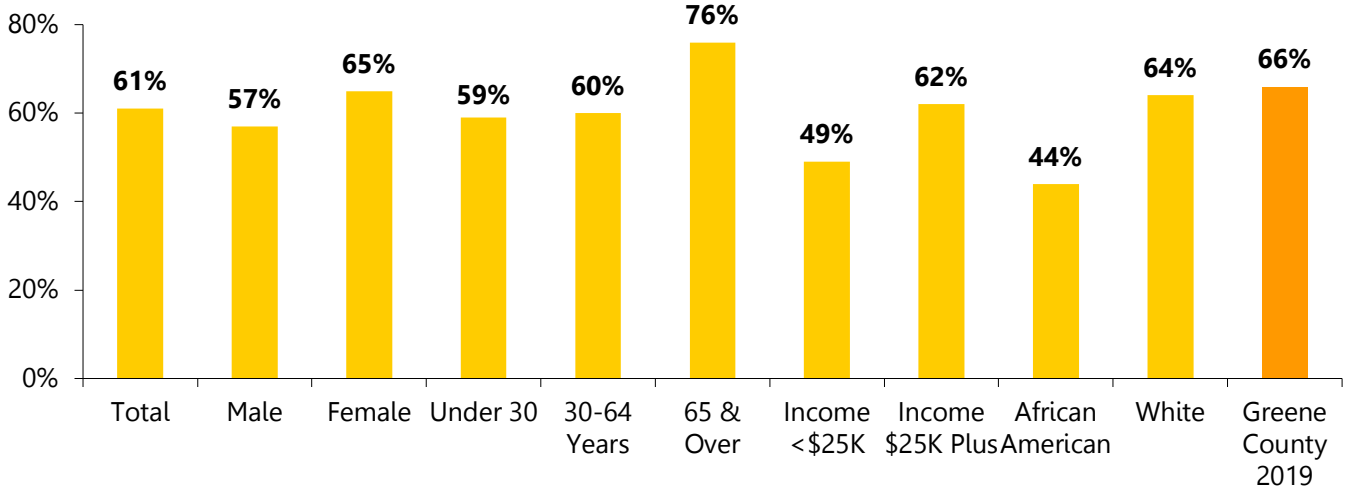
110,248 Greene County adults had a flu vaccine in the past year.

Vaccination

- Sixty-one percent (61%) of Greene County adults received a flu vaccine during the past year, increasing to 76% of adults ages 65 and over.
- Greene County Public Health estimates the flu vaccination rates for Ohio Medicaid Covered Beneficiaries were about 24.9% (22.9 to 26.4%) over the three years ending in 2021, showing that those who are in poverty have reductions in flu vaccination rates by over half the overall population.
- Over one-third (35%) of adults had a pneumonia vaccine in their life, increasing to 77% of those ages 65 and over.

The following graph shows the percentage of Greene County adults who received a flu vaccine in the past year. An example of how to interpret the information includes: 61% of all adults received the flu vaccine in the past year, including 49% of adults with incomes less than $25,000 and 76% of adults ages 65 and older.

Greene County Adults Who Received a Flu Vaccine in the Past Year



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Had a pneumonia vaccination (age 65 and over)	67%	77%	71%	71%
Had a flu vaccine in the past year (age 65 and over)	74%	76%	66%	67%

Healthy People 2030
Immunization and Infectious Diseases (IID)

Objective	Greene County 2023	Healthy People 2030 Target
IID-09: Increase the proportion of people who get the flu vaccine every year	61%	70%

(Sources: Healthy People 2030 Objectives, 2023 Greene County Community Health Assessment)

Vaccination, *continued*

- Greene County adults had the following vaccines:
  - COVID-19 (Moderna, Pfizer, Johnson & Johnson, Novavax) vaccine (80%)
  - Measles, mumps, and rubella (MMR) in their lifetime (77%)
  - Tetanus, diphtheria, and pertussis (including Tdap) in the past 10 years (77%)
  - Chicken pox in their lifetime (60%)
  - Hepatitis B in their lifetime (46%)
  - Hepatitis A in their lifetime (44%)
  - Haemophilus influenza or Influenza type B (Hib) in their lifetime (33%)
  - Meningococcal vaccine in their lifetime (33%)
  - Zoster (shingles) vaccine in their lifetime (28%)
  - Human papillomavirus (HPV) vaccine in their lifetime (20%)

Preventive Health Screenings and Exams

- Greene County adults had the following tests/screenings:
  - Colonoscopy (colorectal cancer) in the past five years (34%)
  - Depression in the past year (18%)
  - Blood stool test (FIT or Cologuard) in the past year (12%)
  - Skin cancer in the past year (10%)
  - Bone density in the past year (9%)
  - Balance/falls in the past year (7%)
  - Digital-rectal exam (DRE) in the past year (6%)
  - Oral cancer in the past year (6%)
  - Colorectal cancer in the past 5 years (5%)
  - Genetic testing in the past year (3%)
  - BRCA gene test in the past year (1%)
  - Lung cancer screening in the past three years (1%)
  - Substance use in the past year (<1%)

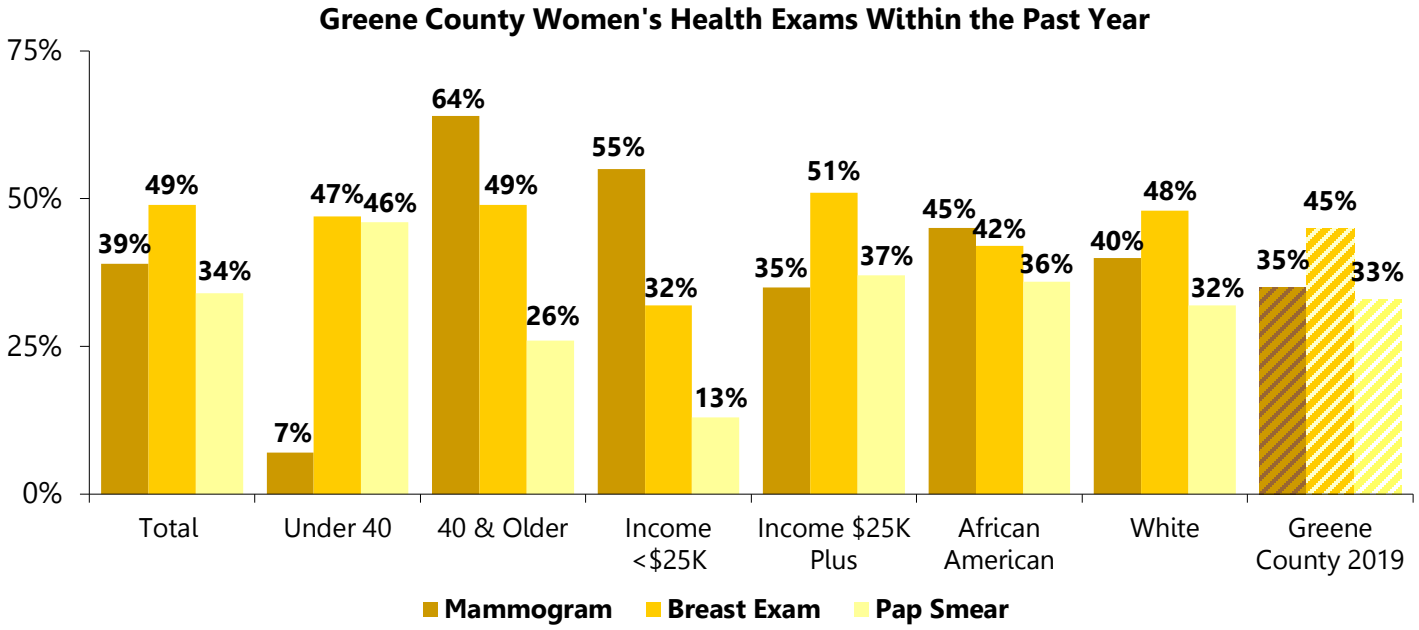
- Greene County adults indicated a doctor or health professional talked to them about following topics in the past year:
  - Immunizations (60%)
  - Family history (43%)
  - Weight control (36%)
  - Depression, anxiety, or emotional problems (31%)
  - PSA testing (among males) (22%)
  - Safe use of prescription medication (21%)
  - Family planning (16%)
  - Tobacco use (13%)
  - Alternative pain therapy (12%)
  - Bone density (12%)
  - Falls (12%)
  - Alcohol use (11%)
  - Injury prevention (11%)
  - Sexually transmitted diseases (STDs) (9%)
  - Genetic testing (8%)
  - Personal trauma (8%)
  - Self-testicular exams (among males) (8%)
  - Post-traumatic stress disorder (PTSD) (5%)
  - Domestic violence (4%)
  - Firearm safety (4%)
  - Safe use of opiate-based pain medication (4%)
  - Illicit drug abuse (3%)
  - Community trauma (1%)
  - Natural disasters (1%)

Health Care Access: Women's Health

Women's Health Screenings

- Fifty-seven percent (57%) of women had a mammogram at some time in their life, and 39% had this screening in the past year.
- Nearly two-thirds (64%) of women ages 40 and over had a mammogram in the past year, and 73% had one in the past two years.
- Ninety-five percent (95%) of women had a clinical breast exam at some time in their life, and 49% had one within the past year. Approximately three out of five (61%) women ages 40 and over had a clinical breast exam in the past two years.
- Eighty-nine percent (89%) of women had a Pap smear at some time in their life, and 34% reported having had the exam in the past year. Nearly three out of four (72%) women ages 21 to 65 had a Pap smear in the past three years.

The following graph shows the percentage of Greene County females who had various health exams in the past year. An example of how to interpret the information shown on the graph includes: 39% of Greene County females had a mammogram within the past year, 49% had a clinical breast exam, and 34% had a Pap smear.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Had a mammogram within the past two years (age 40 and older)	71%	73%	71%*	72%*
Had a Pap smear within the past three years (age 21-65)	69%	72%	77%*	78%*

**2020 BRFSS Data*

Women's Health Screenings, *continued*

Healthy People 2030
Cancer

Objective	Greene County 2023	Healthy People 2030 Target
C-09: Increase the proportion of females ages 21-65 who get screened for cervical cancer in the past three years	72%	79%

(Sources: Healthy People 2030 Objectives, 2023 Greene County Community Health Assessment)

Pregnancy

- Nearly one-quarter (24%) of Greene County women had been pregnant in the past five years.

- During their last pregnancy within the past five years, Greene County women:
  - Had a prenatal appointment in the first 3 months (86%)
  - Took a multi-vitamin with folic acid during pregnancy (76%)
  - Had a dental exam (54%)
  - Received WIC services (27%)
  - Experienced depression (during or after pregnancy) (25%)
  - Experienced complications with pregnancy or birth/delivery (12%)
  - Used over-the-counter medications or supplements not prescribed (12%)
  - Experienced a miscarriage (10%)
  - Experience domestic violence (3%)
  - Smoked cigarettes or other tobacco products (2%)

Women's Health Concerns

- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Greene County, the 2023 health assessment has identified that:
  - 72% of women were overweight or obese (2021 BRFSS reports 67% for Ohio and 63% for U.S.)
  - 43% were diagnosed with high blood cholesterol (2021 BRFSS reports 34% for Ohio and 35% for U.S.)
  - 28% were diagnosed with high blood pressure (2021 BRFSS reports 34% for Ohio and 31% for U.S.)
  - 11% were current smokers (2021 BRFSS reports 18% for Ohio and 12% for U.S.)
  - 9% had been diagnosed with diabetes (2021 BRFSS reports 12% for Ohio and 11% for U.S.)

Greene County and Ohio Female Leading Causes of Death, 2018-2020

Greene County Female Leading Causes of Death, 2018-2020 Total Deaths: 2,589	% of all deaths	Greene County African American* Female Leading Causes of Death, 2018-2020 Total Deaths: 138	% of all deaths	Ohio Female Leading Causes of Death, 2018-2020 Total Deaths: 192,857	% of all deaths
Heart Disease	21%	Heart Disease	20%	Heart Disease	22%
Cancer	17%	Cancer	15%	Cancer	18%
Stroke	9%	Stroke	11%	Stroke	6%
Alzheimer's Disease	6%	Conditions originating in the perinatal period	4%	Alzheimer's Disease	6%
Accidents, Unintentional Injuries	5%	Chronic Lower Respiratory Diseases	3%	Chronic Lower Respiratory Diseases	6%
Chronic Lower Respiratory Diseases	4%	Diabetes	3%	Accidents, Unintentional Injuries	5%
COVID-19	3%	Primary Hypertension and Hypertensive Renal Disease	3%	COVID-19	3%
Diabetes	2%	N/A**	--	Diabetes	3%
Septicemia	2%	N/A**	--	Influenza and Pneumonia	2%
Kidney Disease	2%	N/A**	--	Kidney Disease	2%

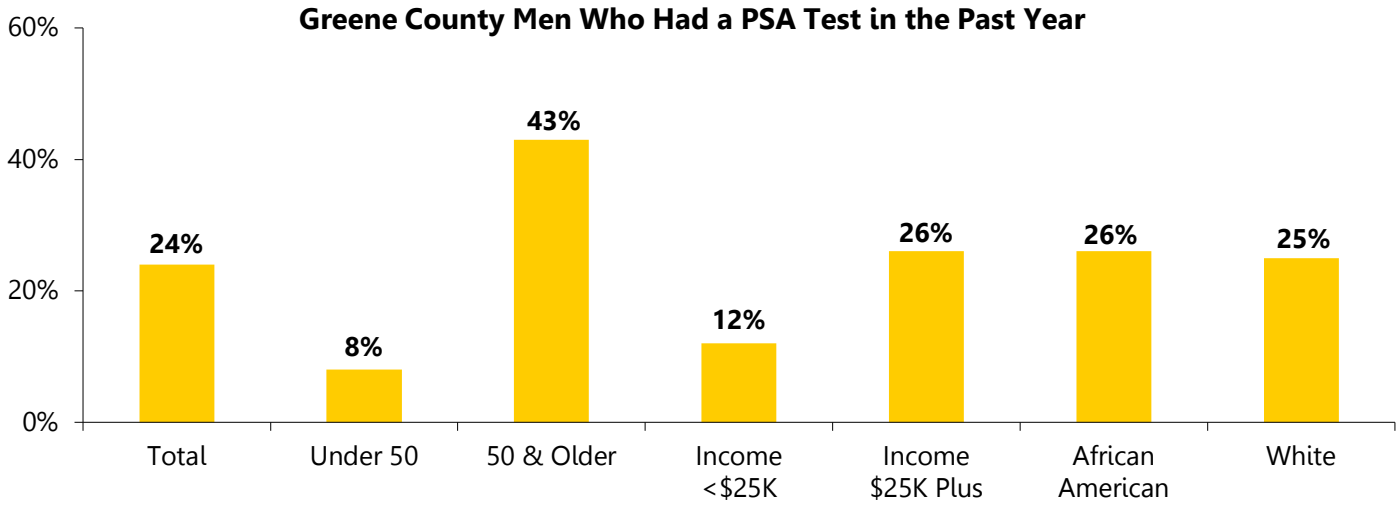
**Ohio Public Health Data Warehouse states race as Black*
***Causes of death are unavailable due to death count accounting for 3 or fewer deaths between 2018-2020*
(Source: Ohio Public Health Data Warehouse, 2018-2020)

Health Care Access: Men's Health

Men's Health Screenings

- Greene County males reported experiencing the following: erectile dysfunction (25%), enlarged prostate (BPH) (12%), low testosterone (10%), incontinence (6%), and a concerning test from a colonoscopy (4%).
- Seven percent (7%) of men had a digital rectal exam in the past year.
- Two out of five (40%) Greene County males had a prostate-specific antigen (PSA) test at some time in their life, and 24% had one in the past year.
- Three-fifths (60%) of males age 40 and over had a PSA test at some time in their life, and 47% had one in the past two years.
- Approximately two-thirds (66%) of males age 50 and over had a PSA test at some time in their life, and 43% had one in the past year.

The following graph shows the percentage of Greene County male adults that had a prostate-specific antigen (PSA) test in the past year. Examples of how to interpret the information shown on the graph includes: 24% of Greene County males had a PSA test within the past year, including 12% of adult males with incomes less than $25,000.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Adult Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Had a PSA test within the past two years (age 40 and over)	N/A	47%	32%*	32%*

**2020 BRFSS Data*

Men's Health Concerns

- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Greene County, the 2023 health assessment has identified that:
  - 80% were overweight or obese (2021 BRFSS reports 74% for Ohio and 71% for U.S.)
  - 43% were diagnosed with high blood cholesterol (2021 BRFSS reports 37% for Ohio and 37% for U.S.)
  - 39% were diagnosed with high blood pressure (2021 BRFSS reports 38% for Ohio and 35% for U.S.)
  - 10% had been diagnosed with diabetes (2021 BRFSS reports 13% for Ohio and 12% for U.S.)
  - 10% were current smokers (2021 BRFSS reports 18% for Ohio and 15% for U.S.)

Greene County and Ohio Male Leading Causes of Death, 2018-2020

Greene County Male Leading Causes of Death, 2018-2020 Total Deaths: 2,511	% of all deaths	Greene County African American Male Leading Causes of Death, 2018-2020 Total Deaths: 144	% of all deaths	Ohio Male Leading Causes of Death, 2018-2020 Total Deaths:198,794	% of all deaths
Heart Disease	23%	Cancer	21%	Heart Disease	24%
Cancer	21%	Heart Disease	19%	Cancer	20%
Accidents, Unintentional Injuries	7%	Stroke	6%	Accidents, Unintentional Injuries	8%
Stroke	5%	COVID-19	6%	Chronic Lower Respiratory Disease	5%
Chronic Lower Respiratory Disease	4%	Accidents, Unintentional Injuries	5%	Stroke	4%
COVID-19	4%	Diabetes	4%	COVID-19	4%
Diabetes	3%	Kidney Disease	3%	Diabetes	3%
Septicemia	2%	N/A**	--	Alzheimer's Disease	2%
Intentional self-harm (suicide)	2%	N/A**	--	Intentional self-harm (suicide)	2%
Alzheimer's Disease	2%	N/A**	--	Kidney Disease	2%

**Ohio Public Health Data Warehouse states race as Black*
***Causes of death are unavailable due to death count accounting for 3 or fewer deaths between 2018-2020*
(Source: Ohio Public Health Data Warehouse, 2018-2020)

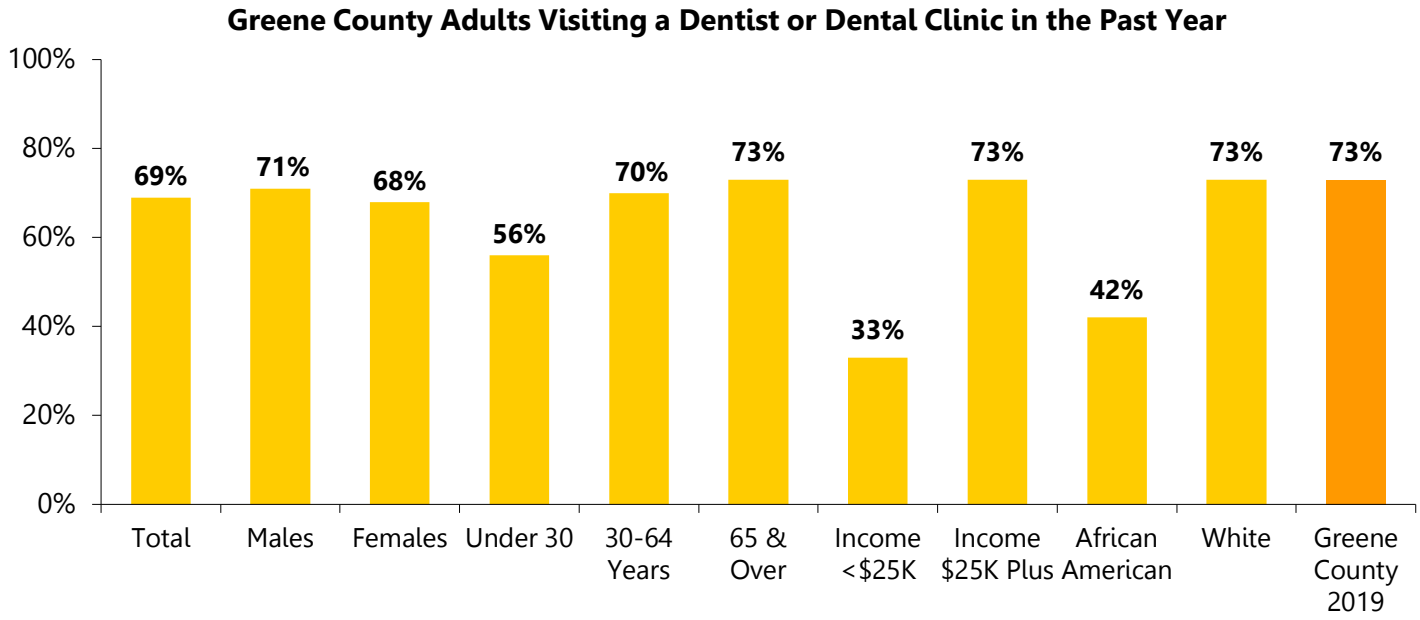
Health Care Access: Oral Health

51,783 Greene County adults did not visit a dentist or dental clinic in the past year.

Oral Health

- In the past year, 69% of Greene County adults had visited a dentist or dental clinic, decreasing to 33% of adults with incomes less than $25,000.
- Seventy-three percent (73%) of adults with dental insurance had been to a dentist or dental clinic in the past year, compared to 70% of adults without dental insurance.

The following graph shows the percentage of Greene County adults who had visited a dentist or dental clinic in the past year. An example of how to interpret the information on the graph includes: 69% of adults had been to the dentist or dental clinic in the past year, including 33% of adults with incomes less than $25,000 and 73% of adults ages 65 and over.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Visited a dentist or dental clinic in the past year	73%	69%	65%*	66%*

**2020 BRFSS*

Oral Health, *continued*

- Greene County adults who had not visited a dentist or dental clinic in the past year reported the following reasons for not receiving dental care in the past year: cost (47%); fear, apprehension, nervousness, pain, dislike going (31%); no reason to go/had not thought of it (18%); did not have or know a dentist (17%); dentist did not accept their health insurance (15%); COVID-19 (9%); could not find a dentist that takes Medicaid (8%); have dentures (7%); could not get into a dentist (3%); transportation (3%); language barrier (1%); they have mental health/substance use complication or issue (1%); and some other reason (13%).

The following table shows how long it has been since Greene County last visited a dentist or dental clinic, by gender.

Oral Health	Within the Past Year	Within the Past 2 Years	Within the Past 5 Years	5 or More years	Never
Time Since Last Visit to Dentist/Dental Clinic*					
Males	71%	6%	11%	10%	<1%
Females	68%	12%	10%	9%	<1%
Total	69%	9%	10%	10%	<1%

**Totals may not equal 100% as some respondents answered, "Don't know".*

HEALTH BEHAVIORS

Health Status Perceptions

Weight Status

Tobacco Use

Alcohol Consumption

Drug Use

Sexual Behavior

Mental Health

Note for population: "adults" are defined throughout the report as those ages 19 and older living in Greene County

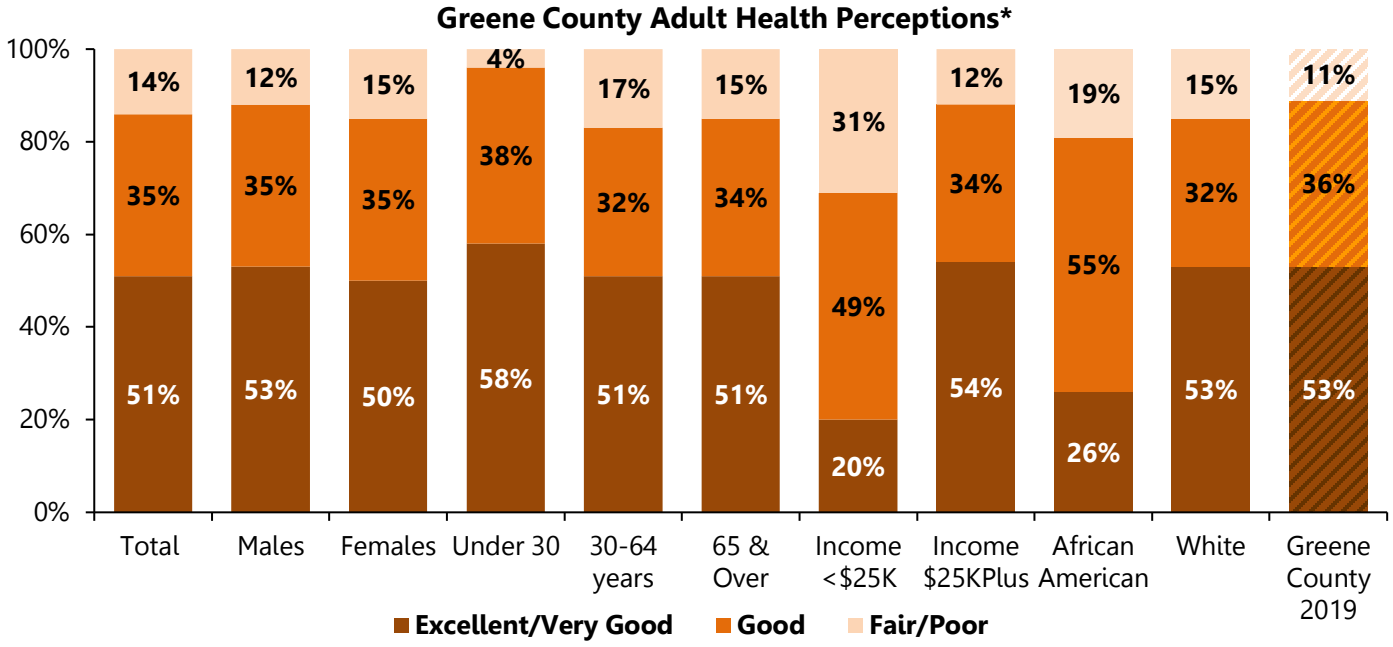
Health Behaviors: Health Status Perceptions

23,386 Greene County adults rated their health as fair or poor.

General Health Status

- Over half (51%) of Greene County adults rated their health as excellent or very good.
- Greene County adults with higher incomes (54%) were most likely to rate their health as excellent or very good, compared to 20% of those with incomes less than $25,000.
- Fourteen percent (14%) of adults rated their health as fair or poor.
- Greene County adults were most likely to rate their health as fair or poor if they:
  - Had been diagnosed with diabetes (33%)
  - Had been diagnosed with high blood pressure (19%)
  - Had been diagnosed with high blood cholesterol (16%)
  - Were overweight or obese (including severely and morbidly obese) (16%)
- Thirty-six percent (36%) of adults reported that poor mental or physical health kept them from doing usual activities such as self-care, work, or recreation in the past month.
- Adults reported that poor mental or physical health kept them from doing usual activities such as self-care, work, or recreation on an average of 3.5 days in the past month.

The following graph shows the percentage of Greene County adults who described their personal health status as excellent/very good, good, and fair/poor. An example of how to interpret the information includes: 51% of all Greene County adults, 58% of adults under the age of 30, and 20% of adults with incomes more than $25,000 rated their health as excellent or very good.



**Respondents were asked: "Would you say that in general your health is excellent, very good, good, fair or poor?"*
Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Physical Health Status

- Over one-quarter (27%) of Greene County adults rated their physical health as not good on four or more days in the previous month.
- Greene County adults reported their physical health as not good on an average of 4.7 days in the previous month.
- Greene County adults with lower incomes (30%) were most likely to rate their physical health as not good on four or more days in the previous month, compared to adults with higher incomes (26%).

The following table shows the percentage of adults with poor physical health in the past 30 days.

Health Status	No Days	1-3 Days	4-5 Days	6-7 Days	8 or More Days
Physical Health Not Good in Past 30 Days*					
Males	53%	15%	7%	1%	19%
Females	41%	18%	6%	3%	18%
Under 30	48%	15%	4%	4%	19%
30-64 Years	49%	17%	7%	2%	17%
65 & Over	45%	13%	7%	3%	19%
Income <$25K	25%	20%	6%	2%	22%
Income >$25K	51%	15%	5%	2%	19%
African American	36%	16%	11%	0%	16%
White	48%	17%	5%	3%	19%
Total	47%	16%	6%	2%	19%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.
**Totals may not equal 100% as some respondents answered, "Don't know".*

Mental Health Status

- Nearly one-third (32%) of Greene County adults rated their mental health as not good on four or more days in the previous month.
- Greene County adults reported their mental health as not good on an average of 4.8 days in the previous month.
- Greene County adults were most likely to rate their mental health as not good on four or more days in the past month if they:
  - Were under the age of 30 (47%)
  - Were African American (35%)

The following table shows the percentage of adults with poor mental health in the past 30 days.

Health Status	No Days	1-3 Days	4-5 Days	6-7 Days	8 or More Days
Mental Health Not Good in Past 30 Days*					
Males	60%	15%	8%	2%	13%
Females	35%	20%	10%	3%	24%
Under 30	29%	14%	7%	4%	36%
30-64 Years	45%	21%	10%	5%	17%
65 & Over	63%	11%	6%	1%	11%
Income <$25K	47%	9%	6%	0%	23%
Income >$25K	45%	20%	9%	3%	20%
African American	41%	16%	14%	2%	19%
White	47%	18%	9%	2%	20%
Total	46%	18%	9%	3%	20%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.
**Totals may not equal 100% as some respondents answered, "Don't know".*

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Rated health as excellent or very good	53%	51%	51%	53%
Rated health as fair or poor	14%	14%	17%	15%
Rated physical health as not good on four or more days (in the past 30 days)	21%	27%	21%	20%
Average days that physical health not good in past month	3.5	4.7	4.2*	3.9*
Rated mental health as not good on four or more days (in the past 30 days)	30%	32%	31%	29%
Average days that mental health not good in past month	4.5	4.8	5.2*	4.5*
Poor physical or mental health kept them from doing usual activities, such as self-care, work, or recreation (on at least one day during the past 30 days)	29%	36%	N/A	N/A

**2019 BRFSS data as compiled by 2022 County Health Rankings*

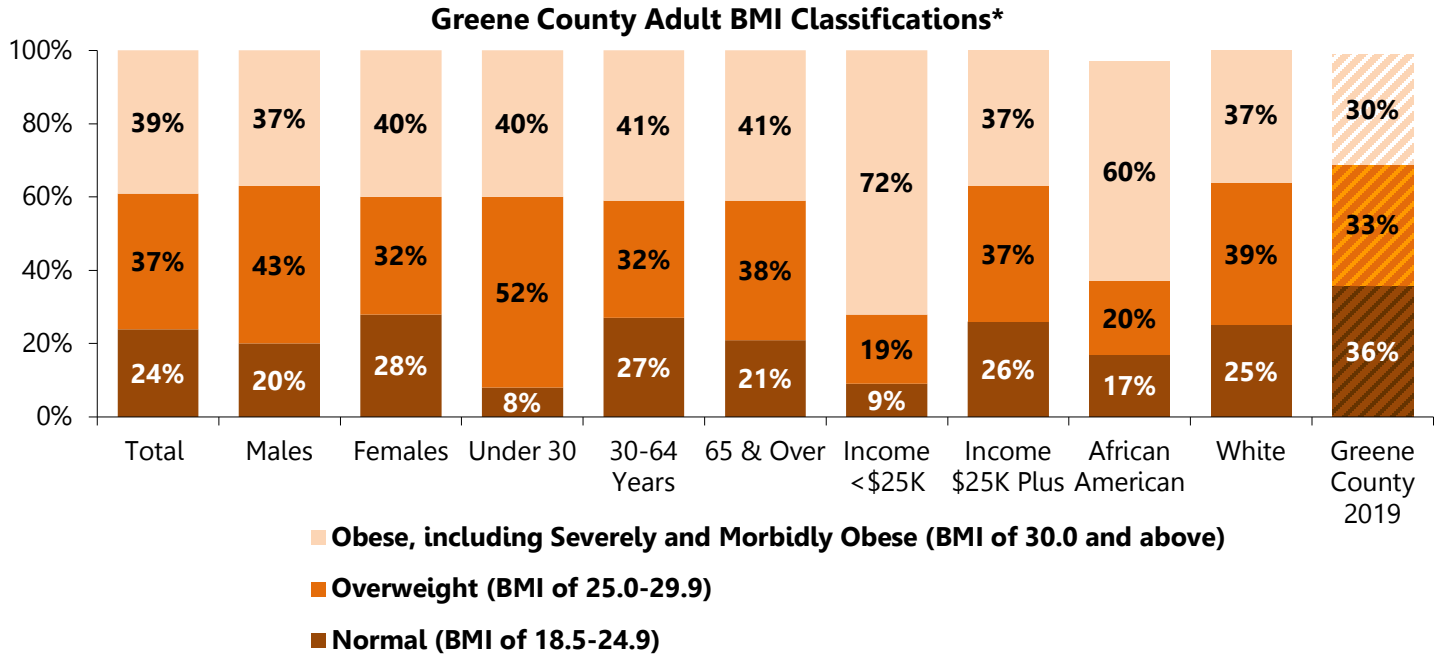
Health Behaviors: Weight Status

65,147 Greene County adults were obese.

Weight Status

- Over three-quarters (76%) of Greene County adults were either overweight (37%) or obese (including severely and morbidly obese) (39%) by body mass index (BMI), putting them at elevated risk for developing a variety of diseases.

The following graph shows the percentage of Greene County adults who were normal weight, overweight, or obese by body mass index (BMI). An example of how to interpret the information includes: 24% of all adults were classified as normal weight, 37% were overweight, and 39% were obese.



**Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight.*
Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Obese, including severely and morbidly obese (BMI of 30.0 and above)	30%	39%	38%	34%
Overweight (BMI of 25.0 – 29.9)	33%	37%	33%	34%

Healthy People 2030

Nutrition and Weight Status (NWS)

Objective	Greene County 2023	Healthy People 2030 Target
NWS-03: Reduce the proportion of adults with obesity	39%	36%

(Sources: Healthy People 2030 Objectives, 2023 Greene County Community Health Assessment)

Weight Status, *continued*

- Greene County adults did the following to lose weight or keep from gaining weight:
  - Exercised (40%)
  - Ate less food, fewer calories, or foods low in fat (38%)
  - Drank more water (38%)
  - Ate a low-carb diet (14%)
  - Went without eating 24 or more hours (3%)
  - Took prescribed medications (2%)
  - Bariatric surgery (1%)
  - Health coaching (1%)
  - Participated in a dietary or fitness program prescribed by a health professional (1%)
  - Took diet pills, powders or liquids without a doctor's advice (1%)
  - Took laxatives (1%)
  - Used a weight loss program (1%)
  - Smoked cigarettes (<1%)
  - Vomited after eating (<1%)

Physical Activity

- In Greene County, 61% of adults engaged in some type of physical activity or exercise for at least 30 minutes 3 or more days per week. Thirty-five percent (35%) of adults exercised 5 or more days per week. Nearly one-fifth (19%) of adults did not participate in any physical activity in the past week, including 3% who were unable to exercise.

- Greene County adults spent an average of 2.5 hours watching/streaming TV, 2.1 hours on their cell phone, 1.3 hours on the computer/tablet (outside of work), and 0.3 hours playing video games on an average day.

- Adults reported the following prevented them from exercising:
  - Time (28%)
  - Self-motivation/will power (26%)
  - Too tired (21%)
  - Weather (17%)
  - Pain or discomfort (16%)
  - Do not like exercise (11%)
  - Choose not to exercise (8%)
  - Ill or physically unable (8%)
  - No child care (6%)
  - No exercise partner (6%)
  - Could not afford a gym membership (5%)
  - Poorly maintained/no sidewalks (4%)
  - Did not know what activity to do (3%)
  - Lack of opportunities for those with physical impairments or challenges (3%)
  - Afraid of injury (2%)
  - Too expensive (2%)
  - Doctor advised them not to exercise (1%)
  - Neighborhood safety (1%)
  - No gym available (1%)
  - No walking, biking trails, or parks (1%)
  - No transportation to a gym or other exercise activity (<1%)
  - Other (3%)

- Adults reported the following would help them use community parks, bike trails, and walking paths more frequently:
  - More available/accessible parks, bike trails, and walking paths (22%)
  - Better promotion and advertising of existing parks, trails, and paths (19%)
  - Designated safe routes (19%)
  - Improvements to existing parks, trails, and paths (17%)
  - More public events and programs involving parks, trails, and paths (9%)

Nutrition

The table below indicates the number of servings of fruit, vegetables, whole grains, and sugar-sweetened beverages Greene County adults consumed daily.

	5 or more servings	3-4 servings	1-2 servings	0 servings
Fruit	1%	14%	73%	12%
Vegetables	3%	23%	70%	4%
Whole Grains	2%	20%	66%	12%
Sugar-sweetened beverages	2%	9%	41%	48%

- In 2023, 36% of adults ate 1 to 2 servings of fruits and/or vegetables per day, 39% ate 3 to 4 servings per day, and 24% ate 5 or more servings per day. One percent (1%) of adults ate no servings of fruits and vegetables per day.

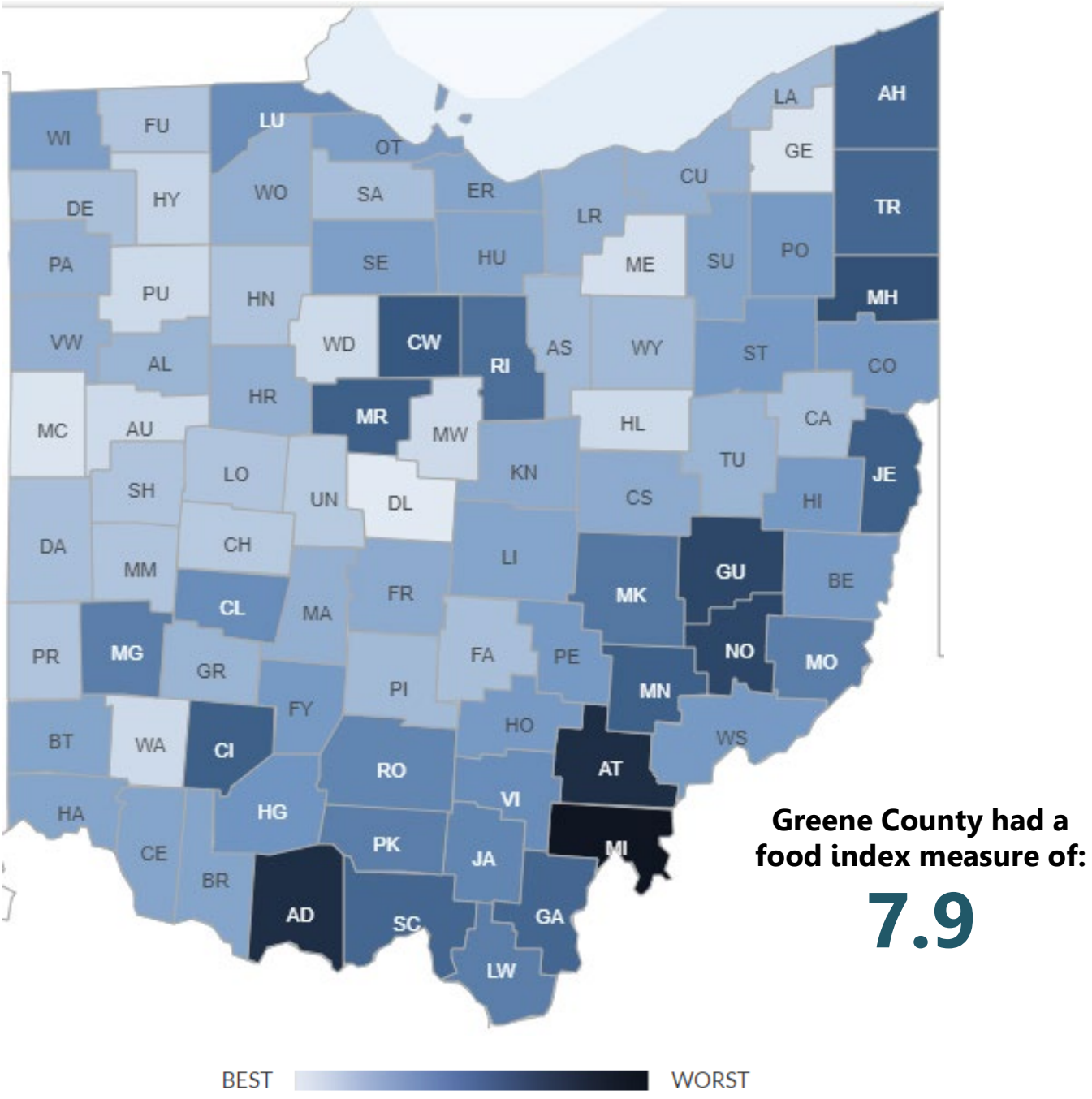
- Adults reported the following barriers to consuming fruits and vegetables:
  - Too expensive (21%)
  - Did not like the taste (8%)
  - Did not know how to prepare (4%)
  - No variety (3%)
  - Did not have access to healthy foods (2%)
  - Availability of food at the food pantry (1%)
  - Transportation (1%)
  - Limitations set by WIC (<1%)
  - Other (2%)

- Sixty-nine percent (69%) of adults reported they did not have any barriers in consuming healthy foods.

- Adults reported living within driving distance (74%), walking distance (18%), and biking distance (5%) from fresh, healthy food. Three percent (3%) of adults did not know how far they lived from fresh, healthy food.

The Food Environment Index measures the quality of the food environment in a county on a scale from 0 to 10 (zero being the worst value in the nation and 10 being the best). The two variables used to determine the measure are limited access to healthy foods (i.e., the percentage of the population who are low income and do not live close to a grocery store) & food insecurity (i.e., the percentage of the population who did not have access to a reliable source of food during the past year).

- The food environment index in Greene County is 7.9.
- The food environment index in Ohio is 6.8.



Greene County had a food index measure of:

7.9

(Source: USDA Food Environment Atlas, as compiled by County Health Rankings 2022)

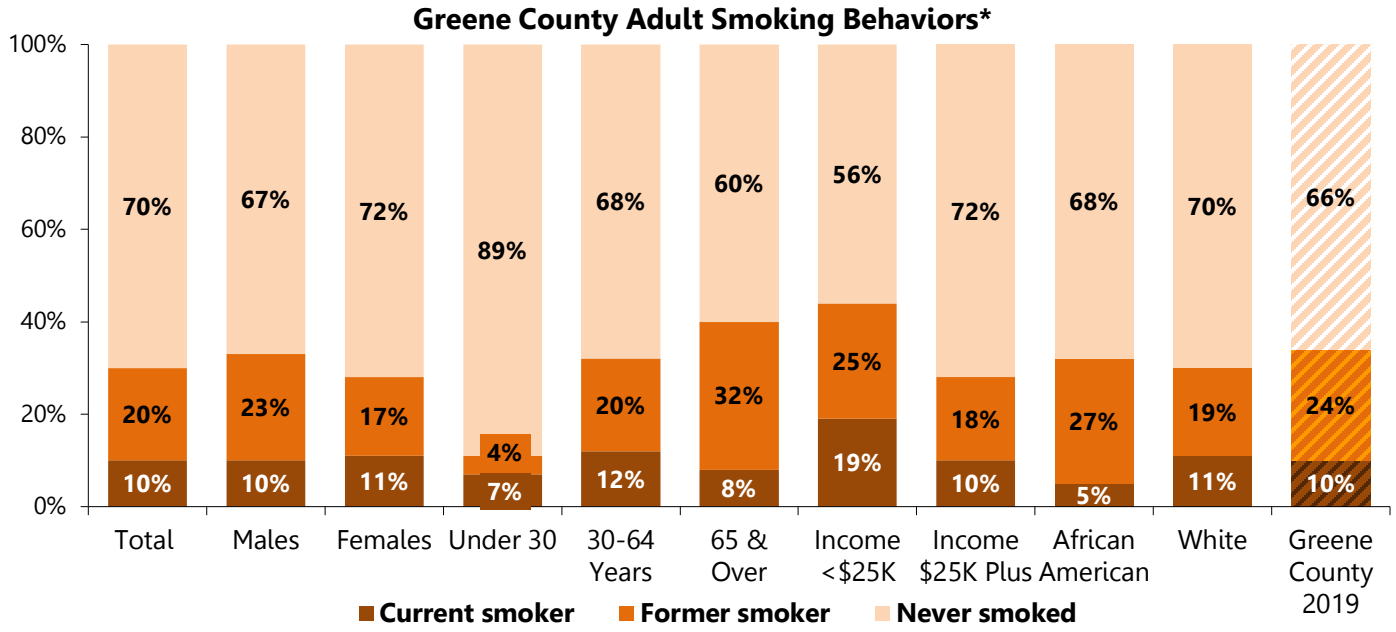
Health Behaviors: Tobacco Use

16,704 Greene County adults were current smokers.

Tobacco Use

- Ten percent (10%) of Greene County adults were current smokers (those who indicated smoking at least 100 cigarettes in their lifetime and currently smoked some or all days).
- One-fifth (20%) of adults indicated that they were former smokers (smoked 100 cigarettes in their lifetime and now do not smoke).
- Greene County adult current smokers were more likely to have:
  - Been diagnosed with COPD, emphysema, or chronic bronchitis (22%)
  - Rated their overall health as fair or poor (21%)
  - An annual income less than $25,000 (19%)
- Almost half (46%) of current smokers reported that they had stopped smoking for at least one day in the past year because they were trying to quit smoking.
- Adult smokers who tried quitting smoking in the past year used the following methods: cold turkey (74%), e-cigarette (30%), substitute behaviors (30%), nicotine gum (26%), nicotine patch (17%), and Wellbutrin (9%).

The following graph shows the percentage of Greene County adults' smoking behaviors. An example of how to interpret the information includes: 10% of all adults were current smokers, 20% were former smokers, and 70% had never smoked cigarettes.



**Respondents were asked: "Have you smoked at least 100 cigarettes in your entire life? If yes, do you now smoke cigarettes every day, some days or not at all?"*

Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Tobacco Use, *continued*

- Greene County adults used the following tobacco products in the past year: cigarettes (15%); cigars (9%); e-cigarettes or other electronic vaping products (7%); cigarillos (3%); little cigars (3%); chewing tobacco, snuff or snus (2%); pipes (2%); and hookah (1%).
- One-quarter (25%) of adults had used at least one tobacco product in the past year, including 10% of adults who used two or more tobacco products.
- Six percent (6%) of adults were current electronic vapor product users (those who indicated using an electronic vapor product in their lifetime and currently used it some or all days).
- Fifteen percent (15%) of adults indicated they were former electronic vapor product users.

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Current smoker (currently smoke some or all days)	10%	10%	18%	14%
Former smoker (smoked 100 cigarettes in lifetime & now do not smoke)	24%	15%	25%	25%
Current e-cigarette user (vaped on some or all days)	1%	6%	8%	7%

Healthy People 2030

Tobacco Use (TU)

Objective	Greene County 2023	Healthy People 2030 Target
TU-02: Reduce current cigarette smoking in adults	10%	6%*
TU-11: Increase past-year attempts to quit smoking among current smokers	46%	66%*

**Healthy People 2030 target objective is among adults ages 18 years and over*
(Sources: Healthy People 2030 Objectives, 2023 Greene County Community Health Assessment

Health Behaviors: Alcohol Consumption

96,885 Greene County adults had at least one alcoholic drink in the past month.

Alcohol Consumption

- Fifty-eight (58%) of Greene County adults had at least one alcoholic drink in the past month, increasing to 62% of males and 63% of adults ages 30-64.
- Of those who drank, Greene County adults drank 3.1 drinks on average, increasing to 4.9 drinks among adults with incomes less than $25,000.
- Almost one-quarter (22%) of Greene County adults reported they had five or more alcoholic drinks (for males) or four or more drinks (for females) on an occasion in the last month and would be considered binge drinkers. Of those who drank in the past month, 38% had at least one episode of binge drinking.
- Two percent (2%) of adults reported driving after having perhaps too much alcohol to drink in the past month.
- Greene County adults indicated they, a family member, or someone in their household experienced the following in the past 6 months:
  - Drank more than they expected (11%)
  - Drove a vehicle or other equipment after having any alcoholic beverages (11%)
  - Drank more to get the same effect (5%)
  - Used prescription drugs while drinking (5%)
  - Spent a lot of time drinking (4%)
  - Continued to drink despite problems caused by drinking (2%)
  - Failed to fulfill duties at work, home, or school (2%)
  - Gave up other activities to drink (2%)
  - Tried to quit or cut down but could not (2%)
  - Drank to ease withdrawal symptoms (1%)
  - Had legal problems (<1%)
  - Placed themselves or their family in harm (<1%)

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Current Drinker (drank alcohol at least once in the past month)	66%	58%	53%	53%
Binge drinker (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days)	22%	22%	17%	15%
Drove after having perhaps too much alcohol to drink (in the past month)	3%	2%	N/A	N/A

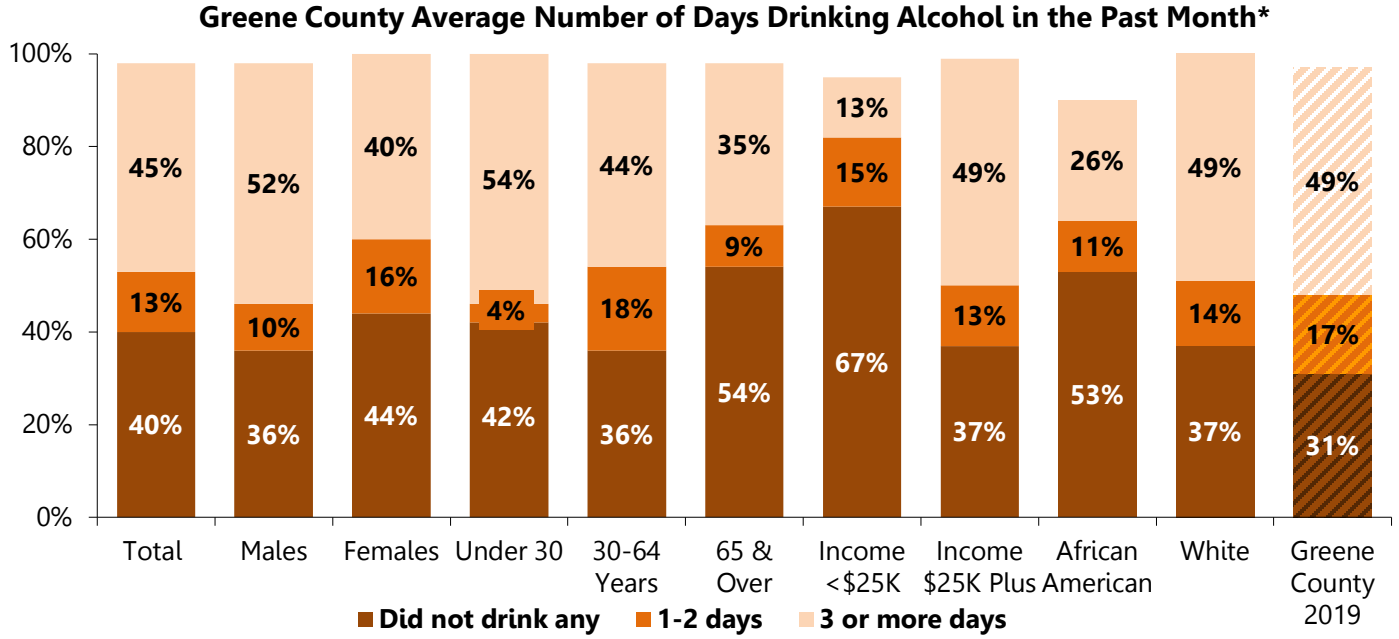
Healthy People 2030

Substance Use (SU)

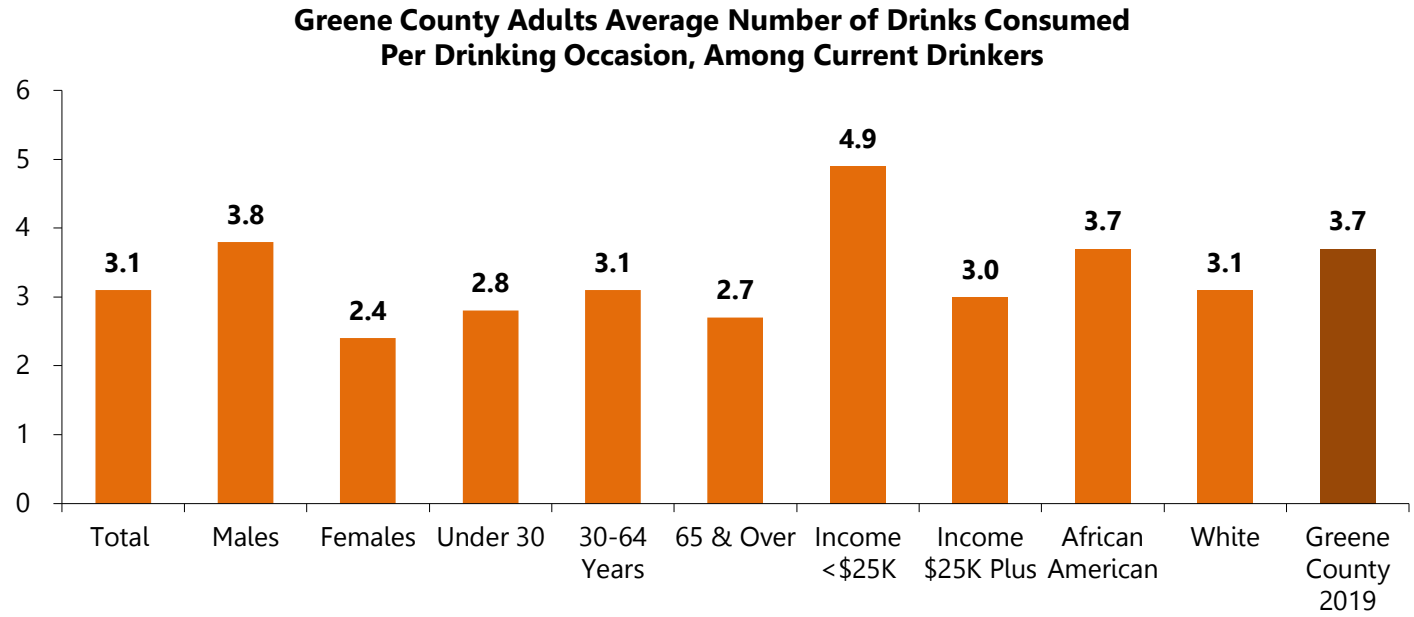
Objective	Greene County 2023	Healthy People 2030 Target
SU-10: Reduce the proportion of people who engaged in binge drinking in the past month	22%	25%*

**Healthy People 2030 target objective is among adults ages 21 years and over*
(Sources: Healthy People 2030 Objectives, 2023 Greene County Community Health Assessment

The following graphs show the percentage of Greene County adults who consumed alcohol and the amount consumed on average in the past month. An example of how to interpret the information shown on the first graph includes: 40% of all Greene County adults did not drink alcohol in the past month, including 36% of adults ages 30-64 years and 67% of adults with incomes below $25,000.



**Percentages may not equal 100% as some respondents answered, "don't know"*



Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey

Health Behaviors: Drug Use

18,375 Greene County adults misused medication in the past 6 months.

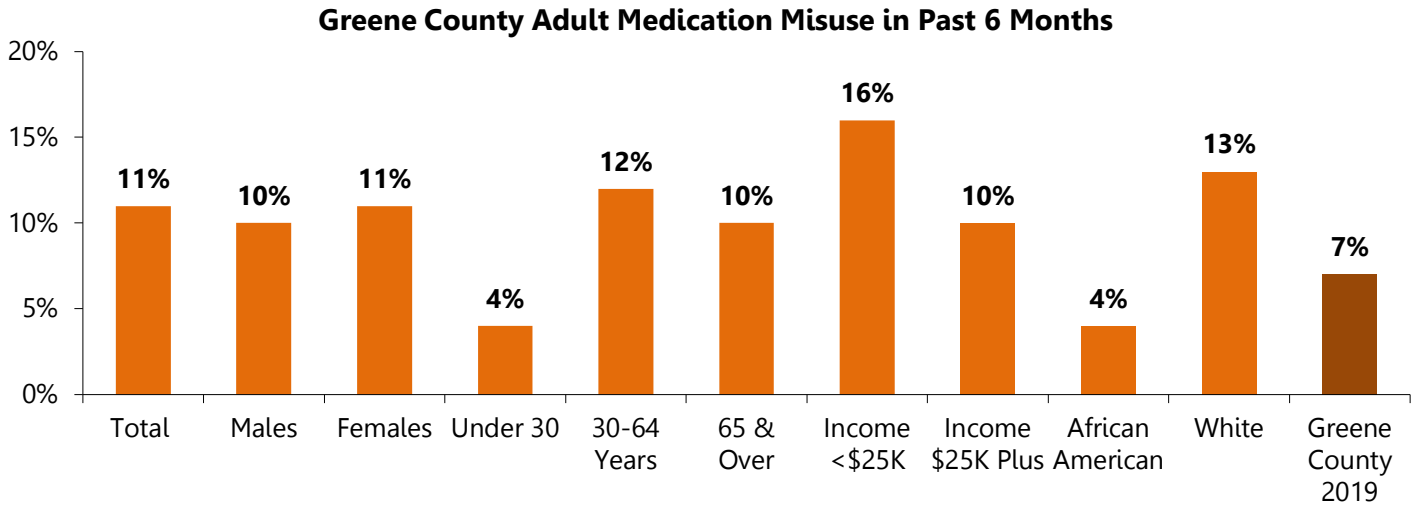
Prescription Drug Misuse

- One-in-nine (11%) adults had used medication not prescribed for them or took more than prescribed to feel good or high and/or more active or alert during the past six months.

- Adults reported that they, an immediate family member, or someone in their household took the following medications not prescribed to them to feel good, high, and/or more active or alert during the past 6 months:
  - Steroids (6%)
  - Medical marijuana (5%)
  - Tranquilizers such as Valium or Xanax, sleeping pills, barbiturates, etc. (5%)
  - Ritalin, Adderall, Concerta, or other ADHD medication (3%)
  - Codeine, Demerol, Morphine, Percocet, Dilaudid, or Fentanyl (2%)
  - Tramadol/Ultram (2%)
  - Vicodin (2%)
  - Kratom (1%)
  - Neurontin (1%)
  - OxyContin (1%)
  - Suboxone or methadone (<1%)

- Four percent (4%) of Greene County adults who had ever been prescribed opioid based medications (e.g., OxyContin, Codeine, Hydrocodone, Fentanyl) reported they had trouble stopping.

The following graph shows adult medication misuse in the past six months. An example of how to interpret the information in the graph includes: 11% of adults used misused medication in the past 6 months, including 4% of adults under the age of 30 and 16% of adults with incomes below $25,000.

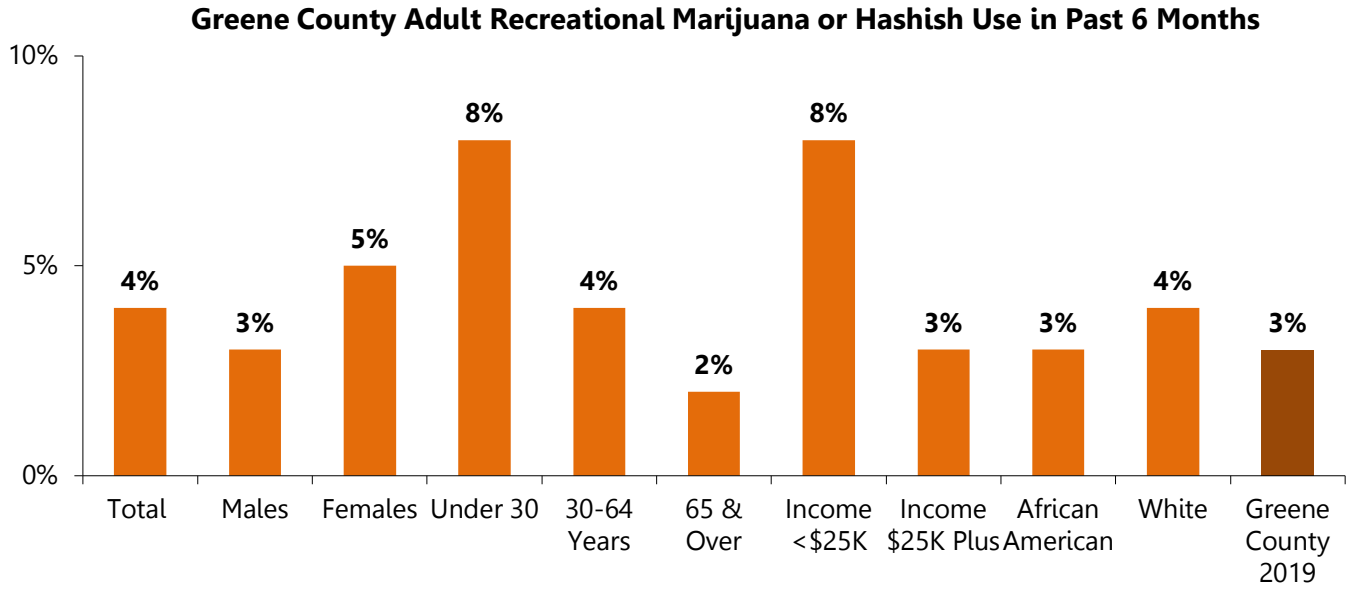


Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey

Marijuana and Other Drug Use

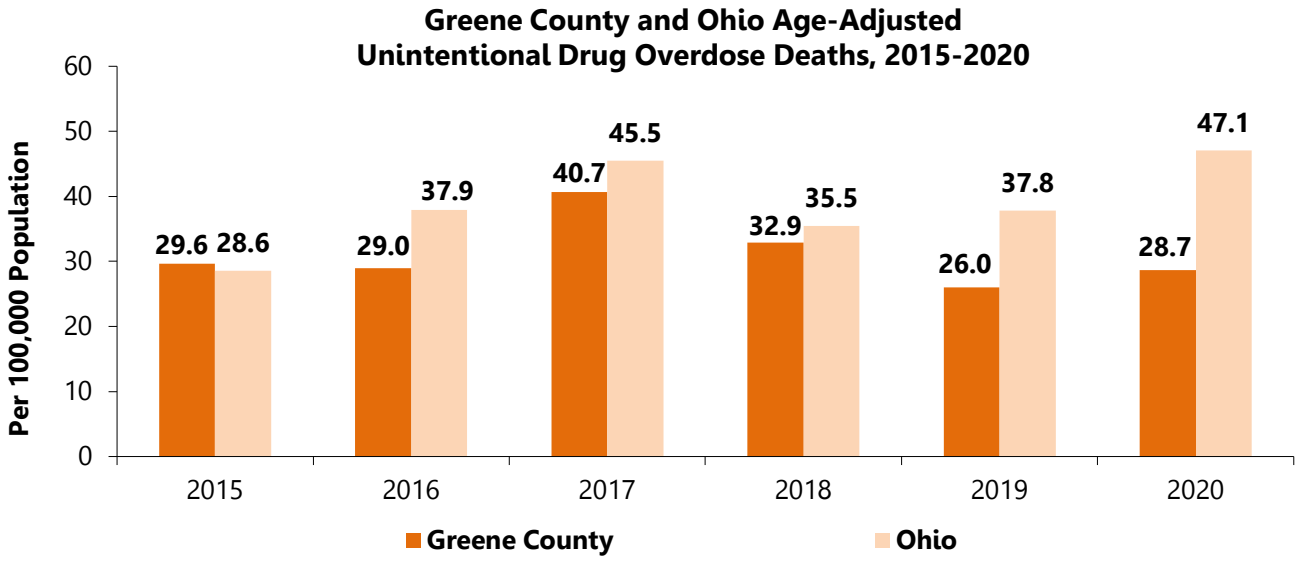
- Four percent (4%) of Greene County adults reported they had used recreational marijuana or hashish in the past six months, increasing to 8% of adults under the age of 30 and 8% of adults with incomes less than $25,000.
- Three percent (3%) of adults indicated they had used medical marijuana in the past six months.
- Adults reported that they, an immediate family member, or someone in their household used the following in the past 6 months:
  - Recreational marijuana or hashish (13%)
  - Cannabidiol (CBD) oil (8%)
  - Medical marijuana (8%)
  - Wax, oil, or edibles with THC (8%)
  - Amphetamines, methamphetamines, or speed (2%)
  - LSD, mescaline, peyote, psilocybin, DMT, or mushrooms (1%)
  - Bath salts (<1%)
  - Cocaine, crack, or coca leaves (<1%)
  - Heroin/fentanyl (<1%)
  - Inappropriate use of over-the-counter medications (<1%)
  - Synthetic marijuana/K2 (<1%)
- As a result of using drugs, Greene County adults indicated they, an immediate family member, or someone in their household had: been placed in dangerous situations (1%), experienced legal problems (1%), regularly failed to fulfill obligations at work or home (1%), and administered Narcan or nasal Naloxone (<1%).
- One percent (1%) of adults used a program or service to help with a tobacco, alcohol, or drug problem for them or a loved one. Reasons for not using such a program included the following: had not thought of it (2%), could not afford to go (1%), did not have any openings (wait-listed) (1%), did not want to get in trouble (1%), did not want to miss work (1%), fear (1%), insurance did not cover it (1%), stigma of seeking alcohol services (1%), a program was not available (<1%), stigma of seeking drug services (<1%), transportation (<1%), wait time (<1%), and other reasons (2%). Ninety-three percent (93%) of adults indicated such a program was not needed.

The following graph shows adult recreational marijuana or hashish use in the past 6 months. An example of how to interpret the information in the graph includes: 4% of Greene County adults used recreational marijuana or hashish in the past 6 months, including 8% of adults under the age of 30 and 2% of adults ages 65 and over.



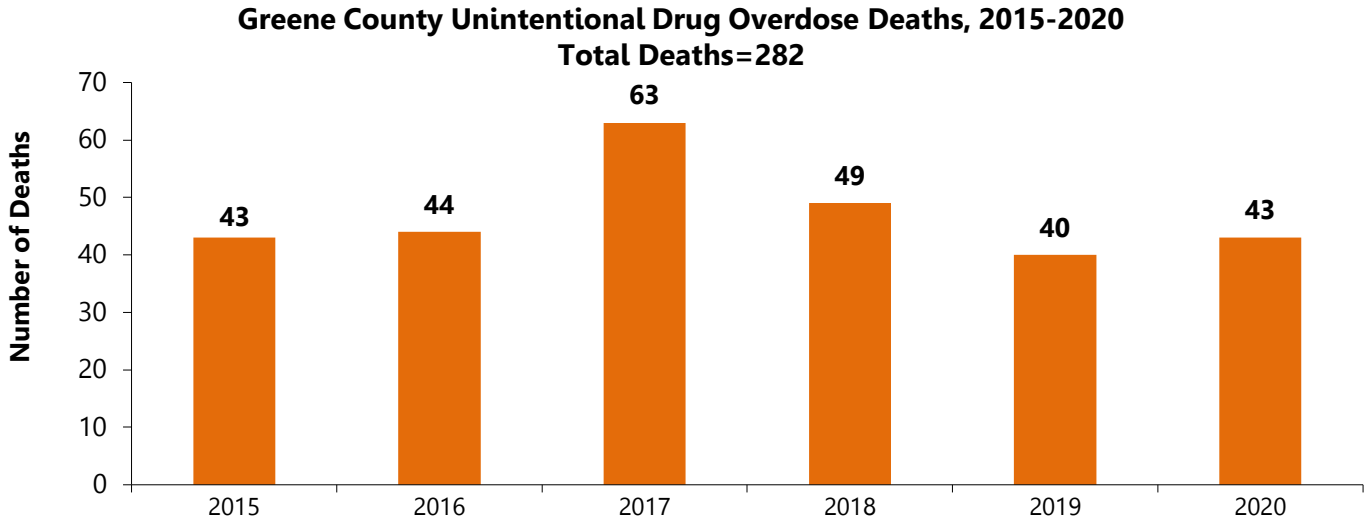
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey

The following graph shows the Greene County and Ohio age-adjusted unintentional drug overdose deaths from 2015-2020.



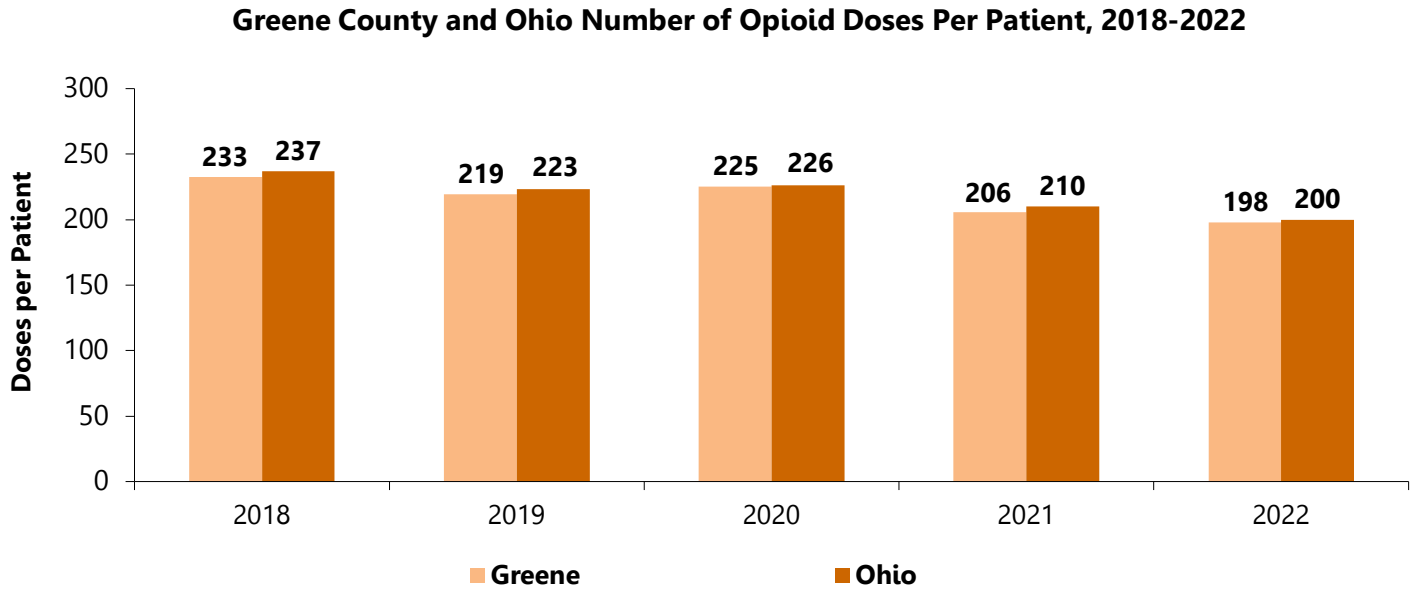
Note: Includes Ohio residents who died due to unintentional drug poisoning (underlying cause of death ICD-10 codes X40-X44)
Updated 4/4/2023

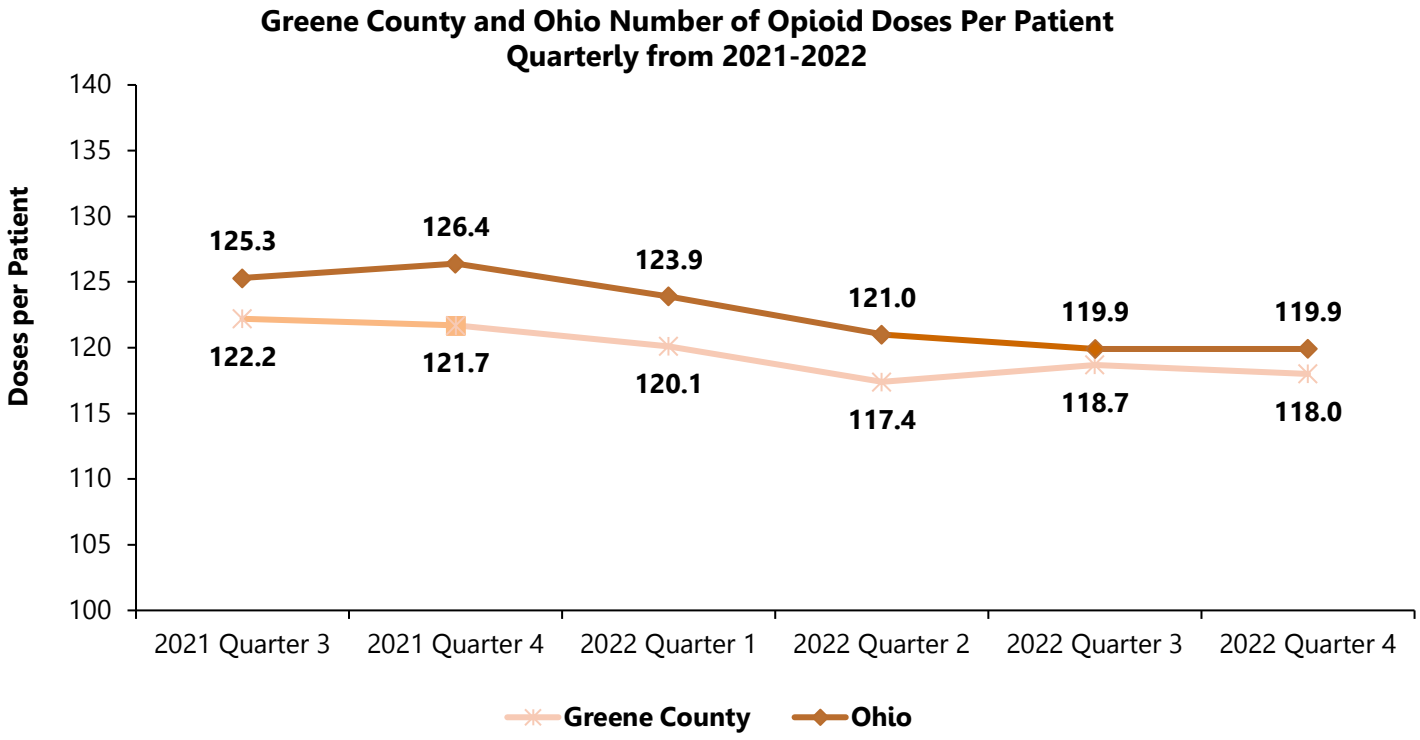
The following graph shows the number of unintentional drug overdose deaths from 2015-2020 in Greene County.



(Source for graphs: Ohio Public Health Data Warehouse, 2015-2020, Updated 4/4/2023)

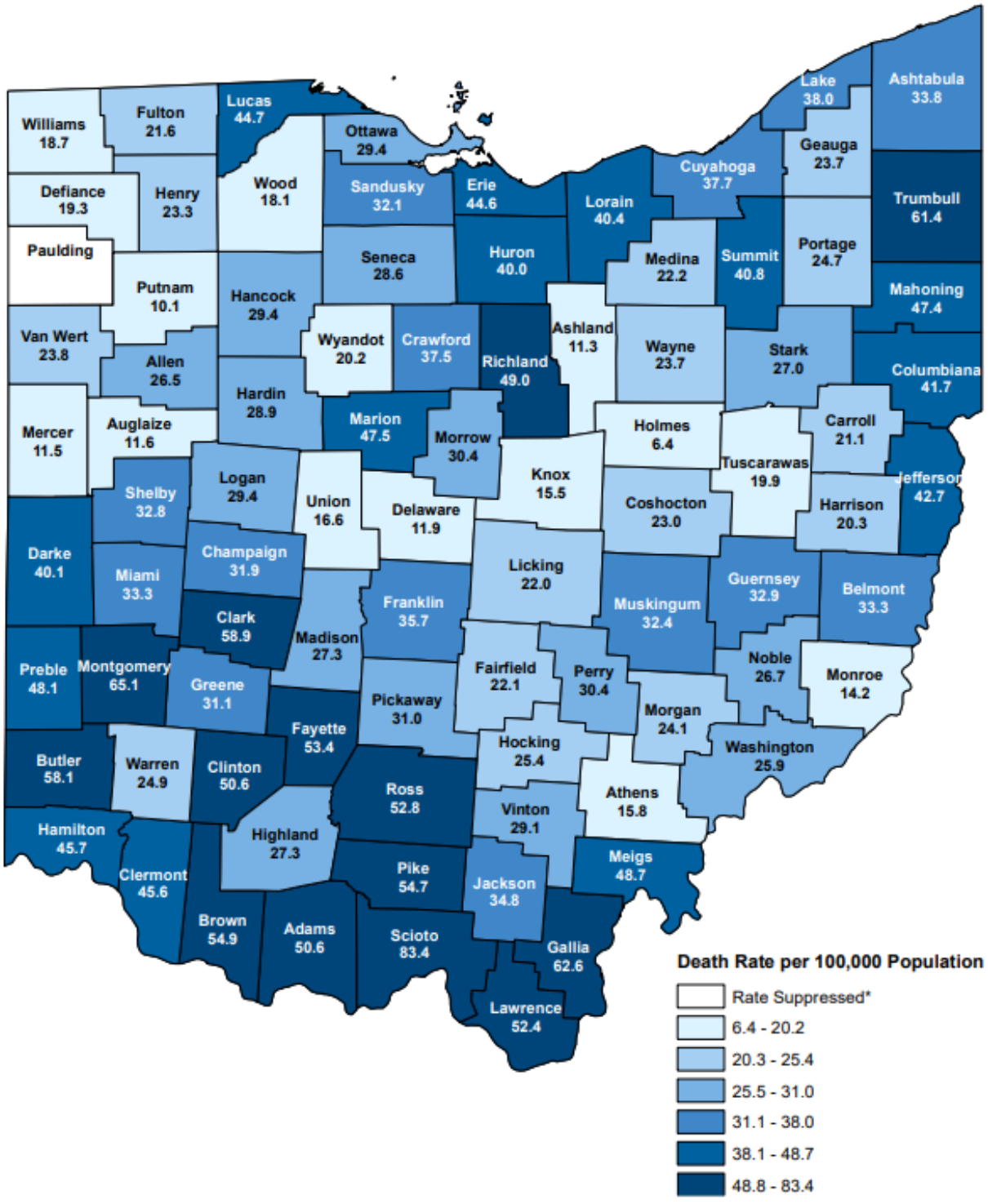
The following graphs are data from the Ohio Automated Prescription Reporting System (OARRS) indicating Greene County and Ohio yearly opioid doses per patient, as well as quarterly opioid doses per patient.





(Source for graphs: Ohio's Automated Rx Reporting System, 2018-2022)

The following map illustrates the average age-adjusted unintentional drug overdose death rate per 100,000 population, by county from 2015 to 2020.



(Source: Ohio Department of Health, 2020 Ohio Drug Overdose Data: General Findings)

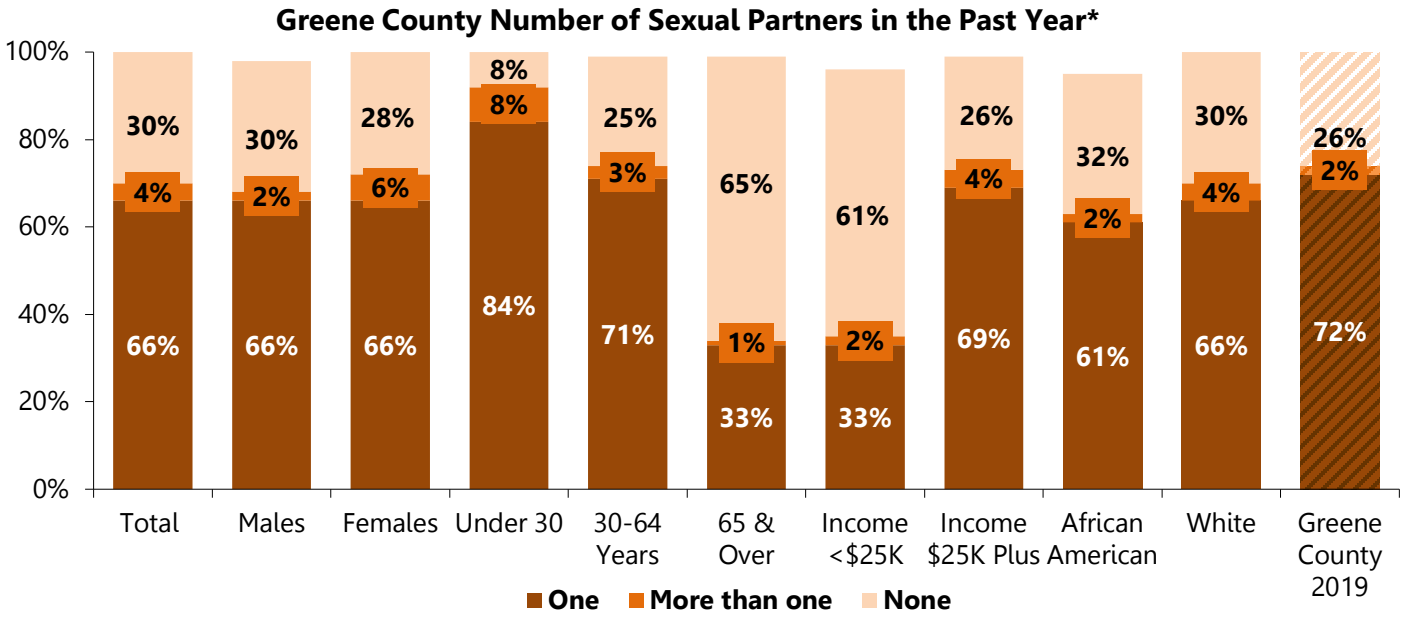
Health Behaviors: Sexual Behavior

6,682 Greene County adults reported having sexual intercourse with more than one partner in the past year.

Sexual Behavior

- Seventy percent (70%) of Greene County adults had sexual intercourse in the past year. Four percent (4%) of adults reported they had intercourse with more than one partner in the past year.

The following graph shows the number of sexual partners Greene County adults had in the past year. An example of how to interpret the information in the graph includes: 66% of all Greene County adults had one sexual partner in the last 12 months, and 4% had more than one than one partner.



**Totals may not equal 100% as some respondents answered, "Don't know".*
**Respondents were asked: "During the past 12 months, with how many different people have you had sexual intercourse?"*
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey

- Greene County adults used the following methods of birth control the last time they had sex:
  - They or their partner were too old to get pregnant (15%)
  - Male sterilization (12%)
  - Condoms (10%)
  - Birth control pill (9%)
  - Hysterectomy (9%)
  - Female sterilization (8%)
  - Rhythm method (7%)
  - Withdrawal (6%)
  - Infertility (3%)
  - IUD (3%)
  - Contraceptive implant (2%)
  - Ovaries or testicles removed (2%)
  - Abstinence (1%)
  - Copper-bearing IUD (1%)
  - Birth control shots (<1%)
- Almost one-quarter (22%) of adults indicated they did not have a partner or were not sexually active.
- Three percent (3%) of adults reported they and their partner were trying to get pregnant, and 3% were currently pregnant.
- Two percent (2%) of adults indicated they were gay or lesbian.
- Seven percent (7%) of Greene County adults were not using any method of birth control.

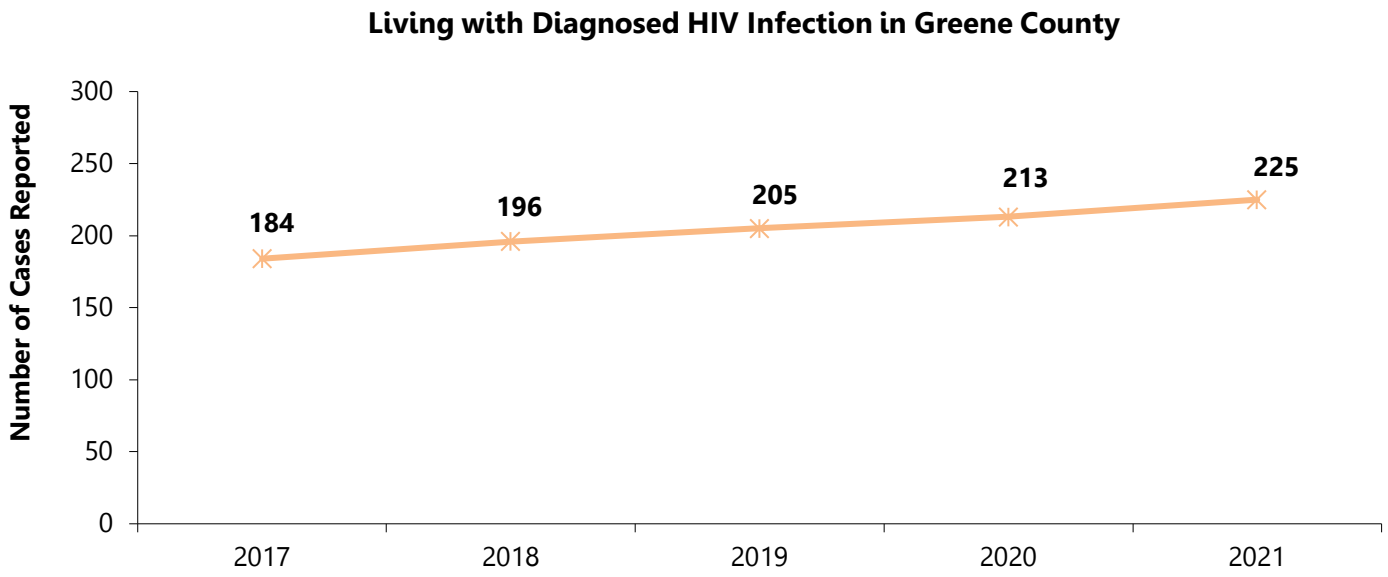
Sexual Behavior, *continued*

- Nearly one-quarter (24%) of adults had been forced or coerced to have any sexual activity when they did not want to within their lifetime. Eight percent (8%) of adults who had ever been sexually assaulted reported it. Adults who did not report their sexual assault reported the following reasons: fear (25%), did not know how (16%), stigma (15%), they were in a relationship with the offender (13%), feared the offender (5%), and some other reason (10%).

- The following situations applied to Greene County adults:
  - Had sex without a condom in the past year (29%)
  - Been forced or coerced to have any sexual activity in the past year (3%)
  - Engaged in sexual activity following alcohol or other drug use that they would not have done if sober (2%)
  - Had anal sex without a condom in the past year (1%)
  - Had sex with someone they met on social media (1%)
  - Tested positive for HPV (1%)
  - Treated for an STD in the past year (1%)
  - Had sex with someone they did not know (<1%)
  - Had unprotected sex because they could not afford birth control methods (<1%)
  - Injected any drug other than those prescribed in the past year (<1%)
  - Know someone involved in sex trafficking (<1%)
  - Tested positive for HIV (<1%)
  - Tested positive for Hepatitis C (<1%)

The following graph shows the number of Greene County HIV/AIDS cases from 2017 to 2021. The graph shows:

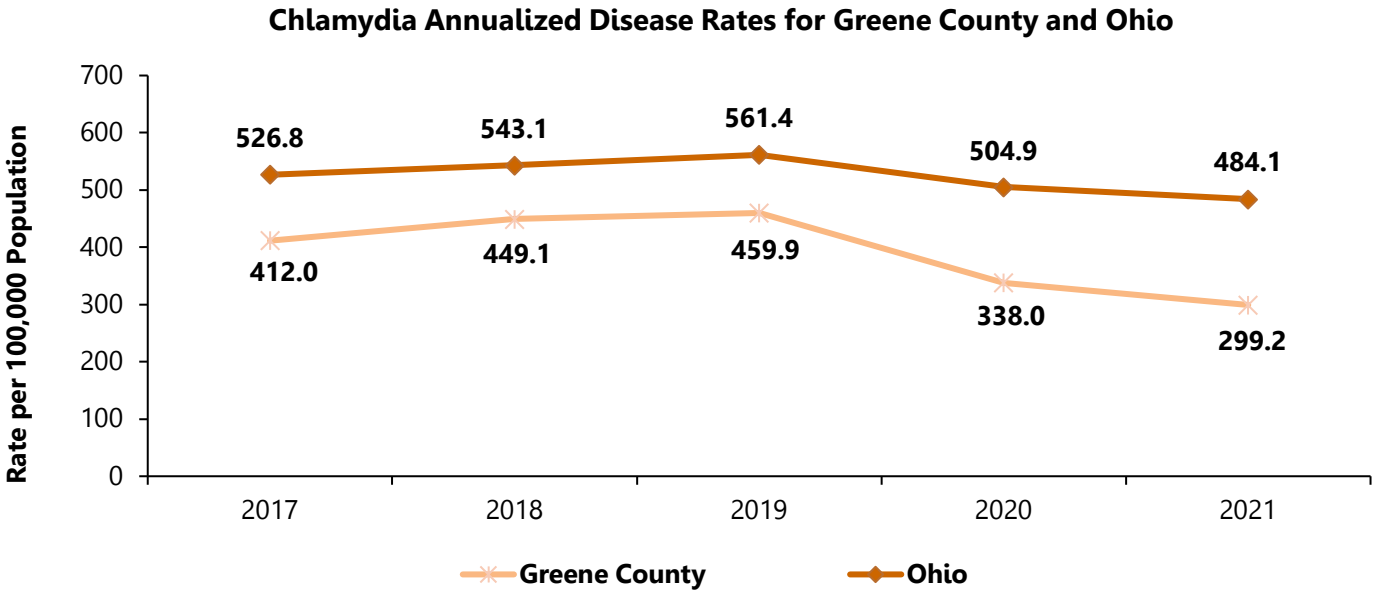
- From 2017 to 2021, the number of Greene County HIV/AIDS cases steadily increased.

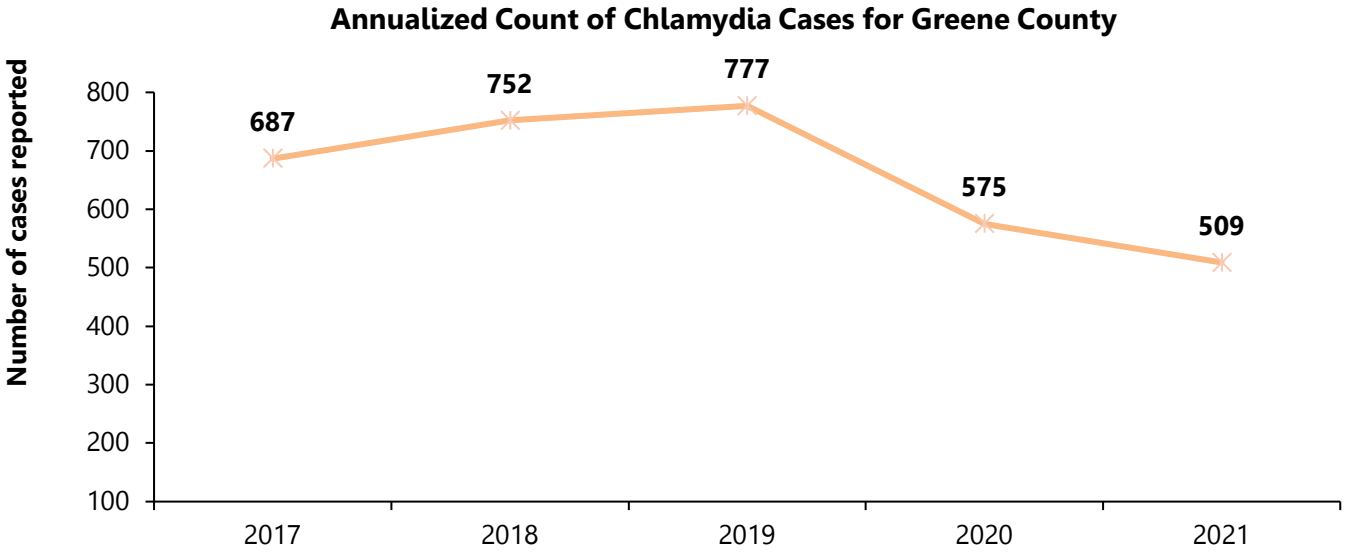


Note: Living with diagnosed HIV infection by year (2017-2021) represents all persons ever diagnosed and reported with HIV and/or AIDS who have not been reported as having died as of December 31 of the corresponding year. Persons living with diagnosed HIV infection represent persons living in Ohio as of December 31 of the corresponding year, regardless of whether the person was a resident of Ohio at time of initial HIV and/or AIDS diagnosis.
(Source: ODH, HIV/AIDS Surveillance Program, data reported through 6/30/2022)

Sexual Behavior, *continued*

The following graphs show Greene County chlamydia disease rates per 100,000 population and the number of chlamydia disease cases.

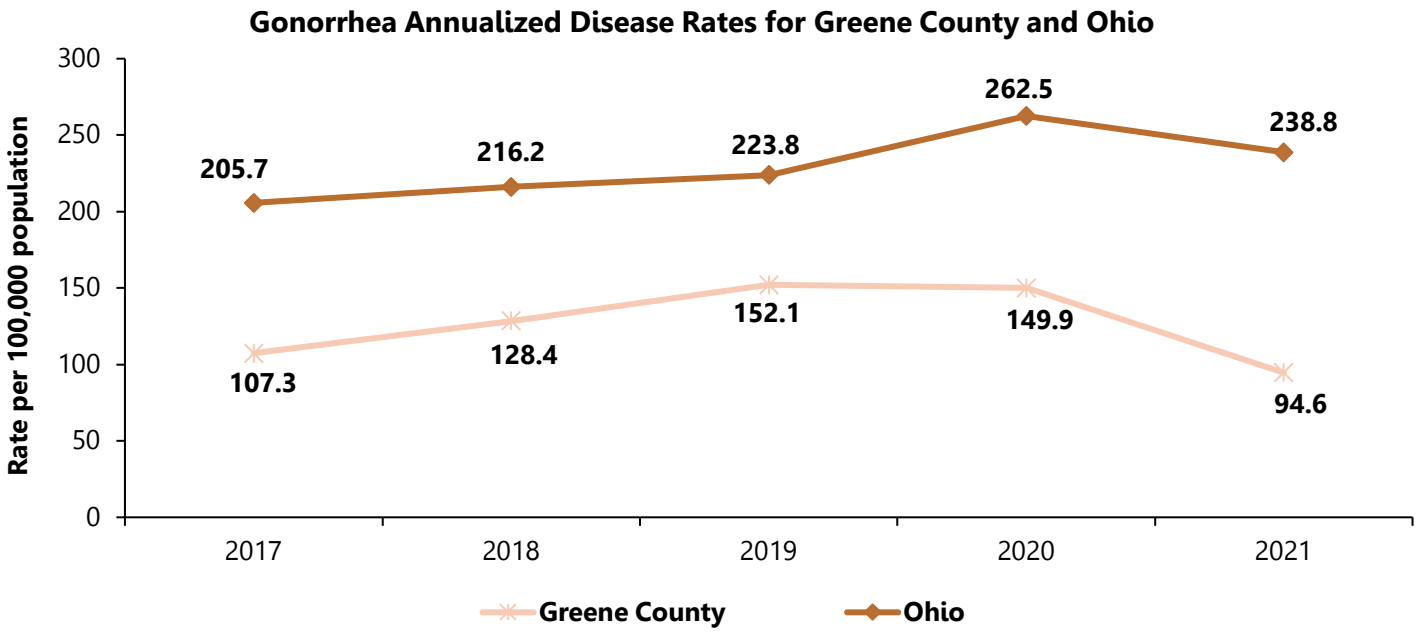


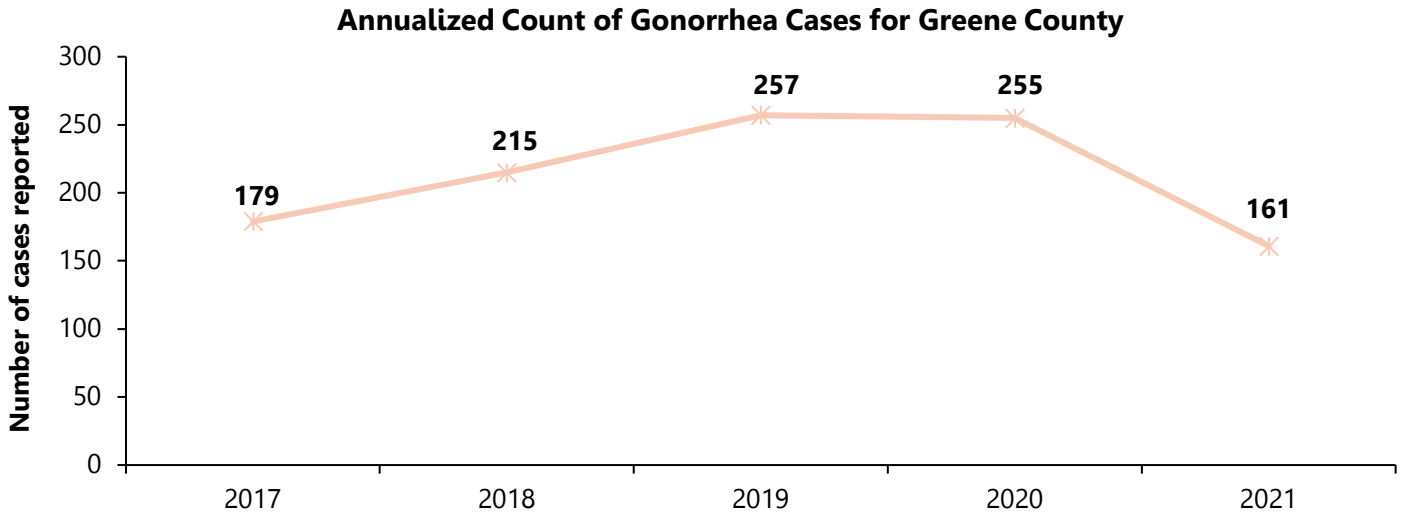


(Source for graphs: ODH, STD Surveillance, data reported through 11/16/2022)

Sexual Behavior, *continued*

The following graphs show Greene County gonorrhea disease rates per 100,000 population and the number of gonorrhea disease cases.





(Source for graphs: ODH, STD Surveillance, data reported through 11/16/2022)

Health Behaviors: Mental Health

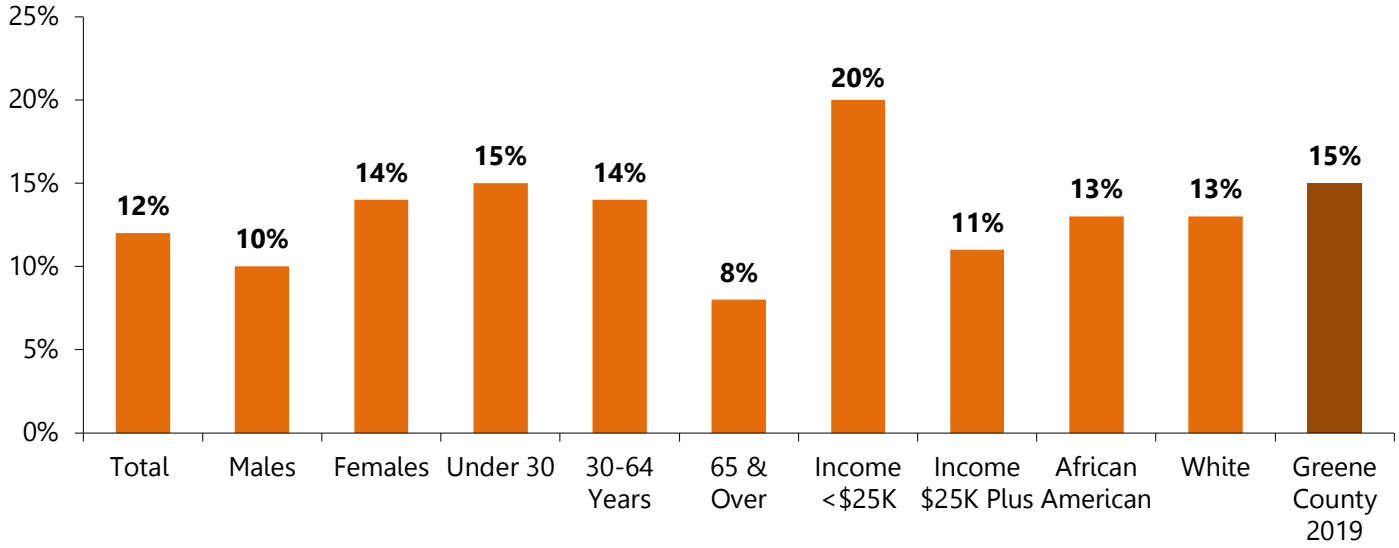
6,682 Greene County adults reported attempting suicide in the past year.

Mental Health

- In the past year, 12% of Greene County adults had a period of two or more weeks when they felt so sad or hopeless nearly every day that they stopped doing usual activities.

The following graph shows the percentage of Greene County adults who felt sad or hopeless for two or more weeks in a row in the past year. An example of how to interpret the information includes: 12% of all adults felt sad or hopeless for two or more weeks in a row, including 20% of adults with incomes less than $25,000 and 8% of adults ages 65 and over.

Greene County Adults Feeling Sad or Hopeless for Two or More Weeks in a Row



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey

- Four percent (4%) of Greene County adults seriously considered attempting suicide in the past year.
- No (0%) adults reported attempting suicide in the past year.
- One-fifth (20%) of Greene County adults reported they or a family member had been diagnosed with, or treated for, a mental health issue in the past year.
- Adults reported they or a family member were diagnosed with, or treated for, the following mental health issues:
  - Depression (28%)
  - Anxiety disorder (27%)
  - Attention deficit disorder (ADD/ADHD) (13%)
  - Emotional problems (9%)
  - Autism spectrum (7%)
  - Seasonal affective disorder (7%)
  - Developmental disability (6%)
  - Post-traumatic stress disorder (PTSD) (6%)
  - Bipolar disorder (5%)
  - Alcohol and/or illicit drug abuse (3%)
  - Other trauma (3%)
  - Eating disorder (2%)
  - Gaming addiction (2%)
  - Life-adjustment disorder/issue (2%)
  - Psychotic disorder (2%)
  - Gambling problem (1%)
  - Some other mental health disorder (3%)
- Over one-quarter (29%) of adults indicated that they or a family member had taken medication for one or more mental health issues.

Mental Health, *continued*

- Greene County adults indicated the following caused them anxiety, stress, or depression:
  - Job stress (36%)
  - Financial stress (32%)
  - Current news/political environment (29%)
  - Raising/caring for children (20%)
  - Marital/dating relationship (17%)
  - Death of close family member or friend (16%)
  - Loneliness (16%)
  - Poverty/no money (16%)
  - Sick family member (16%)
  - Fighting at home (10%)
  - Other stress at home (10%)
  - Family member with mental illness (9%)
  - Social media (9%)
  - Caring for a parent (8%)
  - Unemployment (6%)
  - Natural disasters (5%)
  - Not having enough to eat (4%)
  - Traumatic community events (4%)
  - Divorce/separation (3%)
  - Not feeling safe at home (2%)
  - Not feeling safe in the community (2%)
  - Not having a place to live (2%)
  - Sexual orientation (1%)
  - Gender identity (<1%)
  - Other causes (11%)

- Adults in Greene County dealt with stress in the following ways:
  - Talked to someone they trust (46%)
  - Engaged in prayer/meditation (39%)
  - Exercised (38%)
  - Worked on a hobby (34%)
  - Ate more or less than normal (33%)
  - Listened to music (32%)
  - Slept (30%)
  - Worked (19%)
  - Drank alcohol (14%)
  - Smoked tobacco (6%)
  - Used prescription drugs as prescribed (6%)
  - Took it out on others (5%)
  - Called a professional (2%)
  - Self-harm (1%)
  - Used illegal drugs (1%)
  - Misuse prescription drugs (<1%)
  - Other ways (9%)

- Greene County adults received the social and emotional support they needed from the following:
  - Family (68%)
  - Friends (58%)
  - God/prayer (37%)
  - Church (23%)
  - Neighbors (9%)
  - A professional (6%)
  - Community (4%)
  - Internet/social media (4%)
  - Self-help group (1%)
  - Online support group (<1%)
  - Text crisis line (<1%)
  - Other (3%)

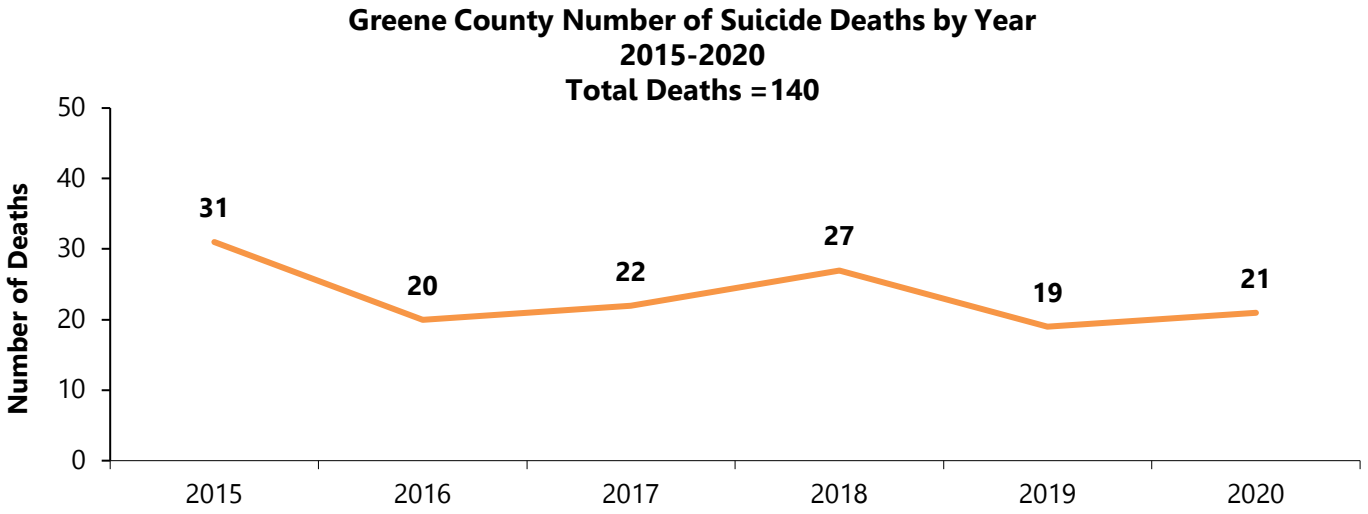
- Sixteen percent (16%) of adults stated they do not need support and can handle it themselves, while 9% of adults indicated they do not get the social and emotional support they need.

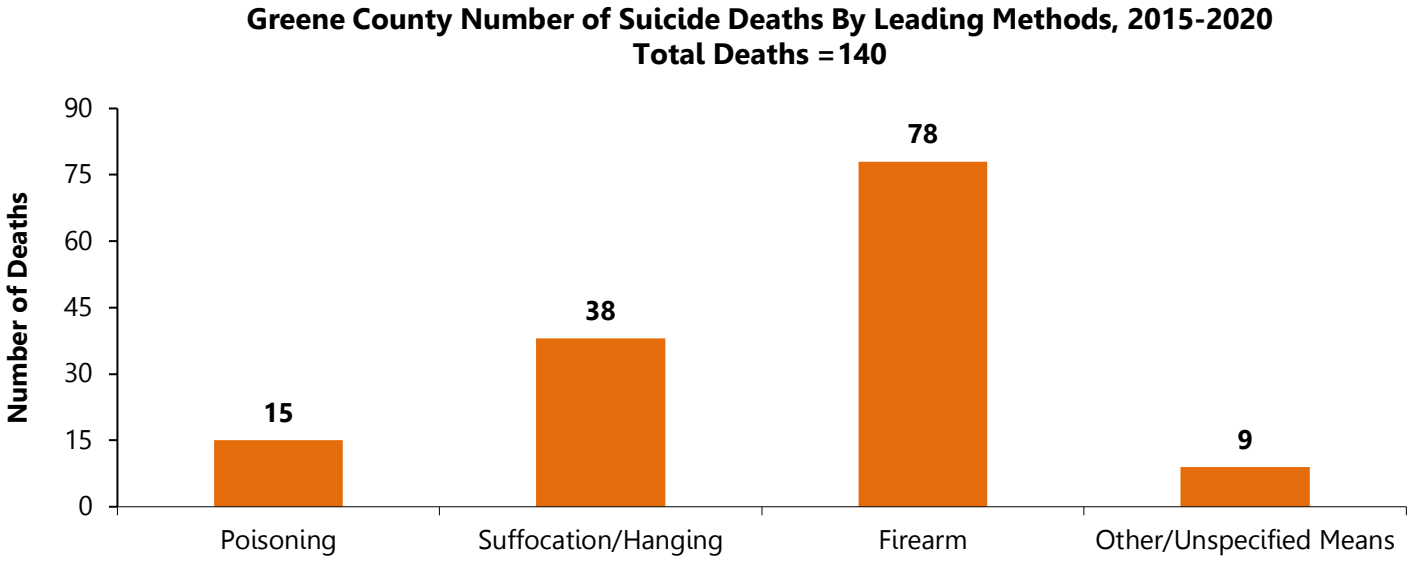
- Twelve percent (12%) of Greene County adults used a program or service for help with depression, anxiety, or other emotional problem for themselves or a loved one. Reasons for not using a program or service to help with depression, anxiety, or emotional problems included the following:
  - Could not afford to go (7%)
  - Co-pay/deductible too high (6%)
  - Had not thought of it (6%)
  - Could not find a mental health doctor or provider (4%)
  - Fear (3%)
  - Other priorities (3%)
  - Too long of a wait to see a doctor/health care provider (3%)
  - Cannot find a provider who accepts their insurance (2%)
  - Did not know how to find a program (2%)
  - Embarrassed to seek mental health services (2%)
  - Stigma of seeking mental health services (2%)
  - They cannot find a provider to address both mental health and disability (2%)
  - Transportation (2%)
  - Cannot get into the office or clinic (1%)
  - Other reasons (6%)

- Over half (53%) of adults indicated they did not need a program or service for help with depression, anxiety, or other emotional problems for themselves or a loved one.

Suicide

The graphs below show the number of suicide deaths by year and method in Greene County.

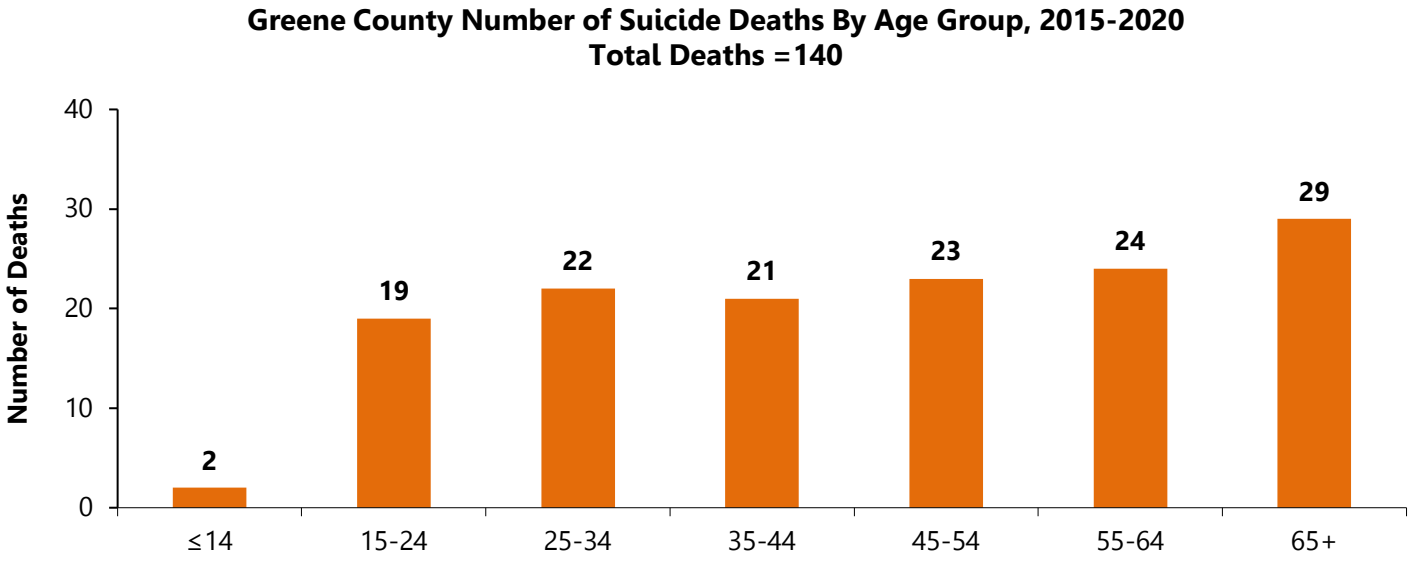


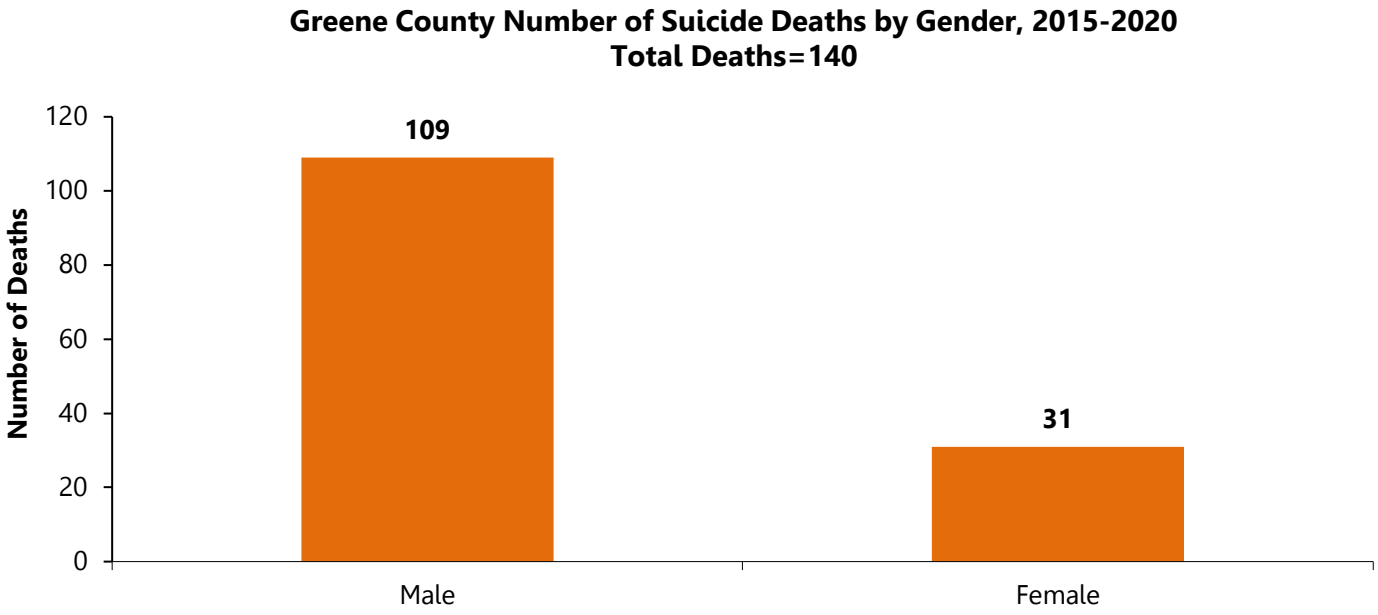


(Source for graphs: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 5/25/2023)

Suicide, *continued*

The graphs below show the number of suicide deaths by age group and gender from 2015 to 2020 in Greene County.





(Source for graphs: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 11/21/2022)

CHRONIC DISEASE

Cardiovascular Health
Cancer
Asthma and Other Respiratory Diseases
Arthritis
Diabetes
Quality of Life

Note for population: "adults" are defined throughout the report as those ages 19 and older living in Greene County

Chronic Disease: Cardiovascular Health

71,828 Green County adults had ever been diagnosed with high blood cholesterol.

High Blood Pressure (Hypertension)

- One-third (33%) of adults had ever been diagnosed with high blood pressure.
- Twelve percent (12%) of adults were told they were pre-hypertensive/borderline high.
- Eighty-nine percent (89%) of adults had their blood pressure checked within the past year.
- Greene County adults diagnosed with high blood pressure were more likely to have:
  - Been ages 65 years or older (61%)
  - Made less than $25,000 (55%)
  - Been classified as obese (including severely and morbidly obese) by body mass index (47%)
  - Rated their overall health as fair or poor (44%)

High Blood Cholesterol

- Forty-three percent (43%) of adults had ever been diagnosed with high blood cholesterol.
- Over four-fifths (84%) of adults had their blood cholesterol checked within the past 5 years.
- Greene County adults with high blood cholesterol were more likely to have:
  - Been ages 65 years or older (71%)
  - Made less than $25,000 (55%)
  - Been classified as obese (including severely and morbidly obese) by body mass index (51%)
  - Have rated their overall health as fair or poor (48%)

Heart Disease and Stroke

- Four percent (4%) of Greene County adults reported they had survived a heart attack or myocardial infarction in their lifetime, increasing to 12% of adults over the age of 65.
- Two percent (2%) of Greene County adults reported they had survived a stroke in their lifetime, increasing to 9% of adults with incomes less than $25,000.
- Two percent (2%) of adults reported they had ever been told they have angina or coronary heart disease by a health care provider, increasing to 8% of adults over the age of 65.
- Two percent (2%) of adults reported they had ever been told they have congestive heart failure by a health care provider, increasing to 7% of adults with incomes less than $25,000 and adults over the age of 65.

Greene County
Leading Causes of Death, 2018-2020

Total Deaths: 5,100

1. Heart Disease (22% of all deaths)
2. Cancer (19%)
3. Stroke (7%)
4. Accidents, Unintentional Injury (6%)
5. Chronic Lower Respiratory Diseases (4%)

(Source: Ohio Public Health Data Warehouse, 2018-2020)

Greene County African American* Leading Causes of Death 2018-2020

Total Deaths: 282

1. Heart Disease (20% of all deaths)
2. Cancer (18%)
3. Stroke (8%)
4. Diabetes (4%)
5. Accidents, Unintentional Injury (4%)

**ODH labels African American as Black.*
(Source: Ohio Public Health Data Warehouse, 2018-2020)

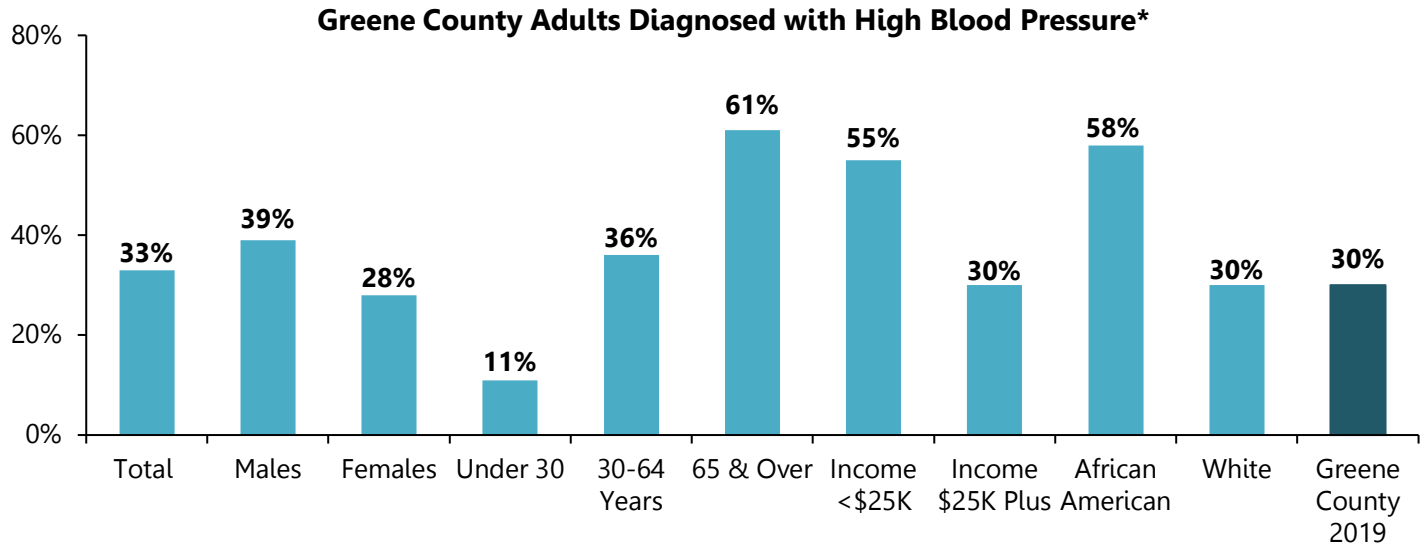
Ohio
Leading Causes of Death, 2018-2020

Total Deaths: 391,659

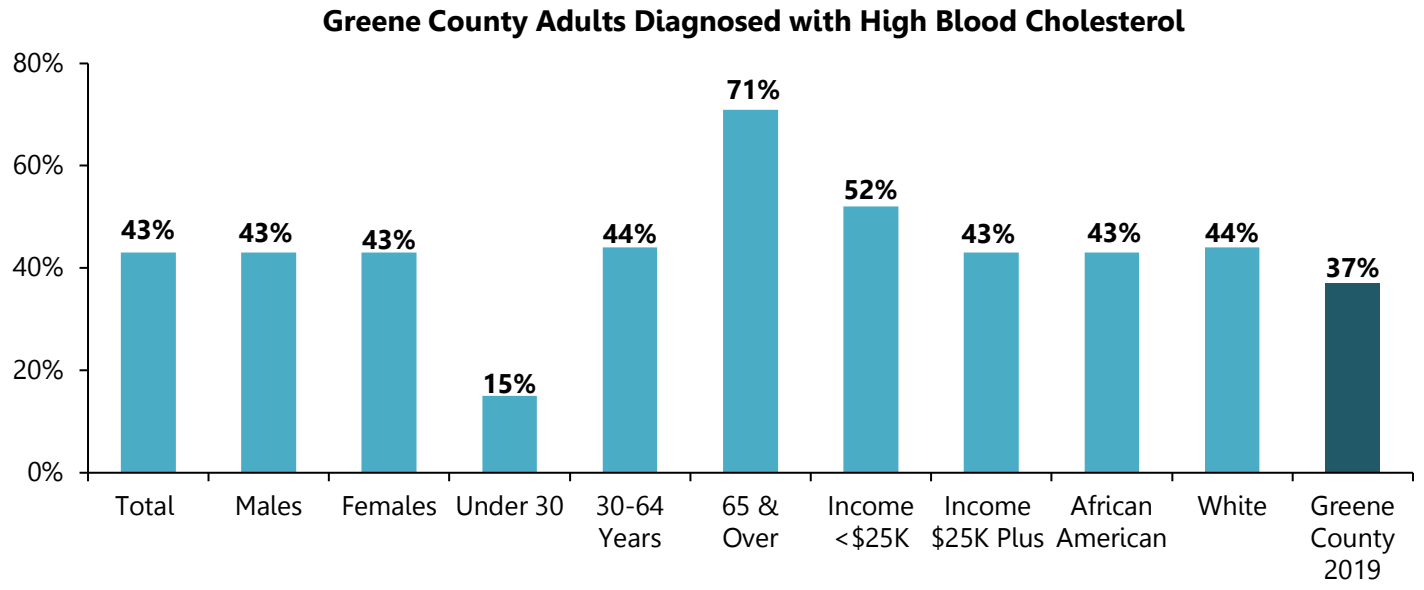
1. Heart Diseases (23% of all deaths)
2. Cancer (19%)
3. Accidents, Unintentional Injuries (7%)
4. Chronic Lower Respiratory Diseases (6%)
5. Stroke (5%)

(Source: Ohio Public Health Data Warehouse, 2018-2020)

The following graphs show the percentage of Greene County adults who had been diagnosed with high blood pressure and high blood cholesterol. An example of how to interpret the information on the first graph includes: 33% of all Greene County adults had been diagnosed with high blood pressure, including 39% of all males and 61% of those 65 years and older.

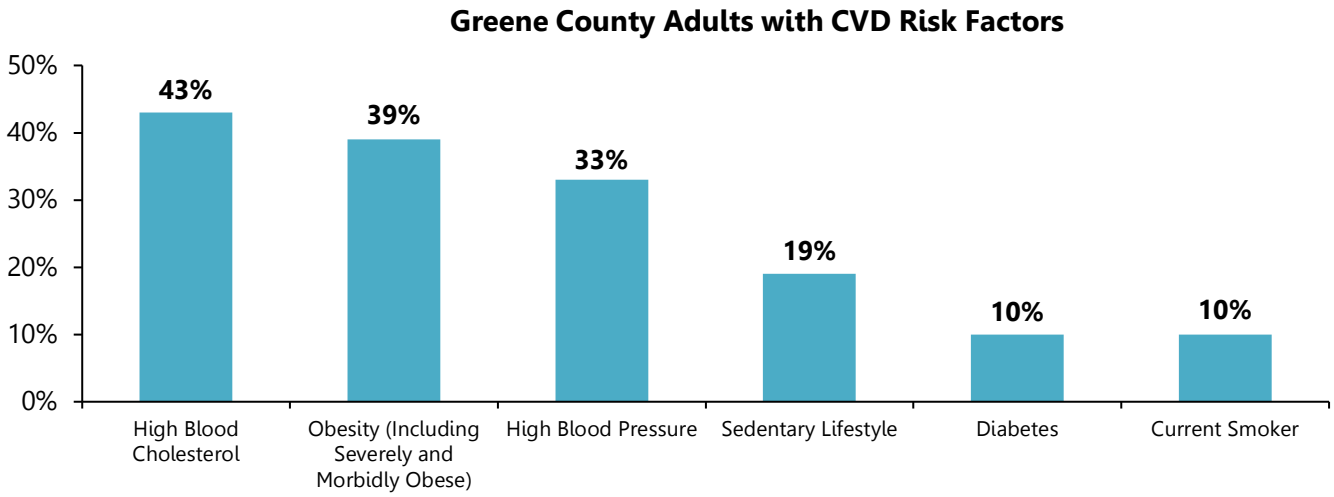


**Does not include respondents who indicated high blood pressure during pregnancy only.*



Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following graph demonstrates the percentage of Greene County adults who had major risk factors for developing cardiovascular disease (CVD).

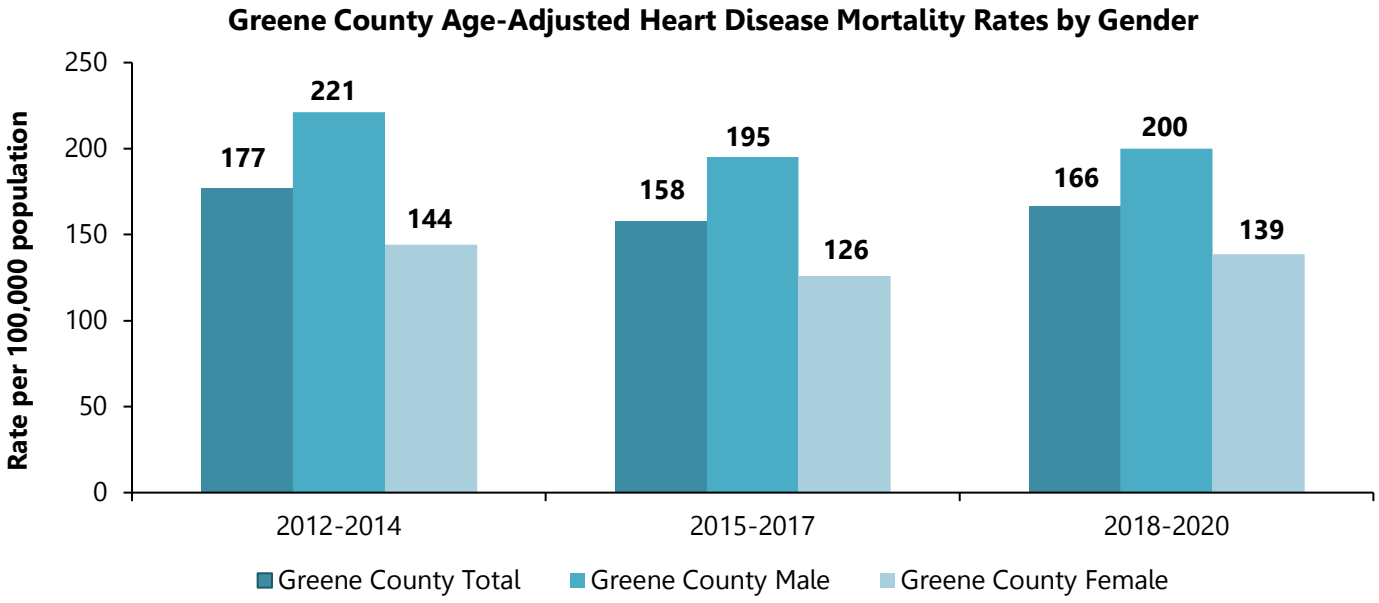


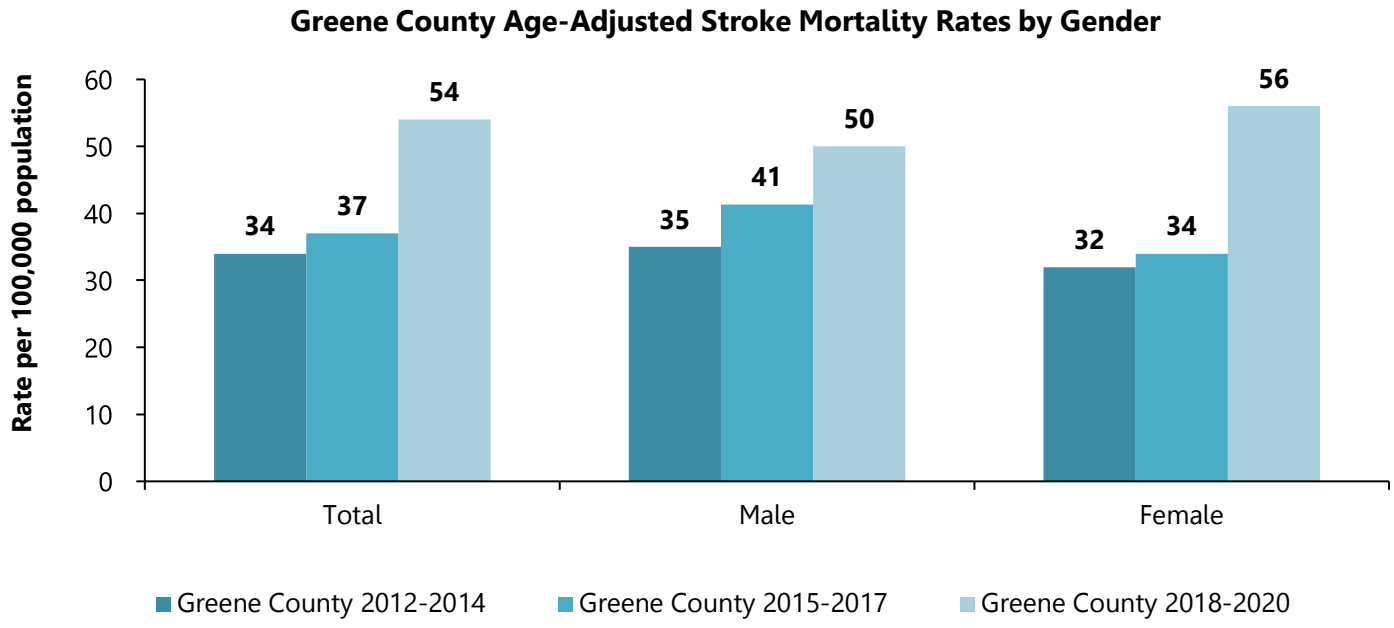
(Source: 2023 Greene County Health Assessment)

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Had angina or coronary heart disease	2%	2%	5%	4%
Had a heart attack or myocardial infarction	4%	4%	5%	4%
Had a stroke	2%	2%	4%	3%
Had high blood pressure	30%	33%	36%	32%
Had high blood cholesterol	37%	43%	37%	36%
Had blood cholesterol checked within past 5 years	84%	84%	85%	85%

The following graphs show the age-adjusted mortality rates per 100,000 population for heart disease and stroke by gender.

- From 2012 to 2020, the Greene County heart disease mortality rate was higher for males than for females.



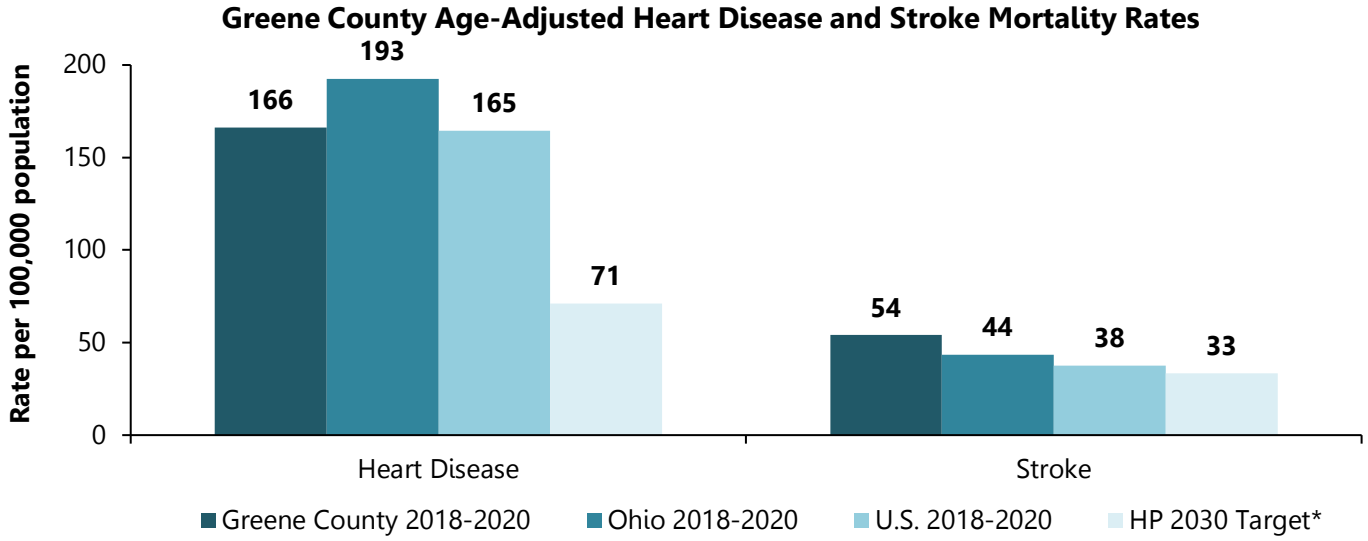


(Source for graphs: Ohio Public Health Data Warehouse, 2012-2020)

The following graph shows the Greene County, Ohio, and U.S. age-adjusted mortality rates per 100,000 population for heart disease and stroke in comparison to the Healthy People 2030 target objective.

- When age differences are accounted for, the statistics indicate that from 2018 to 2020, the Greene County heart disease mortality rate was lower than Ohio's heart disease mortality rate, but greater than the U.S rate and Healthy People 2030 target.

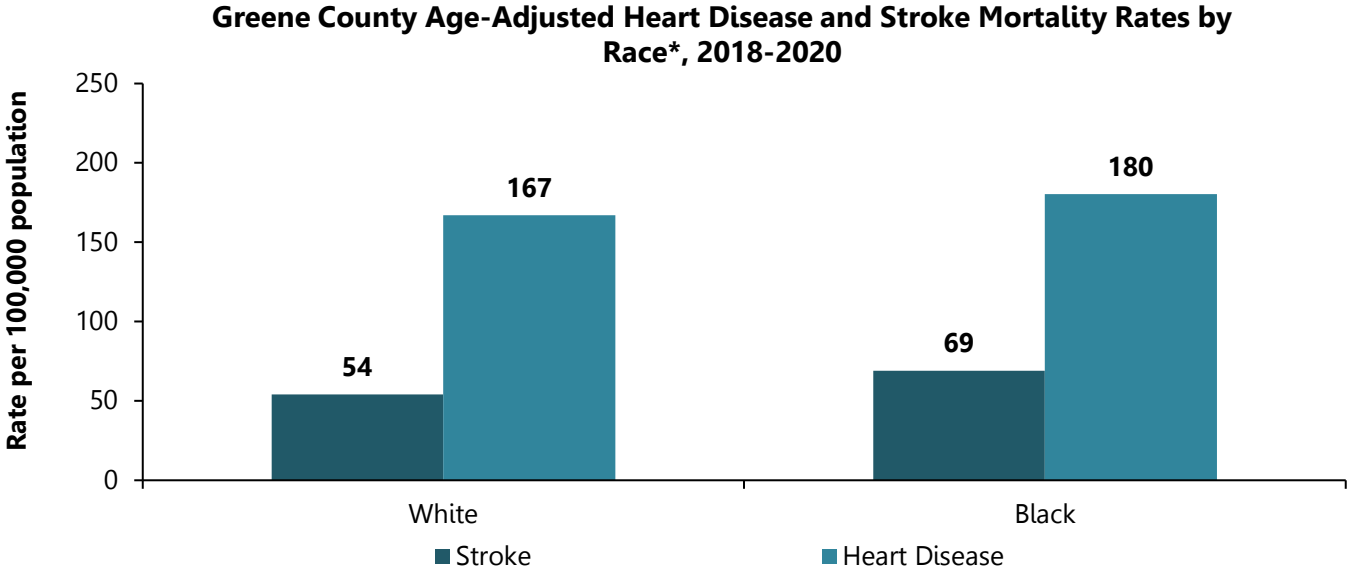
- The Greene County age-adjusted stroke mortality rate from 2018 to 2020 was higher than the state rate, the U.S. rate, and the Healthy People 2030 target objective.



**The Healthy People 2030 target is to reduce coronary heart disease deaths.*
(Source: Ohio Public Health Data Warehouse, 2018-2020, CDC Wonder 2018-2020, Healthy People 2030)

The following graph shows the age-adjusted mortality rates per 100,000 population for heart disease and stroke by race. The graph shows:

- From 2018-2020, the age-adjusted stroke and heart disease mortality rates were higher among the Black population compared to the white population.



**Races represented are white and black. All other races were not available due to low rates.*
(Source: Ohio Public Health Data Warehouse 2018-2020)

Chronic Disease: Cancer

25,056 Greene County adults had been diagnosed with cancer at some point in their lives.

Cancer

- Fifteen percent (15%) of Greene County adults were diagnosed with cancer at some point in their lives, increasing to 36% of adults over the age of 65.
- Among adults diagnosed with cancer, the following types were reported: breast (among females) (31%), prostate (among males) (29%), other skin cancer (26%), melanoma (9%), cervical (among females) (9%), endometrial (6%), testicular (6%), colon/intestine (5%), bladder (5%), rectal (5%), renal (5%), bone (3%), brain (3%), esophageal (3%), Leukemia (3%), ovarian (among females) (3%), stomach (3%), thyroid (3%), head and neck (2%), heart (2%), Hodgkin's lymphoma (2%), larynx (2%), liver (2%), lung (2%), Neuroblastoma (2%), Non-Hodgkin's lymphoma (2%), oral (2%), pancreatic (2%), pharyngeal (2%), and other types of cancer (12%).

Greene County
Incidence of Cancer, 2016-2020

All Types: 4,728

1. Breast: 776 cases (16%)
2. Lung and Bronchus: 600 cases (13%)
3. Prostate: 580 cases (12%)
4. Colon and Rectum: 349 cases (7%)

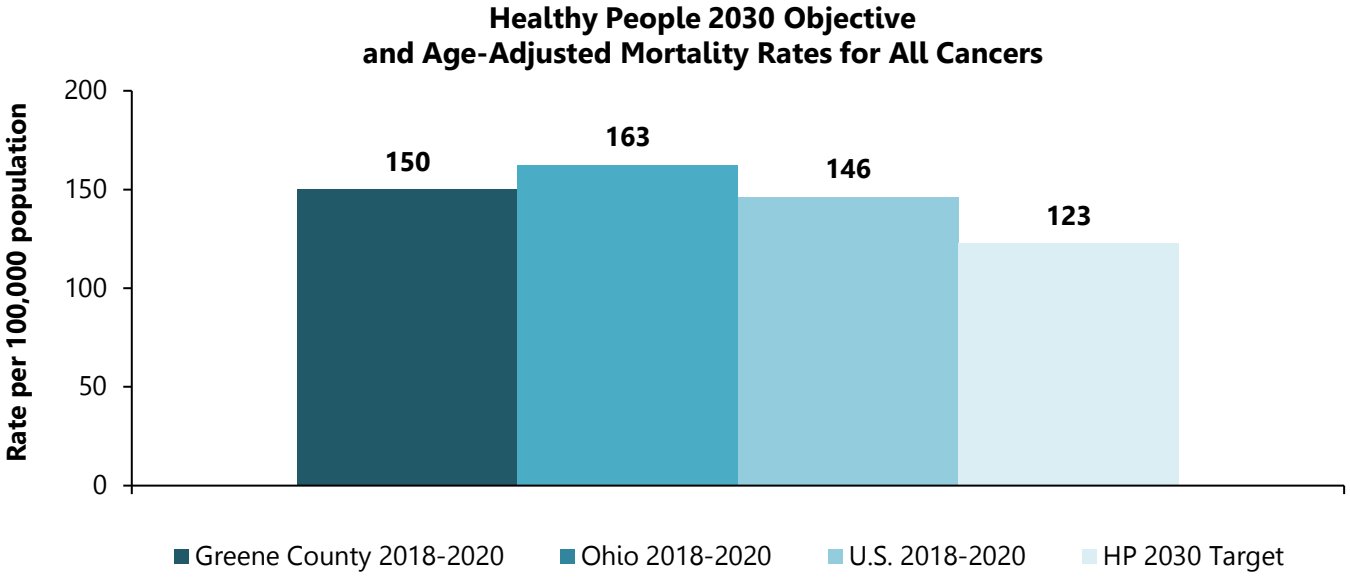
In 2016-2020, there were 1,602 cancer deaths in Greene County.

(Source: Ohio Cancer Incidence, ODH Ohio Public Health Data Warehouse, Updated 6/08/2023)

Cancer Facts

- The Ohio Public Health Data Warehouse indicates that from 2018-2020, cancers caused 19% (983 of 5,100 total deaths) of all Greene County resident deaths *(Source: Ohio Public Health Data Warehouse, 2018-2020).*
- The American Cancer Society states that about 609,360 Americans are expected to die of cancer in 2022. Cancer is the second leading cause of death in the U.S., exceeded only by heart disease *(Source: American Cancer Society, Facts & Figures 2022).*

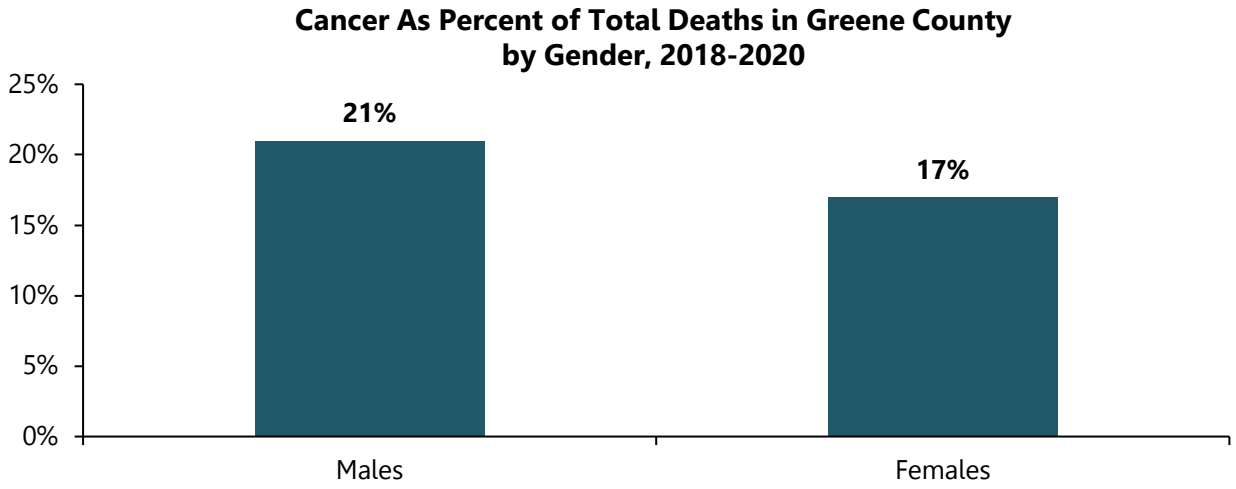
The following graph shows the Greene County, Ohio, and U.S. age-adjusted mortality rates (per 100,000 population) for all types of cancer in comparison to the Healthy People 2030 objective.



(Source: Ohio Public Health Data Warehouse, CDC Wonder, Healthy People 2030)

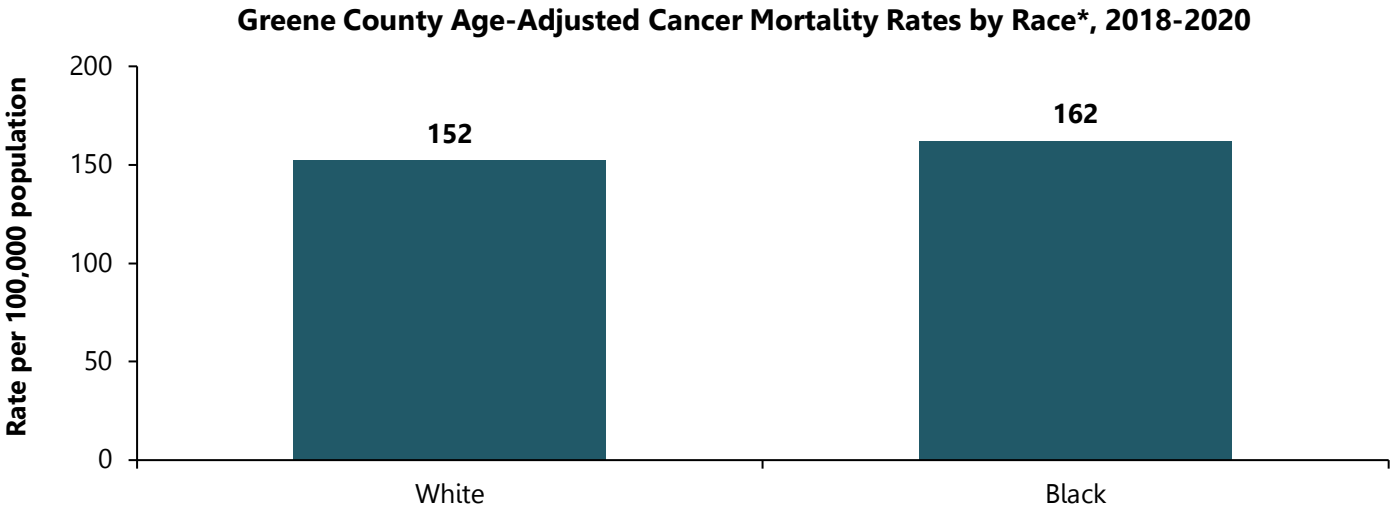
Cancer Facts, *continued*

The following graph shows cancer as a percent of total deaths in Greene County.



(Source: Ohio Public Health Data Warehouse, 2018-2020)

The following graph shows the Greene County age-adjusted mortality rates (per 100,000) for all types of cancer by race from 2018-2020.

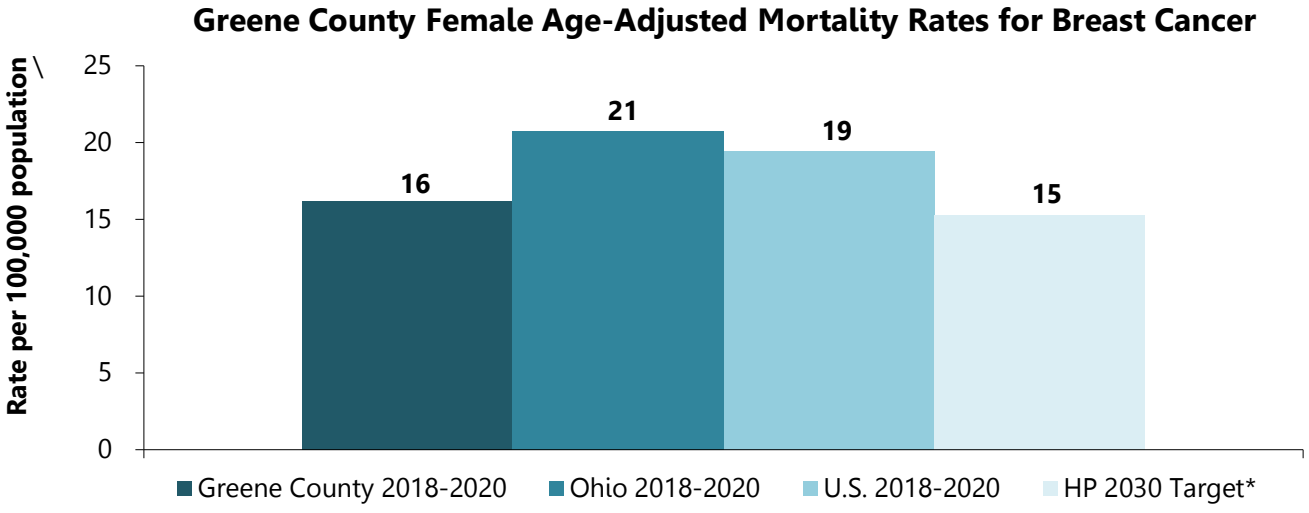


**Races represented are white and black. All other races were not available due to low rates.*
(Source for graphs: Ohio Public Health Data Warehouse, Mortality, Cancer Deaths of Ohio Residents, updated 5/18/2022)

Breast Cancer

- Ninety-five percent (95%) of women had a clinical breast exam at some time in their life, and 49% had one within the past year.
- Nearly two-thirds (64%) of women ages 40 and over had a mammogram in the past year, and 73% had one in the past two years.
- For women at average risk of breast cancer, recently updated American Cancer Society screening guidelines recommend that those 40 to 44 years of age have the option to begin annual mammography, those 45 to 54 should undergo annual mammography, and those 55 years of age and older may transition to biennial mammography or continue annual mammography. Women should continue mammography as long as overall health is good and life expectancy is 10 or more years. For some women at high risk of breast cancer, annual magnetic resonance imaging (MRI) is recommended in addition to mammography, often starting at a younger age than the general population. *(Source: American Cancer Society, Facts & Figures 2022).*

The following graph shows the Greene County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for breast cancer in comparison with the Healthy People 2030 objective.

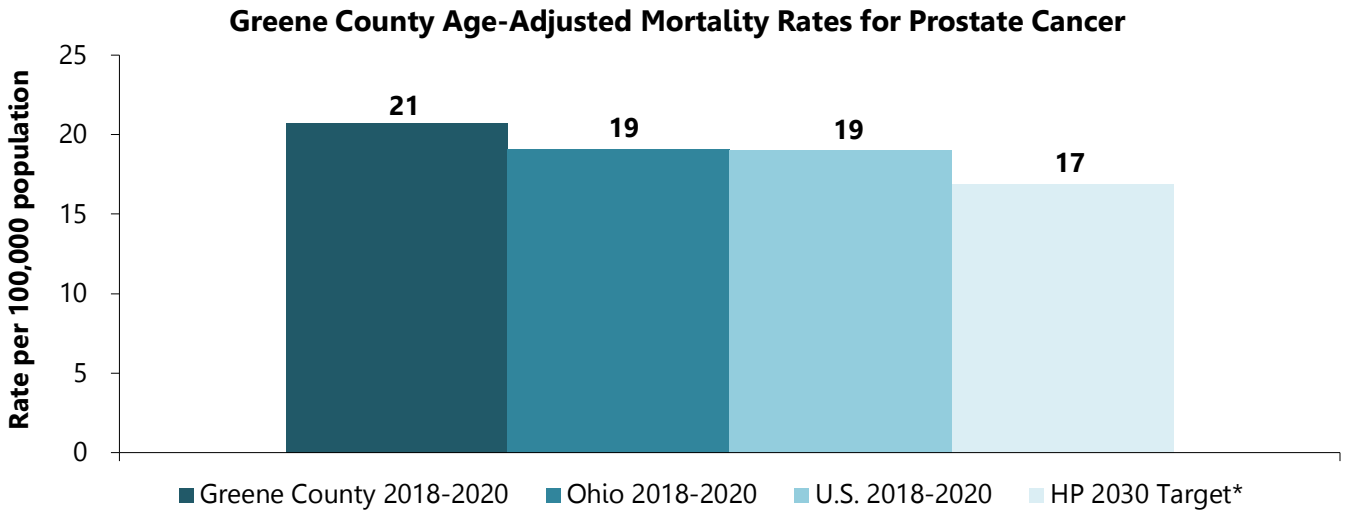


(Sources: Ohio Public Health Data Warehouse 2018-2020, CDC Wonder 2018-2020, Healthy People 2030)

Prostate Cancer

- Seven percent (7%) of men had a digital rectal exam in the past year.
- Approximately two-thirds (66%) of males age 50 and over had a PSA test at some time in their life, and 43% had one in the past year.
- ODH statistics indicate that prostate cancer deaths accounted for 11% of all male cancer deaths from 2018-2020 in Greene County *(Source: Ohio Public Health Data Warehouse, 2018-2020).*
- No organizations presently endorse routine prostate cancer screening for men at average risk because of concerns about the high rate of overdiagnosis (detecting disease that would never have caused symptoms), along with the significant potential for serious side effects associated with prostate cancer treatment. The American Cancer Society recommends that beginning at age 50, men who are at average risk of prostate cancer and have a life expectancy of at least 10 years have a conversation with their health care provider about the benefits and limitations of PSA testing and make an informed decision about whether to be tested based on their personal values and preferences. Men at high risk of developing prostate cancer (black men or those with a close relative diagnosed with prostate cancer before the age of 65) should have this discussion beginning at age 45, and men at even higher risk (those with several close relatives diagnosed at an early age) should have this discussion beginning at age 40. *(Source: American Cancer Society, Facts & Figures 2022).*

The following graph shows the Greene County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for prostate cancer in comparison with the Healthy People 2030 objective.

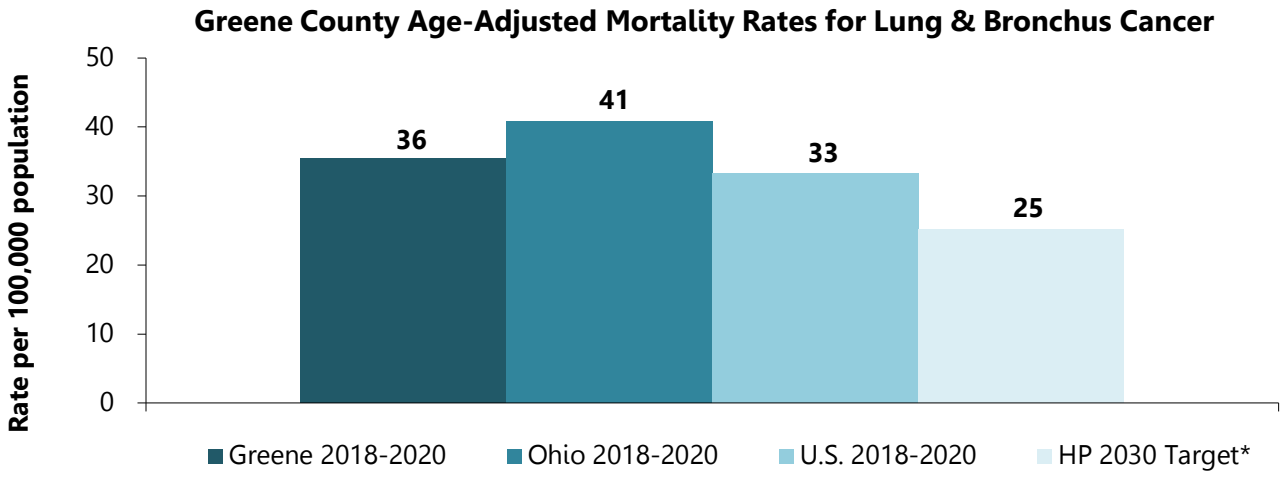


(Sources: Ohio Public Health Data Warehouse 2018-2020, CDC Wonder 2018-2020, Healthy People 2030)

Lung Cancer

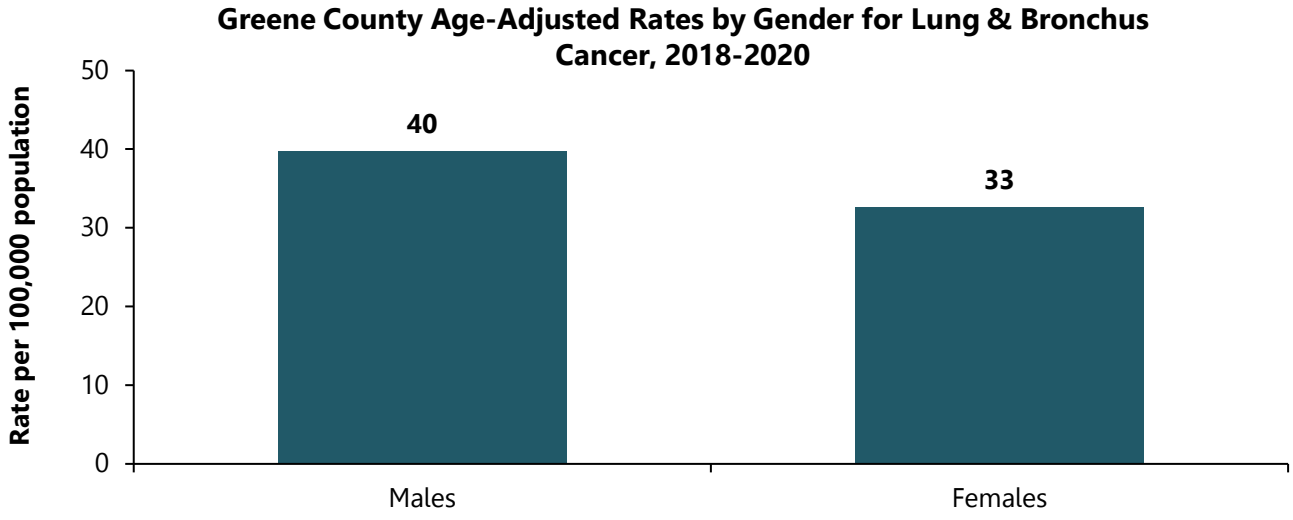
- In Greene County, 10% of male adults and 11% of female adults were current smokers.
- According to the American Cancer Society, smoking causes 80% of lung cancer deaths in the U.S.. Men and women who smoke are about 25 times more likely to develop lung cancer than nonsmokers. *(Source: American Cancer Society, Facts & Figures 2022).*

The following graph shows the Greene County, Ohio, and U.S. age-adjusted mortality rates (per 100,000 population) for lung and bronchus cancer in comparison with the Healthy People 2030 objective.



**Healthy People 2030 Target data is for lung cancer only*
(Sources: Ohio Public Health Data Warehouse 2018-2020, CDC Wonder 2018-2020, Healthy People 2030)

The following graph shows the Greene County age-adjusted mortality rates (per 100,000 population) for lung and bronchus cancer by gender between 2018-2020.



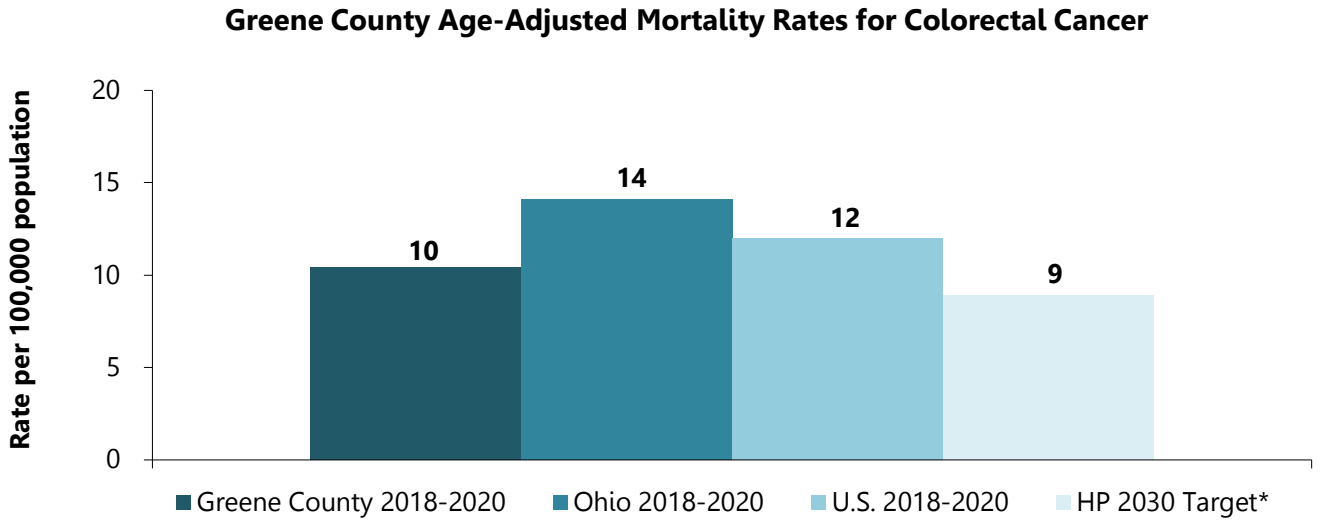
(Source: Ohio Public Health Data Warehouse 2018-2020)

Colorectal Cancers

- ODH indicates that colon and rectal cancer deaths accounted for 7% of all cancer deaths from 2018-2020 in Greene County *(Source: Ohio Public Health Data Warehouse, 2018-2020).*

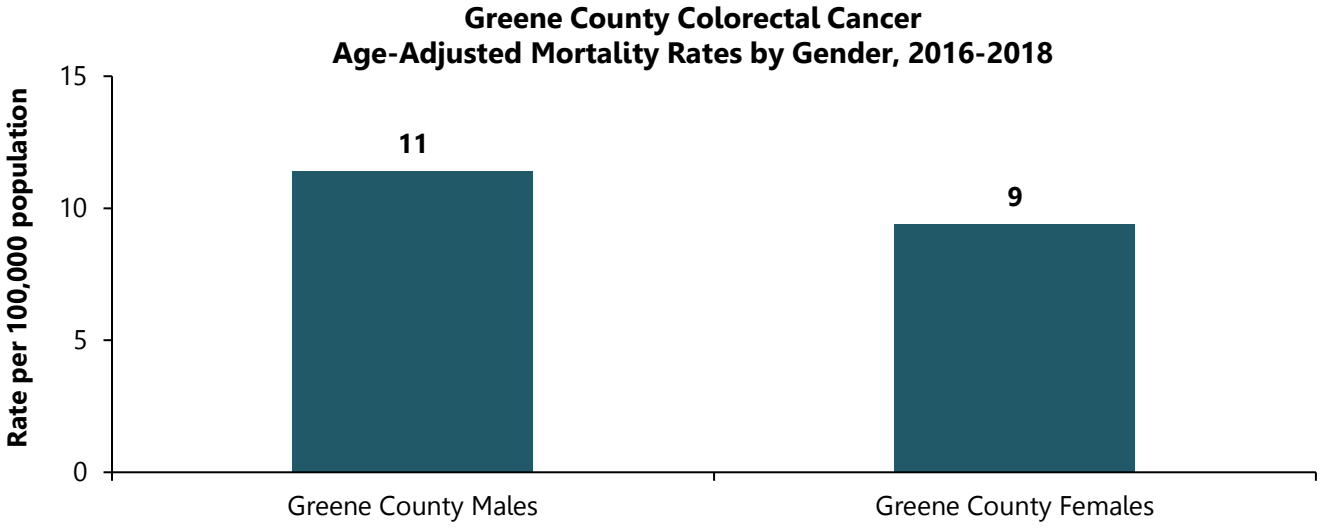
- Modifiable factors that increase colon and rectum cancer risk include obesity, physical inactivity, long-term smoking, high consumption of red or processed meat, low calcium intake, moderate to heavy alcohol consumption, and very low intake of fruits and vegetables and whole-grain fiber. Hereditary and medical factors that increase risk include a personal or family history of colorectal cancer and/or polyps, certain inherited genetic conditions, a personal history of chronic inflammatory bowel disease, and type 2 diabetes. *(Source: American Cancer Society, Facts & Figures 2022).*

The following graph shows Greene County, Ohio, and U.S. age-adjusted mortality rates (per 100,000 populations) for colorectal cancer in comparison with the Healthy People 2030 objective.



(Source: Ohio Public Health Data Warehouse 2018-2020, CDC Wonder 2018-2020, Healthy People 2030)

The following graph shows Greene County age-adjusted mortality rates (per 100,000 population) for colorectal cancer by gender.



(Source: Ohio Public Health Data Warehouse 2018-2020)

Cancer Incidence

Greene County Incidence of Cancer, 2016-2020

Types of Cancer	Number of Cases	Percent of Total Incidence of Cancer	Age-Adjusted Rate
Breast	776	16.4%	75.5
Lung and Bronchus	600	12.7%	54.3
Prostate	580	12.3%	107.1
Other Sites/Types	392	8.3%	37.4
Colon & Rectum	349	7.4%	34.3
Melanoma of Skin	284	6.0%	27.9
Bladder	228	4.8%	20.8
Non-Hodgkins Lymphoma	199	4.2%	18.8
Uterus	187	4.0%	32.3
Thyroid	155	3.3%	18.3
Kidney & Renal Pelvis	151	3.2%	14.1
Leukemia	135	2.9%	14.1
Pancreas	134	2.8%	12.8
Oral Cavity & Pharynx	102	2.2%	9.9
Liver & Intrahepatic Bile Duct	76	1.6%	6.8
Brain and Other CNS	75	1.6%	7.7
Multiple Myeloma	57	1.2%	5.4
Ovary	55	1.2%	10.1
Esophagus	49	1.0%	4.4
Stomach	48	1.0%	4.6
Larynx	31	0.7%	3.0
Cervix	27	0.6%	6.1
Hodgkins Lymphoma	23	0.5%	2.6
Testis	15	0.3%	3.7
Total	**4,728**	**100%**	**449.9**

(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 6/08/2023)

Cancer Incidence, *continued*

Greene County African American Incidence of Cancer, 2016-2020

Types of Cancer	Number of Cases	Percent of Total Incidence of Cancer	Age-Adjusted Rate
Prostate	49	23.2%	192.6
Breast	29	13.7%	55.3
Other Sites/Types	22	10.4%	41.6
Lung and Bronchus	19	9.0%	34.5
Colon & Rectum	17	8.1%	35.0
Bladder	10	4.7%	20.6
Kidney & Renal Pelvis	10	4.7%	19.8
Uterus	9	4.3%	32.2
Leukemia	8	3.8%	16.8
Multiple Myeloma	7	3.3%	14.9
Non-Hodgkin's Lymphoma	5	2.4%	9.7
Thyroid	5	2.4%	7.4
Oral Cavity & Pharynx	4	1.9%	N/A
Pancreas	3	1.4%	N/A
Ovary	3	1.4%	N/A
Esophagus	3	1.4%	N/A
Stomach	2	0.9%	N/A
Cervix	2	0.9%	N/A
Brain & Other CNS	1	0.5%	N/A
Hodgkin's Lymphoma	1	0.5%	N/A
Larynx	1	0.5%	N/A
Liver & Intrahepatic Bile Duct	1	0.5%	N/A
Melanoma of Skin	0	0%	N/A
Testis	0	0%	N/A
Total	**211**	**100%**	**400.1**

(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 6/08/2023)

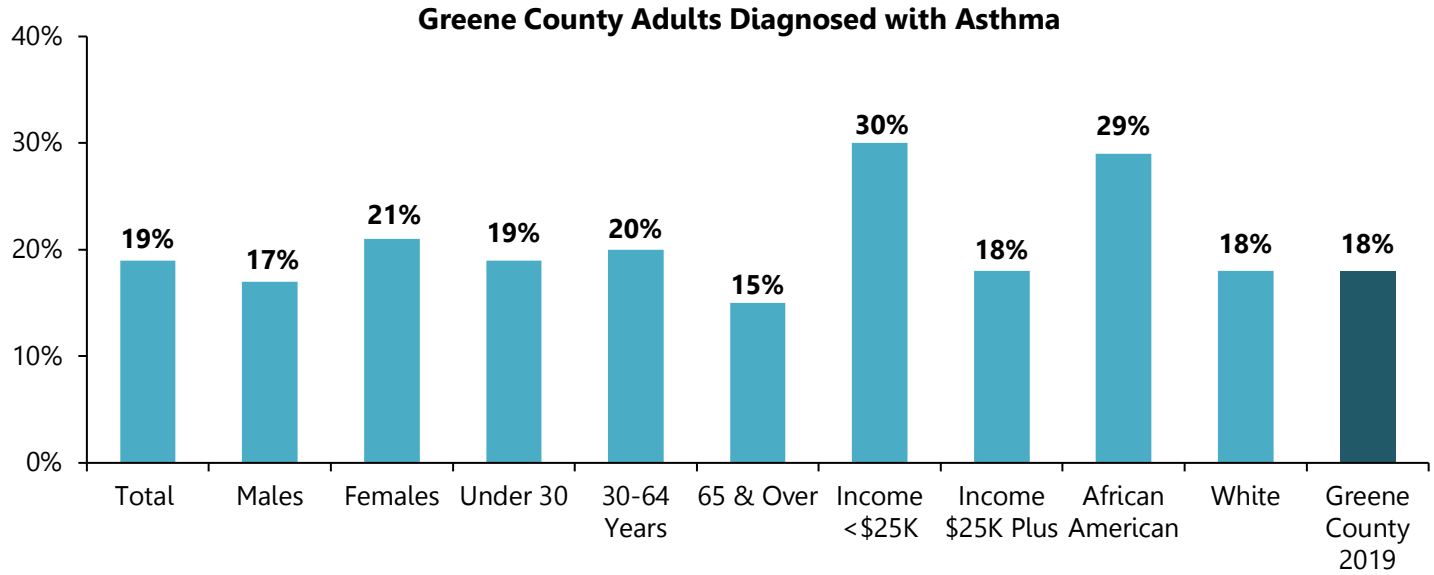
Chronic Disease: Asthma and Other Respiratory Diseases

31,738 Greene County adults had ever been diagnosed with asthma.

Asthma

- Nearly one-fifth (19%) of Greene County adults had been diagnosed with asthma, increasing to 29% of African Americans and 30% of adults with incomes less than $25,000.

The following graph shows the percentage of Greene County adults who had ever been diagnosed with asthma. An example of how to interpret the information includes: 19% of adults were diagnosed with asthma, including 15% of adults ages 65 and older and 30% of adults with incomes below $25,000.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

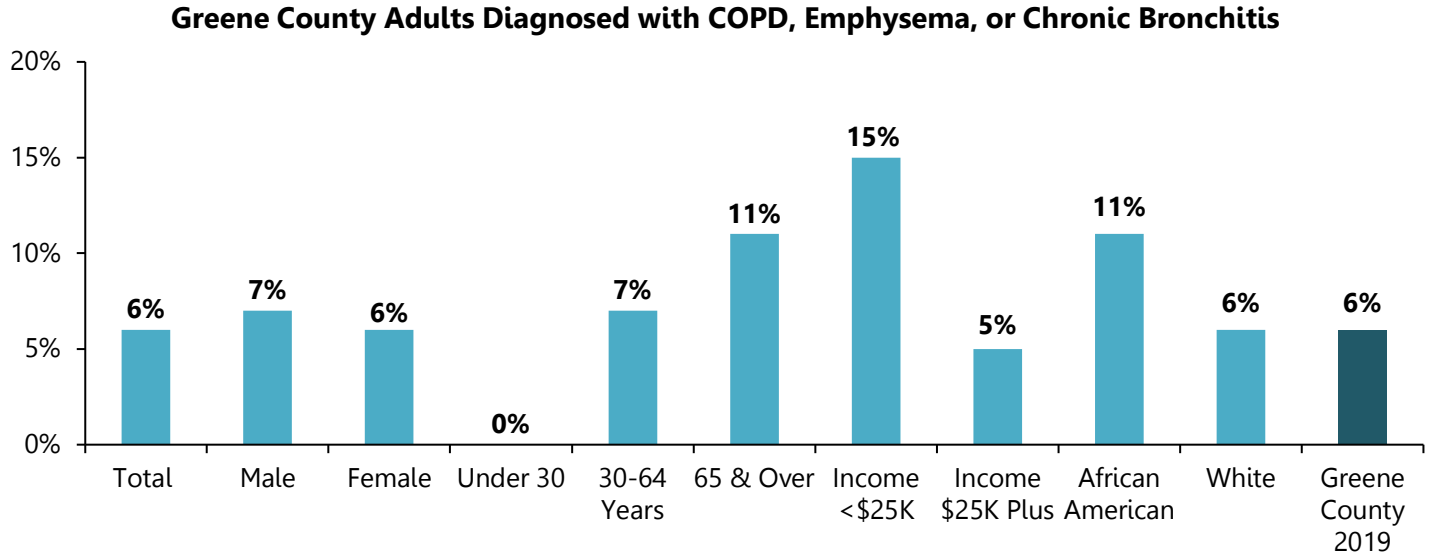
Other Respiratory Diseases

- Six percent (6%) of adults had been diagnosed with COPD, emphysema, or chronic bronchitis, increasing to 15% of adults with incomes less than $25,000.

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Ever been told they have asthma	18%	19%	15%	15%
Ever diagnosed with chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis	6%	6%	9%	6%

Other Respiratory Diseases, *continued*

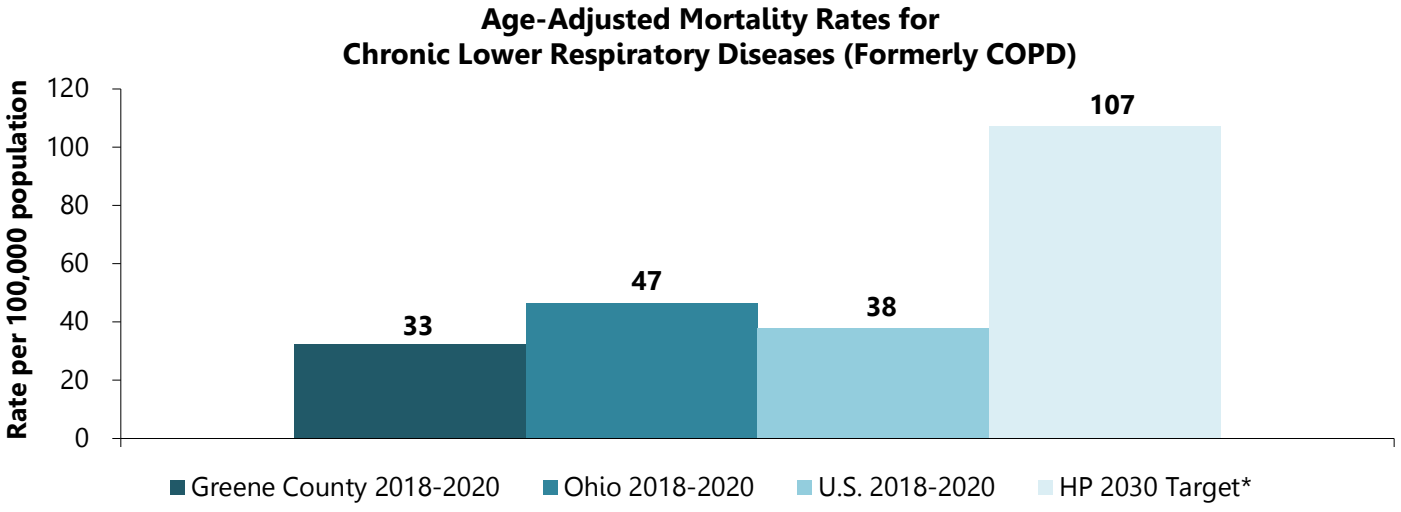
The following graph shows the percentage of Greene County adults who had ever been diagnosed with COPD, emphysema, or chronic bronchitis. An example of how to interpret the information includes: 6% of adults were diagnosed with COPD, emphysema, or chronic bronchitis, including 11% of adults ages 65 and older and 15% of adults with incomes less than $25,000.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following graph shows the Greene County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for chronic lower respiratory diseases (formerly COPD) in comparison with the Healthy People 2030 objective. The graph shows:

- From 2018 to 2020, Greene County's age-adjusted mortality rate for chronic lower respiratory disease was lower than the Ohio rate, U.S. rate, and the Healthy People 2030 target objective rate.



(Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2018-2020, CDC Wonder 2018-2020)
**Healthy People 2030's target rate is for adults aged 45 years and older.*

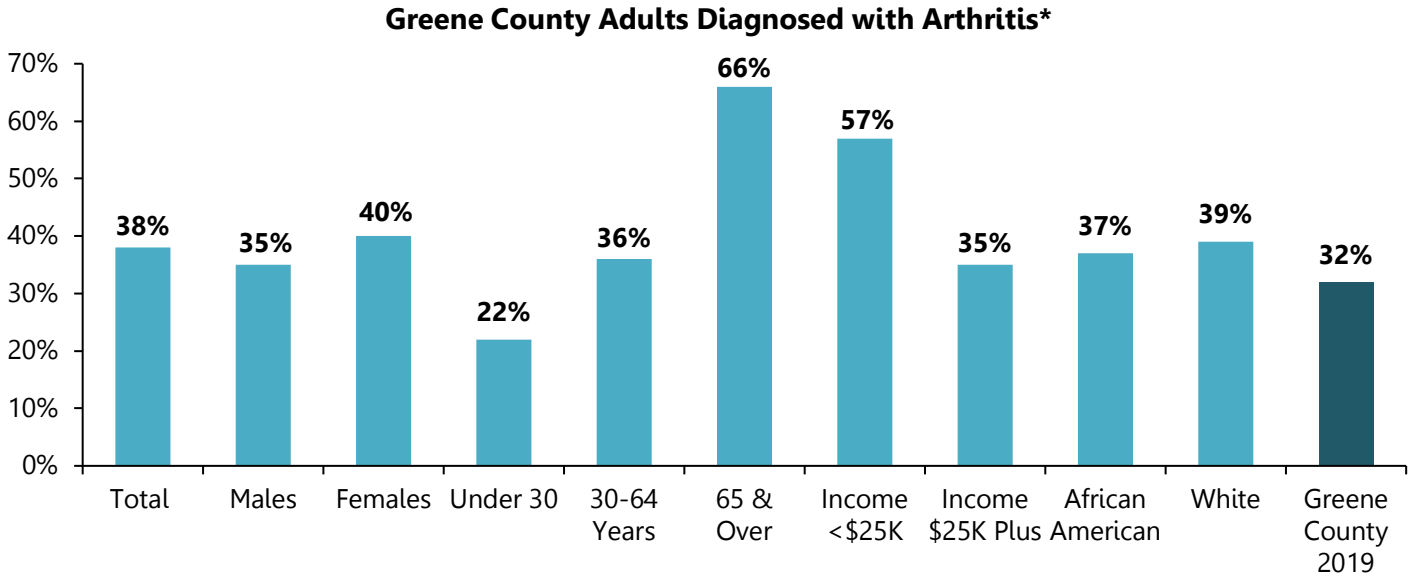
Chronic Disease: Arthritis

63,476 adults had been diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia in their life.

Arthritis

- Thirty-eight percent (38%) of Greene County adults were told by a health professional that they had some form of arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia, increasing to 66% of adults over the age of 65.
- Eighty-four percent (84%) of adults diagnosed with arthritis were overweight or obese (including severely and morbidly obese).

The following graph shows the percentage of Greene County adults who had been diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia. An example of how to interpret the information includes: 38% of adults were diagnosed with arthritis, including 66% of adults over the age of 65.



**Respondents were asked: "Have you ever been told by a doctor, nurse or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?"*

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Ever diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia	32%	38%	30%	25%

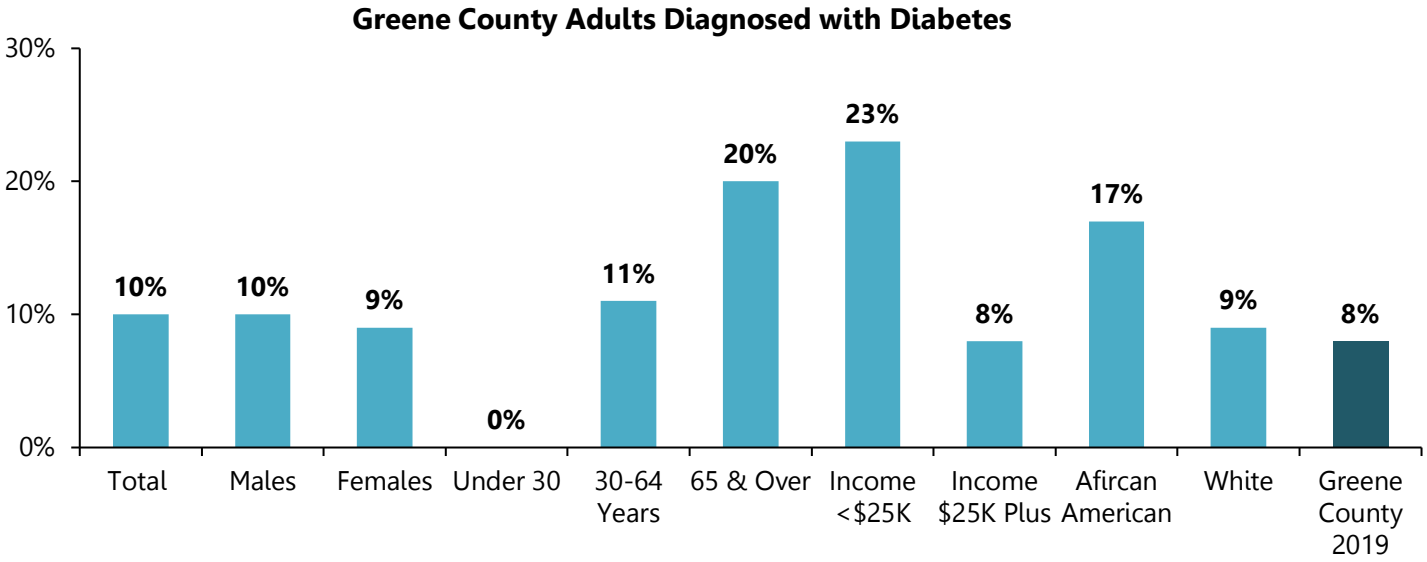
Chronic Disease: Diabetes

16,704 Greene County adults had been diagnosed with diabetes in their lifetime.

Diabetes

- Ten percent (10%) of Greene County adults had been diagnosed with diabetes, increasing to 20% of adults over the age of 65 and 23% of adults with incomes less than $25,000.
- Seven percent (7%) of adults had been diagnosed with pre-diabetes.
- One-third (33%) of adults with diabetes rated their overall health as fair or poor.
- Greene County adults diagnosed with diabetes also had one or more of the following characteristics or conditions:
  - 94% were overweight or obese (including severely and morbidly obese)
  - 89% had been diagnosed with high blood pressure
  - 82% had been diagnosed with high blood cholesterol

The following graph shows the percentage of Greene County adults who had been diagnosed with diabetes. An example of how to interpret the information includes: 10% of adults had been diagnosed with diabetes, including 20% of adults ages 65 and older and 23% of those with incomes less than $25,000.



Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

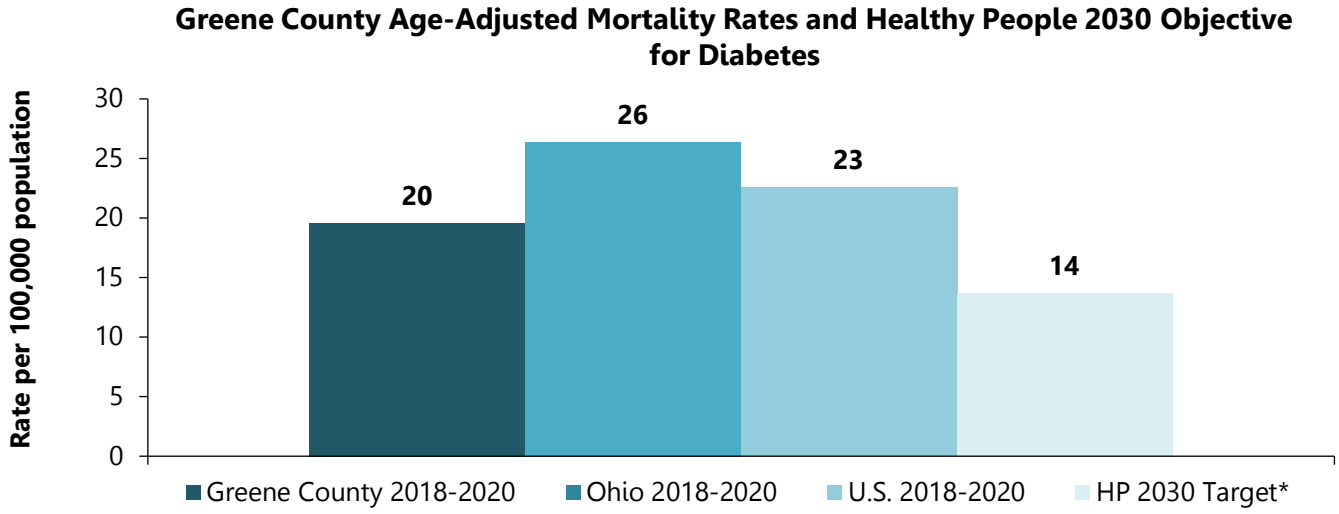
Comparisons	Greene County 2019	Greene County 2023	Ohio 2021	U.S. 2021
Ever been told by a doctor they have diabetes (not pregnancy-related)	8%	10%	12%	11%
Had been diagnosed with pre-diabetes or borderline diabetes	8%	7%	2%	2%

Diabetes, *continued*

- Greene County adults with diabetes were using the following to treat their diabetes: diet control (73%); checking blood sugar (51%); checking A1C annually (50%); exercise (50%); diabetes pills (44%); annual vision exam (38%); 6-month checkup with provider (36%); checking their feet (30%); get a dental exam (18%); insulin (12%); use injectables (e.g., Vyettea, Victoza, Bydurean) (6%); taking a class (5%); and seeing a registered dietician (4%).

The following graph shows the Greene County, Ohio and U.S. age-adjusted mortality rates (per 100,000 population) for diabetes in comparison to the Healthy People 2030 objective. The graph shows:

- When age differences were accounted for, Greene County had a lower diabetes mortality rate than Ohio and the U.S. but a higher mortality rate than the Healthy People 2030 objective.



**Note: The Healthy People 2030 rate is for all diabetes-related deaths*
(Source: Ohio Public Health Data Warehouse, 2018-2020, CDC Wonder, 2018-2020, Healthy People 2030)

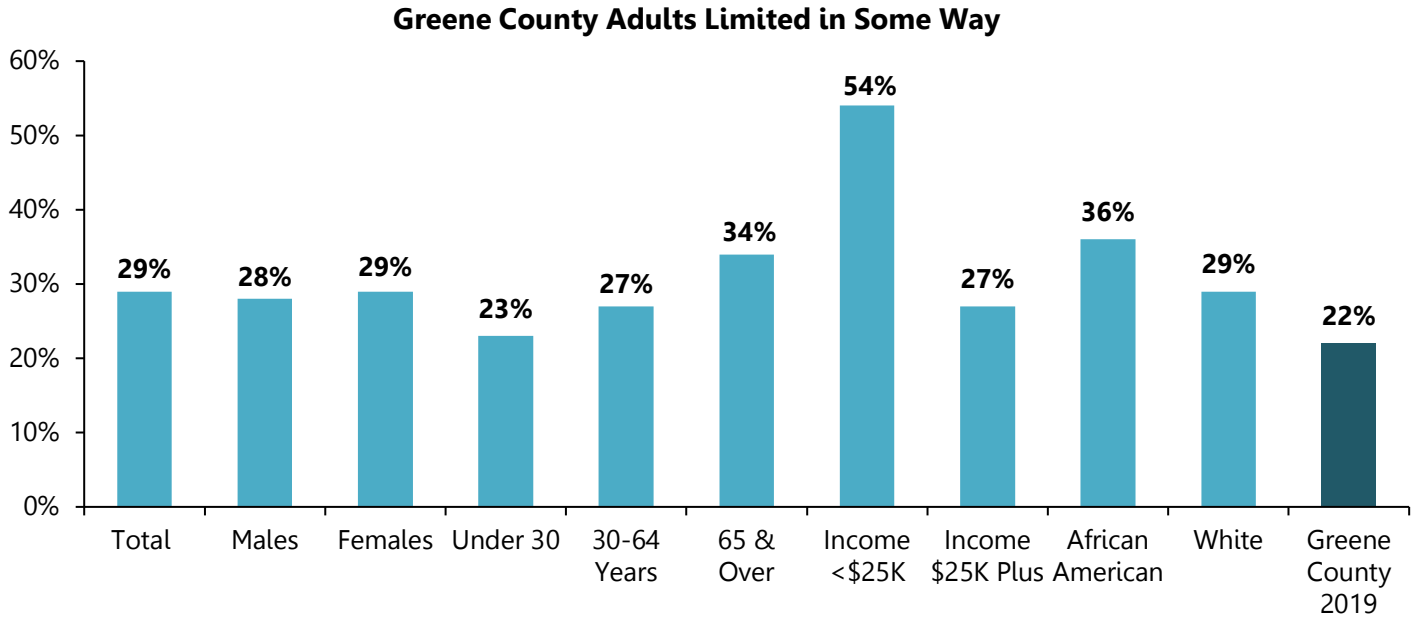
Chronic Disease: Quality of Life

48,442 Greene County adults were limited in some way because of a physical, mental, or emotional problem.

Impairments and Health Problems

- Eleven percent (11%) of Greene County adults had fallen in the past year, increasing to 20% of adults age 65 and older. Seven percent (7%) of adults ages 65 and older had fallen two or more times.
- Almost one-third (29%) of Greene County adults were limited in some way because of a physical, mental, or emotional problem, increasing to 54% of adults with incomes less than $25,000.

The following graph shows the percentage of Greene County adults who were limited in some way. An example of how to interpret the information includes: 29% of Greene County adults were limited in some way, including 34% of those over the age of 65 and 54% of those with incomes less than $25,000.

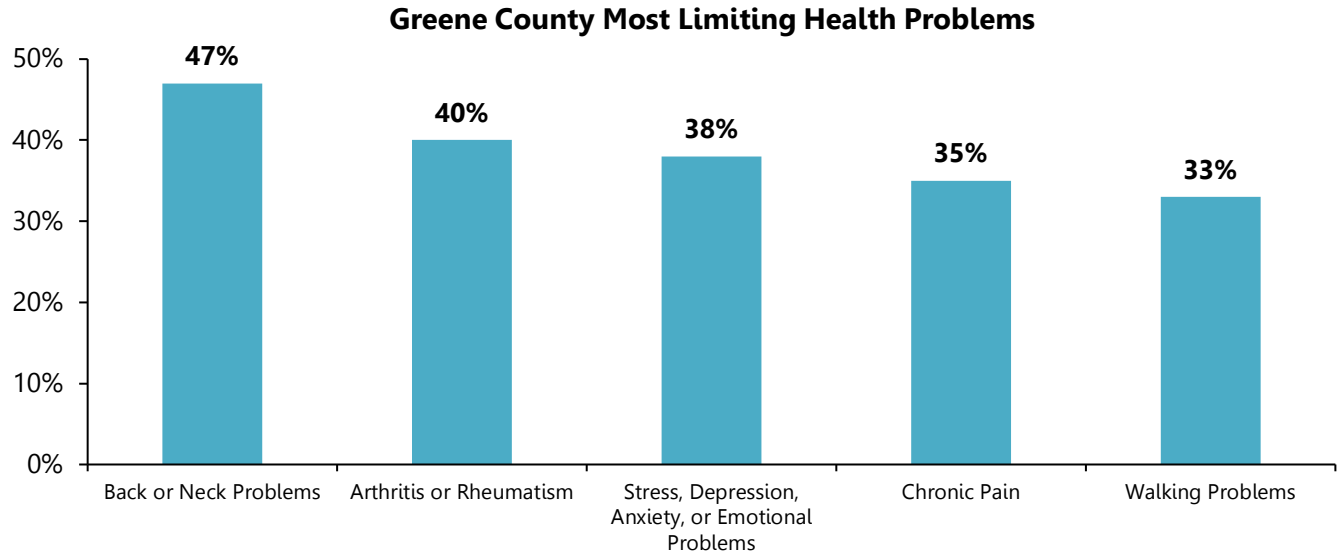


Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Impairments and Health Problems, *continued*

- Among those who were limited in some way, the following most limiting problems or impairments were reported:
  - Back or neck problems (47%)
  - Arthritis/rheumatism (40%)
  - Stress, depression, anxiety, or emotional problems (38%)
  - Chronic pain (35%)
  - Walking problems (33%)
  - Sleep problems (17%)
  - Fitness level (16%)
  - Chronic illness [e.g., diabetes, cancer, heart and stoke related problems, high blood pressure) (16%)
  - Fractures, bone/joint injuries (13%)
  - Lung/breathing problems (11%)
  - Eye/vision problems (10%)
  - Mental health illness/disorder (10%)
  - Hearing problems (10%)
  - Other physical disability (8%)
  - Memory loss (6%)
  - Dental problems (6%)
  - Learning disability (4%)
  - Confusion (4%)
  - Other impairment/problem (8%)

The following graph shows the percentage of Greene County adults most limiting health problems.



SOCIAL CONDITIONS

Social Determinants of Health
Environmental Conditions
Maternal and Infant Health

Note for population: "adults" are defined throughout the report as those ages 19 and older living in Greene County

Social Conditions: Social Determinants of Health

Healthy People 2030

Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. One of Healthy People 2030's 5 overarching goals is specifically related to SDOH: "Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all."

Healthy People 2030 has classified social determinants of health into five domains:

- Economic stability
- Education access and quality
- Social and community context
- Health care access and quality
- Neighborhood and built environment

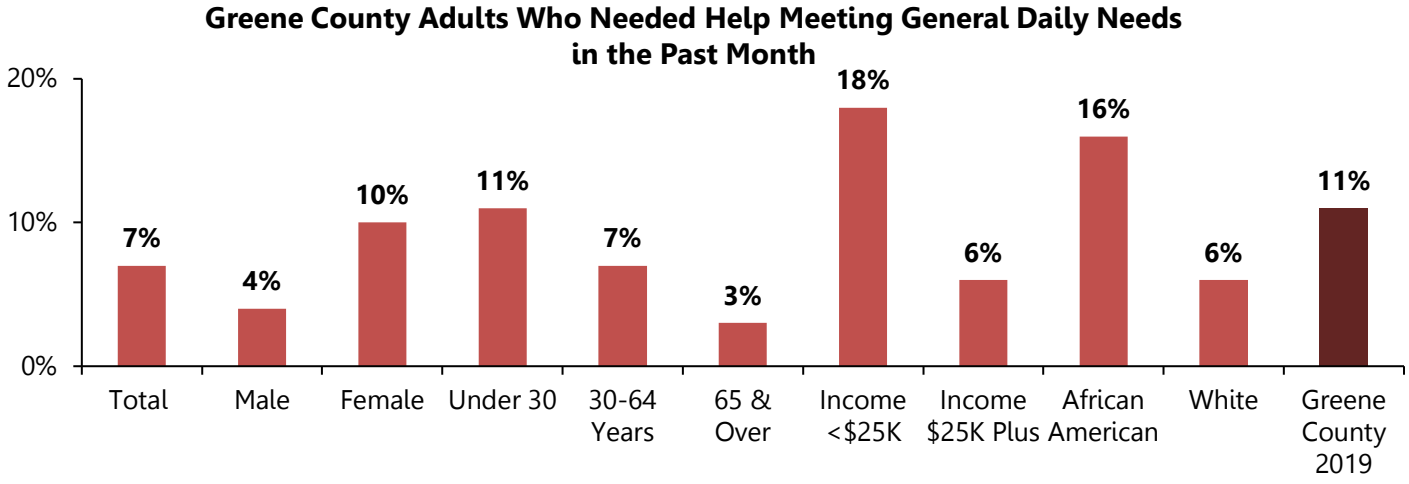
(Source: Social Determinants of Health, Healthy People 2030)

11,693 Greene County adults needed help meeting general daily needs such as food, clothing, shelter, or paying utility bills in the past month.

Economic Stability

- In the past 30 days, 7% of Greene County adults reported needing help meeting general daily needs such as food, clothing, shelter, or paying utility bills.

The following graph shows the percentage of Greene County adults who needed help meeting general daily needs such as food, clothing, shelter, or paying utilities bills in the past 30 days. An example of how to interpret the information on the graph includes: 7% of all adults needed help meeting their general daily needs, including 18% of adults with incomes less than $25,000 and 16% of African Americans.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Economic Stability, *continued*

- Greene County Adults experienced the following food insecurity issues in the past 12 months:
  - Had to choose between paying bills and buying food (8%)
  - Worried food might run out (7%)
  - Went hungry/ate less to provide more food for their family (4%)
  - Loss of income led to food insecurity issues (4%)
  - Did not eat because they did not have enough money for food (3%)
  - Their food assistance was cut (2%)

- Twelve percent (12%) of adults experienced one or more food insecurity issues in the past year.

20,045 Greene County adults experienced one or more food insecurity issues in the past year.

- The median household income in Greene County was $79,035. The U.S. Census Bureau reports median income levels of $62,286 for Ohio and $69,717 for the U.S. *(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, 2021)*

- Ten percent (10%) of all Greene County residents were living in poverty, and 12% of children and youth ages 0-17 were living in poverty *(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, 2021).*

- The unemployment rate for Greene County was 3.6 as of October 2022 *(Source: Ohio Department of Job and Family Services, Office of Workforce Development, Bureau of Labor Market Information, November 25, 2022).*

- There were 71,001 housing units in Greene County, of which 66,279 were occupied. The owner-occupied housing unit rate among occupied units was 67%. Rent in Greene County cost an average of $938 per month *(Source: U.S. Census Bureau, 2021 American Community Survey 5-year Estimates).*

Education

- Greene County adults reported that they or an immediate family member had the following literacy needs: learning computer skills (4%); reading and understanding instructions (3%); reading a map, signs, food ingredient labels, etc. (2%); and completing a job application (1%).

- Ninety-four percent (94%) of Greene County adults 25 years and over had a high school diploma or higher *(Source: U.S. Census Bureau, American Community Survey 5-year Estimates 2021).*

- Six percent (6%) had less than a high school diploma *(U.S. Census Bureau, American Community Survey 5-year Estimates, 2021).*

Health and Health Care

- In the past year, 5% of adults were uninsured.
- More than half (51%) of Greene County adults reported the following top reasons for not getting medical care in the past year:
  - No need to go (47%)
  - Cost/no insurance (22%)
  - Too long of a wait for an appointment (17%)
  - COVID-19 (11%)
  - Could not get time off work (9%)
  - Office was not open when they could get there (8%)
  - Worried they might find something wrong (8%)
  - Inconvenient appointment times (6%)
  - Do not trust or believe doctors (5%)
  - Discrimination/concerned they would be treated differently (4%)
  - Frightened of the procedure or doctor (4%)
  - Too embarrassed to seek help (4%)
  - Concerned about privacy (3%)
  - No child care (3%)
  - Provider would not take their insurance (3%)
  - Difficult to find/no transportation (2%)
  - Too long of a wait in waiting room (2%)
  - Can access medical records online (1%
  - Distance (1%)
  - Language barrier (<1%)
  - Some other reason (13%)
- Adults reported their experiences when seeking health care were worse (1%), the same (46%), or better (13%) compared to people of other races. Two percent (2%) of adults reported their experiences were worse than some races but better than others. Five percent (5%) of adults indicated they had only encountered people of the same race. Over one-quarter (28%) of adults were unsure how their health care experiences compared to adults of other races, and 5% did not receive health care in the past year.

3,341 Greene County adults reported their experience when seeking health care was worse compared to people of other races.

- See the Health Care Coverage and Health Care Access sections for further health and health care information for Greene County adults.

Social and Community Context

- In the past year, Greene County adults reported they were threatened or abused by the following: a spouse or partner (3%), someone outside the home (2%), a child (1%), a parent (1%), another family member living in the home (1%), and someone else (<1%).
- Adults experienced the following types of abuse in the past year: verbal (6%), emotional (4%), financial (1%), physical (1%), and sexual (<1%). Two percent (2%) of adults were abused in any of the previously stated ways through electronic methods (such as texts, Facebook, etc.).

Social and Community Context, *continued*

- Greene County adults experienced the following in the past 12 months:
  - A close family member went to the hospital (41%)
  - Death of a family member or close friend (32%)
  - Experienced a decline in their own health (17%)
  - They were a caregiver (13%)
  - Moved to a new address (12%)
  - Someone close to them had a problem with drinking or drugs (11%)
  - Someone in their household lost their job/had their hours at work reduced (10%)
  - Had bills they could not pay (9%)
  - Household income was cut by 50% (7%)
  - Knew someone who lived in a hotel (4%)
  - Became separated or divorced (3%)
  - Had someone homeless living with them/sleeping on their couch (3%)
  - Were threatened or abused by someone physically, emotionally, sexually, and/or verbally (3%)
  - Their family was at risk of losing their home (2%)
  - Serious/fatal car accident (1%)
  - Their child was threatened or abused by someone physically, emotionally, sexually, and/or verbally (1%)
  - Drug overdose (<1%)
  - Were homeless (<1%)
  - Natural disaster (<1%)
  - Traumatic community event (<1%)
  - Witnessed someone in their family being hit or slapped (<1%)

- In regard to the following statement, "The Greene County area is a place that welcomes and embraces diversity in general", adults reported that they: strongly agree (30%), agree somewhat (58%), disagree somewhat (9%), and strongly disagree (3%).

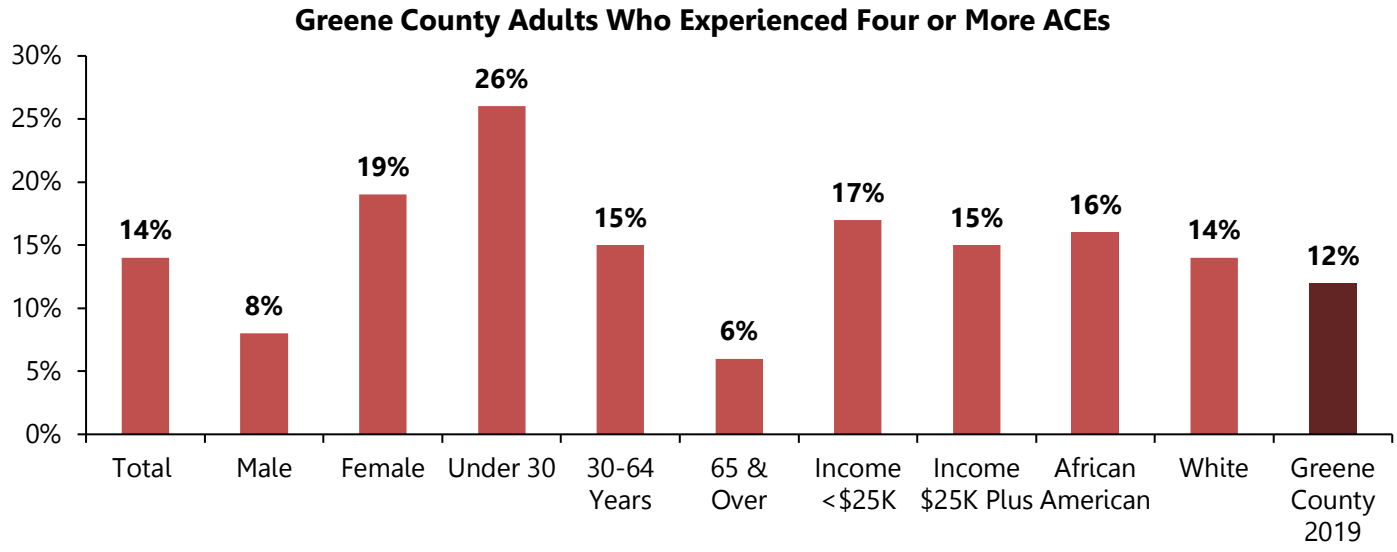
- Adults in Greene County were responsible for providing regular care or assistance to the following:
  - Multiple children (21%)
  - Elderly parent or loved one (10%)
  - A friend, family member, or spouse with a health problem (5%)
  - Child(ren) with special needs (5%)
  - A friend, family member, or spouse with a mental health issue (4%)
  - An adult child (4%)
  - Grandchildren (3%)
  - Child(ren) with discipline issues (2%)
  - Someone with a physical impairment (2%)
  - Someone with behavioral health issues (2%)
  - Adult(s) with special needs (1%)
  - A friend, family member, or spouse with memory issues (1%)
  - Foster children (1%)
  - Children whose parent(s) lost custody due to other reasons besides drugs (<1%)

Social and Community Context, *continued*

- Greene County adults experienced the following adverse childhood experiences (ACEs):
  - Their parents became separated or were divorced (25%)
  - Lived with someone who was a problem drinker or alcoholic (22%)
  - A parent or adult in their home swore at, insulted, or put them down (20%)
  - Lived with someone who was depressed, mentally ill, or suicidal (20%)
  - A parent or adult in their home hit, beat, kicked, or physically hurt them (10%)
  - Their family did not look out for each other, feel close to each other, or support each other (10%)
  - Lived with someone who used illegal street drugs, or who abused prescription medications (9%)
  - Someone at least 5 years older than them or an adult touched them sexually (8%)
  - Their parents or adults in their home slapped, hit, kicked, punched, or beat each other up (8%)
  - Someone at least 5 years older than them or an adult tried to make them touch them sexually (6%)
  - Did not have enough to eat, had to wear dirty clothes, and had no one to protect them (5%)
  - Their parents were not married (5%)
  - Lived with someone who served time or was sentenced to serve time in prison, jail or other correctional facility (4%)
  - Someone at least 5 years older than them or an adult forced them to have sex (3%)
- Fourteen percent (14%) of adults experienced four or more adverse childhood experiences (ACEs).

23,386 Greene County adults experienced four or more ACEs.

The following graph shows the percentage of Greene County adults who had experienced four or more adverse child experiences (ACEs). An example of how to interpret the information on the graph includes: 14% of all Greene County adults had experienced four or more ACEs, including 8% of males and 19% of females.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Social and Community Context, *continued*

The table below indicates correlations between those who experienced four or more ACEs and participating in risky behaviors, as well as other activities and experiences. An example of how to interpret the information includes: 25% of adults who experienced four or more ACEs were current smokers, compared to 6% of adults who did not experience any ACEs.

Health Behaviors of Greene County Adults Experiencing Trauma

Experienced Four or More ACEs vs. Did Not Experience Any ACEs

Behaviors	Experienced Four or More ACEs	Did Not Experience Any ACEs
Overweight or obese (according to BMI)	91%	72%
Current drinker (had at least one alcoholic beverage in the past month)	51%	63%
Felt sad or hopeless for two or more weeks in a row in the past year	38%	4%
Binge drinker (drank 5 or more drinks for males or 4 or more for females on an occasion)	36%	37%
Current smoker (currently smoke on some or all days)	25%	6%
Misused prescription medication (used medications either not prescribed or took more than what was prescribed to feel good or high, more active or alert)	25%	7%
Current vaper (currently vape on some or all days)	17%	2%
Had more than one sexual partner in the past year	16%	2%
Contemplated suicide in the past year	10%	3%
Used recreational marijuana in the past six months	9%	3%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

What are ACEs?

Adverse Childhood Experiences (ACEs) are potentially traumatic events that occur during childhood (ages 0-17). ACEs can generally be grouped into three categories: abuse, household challenges, and neglect. Exposure to adversity in childhood is a pervasive problem in Ohio and across the country with severe, long-term health impacts that persist into adulthood.

Consistent with national research findings, Ohioans who reported experiencing more ACEs were also more likely to report the following negative health outcomes and behaviors:

- Ever being diagnosed with depression, asthma and/or poor respiratory health
- Being a current smoker and/or heavy drinker
- Delaying health care because of cost in the past year

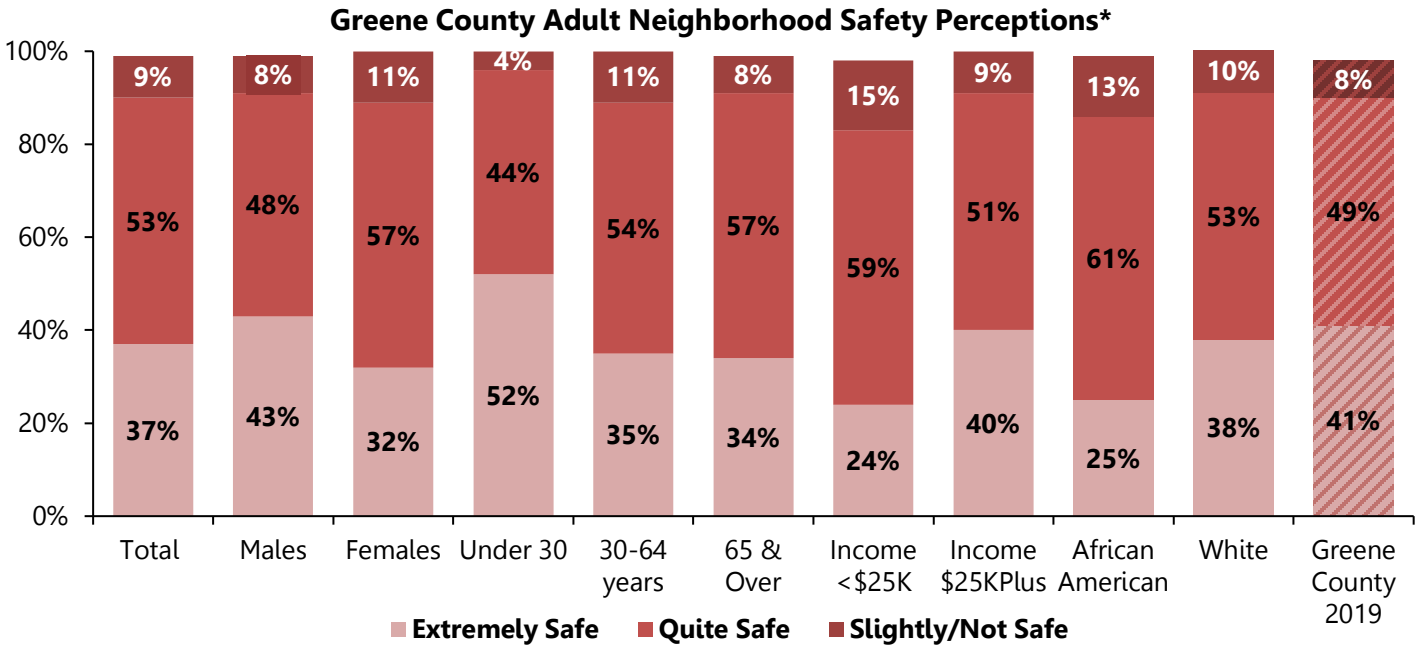
Beyond specific health impacts, ACEs exposure results in direct and indirect costs to individuals, families and society at large. This includes costs to public- and private-sector institutions due to reduced quality of life and lost productivity.

(Source: Health Policy Institute of Ohio Brief: Economic Impact of ACEs in Ohio, Updated February 12, 2021)

Neighborhood and Built Environment

- When asked to describe the social and physical environment in which they live, work, and play, Greene County adults reported the following:
  - Parks and trails are available (81%)
  - Neighborhoods are safe (71%)
  - Fresh, healthy food is easy to get (70%)
  - It is a great place to raise children (61%)
  - Healthcare services are easy to find and use (59%)
  - Sidewalks, parks, and trails are used frequently (55%)
  - Sidewalks are prevalent and accessible (54%)
  - Working conditions are safe (54%)
  - There are many ways to get involved within the community (53%)
  - There are good employment opportunities (46%)
  - There are accessible transportation services available (44%)
  - Housing is safe and affordable (43%)
  - There is economic opportunity/there is room to grow financially (43%)
  - People are often treated differently based on the color of their skin (17%)
- Greene County adults considered their neighborhood to be extremely safe (37%), quite safe (53%), slightly safe (8%), and not safe at all (1%) from crime.

The following graph shows the percentage of Greene County adults who described their neighborhood as extremely safe, quite safe, and slightly/not safe. An example of how to interpret the information includes: 37% of all Greene County adults described their neighborhood as extremely safe, including 52% of adults under the age of 30 and 24% of adults with incomes below $25,000.



**Respondents were asked: "How safe from crime do you consider your neighborhood to be?"*

**Percentages may not equal 100% as some respondents answered, "don't know"*

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Neighborhood and Built Environment, *continued*

- Greene County adults reported regularly using the following to reduce their risk of injury: seat belt (95%), smoke detector (90%), carbon monoxide detectors (68%), sunscreen (67%), life jacket (30%), bike helmet (29%), secured firearms (28%), and motorcycle/ATV/snowmobile helmet (9%).

8,352 Greene County adults indicated they did not regularly use a seat belt.

- In the past month, Greene County drivers reported they did the following while driving: talked on hands-free cell phone (50%), ate (36%), talked on hand-held cell phone (30%), texted (25%), used Internet on their cell phone (13%), did not wear a seatbelt (6%), were under the influence of alcohol (3%), read (1%), were under the influence of recreational drugs (1%), were under the influence of prescription drugs (<1%), and other activities (such as applying makeup, shaving, etc.) (1%).
- Twelve percent (12%) of Greene County adults experienced one or more of the following transportation issues:
  - Could not afford gas (4%)
  - Could not afford vehicle repairs (4%)
  - No working car (3%)
  - Did not feel safe to drive (2%)
  - Limited public transportation available or accessible (2%)
  - Suspended/no driver's license (2%)
  - Need an accessible vehicle (1%)
  - No car insurance (1%)
  - No public transportation available or accessible (1%)
  - Unable to drive (1%)
  - Cost of public or private transportation (<1%)
- Five percent (5%) of adults reported they had more than one transportation issue.

The following tables show 2022 ridership data* in Greene County, provided by Greene CATS Public Transit.

2022 Scheduled Ride Report

Funding Sources	Number of One-Way Trips
TCN/TCN Youth Services	3
Council on Aging	64
Veterans' Services	147
Other	271
ODOT Rides to Wellness	1429
JFS Medicaid	5640
Public	12258
GCBDD	14224
Total One Way Trips	**34036**

2022 Demand Response Ridership Report	
Scheduled Rides	34,036
Flex Trips	37,643
Total Ridership	71,679

**Note for tables: Data is unaudited*

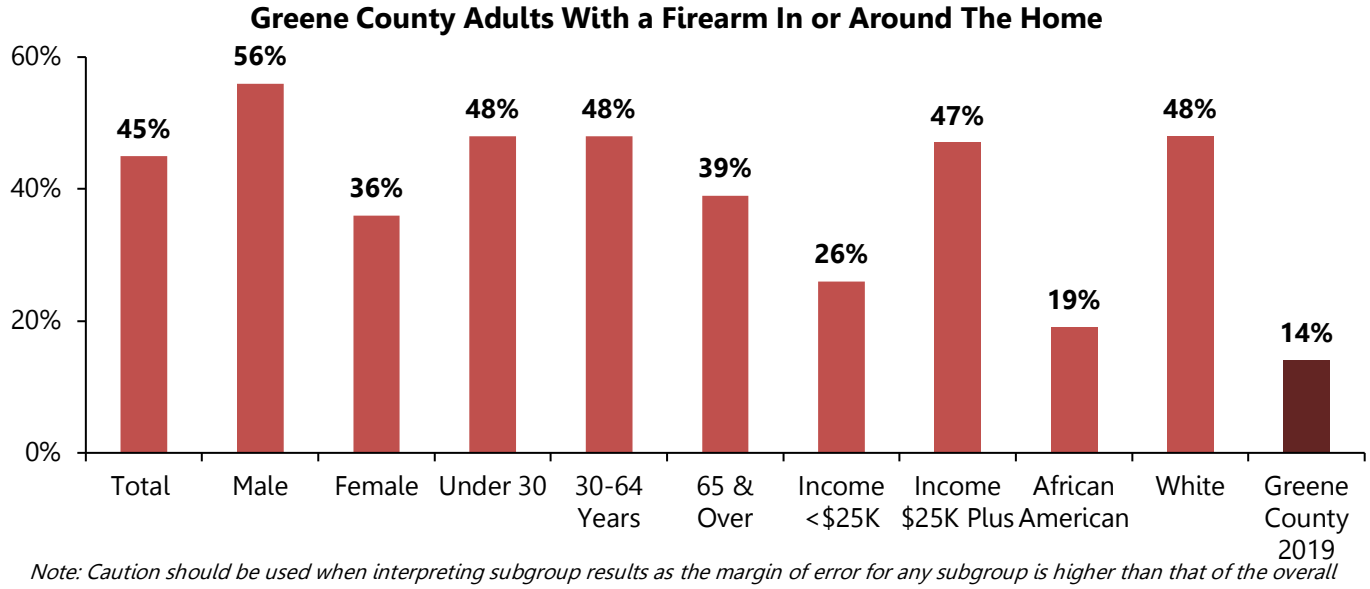
(Source: for tables Greene CATS Public Transit)

Neighborhood and Built Environment, *continued*

- Greene County adults reported the following was needed in their community:
  - More locally grown foods or farmer's markets (37%)
  - Expanded public transportation (25%)
  - Community gardens (24%)
  - Local agencies partnering with grocery stores to provide healthier, low cost food items (24%)
  - New and/or updated recreation centers (22%)
  - Sidewalk accessibility (20%)
  - New and/or updated parks (17%)
  - Bike/walking trail accessibility or connectivity (15%)
  - Safe roadways (15%)
  - Neighborhood safety (13%)

- Forty-five percent (45%) of Greene County adults kept a firearm in or around their home. Five percent (5%) of adults reported that their firearms were unlocked and loaded.

The following graph shows the percentage of Greene County adults who had a firearm in or around the home. An example of how to interpret the information includes: 45% of Greene County adults had a firearm in or around the home, including 19% of African Americans and 56% of males.



Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey

Social Conditions: Environmental Conditions

3,341 Greene County adults did not have any disaster or emergency supplies.

Environmental Health

- Greene County adults thought the following threatened their health or their family's health in the past year:
  - Insects (6%)
  - Mold/moisture issues (5%)
  - Air quality (5%)
  - Temperature regulation (4%)
  - Agricultural chemicals (3%)
  - Rodents (3%)
  - Chemicals found in household products (2%)
  - Plumbing problems (2%)
  - Unsafe water supply/wells (2%)
  - Asbestos (1%)
  - Food safety/food borne illness (1%)
  - Lead paint (1%)
  - Lyme disease (1%)
  - Radon (1%)
  - Sewage/waste water problems (1%)
  - Bed bugs (<1%)
  - Excess medication in the home (<1%)
  - Lice (<1%)
  - Radiation (<1%)
  - Safety hazards (<1%)

Disaster Preparedness

- Greene County households had the following disaster preparedness supplies:
  - Cell phone (95%)
  - Working smoke detector (91%)
  - Computer/tablet (87%)
  - Working flashlight and working batteries (84%)
  - Tools to shut off electricity or water (63%)
  - 3-day supply of prescription medication for each person who takes prescribed medicines (62%)
  - 3-day supply of nonperishable food for everyone in the household (61%)
  - Copies of important documents (electronic or hard copy) (56%)
  - Working battery-operated radio and working batteries (44%)
  - 3-day supply of water for everyone in the household (1 gallon of water per person per day) (40%)
  - Communication plan (29%)
  - Home land-line telephone (28%)
  - Generator (26%)
  - Family disaster plan (15%)
  - A disaster plan (14%)
- Two percent (2%) of adults indicated they did not have any disaster or emergency supplies.

COVID-19

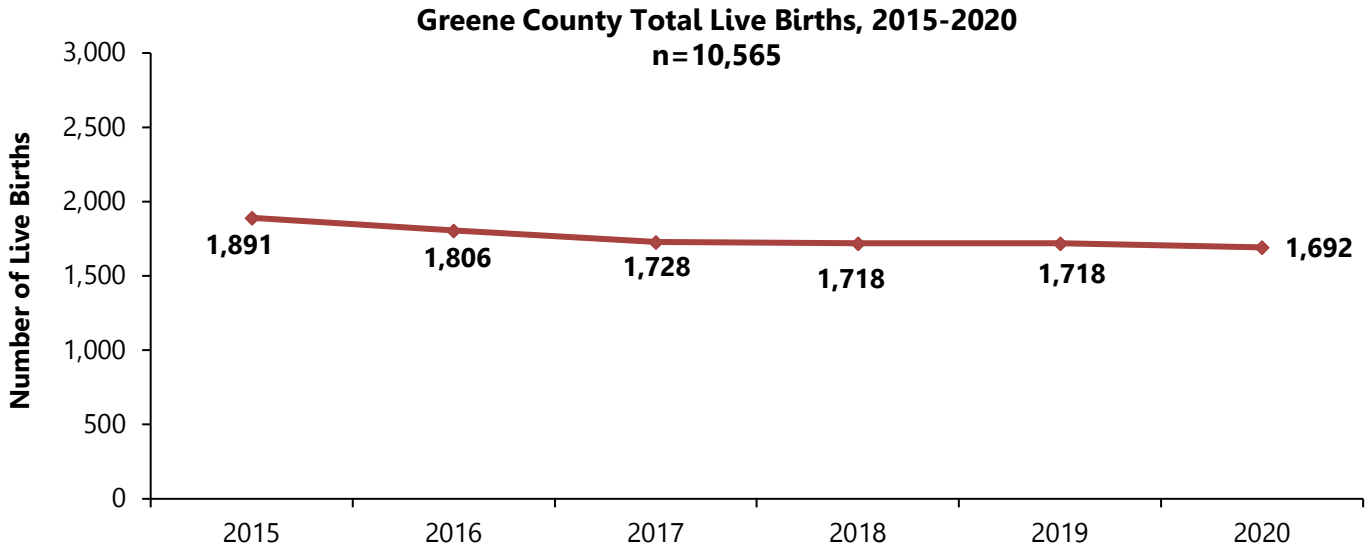
- Greene County adults reported the COVID-19 pandemic impacted their or their family's health or well-being in the following ways:
  - Change in mental health/behavior (18%)
  - Change in physical health (13%)
  - Financial instability (11%)
  - Changes to employment status (9%)
  - Not seeking dental care (9%)
  - Death or serious illness of loved one(s) (8%)
  - Not seeking health care (8%)
  - Change in child(ren) development (7%)
  - Educational challenges (7%)
  - Loss of household income (7%)
  - Increased alcohol use (5%)
  - Unable to afford food (4%)
  - Lack of child care (3%)
  - Unable to afford basic needs, such as household, personal, or baby care (3%)
  - Housing instability (2%)
  - Unable to afford medicine (2%)
  - Increased drug use (1%)
  - Lack of internet access (1%)
  - Other (2%)
- Twenty-eight percent (28%) of Greene County adults experienced two or more of the above issues.

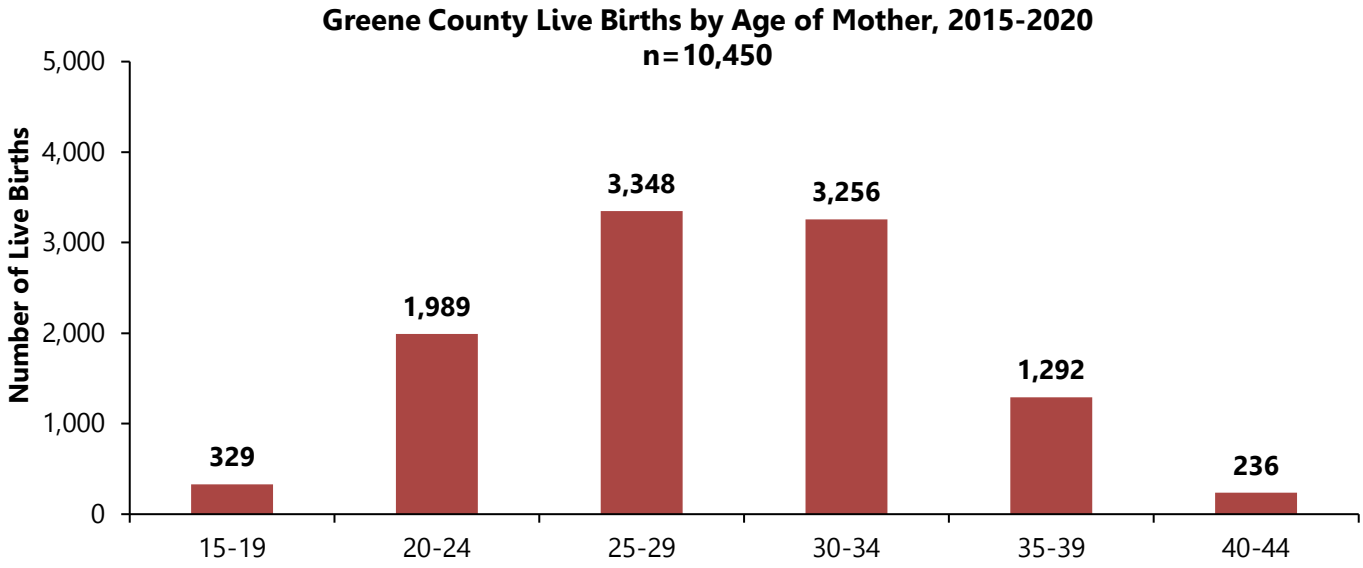
Social Conditions: Maternal and Infant Health

Birth Data

The following graphs show the number of live births in Greene County from 2015 to 2020 and the number of live births by the age of the mother from 2015-2020. Please note that the pregnancy outcomes data include all births to adults and adolescents.

- From 2015-2020, there was an average of 1,759 live births per year in Greene County.

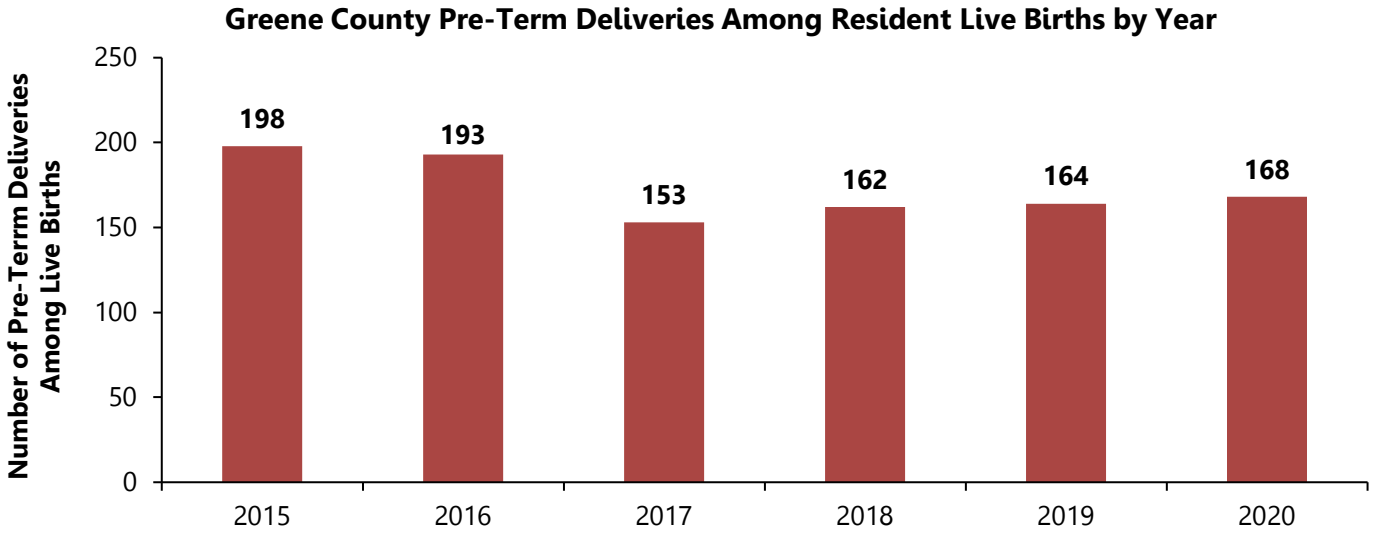




Note for graphs: Births occurring in Ohio to non-Ohio residents are not included in the graph.
(Source: ODH Information Warehouse, updated 11/28/22)

Pre-Term Births

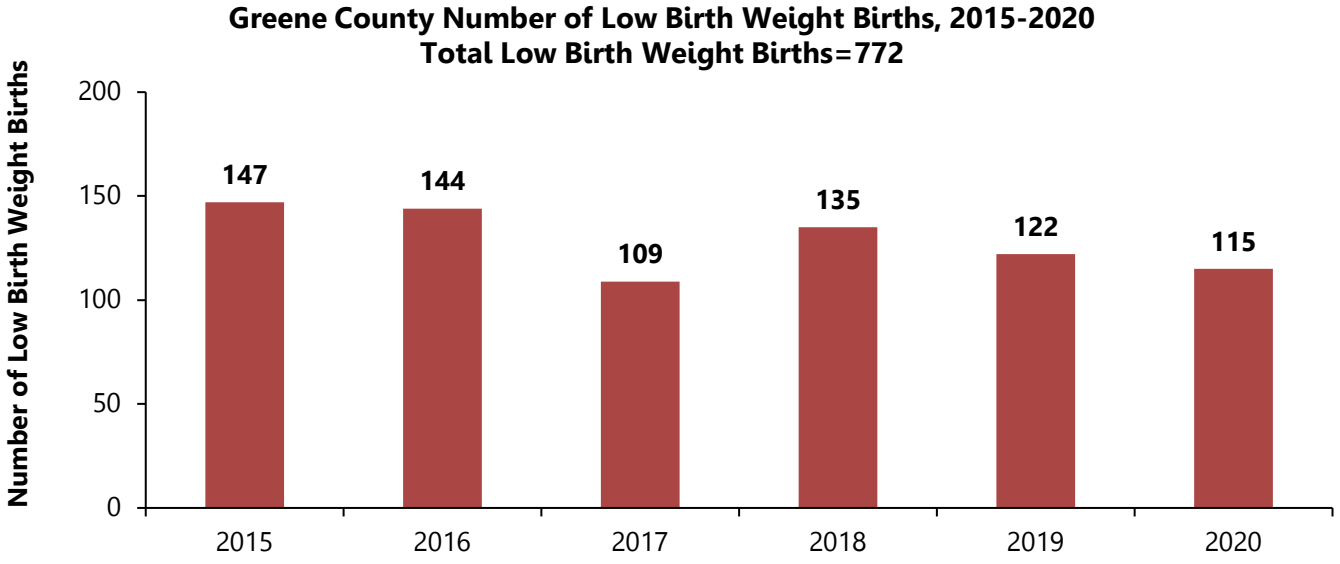
The following graph shows Greene County pre-term deliveries (<37 weeks) among live births by year. Please note that the pregnancy outcomes data include all births to adults and adolescents.



(Source: ODH Information Warehouse, updated 11/28/22)

Low Birth Weight

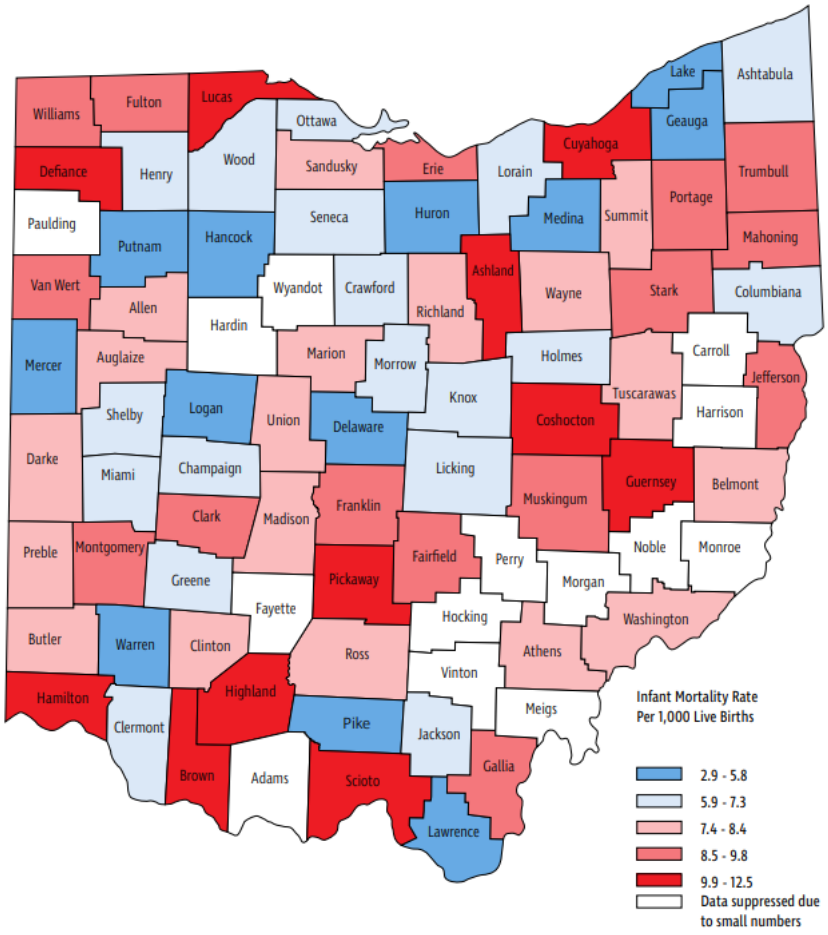
The following graph shows the number of live births in Greene County that were low birthweight by year. Low birth weight is defined as weighing less than 2,500 grams or 5 pounds, 8 ounces, but greater than 3 pounds, 4 ounces. Please note that the pregnancy outcomes data include all births to adults and adolescents.



(Source: ODH Information Warehouse, updated 11/28/22)

Infant Mortality

The following map shows the Ohio five-year total fetal mortality rate (per 1,000 fetal deaths and live births by county from 2016 to 2020.



(Source: Ohio Department of Health, 2020 Infant Mortality Annual Report)

Neonatal, Post-Neonatal, and Infant Mortality in 2020-2022

Area	Year	Number of Neonatal Deaths*	Number of Post-Neonatal Deaths**	Total Number of Infant Deaths	Number of Births	Rate of Infant Deaths per 1,000 Live Births
Greene County	2020	5	4	9	1,692	5.31
Greene County	2021	6	0	6	1,630	3.68
Greene County	2022	9	5	14	1,632	8.57
Ohio	2020	574	290	864	129,320	6.68
Ohio	2021	616	296	912	129,924	7.01
Ohio	2022	584	329	913	128,303	7.11

**Neonatal death is defined as a death of live born infant during the first 27 days of life.*
*** Post-neonatal death is defined as a death of an infant between 28 days and 364 days of life.*
(Source: Greene County Public Health)

FOCUS GROUP QUALITATIVE DATA

Focus Group Qualitative Data

Introduction

From January 2023 through March 2023, Greene County Public Health conducted focus groups throughout Greene County. Focus groups are useful to find a range of opinions across groups of people and are used to gain insight for community needs. The community health assessment incorporated focus groups to uncover attitudes and factors that influence health behaviors that cannot be fully captured through survey research. The interaction between focus group participants is an important dynamic. Participants can share their thoughts and opinions, and others have a chance to reflect on the statements, offer alternative ideas, or build upon other participants' ideas. The qualitative data collected in these focus groups complement the quantitative data captured in the county health assessment survey. Qualitative data provides a deeper understanding as to why participants from the community feel and act a certain way, while quantitative data identifies the extent of a specific health issue.

Methods

PARTICIPANT RECRUITMENT

Greene County Public Health conducted seven focus groups in Beavercreek, Fairborn, Jamestown, Xenia, and Wilberforce. To recruit participants, the steering committee and community partners utilized flyers to promote participation at locations that were frequently visited by populations and on social media. Participants all identified themselves as Greene County residents.

MODERATOR GUIDE

A semi-structured moderator guide was used in this study. Seven key questions were asked with additional probing questions included as the moderator felt necessary. The questions asked were related to health priorities, strengths and barriers of the community, social determinants of health, awareness of programs or services within the community, suggestions for health agencies to consider, and health inequities.

PROCEDURE

The planning committee scheduled seven focus groups and secured rooms for each group. The focus groups had between 3 and 8 participants. As participants entered, staff informed participants about the details of the study and verbally explained the participation consent. Moderators went over the process of recording groups and that all participants would remain anonymous. Participants consented to the process and were given the option to leave if they didn't feel comfortable being recorded. During each group there was one moderator and one notetaker. The notetaker's duties were to write down observations based on body language and other nonverbal activity of participants. The moderator kept participants engaged. Each focus group lasted between one hour to an hour and a half. Participants were offered water and healthy snacks.

ANALYSIS

Focus groups were recorded and transcribed using Microsoft TEAMS meeting. Notes that were taken by the notetakers were incorporated into the final transcripts. An employee who was present for each focus group identified and consolidated themes from the recording and notes.

LIMITATIONS

As with any research method, there are limitations to consider for focus groups. First, although participants were carefully selected, there may have been selection bias that limited the ability to expand the findings to other populations within the county. Second, while the moderator is semi-trained in facilitating and analyzing focus groups, bias could occur. Steps to limit bias in the findings included having notetakers involved in the analysis, writing, and debriefing after groups.

Overall Findings

Several themes emerged consistently across the groups in Greene County. There were also differences in the perceptions of health across the groups. The common themes among the groups were access to care/services, mental health, food insecurity, and built environment. The groups identified recreational resources like the YMCA, bike paths, and parks as strengths in Greene County. The common social determinants of health discussed were nutrition, education, and finances. Groups were aware of different programs in Greene County that aim to improve health but thought that organizations could do more at promotion, meeting individuals where they are and building relationships.

Common barriers that emerged were transportation and awareness of current programs and services in Greene County. Participants suggested programming to include a hybrid model of in-person and virtual. Income/inflation, and age were discussed as contributors to health inequity in Greene County.

The following table summarizes the themes from each focus group.

FOCUS GROUP THEMES

	Jamestown	Xenia	Fairborn	Wilberforce University Greene County Career Center
Priority health topics Greene County should work to address or prevent	• Mental health • Elder care • Access to care	• Food insecurity/Food Deserts • Access to care • Chronic Disease	• Food access • Finances/Inflation • Access to care	• Food Access • Built environment • Chronic Disease
Strengths surrounding health in Greene County	• Parks • Bike path • Senior Center	• YMCA • Bike paths • Community meals	• Recreational resources • Churches • Fish Food Pantry	• School programs (sports) • Community meals
Factors that influence why some people may be healthier than others in Greene County	• Closed mindedness • Income • Nutrition	• Income • Nutrition • Transportation • Community engagement	• Income • Access to healthy options • Transportation • Cost of services	• Income • Age • Transportation
Awareness of services and resources in Greene County that focus on improving health	• Senior Center programing • Youth sports • ER	• Outdoor actives • Mental Health • Nutritional programs • School lunch programs	• Food Pantry • Churches • Harm Reduction programs	• Health services • School resources
Barriers people have accessing programs, services, or resources in Greene County	• Stigma • Limited access to health care resources/services • Transportation	• Education • Affordability • Motivation	• Transportation • Knowledge of programs/services • Poverty	• Transportation • Limited access to health care • Cost of services • Knowledge of programs/services
Suggestions to overcome barriers and help community members live a healthier lifestyle in Greene County	• Education • Build relationships	• Acceptance • Education • Improvements to built environment (sidewalks, pavement) • Nutritional programs	• Alternative access to nutritional food options • Increase community and local leader's partnerships • Policy changes	• Communications • Access to nutritional food options • Improvements to built environment (sidewalks)
Factors that influence community members' ability to access programs, services, or health care in Greene County	• Age • Awareness • Income	• Income • Awareness • Culture	• Income • Politics	• Age • Income

JAMESTOWN FOCUS GROUP

The Jamestown focus group consisted of 3 residents from Jamestown and Xenia. The group met at the Jamestown Community Library.

INDIVIDUAL PRIORITIES

Participants identified the following as priority health topics Greene County should work to address or prevent:

- *Mental Health:* A participant stated that there was stigma on mental health issues in rural communities.
- *Elder Care:* A participant mentioned the need for resources for the senior community and a lack of knowledge outside of the senior center on programs offered.
- *Access to Care:* Participants mentioned access to care in the community. One participant specifically spoke of individuals that have health insurance but that don't access preventive care.

STRENGTHS

Participants identified the following strengths in Greene County surrounding health:

- *Parks:* Participants mentioned many activities that take place at the local park. Like youth sports leagues.
- *Bike Paths:* A participant mentioned the bike path and how it is one of the recreational resources in the community.
- *Senior Center:* One participant mentioned how the senior center helped with connecting and providing services to the growing senior population.

SOCIAL DETERMINANTS OF HEALTH

The following themes were identified by the group as factors that influence why some people may be healthier than others in Greene County:

- *Age:* Participants mentioned the growing senior population in the community. They spoke about lack of knowledge of resources or services and preventive care.
- *Awareness:* Lack of awareness of resources and services was indicated as a reason that someone might not be considered healthy.
- *Political Divide:* A individual spoke about the current political divide and how that can influence individuals' perception of health.

AWARENESS

Focus group participants were aware of the following services and resources within Greene County:

- *Senior Center Programing:* Participant mentioned programs and services that we available at the senior center.
- *Youth Sports:* Participants highlighted the youth sports leagues that take place at the local park.
- *Emergency Room Services:* A participant mentioned that "the only thing we have going on for us here is an active ER".

JAMESTOWN FOCUS GROUP, *continued*

BARRIERS

Participants identified the following barriers to people accessing programs, services, or resources in Greene County:

- *Stigma:* One participant spoke to the community stigmas that are surrounding unhealthy lifestyles.
- *Limited access to resources or services:* Participants mentioned that there are limited local resources for services in the community and that this leads to barriers for individuals.
- *Transportation:* Participants mentioned the lack of knowledge surrounding local resources for transportation. One participant mentioned that there is not enough awareness about transportation for medical services available.

SUGGESTIONS

Participants suggested the following to overcome barriers and help community members live a healthier lifestyle:

- *Education:* Participants mentioned education to the community on programs and resources would increase the community's ability to make healthy choices, like preventive care and nutrition.
- *Building Relationships:* One participant mentioned the importance of building relationships within the community and local leadership. By increasing relationships, they will gain buy-in from leaders that can help to implement programming and resources.

HEALTH INEQUITIES

Participants described the following as factors that influence community member's ability to access programs, services, or health care in Greene County:

- *Age:* Participants stated that some elderly members don't have the ability to engage in programs or services, due to lack of technology, transportation, or support.
- *Awareness:* Lack of awareness of resources and services was indicated as a reason that someone might not be considered healthy.
- *Income:* One participant mentioned the cost of services and the factor that income plays in obtaining services/resources. Another participant mentioned the stigma that income has on rural communities "People assume farm families are broke".

XENIA FOCUS GROUPS

Two Xenia focus groups were conducted and consisted of 5 and 6 residents from Xenia, Beavercreek, Wilberforce, and Yellow Springs. The group met at the Xenia Community Library and the Xenia YMCA.

INDIVIDUAL PRIORITIES

Participants identified the following as priority health topics Greene County should work to address or prevent:

- *Food Insecurity and Food Deserts:* Participants mentioned the lack of access to healthy food options in town. "I have a concern. We have two high level elderly living complexes here. They are eating in the Dollar General. No fresh food is available."
- *Access to Care:* Participants mentioned access to care specifically where and when to seek help.
- *Chronic Disease:* Participants spoke about issues causing preventable chronic diseases.

STRENGTHS

Participants identified the following strengths in Greene County surrounding health:

- *YMCA:* Participants mentioned the many activities that the YMCA and Reach Center offer for the community.
- *Bike Paths:* A participant spoke about the bike paths that are offered in the community. "There are nice walking trails in Xenia, in Greene County in general."
- *Community Meals:* One participant mentioned the community meals that are offered at One Bistro and local churches.

SOCIAL DETERMINANTS OF HEALTH

The following themes were identified by the group as factors that influence why some people may be healthier than others in Greene County:

- *Community Engagement:* Participants mentioned the lack of knowledge that the community has of services and resources. This can be due to the lack of community engagement because of the pandemic.
- *Transportation:* Participants mentioned transportation and that some individuals might not utilize resources or services because they don't have transportation.
- *Income:* Participants mentioned that income impacts the options one has regarding healthy lifestyles.
- *Nutrition:* Participants mentioned that nutrition was dependent on the access that one has to fresh food. One participant mentioned that families and culture also influence healthy choices.

XENIA FOCUS GROUPS, *continued*

AWARENESS

Focus group participants were aware of the following services and resources within Greene County:

- *Outdoor Activities:* Participants mentioned the programs that are offered surrounding parks and outdoor recreation.
- *Mental Health:* A participant mentioned that there are several programs locally that can help with mental health needs.
- *Nutritional Programs:* A participant mentioned Ohio State University and Central State University Extension Offices offer nutritional programming to help increase healthy eating.

BARRIERS

Participants identified the following barriers to people accessing programs, services, or resources in Greene County:

- *Education:* Participants mentioned that there needs to be more education offered regarding nutrition. If there was more education, then individuals might be able to make healthier choices.
- *Affordability:* One participant mentioned "affordability and accessible food systems" create a barrier for healthy lifestyles.
- *Stigma:* Participants mentioned that stigma is associated with asking for help and that it could make a person not want to reach out for services.

SUGGESTIONS

Participants suggested the following to overcome barriers and help community members live a healthier lifestyle:

- *Education:* Participants mentioned increasing education surrounding nutrition and utilizing schools as a place to reach families would potentially help to increase healthy lifestyles.
- *Improvement to Built Environment:* Participants discussed the need for updates to the infrastructure and an increase in safe routes.
- *Nutritional Program:* Participants discussed the opportunity for nutritional education and partnerships that could be built from increasing this specific type of programming. One participant mentioned collaborating with local farmers to decrease produce waste while educating on nutritional meals.

XENIA FOCUS GROUPS, *continued*

HEALTH INEQUITIES

Participants described the following as factors that influence community member's ability to access programs, services, or health care in Greene County:

- *Income:* Participants agreed that income played a large role in several factors surrounding healthy lifestyles.
- *Awareness:* Participants mentioned "communication/collaboration between local government agencies to increase communication to public" would increase the public's knowledge of programming to help increase healthy lifestyles.
- *Culture:* Participants mention that culture plays a role in the way that individuals view healthy behaviors.

FAIRBORN FOCUS GROUPS

The Fairborn focus group consisted of 6 residents from Fairborn, Beavercreek, Yellow Springs, and Xenia. The group met at the Fairborn Community Library.

INDIVIDUAL PRIORITIES

Participants identified the following as priority health topics Greene County should work to address or prevent:

- *Food Access:* There was a consensus of the lack of nutritional food options and that there were concerns about food quality among some of the available options.
- *Finances/Inflation:* Participants discussed the increase of inflation today and financial stress that many are experiencing.
- *Access to Care:* Mental health care and access to health care were priorities of the participants.

STRENGTHS

Participants identified the following strengths in Greene County surrounding health:

- *Recreational Resources:* Participants agreed that the bike paths and YMCA were affordable and accessible assets to the community.
- *Churches:* Participants agreed that churches like Abiding Christ were doing lot in the community to help and provided resources to many. One participant spoke about the stigma that churches have regarding individuals needing addiction services.
- *Fish Food Pantry:* Participants agreed that the local Fish Food Pantry was an asset to the community.

FAIRBORN FOCUS GROUPS, *continued*

SOCIAL DETERMINANTS OF HEALTH

The following themes were identified by the group as factors that influence why some people may be healthier than others in Greene County:

- *Income:* A participant spoke about the hardships that income or lack of income can have on families or individuals and how that affects one's ability to have access to healthcare/lifestyle/nutrition. "I am on EBT and in terms of inflation my EBT doesn't go as far."

- *Access to Healthy Options:* Participants spoke about the lack of healthy options practically affecting the downtown area.

- *Transportation:* Some participants felt that there was a lack of access to transportation or knowledge of how the public transit worked.

- *Cost of Services:* Participants agreed that the cost of Services and inflation are factors in individuals getting care or services.

AWARENESS

Focus group participants were aware of the following services and resources within Greene County:

- *Food Panty:* A participant highlighted the work that the Fish Food Pantry was doing for the community and the collaborations that they had with agencies like Greene County Public Health helped to bridge gaps and increase awareness of programing.

- *Churches:* Participants agreed that churches in the community worked to bring awareness to programming and resources that were available in the community.

- *Harm Reduction Programming:* A participant talked about the harm reeducation programs that Greene County Public Health offers and the importance of disease prevention they are having in the community.

BARRIERS

Participants identified the following barriers to people accessing programs, services, or resources in Greene County:

- *Transportation:* Participants agreed that lack of knowledge and resources (cost of tokens) are preventing people from using the public transit services.

- *Knowledge of Programs and Services*: A participant spoke about the promotion of programming hinders some from knowing what is available to them. They went on to talk about the lack of internet for some and that we need to meet the community where they are.

- *Poverty:* A participant mentioned that "poverty is a policy choice" and there is a need for more connection with individuals that are living in poverty.

FAIRBORN FOCUS GROUPS, *continued*

SUGGESTIONS

Participants suggested the following to overcome barriers and help community members live a healthier lifestyle:

- *Alternative Access to Food Options:* There was a discussion on the lack of a grocery store in the downtown area. A participant spoke about the need for nutritional information or classes that could help with increasing nutritional health. A participant also mentioned the need for more resources to secure fresh/healthy food.

- *Increase in Leadership and Partnerships:* Consensus was made that strengthening and building new relationships/partnerships with leaders and agencies will lead to better communication and programming for the community.

- *Policy Changes:* A participant talked about policy changes that can be made by forging relationships that connect community leaders with populations that are the most vulnerable.

HEALTH INEQUITIES

Participants described the following as factors that influence community member's ability to access programs, services, or health care in Greene County:

- *Income:* Participants agreed that income played a large role in the availability and quality of care or services that one might receive.

- *Politics:* Participants agreed that the current political divide is influencing the community and in turn one's ability to access services.

WILBERFORCE UNIVERSITY AND GREENE COUNTY CAREER CENTER FOCUS GROUPS

The focus group with Bellbrook and Spring Valley residents of Greene County consisted of six participants. The focus group was held at the Bellbrook Presbyterian Church in a reserved meeting room.

INDIVIDUAL PRIORITIES

Participants identified the following as priority health topics Greene County should work to address or prevent:

- *Food Access:* Participants discussed the lack of nutritional food options in their communities and how inflation has added an additional barrier to food.

- *Built Environment:* The participants discussed the lack of sidewalks in their neighborhoods and road conditions influence the way that individuals can get to resources.

- *Chronic Disease:* Two participants discussed the health issues they are seeing in the communities.

WILBERFORCE UNIVERSITY AND GREENE COUNTY CAREER CENTER FOCUS GROUPS, *continued*

STRENGTHS

Participants identified the following strengths in Greene County surrounding health:

- *School Programs:* Participants discussed the programs that are offered at schools. For example, the athletic trainer that is offered to students who play sports.

- *Community Meals:* Participants discussed the community meals that are offered in their areas. One participant spoke about the way that the community will help with transportation to and from meals for students.

SOCIAL DETERMINANTS OF HEALTH

The following themes were identified by the group as factors that influence why some people may be healthier than others in Greene County:

- *Income:* Participants discussed how income impacts one's ability to access services and resources. One participant spoke about their family experience with access to medications and the impact that income plays a role in one's ability to access what they may need.

- *Age:* Participants discussed age and how that can influence or limit one's outlook on healthy lifestyles. This led to a discussion on vaping and the health complications that they are seeing in their classmates.

- *Transportation:* Discussions around the lack of transportation or knowledge of resources could affect the health of individuals.

AWARENESS

Focus group participants were aware of the following services and resources within Greene County:

- *Health Services:* Participants discussed medical specialist that they used, for example Dayton Children's for Asthma needs.

- *School Resources:* Participants discussed the health services that were available to them through schools.

WILBERFORCE UNIVERSITY AND GREENE COUNTY CAREER CENTER FOCUS GROUPS, *continued*

BARRIERS

Participants identified the following barriers to people accessing programs, services, or resources in Greene County:

- *Transportation:* Participants discussed transportation being a barrier to services. They also discussed how there is a need for more sidewalks and safety initiatives for pedestrians in neighborhoods.

- *Limited access to healthcare:* Participants spoke about the limitations that they experience when trying to access healthcare, specifically when trying to access mental health services.

- *"Councilors are more worried about their workloads than our mental health"*

- *Cost of Services:* Multiple participants spoke about the cost of services and food and how that presents limitations to health decisions.

- *Knowledge of programs and services:* Participants observed that there was a key problem in the way programs and services are communicated. Students felt left out and disconnected when trying to find services.

SUGGESTIONS

Participants suggested the following to overcome barriers and help community members live a healthier lifestyle:

- *Communication:* Consensus among the participants was a need for increased communication of programs, services and resources that are available to them. Promoting programs in a way that meets community members where they are, schools/campuses, stores, social media.

- *Access to Nutritional Food Options:* Consensus was that there needs to be an increase in nutritional programs. Participants discussed options of healthy foods at stores and gas stations being options and increasing the awareness of food safety to ensure that you don't get sick from food you are eating.

- *Improvement to Sidewalks:* A few participants spoke about the need for sidewalks in neighborhoods or improvements to existing walkways. They would also like to see education on pedestrian and youth safety.

HEALTH INEQUITIES

Participants described the following as factors that influence community member's ability to access programs, services, or health care in Greene County:

- *Age:* A participant mentioned that age influences the way that we view each other and that there is a need to communicate more with younger people, so they know what is available for them.

- *Income:* A consensus among the groups was that income played a role in the quality and access of care that was available to them.

Appendix I: Health Assessment Information Sources

Source	Data Used	Website
American Cancer Society, Cancer Facts and Figures 2022. Atlanta: ACS, 2022	• 2022 Cancer Facts, Figures, and Estimates	https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2022.html
Behavioral Risk Factor Surveillance System, National Center for Chronic Disease Prevention and Health Promotion, Behavioral Surveillance Branch, Centers for Disease Control	• 2021 Adult Ohio and U.S. Correlating Statistics	www.cdc.gov/brfss
CDC, Wonder, U.S.	• Underlying Cause of Death, 2018-2020	http://wonder.cdc.gov/ucd-icd10.html
County Health Rankings	• Physical and Mental Health Status • Food Environment Index (USDA Food Environment Atlas) • County Profile	https://www.countyhealthrankings.org/
Greene CATS Public Transit	• 2022 Ridership Data	https://www.greenecountyohio.gov/253/Greene-CATS-Public-Transit
Greene County Council on Aging	• 2021 Community Survey Findings	Scripps.MiamiOH.edu/publications
Healthy People 2030: U.S. Department of Health & Human Services Social Determinants of Health	• Social Determinants of Health	https://health.gov/healthypeople/priority-areas/social-determinants-health
Healthy People 2030: U.S. Department of Health & Human Services	• All Healthy People 2030 Target Data Points	www.healthypeople.gov/
Health Policy Institute of Ohio	• Adverse Childhood Experiences: Economic Impacts of ACEs in Ohio	https://www.healthpolicyohio.org/adverse-childhood-experiences-aces-economic-impact-of-aces-in-ohio/
Ohio Automated RX Reporting System (OARRS), Quarterly County Data	• Ohio Automated Rx Reporting System • Opioid Doses Per Patient	https://www.ohiopmp.gov/Stats
Ohio Department of Health, STD Surveillance Data	• STD Surveillance	https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/std-surveillance/data-and-statistics/sexually-transmitted-diseases-data-and-statistics
	• HIV/AIDS Surveillance Program	https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/hiv-aids-surveillance-program/welcome-to

Source	Data Used	Website
Ohio Department of Health, Information Warehouse	• Greene County and Ohio Birth Statistics	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/OhioLiveBirths
	• Greene County Cancer Incidence Surveillance System	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/StateLayoutLockdownCancers
	• Greene County and Ohio Leading Causes of Death	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality
	• Greene County and Ohio Mortality Statistics	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality
	• Greene County and Ohio Unintentional Drug Overdose Deaths	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality
	• County and State Infant Mortality Data	https://odh.ohio.gov/wps/wcm/connect/gov/f972e9db-91c1-4b31-99c6-3d12ab095ddb/Infant+Mortality+Annual+Report+2020+Final.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_K9I401S01H7F40QBNJU3SO1F56-f972e9db-91c1-4b31-99c6-3d12ab095ddb-oaDGMx0
Ohio Department of Health, Ohio Drug Overdose Data: General Findings	• Drug Overdose Rate Map, by County	https://odh.ohio.gov/wps/wcm/connect/gov/6a94aabe-ea77-4c01-8fd8-2abdd83b4ff8/2020%2BUnintentional%2BDrug%2BOverdose%2BAnnual%2BReport.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-6a94aabe-ea77-4c01-8fd8-2abdd83b4ff8-o2GcAjB
Ohio Department of Job and Family Services, Office of Workforce Development, Bureau of Labor Market Information	• Unemployment Information	https://ohiolmi.com/_docs/LAUS/ranking.pdf
Regional CHNA Community Survey	• Summary of regional 2021 CHNA results	https://healthcollab.org/wp-content/uploads/2022/01/Appendices.pdf

Source	Data Used	Website
U. S. Department of Commerce, Census Bureau; Bureau of Economic Analysis, Civilian Labor Force Estimates	• American Community Survey 1-Year Estimate, 2021	https://data.census.gov/table?q=greene+county+ohio&g=0500000US39057&tid=ACSDP1Y2021.DP05
	• Bureau of Economic Analysis	https://apps.bea.gov/iTable/index_regional.cfm
	• Civilian Labor Force Estimates, Employment Statistics: County and State	http://ohiolmi.com/laus/OhioCivilianLaborForceEstimates.pdf
	• Federal Poverty Threshold	www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html
	• Ohio and Greene County 2020/2021 Census Demographic Information	https://data.census.gov/cedsci/all?q=greene%20county%20ohio&g=0500000US39057&hidePreview=false&table=DP05&tid=ACSDP1Y2018.DP05&vintage=2018&layer=county&cid=DP05_0001E&lastDisplayedRow=17
	• Small Area Income and Poverty Estimates	www.census.gov/programs-surveys/saipe/data/datasets.html

Appendix II: Acronyms and Terms

AHS	**A**ccess to **H**ealth **S**ervices, Topic of Healthy People 2030 objectives
Adult	Defined as 19 years of age and older.
Age-Adjusted Mortality Rates	Death rate per 100,000 adjusted for the age distribution of the population.
Adult Binge Drinking	Consumption of five alcoholic beverages or more (for males) or four or more alcoholic beverages (for females) on one occasion.
BMI	**B**ody **M**ass **I**ndex is defined as the contrasting measurement/relationship of weight to height.
BRFSS	**B**ehavior **R**isk **F**actor **S**urveillance **S**ystem, an adult survey conducted by the CDC.
CDC	**C**enters for **D**isease **C**ontrol and **P**revention
Current Smoker	Individual who has smoked at least 100 cigarettes in their lifetime and now smokes daily or on some days.
DRE	**D**igital **R**ectal **E**xam
HCNO	**H**ospital **C**ouncil of **N**orthwest **O**hio
HDS	**H**eart **D**isease and **S**troke, Topic of Healthy People 2030 objectives
HP 2030	**H**ealthy **P**eople **2030**, a comprehensive set of health objectives published by the Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services.
Health Indicator	A measure of the health of people in a community, such as cancer mortality rates, rates of obesity, or incidence of cigarette smoking.
High Blood Cholesterol	240 mg/dL and above
High Blood Pressure	Systolic $\geq$140 and Diastolic $\geq$ 90
IID	**I**mmunizations and **I**nfectious **D**iseases, Topic of Healthy People 2030 objectives
N/A	Data is not available.
NWS	**N**utrition and **W**eight **S**tatus, Topic of Healthy People 2030 objectives
OARRS	**O**hio **A**utomated Prescription (**R**x) **R**eporting **S**ystem
ODH	**O**hio **D**epartment of **H**ealth
Race/Ethnicity	**Census 2020:** U.S. Census data consider race and Hispanic origin separately. Census 2020 adhered to the standards of the Office of Management and Budget (OMB), which define Hispanic or Latino as "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race." Data are presented as "Hispanic or Latino" and "Not Hispanic or Latino." Census 2020 reported the following race categories: White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and Some Other Race. Data reported, "White alone" or "Black alone", means the respondents reported only one race.
SU	**S**ubstance **U**se, Topic of Healthy People 2030 objectives
Ohio SHA/SHIP	**Ohio S**tate **H**ealth **A**ssessment/**S**tate **H**ealth **I**mprovement **P**lan
TU	**T**obacco **U**se, Topic of Healthy People 2030 objectives

Appendix III: Methods for Weighting the 2023 Greene County Needs Assessment Data

Data from sample surveys have the potential for bias if there are different rates of response for different segments of the population. In other words, some subgroups of the population may be more represented in the completed surveys than they are in the population from which those surveys are sampled. If a sample has 25% of its respondents being male and 75% being female, then the sample is biased towards the views of females (if females respond differently than males). This same phenomenon holds true for any possible characteristic that may alter how an individual responds to the survey items.

In some cases, the procedures of the survey methods may purposefully over-sample a segment of the population in order to gain an appropriate number of responses from that subgroup for appropriate data analysis when investigating them separately (this is often done for minority groups). Whether the over-sampling is done inadvertently or purposefully, the data needs to be weighted so that the proportioned characteristics of the sample accurately reflect the proportioned characteristics of the population. In the 2023 Greene County survey, a weighting was applied prior to the analysis that weighted the survey respondents to reflect the actual distribution of Greene County based on age, sex, race, and income.

Weightings were created for each category within sex (male, female), race (White, Non-White), Age (8 different age categories), and income (7 different income categories). The numerical value of the weight for each category was calculated by taking the percent of Greene County within the specific category and dividing that by the percent of the sample within that same specific category. Using sex as an example, the following represents the data from the 2023 Greene County Survey and the 2021 Census estimates.

2023 Greene Survey			**2021 Census Estimate**		**Weight**
Sex	Number	Percent	Number	Percent	
Male	252	50.90909	82,835	49.58903	0.974070
Female	243	49.09091	84,208	50.41097	1.026890

In this example, it shows that there was a slightly larger portion of males in the sample compared to the actual portion in Greene County. The weighting for males was calculated by taking the percent of males in Greene County (based on Census information) (49.58903%) and dividing that by the percent found in the 2023 Greene County sample (50.90909%) [49.58903/50.90909 = weighting of 0.974070 for males]. The same was done for females [50.41097/ 49.09091 = weighting of 1.026890 for females]. Thus, males' responses are weighted less by a factor of 0.974070 and females' responses weighted heavier by a factor of 1.026890.

This same thing was done for each of the 19 specific categories as described above. For example, a respondent who was female, White, in the age category 35-44, and with a household income in the $50-$75k category would have an individual weighting of 1.60453 [1.02689 (weight for females) x 1.03794 (weight for White) x 1.28690 (weight for age 35-44) x 1.16979 (weight for income $50-$75k)]. Thus, each individual in the 2023 Greene County sample has their own individual weighting based on their combination of age, race, sex, and income. See next page for each specific weighting and the numbers from which they were calculated.

Multiple sets of weightings were created and used in the statistical software package (SPSS 28.0) when calculating frequencies. For analyses done for the entire sample and analyses done based on subgroups other than age, race, sex, or income – the weightings that were calculated based on the product of the four weighting variables (age, race, sex, income) for each individual. When analyses were done comparing groups within one of the four weighting variables (e.g., smoking status by race/ethnicity), that specific variable was not used in the weighting score that was applied in the software package. In the example smoking status by race, the weighting score that was applied during analysis included only age, sex, and income. Thus, a total of eight weighting scores for each individual were created and applied depending on the analysis conducted. The weight categories were as follows:

1. **Total weight** (product of 4 weights) – for all analyses that did not separate age, race, sex, or income.
2. **Weight without sex** (product of age, race, and income weights) – used when analyzing by sex.
3. **Weight without age** (product of sex, race, and income weights) – used when analyzing by age.
4. **Weight without race** (product of age, sex, and income weights) – used when analyzing by race.
5. **Weight without income** (product of age, race, and sex weights) – used when analyzing by income.
6. **Weight without sex or age** (product of race and income weights) – used when analyzing by sex and age.
7. **Weight without sex or race** (product of age and income weights) – used when analyzing by sex and race.
8. **Weight without sex or income** (product of age and race weights) – used when analyzing by sex and income.

Category	Greene Sample	%	Greene 2021 Census*	%		Weighting Value
Sex:						
Male	252	50.90909	82,835	49.58903		0.974070
Female	243	49.09091	84,208	50.41097		1.026890
Age:						
20 to 34 years	46	9.44559	35,001	27.86704		2.95027
35 to 44 years	59	12.11499	19,582	15.59076		1.28690
45 to 54 years	61	12.52567	19,570	15.58121		1.24394
55 to 59 years	50	10.26694	11,929	9.49761		0.92507
60 to 64 years	68	13.96304	10,846	8.63535		0.61844
65 to 74 years	123	25.25667	17,279	13.75717		0.54469
75 to 84 years	75	15.40041	8,471	6.74443		0.43794
85+ years	5	1.02669	2,922	2.32643		2.26595
Race:						
White	393	79.55466	137,932	82.57275		1.03794
Other	101	20.44534	29,111	17.42725		0.85238
Household Income:						
Less than $25,000	58	12.44635	9,900	14.93686		1.20010
$25,000 to $34,999	43	9.22747	5,123	7.72945		0.83766
$35,000 to $49,999	60	12.87554	6,813	10.27927		0.79836
$50,000 to $74,999	66	14.16309	10,981	16.56784		1.16979
$75,000 to $99,999	73	15.66524	9,066	13.67854		0.87318
$100,000 to $149,999	84	18.02575	12,170	18.36177		1.01864
$150,000 or more	82	17.59657	12,226	18.44627		1.04829

Note: The weighting ratios are calculated by taking the ratio of the proportion of the population of Greene County in each subcategory by the proportion of the sample in the Greene County survey for that same category.
*** Greene County population figures taken from the 2021 Census estimates.**

Appendix IV: Greene County Sample Demographic Profile*

Variable	2023 Greene County Adult Survey Sample*	Greene County 2021 Census (5-year estimate)	Ohio Census 2021 (1-year estimate)
Age			
20-29	5.1%	14.5%	12.8%
30-39	8.5%	12.7%	12.9%
40-49	11.3%	11.0%	11.9%
50-59	17.8%	13.3%	12.8%
60 plus	53.7%	23.7%	24.8%
Race/Ethnicity			
White	80.2%	94.7%	83.4%
Black or African American	13.1%	6.5%	14.3%
Hispanic Origin (may be of any race)	3.0%	3.1%	1.6%
Asian	1.4%	0.9%	3.1%
American Indian and Alaska Native	0.4%	0.1%	4.4%
Other	2.8%	0.9%	4.3%
Education†			
Less than High School Diploma	1.2%	6.0%	8.2%
High School Diploma	16.8%	22.7%	32.8%
Some college/ College graduate	80.2%	71.2%	58.9%
Income (Families)			
$14,999 and less	5.4%	4.0%	6.3%
$15,000 to $24,999	6.2%	4.0%	4.9%
$25,000 to $49,999	20.4%	13.7%	17.1%
$50,000 to $74,999	13.1%	15.2%	17.8%
$75,000 or more	47.3%	63.0%	54.0%

** The percents reported are the actual percent within each category who responded to the survey. The data contained within the report however are based on weighted data (weighted by age, race, sex, and income). Percents may not add to 100% due to missing data (non-responses).*

† The Ohio and Greene County Census percentages are slightly different than the percent who responded to the survey. Education is calculated for those 25 years and older.

GREENE COUNTY PROFILE

(Source: U.S. Census Bureau, 2021)
2021 ACS 5-year estimates

General Demographic Characteristics

	Number	Percent (%)
Total Population		
2021 Total Population	167,043	100%
Largest City – Beavercreek		
2021 Total Population	46,320	100%
Population by Race/Ethnicity*		
Total Population	167,043	100%
White	148,881	89.1%
Black or African American	14,802	8.9%
Asian	7,212	4.3%
American Indian and Alaska Native	1,690	1.0%
Some other race	3,673	2.2%
Hispanic or Latino (of any race)	5,109	3.1%
Two or more races	8,934	5.3%
Population by Age		
Under 5 years	9,209	5.5%
5 to 14 years	19,418	11.7%
15 to 24 years	25,773	15.4%
25 to 44 years	41,666	24.9%
45 to 64 years	42,345	25.3%
65 years and more	28,672	17.1%
Median age (years)	**38.3**	N/A
Household by Type		
Total households	66,279	100%
Total families	43,072	65.0%
Households with children <18 years	17,183	25.9%
Married-couple family household	34,393	51.9%
Married-couple family household with one or more people <18 years	25,385	38.3%
Female householder, no spouse present	6,055	9.1%
Female householder, no spouse with one or more people <18 years	41,092	62.0%
Nonfamily household	23,207	35.0%
Nonfamily household living alone	51,698	78.0%
Nonfamily household 65 years and >	20,016	30.2%
Households with one or more people <18 years	18,956	28.6%
Households with one or more people 60 years and >	26,710	40.3%
Average household size	2.39 people	N/A
Average family size	2.91 people	N/A

**Race alone or in combination with one or more races.*
N/A – Not Available

General Demographic Characteristics, Continued

Housing Occupancy		
Median value of owner-occupied units	$190,200	N/A
Median housing units with a mortgage	28,686	N/A
Median housing units without a mortgage	15,620	N/A
Median value of occupied units paying rent	$938	N/A
Median rooms per total housing unit	6.1	N/A
Total occupied housing units	66,279	N/A
No telephone service available	852	1.3%
Lacking complete kitchen facilities	432	0.7%
Lacking complete plumbing facilities	84	0.1%
Language Spoken at Home		
Total population 5 years and over	157,834	N/A
Speak only English	148,444	94.1%
Speak a language other than English	9,390	5.9%
Spanish	2,345	1.5%
Other Indo-European languages	3,282	2.1%
Asian and Pacific Island languages	2,569	1.6%
Other languages	1,194	0.8%

N/A – Not Available

Selected Social Characteristics

School Enrollment		
Total population 3 years and over enrolled in school	46,334	100%
Nursery & preschool	2,513	5.4%
Kindergarten	1,748	3.8%
Elementary School (Grades 1-8)	15,358	33.1%
High School (Grades 9-12)	7,899	17.0%
College or Graduate School	18,816	38.6%
Educational Attainment		
Total population 25 years and over	112,683	100%
< 9th grade education	2,088	1.9%
9th to 12th grade, no diploma	4,647	4.1%
High school graduate (includes equivalency)	25,627	22.7%
Some college, no degree	23,017	20.4%
Associate degree	10,957	9.7%
Bachelor's degree	23,982	21.3%
Graduate or professional degree	22,365	19.8%
Percent high school graduate or higher	105,984	94.0%
Percent Bachelor's degree or higher	46,347	41.1%
Marital Status		
Total population 15 years and over	138,416	100%
Never married	43,047	31.1%
Now married, excluding separated	71,423	51.6%
Separated	1,938	1.4%
Widowed	7,198	5.2%
Widowed females 15 years and over	10,658	7.7%
Divorced	23,946	17.3%
Divorced females 15 years and over	17,164	12.4%
Veteran Status		
Total civilian population 18 years and over	130,370	100%
Veterans 18 years and over	14,695	11.3%

Selected Social Characteristics, Continued

Disability Status of the Civilian Non-Institutionalized Population		
Total civilian noninstitutionalized population	163,068	100%
Civilian with a disability	21,361	13.1%
Under 18 years	34,666	21.3%
Under 18 years with a disability	1,546	0.95%
18 to 64 years	100,434	61.6%
18 to 64 years with a disability	10,374	6.4%
65 Years and over	27,968	17.2%
65 Years and over with a disability	9,441	5.8%

Selected Economic Characteristics

Employment Status		
Total population 16 years and over	136,503	100%
16 years and over in labor force	85,745	62.8%
16 years and over not in labor force	50,758	37.2%
Females 16 years and over	69,483	100%
Females 16 years and over in labor force	39,653	57.1%
Population living with own children <6 years	10,731	100%
All parents in family in labor force	7,180	66.9%
Class of Worker		
Total civilian employed population 16 years and over	79,160	100%
Private wage and salary workers	59,233	74.8%
Government workers	15,766	19.9%
Self-employed workers in own not incorporated business	4,068	5.1%
Unpaid family workers	93	0.1%
Occupations		
Total employed civilian population 16 years and over	79,160	100%
Production, transportation, and material moving occupations	8,229	10.4%
Management, business, science, and art occupations	37,714	47.6%
Sales and office occupations	16,106	20.3%
Service occupations	12,707	16.1%
Natural resources, construction, and maintenance occupations	4,404	5.6%
Leading Industries		
Total employed civilian population 16 years and over	79,160	100%
Manufacturing	8,449	10.7%
Educational, health and social services	20,999	26.5%
Trade (retail and wholesale)	10,028	12.6%
Arts, entertainment, recreation, accommodation, and food services	6,718	8.5%
Transportation and warehousing, and utilities	2,879	3.6%
Professional, scientific, management, administrative, and waste management services	9,465	12.0%
Construction	3,719	4.7%
Other services (except public administration)	3,014	3.8%
Finance, insurance, real estate and rental and leasing	4,236	5.4%
Public administration	7,864	9.9%
Agriculture, forestry, fishing and hunting, and mining	615	0.8%
Information	1,174	1.5%

Selected Economic Characteristics, Continued

Income In 2021		
Total households	66,279	100%
< $10,000	3,289	5.0%
$10,000 to $14,999	2,031	3.1%
$15,000 to $24,999	4,580	6.9%
$25,000 to $34,999	5,123	7.7%
$35,000 to $49,999	6,813	10.3%
$50,000 to $74,999	10,981	16.6%
$75,000 to $99,999	9,066	13.7%
$100,000 to $149,999	12,170	18.4%
$150,000 to $199,999	6,014	9.1%
$200,000 or more	6,212	9.4%
Median household income	***$75,901***	N/A
Income in 2021		
Total families	43,072	100%
< $10,000	1,031	2.4%
$10,000 to $14,999	710	1.6%
$15,000 to $24,999	1,741	4.0%
$25,000 to $34,999	2,249	5.2%
$35,000 to $49,999	3,667	8.5%
$50,000 to $74,999	6,553	15.2%
$75,000 to $99,999	6,043	14.0%
$100,000 to $149,999	10,020	23.3%
$150,000 to $199,999	5,393	12.5%
$200,000 or more	5,665	13.2%
Median family income	***$98,217***	N/A
Per capita income in 2021	**$38,882**	N/A
**In 2021 inflation-adjusted dollars*		
Poverty Status in 2021		
Families	N/A	6.8%
Individuals	N/A	10.9%

N/A – Not Available

Bureau of Economic Analysis (BEA) Per Capita Personal Income (PCPI) Figures

	Income	Rank of Ohio Counties
BEA Per Capita Personal Income 2021	$58,363	15th of 88 counties
BEA Per Capita Personal Income 2020	$55,300	14th of 88 counties
BEA Per Capita Personal Income 2019	$52,189	13th of 88 counties
BEA Per Capita Personal Income 2018	$50,821	13th of 88 counties
BEA Per Capita Personal Income 2017	$49,481	12th of 88 counties

(Source: Bureau of Economic Analysis, https://apps.bea.gov/iTable/index_regional.cfm)

Note: BEA PCPI figures are greater than Census figures for comparable years due to deductions for retirement, Medicaid, Medicare payments, and the value of food stamps, among other things

Employment Statistics

Category	Greene County	Ohio
Labor Force	82,100	5,734,800
Employed	79,100	5,516,300
Unemployed	3,000	218,500
Unemployment Rate* in October 2022	3.6	3.8
Unemployment Rate* in September 2022	3.4	3.8
Unemployment Rate* in October 2021	3.4	4.3

**Rate equals unemployment divided by labor force.*
(Source: Ohio Department of Job and Family Services, November 2022, https://ohiolmi.com/portals/206/LAUS/OhioCivilianLaborForceEstimates.pdf)

Estimated Poverty Status in 2021

Age Groups	Number	90% Confidence Interval	Percent	90% Confidence Interval
Greene County				
All ages in poverty	16,474	13,948 to 19,000	10.3%	8.7 to 11.9
Ages 0-17 in poverty	4,131	3,228 to 5,034	12.1%	9.5 to 14.7
Ages 5-17 in families in poverty	3,090	2,394 to 3,786	12.1%	9.4 to 14.8
Median household income	$79,035	$74,024 to $84,046		
Ohio				
All ages in poverty	1,523,366	1,498,525 to 1,548,207	13.3%	13.1 to 13.5
Ages 0-17 in poverty	464,430	451,117 to 477,743	18.2%	17.7 to 18.7
Ages 5-17 in families in poverty	319,011	307,948 to 330,074	16.9%	16.3 to 17.5
Median household income	$62,286	$61,832 to $62,740		
United States				
All ages in poverty	41,393,176	41,149,497 to 41,636,855	12.8%	12.7 to 12.9
Ages 0-17 in poverty	12,243,219	12,110,180 to 12,376,258	16.9%	16.7 to 17.1
Ages 5-17 in families in poverty	8,636,275	8,533,254 to 8,739,296	16.1%	15.9 to 16.3
Median household income	$69,717	$69,583 to $69,851		

(Source: U.S. Census Bureau, 2021 Poverty and Median Income Estimates, https://www.census.gov/data/datasets/2021/demo/saipe/2021-state-and-county.html)

Federal Poverty Thresholds in 2022 by Size of Family and Number of Related Children Under 18 Years of Age

Size of Family Unit	No Children	One Child	Two Children	Three Children	Four Children	Five Children
1 Person <65 years	$15,225					
1 Person 65 and >	$14,036					
2 people Householder < 65 years	$19,597	$20,172				
2 People Householder 65 and >	$17,689	$20,095				
3 People	$22,892	$23,556	$23,578			
4 People	$30,186	$30,679	$29,678	$29,782		
5 People	$36,402	$36,932	$35,801	$34,926	$34,391	
6 People	$41,869	$42,035	$41,169	$40,339	$39,104	$38,373
7 People	$48,176	$48,477	$47,440	$46,717	$45,371	$43,800
8 People	$53,881	$54,357	$53,378	$52,521	$51,304	$49,760
9 People or >	$64,815	$65,129	$64,263	$63,536	$62,342	$60,699

Note: According to the U.S. Census Bureau, poverty thresholds are the dollar amounts used to determine poverty status. The Census Bureau assigns each person or family one out of 48 possible poverty thresholds. The above table indicates how these thresholds vary by size of the family. The same thresholds are used throughout the Unites States (they do not vary geographically). Thresholds are updated annually for inflation using the Consumer Price Index for all Urban Consumers (CPI-U). Although the thresholds in some sense reflect a family's needs, they are intended for use as a statistical yardstick, not as a complete description of what people and families need to live.

(Source: U. S. Census Bureau, Poverty Thresholds 2022, https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html)

Appendix VI: County Health Rankings

	Greene County 2023	Ohio 2023	U.S. 2023
Health Outcomes			
Premature death - Years of potential life lost before age 75 per 100,000 population (age-adjusted) (2018-2020)	6,900	8,700	7,300
Poor or fair heath - Percentage of adults reporting fair or poor health (age-adjusted) (2020)	12%	15%	12%
Poor physical health days - Average number of physically unhealthy days reported in past 30 days (age-adjusted) (2020)	2.8	3.2	3.0
Poor mental health days - Average number of mentally unhealthy days reported in past 30 days (age-adjusted) (2020)	4.7	5.0	4.4
Low birthweight - Percentage of live births with low birthweight (< 2500 grams) (2014-2020)	7%	9%	8%
Health Behaviors			
Adult smoking - Percentage of adults who are current smokers (age-adjusted) (2020)	18%	20%	16%
Adult obesity - Percentage of the adult population (age 18 and older) that report a BMI of 30 or more (age-adjusted) (2020)	35%	36%	32%
Food environment index - Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best) (2019 & 2020)	7.9	6.8	7.0
Physical inactivity - Percentage of adults aged 18 and over reporting no leisure-time physical activity (2020)	21%	24%	22%
Access to exercise opportunities - Percentage of population with adequate access to locations for physical activity (2022 & 2020)	86%	84%	84%
Excessive drinking - Percentage of adults reporting binge or heavy drinking (2020)	19%	19%	19%
Alcohol-impaired driving deaths - Percentage of driving deaths with alcohol involvement (2016-2020)	35%	33%	27%
Sexually transmitted infections - Number of newly diagnosed chlamydia cases per 100,000 population (2020)	343.3	509.2	481.3
Teen births - Teen birth rate per 1,000 female population, ages 15-19 (2014-2020)	12	21	19

(Source: 2023 County Health Rankings for Greene County, Ohio, and U.S. data)

	Greene County 2023	Ohio 2023	U.S. 2023
Clinical Care			
Uninsured - Percentage of population under age 65 without health insurance (2020)	7%	8%	10%
Primary care physicians - Ratio of population to primary care physicians (2020)	1,070:1	1,290:1	1,310:1
Dentists - Ratio of population to dentists (2021)	1,080:1	1,550:1	1,380:1
Mental health providers - Ratio of population to mental health providers (2022)	290:1	330:1	340:1
Preventable hospital stays - Number of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees (2020)	2,682	3,278	2,809
Mammography screening - Percentage of female Medicare enrollees ages 65-74 that receive mammography screening (2020)	40%	40%	37%
Flu vaccinations - Percentage of Medicare enrollees that had an annual flu vaccination (2020)	49%	53%	51%
Social and Economic Factors			
High school completion - Percentage of ninth-grade cohort that graduates in four years (2017-2021)	94%	91%	89%
Some college - Percentage of adults ages 25-44 years with some post-secondary education (2017-2021)	79%	66%	67%
Unemployment - Percentage of population ages 16 and older unemployed but seeking work (2021)	4.3%	5.1%	5.4%
Children in poverty - Percentage of children under age 18 in poverty (2021)	12%	18%	17%
Income inequality - Ratio of household income at the 80th percentile to income at the 20th percentile (2017-2021)	4.5	4.6	4.9
Children in single-parent households - Percentage of children that live in a household headed by single parent (2017-2021)	20%	27%	25%
Social associations - Number of membership associations per 10,000 population (2020)	9.3	10.8	9.1
Injury deaths - Number of deaths due to injury per 100,000 population (2016-2020)	77	96	76

(Source: 2023 County Health Rankings for Greene County, Ohio, and U.S. data)

	Greene County 2023	Ohio 2023	U.S. 2023
Physical Environment			
Air pollution – particulate matter - Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) (2019)	10.3	8.9	7.4
Drinking water violations - Indicator of the presence of health-related drinking water violations. Yes - indicates the presence of a violation, No - indicates no violation (2021)	No	N/A	N/A
Severe housing problems - Percentage of households with at least 1-of-4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities (2015-2019)	12%	13%	17%
Driving alone to work - Percentage of the workforce that drives alone to work (2017-2021)	80%	80%	73%
Long commute – driving alone - Among workers who commute in their car alone, the percentage that commute more than 30 minutes (2017-2021)	24%	31%	37%

(Source: 2023 County Health Rankings for Greene County, Ohio, and U.S. data)
N/A – Not Available

Appendix VII: Summary of Regional CHNA Results

The following information was obtained from the 2021 Regional Community Health Needs Assessment (CHNA). The Regional CHNA assessed the health needs of residents in Southeast Indiana, Northern Kentucky, and Southwest Ohio. The entire 2021 Regional CHNA can be found at https://healthcollab.org/community-health-needs-assessment/

To summarize the results of the Regional CHNA, the lists below highlight main takeaways to consider in the prioritization process.

Most Prevalent Health Conditions (Ranked)	Health Condition Most Untreated (Ranked)	Health Conditions Most Impacted By SDOH
1. Cardiovascular Conditions (Hypertension) 2. Mental Health (Depression and Anxiety) 3. Arthritis 4. Lung/Respiratory Health 5. Dental 6. Maternal health concerns 7. Prevention- related health needs	1. Vision 2. Dental 3. Allergy 4. Mental Health (Depression and Anxiety) 5. Arthritis 6. Cardiovascular Conditions (Hypertension) 7. Maternal health concerns	• Cardiovascular Conditions (Hypertension) • Mental Health (Depression and Anxiety) • Vision • Lung/Respiratory Health • Diabetes

SDOH Factors Impacting Health in the Region

- Economic stability (Stable housing, food security, paying bills)
- Neighborhood and Built Environment (Access to reasonable transportation, parks/outdoor activities, stable phone, and internet)
- Education Access and Quality (Perception of quality of schools and childcare that are available)
- Social and Community Connectedness (Having someone to talk to and feeling connected to the community)
- Healthcare Access and Quality (Perception of quality of health care available, cultural relevancy of health care, ease of finding desired health care, ease of navigating healthcare costs)

Structural Barriers in the Region's Healthcare System

- Competition across healthcare organizations/systems
- Workloads and caseloads are high
- Lack of effective clinical-community linkages
- Language barriers and cultural differences
- High cost of services
- Limited workforce
- Inflexible and restricted funding structures and/or investment in community
- Lack of culturally relevant communication strategies and services across providers
- Limited implementation of DEI practices within organizations
- Community member distrust in the healthcare ecosystem (providers, insurers, pharmacies, etc.)
- Limited implementation of best practices of trauma-informed care

Systemic Barriers

- Structural racism
- High-Cost healthcare system
- Structural divide between healthcare system, holistic wellness providers, and social service providers

Prioritized Health Needs

Regional CHNA Results

Most Prevalent Health Conditions in the Region

Greatest health needs across the region were identified utilizing multiple data sources, including self-report Regional CHNA community survey results (see Figure 1), hospitals' utilization data (see Appendix A for details), and county-level Center for Disease Control (CDC) leading cause of death data. In review of these varying data sources, the most **prevalent health conditions** across the region include:

1. **Cardiovascular-related conditions (i.e., high blood pressure and/orhigh cholesterol)**

   As shown in Figure 1, approximately three in ten residents from the Regional CHNA community survey report needing treatment for high blood pressure and/or high cholesterol. As cardiovascular-related conditions, including high blood pressure/high cholesterol are the leading health needs among residents and are major risk factors for heart disease,[4] it is of no surprise that Diseases of the Heart, particularly Major Cardiovascular Disease, was the leading cause of death in 2019, with an average age-adjusted rate of 251 per 100,000 individuals.[5] Nationally, heart disease is the leading cause of death. [vi] Further, among emergency room and inpatient hospital visits in the region from January 2019 through June 2020, seven percent (or 72,889) of the visits were due to primary diagnoses of the circulatory system (after removing visits due to symptoms, signs, and abnormal clinical and laboratory findings).

2. **Mental health-related conditions (i.e., depression and anxiety disorders)**

   Across the region, approximately two in ten residents from the Regional CHNA community survey report needing treatment to support their mental health (i.e., depression, anxiety, etc.; Figure 1). This is consistent with national rates. [vii] Further, among emergency room and inpatient hospital visits in the region from January 2019 through June 2020, three percent (or 22,112) of the visits were due to primary diagnoses of mood/affective and anxiety/stress-related disorders (after removing visits due to symptoms, signs, and abnormal clinical and laboratory findings).

3. **Arthritis or osteoporosis**

   Across the region, approximately one in ten residents from the Regional CHNA community survey report needing treatment for arthritis or osteoporosis (Figure 1). This is slightly lower than national trends with an estimated two in ten U.S. residents having been diagnosed with arthritis.[viii] Further, among emergency room and inpatient hospital visits in the region from January 2019 through June 2020, one percent (or 10,498) of the visits were due to primary diagnoses of osteoarthritis and osteoporosis (after removing visits due to symptoms, signs, and abnormal clinical and laboratory findings).

[4] https://www.cdc.gov/heartdisease/risk_factors.htm

[5] Age-adjusted rates were obtained from CDC Wonder, Underlying Cause of Death (https://wonder.cdc.gov/wonder/help/DataExport.html#Excel) and averaged across all counties within the region (with exception of Ohio and Union Counties due to limited data), ranging from 189.8 in Ripley County to 325.4 in Adams County.

4. **Lung/respiratory-related conditions, including asthma**

Across the region, approximately one in ten residents from the Regional CHNA community survey report they needed treatment for lung health conditions (including asthma, COPD, emphysema, chronic bronchitis) and, similarly, for COVID-19 (Figure 1). This is higher than national trends. Across the U.S., approximately 8% of adults have asthma and 4.6% have chronic obstructive pulmonary disease (COPD). In terms of the Regional CHNA community survey, need for treatment prevalence for lung-related conditions ranked fifth in terms of the conditions surveyed, however, hospital data reveals that it is among the leading reasons (among the priority health conditions) why people visit the ER or are hospitalized as inpatient. From January 2019 through June 2020, 11 percent (or 111,301) of the visits were due to primary diagnoses of diseases of the respiratory system[6] (after removing visits due to symptoms, signs, and abnormal clinical and laboratory findings).

5. **Oral/Dental disease**

Across all communities, there is a need for access to dental services. Because dental services are not under the system's 'healthcare' umbrella, dental care often requires supplemental insurance. In focus groups, dental services were identified as a need across many community members.

6. **Maternal health complications**

Maternal health complications were a priority health area for women. Across the region, less than one in ten residents reported they needed treatment for maternal health complications (a lower rate relative to other conditions is to be expected given this can only apply to pregnant women; Figure 1). Further, among emergency room and inpatient hospital visits in the region from January 2019 through June 2020, three percent (or 30,363) of the visits were due to primary diagnoses of pregnancy, childbirth, and the and certain conditions originating in the perinatal period.

7. **Prevention services**

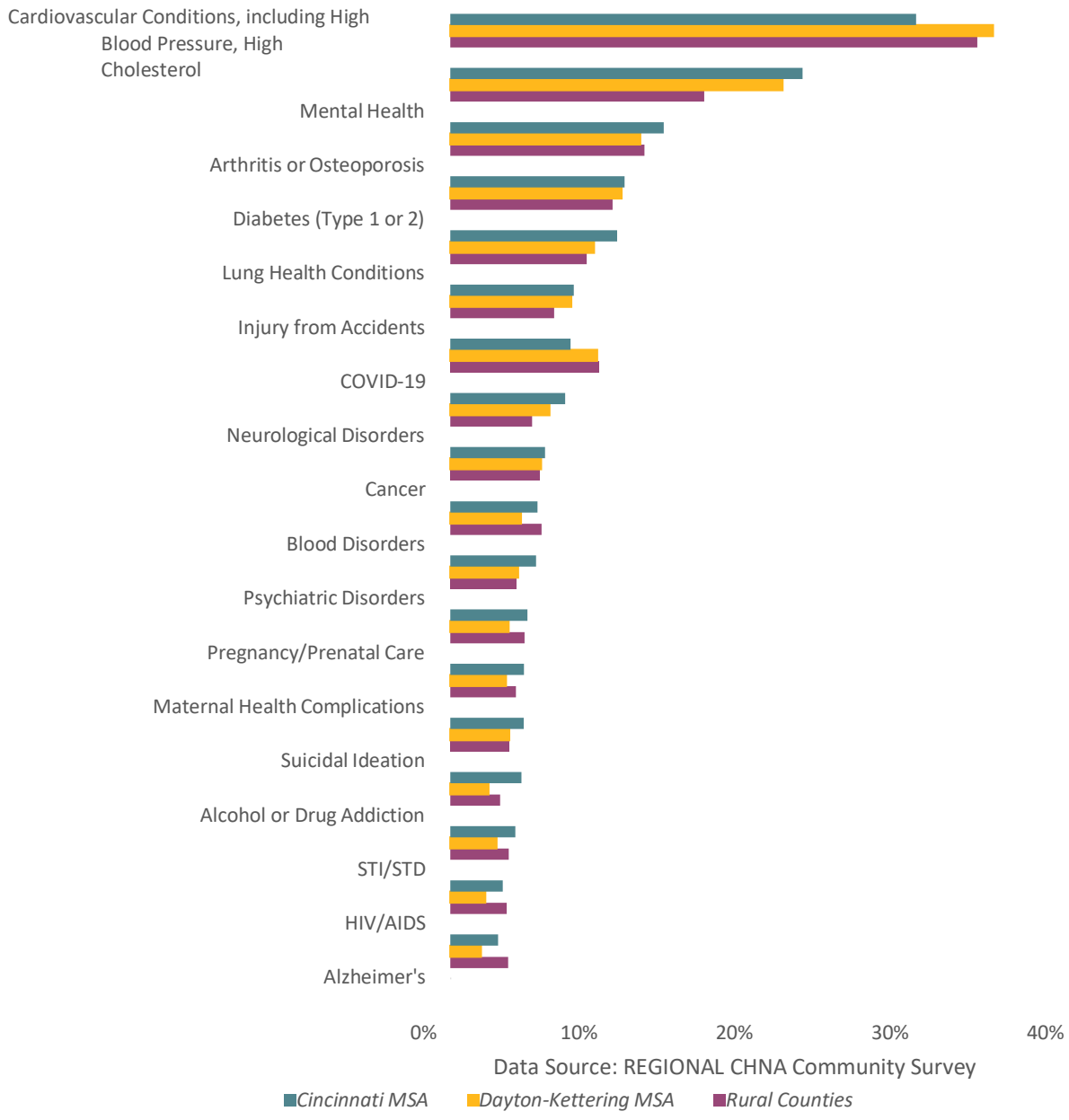
While community members reported needing treatment for the above specific conditions, when asked in focus groups and interviews, community members and providers alike identified the need for prevention services in the region. Prevention services are needed across the life span, with community members highlighting the need for more mental health and addiction prevention programs for youth, adults, and older adults (e.g., mindfulness); preventative reproductive health care for youth and adults; nutritional education; programs that promote social connectivity; and programs that promote exercise and coping with stress.

[6] Based on ICD10 codes provided in the hospital data, we were unable to determine if this accounts for COVID-19.

Additional health conditions were assessed in this Regional CHNA based on interests and priorities of local health improvement plans across all three states. All conditions are summarized in Figures 1 and 2 as well as in Tables 1 and 2. However, only the most prevalent are discussed and further analyzed in this Regional CHNA.

Figure 1. Overall Need for Treatment for Health Conditions

% of individuals who self-reported needing treatment for this condition in the past year



Greatest Unmet Needs

In the Regional CHNA community survey, community members were asked to identify their unmet health needs, i.e., the health conditions for which they needed health care but did not receive care/treatment in the past year (Figure 2). To investigate health needs further, community members were also asked what *other* conditions they had and needed treatment for but did not get treatment in the past year. These *other* conditions were not identified in the original list of health conditions but were included in the survey based on the understanding that these conditions were also prevalent in the community. Together, there are seven leading unmet healthcare needs reported in the Regional CHNA community survey by community members throughout the region. Systemic barriers driving these unmet needs are further discussed in the following sections of this report.

1. **Vision Concerns** 

   When asked what other health conditions (i.e., other than the priority health conditions shown in Table 1) community members needed treatment for but did not get, the most common condition was vision concerns, with approximately two in ten community members indicating this (Table 1).

2. **Oral/Dental disease** 

   Similar to unmet vision needs, community members are presented with barriers that lead to unmet dental needs. Approximately two in ten community members reported needing treatment for dental concerns but not receiving it within the past year (Table 1).

3. **Allergies** 

   Unmet health needs for allergies are also fairly prevalent throughout the region with approximately two in ten residents reporting needing but not receiving care for this health condition (Table 1).

4. **Mental health-related conditions (i.e., depression and anxiety disorders)** 

   Among the priority health conditions surveyed, mental health treatment was the leading unmet need across the region. Specifically, among residents who reported needing treatment for mental health, nearly one in three indicated that they did not receive it (Figure 2).

5. **Arthritis or osteoporosis** 

   Among the priority health conditions surveyed, treatment for arthritis or osteoporosis was the second highest unmet need across the region. Specifically, among residents who reported needing treatment for arthritis or osteoporosis (Figure 2), one in three or more (in Cincinnati MSA and rural counties) indicated that they did not receive it (Figure 2).

6. **Cardiovascular-related conditions (i.e., high blood pressure and/or high cholesterol)**

Not only are high blood pressure/high cholesterol the leading health needs in the region, but these conditions are also a leading unmet health need among the priority health conditions surveyed. Specifically, among residents who reported needing treatment for high blood pressure/high cholesterol, approximately one in ten did not receive it (Figure 2).

7. **Maternal health complications**

Maternal health is a priority for the region. Among pregnant women who need/needed treatment for maternal health complications, more than half report an unmet need in the Regional CHNA community survey results. Further, across Dayton and Cincinnati MSAs in 2019, approximately six percent of pregnant women received late (care started in the third trimester) or no prenatal care during their pregnancy.[7]

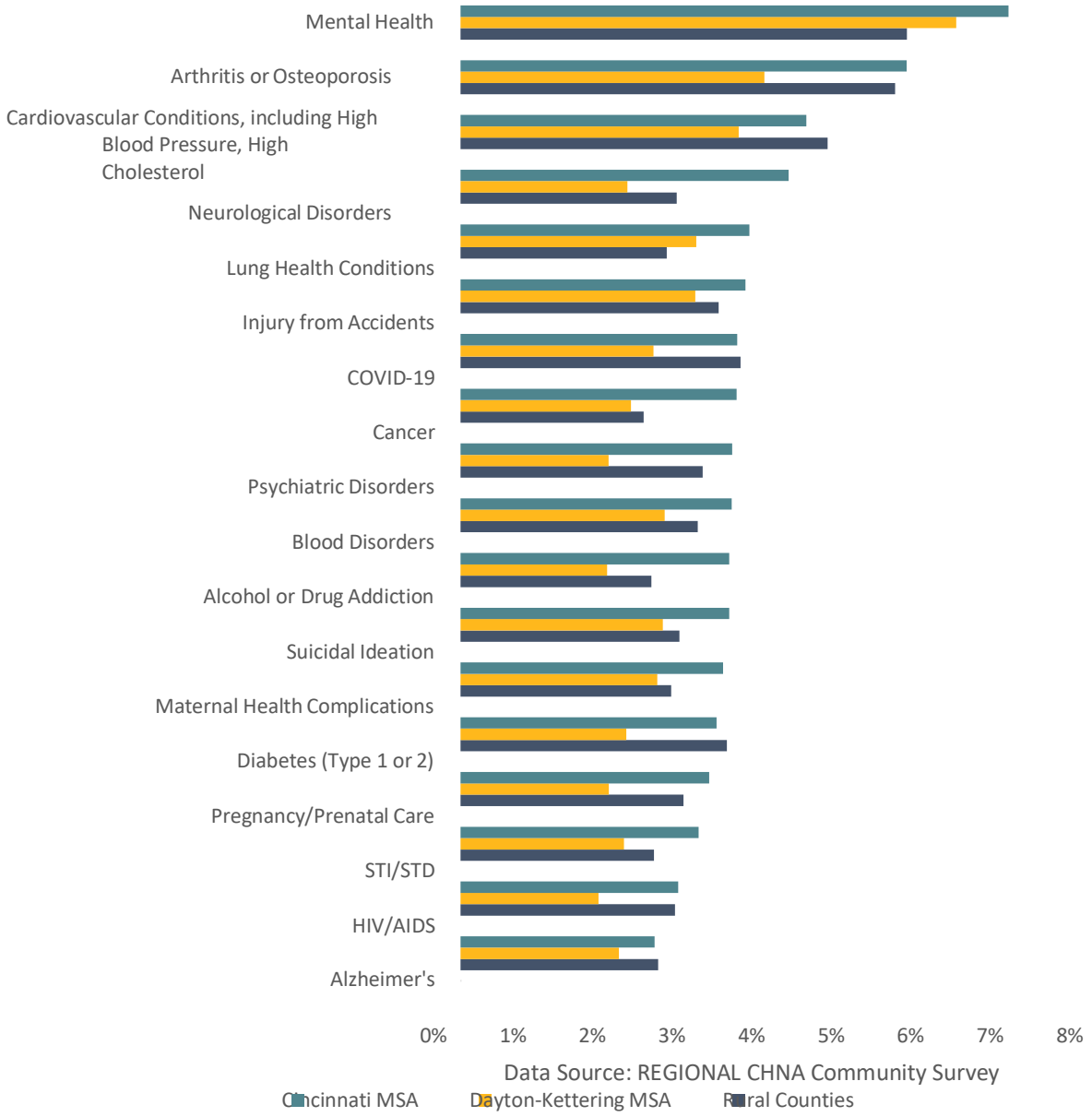
Table 1. Percent of individuals with other unmet health needs.
*What **other** health conditions did you have and need treatment for but did not get in the past 12 months?*

Other Health Condition	Cincinnati MSA (n = 4,415)	Dayton-Kettering MSA (n = 2,543)	Rural Counties (n = 1,363)
Vision concerns	23%	22%	23%
Dental concerns	20%	17%	17%
Allergies	20%	16%	15%
Migraines	9%	7%	8%
Autoimmune disease	6%	5%	5%
Men's reproductive health concerns (not cancer)	2%	3%	2%
Women's reproductive health concerns (not cancer)	3%	4%	3%
Another	3%	2%	3%
Data Source: Regional CHNA community survey			

[7] https://wonder.cdc.gov/wonder/help/DataExport.html#Excel; estimates are limited to counties with sufficient data needed for CDC to calculate reliable estimates. These counties include: Boone, Kenton, Butler, Clermont, Hamilton, Warren, Clark, Greene, Miami, and Montgomery.

Figure 2. Unmet Need for Health Conditions

% of individuals who self-reported needing treatment for this condition but did not receive it in the past year



When asked in focus groups what healthcare services they need most in their communities, community members across the region said, “dental, mental health, and prevention.”

Underserved Populations

There is a myriad of factors that can explain why individuals have unmet health needs (defined as needing treatment for a condition and not receiving it), ranging from individual factors (e.g., choosing not to seek out health care due to the assumption symptoms will improve on their own), family/personal responsibilities (e.g., prioritizing caregiving responsibilities over one's own health needs), and system-level factors (e.g., lack of availability or accessibility to care). Regardless of the reason why individuals have unmet needs, understanding for whom unmet health needs are most prevalent are critical to inform targeted interventions and/or outreach efforts to ensure residents throughout the region understand when, where, and how to get treatment. The following lists for whom unmet needs are most common and the following sections will provide greater context behind the reasons why treatment is not sought.

- **Males.** Among the greatest unmet needs across the regions, males, relative to females, are significantly more likely to have unmet health needs for vision concerns (1.2 times as likely),[8] dental concerns (1.3 times as likely),[9] and mental health (2.2 times as likely).[10]
- **Black, Multiracial, Asian, and American Indian/Alaskan Native.** Among the greatest unmet needs across the regions, Black/African American individuals, relative to White individuals, are significantly more likely to have unmet health needs for dental (1.3 times as likely)[11] and allergy- related concerns (1.6 times as likely),[12] as well as mental health (1.6 times as likely).[13] Multiracial individuals were also significantly more likely to have unmet dental needs (1.5 times as likely) relative to White individuals.[14] Finally, individuals identifying as Asian, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander or another race (that is not Black, White or multiracial) relative to those identifying as White, are significantly more likely to have unmet mental health (1.8 times as likely)[15] and allergy needs (1.7 times as likely).[16]
- **Younger Individuals.** Among the greatest unmet health needs throughout the region, younger individuals[17] are significantly more likely to experience unmet needs among nearly all the

[8] The odds of having an unmet vision need for males is 1.2 times as large as it is for females (b = .15, p < .05).
[9] The odds of having an unmet dental need for males is 1.3 times as large as it is for females (b = .24, p < .05).
[10] The odds of having an unmet mental health need for males is 2.2 times as large as it is for females (b = .80, p < .05). [11] The odds of having an unmet dental need for Black/African American individuals is 1.3 times as large as it is for White individuals (b = .29, p < .05)
[12] The odds of having an unmet allergy need for Black/African American individuals is 1.6 times as large as it is for White individuals (b = .45, p < .001)
[13] Greater unmet mental health needs for Black/African American individuals mainly derived from qualitative data collection. The logistic regression results were not statistically significant at p < .05, though the effect size, odds ratio, for having an unmet mental health need was rather sizeable for Black individuals relative to White individuals (odds were 1.6 times as large; b = .47, p =.059).
[14] The odds of having an unmet dental need for Multiracial individuals is 1.5 times as large as it is for White individuals (b = .43, p < .05)
[15] The odds of having an unmet mental health need for individuals identifying as Asian, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander, or identified as another race that is not Black, White or multiracial is 1.8 times as large as it is for White individuals (b = .57, p < .05)
[16] The odds of having an unmet allergy need for individuals identifying as Asian, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander, or identified as another race that is not Black, White or multiracial is 1.7 times as large as it is for White individuals (b = .51, p < .001)
[17] Age is treated as a continuous variable and thus differences in unmet need based on age is interpreted as each additional year younger.

conditions, including dental, [18] allergy, [19] mental health, [20] arthritis/osteoporosis, [21] and cardiovascular-related conditions. [22] Thus, though younger individuals are less likely to need treatment for these conditions, when they do need treatment, they are also less likely to get it. (See footnotes for effect sizes.)

- **LGBTQ+ Individuals.** The exposure to chronic and pervasive stress, in line with the minority stress model,[ix] creates results in health disparities among LGBTQ+ individuals when compared to heterosexual, cisgender individuals (Caceres 2020). [x] The health disparity among LGBTQ+ individuals has primarily been studied in relationship to cardiovascular disease and mental health, with research concluding that rates of occurrence are higher in both cases (Gonzales 2017; Merschel 2020).[xi] Certain health conditions are found to be more prevalent among LGBTQ+ adults including high blood pressure and obesity.[xii] Because LGBTQ+ individuals report high levels of discrimination when accessing health care (between 50-70% depending on sexual orientation and gender identity), they are more apt to "delay primary or preventative care" and display mistrust in health care. [xiii]
- **Maternal Age Women.** Unmet needs for maternal age women highlight racial and ethnic discrepancies in health care. In Dayton and Cincinnati MSAs, individuals who are Hispanic as well as individuals who are Black have lower rates of receiving prenatal care during the first trimester, with first trimester prenatal care rates up to 19% lower for these individuals relative to other populations in these regions. [23] Overall, rates of pre-pregnancy obesity, as well as chronic illness during pregnancy including diabetes and hypertension, have all increased by an average of two percent (Cradle Cincinnati 2020). Other conditions such as drug exposure, postpartum depression, unintentional pregnancies, and those with an underweight pre- pregnancy body mass index have all decreased in recent years (Cradle Cincinnati 2020).
- **Veterans and Active Military.** Active military, relative to non-active military, are significantly more likely to have unmet mental health (2.5 times as likely), [24] arthritis/osteoporosis (2.8 times as likely), [25] and cardiovascular-related needs (2.7 times as likely). [26] Further, veterans, relative to non-veterans, are significantly more likely to have unmet mental health needs (2.3 times as likely).[27]

[18] For each additional year increase in age, the odds of having an unmet dental need are .7% less (b = -.007, p < .05). Thus, the odds of having an unmet need for an individual aged 55 are .7% less relative to an individual aged 54; the odds of having an unmet need for an individual aged 55 are 6.4% less than an individual aged 45.
[19] For each additional year increase in age, the odds of having an unmet allergy need are 1.6% less (b = -.02, p < .001).
[20] For each additional year increase in age, the odds of having an unmet mental health need are 3.0% less (b = -.03, p < .001).
[21] For each additional year increase in age, the odds of having an unmet arthritis/osteoporosis need are 4.5% less (b = -.05, p < .001).
[22] For each additional year increase in age, the odds of having an unmet cardiovascular need are 7.4% less (b = -.08, p < .001). [23] https://wonder.cdc.gov/wonder/help/DataExport.html#Excel; estimates are limited to counties with sufficient data needed for CDC to calculate reliable estimates. These counties include: Boone, Kenton, Butler, Clermont, Hamilton, Warren, Clark, Greene, Miami, and Montgomery.
[24] The odds of having an unmet mental health need for active military is 2.5 times as large as it is for non-active military (b = .90, p < .01)
[25] The odds of having an unmet arthritis/osteoporosis need for active military is 2.8 times as large as it is for non-active military (b = 1.01, p < .05)
[26] The odds of having an unmet cardiovascular need for active military is 2.7 times as large as it is for non-active military (b = .98, p < .01)
[27] The odds of having an unmet mental health need for veterans is 2.3 times as large as it is for non-veterans (b = .82, p < .001)

- **Individuals with Disabilities.** Individuals with disabilities, relative to those without disabilities, are significantly more likely to have unmet vision (1.7 times as likely),[28] dental (1.7 times as likely),[29] and allergy needs (1.4 times as likely).[30]
- **Caregivers of Individuals with Disabilities.** Individuals caring for others with a disability are significantly more likely to have unmet needs for nearly all of the greatest unmet needs in the region (except cardiovascular-related), including mental health (1.5 times as likely),[31] dental (1.7 times as likely), [32] vision (1.5 times as likely), [33] allergy (1.2 times as likely),[34] and arthritis/osteoporosis (2.1 times as likely).[35]
- **Individuals without Private Insurance.** Individuals without private insurance (those not insured and those publicly insured) are significantly more likely to have unmet mental health (.6 times as likely),[36] dental (.7 times as likely), [37] and cardiovascular-related needs (.6 times as likely), [38] relative to privately insured individuals.
- **Individuals with Lower Educational Attainment.** Individuals with lower educational attainment are significantly more likely to have unmet vision,[39] dental,[40] and cardiovascular needs.[41]
- **Women with past traumas** of physical abuse and/or sex trafficking identified a need for chiropractic care but the cost can be too high, the care is not often covered by insurance, and/or the service is not accessible from shelters or group homes.

[28] The odds of having an unmet vision need for individuals with disabilities is 1.7 times as large as it is for those without disabilities (b = .52, p < .001)
[29] The odds of having an unmet dental need for individuals with disabilities is 1.7 times as large as it is for those without disabilities (b = .53, p < .001)
[30] The odds of having an unmet allergy need for individuals with disabilities is 1.4 times as large as it is for those without disabilities (b = .30, p < .001)
[31] The odds of having an unmet mental health need for caregivers of individuals with disabilities is 1.5 times as large as it is for those who are not caregivers (b = .40, p < .01)
[32] The odds of having an unmet dental need for caregivers of individuals with disabilities is 1.7 times as large as it is for those who are not caregivers (b = .53, p < .001)
[33] The odds of having an unmet vision need for caregivers of individuals with disabilities is 1.5 times as large as it is for those who are not caregivers (b = .44, p < .001)
[34] The odds of having an unmet allergy need for caregivers of individuals with disabilities is 1.2 times as large as it is for those who are not caregivers (b = .18, p < .05)
[35] The odds of having an unmet arthritis/osteoporosis need for caregivers of individuals with disabilities is 2.1 times as large as it is for those who are not caregivers (b = .74, p < .001)
[36] The odds of having an unmet mental health need for privately insured is .6 times as large (i.e., less likely) as it is for those who are not privately insured (b = -.51, p < .001)
[37] The odds of having an unmet dental need for privately insured is .7 times as large (i.e., less likely) as it is for those who are not privately insured (b = -.34, p < .001)
[38] The odds of having an unmet cardiovascular need for privately insured is .6 times as large (i.e., less likely) as it is for those who are not privately insured (b = -.51, p < .01)
[39] The odds of having an unmet vision need for those with a college degree and those with a graduate degree are .81, and .76 times as large (i.e., less likely), respectively, as it is for those with only a high school degree (b = -.22, p < .05; b = -.28, p < .05, respectively).
[40] The odds of having an unmet dental need for those with a college degree and those with a graduate degree are .71, and .59 times as large (i.e., less likely), respectively, as it is for those with only a high school degree (b = -.33, p < .05; b = -.53, p < .05, respectively).
[41] The odds of having an unmet cardiovascular need for those with a graduate degree are .46 times as large (i.e., less likely) as it is for those with only a high school degree (b = -.77, p < .05).

- **Incarcerated community members and community members transitioning** back into the community identified a need for greater access to longer term mental health services, particularly coordination of services.
- **Community members in addiction recovery** reported needing dental repair and/or dentures.
- **Older adults and youth** need prevention services in both mental health and addiction.

Themes from qualitative, secondary, and survey data highlight specific populations within the region most likely to have unmet needs. All differences reported below (except for qualitative data summaries) are after accounting for all other demographic variables listed in Table 2.

Disparity	Vision	Dental	Allergy-Related	Mental Health	Arthritis/ Osteoporosis	Cardio-vascular	Maternal Complications
Males	X	X		X			
Younger individuals		X	X	X	X	X	
Older individuals	X						
Black individuals		X	X	*			*
Multiracial individuals		X					
Asian, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander or another race that is not White or Black or Multiracial			X	X			
Active military				X	X	X	
Military veterans				X			
Individuals without private insurance		X		X		X	
Individuals with disabilities	X	X	X				
Individuals with lower education	X	X				X	

Disparity	Vision	Dental	Allergy-Related	Mental Health	Arthritis/ Osteoporosis	Cardio-vascular	Maternal Complications
Individuals caring for a disabled individual	X	X	X	X	X		
LGBTQ+ individuals				*		*	
Cincinnati MSA			X				
Dayton MSA						X	

Data source: Regional CHNA community survey
Note. "X" indicates significant, negative effects (i.e., greater likelihood of having an unmet need relative to the reference, such as males compared to females or Black/African American compared to White) from logistic regression analyses. Each unmet health condition was a separate analysis with the same predictors across all models: gender, age, race, ethnicity, education, military/veteran status, disability status, private insurance, sexual orientation, and caregiver of an individual with a disability. Thus, all negative effects are after controlling for all other variables in the model. "*" indicates an additional theme gathered from interviews/focus groups or secondary data, not effects from regression analyses.

Places With Unmet Needs

Differences between subregions were not very common with respect to unmet health needs (i.e., after accounting for individual demographic differences, there were often not meaningful differences by subregion). However, two themes emerged.

- Relative to Dayton MSA, individuals in Cincinnati MSA are significantly more likely to have unmet allergy needs.[42]
- Relative to individuals living in Cincinnati MSA, individuals living in Dayton MSA are significantly more likely to have unmet cardiovascular-related needs.[43]

[42] The odds of having an unmet allergy need for individuals living in Cincinnati MSA are 1.7 times as large as it is for those living in Dayton MSA, adjusting for age, sex, race, ethnicity, education level, military status, disability status, and caring for a disabled person. ($b = .29$, $p < .001$).

[43] The odds of having an unmet cardiovascular need for individuals living in Cincinnati MSA are .66 times as large (i.e., less likely) as it is for those living in Dayton MSA, adjusting for age, sex, race, ethnicity, education level, military status, private insurance or lack thereof, caring for a disabled person, and sexual orientation. ($b = -.42$, $p < .05$).

Appendix VIII: Community Stakeholder Perceptions

Greene County CHA Release Event
Date: Tuesday, July 18th

What surprised you the most?

- Greene County residents surpassing the state and nation in various chronic health conditions (asthma, arthritis, high blood cholesterol, etc.) (5)
- Overweight/obesity rates in Greene County (4)
- Increase in uninsured
- Rates of flu vaccines
- Rate of mammograms
- Only 7% of men had a digital rectal exam when it can be done with a simple blood test
- 29% of adults were limited in some way because of a physical, mental, or emotional problem
- 36% reported that poor physical or mental health kept them from usual activities in the last 30 days
- Number of firearms in the community
- Transportation needs for education and awareness
- 16% of adults were current smokers and/or currently used electronic vapor products
- All the binge drinking- perhaps a lack of awareness of health implications or what binge drinking is
- The increase in neonatal deaths
- How much higher Greene County is than the state for infant mortality
- 24% of Greene County women were pregnant in the last 5 years
- Low income was a factor for across the board. African American was next most common factor for negative outcomes
- The responses from the focus group
- The demographics of the data being weighted significantly towards people earning $50k+/annually (with 47% over 75k)

What would you like to see covered in the report next time?

- A more in-depth assessment of chronic pain and the stigma associated with it
- Behaviors people have tried to reduce their weight
- Women's health and men's health broken down by race not just age
- Childhood immunization rates
- Maternal and infant mortality
- More information about family well-being, children, and student populations
- Access to transportation
- More data on residents who make less than 50k
- Find ways to reach more of the low-income population. Maybe a survey method that could still be statistically valid, but digital maybe
- More detailed data across a number of areas (statistics on maternal and infant health based on race, income, type of insurance; types of depression screenings provided; credentials of providers of depression screenings; detailed data on food apartheid-specifically shift the focus away from the notion of "food deserts"; exploration of the top three MH diagnoses- specifically if these residents were ever screened for traumatic experiences)
- Find a way to survey youth (maybe in a separate survey)
- If we know any root causes that might explain the data
- Background demographic data in relation to our environments in Greene County (both built and natural)
- Information more specifically broken down by communities (Beavercreek did not have a successful focus group) and county-wide data geo-coded
- Synopsis of SDOH resources available in Greene County
- How we can support mental health together as a community especially in our kids
- More about what is being done to improve the identified barriers

What will your organization do with this data?

- Develop and improve programming/partnerships to meet community needs (3)
- Strategic planning purposes (2)
- Use it as a guide to align programs
- Plan projects, speaker presentations, and activities to inform community of mobility options
- Optimize programming and interventions for students, children, and their families
- We will focus on potential programming for the issues that most affect older adults
- Review this data to determine how we can improve the quality of life for our clients
- See how we can better support the lower income demographic
- Collaborate with community partners to impact those things we can (prioritize communications and outreach)
- Use in the planning process for developing transit routes and areas of service to reduce barriers for accessing services, work, and community amenities
- Use it to strategically determine preventative care focus
- Help with education and injury prevention of our population
- Continue providing services and emphasize those that help address the CHA priorities
- Make changes to positively impact the residents we serve in Greene County
- Increase our intentionality and consistency with assessing and treatment planning for the impact of obesity on MH, impact of food apartheid on our clients, assessing firearm status of households, etc.
- Use for grant writing and reporting
- Look for ways outside of the CHIP that we can work to raise awareness or address some of the things that stand out, but may not be a top priority overall

Based on the Community Health Assessment, what health topics do you see as the most important? Please list 2 or more choices.

- Mental health (13)
- Obesity (9)
- Social Determinants of Health (4)
- Health care access (including cost) (4)
- Addressing the income disparity, providing resources and connections (2)
- Access to food (2)
- Binge drinking education (2)
- Preventative health (2)
- Health status perception (2)
- Substance use disorder
- Vaping
- Nutrition
- Poor physical health that keeps respondents from doing usual activities
- Domestic violence
- Men's preventive care
- Adult immunizations
- Childhood immunization rates
- Minority health
- Neonatal death
- Chronic disease
- Quality of life
- Raising awareness about health care services both physical and mental, beyond the basics and preventative care
- Transportation barriers
- Health care coverage

In your opinion, what is the best way to communicate the information from the Community Health Assessment and Community Health Improvement Plan to the rest of the public?

- Social media (12)
- Newspapers (5)
- Presentations/meetings with community organizations (senior centers, Rotary, Chambers of Commerce, Families and Children First Group, township/municipal meetings, churches) (5)
- Newsletters (print materials, electronic methods that are sharable on various platforms) (4)
- Websites (4)
- Television (4)
- Radio (3)
- Targeted media (consider various audiences, such as age groups) (2)
- Billboards (2)
- Summarize results and make easily shareable (2)
- Pamphlets/flyers (2)
- Health care provider offices
- 1:1 interactions to understand what the CHA is showing Greene County residents
- Public health "town hall" type event
- Public health tip cards with preventative measures for the health problems, where you can receive help for such health problems in Greene County
- Health classes at the schools
- Infographics (shared electronically via websites, partner organizations, social media, etc.)
- In smaller groupings
- Companies
- News outlets
- Key stakeholder drop offs/introductions. Hidden gem stakeholders- a small business, churches, non-profits, government agencies not typically affiliated with "health" concerns
- Use GCPH resources and ask all partners to all spread the word through their resources and networks

What are some barriers people may face regarding the issues identified?

- Transportation (6)
- Socio-economic status (6)
- Connection with resources (3)
- Support from professionals, family members, or friends to make lifestyle changes needed to improve health (3)
- Awareness of available resources (3)
- Stigma (3)
- Education (3)
- Health coverage (2)
- Knowledge and understanding (2)
- Navigating the process to access care or other resources (2)
- Cost of nutritious foods/fresh produce (2)
- Opportunity
- Availability of health providers
- Inability to get time off work to have regular health care visits
- Social determinants of health (challenging to address at the individual level)
- Elderly
- Education level
- Prejudice and stereotype
- Cultural practices
- Familial practices
- Generations of dysfunction
- Shame
- Isolation
- Feeling like there is too much information and feeling overwhelmed
- Self-identification and knowing how to overcome

Are there any groups or agencies you think would be valuable resources or partners to work towards the priority health issues?

- Health centers/providers (e.g., Kettering/Premier Health, urgent care centers) (6)
- School districts/Greene Educational Service Center (5)
- Faith-based organizations and churches (5)
- Chambers of Commerce (2)
- Council on Aging (2)
- YMCA (2)
- Local universities (2)
- Health insurance plans (e.g., Buckeye Health Plan) (2)
- Miami Valley Regional Planning Commission (2)
- Local municipalities/cities/villages/townships (2)
- Public health department
- Health and human services
- Mental health and substance use disorder agencies
- The Ohio Department of Insurance
- Child care centers
- Family violence prevention
- Parents
- Organizations/agencies who participated in the assessment
- Greene County Parks and Recreation
- Grocery stores
- OSU extension
- United Way
- Food pantries
- Libraries
- American Heart Association
- Local bars/breweries
- Case managers
- Small business
- City planners
- Other government agencies

Other comments or concerns:

- Very appreciative of all the work done thus far! I believe the current data is helpful in understanding the experiences/needs of our community and for illuminating areas that we need to investigate further
- Raise awareness, starting with student population. Overuse of technology and sedentary lifestyles are linked to mental and physical health issues
- Please keep up the great work. I am motivated by this assessment to help Greene County meet Healthy People 2030 goals
- Thanks for doing this! It's a huge job!
- We have a treasure trove of information to jump off from. I suggest that we be mindful of things that made us ask why when we read it or those things that surprised us. Also the things that we may have addressed before but the trend is in the wrong direction—seek the real root cause and new potential solutions not just the low hanging fruit. It is okay to have a long term goal, with some short-term goals that keep us moving toward the bigger goal. Some things maybe should be ongoing efforts and seeking best practices or something outside the box… even if it is something that we have to seek funding for
- Great work! Keep up the momentum you have going
- This is great data and will help serve the community in prevention
- Thank you! Excellent data presentation