



2024 CHARLES COUNTY Community Health Needs Assessment

In Conjunction with the Charles County Department of Health
and Partnerships for a Healthier Charles County



UM CHARLES
REGIONAL
MEDICAL
CENTER



UNIVERSITY of MARYLAND
MEDICAL SYSTEM

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Charles County health needs assessment executive summary

From July 2023 to February 2024, the University of Maryland Charles Regional Medical Center, the Charles County Department of Health, and the Partnerships for a Healthier Charles County undertook a comprehensive assessment of the health needs of Charles County, Maryland.

To provide a comprehensive assessment of the health needs of the county, a four-method plan was developed which included 5 different sources of data: a long online survey of Charles County residents' perceptions of health and health behaviors, a short paper survey on health perceptions throughout the county, focus groups with community members and leaders, a quantitative data analysis of secondary, published data. Data collection occurred between July 2023 and December 2023.

The use of the multiple data collection methods strengthened the validity of the assessment's findings as well as ensuring that Charles County residents had an opportunity to participate in the assessment process and to provide recommendations and suggestions for programming to address their communities.

Six focus groups were conducted with the participation from community members with various backgrounds. The goal of each focus group was to gain feedback, gather insights, and obtain opinions and perceptions of the current health status in Charles County. The six focus groups included: the Charles County school nurses, members of the Partnerships for a Healthier Charles County Local Health Improvement Coalition, Charles County Access to Care Coalition members, Healthcare Consumers and Community Leaders, Chronic Disease Prevention and Management Coalition members, and Charles County Overdose Fatality Review Team members.

The biggest issues to emerge from the focus groups included:

- Behavioral Health Services and Resources
- Transportation
- Access to Care
- Specialty Services
- Obesity/Overweight
- Cost of Living (health care costs, housing, food, inflation)

755 people completed the 51-question online survey between July 1, 2023, and December 31, 2023. It was designed using Survey Monkey, and a link was provided on the University of Maryland Charles Regional Medical Center website and the Charles County Department of Health website. The first set of question gathered demographic information for all participants. A second set of questions asked people about their own health status and their access to needed health care. A third set of questions asked participants about their risk factors for health conditions (example, fruit and vegetable intake, physical activity level, alcohol/tobacco use) to determine if they are at risk for certain health conditions and chronic diseases. The fourth set of questions asked

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participants about their perceptions of the state of health and health conditions within Charles County. A fifth set of questions asked participants perceptions of improvements within the county to improve health. Lastly, survey respondents were given the opportunity to comment on the state of health in the county and provide suggestions on how to improve the health status of Charles County.

Most of the respondents were from Charles County (85.4%). The second largest percentage is from St. Mary's County (5.6%). Only 5.68% of respondents reported living outside of Southern Maryland (Charles, Calvert, St Mary's, or Prince George's). Approximately 67.15% of the respondents were between the ages of 45-74 years. The highest percentage was in the 45-54-year age group (25.66%). The overwhelming majority of the respondents were assigned female at birth (79.52%).

This report represents a more diverse group of respondents. Minorities made up 47.16% of the total survey population. This is a large increase from 26% reported in the last needs assessment report. African Americans comprised 41.49% of the respondents. This is an increase from 22% in the FY21 needs assessment report. Approximately 4.47% of the survey respondents self-identified as Hispanic.

The survey participants were a highly educated group with 91.16% reporting having had any amount of college education. Just over half of the group had completed an undergraduate degree or higher (59.12%). Most of the participants were employed and working full-time.

Individuals from all income levels were represented in the survey population. Individuals who reported household income of \$180,000 or more per year represented 19.49% of the respondents. Individuals with a household income less than \$60,000 made up one-sixth of the 2023 survey (15.4%). This represents all individuals responding that their household income was either \$0-\$29,999 or \$30,000-\$59,999.

Nearly all the survey participants (96.32%) reported having health insurance. Most of the participants also reported having dental insurance (84.72%) though this percentage is smaller than those reporting health insurance. Many of the respondents also had vision insurance (74.62%). Only 1.5% of the survey population reported having no type of insurance.

The top 5 serious health issues for Charles County residents were affordable housing, obesity, crime, drug use, and affordable healthcare. Social determinants of health, such as housing and crime, have come to the forefront during this needs assessment.

The protective health behaviors that Charles County residents were displaying included: always wearing a seat belt, washing hands after using bathroom or making food, practicing safe sex, getting a flu shot, and following road safety rules.

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Some risk factors that Charles County residents possessed that may lead to chronic disease included: not participating in physical activity each day, not eating enough fruits and vegetables, not performing self-exams for cancer, not getting enough sleep at night, and not using sunscreen regularly.

The online survey participants were also asked about access to health care. 84.9% have had a routine doctor's visit in the past 12 months. 93.37% receive their routine health care in a primary care physician or provider's office.

64.94% were always able to see a doctor when needed. If they were unable to see the doctor when needed, the most common reasons were that there were no available appointments (41.3%) or that it was too expensive, and they could not afford it (3.75%).

78.26% travel outside of Charles County for medical care at some point. Only 13.18% reported that they always travel outside the county for care. The most common medical services that people receive outside of Charles County are specialist doctor appointments (60.62%), dental appointments (21.68%), primary care doctor appointments (30.24%), and surgeries (20.94%). The most common responses among participants were that the quality is better elsewhere (41.12%) and services are not available in Charles County (24.67%).

A short 5 question survey was developed to distribute throughout the county for additional qualitative data from July 1, 2023, through December 31, 2023. A total of 1,189 surveys were completed throughout the community. Short survey data collection was performed at various community events throughout the county.

Emphasis was given to the collection of data among the county's vulnerable populations including the medically underserved, the homeless, and the geographically isolated. An ongoing survey collection was conducted at the Charles County Department of Health and the University of Maryland Charles Regional Medical Center. Short surveys were collected during blood drives at the University of Maryland Charles Regional Medical Center (CRMC), the Red Cross Blood Drive, and church Blood Drives. CRMC also coordinated with the Charles County Department of Health to distribute surveys at the Charles County Fair. The Charles County Department of Health conducted survey collection at all community outreach events attended from July to December 2023. Emphasis was given to the western region of the county that is more geographically isolated. Surveys collection was conducted at Fruit and Vegetable distribution sites and at the Nanjemoy Heritage Day. The community was also surveyed at large events such as the Charles County Fair, blood drives, Charles County Government Wellness Fair and Rodeo, Recovery Day, food drives, and other community outreach events.

The biggest health problems identified by the short community survey included: obesity, drug and alcohol use, mental health, heart disease, cancer, and high blood pressure/stroke. Common themes

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for recommendations included access to care, mental health, transportation, substance use, and outreach.

The most cited barriers to needed health care were care is too expensive/can't afford it (56.6%) and lack of health insurance (41.0%). Over 20% of respondents also identified transportation and not being able to get an appointment with their doctor as barriers to needed health care as well. Under "Other", several respondents explained that there is an issue trying to get in to see a provider. Respondents expressed that there's not enough health care providers, no available appointments for months, hard to find new doctors when needed, not enough doctor's offices, hard to get appointments, not enough specialist providers, hard to find a primary care doctor they like, providers not accepting new patients, and lack of providers that take Medicaid in the psychiatric department. Other barriers were distrust of health care providers, no time off from work, poverty, lack of education, unreliable services, overcrowded ER facility, insurance is not accepted, limited eye doctors, and no prevention.

Short survey participants were asked if sufficient services are available to address the health conditions in Charles County. Many of the respondents answered that they did not know, or they left it blank. This leads us to believe that additional outreach and awareness campaigns are needed to educate people on available services in Charles County.

There were very few survey respondents who believed there were no services available for the listed health conditions. Of those who did answer there were no services available in the county, Mental Health, Traffic Safety/Injuries, and Access to healthcare in rural Charles County had the most responses.

Quantitative data was analyzed for various health topics including: mortality, population and demographic data, natality, infant mortality, social determinants of health, heart disease, stroke, hypertension, access to health care/health un-insurance, cancer, asthma, injuries, diabetes, food, physical activity, obesity, arthritis, dementia/Alzheimer's disease, infectious disease, environmental health, sexually transmitted diseases, HIV/AIDS, mental health, dental health, substance use, disabilities, violence, social determinants of health, and tobacco use.

The current assessment findings are an update from the Fiscal Year 2021 community health needs assessment report and health improvement plan. 25% of the objectives outlined in the Charles County Health Improvement Plan reached their anticipated goals in the given time frame.

Thanks to the work of the Partnerships for a Healthier Charles County and its teams, the Charles County Health Improvement Plan objectives have been met for:

- Preventable Hospital Stay Rate decreased
- Number of medical practices increased

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Charles County Health Improvement Plan objectives that were not met include:

- Percentage of residents who did not see a doctor in the last year due to cost increased
- Percentage of Charles County residents who received a flu vaccination increased but did not reach goal
- Drug-induced death rate decreased but did not reach goal
- Childhood obesity percentage increased
- Adult obesity percentage increased

3 Charles County Health Improvement Plan objectives where updated data was not available: mental health, hypertension, and diabetes emergency department visit rates.

The data from this community health needs assessment will be used to develop the next Charles County health improvement plan and subsequent action plans. They provide the county with measurable outcomes and benchmarks for 3-year program implementation.

Focus Groups:

A critical part of the needs assessment process is to invite the community to express their perceptions of health status. Qualitative data accumulated from this process is used in conjunction with quantitative health data to determine the most important health issues within the county.

Throughout the data collection phase of the Charles County Community Health Needs Assessment, six focus groups were conducted with the participation from community members with various backgrounds. The goal of each focus group was to gain feedback, gather insights, and obtain opinions and perceptions of the current health status in Charles County. The six focus groups included: the Charles County school nurses, members of the Partnerships for a Healthier Charles County Local Health Improvement Coalition, Charles County Access to Care Coalition members, Healthcare Consumers and Community Leaders, Chronic Disease Prevention and Management Coalition members, and Charles County Overdose Fatality Review Team members.

The focus group followed a pattern of health-related questioning. The questions included:

Question 1: What do you believe is the health condition most affecting Charles County?

Question 2: Are there barriers and gaps in services affecting health in Charles County?

Question 3: Since the FY 2021 community health needs assessment, do you feel health improvements have been made in the county in respect to healthcare?

Question 4: What are the strengths of the community?

Question 5: Do you feel there are adequate resources in Charles County to address health?

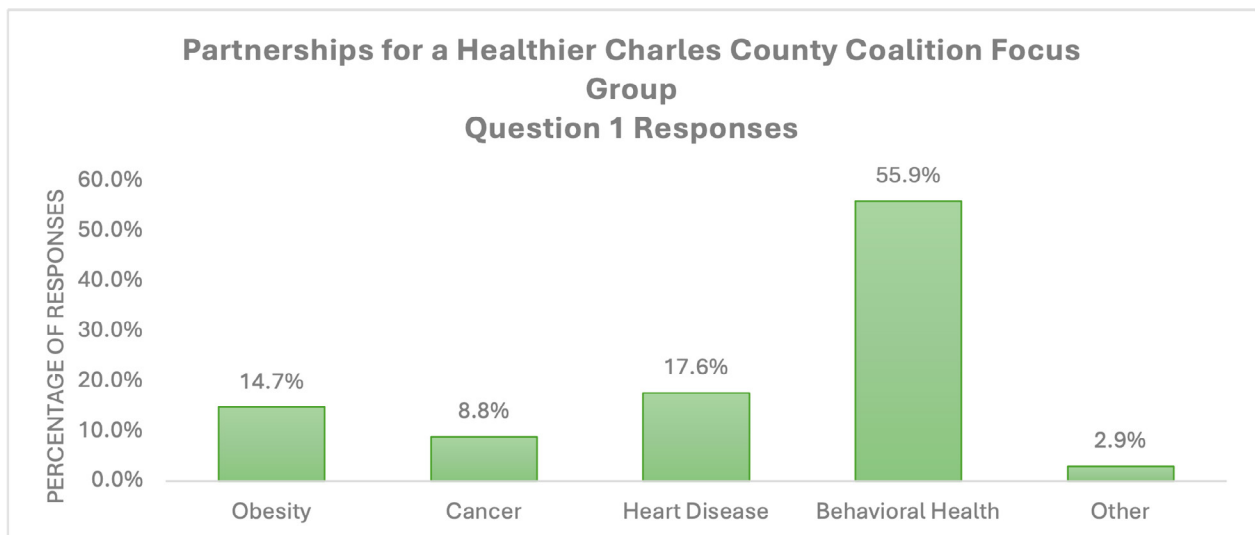
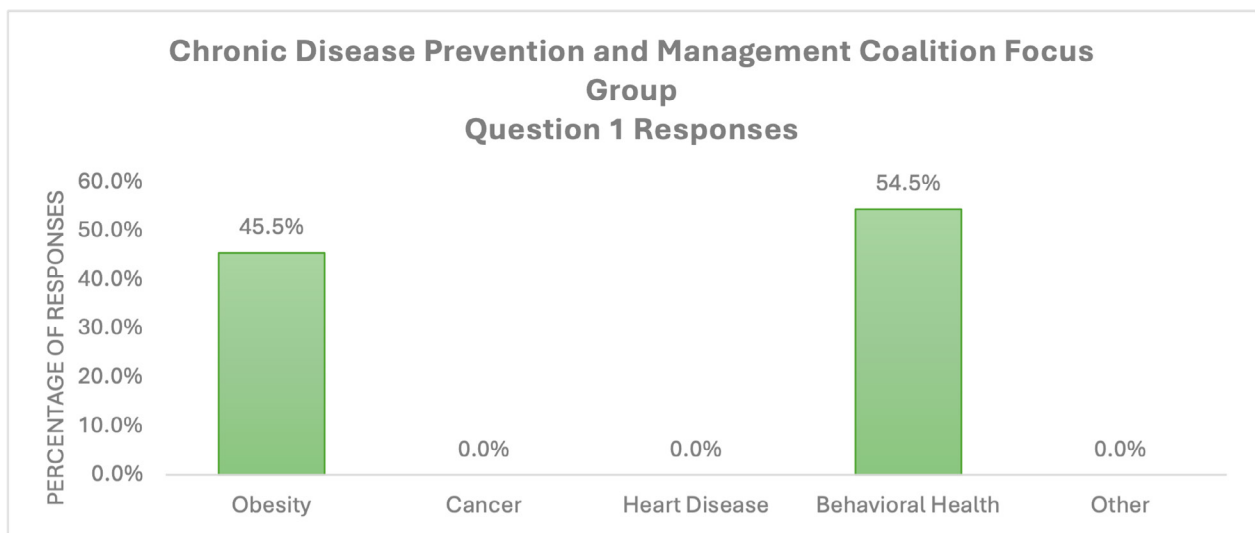
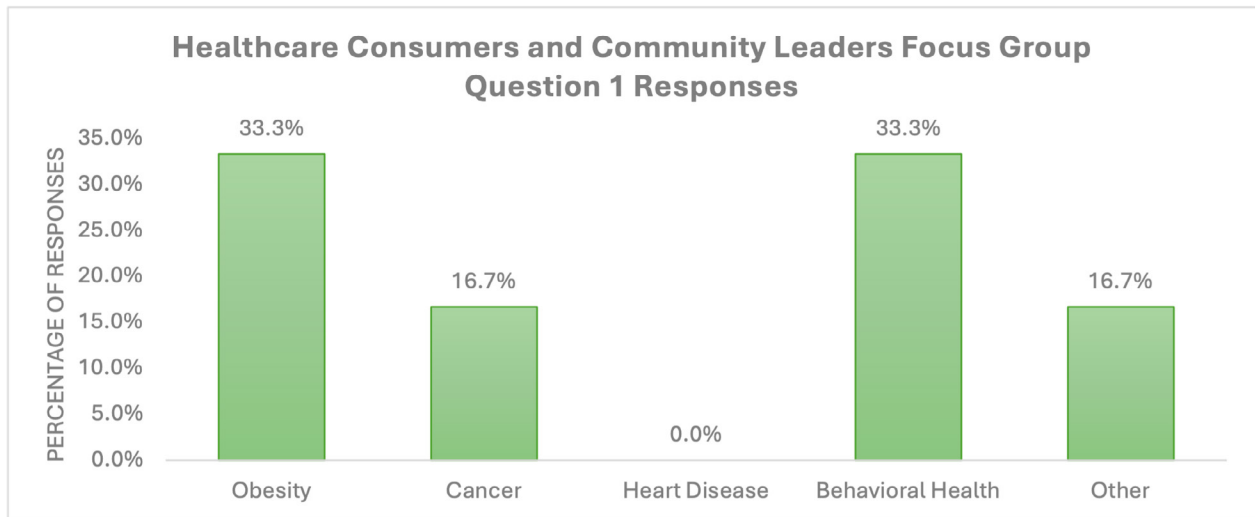
Question 6: What key changes could the community implement to improve health locally?

Interactive Question 1: What do you believe is the health condition most affecting Charles County?

Focus group participants had the following answer options for Question 1: Obesity, Cancer, Heart Disease, Behavioral Health, or Other. Across all six focus groups, Behavioral Health and Obesity were the top health conditions that participants believed to be affecting Charles County the most. Behavioral Health had the most responses among focus group participants, followed by Obesity. Although Behavioral Health and Obesity were the top responses among participants, responses varied among each of the different focus groups. The Healthcare Consumers and Community Leaders focus group had more varied answers, with 33.3% of participants choosing Obesity and 33.3% choosing Behavioral Health. While the Chronic Disease Prevention and Management Coalition members had 54.5% of participants choosing Behavioral Health and 45.5% of participants choosing Obesity. Lastly, in the Partnership for a Healthier Charles County focus group almost 56% of participants believed Behavioral Health to be the health condition most affecting Charles County, followed by heart disease at 17.6%. Obesity came in third for that group with 14.7%. Other responses that focus group participants mentioned were Cancer, Chronic Kidney Disease, Sexually Transmitted Infections (Syphilis, Chlamydia), Diabetes, and Infectious Disease.

In past needs assessments, Behavioral Health and Obesity were also the most common responses

among participants. In the last needs assessment, approximately 87.5% of focus group participants felt that Behavioral Health was the greatest health problem in Charles County, followed by 12.5% for Obesity.



Question 2: Are there barriers and gaps in services affecting health in Charles County?

The perceived barriers and gaps were very similar among focus group participants. A large majority of participants stated that barriers related to transportation and access to care were greatest in Charles County.

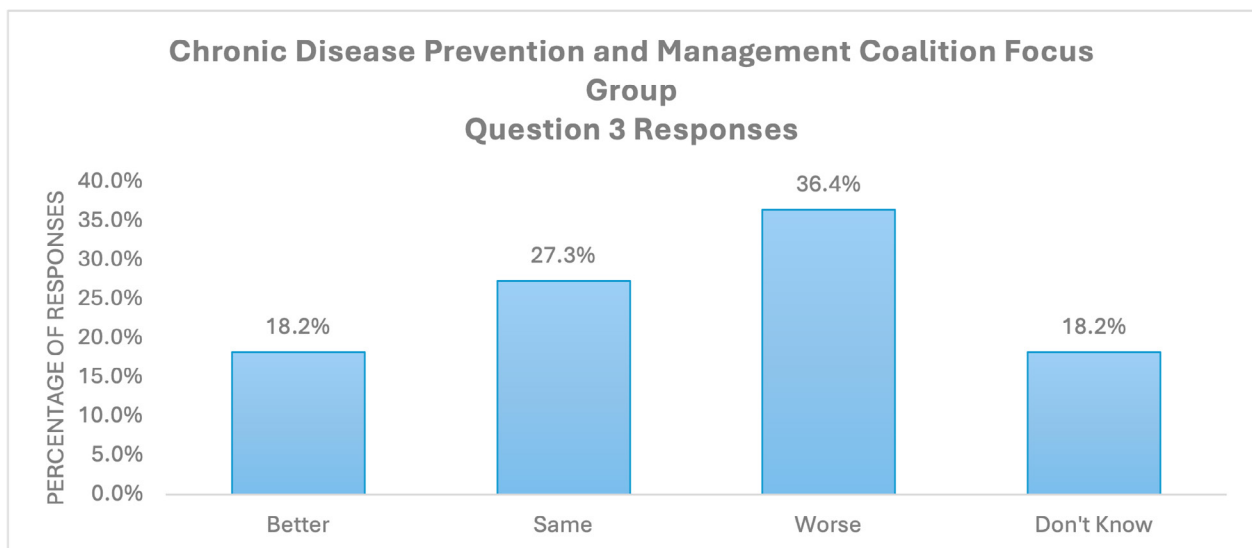
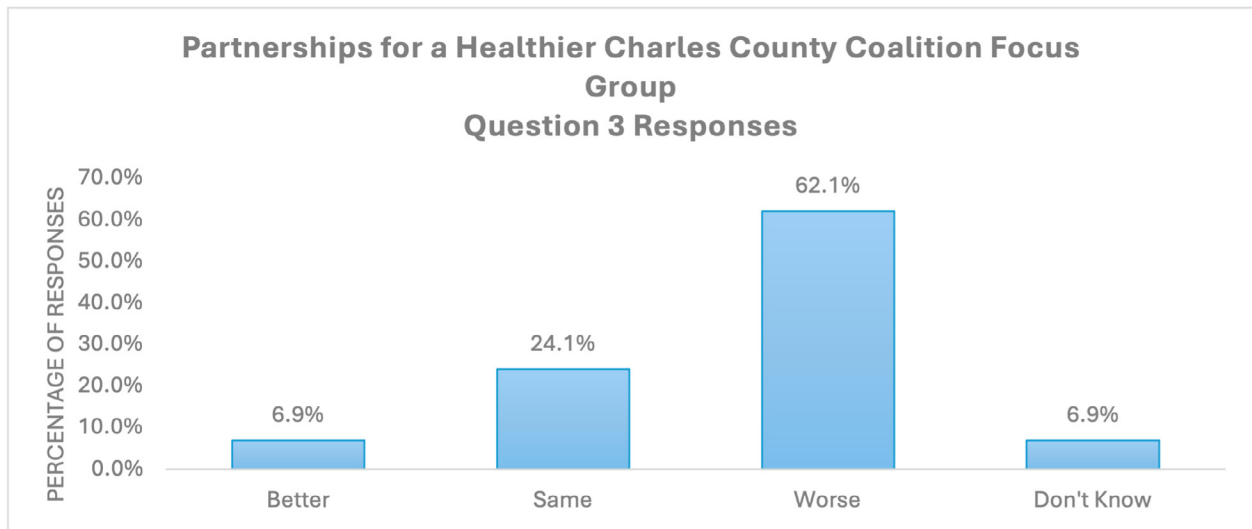
Across all six focus groups, transportation was identified as a barrier in accessing or receiving healthcare services in Charles County. From childhood and adolescence to the elderly population of the county, the lack of transportation is a countywide barrier. Focus group participants stated that the lack of transportation to and from after school programs is causing a sedentary lifestyle among the youth in Charles County. In the Partnerships for a Healthier Charles County focus group, participants stated that transportation to and from health services is a barrier. Participants also stated that children need to be involved in more activities, but transportation becomes a barrier to those activities. In the Chronic Disease Prevention and Management Coalition focus group, participants mentioned that more services are becoming available in the county, but the issue is getting to those services. Lastly, in the Healthcare Consumers and Community Leaders focus group, participants stated that there is a lack of transportation throughout the county, but specifically in more rural areas of the county including Nanjemoy, Indian Head and Welcome.

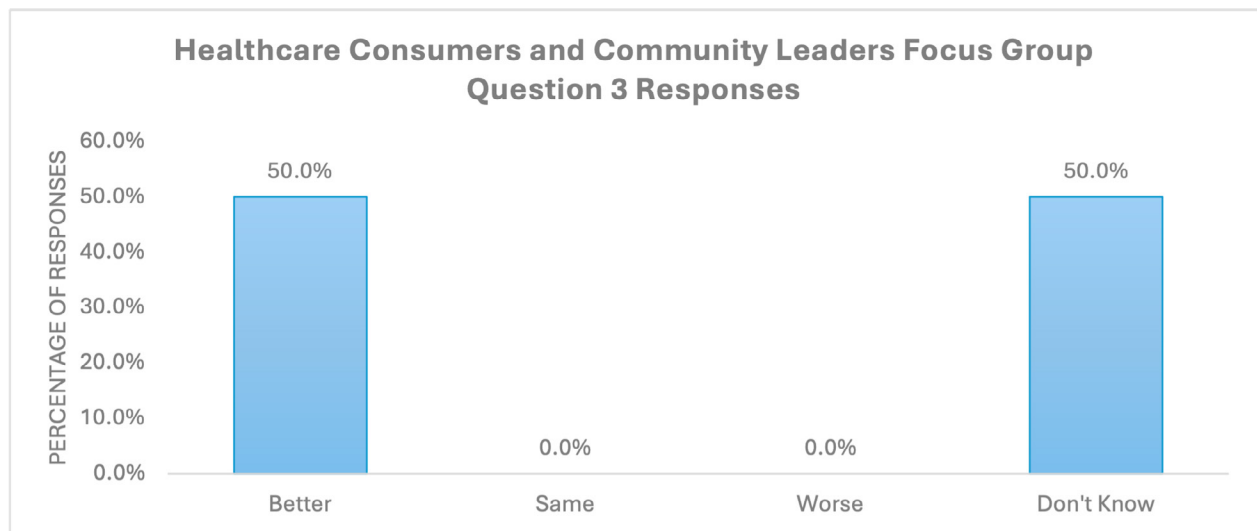
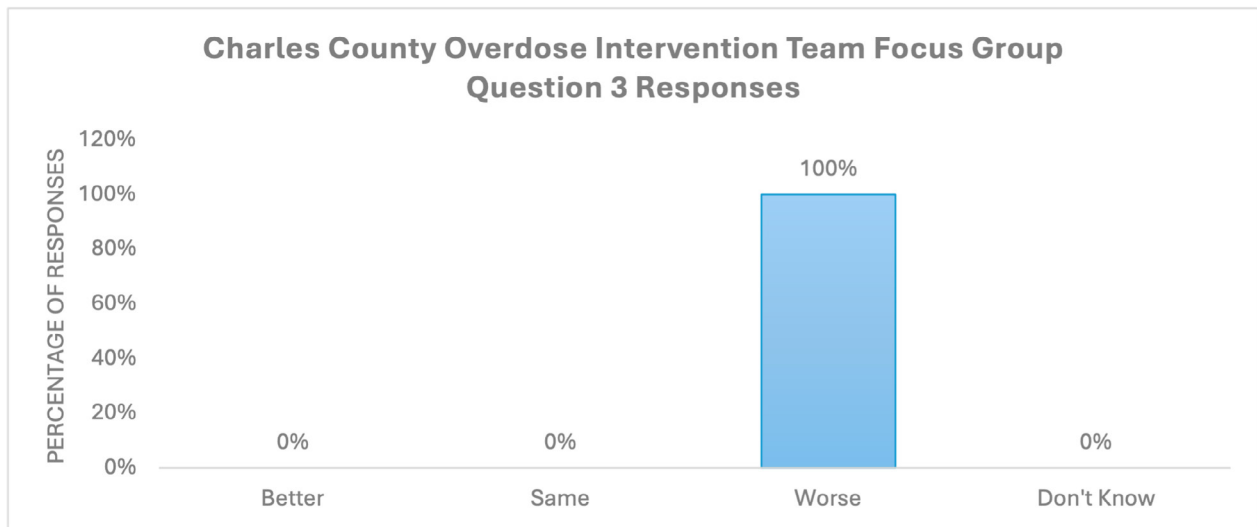
Access to care was also seen as a major barrier to healthcare services in Charles County among focus group participants. Across the six focus groups, participants mentioned there is a lack of facilities in the county and inpatient beds. A lack of proximity to services was also expressed as a barrier. Many of the perceived barriers in the community that were mentioned were related to mental health services. In the Healthcare Consumers and Community Leaders focus group, participants stated that there is a lack of psychiatrists in the county and that there needs to be more education on how to access mental health services. Focus group members within the Partnerships for a Healthier Charles County Coalition also stated that behavioral health practitioners are limited in Charles County. Among the school nurses, many agreed that there was a lack of mental health providers and services for youth, and too much screen time. Also related to mental health, participants mentioned that there is a lack of behavioral health prescribers in Charles County and trouble with the school systems filling their school psychiatrist positions. Lastly, barriers of commercial insurance and behavioral health services were identified. Focus group participants stated that those with public insurance have access to community-based services and case management. If those services can be offered through Medicaid, they should also be available for those with commercial insurance. It was also mentioned that most people develop behavioral health conditions in childhood or adolescence, yet if they have commercial insurance, they have limited options when it comes to accessing services. Other barriers mentioned among participants related to access to care included the need for a bigger hospital, more specialists in the county, long wait-times, health literacy, the lack of health care centers and urgent care centers, and the care for Drug Affected Newborns (DAN) babies that is not offered in the county. Those patients currently must travel outside of the county to receive those services and parents may not be able to make that trip.

Other barriers that were identified in the focus groups were food deserts within the county and the need for more healthy food options, the cost of healthcare services, health insurance issues (providers only accepting certain plans), lack of physical activity, affordable housing, access to veteran's services, physician recruitment and retention, safety issues within the county, and issues with telehealth services that have limited the patient-provider relationship.

Question 3: Since the FY 2021 community health needs assessment, do you feel health improvements have been made in the county in respect to healthcare?

Perceptions of health improvements in the county since the last needs assessment varied among focus group participants. While there were a handful of participants who believed health improvements have been made, many others believed that it has stayed the same or gotten worse. Among participants in the Partnerships for a Healthier Charles County focus group, over 62% responded that healthcare got worse in the county and over 24% felt it stayed the same. The Charles County Overdose Intervention Team focus group had 100% responses for healthcare got worse since the last needs assessment. While participants of the Healthcare Consumers and Community Leaders focus group had split responses with 50% believing healthcare improved in the county and 50% did not know.





Of those who believed improvements have been made, participants gave examples of more acute care health centers in the county, an increase in primary care providers and facilities, and more access to behavioral health services.

Of those who believed healthcare got worse, some examples were related to specialty providers (long wait times, proximity, youth access, and staffing issues), behavioral health in Emergency Departments, communication with the community, and no inpatient treatment in the county. Although many participants believed healthcare in the county got worse since the last needs assessment, there was agreement that providers and facilities have increased but with the population growth of the county those achievements are not being noticed.

Question 4: What are the strengths of the community?

There was overwhelming agreement among focus group participants that partnerships and collaborations within Charles County are a major strength of the community. Participants stated that organizations are interested in improving and obtaining feedback from community members on how they can improve. One of the products of great collaboration in the county is the school

nurses. The school nurses are through the health department and there is great communication and collaboration between the two. The relationship between the Charles County Department of Health and the school nurses has not only created a pivotal collaboration but has also strengthened the connection with the public school system and community as well. A major accomplishment within Charles County is the first school-based health center at Indian Head Elementary School, which plans to open in Fall 2024. The health center is the result of strong partnerships between Charles County Public Schools and the Charles County Department of Health. The goal of the health center is to provide a multitude of different health care needs to the community. Lastly, the relationship between the health department and the hospital, and all community partners is amazing. Focus group participants stated that they believe partnerships between hospital systems in the community are also a strength.

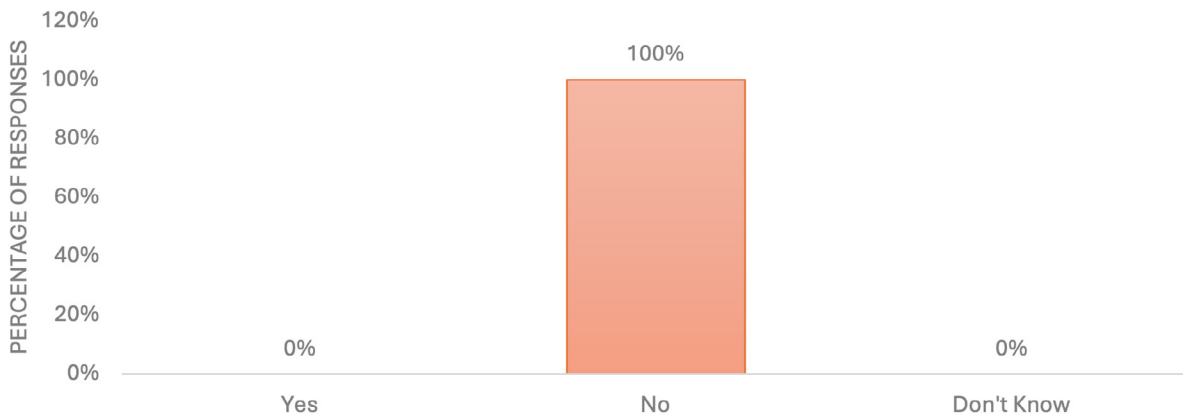
Outreach was another strength mentioned among the focus groups. Outreach programs and events bring resources and information out into the community and gives programs the ability to meet people where they are. Other strengths that were mentioned in the focus groups were food pantries, school meal programs, farmer's markets accepting SNAP, the new provider in Bryans Road, telehealth services, the Diabetes Prevention Program, Building Better Caregivers program, the Tobacco Prevention, Enforcement, and Cessation Program, and people who work in those programs are passionate about what they do and helping the community.

Question 5: Do you feel there are adequate resources in Charles County to address health?

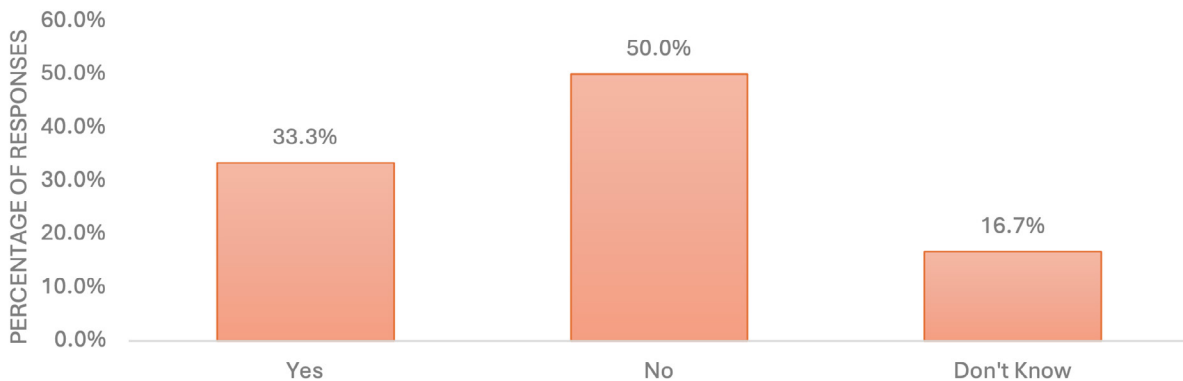
Across all six focus groups, there were mixed feelings on if there are adequate resources in Charles County to address health. For those who believe there are adequate resources in the community, they mentioned that more providers have been brought into the county and that new senior centers have opened. The reality is that people who know about the services use them; it is the issue of people who are not aware these services exist. Some said this question was multi-faceted because resources are available, but people might not be able to access them.

The issue of accessing resources was a common theme among focus group participants. There was a strong feeling that people do not know where to start when it comes to accessing services. Participants also stated that people do not understand that services work with everyone, with any income level. There is a stereotype that services are only for people of certain demographics, but that is far from true. Transportation and getting people to the services that are available is also a barrier. There was agreement among focus group participants that people must have the want to access services, and that it is sometimes a struggle motivating people to commit to change. There was also a mention of disparities among services in the county. There are some services that are in abundance and others that are lacking.

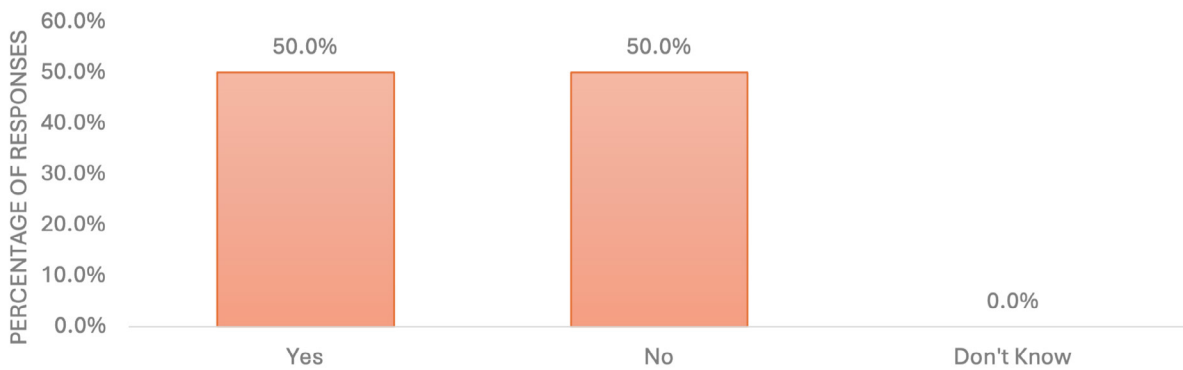
Charles County Overdose Intervention Team Focus Group Question 5 Responses



Healthcare Consumers and Community Leaders Focus Group Question 5 Responses



Chronic Disease Prevention and Management Coalition Focus Group Question 5 Responses



Question 6: What key changes could the community implement to improve health locally?

There was much agreement among the focus groups that services and resources need to be provided to the less populated areas of the county, specifically the Western part of Charles County. Participants stated that Waldorf and La Plata are so populated and that there is a need to branch out to other areas throughout the county. A few ideas emerged from these focus groups on how to target these areas of the county. Participants stated that a mobile health service, like a van, could help reach these communities and provide health services and education. The need for more urgent care centers in rural areas in the county was also mentioned.

Another key change was to focus on the senior population in the county. Participants mentioned that seniors want to be more active and that there is a need for more fitness activities for the senior population, including giving them better access to the pools. Senior isolation was also brought up in the focus group, and participants believe there needs to be more resources for those seniors who live in isolation, either by choice or by circumstance. Many seniors do not want to leave their homes for an assisted living facility. There is a need in the community to provide seniors with resources that will assist them when they are living alone in their own home. Overall, since COVID-19, the world has become more mobile (ordering groceries, shopping online) and there is less interaction for people resulting in lonelier lifestyles. Lastly, another key change that would help the senior community is having specialists who understand the aging population. There are currently no specialists in geriatric behavioral health.

Lastly, there was agreement across the focus groups that Charles County is growing and that the health services and resources also need to grow with the population. This includes expanding the hospital and the emergency department. Many participants believed there needs to be more inpatient beds at CRMC to accommodate the growth of the population. With the growing population, the addition of more providers, specifically specialist providers, are also needed in the county. Closely related to expanding services in the community, there was also a need to expand the hours of services. Urgent care centers and other health services are open during the workday, when most people are at work and do not have the time to take off to go to an appointment. Expanding the hours would allow those people to receive the services they need without taking time off work. Lastly, there is a need for more pharmacies in Charles County, and more pharmacies that deliver.

Another key change that is important to note is the need to increase the capacity around trauma-informed care and improve the competence of providers for individuals with co-occurring behavioral health conditions and intellectual disabilities. The people that are the most vulnerable are left out in the cold with limited resources.

A few other key changes that were mentioned in the focus groups were adding more back to basics classes, including cooking classes and knife skills classes, starting more classes in Nanjemoy, Swan Point, Cobb Island, and libraries, creating an access point for Charles County services that will help direct people to the services they need and how to access them, more peer recovery specialists for families and individuals, and adding behavioral health clinics in the schools.

The biggest issues to emerge from the focus groups included:

- Behavioral Health services and resources
- Transportation
- Access to Care

- Specialty services
- Obesity/Overweight
- Cost of Living (health care costs, housing, food, inflation)

Qualitative data from the focus groups on specific health topics has been incorporated into those sections of the needs assessment report.

Recruitment and facilitation of all focus groups was the shared responsibility of the University of Maryland Charles Regional Medical Center, the Charles County Department of Health, the Partnerships for a Healthier Charles County, the Charles County Public Schools, and the College of Southern Maryland.

Long Survey Analysis:

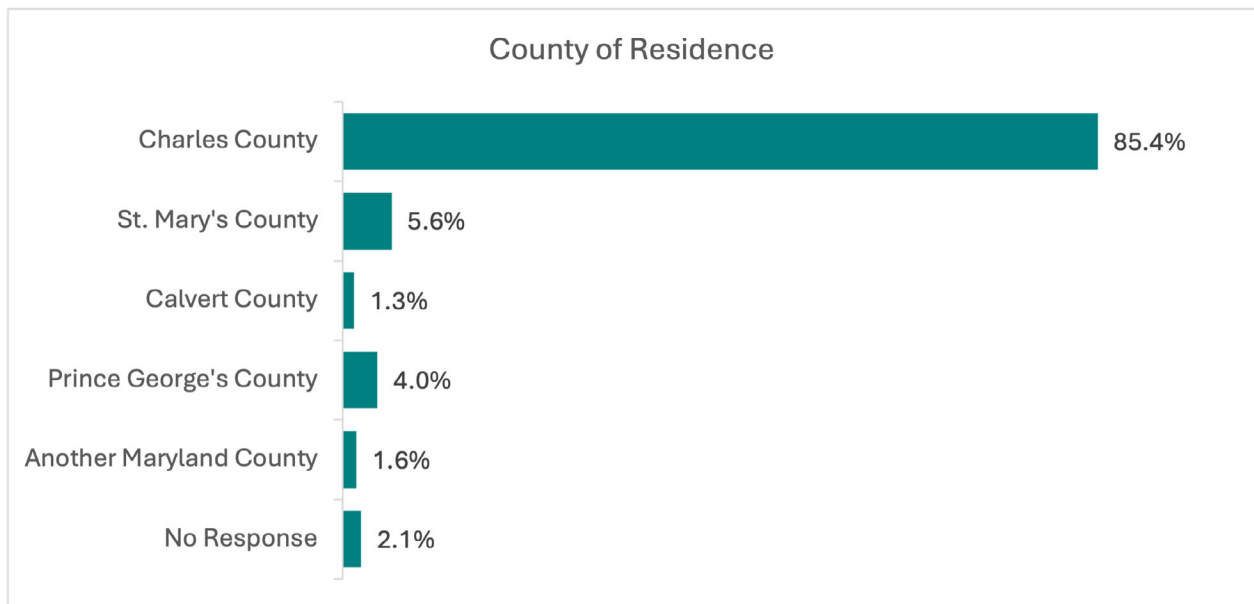
Introduction

A 51-question online survey was developed in the summer of 2023. Some of the questions had several components. It was designed using Survey Monkey, and a link was provided on the University of Maryland Charles Regional Medical Center website and the Charles County Department of Health website. The first set of question gathered demographic information for all participants. A second set of questions asked people about their own health status and their access to needed health care. A third set of questions asked participants about their risk factors for health conditions (example, fruit and vegetable intake, physical activity level, alcohol/tobacco use) to determine if they are at risk for certain health conditions and chronic diseases. The fourth set of questions asked participants about their perceptions of the state of health and health conditions within Charles County. A fifth set of questions asked participants perceptions of improvements within the county to improve health. Lastly, survey respondents were given the opportunity to comment on the state of health in the county and provide suggestions on how to improve the health status of Charles County.

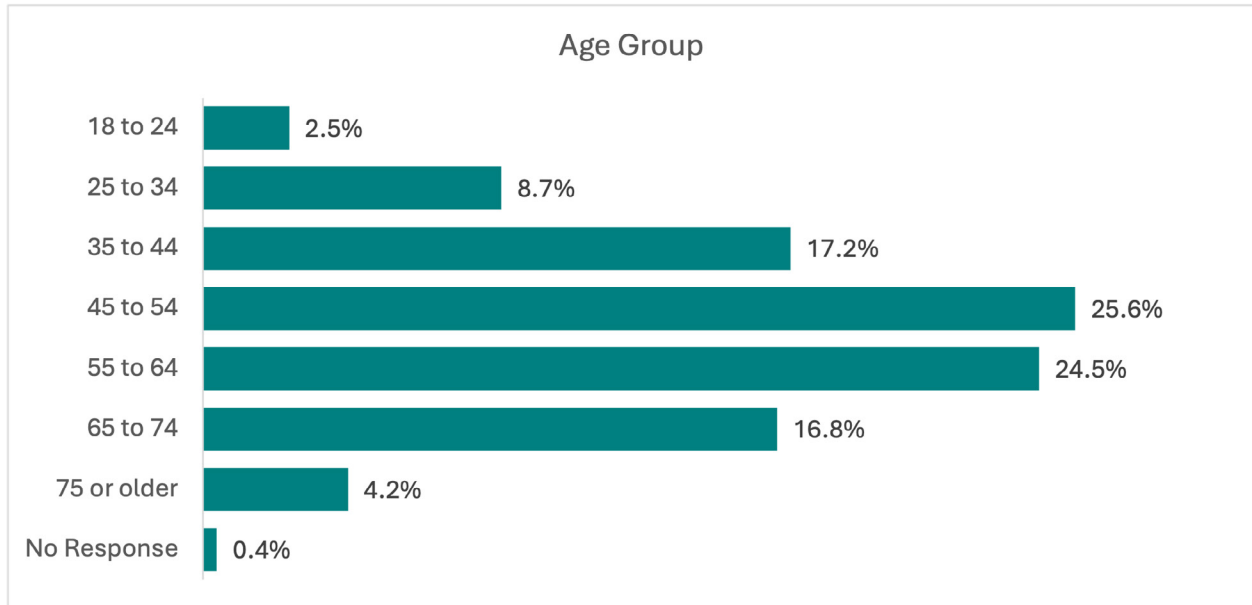
There were a total of 755 participants that took the survey. Some questions were not completed by all survey participants. Not every question was applicable to every participant. Some questions were skipped. Data for each question was compiled and analyzed.

Demographic Information

Most of the survey participants were residents of Charles County (85.4%). The second largest population was from the neighboring St. Mary's County. Residents of neighboring counties were included in the analysis since there is a lot of movement between the counties. A large portion of individuals work and spend time in Charles County.

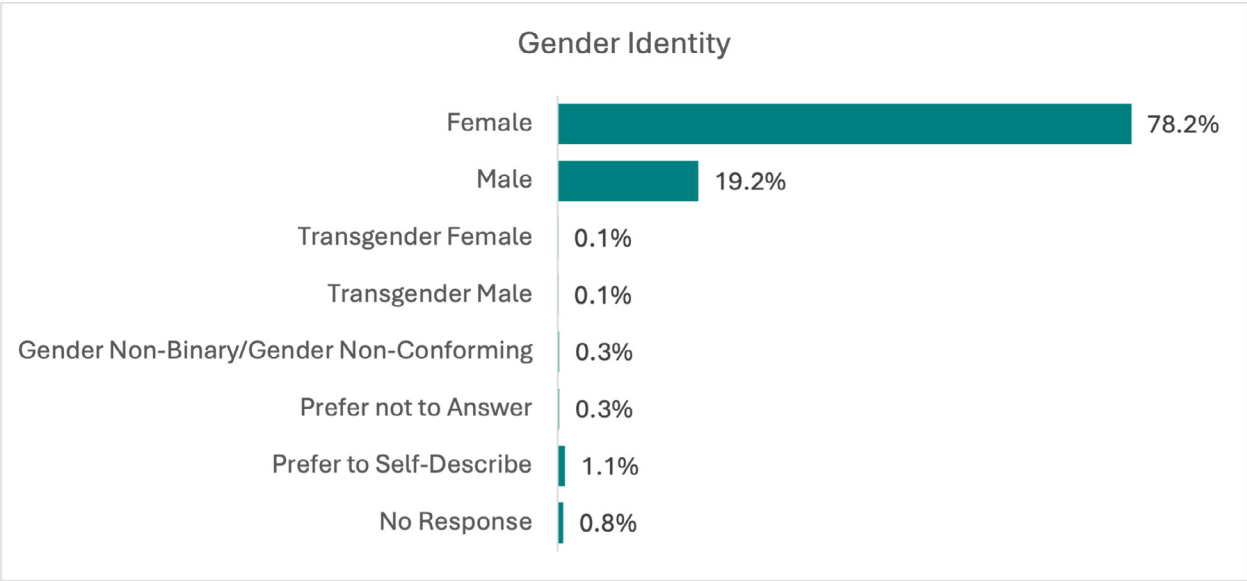


Survey participants varied among all age groups, with most of the participants being between the ages of 35 and 74. The largest percentage of participants were from the 45 to 54 age group with 25.6% of participants, followed by the 55 to 64 age group with 24.5% of participants. The youngest age group of 18 to 24 years had the lowest number participants with a percentage of 2.5%.

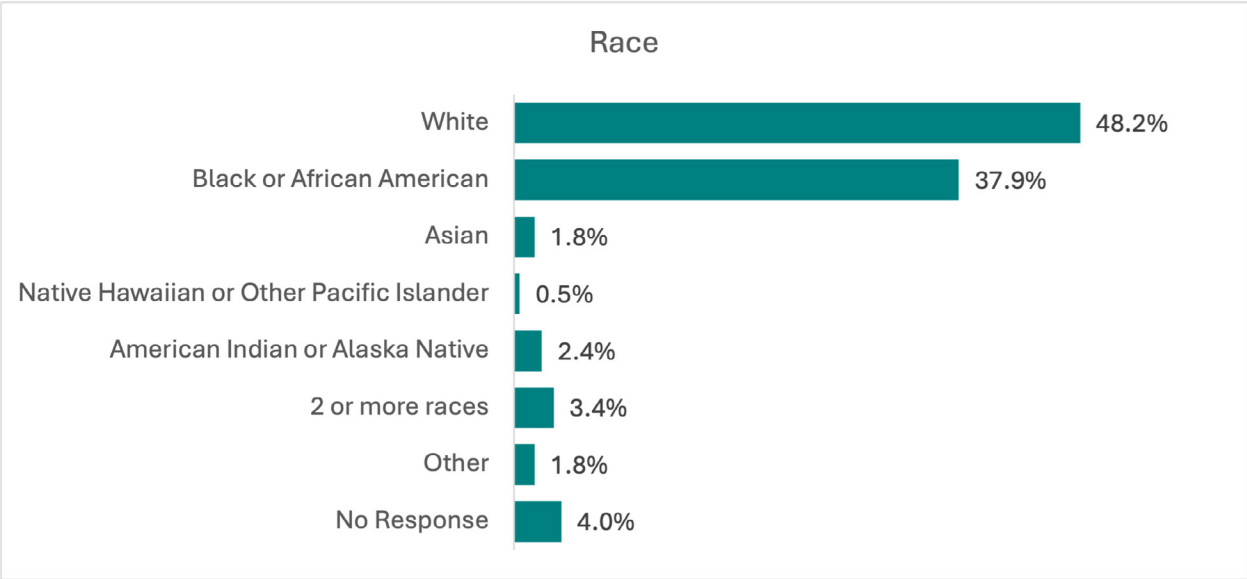


Almost 80% of survey respondents were assigned the sex of female at birth, or female was on their original birth certificate. Historically, males have had low participation percentages for the needs assessment. In the 2024 survey, males comprised of 20.4% of respondents, a slight decrease from the 2021 survey when the male percentage was 22.6%.

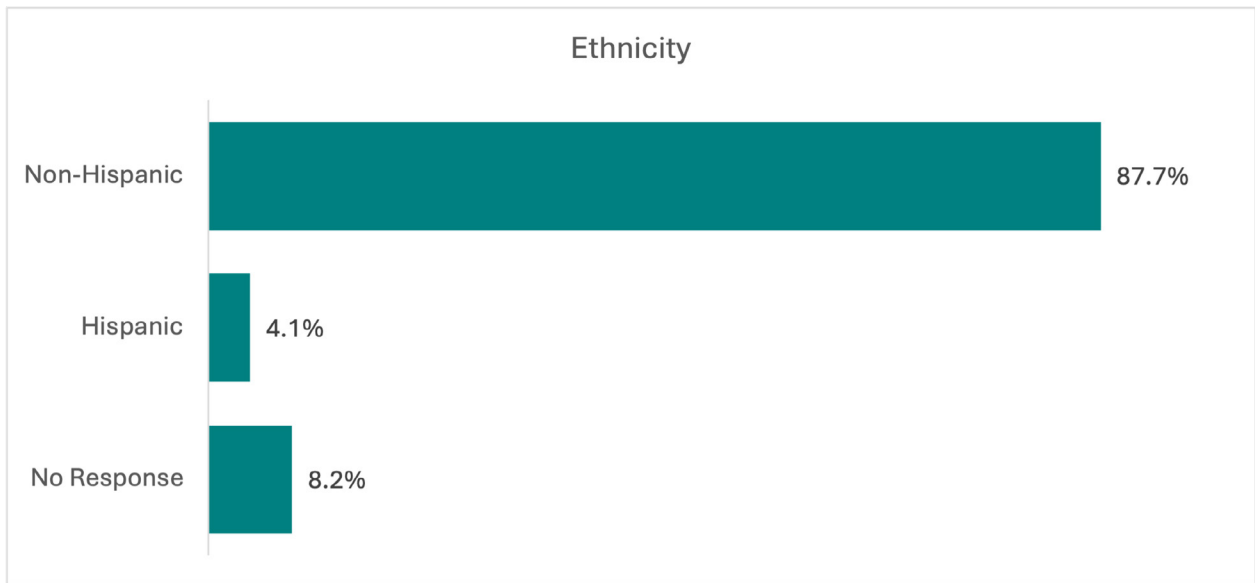
Over 78% of survey respondents identify as female, and 19.2% identify as male. 0.1% of respondents identify as transgender female and 0.1% identify as transgender male. 0.3% of respondents identify as gender non-binary/non-conforming.



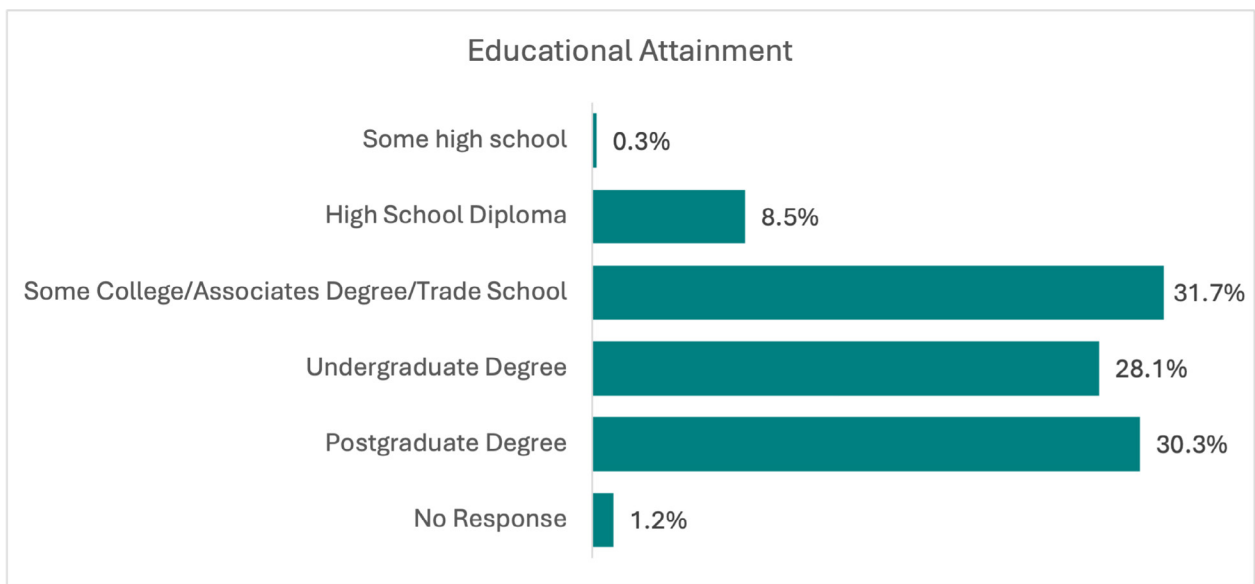
During the survey collection phase of the needs assessment, efforts were made to obtain representation from all racial populations of the community. Historically, the White population has made up a substantial proportion of survey respondents in past needs assessment surveys. However, this year, the minority population had a greater representation. Minorities made up 44.4% of survey respondents. This is an increase from the percentage of 26% reported from the last needs assessment survey. Black or African American comprised of 37.9% of survey respondents, an increase from 22.5% from the previous needs assessment.



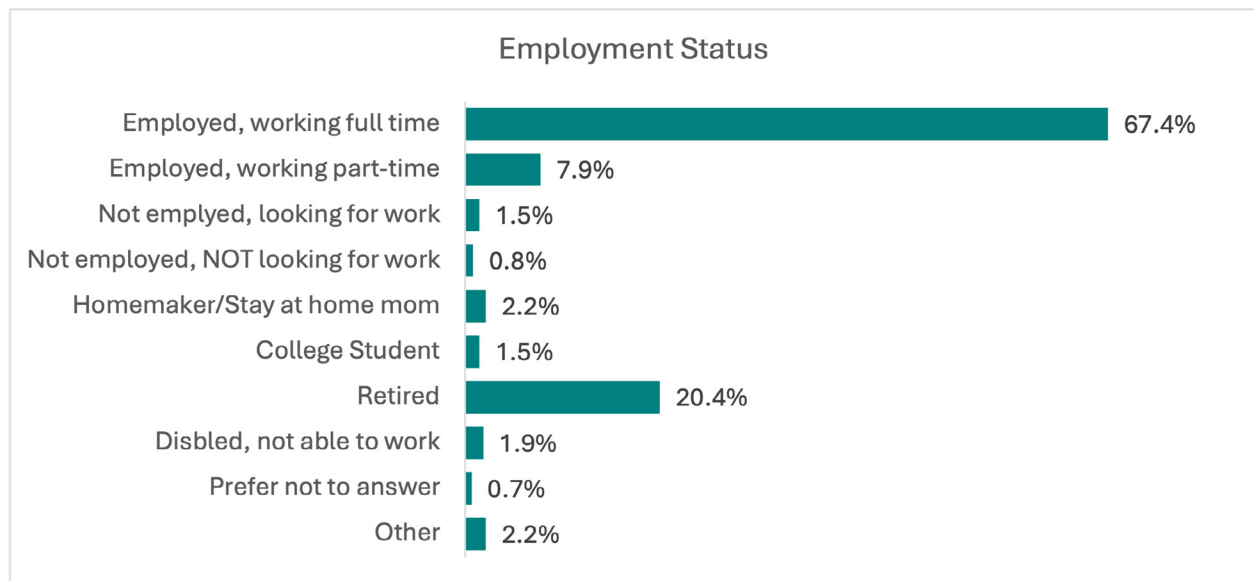
Around 4% of survey respondents self-identified as Hispanic. This percentage is slightly higher than last needs assessment, where 3% of participants identified as Hispanic. The county's overall population is about 7.5% (U.S. Census Bureau).



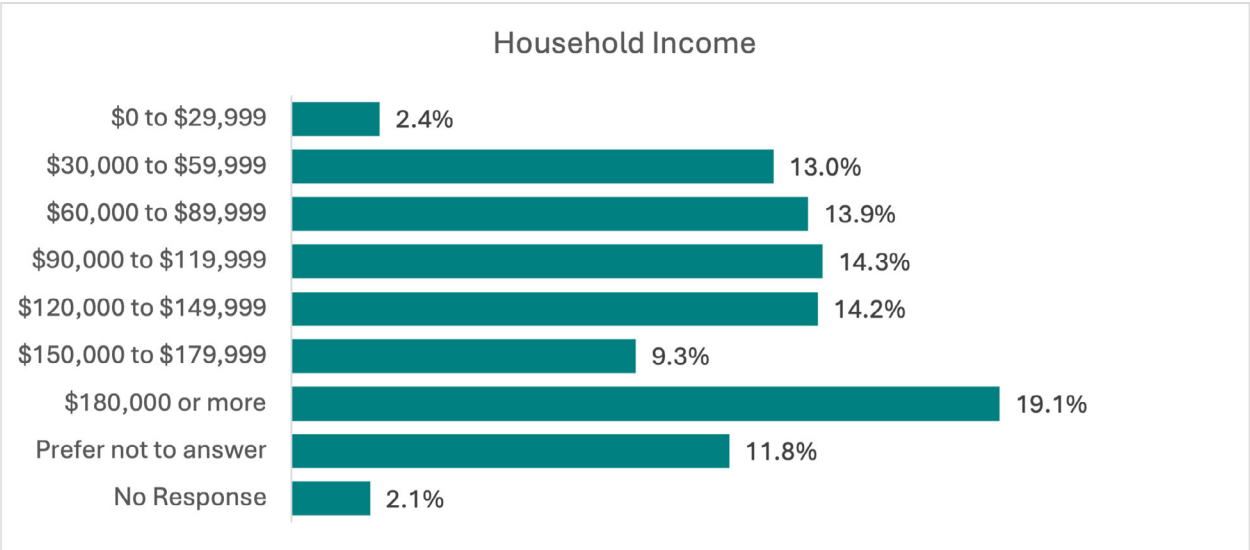
The majority of survey respondents were highly educated (90.1%) having at least some type of college education. The largest participant group had some college, associate degree, or trade school with 31.7% of total respondents. 28.1% had an undergraduate degree and 30.3% had a postgraduate degree. Only 8.5% of respondents had a high school diploma and less than 1% had some high school education.



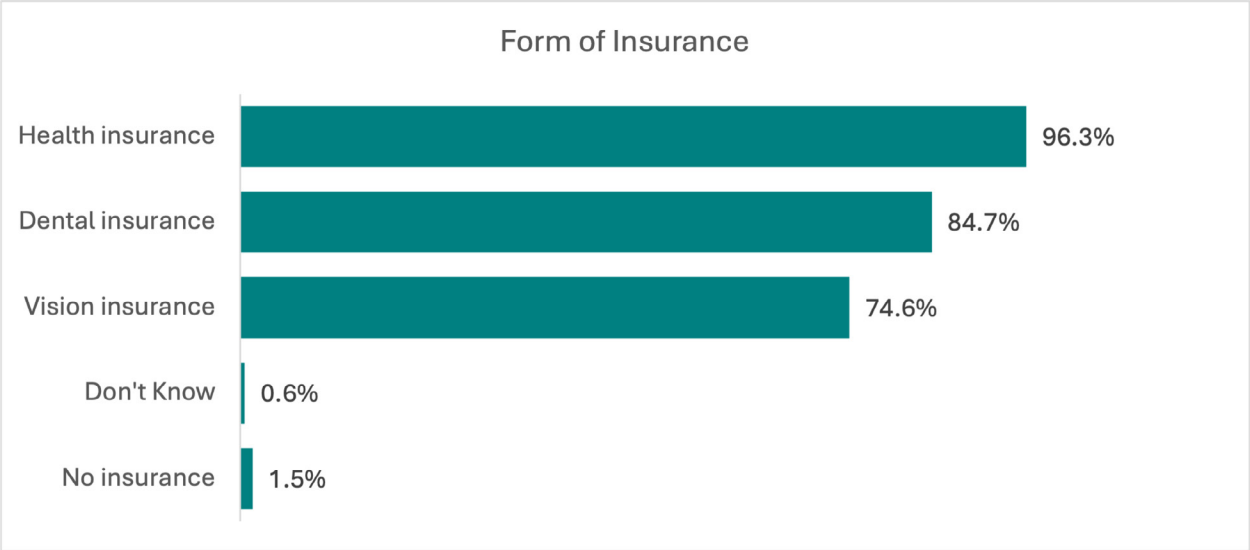
Participants were also asked their employment status. Most survey respondents reported being employed full time, with 67.4% of total responses. The second largest group were those who reported as being Retired, with 20.4% of total survey responses. The percentage of respondents who were employed full time increased from the 2021 needs assessment from 44.9% to 67.4%. The percentage of respondents who reported as being Retired decreased from 39.7% to 20.4%. This difference may be based on the age of survey respondents. In the 2021 needs assessment survey, almost 40% of respondents were 65 years of age or older. In 2024 needs assessment, this percentage decreased to 21%.



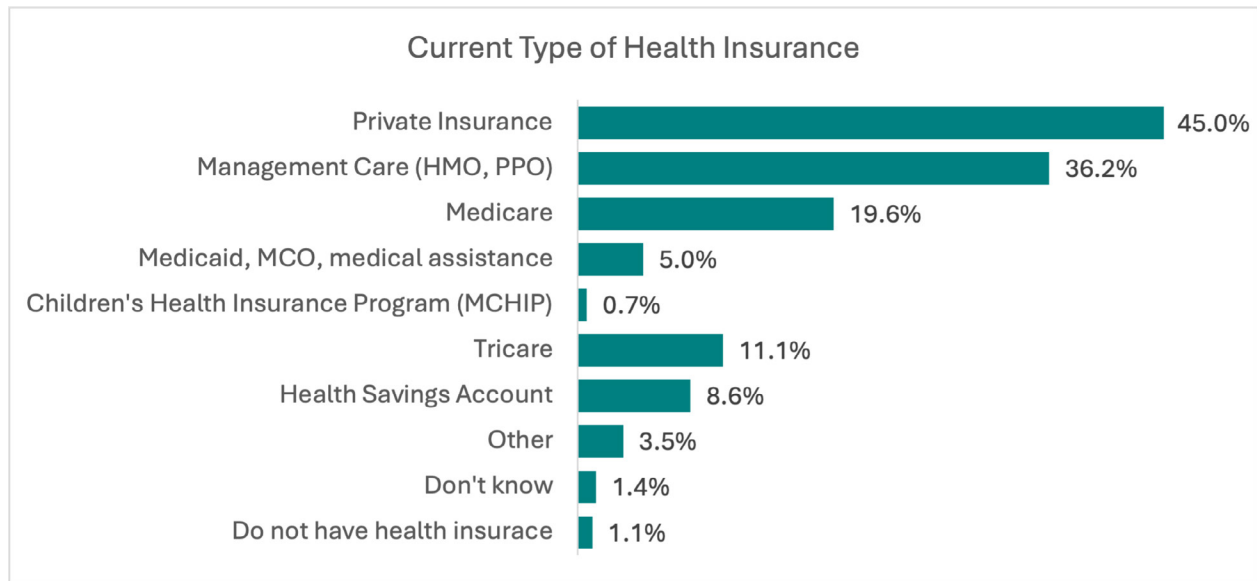
Survey participants were asked to report their household income. The household income with the most responses from participants was \$180,000 or more, with 19.1% of total responses. The percentage of respondents with a household income of \$180,000 or more increased from the 2021 needs assessment from 9.6% to 19.1%. The income ranges between \$30,000 and \$149,999 had very similar response rates, with around 13-14% of total responses for each income group. The percentage of respondents who preferred not to answer the question decreased from the previous needs assessment survey from 21.3% to 11.8%.



The participants were also asked to report all types of health insurance they currently have. Most respondents reported having at least one form of health insurance. Over 96% of survey respondents reported having health insurance, almost 85% reported having dental insurance, and almost 75% reported having vision insurance. 1.5% of survey respondents reported having no health insurance of any type. The largest increase in insurance coverage since the last needs assessment was seen in vision insurance, with an increase from 64.3% to 74.6%.

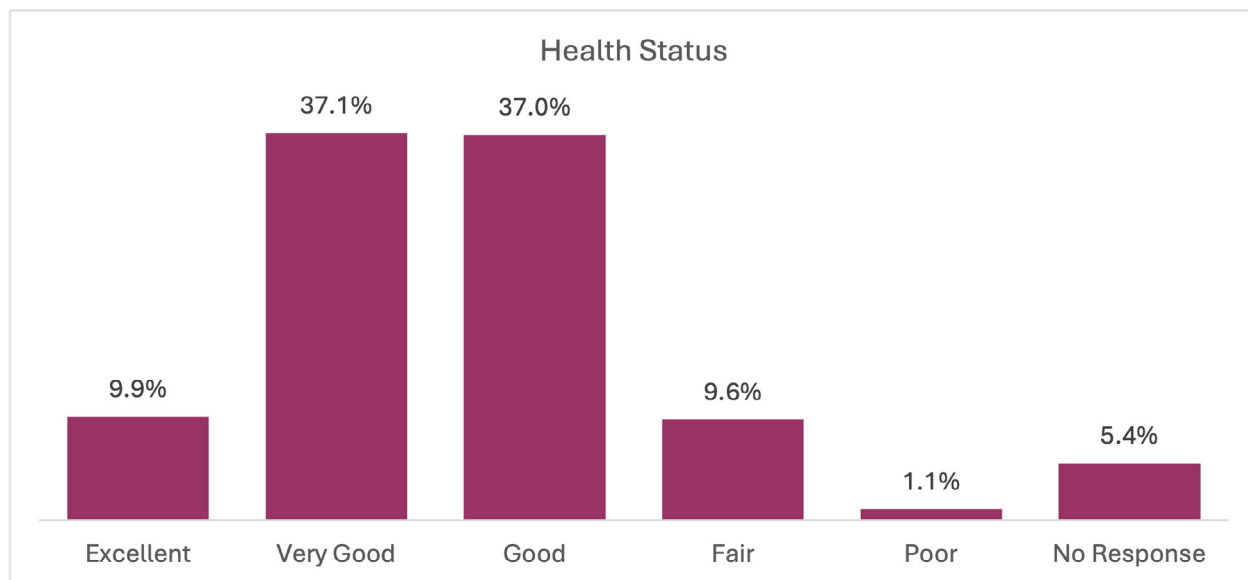


Among those having health insurance, Private Insurance, Management Care (HMO, PPO), and Medicare were the most common among survey participants, with 45.0%, 36.2%, and 19.6% respectively. 1.1% of survey respondents reported not having health insurance.

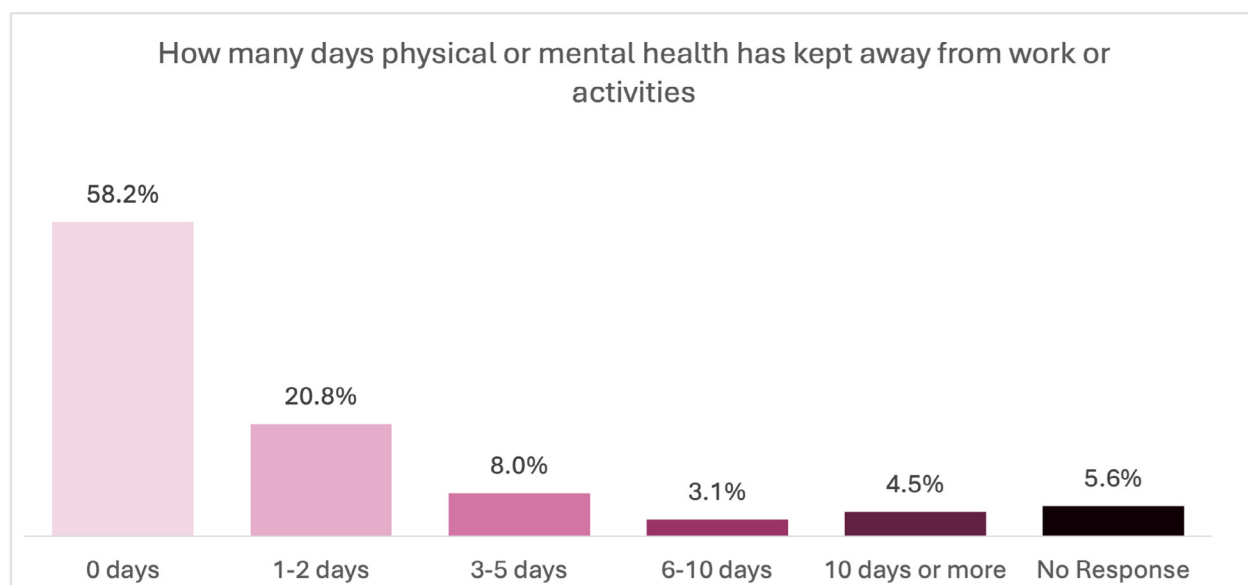


Health Status

Participants were asked to rate their current health status as poor, fair, good, very good, or excellent. The most common responses among participants were “very good” or “good” with 37.1% and 37.0%, respectively. The percentage of respondents who rated their health as “very good” increased slightly since the last needs assessment from 36.6% to 37.1%, while those who rated their health as “good” decreased from 41.5% to 37.0%. A small percentage of participants rated their health status as “excellent” at 9.9%, however this percentage is an increase from the 2021 needs assessment where only 7.9% of respondents rated their health status as “excellent”.

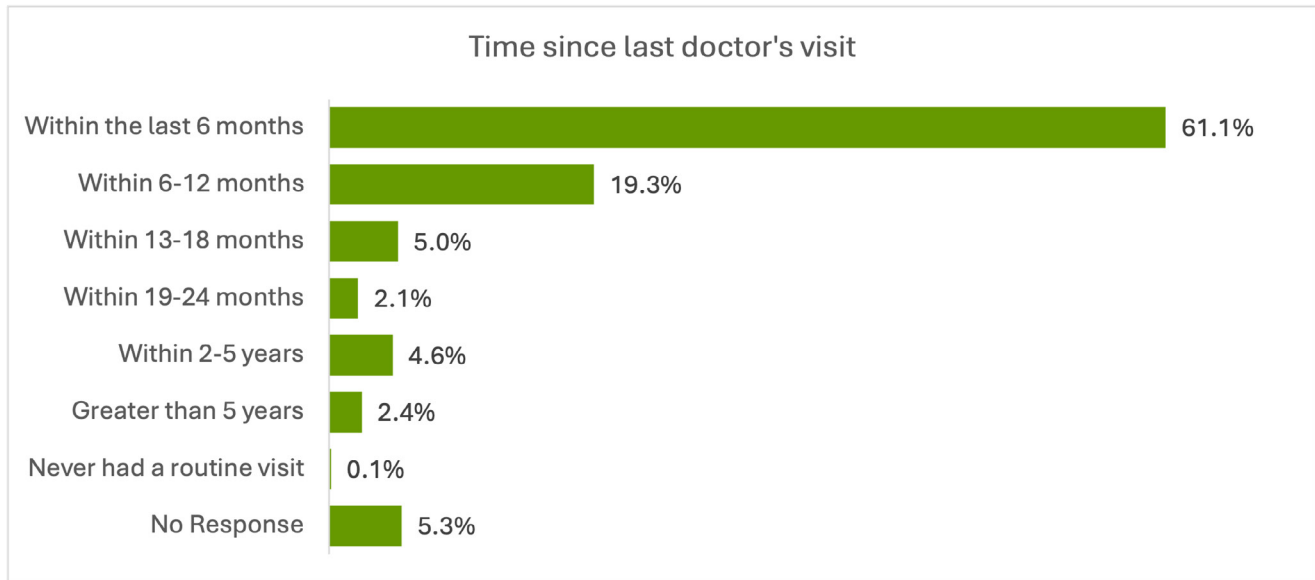


Participants were also asked how many days in the past month their physical or mental health kept them from work or normal activities. A little over 58% of participants reported that there were no days in the past month that prevented them from work or activities. This percentage is a decrease from 62.9% reported in the 2021 needs assessment. Over 20% of participants reported that their physical or mental health has kept them from work or activities for 1-2 days in the past month. This is a slight increase from 18.7% reported during the previous needs assessment. The percentage of participants that reported 10 or more days decreased from the previous need assessment from 8.4% to 4.5% of total responses.



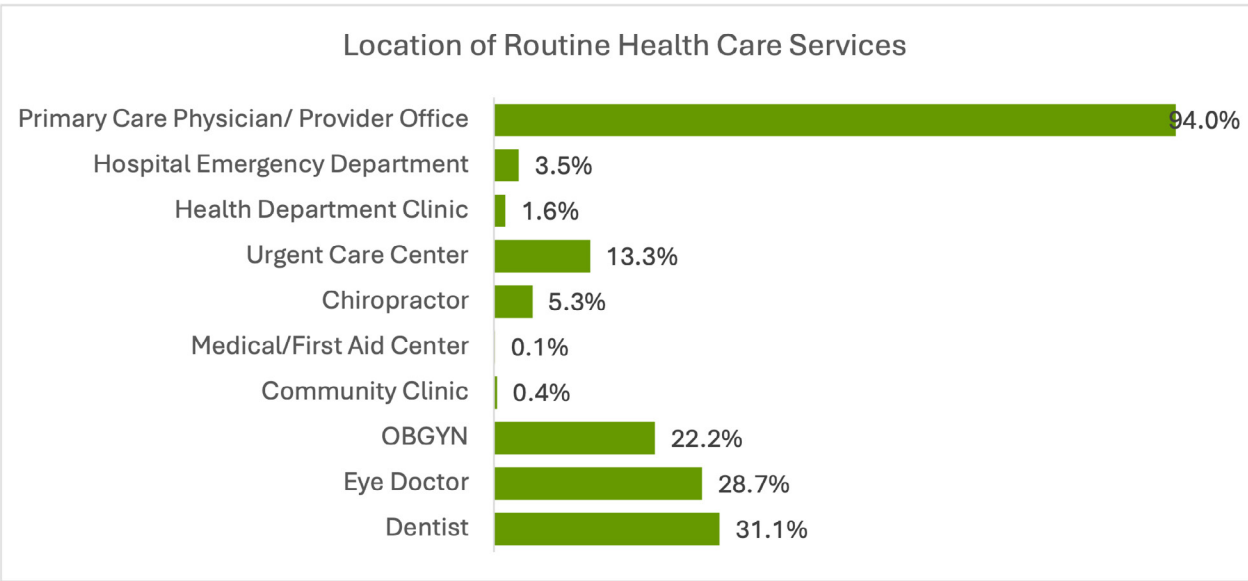
Access to Care

Most of the survey participants reported having a routine doctor's visit within the last 12 months (80.4%). This percentage is down from the 2021 survey where 88.2% of participants reported having a routine doctor's visit in the last 12 months. 4.6% of participants reported that their last routine doctor's visit was within the last 2-5 years, which is an increase from 2.3% reported on the previous needs assessment. Those who haven't been to a doctor for a routine visit in more than 5 years also increased from 1.3% in 2021 to 2.4% in 2023. Only 0.1% of participants reported that they have never had a routine doctor's visit.

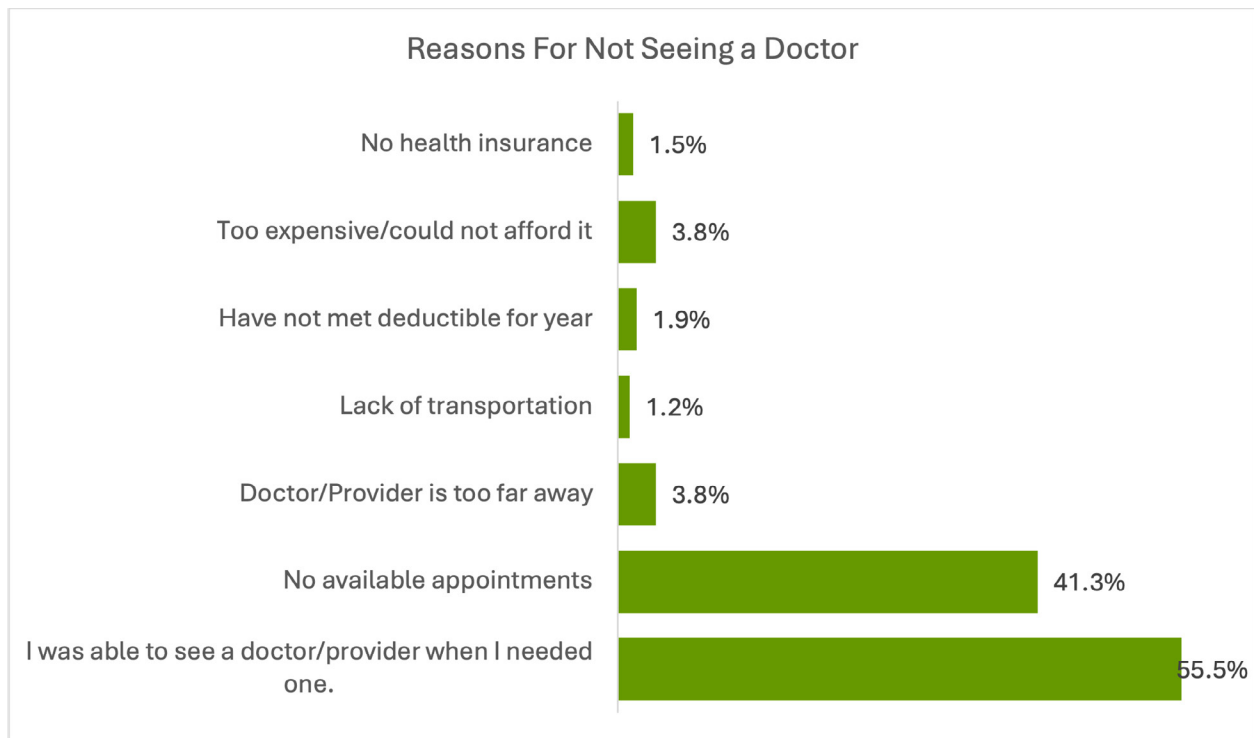


About 94% of survey participants reported that they receive their routine health care at a Primary Care Physician or Provider Office. Just under one third of participants reported receiving routine care from a Dentist (31.1%), followed by 28.7% from an Eye Doctor, and 22.2% from an OBGYN. 13.3% of survey respondents reported that they receive their routine health care from an Urgent Care Center. This percentage is a slight increase from 13% reported in the 2021 survey.

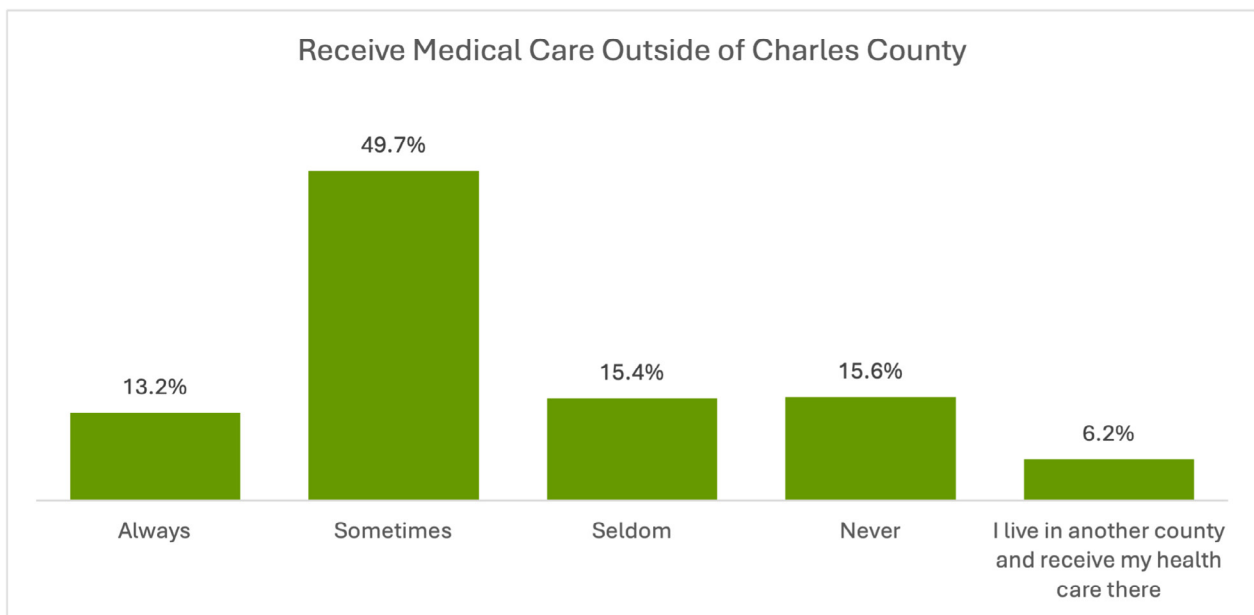
The percentage of survey participants who reported receiving routine health care from the hospital emergency department decreased from 4.2% in 2021 to 3.5% in 2023. However, this is still up from the 2018 survey where only 2.4% of participants reporting receiving routine care from the hospital emergency department.



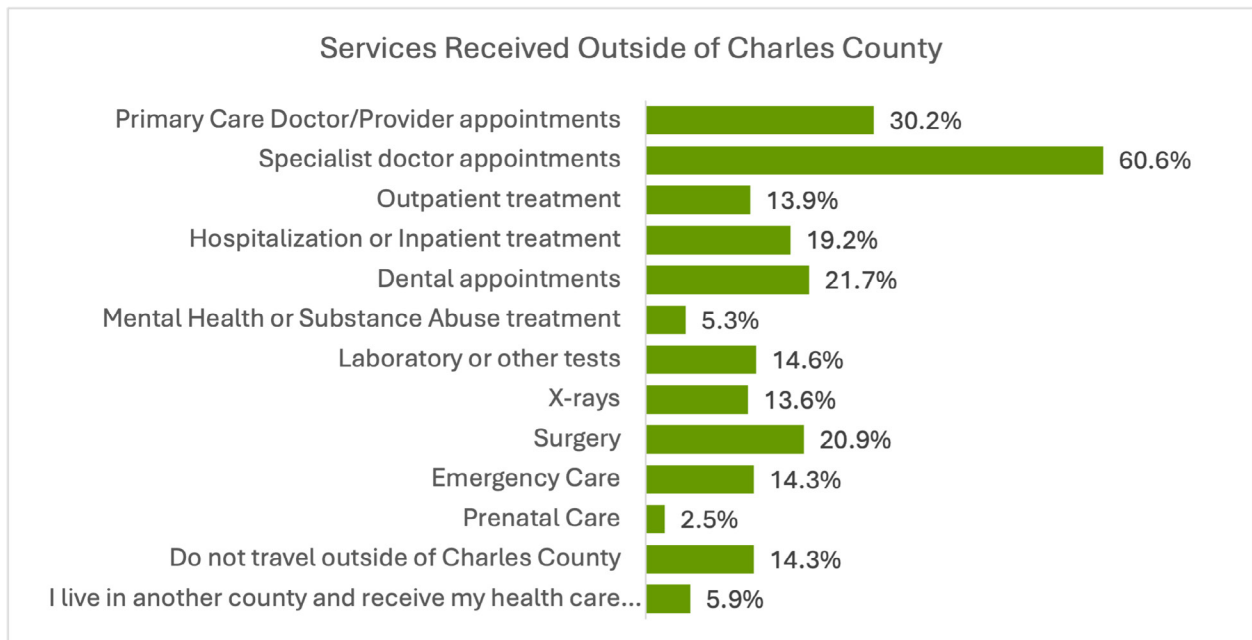
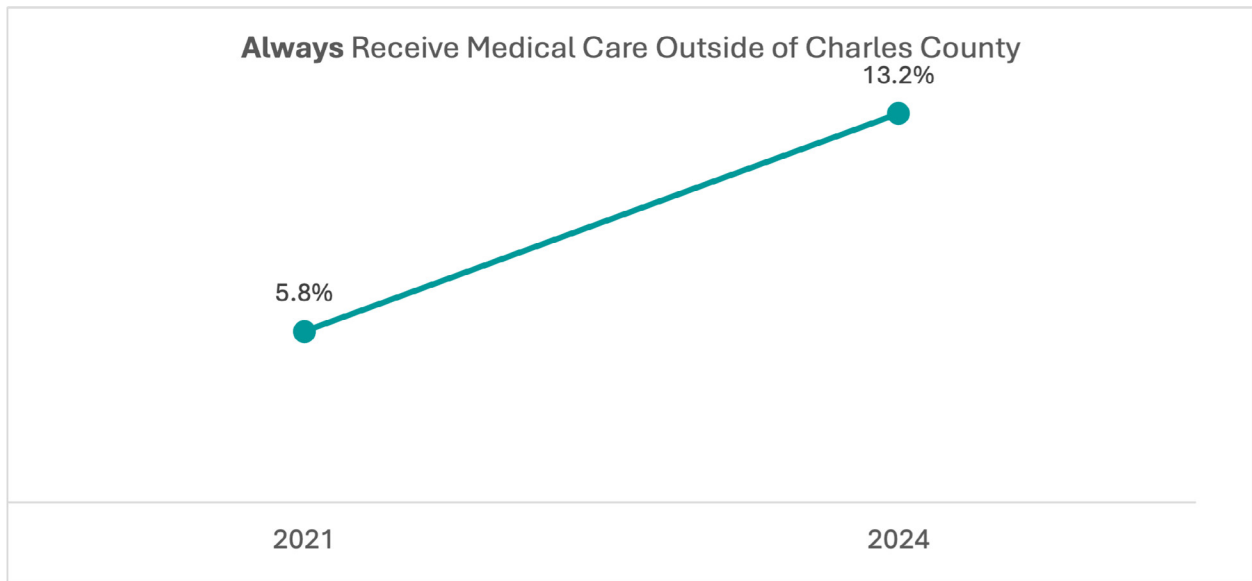
61.3% of survey respondents were able to see a doctor when needed. This percentage is a decrease from 75.3% reported in the 2021 survey. Just under 5% of respondents reported that they were seldom or never able to see a doctor when needed. This is an increase from 1.9% reported in 2021. If participants were unable to see a doctor when needed, the most common reasons were that there were no available appointments (41.3%), that it was too expensive/could not afford it (3.8%), or the doctor/provider was too far away (3.8%). The percentage of respondents who reported they were unable to see a provider when needed because there were no available appointments saw a 41% increase since the 2021 needs assessment survey when the percentage was 29.3%. However, 55.5% of survey respondents reported that they were able to see a doctor/provider when they needed one.



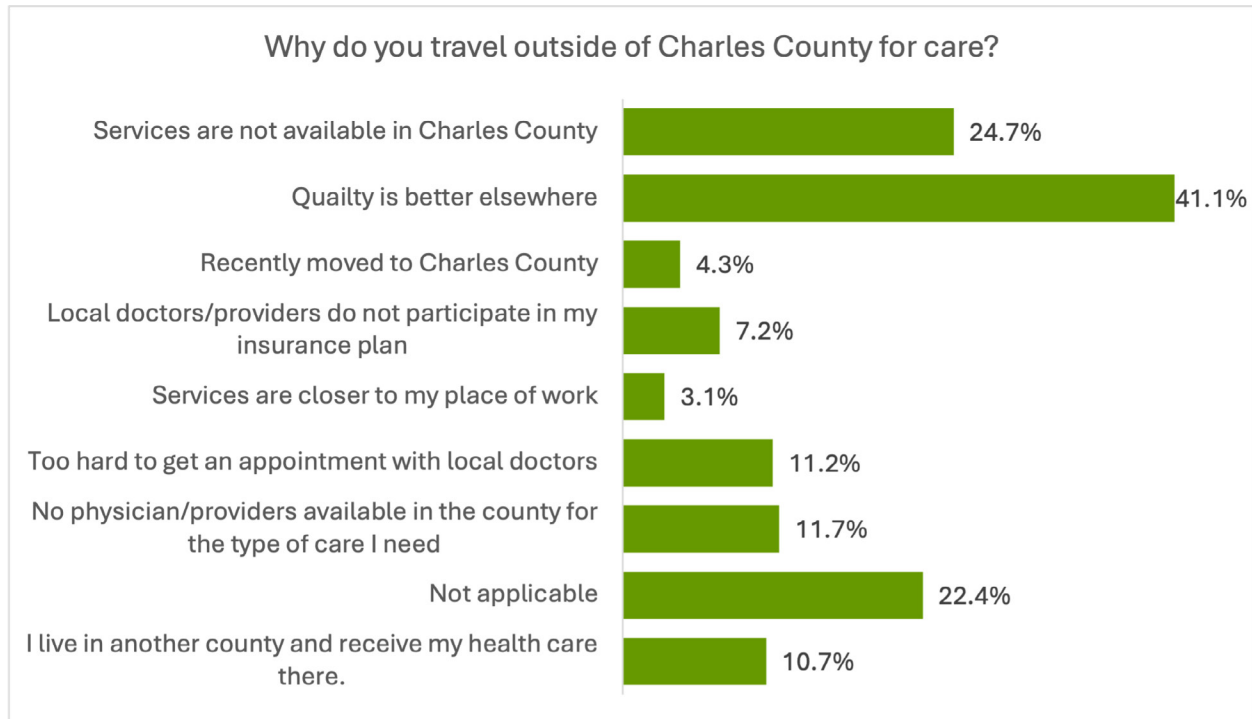
When asked if they receive medical care outside of Charles County, almost 16% of respondents reported that they never receive care outside of Charles County. This is a decrease from 22% reported in the 2021 survey. Almost half of respondents reported that they sometimes receive medical care outside of Charles County. The largest increase since the 2021 survey was in those who reported they always receive medical care outside of Charles County. 13.2% of respondents reported always receiving care outside of the county, compared to 5.8% in 2021.



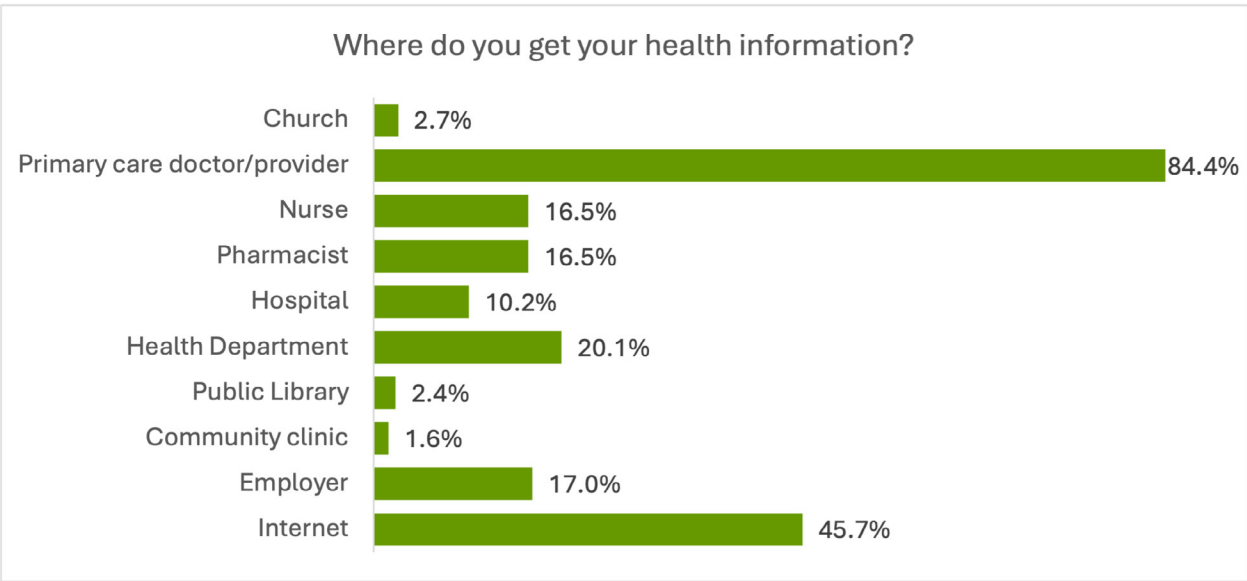
Participants were asked what medical services they receive outside of Charles County. They were asked to check all services that were applicable. The most common services that people receive outside of Charles County are specialist doctor appointments (60.6%), Primary Care Doctor/Provider appointments (30.2%), Dental appointments (21.7%), and Surgeries (20.9%). These were the most common responses reported in the 2021 survey as well. The percentage of respondents who reported receiving primary care services outside of Charles County increased to 30.2% from 19.0% reported in the 2021 survey.



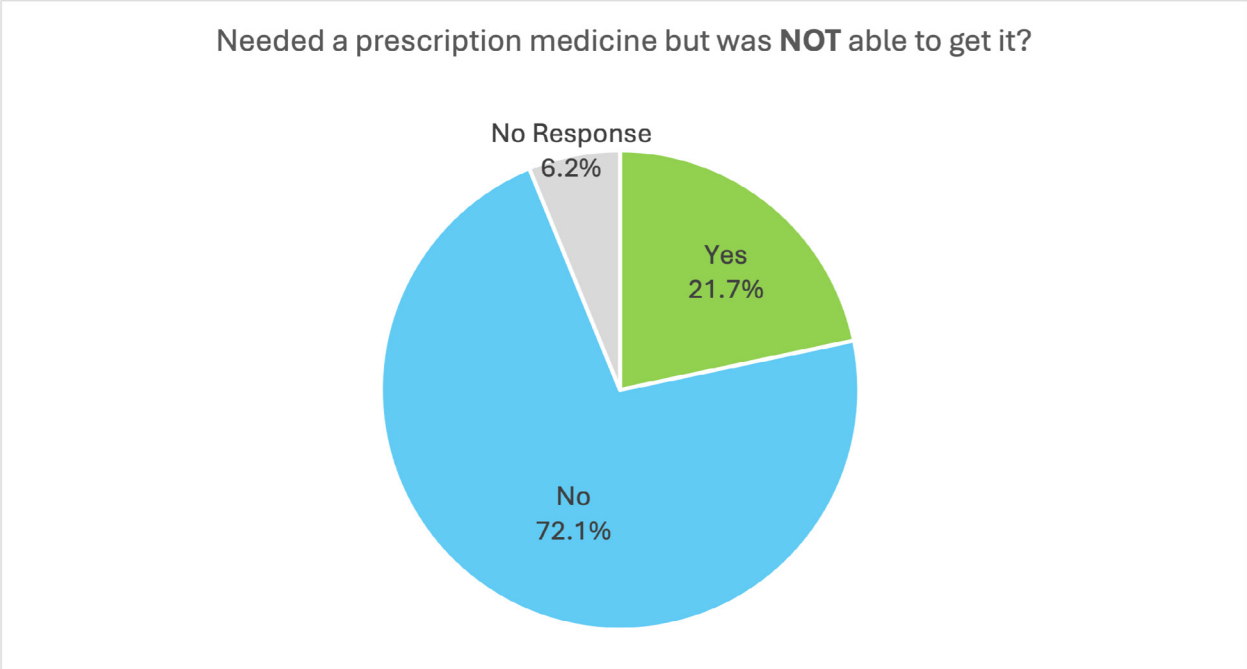
Participants were also asked why they choose to receive those medical services outside of Charles County. The most common responses were that quality is better elsewhere (41.1%) and that those services are not available in Charles County (24.7%). These were also the most common responses in the 2021 survey. The percentage of respondents that reported quality is better elsewhere increase from the 2021 survey from 37.1% to 41.1%.



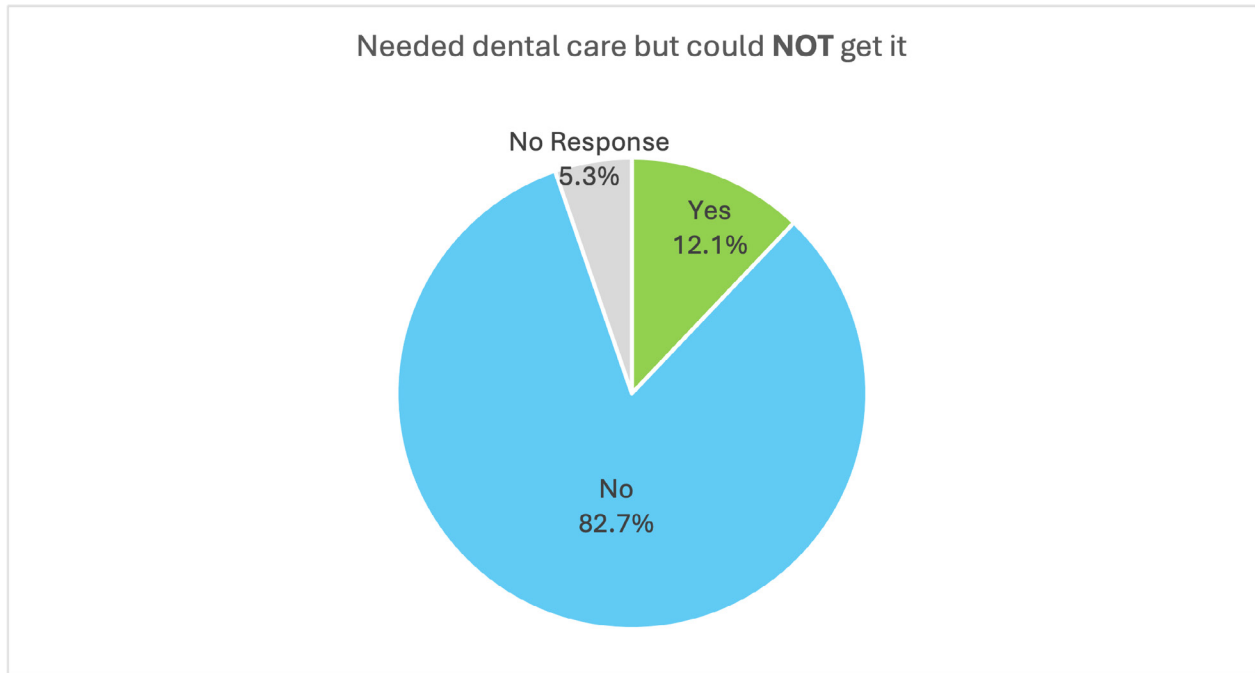
There are various sources in which individuals can get health information. The majority of survey respondents reported getting their health information from a Primary Care doctor/provider (84.4%). The second highest response was the Internet at 45.7% of responses. The percentage of respondents who reported receiving health information from the health department increased from 16.0% in 2021 to 20.1% in 2024.



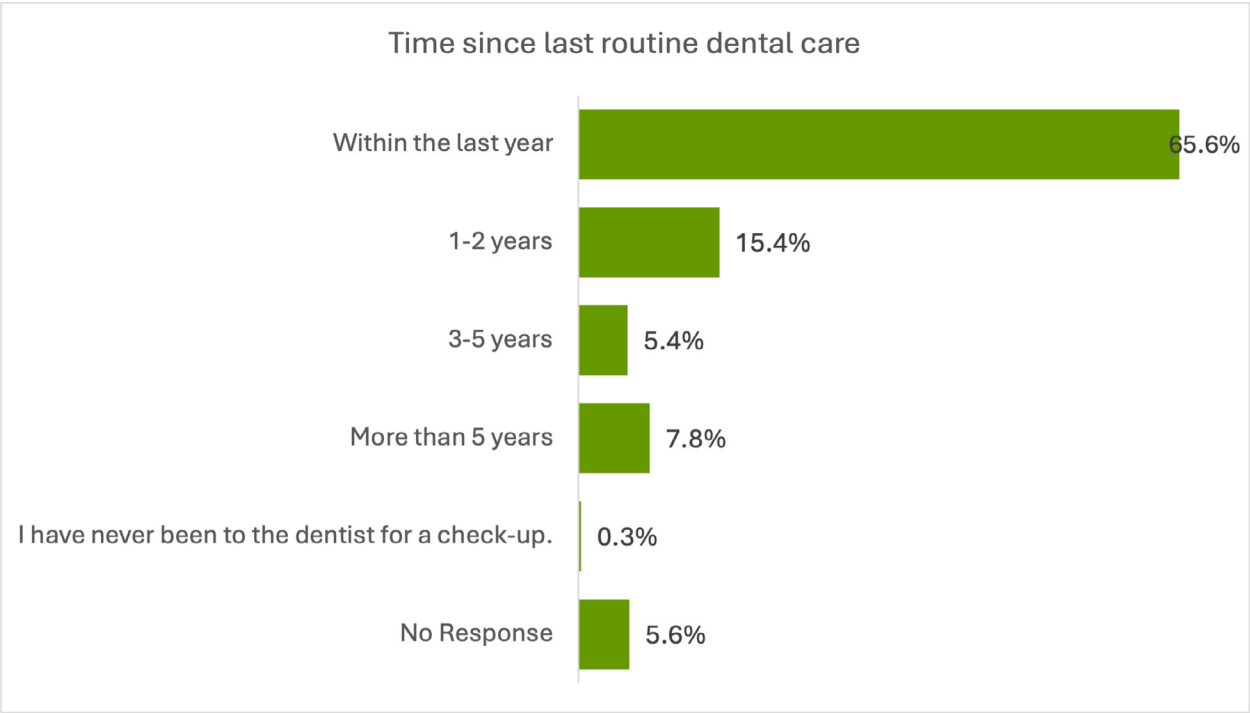
Various questions were asked to determine specific barriers in the county around access to care. The first question for respondents was in the last year, did they need a prescription medicine but were not able to get it? Almost 22% of respondents reported that in the last year they needed prescription medicine but were unable to get it.



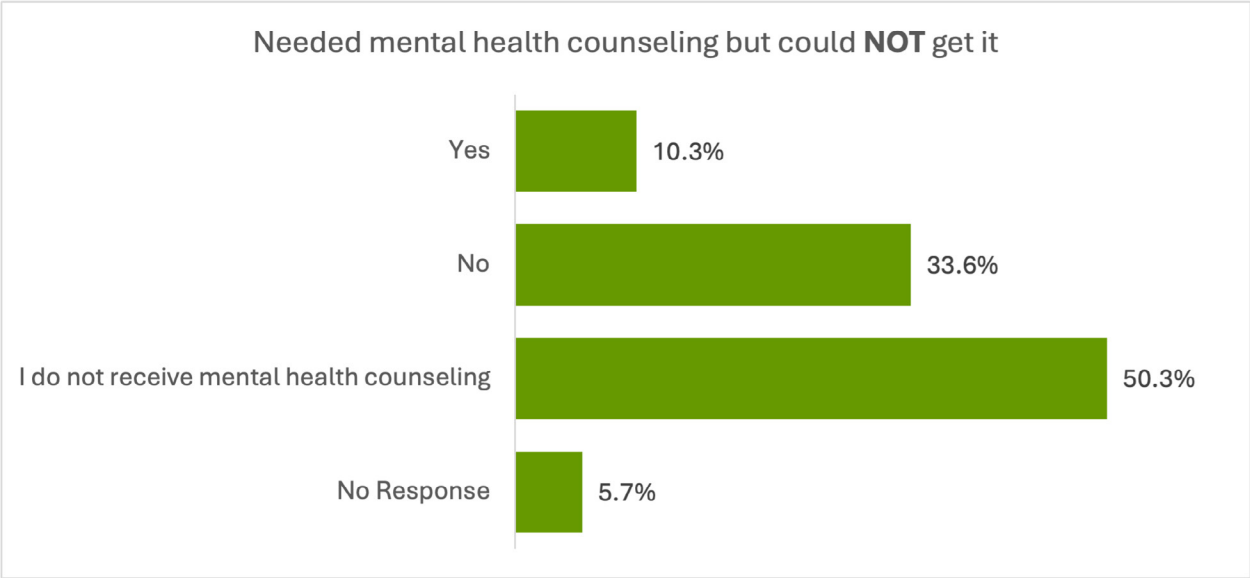
Access to care questions regarding oral health were also asked. Most survey respondents reported that in the last year they were able to receive dental care if they needed it (82.7%). Around 12% of respondents reported that in the last year they needed dental care but could not get it.



65.6% of survey respondents reported having routine dental care within the last year. However, over 10% of respondents reported not having routine dental care in over 3 years (13.2%). Only 0.3% of respondents have never been to the dentist for a check-up.

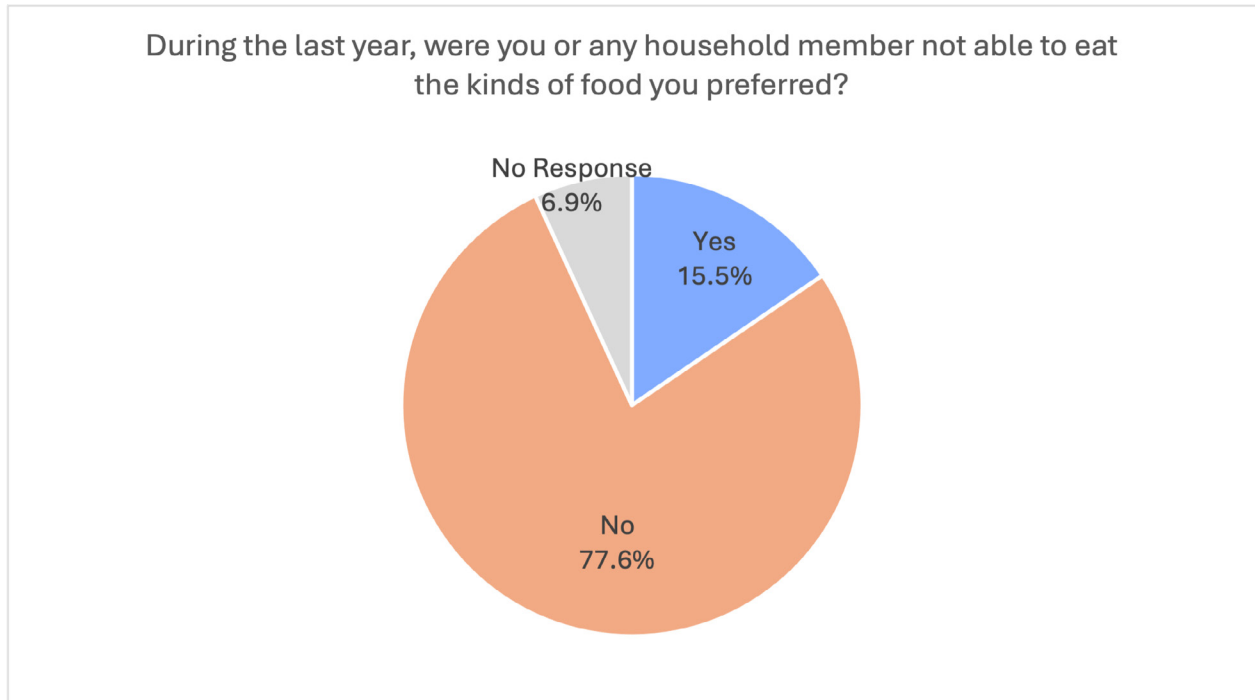


Survey participants were also asked in the last year if they needed mental health counseling but were unable to get it. About half of respondents reported that they do not receive mental health counseling. 33.6% of respondents reported they were able to receive mental health counseling when they needed it, and 10.3% reported they were not able to receive mental health counseling when they needed it.



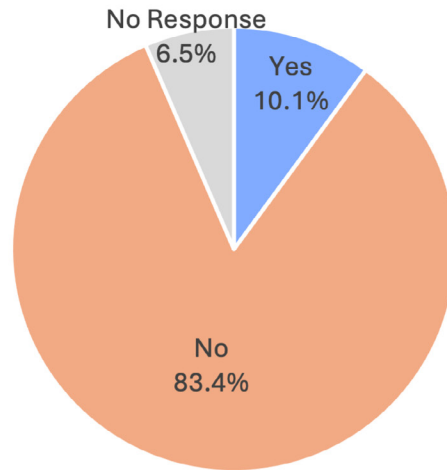
Food Insecurity

Survey respondents were also asked questions related to food insecurity. These questions were designed to understand the community needs and concerns around food and obtaining food. Almost 83% of survey respondents reported not worrying about food for themselves or their household in the last year. However, 11% of survey respondents did worry about having enough food in the last year.



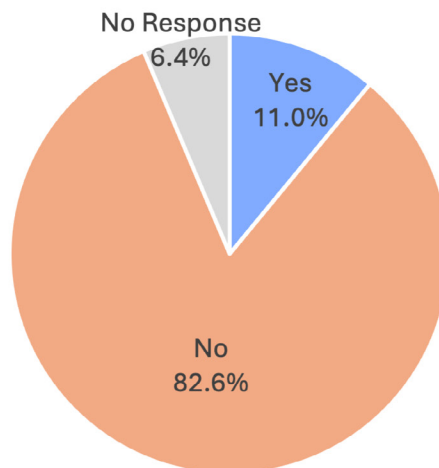
A very similar percentage of survey respondents also reported not being able to eat healthy and nutritious food in the last year (10.1%)

During the last year, were you or any household member unable to eat healthy and nutritious food?

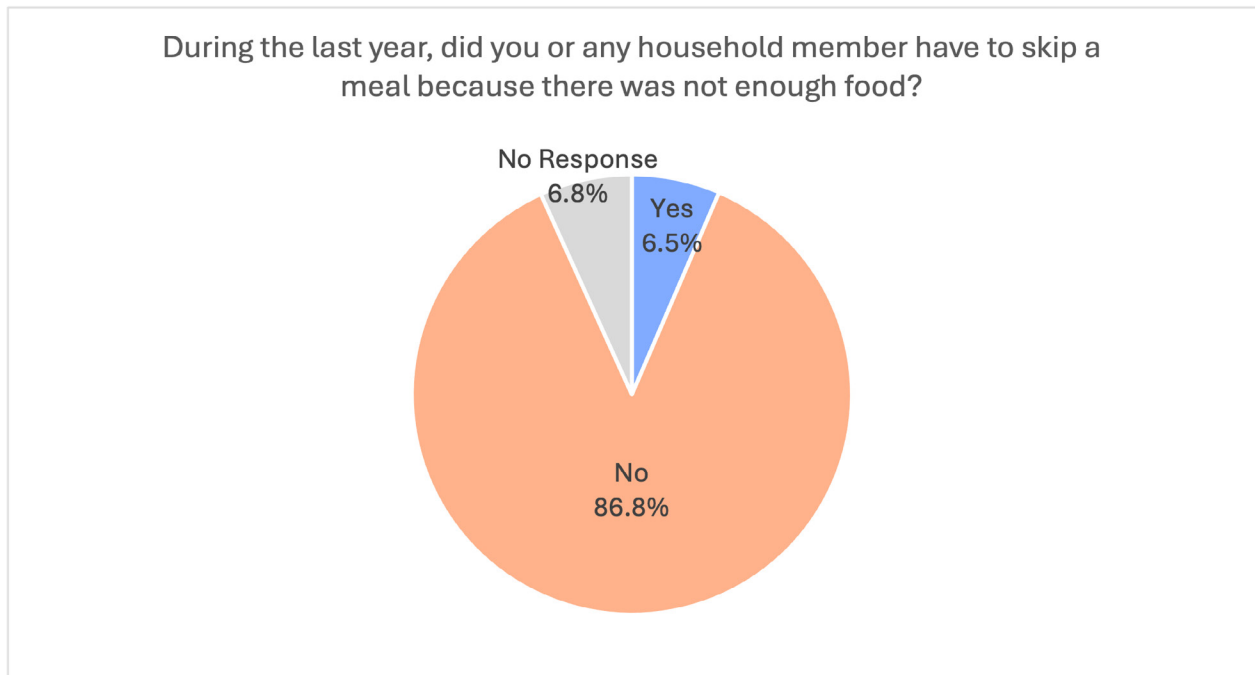


A larger percentage of survey respondents reporting not being able to eat the kinds of food they preferred in the last year, at 15.5%.

During the last year, did you worry that you or your household would not have enough food?

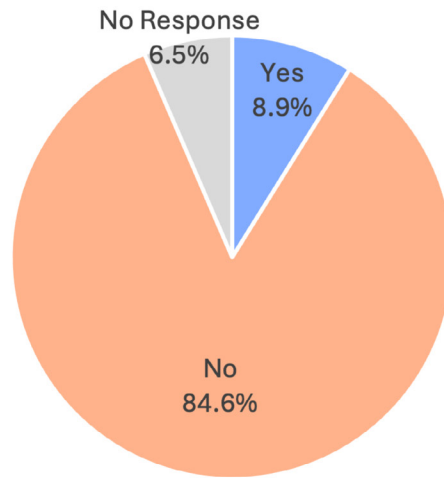


Over 86% of survey participants reported that they or a household member did not have to skip a meal because there was not enough food in the last year. 6.5% of respondents did report that they or a household member had to skip a meal in the last year.



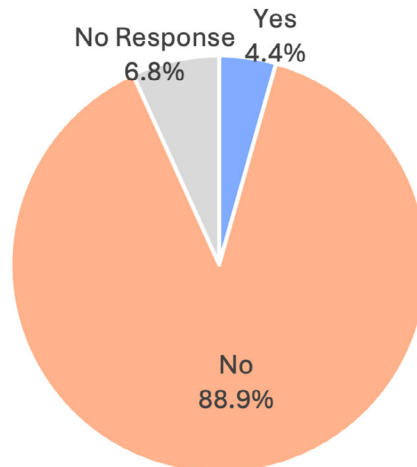
Similarly, almost 85% of respondents reported that in the last year they or a household member did not have to eat a smaller meal than they felt they needed because there was not enough food. Almost 9% of survey respondents reported “Yes” to this question.

During the last year, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?



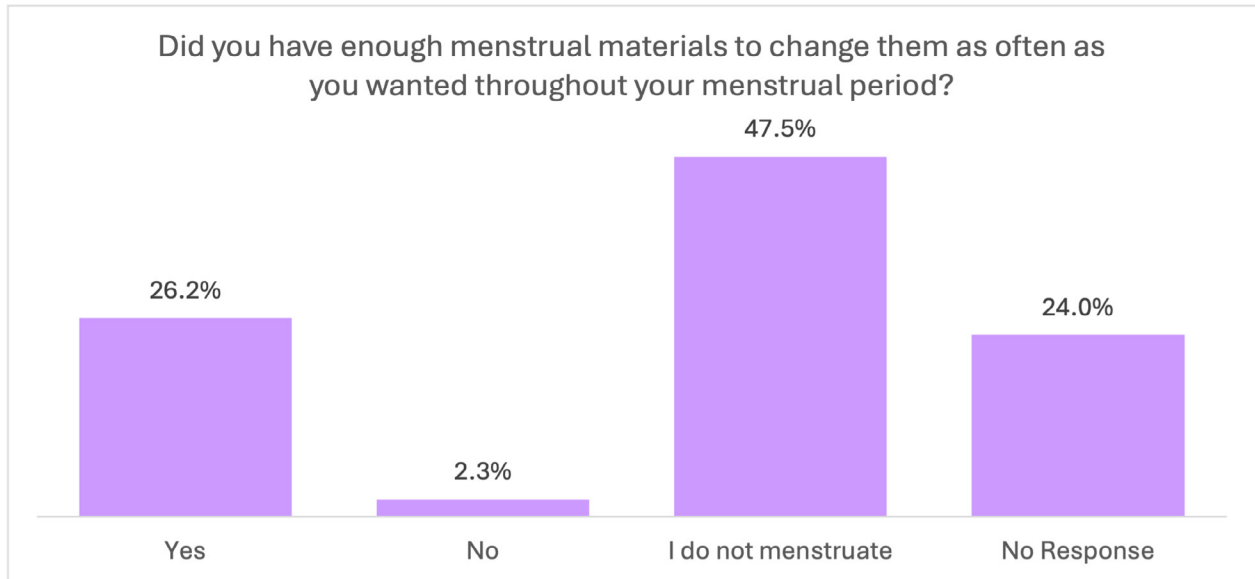
Almost 89% of survey respondents reported that in the last year they or a household member did not go without eating for a whole day. 4.4% of respondents reported that either they or a household member did go a whole day without eating in the last year.

During the last year, did you or any household member go without eating for a whole day?

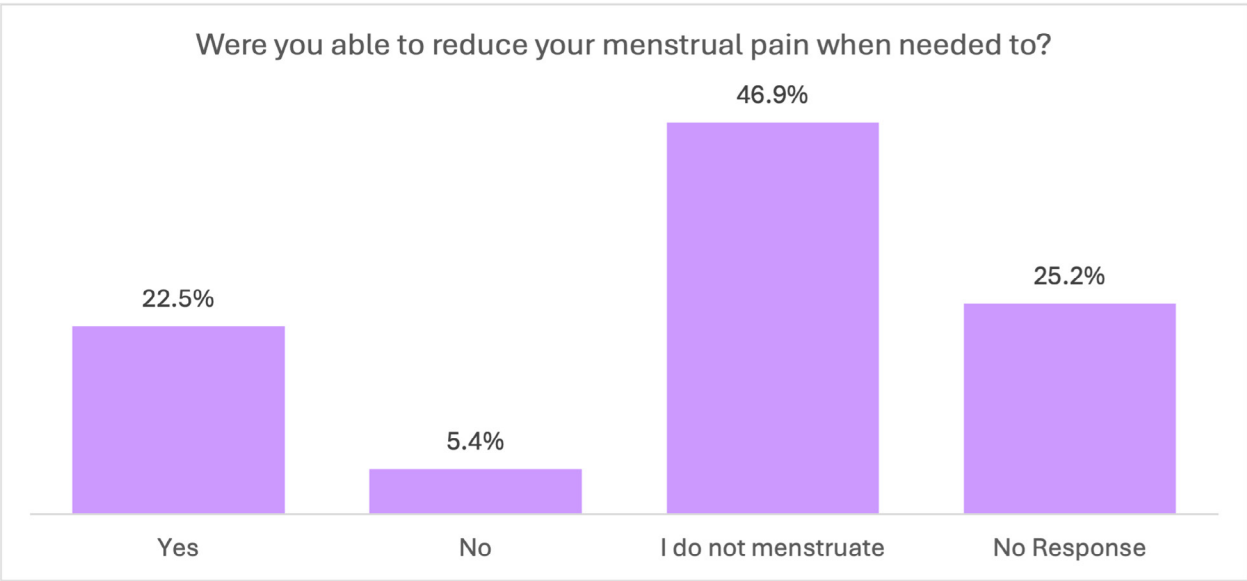


Menstrual Health/Period Poverty

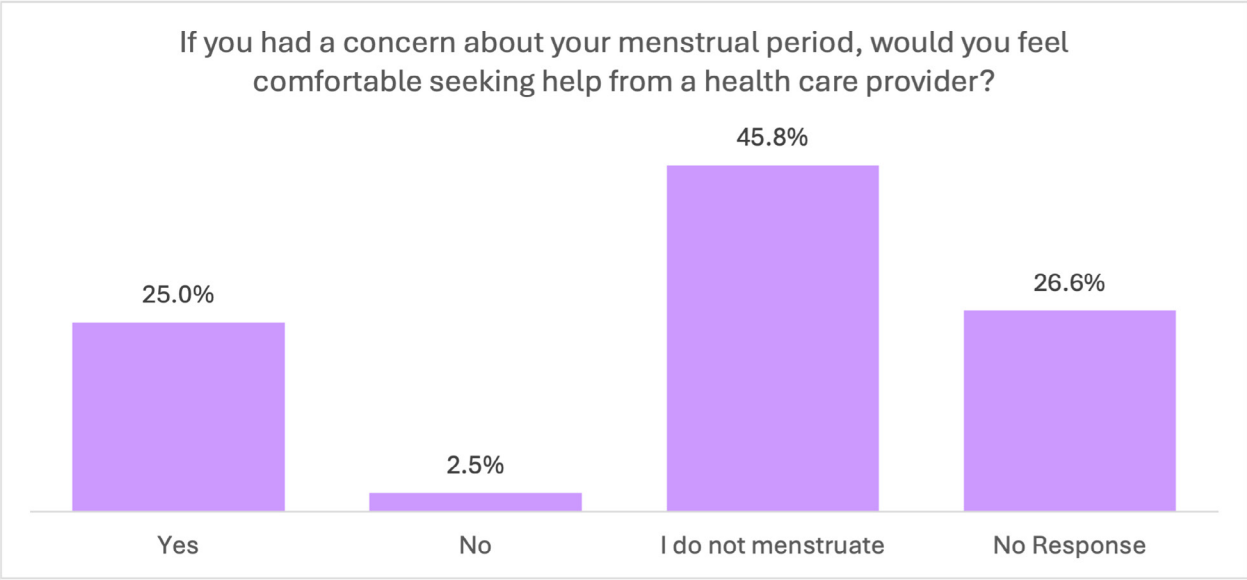
Questions relating to menstrual health and period poverty were also asked in this year's needs assessment survey. Although a large majority of survey respondents either reported they did not menstruate or did not respond (71.5%), 26.2% of respondents reported that they did have enough menstrual materials throughout their menstrual period. 2.3% of respondents reported they did not.



Over 22% of respondents reported being able to reduce their menstrual pain when they needed to during their last menstrual period. 5.4% of respondents reported they were not able to reduce their menstrual pain when they needed to. Again, a large percentage of survey respondents reported they did not menstruate, or they did not respond (72.1%).



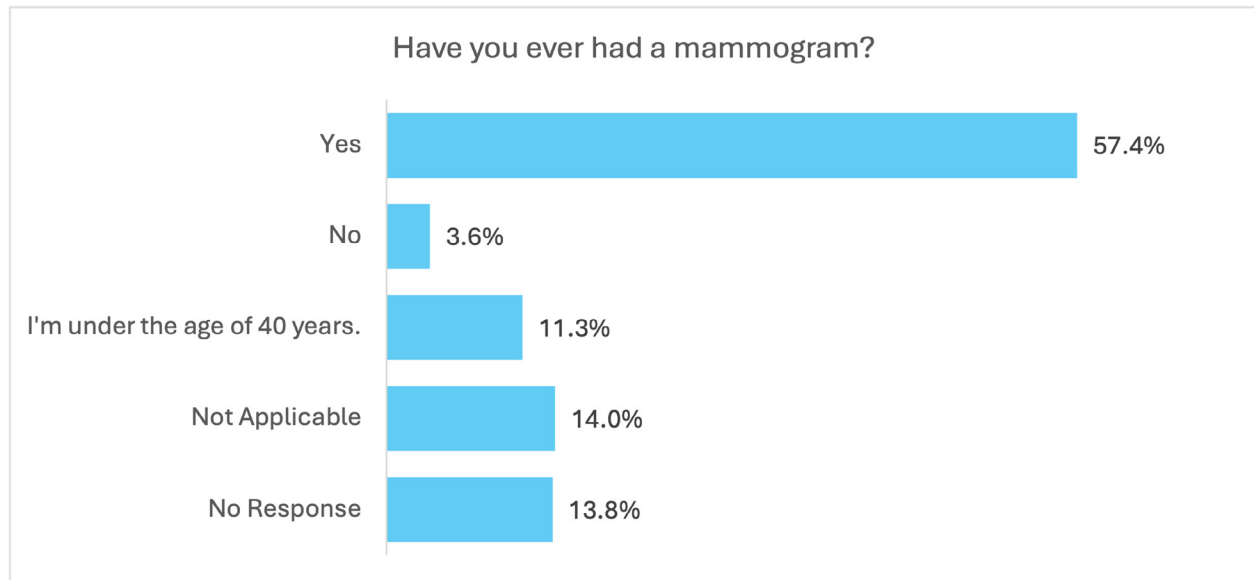
A quarter of survey respondents reported that if they had a concern about their menstrual period, they would feel comfortable seeking help from a health care provider. Meanwhile, 2.5% of respondents reported they would not feel comfortable seeking help from a health care provider. Similarly, to the other menstrual health questions, a large percentage of respondents reported they did not menstruate (45.8%) or they did not respond to the question (26.6%).



Cancer Screenings/Prevention

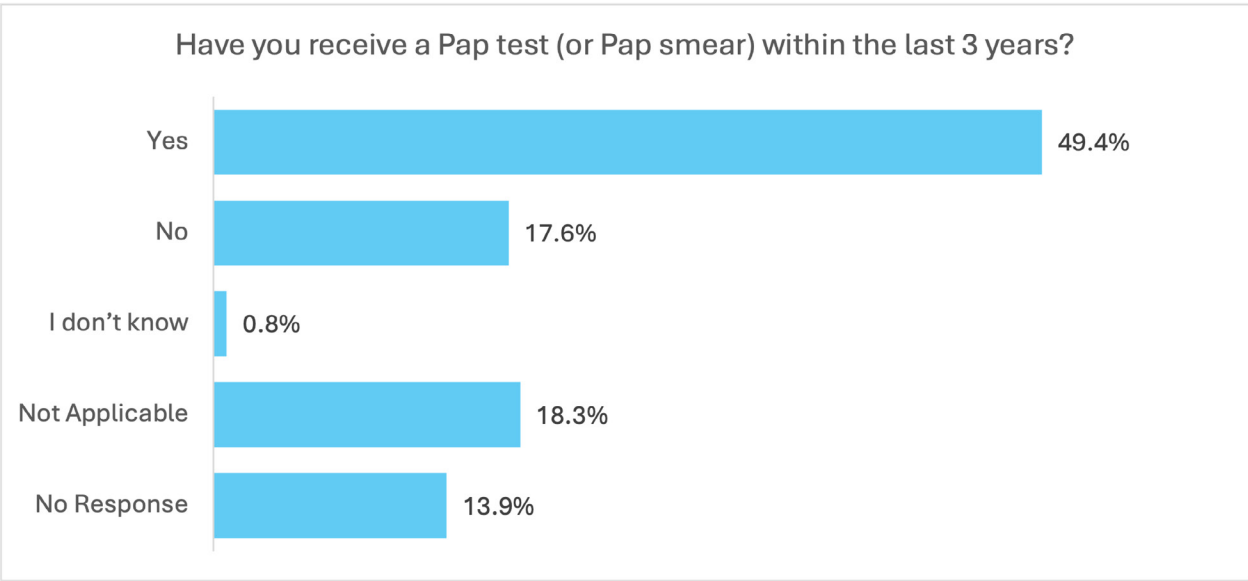
Screening for cancer has become a vital prevention strategy in detecting cancer early in patients and increasing the chances of survival. Survey participants were asked to answer questions regarding their own cancer prevention strategies by using screenings.

When asked if they have ever had a mammogram, 57.4% of participants reported that they have had a mammogram in the past compared to 3.6% who reported they have not had a mammogram. Over 11% of survey participants reported that they are under the age of 40, meaning they are too young to have mammogram.

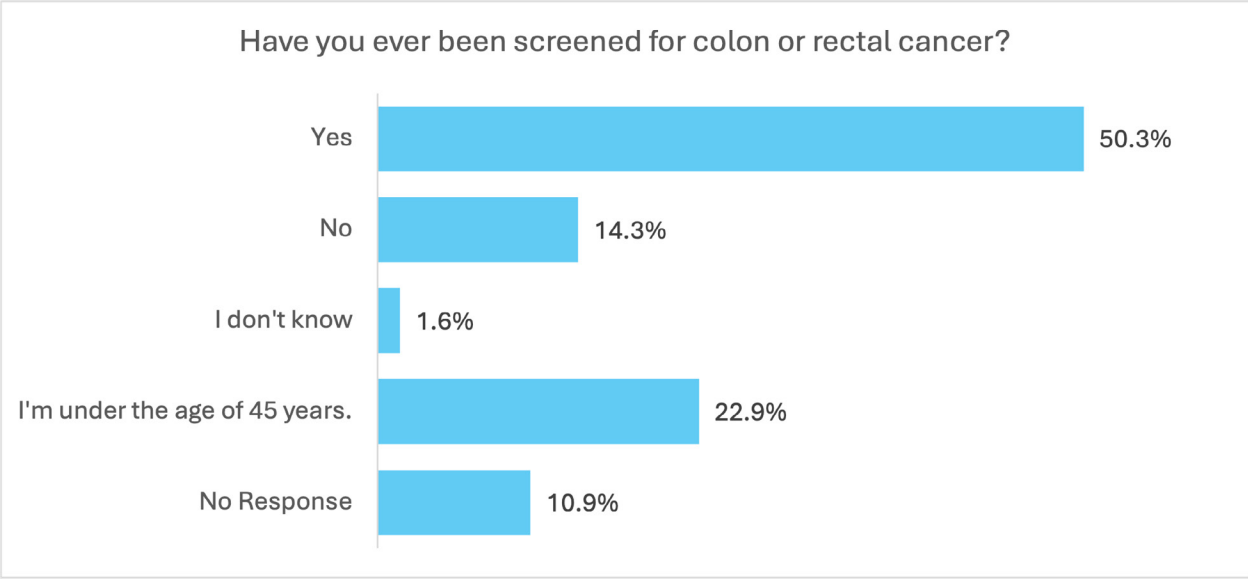


Almost 50% of survey participants reported that they have received a Pap test or Pap smear in the last 3 years, while over 17% of participants reported that they have not received a Pap test in the last 3 years.

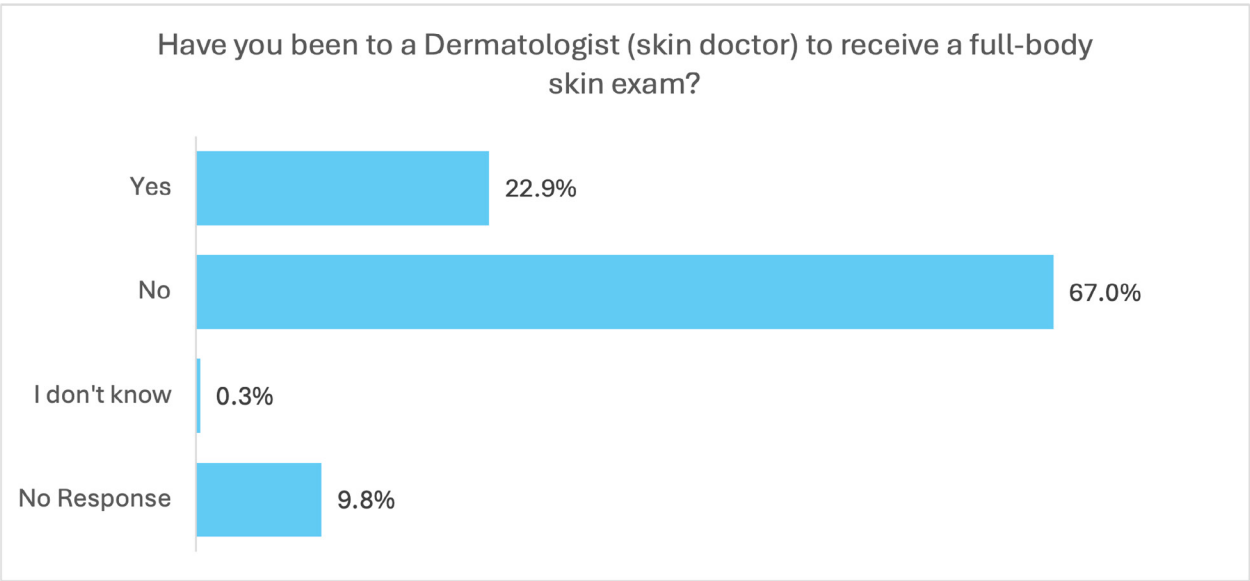
A smaller percentage of participants reported having a PSA test in the last 3 years, at 7.5%. This small percentage may be due to the fact that almost 80% of survey participants reported female as their sex assigned at birth. 53.1% reported that this question was not applicable to them.



50.3% of survey respondents reported that they have been screened for colon or rectal cancer in the past, while 14.3% of respondents reported they have not been screened for colon or rectal cancer. About 23% of respondents reported that they are under the age of 45, resulting in them being too young for colon or rectal screenings at this time.

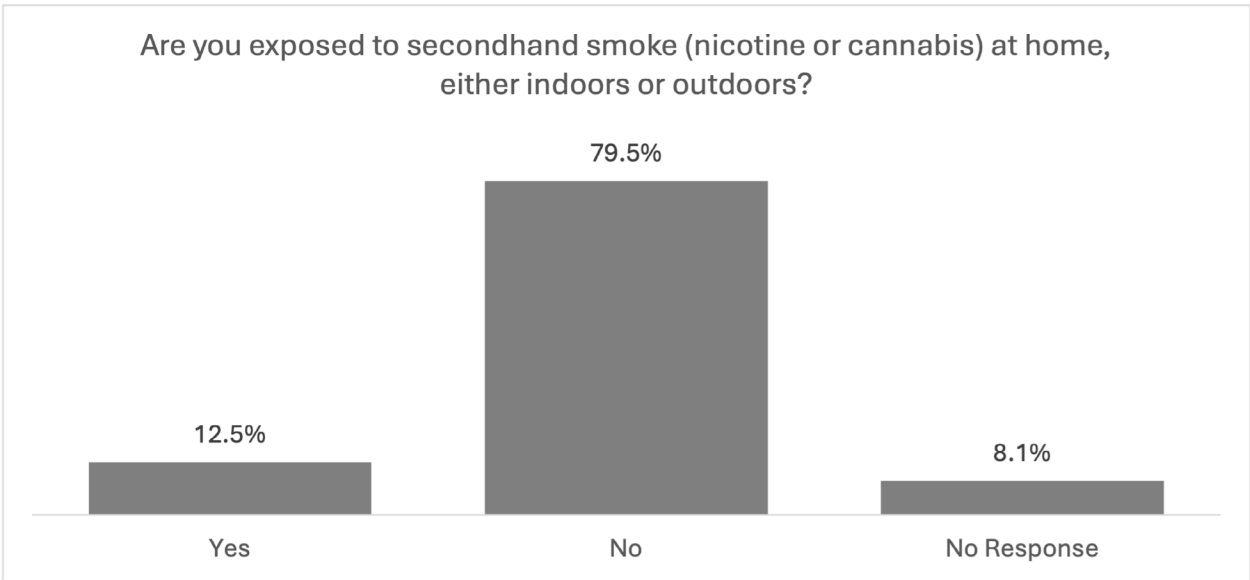


The majority of survey respondents reported that they have not been to a Dermatologist in the last year for a full-body skin exam (67.0%). About 23% of respondents reported that they have received a full-body skin exam in the last year.

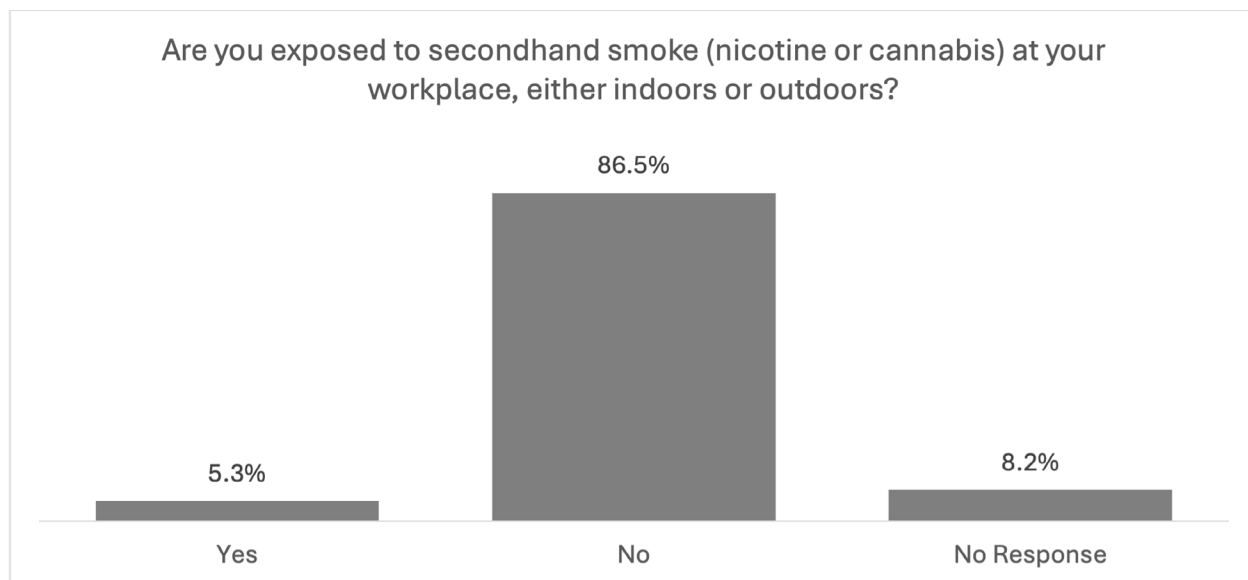


Secondhand Smoke

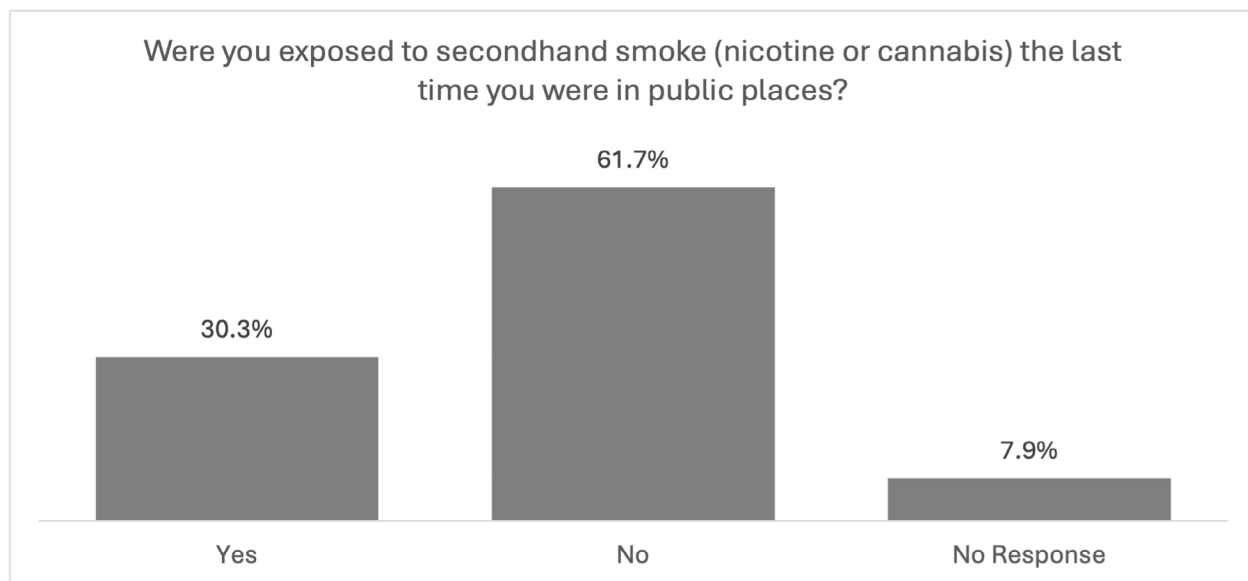
Survey respondents were also asked about their exposure to secondhand smoke, in their home or out in the community. Almost 80% of respondents reported that they are not exposed to secondhand smoke at home. 12.5% of respondents reported that they are exposed to secondhand smoke at their home, either indoors or outdoors.



A larger percentage of respondents reported that they are not exposed to secondhand smoke at their workplace. Just over 5% of respondents reported that they are exposed to secondhand smoke at work.



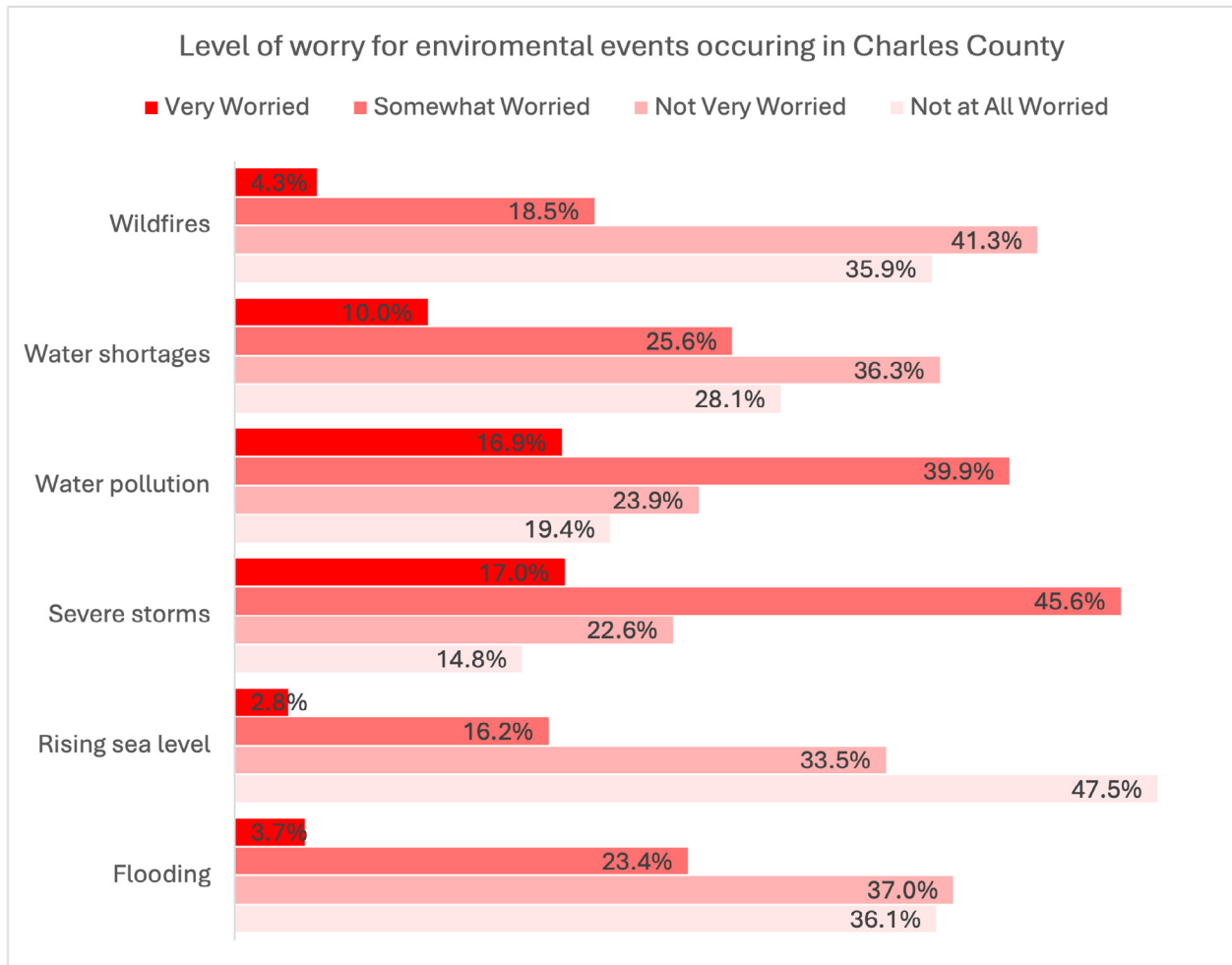
When asked if they were exposed to secondhand smoke in public places, a larger percentage of survey respondents reported that they were (30.3%). Just under 62% of respondents reported that they were not exposed to secondhand smoke the last time they were in public places.



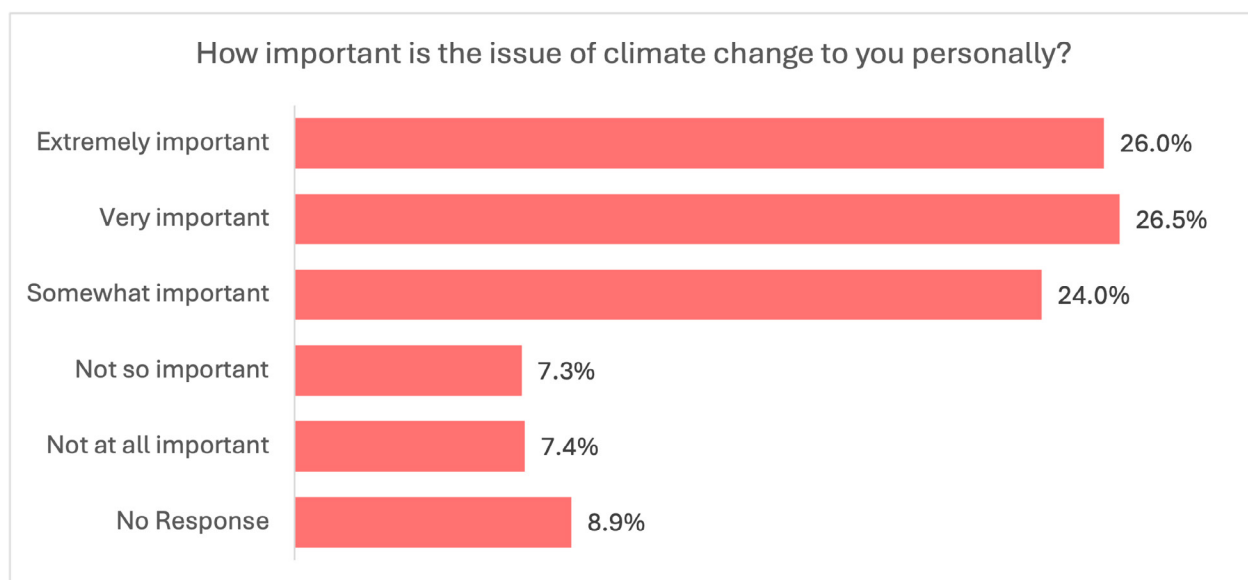
Environmental Health

Participants were asked to rate their level of worry about various environmental events that could occur in the county. Overall, many participants were not worried about these events occurring in Charles County. Water pollution and severe storms had the highest percentage of participants who reported being either very or somewhat worried that they could harm the community. About 17% of participants reported they were very worried about water pollution and severe storms harming the community. Water pollution and severe storms also had the highest percentage of participants

who reported being somewhat worried about these events harming Charles County, at 39.9% and 45.6% respectively. Rising sea level was the environmental event most participants reported not being worried about. 81% of survey participants reported not being very worried or not at all worried about rising sea levels harming Charles County.



Although many participants were not worried about specific environmental events harming Charles County, a large percentage reported that climate change was important to them. Over half of survey respondents reported that the issue of climate change was either very or extremely important to them (52.5%). Over a quarter of participants reported that climate change was extremely important to them (26.0%). Only 14.7% of respondents reported that climate change is not so important to them or not at all important to them.



Behavioral Risk Factors

The Top Protective Factors (greatest percentage reporting that they consistently do these activities) include:

- Always wear a seatbelt (95.1%)
- Always wash hands after using the bathroom or before making food (86.2%)
- Always follow road safety rules (55.6%)
- Never use other illegal drugs (81.7%)
- Never misuse prescription opioids or use heroin (81.6%)
- Never use smokeless tobacco (chew, snuff, dip) (77.7%)
- Never smoke e-cigarettes (75.6%)
- Never use marijuana (73.5%)
- Never smoke cigarettes, cigars, pipes, or cigarillos (70.7%)
- Never get exposed to secondhand smoke at home or work (62.9%)
- Never drink more than three alcoholic beverages per day (61.7%)
- Never drink more than 5 alcoholic beverages in one sitting (60.3%)

The Top Risk Factors that increase the chances of chronic/infectious disease or injury (lowest percentage reporting that they always do these activities) include:

- Always perform self-exams for cancer (8.3%)
- Always eat 5 or more servings of fruits and vegetables each day (8.5%)

- Always get 7-9 hours of sleep each night (15.3%)
- Always participate in 30 minutes of physical activity each day (16.2%)
- Always use sunscreen regularly (17.9%)
- Always practice safe sex (ex. use a condom, get tested) (29.4%)

| Risk and Behavioral Factors | Always | Most of the time | Sometimes | Rarely | Never | Not applicable | Total |
|--|---------------|-------------------------|------------------|---------------|--------------|-----------------------|--------------|
| Use a seatbelt? | 645 | 21 | 7 | 1 | 2 | 2 | 678 |
| Wear a helmet while riding a bicycle? | 170 | 40 | 37 | 45 | 55 | 330 | 677 |
| Wear a helmet while riding a scooter, ATV, or motorcycle? | 135 | 14 | 20 | 8 | 10 | 489 | 676 |
| Eat 5 or more servings of fruits and vegetables each day? | 58 | 176 | 278 | 134 | 32 | 2 | 680 |
| Eat fast food more than once a week? | 47 | 78 | 243 | 232 | 67 | 10 | 677 |
| Drink more than 5 alcoholic beverages in one sitting? | 2 | 9 | 43 | 128 | 409 | 87 | 678 |
| Drink more than three alcoholic beverages per day? | 1 | 2 | 40 | 125 | 419 | 92 | 679 |
| Smoke cigarettes, cigars, pipes, or cigarillos? | 16 | 8 | 11 | 26 | 479 | 138 | 678 |
| Smoke e-cigarettes? | 5 | 3 | 9 | 10 | 510 | 138 | 675 |
| Use smokeless tobacco (chew, snuff, dip)? | 1 | 2 | 2 | 2 | 526 | 144 | 677 |
| Get exposed to secondhand smoke at home or work? | 13 | 14 | 46 | 67 | 427 | 112 | 679 |
| Use marijuana? | 11 | 9 | 20 | 20 | 499 | 120 | 679 |
| Misuse prescription opioids or use heroin? | 0 | 1 | 1 | 1 | 553 | 122 | 678 |
| Use other illegal drugs? | 0 | 1 | 5 | 0 | 554 | 118 | 678 |
| Perform self-exams for cancer? | 56 | 99 | 235 | 110 | 140 | 36 | 676 |
| Wash hands after using the bathroom or before making food? | 586 | 75 | 13 | 1 | 3 | 2 | 680 |
| Use sunscreen regularly? | 121 | 217 | 196 | 74 | 55 | 13 | 676 |
| Get a flu shot every year? | 332 | 90 | 78 | 50 | 112 | 16 | 678 |
| Practice safe sex (ex. use a condom, get tested)? | 198 | 45 | 27 | 21 | 60 | 322 | 673 |
| Take a vitamin or supplement daily? | 317 | 109 | 118 | 57 | 68 | 8 | 677 |
| Get 7-9 hours of sleep each night? | 104 | 220 | 199 | 114 | 37 | 4 | 678 |
| Feel stressed out or overwhelmed? | 69 | 139 | 295 | 129 | 42 | 5 | 679 |
| Follow road safety rules? | 374 | 259 | 32 | 2 | 3 | 3 | 673 |
| Participate in 30 minutes of physical activity each day? | 110 | 208 | 241 | 92 | 24 | 4 | 679 |

Health Issues

Participants were given a list of 34 different health issues and conditions that affect Charles County residents. They were asked their perceptions of health by rating what problem level these particular issues present to the community: not a problem, slight problem, a moderate problem, a serious problem, or not sure.

| Health Problems/Conditions | Serious Problem | Moderate Problem | Slight Problem | Not a Problem | Not Sure/Don't Know | Total |
|--|------------------------|-------------------------|-----------------------|----------------------|----------------------------|--------------|
| Drug Use | 305 | 152 | 33 | 44 | 125 | 659 |
| Alcohol Use | 227 | 195 | 44 | 46 | 144 | 656 |
| Tobacco Use | 202 | 190 | 63 | 51 | 144 | 650 |
| Asthma and lung diseases | 122 | 170 | 62 | 38 | 266 | 658 |
| Cancer | 186 | 154 | 35 | 43 | 240 | 658 |
| Child Abuse and Neglect | 124 | 156 | 70 | 44 | 263 | 657 |
| Crime | 313 | 178 | 55 | 43 | 67 | 656 |
| Domestic Violence | 195 | 167 | 49 | 41 | 203 | 655 |
| Prenatal and Infant health | 86 | 140 | 84 | 47 | 296 | 653 |
| Diabetes/Sugar | 237 | 153 | 40 | 35 | 190 | 655 |
| Affordable health care | 284 | 125 | 47 | 39 | 161 | 656 |
| Health Insurance | 228 | 143 | 57 | 48 | 178 | 654 |
| Access to health care | 232 | 152 | 74 | 51 | 149 | 658 |
| Affordable housing | 332 | 119 | 55 | 45 | 105 | 656 |
| Dental health | 171 | 159 | 63 | 55 | 204 | 652 |
| Flu/Pneumonia | 66 | 135 | 135 | 78 | 241 | 655 |
| Infectious Diseases (i.e. COVID-19) | 84 | 155 | 159 | 74 | 185 | 657 |
| Mental health | 279 | 153 | 48 | 33 | 137 | 650 |
| Obesity/Overweight | 318 | 172 | 37 | 21 | 107 | 655 |
| Disability Services | 161 | 154 | 64 | 49 | 223 | 651 |
| After school programs for kids | 162 | 152 | 80 | 56 | 203 | 653 |
| Sexually transmitted diseases | 85 | 116 | 78 | 43 | 331 | 653 |
| HIV/AIDS | 64 | 97 | 92 | 47 | 350 | 650 |
| Suicide | 115 | 139 | 81 | 47 | 263 | 645 |
| Heart Disease | 180 | 161 | 41 | 36 | 228 | 646 |
| High Blood Pressure | 245 | 159 | 37 | 24 | 187 | 652 |
| Stroke | 166 | 160 | 51 | 39 | 235 | 651 |
| Injuries | 88 | 153 | 95 | 42 | 267 | 645 |
| Highway Safety/Traffic Accidents | 248 | 183 | 80 | 46 | 96 | 653 |
| Public Transportation | 209 | 163 | 85 | 58 | 138 | 653 |
| Homelessness | 243 | 191 | 79 | 39 | 100 | 652 |
| Environmental Health/Air Quality | 126 | 165 | 128 | 68 | 165 | 652 |
| Veteran Health | 194 | 119 | 67 | 36 | 237 | 653 |
| Traumatic Brain Injuries and Concussions | 73 | 96 | 95 | 49 | 340 | 653 |

The top 5 serious health issues for Charles County residents were Affordable Housing, Obesity, Crime, Drug Use, and Affordable Healthcare. Social determinants of health, such as housing and crime, have come to the forefront during this needs assessment.

When examining the top serious health issues in Charles County by race and ethnicity, there is a lot of variation. Obesity, Mental Health, and Affordable Housing are the three conditions that appeared in the Top 5 for every race and ethnicity.

Top 5 Most Serious Problems in Charles County by Race and Ethnicity

| American Indian/Alaska Native | Asian/Pacific Islander | Non-Hispanic Black | Hispanic | Non-Hispanic White | All Races |
|--------------------------------------|---------------------------------|---------------------------|-----------------------|---------------------------|-----------------------|
| Affordable Healthcare | Drug Use | Affordable Housing | Affordable Healthcare | Crime | Affordable Housing |
| Health Insurance | Crime | Obesity | Mental Health | Drug Use | Obesity |
| Affordable Housing | Diabetes | Homelessness | Affordable Housing | Obesity | Crime |
| Obesity | Affordable Housing | Mental Health | Obesity | Affordable Housing | Drug Use |
| Access to Healthcare | Mental Health and Obesity (Tie) | Affordable Healthcare | High Blood Pressure | Mental Health | Affordable healthcare |

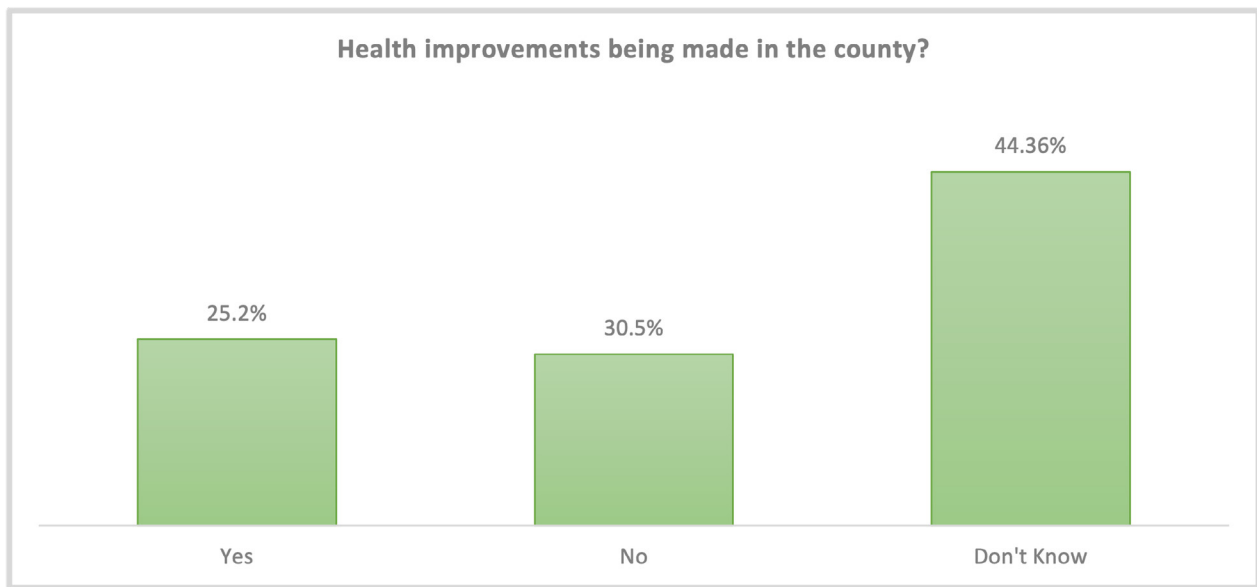
When breaking down the top 5 serious health conditions by gender, the health issues are the basically the same, just in a different order.

Top 5 Most Serious Problems in Charles County by Gender

| Male | Female |
|---------------------|-----------------------|
| Obesity | Affordable Housing |
| Crime | Obesity |
| Affordable Housing | Drug Use |
| Drug Use | Crime |
| High Blood Pressure | Affordable Healthcare |

Health Improvements in Charles County

25.19% of survey participants claimed they have seen health improvements in Charles County. This percentage is similar to the 2021 survey, where 26.2% of participants claimed they saw health improvements in Charles County.



The top five health issues where participants have seen improvements include: infectious diseases, diabetes, access to health care, mental health, and high blood pressure.

| | |
|--|--------|
| Heart Disease | 18.03% |
| Cancer | 16.31% |
| Diabetes | 36.91% |
| Asthma/Lung Diseases | 9.44% |
| Tobacco use | 22.32% |
| Substance Use | 15.02% |
| Mental health | 30.04% |
| High Blood Pressure | 24.03% |
| Stroke | 12.45% |
| Traffic Safety | 12.02% |
| Injuries | 4.29% |
| Obesity/Overweight | 19.74% |
| Access to health care | 31.76% |
| Access to needed medications | 15.02% |
| Infectious Diseases (like COVID-19, Influenza) | 39.48% |

Agency Responsibility

Promotion of the long survey to community agencies, non-profit partners, and community members was the shared responsibility of the University of Maryland Charles Regional Medical Center, the Charles County Department of Health, and all members of the Partnerships for a Healthier Charles County. Flyers with a QR code to the long survey were taken to all community events from July-December 2023 so residents could quickly access the survey online. For those who were not comfortable with technology, paper copies were provided, and data was entered at a later date. The University of Maryland Charles Regional Medical Center also sent out postcards to households with the link and QR code to complete the survey.

Short Survey Analysis:

Introduction

A short 5 question survey was developed to distribute throughout the county for additional qualitative data from July 1, 2023, through December 31, 2023. A total of 1,189 surveys were completed throughout the community. Short survey data collection was performed at various community events throughout the county.

Particular emphasis was given to the collection of data among the county's vulnerable populations including the medically underserved, the homeless, and the geographically isolated. An ongoing survey collection was conducted at the Charles County Department of Health and the University of Maryland Charles Regional Medical Center. Short surveys were collected during blood drives at the University of Maryland Charles Regional Medical Center (CRMC), the Red Cross Blood Drive, and church Blood Drives. CRMC also coordinated with the Charles County Department of Health to distribute surveys at the Charles County Fair. The Charles County Department of Health conducted survey collection at all community outreach events attended from July to December 2023. Emphasis was given to the western region of the county that is more geographically isolated. Surveys collection was conducted at Fruit and Vegetable distribution sites and at the Nanjemoy Heritage Day. The community was also surveyed at large events such as the Charles County Fair, blood drives, Charles County Government Wellness Fair and Rodeo, Recovery Day, food drives, and other community outreach events.

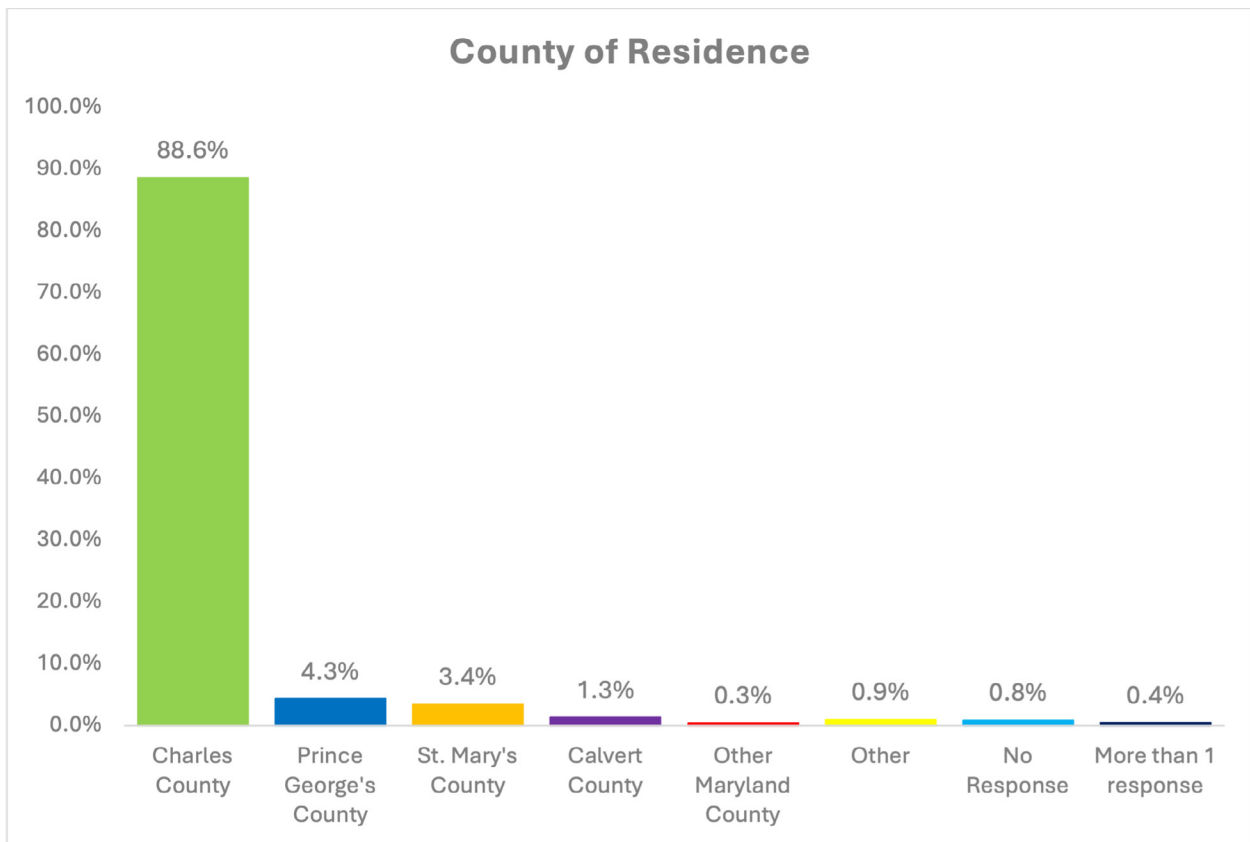
The results of all the surveys combined are presented below.

All Accumulated Surveys

Question 1: County of residence

The majority of the short survey respondents were residents of Charles County (88.6%). 4.3% of short survey respondents were residents of Prince George's County and 3.4% were residents of St. Mary's County. Other counties respondents resided in were Calvert County (1.3%), King George County, VA (0.3%), and Washington D.C. (0.2%) Their answers were included since individuals may work, spend time, or access medical care in Charles County.

| <u>County of Residence</u> | <u>Count (N)</u> | <u>Percentage (%)</u> |
|--------------------------------------|-------------------------|------------------------------|
| <i>Charles County</i> | 1053 | 88.6% |
| <i>St. Mary's County</i> | 40 | 3.4% |
| <i>Calvert County</i> | 15 | 1.3% |
| <i>Prince George's County</i> | 51 | 4.3% |
| <i>Other Maryland County</i> | 4 | 0.3% |
| <i>Other</i> | 11 | 0.9% |
| <i>No Response</i> | 10 | 0.8% |
| <i>More than 1 Response</i> | 5 | 0.4% |



Question 1: What do you believe to be the biggest health problems in Charles County today?

Over half of respondents (51.7%) felt that Diabetes was the biggest health issue in Charles County. Overweight/Obesity followed as the second most commonly cited health issue at 46.9%. These responses differed slightly from the previous needs assessment. In the last needs assessment, Obesity was biggest the health issue selected among respondents at 50.3%. Diabetes came in second among short survey respondents at 47.7%.

Mental Health was also a common response among respondents with a percentage of 45.8%. Other responses that were popular among short survey respondents were Alcohol or Drug Use (40.7%), High Blood Pressure/Stroke (38.5%), Heart Disease (38.2%), and Cancer (36.2%).

Issues that participants rarely reported as significant health problems included Injuries (5.8%), Infectious Diseases (10.6%), Asthma/Lung Diseases (14.5%), and Dental Health (14.8%). Infectious Diseases was a newly added health issue to Fiscal Year 2021 needs assessment short survey. With the recent COVID-19 pandemic, Infectious Diseases was added to understand the impact of disease on the community and their perceptions. However, only 10.6% of short survey respondents felt Infectious Diseases were the biggest health problem in Charles County.

Percentages will not equal 100% since short survey participants were permitted to check as many health conditions that applied.

| <u>Biggest Health Problems:</u> | <u>Response Count (N)</u> | <u>Response Percent (%)</u> |
|--|----------------------------------|------------------------------------|
| <i>Access to care/no health insurance</i> | 206 | 17.3% |
| <i>Alcohol and Drug Use</i> | 484 | 40.7% |
| <i>Asthma/ Lung Diseases</i> | 172 | 14.5% |
| <i>Cancer</i> | 430 | 36.2% |
| <i>Dental Health</i> | 176 | 14.8% |
| <i>Diabetes</i> | 615 | 51.7% |
| <i>High Blood Pressure/Stroke</i> | 458 | 38.5% |
| <i>Heart Disease</i> | 454 | 38.2% |
| <i>Infectious Diseases</i> | 126 | 10.6% |
| <i>Injuries</i> | 69 | 5.8% |
| <i>Mental Health</i> | 544 | 45.8% |
| <i>Other</i> | 57 | 4.8% |
| <i>Overweight/Obesity</i> | 557 | 46.9% |
| <i>Tobacco/Smoking</i> | 390 | 32.8% |
| <i>Traffic Accidents/Highway Safety</i> | 251 | 21.1% |

Write ins included homelessness, children’s mental health, seizure, dementia, crime, ortho issues, access to health care for seniors, autism, HIV/AIDS, overdoses, hit and runs, poor nutrition, ambulance service, sexually transmitted diseases, and lack of healthy food facilities.

Question 3: What prevents you or other Charles County residents from getting the health care needed?

The most commonly cited barriers to needed health care were care is too expensive/can’t afford it (56.6%) and lack of health insurance (41.0%). Over 20% of respondents also identified transportation and not being able to get an appointment with their doctor as barriers to needed health care as well. Under “Other”, several respondents explained that there is an issue trying to get in to see a provider. Respondents expressed that there’s not enough health care providers, no available appointments for months, hard to find new doctors when needed, not enough doctor’s offices, hard to get appointments, not enough specialist providers, hard to find a primary care doctor they like, providers not accepting new patients, and lack of providers that take Medicaid in the psychiatric department. Other barriers were distrust of health care providers, no time off from work, poverty, lack of education, unreliable services, overcrowded ER facility, insurance is not accepted, limited eye doctors, and no prevention.

| <u>Barriers to getting health care:</u> | <u>Response Count (N)</u> | <u>Response Percent (%)</u> |
|--|----------------------------------|------------------------------------|
| <i>Couldn't get an appointment with my doctor</i> | 265 | 22.3% |
| <i>Doctor is too far away from my home</i> | 135 | 11.4% |
| <i>Local doctors are not on insurance plan</i> | 225 | 18.9% |
| <i>No health insurance</i> | 487 | 41.0% |
| <i>No transportation</i> | 262 | 22.0% |
| <i>Service is not available in my own county</i> | 128 | 10.8% |
| <i>Too expensive/Can't afford it</i> | 673 | 56.6% |
| <i>Other</i> | 121 | 10.1% |
| <i>No Response</i> | 5 | 0.4% |

Question 4: Do you have any ideas or recommendations to help decrease the health problems in the county or to help solve the problems with access to health service?

Access to care

- Affordable healthcare/insurance
 – *Many respondents expressed the need for lower health care costs and more affordable health care. Better insurance policies and lower costs for health insurance were also noted.*
- Public Transportation
 – *Recommendations for more VanGo stops, partnering with Uber or Lyft to provide transportation to appointments, provide rides to the hospital, and creating a transportation program were all mentioned by respondents.*
- Increase the number of doctors, hospitals/facilities, and provider hours.
 – *Many short survey respondents expressed the need to expand the hospital to meet the county population, addition of weekend or holiday hours, increase the number of doctors in the county, build more doctor's offices, and add more primary care doctors.*
- Other access to care ideas and recommendations from short survey respondents included the addition of mobile health services in the community and the need for better providers in the county (ENTs, providers in Indian Head, and more reputable doctors).

Mental Health/Substance Use

- Short survey respondents expressed the need for fentanyl awareness and more Narcan training throughout the county. Also, more support for drug addictions, prescription pill addicts, and cut down on the number of tobacco and alcohol stores in the area.

- Mental health emergency services separate from traditional emergencies, more mental health care for schools, the need for a full-time mental health facility, and better mental health options.

Outreach

- The need for more outreach within the community was a popular response among survey respondents. Recommendations for more classes and outreach events in the county was expressed. Respondents stated that events and programs are helpful, but there needs to be more awareness of these events, such as public service announcements. More services for those who are homebound and support for care givers was another recommendation.

Other

- Other recommendations from respondents included stop building more communities in the county, reduce crime, free healthcare, more healthier food options, and better access to fresh produce.

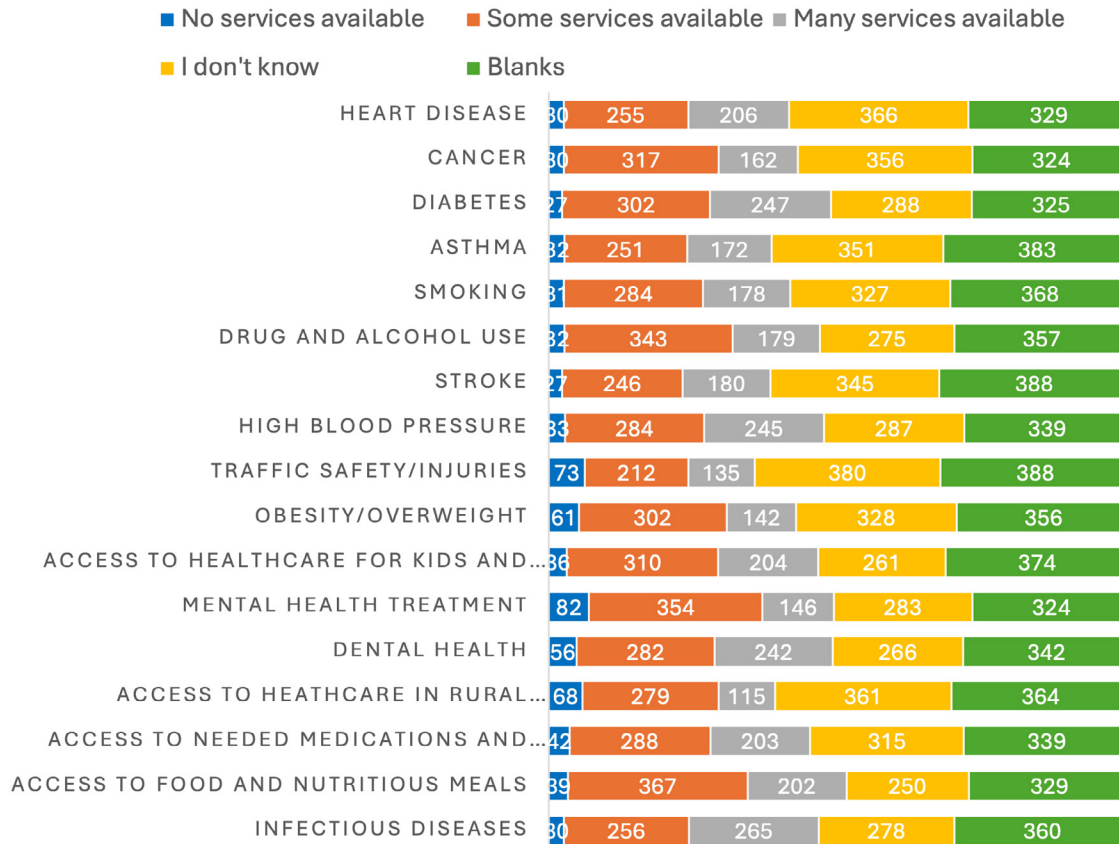
Question 5: Are sufficient services and resources available in Charles County to address these health issues/conditions?

Responses varied for every health condition listed. Many of the respondents answered that they did not know, or they left it blank. This leads us to believe that additional outreach and awareness campaigns are needed to educate people on available services in Charles County.

There were very few survey respondents who believed there were no services available for the listed health conditions. Of those who did answer there were no services available in the county, Mental Health, Traffic Safety/Injuries, and Access to healthcare in rural Charles County had the most responses.

A response of “some services available” and “many services available” were more common among short survey respondents.

RESOURCE AVAILABILITY



| Resource Availability: | No services available | Some services available | Many services available | I don't know | Blanks |
|--|------------------------------|--------------------------------|--------------------------------|---------------------|---------------|
| <i>Heart Disease</i> | 30 | 255 | 206 | 366 | 329 |
| <i>Cancer</i> | 30 | 317 | 162 | 356 | 324 |
| <i>Diabetes</i> | 27 | 302 | 247 | 288 | 325 |
| <i>Asthma</i> | 32 | 251 | 172 | 351 | 383 |
| <i>Smoking/Tobacco Use</i> | 31 | 284 | 178 | 327 | 368 |
| <i>Drugs and Alcohol Use</i> | 32 | 343 | 179 | 275 | 357 |
| <i>Stroke</i> | 27 | 246 | 180 | 345 | 388 |
| <i>High Blood Pressure</i> | 33 | 284 | 245 | 287 | 339 |
| <i>Traffic/Highway Safety</i> | 73 | 212 | 135 | 380 | 388 |
| <i>Overweight/Obesity</i> | 61 | 302 | 142 | 328 | 356 |
| <i>Access to care for children and adults</i> | 36 | 310 | 204 | 261 | 374 |
| <i>Mental Health</i> | 82 | 354 | 146 | 283 | 324 |
| <i>Dental Health</i> | 56 | 282 | 242 | 266 | 342 |
| <i>Access to care in rural Charles County</i> | 68 | 279 | 115 | 361 | 364 |
| <i>Access to needed prescriptions</i> | 42 | 288 | 203 | 315 | 339 |
| <i>Access to food and nutritious meals</i> | 39 | 367 | 202 | 250 | 329 |
| <i>Infectious Diseases/COVID-19</i> | 30 | 256 | 265 | 278 | 360 |

Location

The location of data collection was recorded to ensure that all county populations have had a chance to voice their opinions on health in the county. The medically underserved population was surveyed at the Charles County Department of Health clinics and Wellness Fair. The elderly were surveyed at senior centers and hospital outpatient clinics and centers. The western and rural regions of the county were surveyed at fruit and vegetable distribution sites and the Nanjemoy Heritage Day. Families were surveyed at the health department and the University of Maryland Charles Regional Medical Center. Surveys were also available in Spanish and made available at the health department and community events.

| <u>Location of Data Collection</u> | <u>Count (N)</u> |
|--|-------------------------|
| Charles County Fair (Health dept and hospital booths) | 456 |
| Health Dept Flu Vaccination Clinics | 24 |
| Health Dept Fruit + Veg Box Distributions | 91 |
| Charles County Senior Centers | 36 |
| UMCMG Medical Offices | 8 |
| UMCMG Women's Health | 6 |
| St. Peter's Church Food Drive | 67 |
| Agua Class St. Charles High School | 12 |
| Hospital Focus Group | 8 |
| ESL Community Night | 14 |
| Diabetes Support Group/Diabetes 101 | 67 |
| Red Cross Blood Drive | 15 |
| Hospital Blood Drive | 50 |
| Kent Ave. Block Party | 28 |
| Charles County Govt Wellness Fair and Rodeo | 59 |
| Homeshow Capital Clubhouse | 36 |
| Metropolitan Church Food Pantry | 24 |
| Charles County Citizens Academy | 11 |
| Viking-Con | 14 |
| Kris Kringle Holiday Market | 4 |
| Thomas Stone HS Craft Fair | 12 |
| Free Gospel Church of Bryans Road Fall Fest | 13 |
| Nanjemoy Heritage Day | 26 |
| Davis Middle School Community Day | 12 |
| Town of La Plata Event | 14 |
| Patient Advisory Council | 1 |
| Charles Regional Medical Center | 24 |
| UMCMG Primary Care Office | 6 |
| Cornerstone AME Community Day | 5 |
| Health Dept Recovery Day Event | 20 |
| Charles County Public Schools (CCPS) Staff | 9 |
| Reese | 17 |

Conclusions of Short Survey Analysis

Over half of the respondents (51.7%) felt that Diabetes is the biggest health issue in Charles County. It was the most commonly marked answer to Question 2. The second health issue most commonly cited by survey respondents was Overweight/Obesity (46.9%).

The most commonly cited barriers to needed health care were too expensive/can't afford it (56.6%) and lack of health insurance (41.0%). Charles County residents felt that there were no services in the county for Mental Health, Traffic Safety/Injuries, and access to healthcare in rural Charles County.

Many of the suggestions and ideas presented by survey respondents focused on affordable health care and increasing the number of providers and healthcare facilities in the county. Survey respondents also expressed the need for more healthy food options in the county and more transportation.

Agency responsibilities for the short surveys:

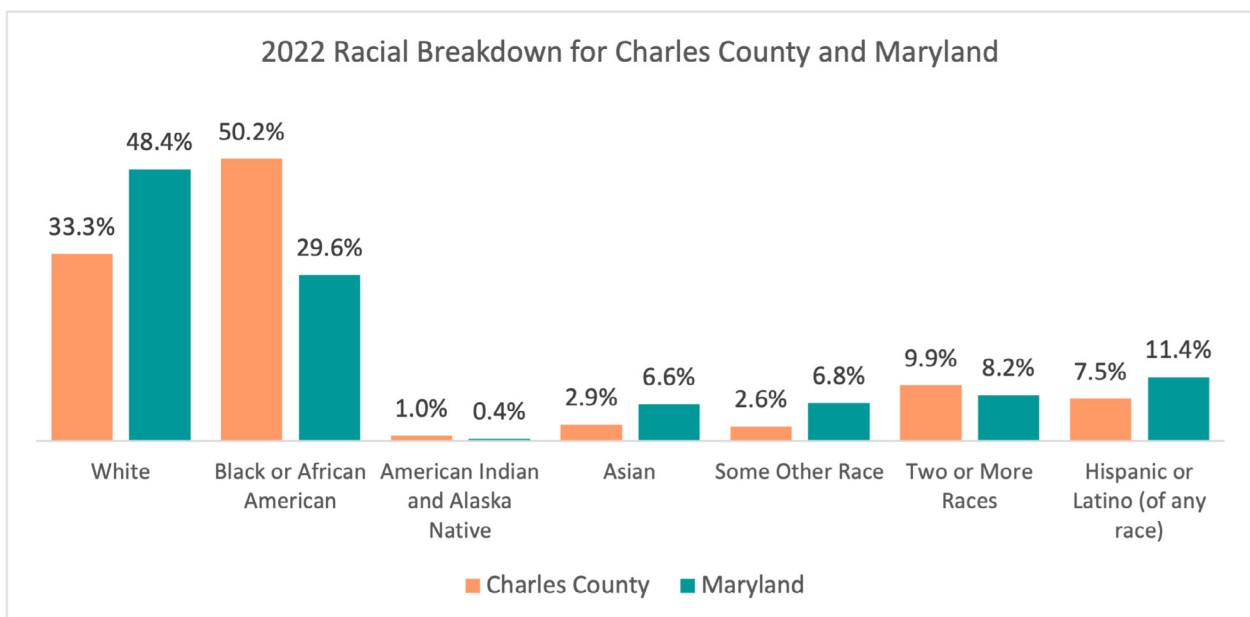
The University of Maryland Charles Regional Medical Center and the Charles County Department of Health shared responsibility for the collection of short surveys in the community. Each agency surveyed county residents in clinics and at community events. Each agency's outreach team took short surveys to every community event that they attended from July 1, 2023 to December 31, 2023.

Charles County Geographic and Demographic Profile:

Charles County is a largely rural jurisdiction located approximately 23 miles south of Washington, D.C. It is one of five Maryland counties, which are part of the Washington, DC-MD-VA metropolitan area. At 458 square miles, Charles County is the ninth largest of Maryland's twenty-four counties and accounts for about 5 percent of Maryland's total landmass. The northern part of the county is the "development district" where commercial, residential, and business growth is focused. The major communities of Charles County are La Plata, the county seat; Port Tobacco, Indian Head, and St Charles; and the main commercial cluster of Hughesville-Waldorf-White Plains. Approximately 66 percent of the county's residents live in the greater Waldorf-La Plata area. Charles County has experienced rapid growth since 1970, expanding its population from 47,678 to 166,617 in the 2020 census.

In 2022, the population estimate for Charles County was 170,102. The Charles County population has seen almost a 16% increase since 2010, when the population estimate was 147,086. The population growth of Charles County since 2010 was larger than the Maryland population growth, which saw only a 6.5% increase in population since 2010.

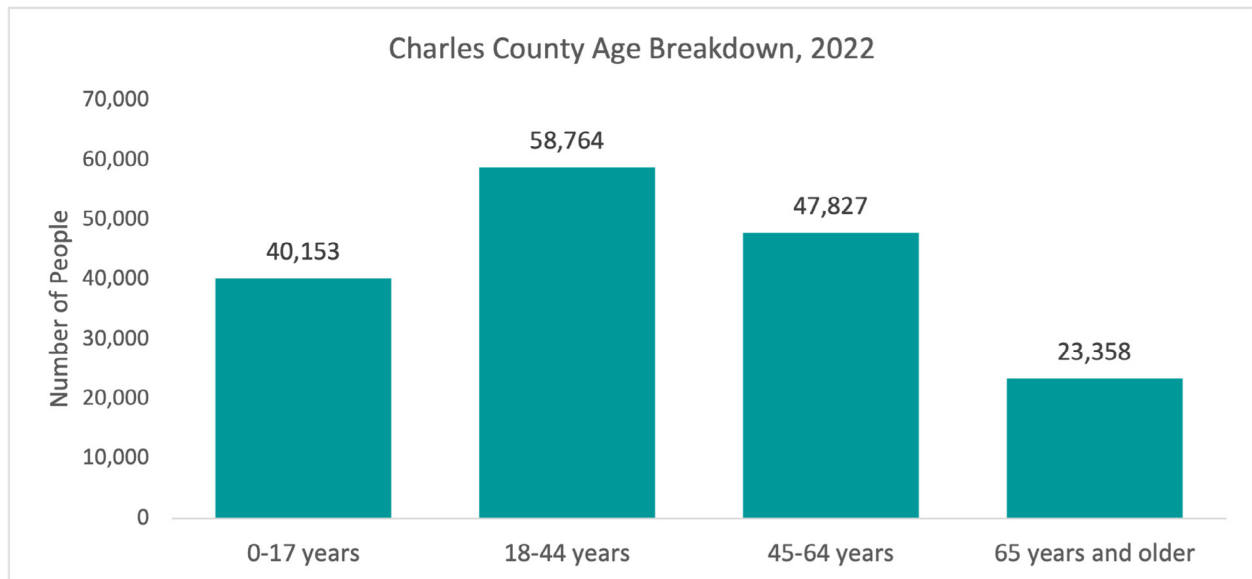
The population growth among various racial groups within Charles County has also been seen throughout the years. The Black or African American population has experienced the greatest increase among racial groups. In 2022, Black or African Americans made up 50.2% of the Charles County population, an increase from 26% in 2000. Minorities now make up two-thirds of the Charles County population. The White population has experienced decreases in population over the years. In 2022, Whites made up one-third of the Charles County population (33.3%), a decrease from 58.9% reported in 2010. After a steady increase in population since 2010, the Hispanic and Latino population in Charles County experienced a decrease in 2022, to 7.5%. Just one year prior, Hispanic and Latinos made up 11.1% of the Charles County population. Lastly, the American Indian and Alaska Native population is important to note because Charles County has one of the largest American Indian/Alaska Native populations in the state, at 1.0%. This population saw an increase in 2022, from 0.8% reported in 2019.



Source: U.S. Census Bureau; 2022 ACS 1-year Estimates Data Profiles

The 2022 Charles County gender breakdown is approximately 50/50. Males make up 48.4% of the population, and females make up 51.6% of the county population.

With the population growth of Charles County, all age groups have experienced increases in numbers over the years. The largest age group in Charles County are those between the ages of 18-44 years, with a percentage of 34.5% of the total population. This percentage has stayed the same since 2018. The 65 year and older population has seen the greatest increase in population, now comprising 13.7% of the total population. This is an increase from 12.4% reported in 2018. The juvenile population (under 18 years) experienced a slight decrease in 2022, making up 23.6% of the total population, compared to 24.0% reported in 2018. The 45-64 age group also saw a decrease since 2018, from 29.1% to 28.1% in 2022.



Source: U.S. Census Bureau; 2022 ACS 1-year Estimates Data Profiles

Transportation

The percent change in the population growth for Charles County has been slightly greater than the change seen in the Maryland population growth. This growth has created transportation issues for the County, in particular for the “development district” in the northern part of the county where many residents commute to Washington D.C. to work. The average work commute time for a Charles County resident is 44.2 minutes which is higher than the Maryland average of 32.0 minutes. Almost one-third of commuters in Charles County has a commute to work that is an hour or longer. (Source US Census Bureau’s 2018-2022 American Community Survey 5-year estimates). Public transportation consists of commuter buses for out-of-county travel and the county-run Van Go bus service for in-county transportation.

Source: 2018-2022 US Census Bureau’s American Community Survey 5-year estimates

Economy

Employment and economic indicators for the county are fairly strong. The 2018-2022 US Census

American Community Survey estimates that 68.8% of the Charles County population is currently in the labor work force. The 2018-2022 5-year estimate for Charles County found that approximately 8.5% of Charles County individuals are living below the poverty level. This is the same as the Maryland rate of 8.5%. The percentage of individuals living below the poverty level increased since the 2015-2019 5-year estimate when the percentage was 6.4%. The Charles County median household income was \$116,882, well above the Maryland median household income of \$98,461.

Source: 2018-2022 US Census Bureau's American Community Survey 5-year estimates

Education

94.4% of Charles County residents over the age of 25 have a high school degree or higher. This is above the Maryland percentage of 91.0%. However, Maryland has a higher percentage of residents with a bachelor's degree or higher at 42.2%, compared to Charles County at 31.1%.

Source: 2018-2022 US Census Bureau's American Community Survey 5-year estimates

Housing

In Charles County, 79.8% of homes are owner-occupied, compared to 20.2% renter occupied. Maryland has a slightly higher renter occupied percentage at 32.3%. The percentage of owner-occupied houses in Maryland is 67.7%.

| Social, Economic, and Housing Factors | Charles County | Maryland |
|--|-----------------------|-----------------|
| Total Housing Units | 59,205 | 2,318,124 |
| Owner Occupied | 79.8% | 67.7% |
| Renter Occupied | 20.2% | 32.3% |
| Median Gross Rent (dollars) | \$1,839 | \$1,550 |
| Median Household Income (dollars) | \$116,882 | \$98,461 |
| Language Spoken at Home: Other than English | 9.8% | 19.8% |
| Foreign-Born Population | 12,581 | 965,638 |
| High School Graduate or Higher | 94.4% | 91.0% |
| Bachelor's degree or Higher | 31.1% | 42.4% |
| In Labor Force (16 years and older) | 68.8% | 67.2% |
| Average Commute Time to work (minutes) | 44.2 | 32.0 |
| Persons Below Poverty Level | 8.5% | 8.5% |
| Civilian Veterans | 16,942 | 345,104 |

Source: 2018-2022 US Census Bureau's American Community Survey 5-year estimates

Life Expectancy

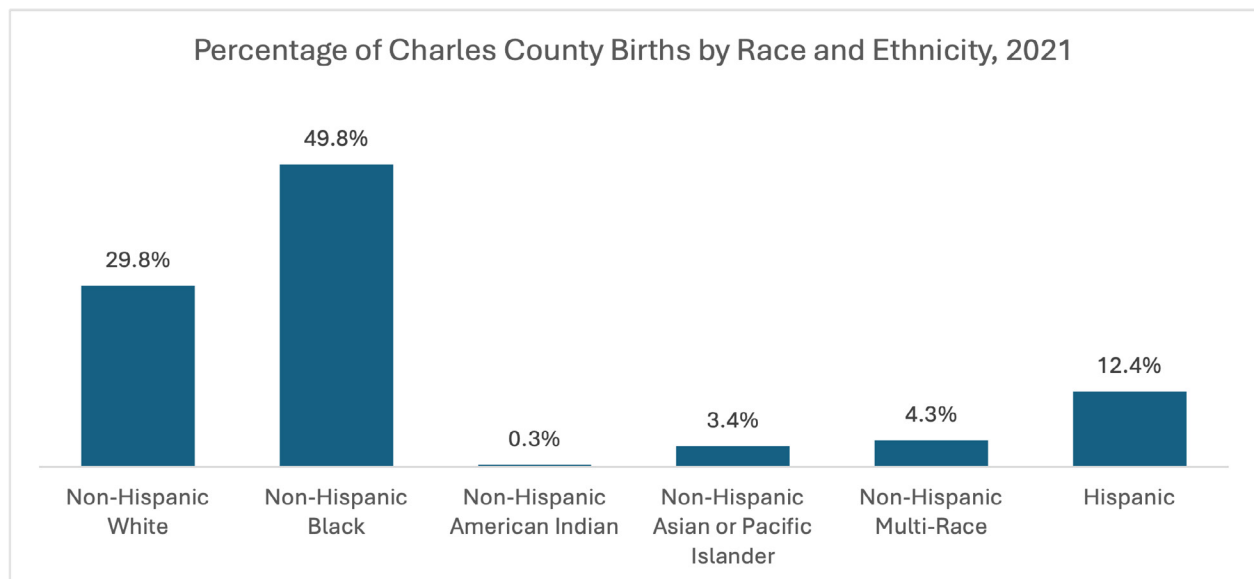
The life expectancy for a Charles County resident from 2019-2021 was 77.2 years. This is slightly lower than the Maryland life expectancy of 78.2 years.

| Life Expectancy at Birth by Race, 2019-2021 | Charles County | Maryland |
|---|----------------|----------|
| All Races | 77.2 | 78.2 |
| Non-Hispanic White | 77.0 | 78.7 |
| Non-Hispanic Black | 75.8 | 74.8 |

Source: 2021 Maryland Vital Statistics Report

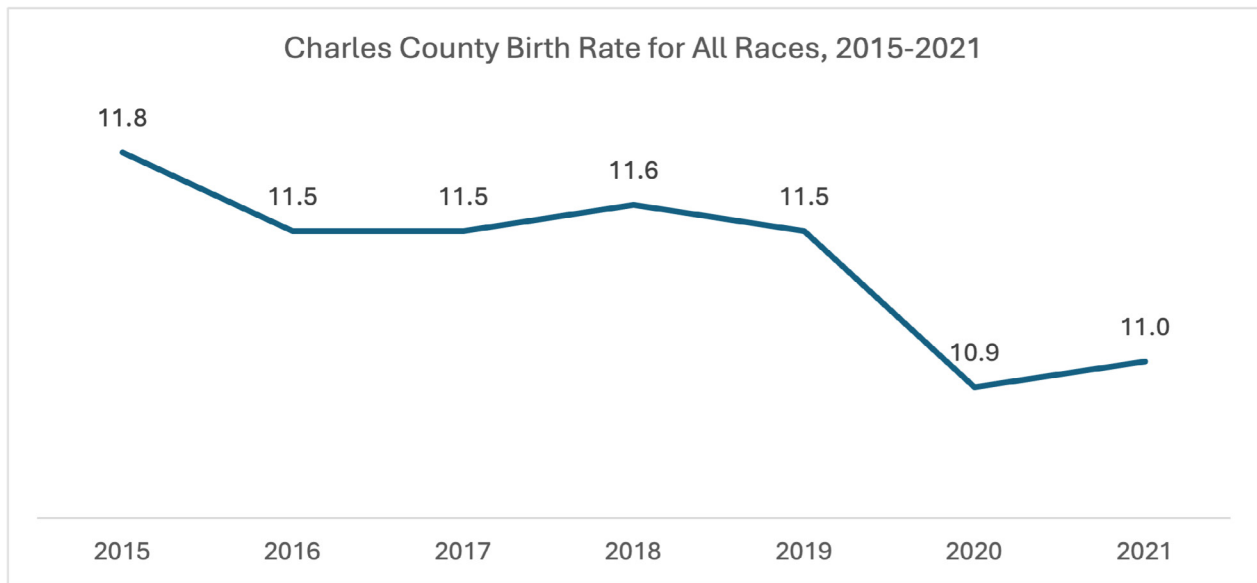
Births

In 2021, there were 1,850 births in Charles County. Charles County represents 2.7% of total births in the state of Maryland in 2021, and 43.7% of births in the Southern Area of Maryland (Charles County, Calvert County, St. Mary's County). Minorities made up almost 70% of the births in Charles County in 2021, at 69.8%.



Source: 2021 Maryland Vital Statistics Report

The birth rate in Charles County for 2021 was 11.0 per 1,000, with Non-Hispanic Blacks having a birth rate of 10.6 per 1,000 compared to Non-Hispanic Whites at 9.4 per 1,000. The Charles County Hispanic population had the highest birth rate in 2021, at 19.2 per 1,000.



Source: 2015-2021 Maryland Vital Statistics Report

Among all births in Charles County, the most common age group for the mother was between 30-34 years. Non-Hispanic White, Non-Hispanic Black, and Hispanic mothers within this age range had the most births during the 2021 year. The second most common age range was 25-29 years. Since 2018, there has been a shift in the age of mothers in Charles County. In 2018, the most common age range was 25-29 years, this range has now increased in 2021 to 30-34 years.

In 2021, the birth rate for mothers between the ages of 30-34 years was 103.9 per 1,000, the highest rate among all age groups. The Maryland birth rate for mothers between the ages of 30-34 years was 107.4 per 1,000.

| Births by Age of Mother, 2021 | All Ages | Under 15 | 15-17 | 18-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50 & over | Not Stated |
|-------------------------------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|------------|
| Charles County Total | 1,850 | 1 | 12 | 41 | 273 | 498 | 579 | 356 | 82 | 8 | 0 | 0 |
| Non-Hispanic White | 547 | 0 | 3 | 13 | 85 | 164 | 176 | 83 | 22 | 1 | 0 | 0 |
| Non-Hispanic Black | 915 | 0 | 5 | 13 | 116 | 238 | 289 | 208 | 44 | 2 | 0 | 0 |
| Hispanic | 229 | 1 | 3 | 11 | 47 | 61 | 62 | 37 | 6 | 1 | 0 | 0 |

Source: 2021 Maryland Vital Statistics Report

Almost 38% of babies born in Charles County in 2021 were in the first birth order (37.4%), and about one third of babies born were in the second birth order (33.2%). Only a small percentage of babies were in the fifth or more birth order at 4.2%.

| Charles County- Birth Order | Number of Births (N) | Percent (%) |
|-----------------------------|----------------------|-------------|
| 1st | 692 | 37.4% |
| 2nd | 614 | 33.2% |
| 3rd | 318 | 17.2% |
| 4th | 148 | 8.0% |
| 5 or more | 78 | 4.2% |
| Total | 1850 | 100% |

Source: 2021 Maryland Vital Statistics Report

About two-thirds of mothers in Charles County received prenatal care during the first trimester of their pregnancy in 2021. This percentage is slightly below the Maryland percentage of 69.1%. Among all births in 2021, 6.5% of Charles County mothers received late prenatal care or had no prenatal care during their pregnancy.

About half of Charles County Hispanic mothers who gave birth in 2021 received first trimester prenatal care. This was the lowest percentage among any racial or ethnic group in Charles County. However, this percentage is higher than the Maryland percentage of 39.8% for Hispanic mothers. The percentage of Charles County Non-Hispanic White and Non-Hispanic Black mothers who received first trimester prenatal care were very comparable at 69.1% and 69.8%, respectively.

| Percentage of Births to Women Receiving Prenatal Care | Charles County (All Races) | Maryland (All Races) |
|---|----------------------------|----------------------|
| First Trimester Prenatal Care | 66.8% | 69.1% |
| Late or No Prenatal Care | 6.5% | 6.2% |

Source: 2021 Maryland Vital Statistics Report

| Number and Percentage of Births to Women Receiving 1 st Trimester Prenatal Care | All Races | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic American Indian | Non-Hispanic Asian or Pacific Islander | Non-Hispanic Multi-Race | Hispanic |
|--|-------------------|--------------------|--------------------|------------------------------|--|-------------------------|------------------|
| Charles County | 1,236 (66.8%) | 378 (69.1%) | 639 (69.8%) | 0 (0.0%) | 41 (65.1%) | 53 (67.1%) | 114 (49.8%) |
| Maryland | 47,149 (69.1%) | 22,538 (80.2%) | 13,529 (66.4%) | 52 (62.7%) | 3,355 (75.1%) | 1,191 (70.4%) | 5,240 (39.8%) |

Source: 2021 Maryland Vital Statistics Report

Over 10% of babies born in Charles County in 2021 were low birth weight. Low birth weight is defined as a baby weighing less than 2,500 grams or 5.5 pounds. In 2021, the Charles County percentage of low-birth-weight infants exceeded the Maryland percentage of 8.9%. The percentage of low-birth-weight infants was also higher among Non-Hispanic Blacks (12.9%) compared to Non-Hispanic Whites (7.7%).

| Number and Percentage of Low-Birth-Weight Infants | All Races | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic American Indian | Non-Hispanic Asian or Pacific Islander | Non-Hispanic Multi-Race | Hispanic |
|---|-----------------|--------------------|--------------------|------------------------------|--|-------------------------|---------------|
| Charles County | 198 (10.7%) | 42 (7.7%) | 118 (12.9%) | 1 (*) | 113 (*) | 5 (*) | 16 (*) |
| Maryland | 6,094 (8.9%) | 1,872 (6.7%) | 2,613 (12.8%) | 6 (*) | 394 (8.8%) | 161 (9.5%) | 997 (7.5%) |

Source: 2021 Maryland Vital Statistics Report

*Percentages based on <20 events in the numerator are not presented since such percentages are subject to instability.

Almost 40% of births in Charles County were delivered by cesarean section in 2021. Births by Non-Hispanic Black mothers had a higher percentage of delivery by cesarean section out of all racial and ethnic groups at 45.5%. Non-Hispanic Asian or Pacific Islander had the second highest percentage at 39.7%. Births to Charles County Non-Hispanic White mothers had the lowest percentage of delivery by cesarean section out of all racial and ethnic groups, at 32.7%.

| Number and Percentage of Births Delivered by Cesarean Section | All Races | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic American Indian | Non-Hispanic Asian or Pacific Islander | Non-Hispanic Multi-Race | Hispanic |
|---|-------------------|--------------------|--------------------|------------------------------|--|-------------------------|------------------|
| Charles County | 730 (39.5%) | 179 (32.7%) | 416 (45.5%) | 1 (*) | 25 (39.7%) | 28 (35.4%) | 75 (32.8%) |
| Maryland | 23,428 (34.3%) | 9,108 (32.4%) | 8,025 (39.4%) | 27 (32.5%) | 1,584 (35.5%) | 569 (33.6%) | 3,987 (30.3%) |

Source: 2021 Maryland Vital Statistics Report

*Percentages based on <20 events in the numerator are not presented since such percentages are subject to instability.

In 2021, 1,430 out of the 1,850 Charles County babies were born in the state of Maryland (77.3%). However, only 444 babies were born in Charles County (24.0%). This percentage is lower than the 2018 percentage of 37.2%. Compared to our neighboring counties, Charles County has the lowest percentage, with St. Mary's at 72.6% and Calvert County at 47.6%. Over half of babies born to residents of Charles County were born in another Maryland county (53.3%).

| Number of Births to Residents by Place of Occurrence | All Births | State Totals | MD. County Same as Residence | MD. County Other than Residence | District of Columbia | Other States |
|---|-------------------|---------------------|-------------------------------------|--|-----------------------------|---------------------|
| Charles County | 1,850 | 1,430 | 444 | 986 | 148 | 272 |

Source: 2021 Maryland Vital Statistics Report

Demographic Data by Charles County Zip Code

Over the years, Charles County has experienced variations in demographic structure among zip codes. The northern part of the county, which has the largest zip codes and most populated areas have historically been the most diverse in the county whereas the smaller zip codes in the south and west of the county have remained less diverse. However, even the smaller zip codes have experienced a shift in demographic structure.

The Waldorf zip codes of 20601, 20602, and 20603 are the most populated zip codes in Charles County. These zip codes are located in the northern part of the county and are home to a large percentage of minorities in Charles County.

The zip codes with the largest Black or African American alone population in Charles County are Bryans Road (20616) at 75.6% and Accokeek (20607) at 65.8%. Brandywine (20613), Waldorf (20602), and Waldorf (20603) follow at 64.5%, 64.2%, and 61.1% respectively. These zip codes are all located in the northern part of the county.

The zip codes with the largest White alone population are Benedict (20612) at 100%, Cobb Island (20625) at 94.9%, and Issue (20659) at 92.7%. Benedict is located on the eastern side of the county whereas Cobb Island and Issue are located at the southern tip of Charles County.

The zip codes with the largest Hispanic population in Charles County are Bel Alton (20611) at 18.0%, Faulkner (20632) at 15.3%, and Newburg (20664) at 14.9%. These three zip codes are all located in the southern region of the county.

| Zip Code Racial Composition | Total Pop. | White Alone | Black or African American Alone | American Indian/Alaska Native | Asian/Pacific Islander | Some Other Race | 2 or more Races | Hispanic |
|-----------------------------|------------|----------------|---------------------------------|-------------------------------|------------------------|-----------------|-----------------|--------------|
| 20601 Waldorf | 27,328 | 8,135 (29.8%) | 15,387 (56.3%) | 195 (0.7%) | 847 (3.1%) | 697 (2.6%) | 2,050 (7.5%) | 2,182 (8.0%) |
| 20602 Waldorf | 28,988 | 6,531 (22.5%) | 18,607 (64.2%) | 113 (0.4%) | 567 (2.0%) | 0 (0.0%) | 675 (2.3%) | 2,242 (7.7%) |
| 20603 Waldorf | 32,495 | 7,389 (22.7%) | 19,857 (61.1%) | 108 (0.3%) | 1,836 (5.7%) | 0 (0.0%) | 748 (2.3%) | 3,093 (9.5%) |
| 20607 Accokeek | 12,080 | 2,257 (18.7%) | 7,944 (65.8%) | 93 (0.8%) | 646 (5.3%) | 0 (0.0%) | 117 (1.0%) | 257 (2.1%) |
| 20611 Bel Alton | 1,127 | 803 (71.3%) | 105 (9.3%) | 0 (0.0%) | 6 (0.5%) | 0 (0.0%) | 0 (0.0%) | 203 (18.0%) |
| 20612 Benedict | 147 | 147 (100%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| 20613 Brandywine | 14,800 | 3,388 (22.9%) | 9,540 (64.5%) | 12 (0.1%) | 377 (2.5%) | 0 (0.0%) | 361 (2.4%) | 919 (6.2%) |
| 20616 Bryans Road | 6,792 | 884 (13.0%) | 5,137 (75.6%) | 0 (0.0%) | 180 (2.7%) | 0 (0.0%) | 100 (1.5%) | 431 (6.3%) |
| 20617 Bryantown | 630 | 444 (70.5%) | 121 (19.2%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 65 (10.3%) |
| 20622 Charlotte Hall | 5,471 | 4,318 (78.9%) | 413 (7.5%) | 7 (0.1%) | 166 (3.0%) | 0 (0.0%) | 28 (0.5%) | 236 (4.3%) |
| 20625 Cobb Island | 1,248 | 1,184 (94.9%) | 0 (0.0%) | 0 (0.0%) | 19 (1.5%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| 20632 Faulkner | 802 | 384 (47.9%) | 121 (15.1%) | 0 (0.0%) | 270 (33.7%) | 0 (0.0%) | 0 (0.0%) | 123 (15.3%) |
| 20637 Hughesville | 6,221 | 3,508 (56.4%) | 1,753 (28.2%) | 70 (1.1%) | 155 (2.5%) | 0 (0.0%) | 0 (0.0%) | 248 (4.0%) |
| 20640 Indian Head | 10,629 | 4,013 (37.8%) | 5,815 (54.7%) | 32 (0.3%) | 250 (2.4%) | 8 (0.1%) | 94 (0.9%) | 439 (4.1%) |
| 20645 Issue | 763 | 707 (92.7%) | 0 (0.0%) | 4 (0.5%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| 20646 La Plata | 21,248 | 14,213 (66.9%) | 5,152 (24.2%) | 102 (0.5%) | 564 (2.7%) | 0 (0.0%) | 238 (1.1%) | 816 (3.8%) |
| 20658 Marbury | 978 | 694 (71.0%) | 230 (23.5%) | 6 (0.6%) | 18 (1.8%) | 0 (0.0%) | 0 (0.0%) | 23 (2.4%) |
| 20659 Mechanicsville | 23,346 | 20,555 (88.0%) | 1,577 (6.8%) | 81 (0.3%) | 0 (0.0%) | 193 (0.8%) | 935 (4.0%) | 669 (2.9%) |
| 20662 Nanjemoy | 2,590 | 1,575 (60.8%) | 745 (28.8%) | 53 (2.0%) | 27 (1.0%) | 0 (0.0%) | 107 (4.1%) | 0 (0.0%) |
| 20664 Newburg | 2,780 | 1,821 (65.5%) | 476 (17.1%) | 139 (5.0%) | 39 (1.4%) | 0 (0.0%) | 71 (2.6%) | 413 (14.9%) |
| 20675 Pomfret | 2,060 | 934 (45.3%) | 714 (34.7%) | 0 (0.0%) | 27 (1.3%) | 0 (0.0%) | 125 (6.1%) | 101 (4.9%) |
| 20677 Port Tobacco | 2,055 | 1,590 (77.4%) | 273 (13.3%) | 0 (0.0%) | 56 (2.7%) | 0 (0.0%) | 14 (0.7%) | 152 (7.4%) |
| 20693 Welcome | 1,210 | 735 (60.7%) | 194 (16.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 87 (7.2%) |
| 20695 White Plains | 11,455 | 3,313 (28.9%) | 6,592 (57.5%) | 0 (0.0%) | 299 (2.6%) | 0 (0.0%) | 345 (3.0%) | 431 (3.8%) |

Source: 2018-2022 US Census Bureau's American Community Survey 5-year estimates

Age Data by Zip Code

In 2022, the median age in Charles County was 38.3 years. This is only a slight increase from the average median age of 38.1 years reported in 2017. The populated Waldorf zip codes in the northern part of the county have a younger population of residents, with an average median age of 36.8 years for 20601, 34.9 years for 20602, and 38.5 years for 20603. This may be due to the influx of young professionals living in the suburban areas of Waldorf and commuting to Washington DC or Northern Virginia. However, the zip code with the lowest median age in the county is Welcome (20693) at 29.5 years.

The zip code with the highest average median age in Charles County is Benedict (20612) at 91.2 years. This is a very small zip code located in the eastern side of the county. The second highest average median age is Pomfret (20675) at 51.5 years.

| 2018-2022 Average Median Age, By Zip Code | | Median Age (in years) | |
|---|------|---------------------------------------|------|
| 20601 Waldorf | 36.8 | 20637 Hughesville | 44.0 |
| 20602 Waldorf | 34.9 | 20640 Indian Head | 37.4 |
| 20603 Waldorf | 38.5 | 20645 Issue | 50.4 |
| 20607 Accokeek | 42.8 | 20646 La Plata | 43.1 |
| 20611 Bel Alton | 47.0 | 20658 Marbury | 43.1 |
| 20612 Benedict | 91.2 | 20659 Mechanicsville | 38.1 |
| 20613 Brandywine | 44.2 | 20662 Nanjemoy | 44.5 |
| 20616 Bryans Road | 37.4 | 20664 Newburg | 37.9 |
| 20617 Bryantown | 41.1 | 20675 Pomfret | 51.5 |
| 20622 Charlotte Hall | 45.0 | 20677 Port Tobacco | 50.2 |
| 20625 Cobb Island | 46.6 | 20693 Welcome | 29.5 |
| 20632 Faulkner | 39.3 | 20695 White Plains | 40.2 |

Source: 2018-2022 US Census Bureau's American Community Survey 5-year estimates

Geographic and Demographic Profile References

1. 2022 US Census Bureau, American Community Survey 1-year estimates, Charles County and Maryland. Available at https://data.census.gov/profile/Charles_County,_Maryland?g=050XX00US24017
2. 2021 Maryland Vital Statistics Report. Charles County Demographic and Population Data. Maryland Department of Health. Available at <https://health.maryland.gov/vsa/Pages/reports.aspx>
3. 2018-2022 US Census Bureau, American Community Survey 5-year estimates, Charles County and Maryland. Available at https://data.census.gov/profile/Charles_County,_Maryland?g=050XX00US24017
4. Charles County Demographic and Population Data, County and Zip Code Level. 2018-2022 average and 2022 American Community Survey. United States Census Bureau. American FactFinder. Available at www.census.gov

Charles County Vital Statistics Profile:

Marriage and Divorce

A total of 861 marriage ceremonies were conducted in Charles County in 2021. Most of those marriages were Maryland residents (820).

| Marriage | Total Marriages | Maryland Residents* | Non-MD Residents | % to non-MD residents |
|-----------------------|-----------------|---------------------|------------------|-----------------------|
| Charles County | 861 | 820 (95.2%) | 41 | 4.8% |

**One or both of the partners are residents of Maryland.*

Data on the age of the bride and groom and previous marital status are not available on a county level.

In 2021, there were 665 divorces and annulments in Charles County. Data on the number of years of marriage was not available on a county level.

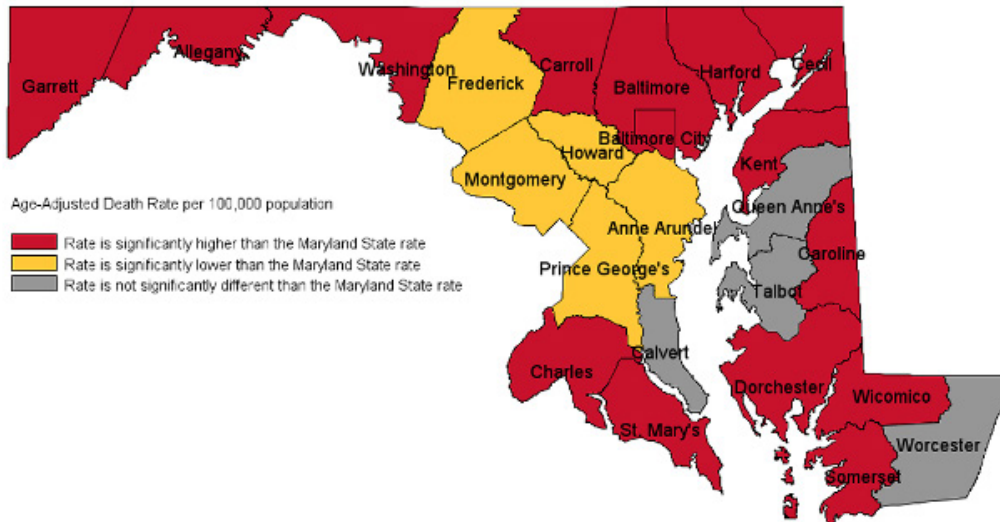
Mortality

Death Rates:

There were a total of 1,482 deaths in Charles County in 2021.

The 2021 Charles County age-adjusted all-cause mortality rate was 854.4 per 100,000 population. This rate is higher than the Maryland state all-cause mortality rate of 786.3 per 100,000 population.

Comparison of Jurisdiction Age-adjusted Death Rates* for All Causes with the Maryland State Rate, 2021



The leading causes of death for 2021 were Cancer and Heart Disease. They have very similar counts of deaths and similar age-adjusted death rates. The 2021 Charles County heart disease death rate was 150.4 per 100,000. The 2021 Charles County cancer death rate was 149.2 per 100,000.

The Charles County death rates with the greatest disparities compared to the Maryland state rates included COVID-19 (89.1 vs. 69.7), Cerebrovascular Disease (67.4 vs. 45.5), Diabetes (39.6 vs. 22.7), and Influenza and Pneumonia (15.4 vs. 8.4).

2021 Ten Leading Causes of Death by Count and Rate, Charles County and Maryland

| Cause of Death | Charles County Number, 2021 | Charles County Rate, 2021 | Maryland Number, 2021 | Maryland Rate 2021 |
|--|------------------------------------|----------------------------------|------------------------------|---------------------------|
| <i>All Causes</i> | 1482 | 854.4 | 58,130 | 786.3 |
| <i>Cancer</i> | 277 | 149.2 | 10,540 | 136.8 |
| <i>Diseases of the Heart</i> | 266 | 150.4 | 12119 | 160.1 |
| <i>COVID-19</i> | 160 | 89.1 | 5,249 | 69.7 |
| <i>Cerebrovascular Diseases</i> | 109 | 67.4 | 3409 | 45.5 |
| <i>Accidents</i> | 70 | 40.6 | 3071 | 45.1 |
| <i>Diabetes Mellitus</i> | 70 | 39.6 | 1731 | 22.7 |
| <i>Chronic Lower Respiratory Disease</i> | 44 | 26.0 | 1813 | 23.8 |
| <i>Influenza and Pneumonia</i> | 26 | 15.4 | 627 | 8.4 |
| <i>Septicemia</i> | 23 | 13.4 | 915 | 12.1 |
| <i>Chronic Liver Disease and Cirrhosis</i> | 21 | 11.1 | 680 | 9.2 |

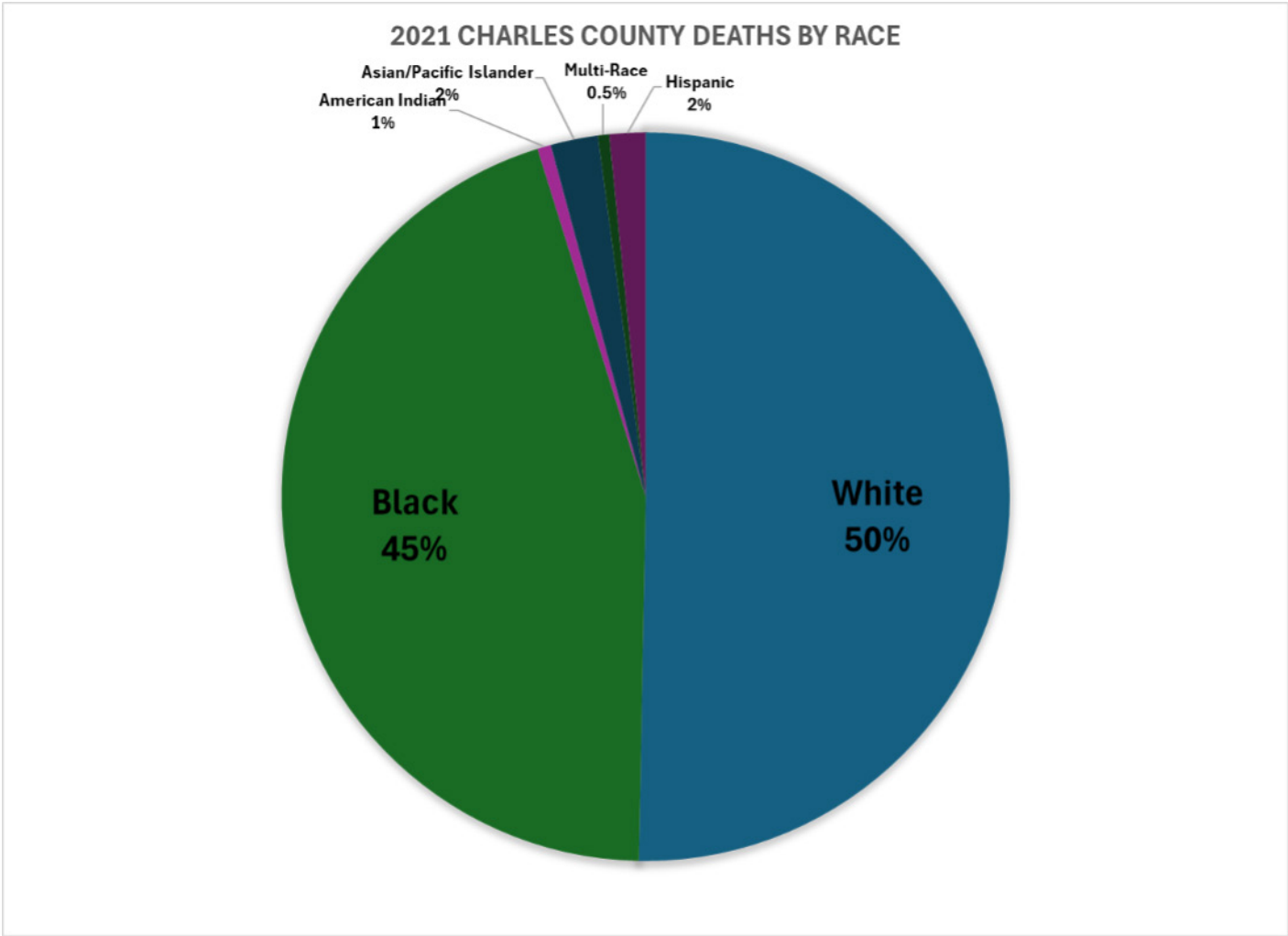
**Per 100,000 population*

**** Age-adjusted death rates not calculated for jurisdictions with fewer than 20 deaths.*

All Cause Deaths by Race:

Whites make up 50.3% of the deaths in Charles County. African Americans make up the second highest at 44.9% of the total deaths.

The rate among the White population is greater than the other races because they make up the majority of the aging population in the county. Almost two-thirds of the 65+ population in Charles County (60.2%) are White. The minority populations are moving into Charles County and are a younger population; therefore, they have lower mortality rates. The median age in Charles County is 34 years.



When comparing by 2021 calculated crude death rates, the rate is much higher in the White population. The 2021 Charles County White death rate was 1,281.0 per 100,000. This is much higher than the Charles County total 2021 crude death rate of 877.6 per 100,000 and higher than the death rates for Blacks (766.2), for Asians and Pacific Islanders (535.5), and for Hispanics (217.5). American Indian was suppressed because the rate was based on less than 20 events and would not be stable.

| 2021 Crude Death Rates: | All Races | White | Black | American Indian | Asian/PI | Hispanic |
|--------------------------------|------------------|--------------|--------------|------------------------|-----------------|-----------------|
| <i>Charles County</i> | 877.6 | 1281.0 | 766.2 | Not Available | 535.5 | 217.5 |

All Cause Deaths by Age:

The number of reported deaths increased with age. The greatest numbers of deaths were seen in the 75-84 years age group. This age group accounted for one-quarter of the total county deaths for 2021.

| Deaths by Age | All ages | <1 yr. | 1-4 | 5-14 | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75-84 | 85+ |
|-----------------------|-----------------|------------------|------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| <i>Charles County</i> | 1482 | 9 | 1 | 6 | 20 | 30 | 60 | 136 | 237 | 325 | 370 | 388 |

In 2021, there were 23 deaths in Charles County for children and adolescents ages 0-21 years.

| Child Deaths | 0-21 yrs. | <1 yr. | 1-4 yrs. | 5-9 yrs. | 10-14 yrs. | 15-17 yrs. | 18-19 yrs. | 20-21 yrs. |
|-----------------------|------------------|------------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|
| <i>Charles County</i> | 23 | 9 | 1 | 5 | 1 | 1 | 2 | 4 |

Adolescent Violent Deaths:

There were 2 violent deaths to adolescents in Charles County in 2021. There was 1 accident and 1 assault. There were no reported incidents of intentional self-harm (suicide).

Deaths from Selected Causes:

The number of deaths in Charles County for selected causes is presented below.

| | |
|--|------|
| All Causes of Death | 1482 |
| Tuberculosis | 0 |
| Septicemia | 23 |
| HIV Disease | 3 |
| COVID-19 | 160 |
| Total Malignant Neoplasms | 277 |
| <i>Malignant Neoplasms of Stomach</i> | 12 |
| <i>Malignant Neoplasms of Rectum, Colon, and Anus</i> | 30 |
| <i>Malignant Neoplasms of Pancreas</i> | 30 |
| <i>Malignant Neoplasms of Trachea, Bronchus, and Lung</i> | 63 |
| <i>Malignant Neoplasms of Breast</i> | 24 |
| <i>Malignant Neoplasms of Cervix, Uteri, Corpus Uteri, and Ovary</i> | 14 |
| <i>Malignant Neoplasms of Prostate</i> | 13 |
| <i>Malignant Neoplasms of Urinary Tract</i> | 9 |
| <i>Non-Hodgkin's Lymphoma</i> | 4 |
| <i>Leukemia</i> | 4 |
| <i>Other Malignant Neoplasms</i> | 74 |
| Diabetes Mellitus | 70 |
| Alzheimer's Disease | 10 |
| Total Major Cardiovascular Diseases | 401 |
| Total Diseases of the Heart | 266 |
| <i>Hypertensive Heart Disease</i> | 35 |
| <i>Ischemic Heart Disease</i> | 153 |
| <i>Other Diseases of the Heart</i> | 78 |
| Essential Hypertension and Hypertensive Renal Disease | 16 |
| Cerebrovascular Diseases | 109 |
| Atherosclerosis | 1 |
| Other Diseases of the Circulatory System | 9 |
| Influenza and Pneumonia | 26 |
| Chronic Lower Respiratory Diseases | 44 |
| Peptic Ulcer | 1 |
| Chronic Liver Disease and Cirrhosis | 21 |
| Nephritis, Nephrotic Syndrome and Nephrosis | 15 |
| Pregnancy, Childbirth, and the Puerperium | 0 |
| Certain Conditions Originating in the Perinatal Period | 5 |
| Congenital Abnormalities | 2 |
| Sudden Infant Death Syndrome | 2 |
| Symptoms, Signs, and Abnormal Clinical and lab findings | 11 |
| All other Disease (residual) | 284 |
| Total Accidents | 70 |
| <i>Motor Vehicle Accidents</i> | 24 |
| <i>All Other Accidents</i> | 46 |
| Intentional Self Harm (Suicide) | 19 |
| Assault (Homicide) | 11 |
| All Other External Causes | 27 |

Place of Death:

42.2% of Charles County deaths occurred in a hospital. 9.7% occurred within a nursing home. 3.2% were in a hospice. The other county deaths occurred outside of an institution such as a home. The percentage of deaths occurring in a hospital doubled from 21% in 2018 to 42% in 2021. This may be due to the COVID-19 pandemic where an advanced level of care was needed. Hospice saw a decrease from 11% of deaths in 2018 to 3% in 2021. Again, this may be due to the increase in infectious disease deaths due to COVID-19.

| Deaths in Hospitals | Number of Deaths Occurring in Hospitals: All Races | Number of Deaths Occurring in Hospitals: White | Number of Deaths Occurring in Hospitals: Black | Number of Deaths Occurring in Hospitals: Hispanic |
|----------------------------|--|--|--|---|
| <i>Charles County</i> | 625 | 282 | 302 | 14 |

| Deaths in Nursing Homes | Number of Deaths Occurring in Nursing Homes: All Races | Number of Deaths Occurring in Nursing Homes: White | Number of Deaths Occurring in Nursing Homes: Black | Number of Deaths Occurring in Nursing Homes: Hispanic |
|--------------------------------|--|--|--|---|
| <i>Charles County</i> | 144 | 75 | 64 | 3 |

| Deaths in Hospices | Number of Deaths Occurring in Hospices: All Races | Number of Deaths Occurring in Hospices: White | Number of Deaths Occurring in Hospices: Black | Number of Deaths Occurring in Hospices: Hispanic |
|---------------------------|---|---|---|--|
| <i>Charles County</i> | 48 | 24 | 21 | 2 |

| Deaths in Institutions | Percent of All Deaths Occurring in Hospitals, Hospice, and Nursing Homes: All Races | Percent of All Deaths Occurring in Hospitals, hospice, and Nursing Homes: White | Percent of All Deaths Occurring in Hospitals, hospice, and Nursing Homes: Black | Percent of All Deaths Occurring in Hospitals, Hospice, and Nursing Homes: Hispanic |
|-------------------------------|---|---|---|--|
| <i>Charles County</i> | 55.1% | 51.1% | 58.0% | 63.3% |

Infant Mortality:

For 2021, Charles County infant mortality rate was lower than the Maryland state rate. When the Charles County infant mortality rates are compared by race, the rates appear to be higher in the African American population than the general county population.

| 2021 Data | Charles County Number | Charles County Rate | Maryland Number | Maryland Rate |
|--|------------------------------|----------------------------|------------------------|----------------------|
| Infant Mortality Rate (per 1000 live births) | 9 | 4.9 | 415 | 6.1 |
| Neonatal Mortality Rates (per 1,000 births) | 6 | *** | 282 | 4.1 |
| Post neonatal Mortality Rates (per 1,000 births) | 3 | *** | 133 | 1.9 |
| Fetal death rates (per 1,000 total deliveries: live births and fetal deaths) | 17 | *** | 479 | 7.0 |
| Perinatal Mortality Rates (per 1,000 fetal deaths) | 11 | *** | 437 | 6.4 |

***Rates based on less than 20 events are not presented since such rates are not stable. Mortality Rates per 1,000 live births are presented in parentheses when available. Rates could not be calculated for cells with fewer than 20 deaths.

| 2021 Vital Statistics Data: Charles County Counts | All Races | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic American Indian | Non-Hispanic Asian or Pacific Islander | Non-Hispanic Multi Race | Hispanic |
|---|-----------|--------------------|--------------------|------------------------------|--|-------------------------|----------|
| Infant Deaths | 9 | 0 | 7 | 0 | 0 | 2 | 0 |
| Fetal Deaths | 17 | 7 | 7 | 0 | 1 | 0 | 2 |
| Perinatal Deaths | 11 | 0 | 7 | 0 | 0 | 0 | 0 |
| Neonatal Deaths | 6 | 0 | 5 | 0 | 0 | 1 | 0 |
| Post neonatal Deaths | 3 | 0 | 2 | 0 | 0 | 1 | 0 |

Infant Mortality Definitions

Infant death: Death occurring to a person under one year of age.

Neonatal death: Death occurring to an infant under 28 days of age.

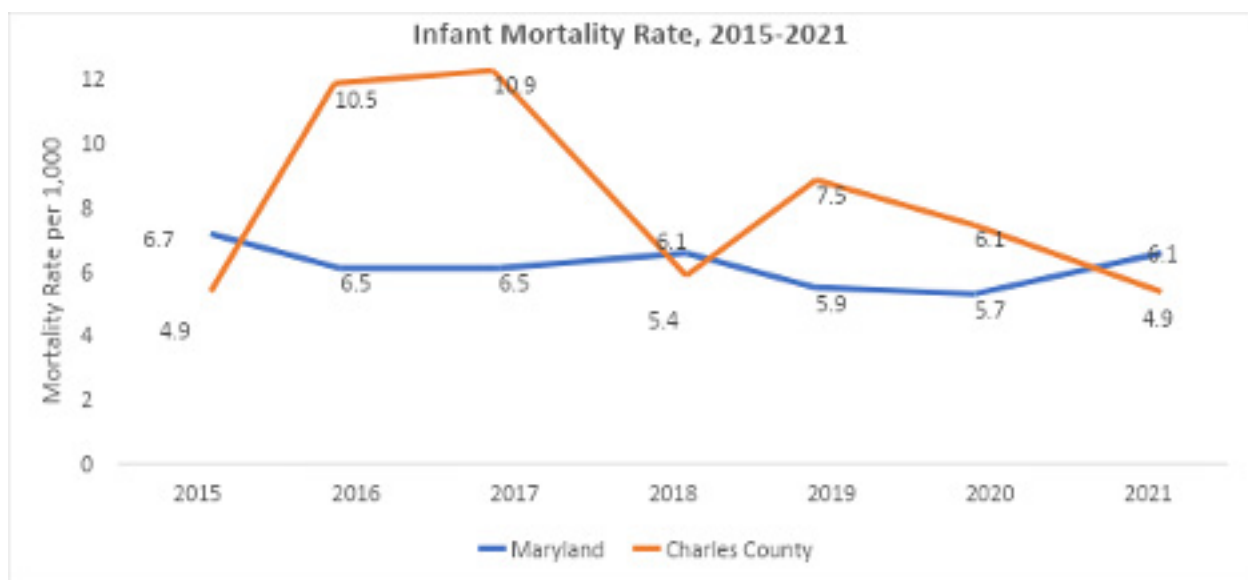
Post neonatal death: Death occurring to an infant between 28 days and one year of age.

Fetal death: Death before the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy.

Perinatal death: Death of a fetus of 28 or more weeks of gestation or of an infant less than 7 days of age.

Looking at the trends in infant mortality for Charles County, there appears to be a downward trend in infant mortality. However, there is a lot of fluctuation each year in the rate due to small sample sizes. It is also difficult to make any conclusions based on race or ethnicity due to the small numbers of deaths each year.

| Infant Mortality Rates per 1,000 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>Maryland (All Races)</i> | 6.7 | 6.5 | 6.5 | 6.1 | 5.9 | 5.7 | 6.1 |
| <i>Charles County (All Races)</i> | 4.9 | 10.5 | 10.9 | 5.4 | 7.5 | 6.1 | 4.9 |
| <i>Non-Hispanic White</i> | *** | *** | 12.2 | *** | *** | *** | **** |
| <i>Non-Hispanic Black</i> | 8.3 | 14.9 | 10.0 | 8.4 | 11.1 | 9.9 | 7.7 |
| <i>Non-Hispanic American Indian</i> | *** | *** | *** | *** | *** | *** | **** |
| <i>Non-Hispanic Asian or Pacific Islander</i> | *** | *** | *** | *** | *** | *** | **** |
| <i>Hispanic</i> | *** | *** | *** | *** | *** | *** | **** |



Vital Statistics References

1. 2021 Charles County Marriage, Divorce, Mortality and Infant Mortality Statistics. 2021 Maryland Vital Statistics Report. Maryland Department of Health. Available at https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/2021AnnualReport_Final_v1023.pdf.

Social Determinants of Health:

The social determinants of health are the conditions in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, and resources at global, national and local levels.

The places where we live, learn, work and play have a tremendous impact on our health. Receiving proper medical care and regular physicians' visits are essential for detecting and curing illness. Access to health care can only account for 10-15% of preventable deaths. Social factors such as housing, education, income, transportation, access to healthy affordable food, and employment greatly influence the health and quality of life in communities. These social factors, generally referred to as the social determinants of health, determine whether individuals have parks and playgrounds to exercise, full-service supermarkets to buy fresh and affordable fruits and vegetables, living wage paying job opportunities to support their families, and other, necessary resources that allow them to thrive. As public health advocates, educators, and leaders, we must encourage people to make healthy choices, but must also remember that people can only make healthy choices if they have healthy options. (Robert Wood Johnson Commission to Build a Healthier America)

Data on the social determinants of health was extracted for Charles County using the American Factfinder tool from the United States Census Bureau. Data is based on 5-year average estimates from 2018-2022 American Community Surveys. Data is aggregated for a five-year period to increase the sample size and the validity of the statistics.

Disability

Public health acknowledges that what defines individuals with disabilities, their abilities, and their health outcomes is directly related to their community, including their social and environmental circumstances. To be healthy, people of all abilities should have access to meaningful daily activities that add to their growth, development, fulfillment, and community contribution.

7.6% of Charles County residents under the age of 65 years have a disability. This percentage is less than the Maryland state average percentage of 7.8% and the US percentage of 8.9%.

Language

Certain groups are at higher risk for having limited English language skills and low literacy, such as individuals who do not speak English at home and immigrants. Limited language skills and low literacy skills are associated with lower educational attainment and worse health outcomes. Having limited English proficiency in the United States can be a barrier to accessing health care services and understanding health information. For example, compared to older individuals who only speak English, older individuals with limited English proficiency are more likely to have no usual source of care, report lower self-rated health, and report feeling sad most or all of the time.

Language Other Than English Spoken at Home

Most of the Charles County population speaks English in the home. Only 9.8% of residents reported speaking a language other than English at home. This is much lower than the Maryland percentage of 19.8% and the US percentage of 21.7%.

Foreign Born

Charles County also has a low percentage of individuals who report being foreign-born at 7.5%.

This is much lower than the Maryland state percentage of 15.7% and the US percentage of 13.7%.

Housing

Housing quality refers to the physical condition of a person's home as well as the quality of the social and physical environment in which the home is located. Aspects of housing quality include air quality, home safety, space per individual, and the presence of mold, asbestos, or lead. Housing quality is affected by factors like a home's design and age. Poor-quality housing is associated with various negative health outcomes, including chronic disease and injury and poor mental health. The quality of a home's neighborhood is shaped in part by how well individual homes are maintained, and widespread residential deterioration in a neighborhood can negatively affect mental health.

Both home design and structure significantly influence housing quality and may affect mental and physical health. Steps, balconies, and windows are features of home design that may present a threat to safety, especially for individuals with physical disabilities. Breakable glass, low windowsills, and poorly constructed stairs may increase the risk of injury from a fall.

Lack of housing maintenance may lead to poor housing conditions inside the home (e.g., damaged appliances, exposed nails, or peeling paint) as well as poor housing conditions outside the home (e.g., damage to stairs and windows). These conditions may harm health by increasing exposure to hazards such as carbon monoxide, allergens, and lead in paint, pipes, and faucets. Carbon monoxide has been shown to cause heart damage, neurological impairment, and death. Likewise, even low levels of lead exposure can have serious effects on children's health and behavior.

Inadequate plumbing and lack of air conditioning in homes may also impact health. Corroded plumbing infrastructure (e.g., in Flint, Michigan) increases residents' exposure to lead and their risk of lead poisoning. Living in a home without air conditioning may increase the risk of vector-borne diseases, like dengue fever, if people leave unscreened windows open for ventilation.

Low-income families may be more likely to live in poor-quality housing that can damage health. These homes may be under-insulated, lack air conditioning, and cost more to heat, leaving homes either too hot or too cold, which has been linked to poorer health outcomes. For example, spending time in a cold home may raise blood pressure or even lead to a heart attack. In addition, residents of overcrowded homes may be at risk for poor mental health, food insecurity, and infectious diseases. Additionally, the homes of low-income families are more likely to have water leaks; these leaks are associated with mold growth, which has been shown to affect respiratory health and increase the likelihood of asthma, coughing, and wheezing.

Children and older adults with physical limitations may be especially susceptible to negative health outcomes when living in poor quality housing. Inadequately vented appliances in the home may result in increased exposure to carbon monoxide in utero, which may affect fetal development or even result in fetal death. Children's behaviors, such as hand-to-mouth activity, may increase their exposure to home pollutants. Older adults may experience serious injury from falls in the home, especially in homes with stairs, narrow doorways, or other obstacles.

Housing Data and Housing Values

There are 63,772 housing units in Charles County. 79.8% of those housing units are owner occupied. The median value of the owner-occupied housing units is \$382,800. This median value is higher than the Maryland median value of \$380,500 and higher than the US median value of \$281,900.

The median selected monthly owner costs with a mortgage for Charles County was \$2,411. This was higher than the median cost of \$2,245 for Maryland and the median cost of \$1,828 for the US.

Rent is also high in Charles County. The median gross rent in Charles County is \$1,839. This is higher than the median gross rent of \$1,598 for Maryland and the median gross rent of \$1,268 for the US.

Affordable housing is also an indicator of the Maryland State Health Improvement Process. This indicator shows the percentage of housing units sold that are affordable on the median teacher's salary. 2020 data from the Maryland Department of Planning found that 41.7% of housing units sold in Charles County were affordable on the median teacher's salary. This was far below the Maryland state percentage of 56.7%.

Household Size

There is a total of 59,205 households in Charles County. The average household size in Charles County is 2.80 persons. 88.7% of Charles County residents have been living in the same house from the previous year.

Income

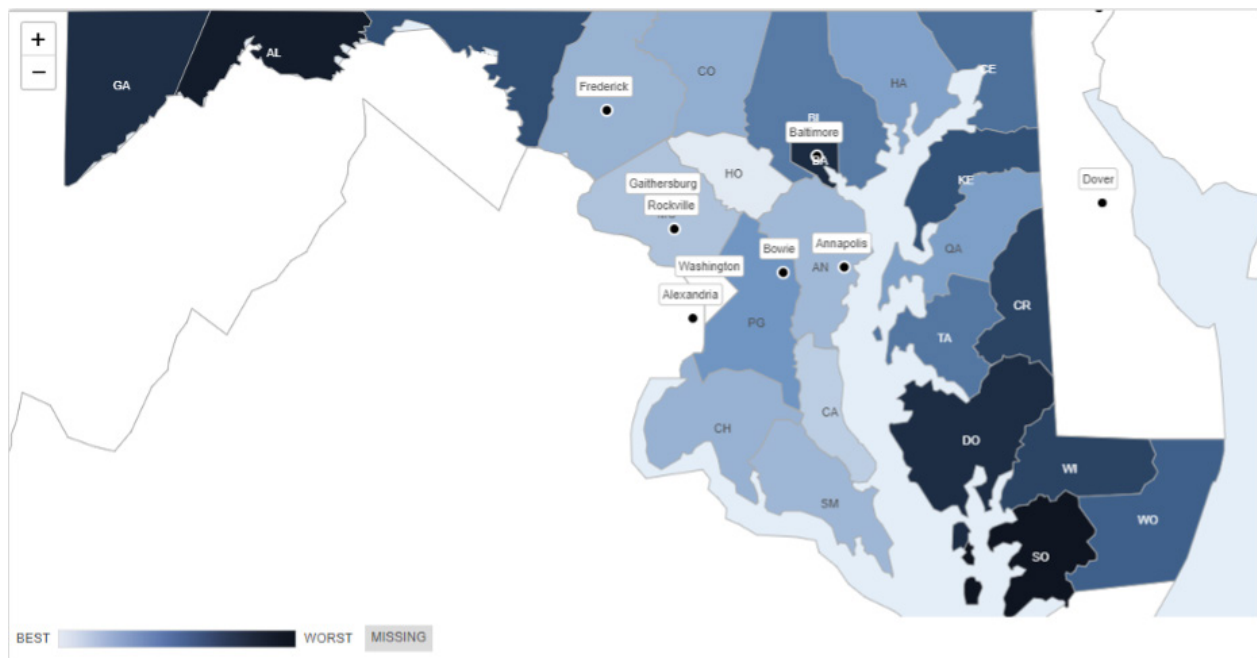
Public health has long recognized the link between poor health and poverty. Science consistently shows that low incomes are a significant risk factor in disease incidence and severity as well as life expectancy.

A study published in April 2016 in the Journal of the American Medical Association examined more than 1 billion U.S. tax records from 1999 through 2014. They found that higher income was linked with longer life, with differences in life expectancy across income groups increasing over time.

In particular, the study found that the gap in life expectancy between the richest 1 percent and poorest 1 percent was more than 14 years for men and more than a decade for women. Inequality in life expectancy increased as well, with men and women in the top 5 percent of income distribution gaining about three years of life expectancy, while those in the bottom 5 percent gained virtually no additional years of life.

Median Income and Poverty

Employment and economic indicators for the county are fairly strong. The 2018-2022 US Census American Community Survey estimates that 67.3% of the Charles County population is currently in the labor work force. The 2018-2022 5-year estimate for Charles County found that approximately 8.0% of Charles County individuals are living below the poverty level; however, this is lower than the Maryland rate of 9.6%. The Charles County median household income was \$116,882, well above the Maryland median household income of \$98,461 and the US median of \$75,149.

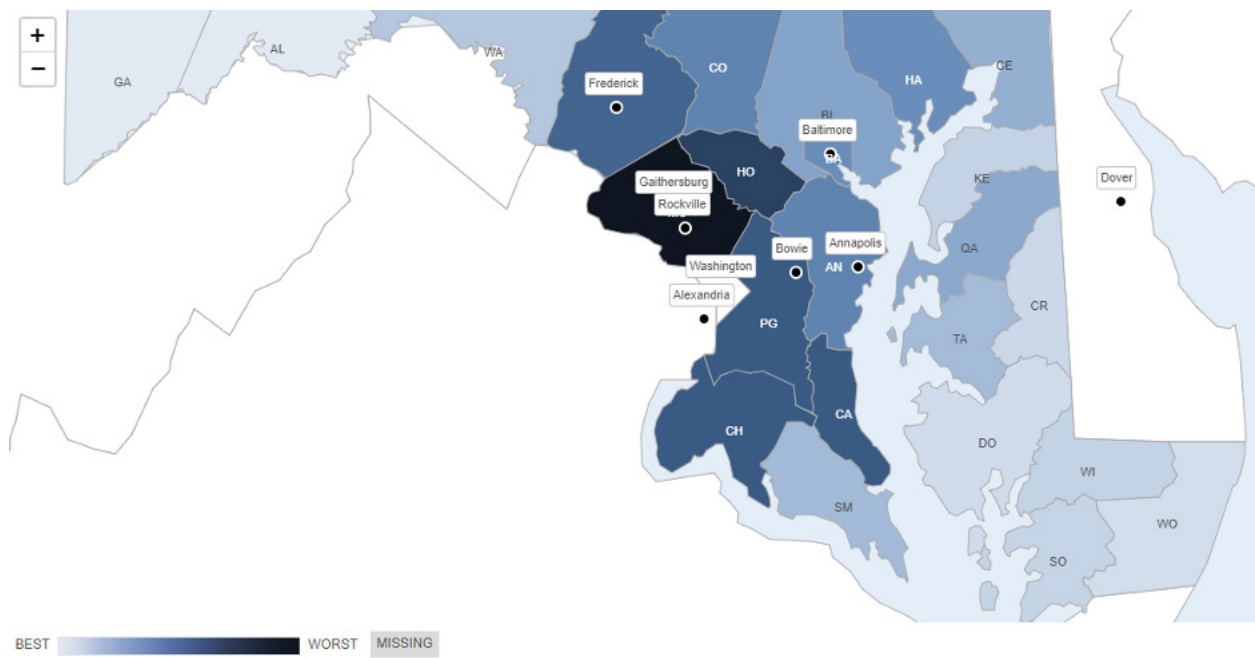


Livable Wage

According to the Robert Wood Johnson Foundation’s County Health Rankings, the livable wage is “The hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children.” This living wage estimate is calculated by Dr. Amy Glasmeier and colleagues at the Massachusetts Institute of Technology for twelve different household compositions. We include a measure of Living Wage reflecting a household of three with one adult working full-time and two children.

Living wage represents the minimum income necessary for financial independence to meet the basic needs of an individual or family without requiring public assistance in the form of income-conditioned benefits like the Supplemental Nutrition Assistance Program (SNAP), Supplemental Security Income (SSI), Earned Income Tax Credit (EITC), and Temporary Assistance for Needy Families (TANF).¹ The Living Wage measure specifically accounts for basic household needs, including food, child care, health care, housing, transportation, and other necessities such as clothing, broadband service, and cell phone service. The costs of many elements of the basic needs budget are based on market-derived data which vary according to geographic region. This makes the Living Wage measure a much more accurate determination of household need as compared to the U.S. poverty thresholds.

For Charles County, the 2022 hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children is \$52.84. This is the third highest in the state of Maryland and is greater than the Maryland state hourly living wage of \$50.60.



Food Insecurity

According to the Robert Wood Johnson Foundation’s County Health Rankings, 7% of Charles County residents do not have a reliable source of food. This is lower than the Maryland percentage of 9% and the US percentage of 12%. This measure is based on 2020 data from Feeding America’s Map the Meal Gap project.

In addition, 5% of Charles County residents are considered low income and without a close grocery store. This limits their ability to access healthy and fresh foods. This is higher than the Maryland state average percentage of 4%.

Children Eligible for Free or Reduced-Price Lunch:

Food insecurity and hunger are known to impair child development and increase risk of poor health outcomes. The 2020-2021 percentage of Charles County children eligible for free or reduced-price lunch was 40%.

Poverty

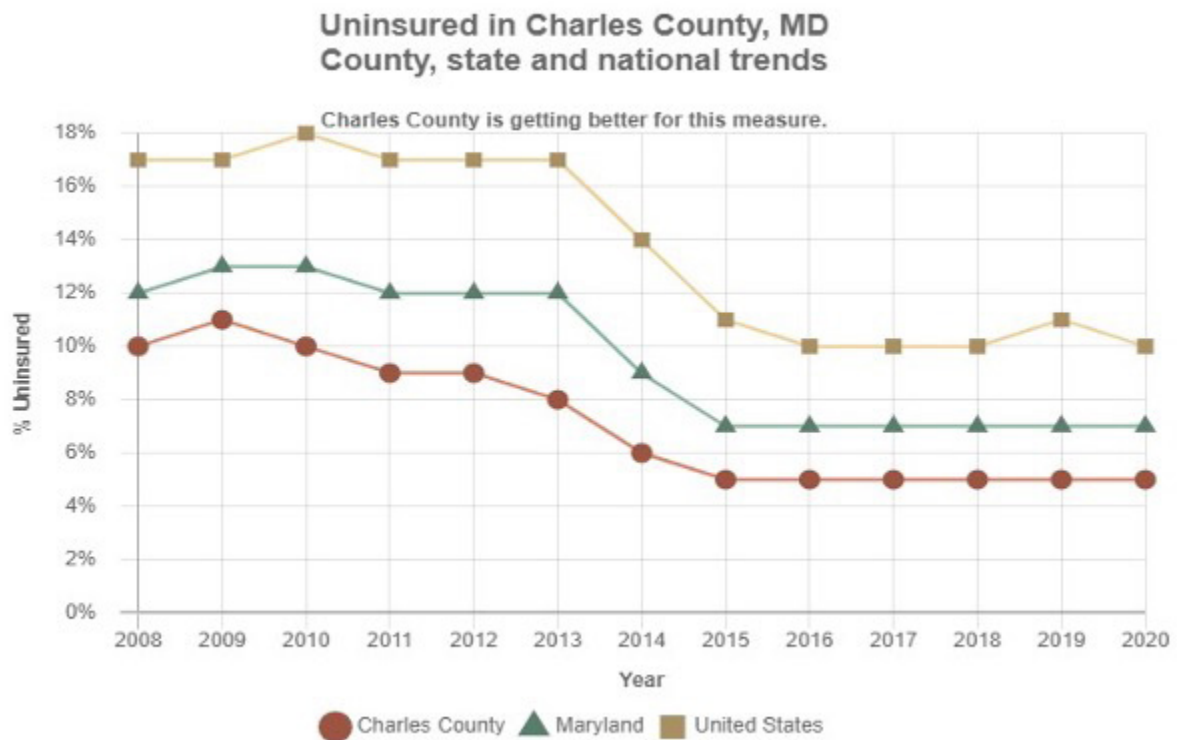
According to the 2018-2022 US Census Bureau’s American Community Survey, 8.0% of Charles County residents are living in poverty.

Another indicator for assessing income is to examine the percentage of people who are spending greater than 35% of their income on gross rent. Gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else). Gross rent eliminates the differences resulting from a variety of practices associated with including utilities and fuels as part of the rental payment. The estimated costs of water, sewer and fuels are reported on a 12-month basis but are converted to monthly figures for the tabulations. The median gross rent in Charles County is \$1,598. This is above the national average gross rent of \$1,268.

Health Insurance Coverage

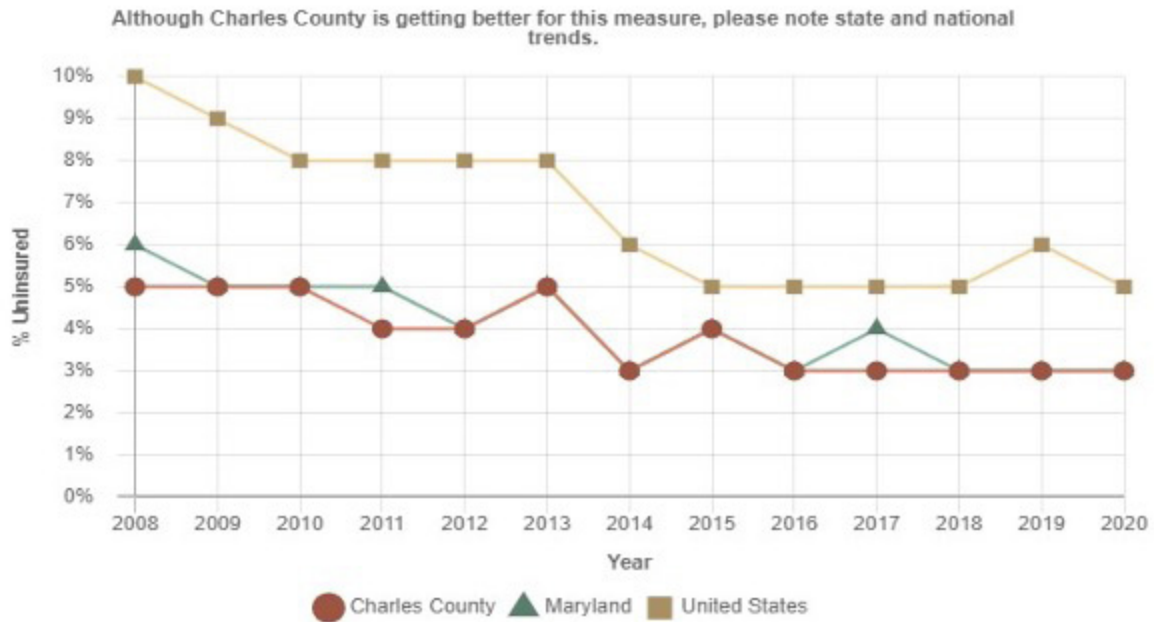
One of the key components of access to health care is the availability to health insurance coverage. According to the short survey respondents, the most commonly cited barriers to needed health care were care is too expensive/can't afford it (56.6%) and lack of health insurance (41.0%).

The 2018-2022 Census American Community Survey estimates that 5.2% of Charles County residents do not have health insurance. Looking at the trends in the uninsured data from 2008-2020, the percent of uninsured in Charles County has gone down and is below both the state and federal levels.



Charles County is also below the state when examining the percentage of county children who are uninsured.

Uninsured children in Charles County, MD County, state and national trends



Internet Access

In the digital age, many forms of health information and education have moved online. Those with access to a computer and the internet can participate in online health education or telehealth services. 95.0% of Charles County households have a computer, and 91.3% of Charles County households have a broadband internet subscription. However, there are parts of the county where broadband internet access is still unavailable.

Education

“Education is the single most important modifiable social determinant of health,” Iton, MD, JD, MPH, senior vice president for healthy communities at the California Endowment. “Income and education are the two big ones that correlate most strongly with life expectancy and most health status measures.”

Education is not just about what is learned in the classroom; it is also about the doors it unlocks to future well-being. U.S. women who were aged 25 years in 2005 who never finished high school could expect to live another 52 years, compared to another 57.3 years for women who completed high school, according to a 2010 National Center for Health Statistics report. Men who never finished high school could expect to live another 46.2 years, compared with 51.5 for those with high school diplomas.

Because of the relationship between education and health, Healthy People 2020 set goals related to education access. One of those goals, boosting the number of kids who graduate in four years as of ninth grade, is a Leading Health Indicator, meaning it is a priority for U.S. health under Healthy People 2020. Seventy-nine percent of public-school students completed high school in four years as of the 2010-2011 school year. The goal is to increase that to 87 percent by 2020.

The building blocks of good health have their foundation in social and emotional skills learned

during early childhood. “Early childhood programs such as preschool use games and social interactions to expose children to the concepts of problem solving and thinking ahead, which forces them to think about the consequences of their actions”, said W. Steven Barnett, PhD, director of the National Institute for Early Education Research at Rutgers University. “That is a practice carried into adulthood that may lead to better decision making about situations that could impact health.”

Charles County has a larger percentage of high school graduates than Maryland (94.4% vs. 91.0%); however, Charles County has a smaller percentage than Maryland of individuals with a bachelor’s degree or higher (31.1% vs. 42.2%).

Transportation

Access to affordable, convenient transportation plays a crucial role in health. The cost and time required for daily travel between home, work, school, daycare, and groceries greatly impacts the quality of life for us all. Those who can afford it live where getting around is easier. Those who cannot afford it face long commutes, crowded buses, and often miss out on life-improving opportunities that they simply cannot get to on a reliable basis. A robust, affordable, and reliable transit system means better access to education and jobs, recreational and after-school activities, healthier food options, health care facilities, as well as friends and family.

The percent change in the population growth for Charles County has been slightly greater than the change seen in the Maryland population growth. This growth has created transportation issues for the County, in particular for the “development district” in the northern part of the county where many residents commute to Washington D.C. to work. The average work commute time for a Charles County resident is 44.6 minutes which is higher than the Maryland average of 26.8 minutes (Source US Census Bureau’s 2017-2021 American Community Survey 5-year estimates). Public transportation consists of commuter buses for out-of-county travel and the county-run Van Go bus service for in-county transportation.

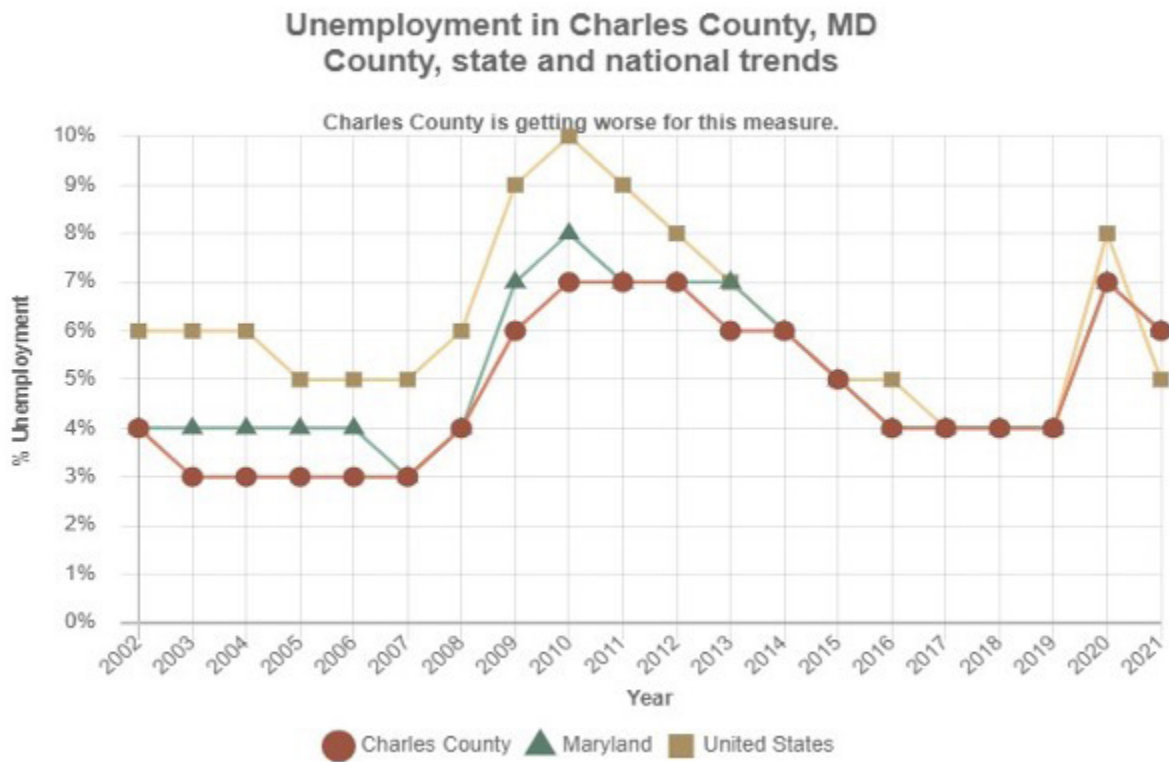
Employment

Every day, many Americans are either working or looking for work. Multiple aspects of employment—including job security, the work environment, financial compensation, and job demands—may affect health.

Job benefits such as health insurance, paid sick leave, and parental leave can affect the health of employed individuals. Two key functions of health insurance are access to affordable medical care and financial protection from unexpected health care costs. Paid sick leave, another benefit offered by some employers, allows employees to seek medical care for themselves or dependent family members without losing wages. In addition, some employers offer maternity leave after the birth of a child; this leave is frequently unpaid. Maternity leave has been associated with several positive health outcomes for both women and children.

Unemployment can also have negative health consequences. Those who are unemployed report feelings of depression, anxiety, low self-esteem, demoralization, worry, and physical pain. Unemployed individuals tend to suffer more from stress-related illnesses such as high blood pressure, stroke, heart attack, heart disease, and arthritis. In addition, experiences such as perceived job insecurity, downsizing or workplace closure, and underemployment also have implications for physical and mental health.

Unemployment in Charles County has risen since 2019. The 2021 Charles County unemployment rate was 5.7%. This is like the Maryland percentage of 5.8% and above the US percentage of 5.4%.



Social Determinants of Health References

1. Social Determinants of Health data on Employment, Education, Income, Transportation, Computer Access, Disability, Health Insurance, Poverty, Housing, Language. 2018-2022 average and 2017 American Community Survey. United States Census Bureau. American FactFinder. Available at www.census.gov.
2. Data on median household income, livable wage, food insecurity, children eligible for free or reduced-price meals, uninsured, and unemployment. The Robert Wood Johnson Foundation’s County health rankings. Available at countyhealthrankings.org.

Qualitative Data Pertaining to Social Determinants of Health

Social determinants of health were often highlighted in focus group discussions. The perceived barriers and gaps were very similar among focus group participants. A large majority of participants stated that barriers related to transportation and access to care were greatest in Charles County.

Across all six focus groups, transportation was identified as a barrier in accessing or receiving healthcare services in Charles County. From childhood and adolescence to the elderly population of the county, the lack of transportation is a countywide barrier. Focus group participants stated that the lack of transportation to and from after school programs is causing a sedentary lifestyle among the youth in Charles County. In the Partnerships for a Healthier Charles County focus group,

participants stated that transportation to and from health services is a barrier. Participants also stated that children need to be involved in more activities, but transportation becomes a barrier to those activities. In the Chronic Disease Prevention and Management Coalition focus group, participants mentioned that more services are becoming available in the county, but the issue is getting to those services. Lastly, in the Healthcare Consumers and Community Leaders focus group, participants stated that there is a lack of transportation throughout the county, but specifically in more rural areas of the county including Nanjemoy, Indian Head and Welcome.

Other social barriers that were identified in the focus groups were food deserts within the county and the need for more healthy food options, the cost of healthcare services, health insurance issues (providers only accepting certain plans), and affordable housing.

When asked what prevents people in Charles County from accessing the services that they need, the short survey participants often cited social determinants of health. The most commonly cited barriers to needed health care were care is too expensive/can't afford it (56.6%) and lack of health insurance (41.0%). Over 20% of respondents also identified transportation and not being able to get an appointment with their doctor as barriers to needed health care as well.

Short Survey Participants Also Asked for Improved Access to Care Through:

Affordable healthcare/insurance: Many respondents expressed the need for lower health care costs and more affordable health care. Better insurance policies and lower costs for health insurance were also noted.

Public Transportation: They provided recommendations for more VanGo stops, partnering with Uber or Lyft to provide transportation to appointments, provide rides to the hospital, and creating a transportation program were all mentioned by respondents.

Other determinants: Short survey respondents expressed the need to reduce crime, to provide free healthcare, to offer more healthier food options, and to have better access to fresh produce.

Several additional questions were added to the long survey to ask respondents about social determinants of health including food insecurity.

Long survey respondents were also asked questions related to food insecurity. These questions were designed to understand the community needs and concerns around food and obtaining food. Almost 83% of survey respondents reported not worrying about food for themselves or their household in the last year. However, 11% of survey respondents did worry about having enough food in the last year.

The top 5 serious health issues for Charles County residents were Affordable Housing, Obesity, Crime, Drug Use, and Affordable Healthcare. Social determinants of health, such as housing and crime, have come to the forefront during this needs assessment.

The Burden of Heart Disease, Stroke, and Their Risk Factors:

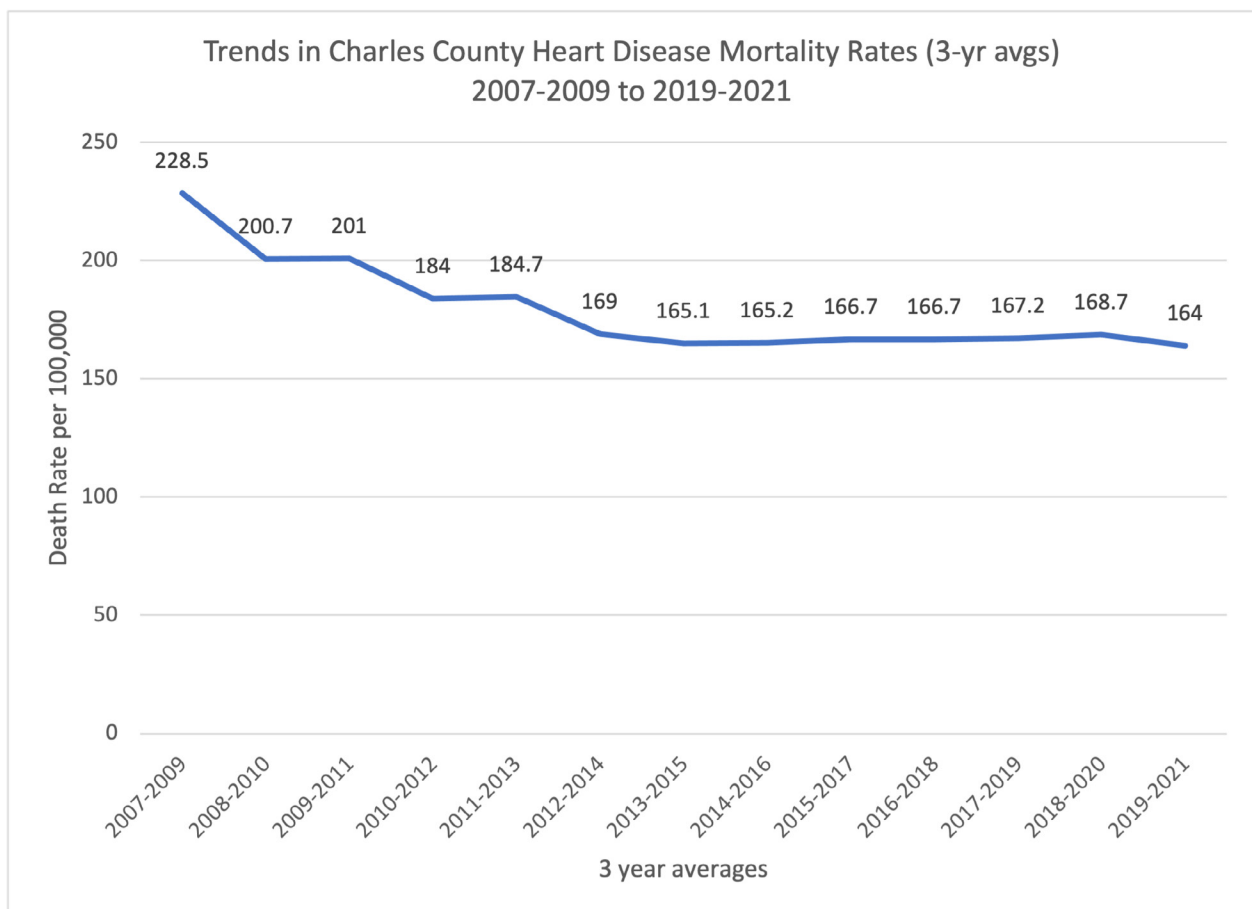
Heart Disease

Mortality:

Heart disease is the second leading cause of death in Charles County. In 2021, a total of 401 Charles County residents died from major cardiovascular diseases, and 266 of those deaths were from heart disease (66%). Deaths due to heart disease made up 18% of the total Charles County deaths in 2018.

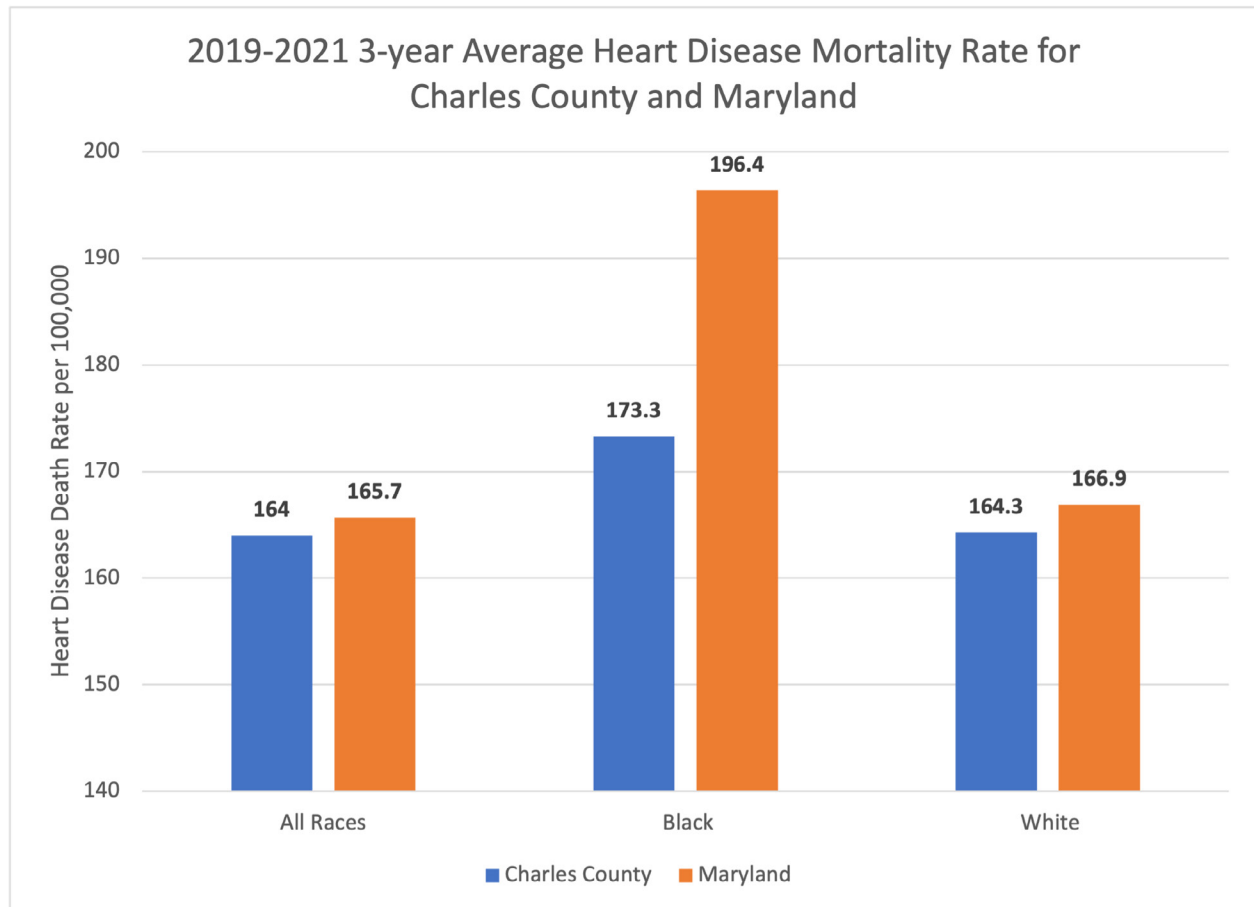
The 2021 Charles County age-adjusted heart disease death rate was 150.4 per 100,000. This was the highest rate for any cause of death in Charles County. The Charles County heart disease death rate is above than the Maryland state average rate of 136.8 per 100,000. However, this difference is not statistically significant.

The 2019-2021 (3-year average) Charles County heart disease mortality rate was 164.0 per 100,000. This is slightly below the Maryland state average rate of 165.7 per 100,000. The Charles County heart disease mortality is the 10th lowest among the Maryland jurisdictions. The 2019-2021 Charles County heart disease mortality rate is a decrease from the 2016-2018 Charles County heart disease mortality rate of 166.7 per 100,000 that was reported on the last needs assessment. Heart disease mortality rates were trending downward from 2007-2009 to 2012-2014. Rates have remained stable since that time.



Racial disparities exist on a county level for heart disease mortality. Charles County Blacks have a slightly higher heart disease mortality rate than Charles County Whites (173.3 vs. 164.3). Due to small case counts, heart disease mortality rates cannot be calculated on a county level for Hispanics and Asians.

The heart disease mortality rate for Charles County African Americans of 173.3 per 100,000 was well below the Maryland African American rate of 196.4 per 100,000. The heart disease mortality rate for Charles County White of 164.3 per 100,000 was similar to the Maryland White rate of 166.9 per 100,000.



Prevalence:

Estimates on the prevalence of coronary heart disease and angina in Charles County can be calculated using the Maryland Behavioral Risk Factor Surveillance System or BRFSS. The BRFSS also provides estimates on the number of Charles County residents who have suffered a heart attack. 2021 BRFSS data is available with age-adjusted and weighted responses for the Charles County population.

Heart Attack Prevalence:

2021 Charles County BRFSS participants were asked if they have ever had a heart attack. Once

weighted and age-adjusted, it is estimated that 3.4% of Charles County residents have ever suffered a heart attack. This is above the 2.7% reported for Maryland.

| Ever had a heart attack: | <i>weighted percentage</i> |
|---------------------------------|----------------------------|
| <i>Charles County</i> | 3.4% |
| <i>Maryland</i> | 2.7% |

Angina and Coronary Heart Disease Prevalence:

When asked if a doctor or health professional has ever told them that they have angina or coronary heart disease, 3.6% of Charles County residents reported having angina or coronary heart disease. This is above the 3.0% reported for Maryland.

| Ever have angina or coronary heart disease: | <i>weighted percentage</i> |
|--|----------------------------|
| <i>Charles County</i> | 3.6% |
| <i>Maryland</i> | 3.0% |

Doctor Diagnosed Heart Disease:

When asked if a doctor or health professional has ever told them that they have heart disease (angina, coronary heart disease, and/or heart attack), 5.3% of Charles County reported having heart disease. This is above the 4.5% reported for Maryland.

| Ever have heart disease: | <i>weighted percentage</i> |
|---------------------------------|----------------------------|
| <i>Charles County</i> | 5.3% |
| <i>Maryland</i> | 4.5% |

Doctor Diagnosed Cardiovascular Disease:

When asked if a doctor or health professional has ever told them that they have cardiovascular disease (angina, coronary heart disease, stroke, and/or heart attack), 6.7% of Charles County reported having cardiovascular disease. This is above the 6.4% reported for Maryland.

| Ever have cardiovascular disease: | <i>weighted percentage</i> |
|--|----------------------------|
| <i>Charles County</i> | 6.7% |
| <i>Maryland</i> | 6.4% |

Stroke

Mortality:

Stroke, or Cerebrovascular disease, is the 4th leading cause of death in Charles County. In 2021, a total of 109 Charles County residents died from a stroke. This constitutes a 2021 Charles County age-adjusted stroke death rate of 67.4 per 100,000. Deaths due to stroke made up 7.4% of the total Charles County deaths in 2021.

Atherosclerosis is the build-up of cholesterol plaque in the walls of arteries causing obstruction of blood flow. Plaques may rupture causing acute occlusion of the artery by clot. In 2021, there was 1 death in Charles County due to atherosclerosis.

Prevalence:

Estimates on the prevalence of stroke in Charles County can be calculated using the Maryland Behavioral Risk Factor Surveillance System or BRFSS. 2021 BRFSS age-adjusted and weighted estimates were used for this analysis.

2021 Charles County stroke prevalence is suppressed because the observed number of events is very small and not appropriate for publication. Variation is too great to calculate a prevalence. The 2021 Maryland stroke prevalence was 2.5% and has remained stable since the last needs assessment.

| Ever had a stroke: | <i>weighted percentage</i> |
|---------------------------|----------------------------|
| <i>Charles County</i> | ** |
| <i>Maryland</i> | 2.5% |

Hypertension or High Blood Pressure

Mortality:

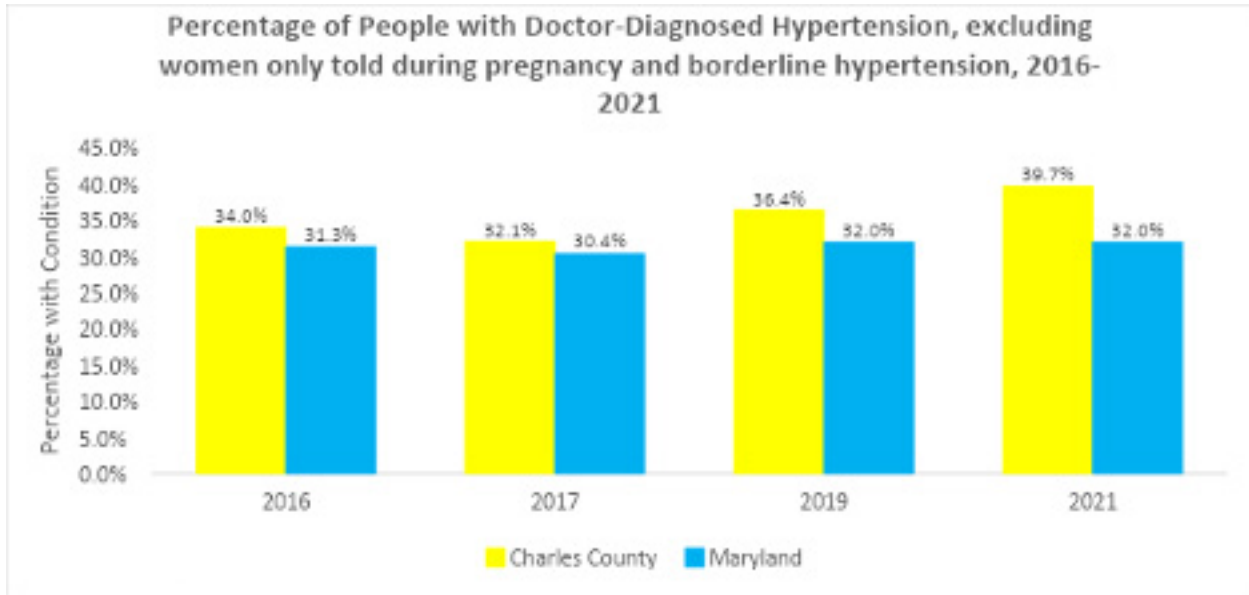
Hypertension, or high blood pressure, is the 11th leading cause of death in Charles County. In 2021, a total of 16 Charles County residents died from essential hypertension or hypertensive renal disease. Hypertension deaths make up 1.1% of the total deaths in Charles County (2021).

Prevalence:

Maryland 2021 BRFSS data was used to determine Charles County's hypertension prevalence estimates. All percentage estimates are weighted to reflect the county population.

The 2021 BRFSS asked participants if they have ever been told by a health professional that they have high blood pressure. 39.7% of Charles County residents reported that they have been told by a health professional that they have high blood pressure. This is higher than the Maryland percentage of 32.0%.

The percentage of individuals with high blood pressure has remained fairly stable for Maryland; however, the hypertension percentage in Charles County has risen each year since 2016.



Among those who reported that they have hypertension, 68.2% reported that they are currently taking medication to control their high blood pressure. This percentage is higher than the Maryland state average percentage of 63.2%.

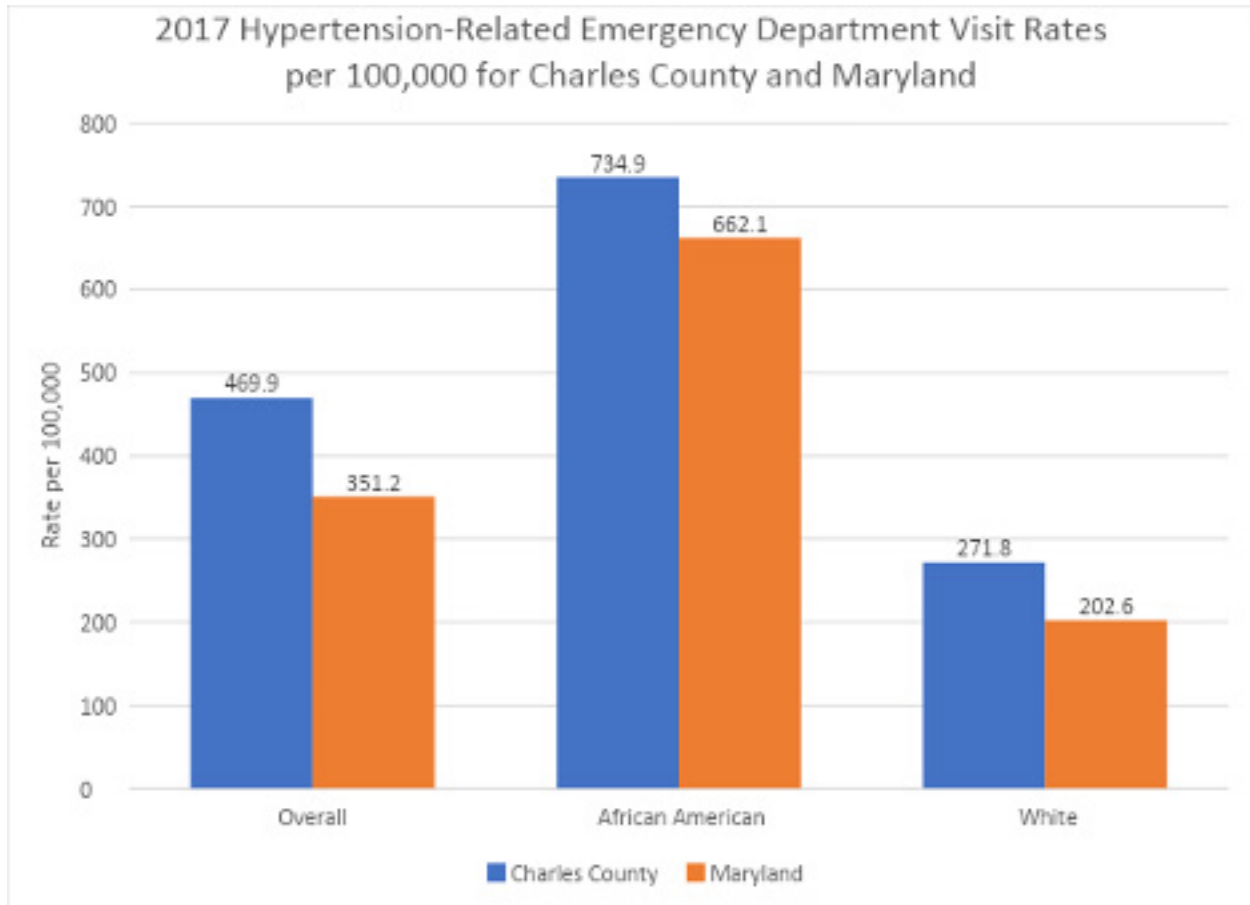
| 2021 BRFSS: Taking Medication to Control Hypertension | Percentage |
|---|------------|
| Charles County | 68.2% |
| Maryland | 63.2% |

Emergency Department Visit Rates for Hypertension:

The 2017 Charles County Emergency Department (ED) Visit Rate for Hypertension was 469.9 per 100,000 population. This rate was higher than the Maryland ED hypertension visit rate of 351.2. It was also an increase from the 2014 Charles County Hypertension ED visit rate of 347.7 per 100,000 population reported in the last needs assessment report. Charles County has seen an increase in the hypertension ED visit rate each year starting from a rate of 201.4 per 100,000 in

2008 to 469.9 per 100,000 in 2017.

There are racial disparities in the hypertension ED visit rate in Charles County. Charles County African Americans had a hypertension ED visit rate of 734.9 per 100,000 compared to 271.8 per 100,000 for Charles County Whites.

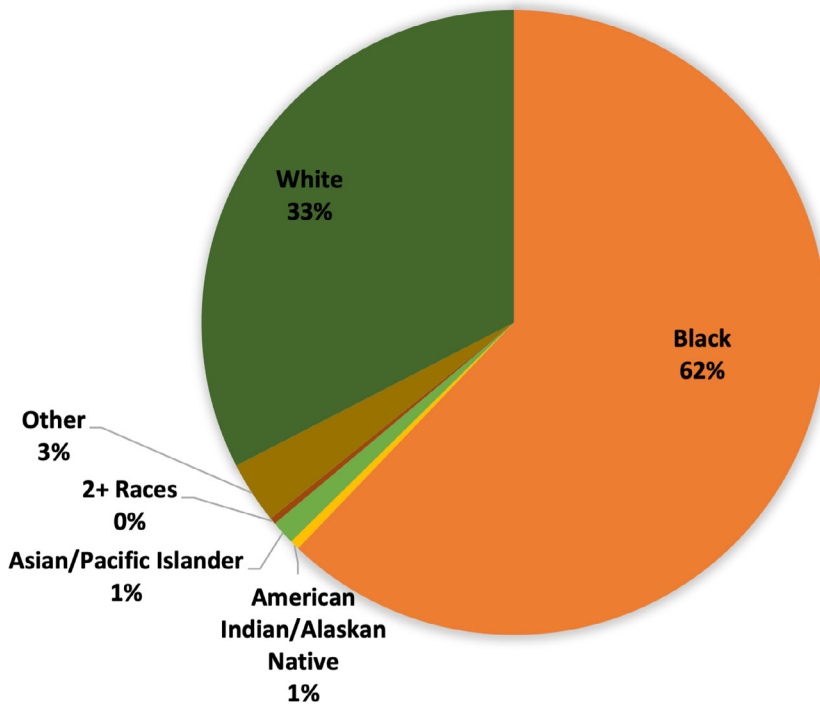


The Chesapeake Regional Information Sharing for our Patients or CRISP, is the health information exchange for the state of Maryland. CRISP Reporting Services provides public health dashboards with queries for emergency department and inpatient stays by demographics for many health conditions, including hypertension.

In 2023, there were 6,472 emergency department (ED) visits for Charles County residents related to hypertension. 64.1% of those ED visits were at the University of Maryland Charles Regional Medical Center. The next highest facility was MedStar Southern Maryland Hospital with 13.7% of the ED visits. In Charles County, females have more hypertension-related ED visits than males (3,833 vs. 2,639).

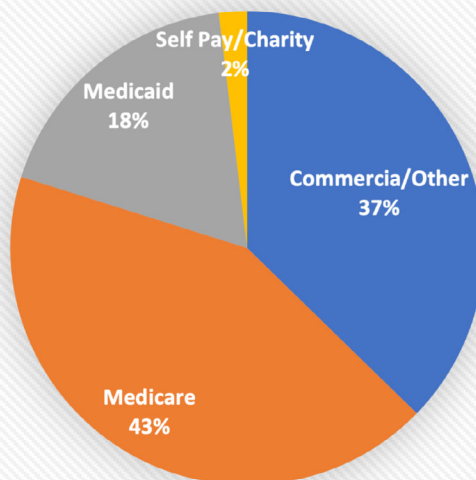
Charles County African Americans are disproportionately affected by hypertension-related ED visits and make up 62% of the total hypertension-related ED visits for Charles County residents.

2023 CHARLES COUNTY HYPERTENSION EMERGENCY DEPARTMENT VISITS BY RACE



When examining by payer source, the largest payer is Medicare followed by Commercial/Other insurance.

2023 Charles County Hypertension ED Visits by Payer Source

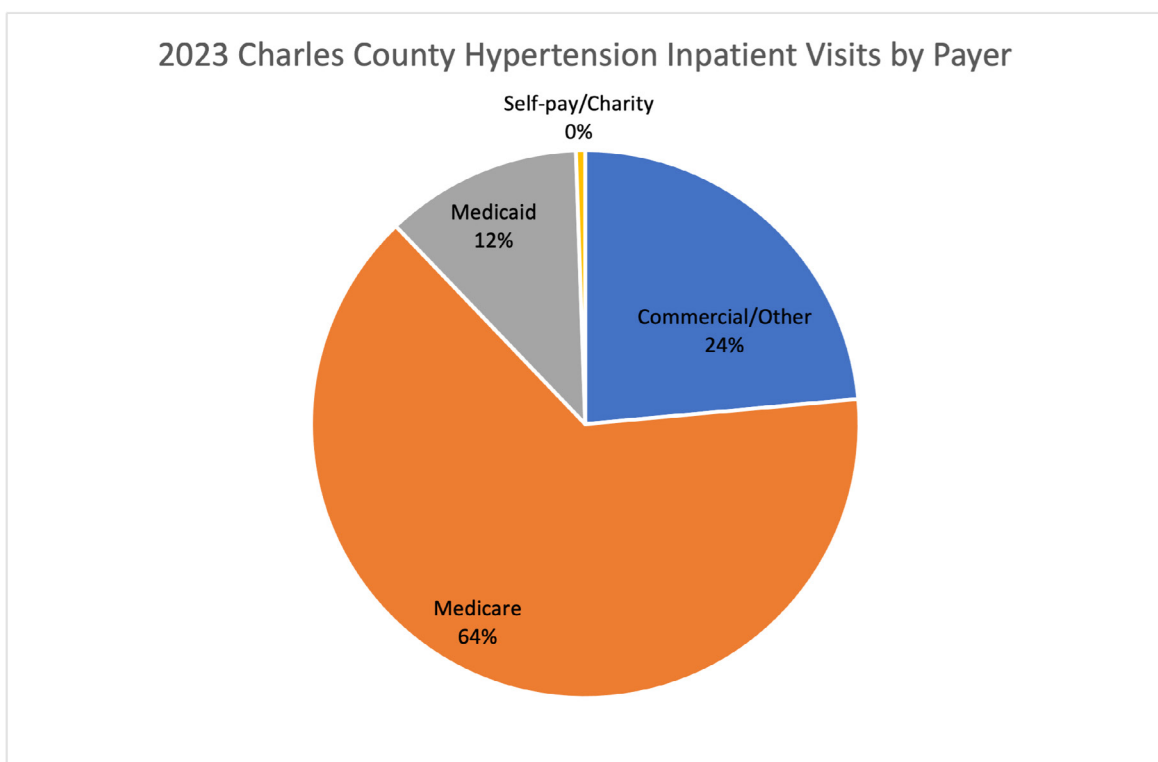
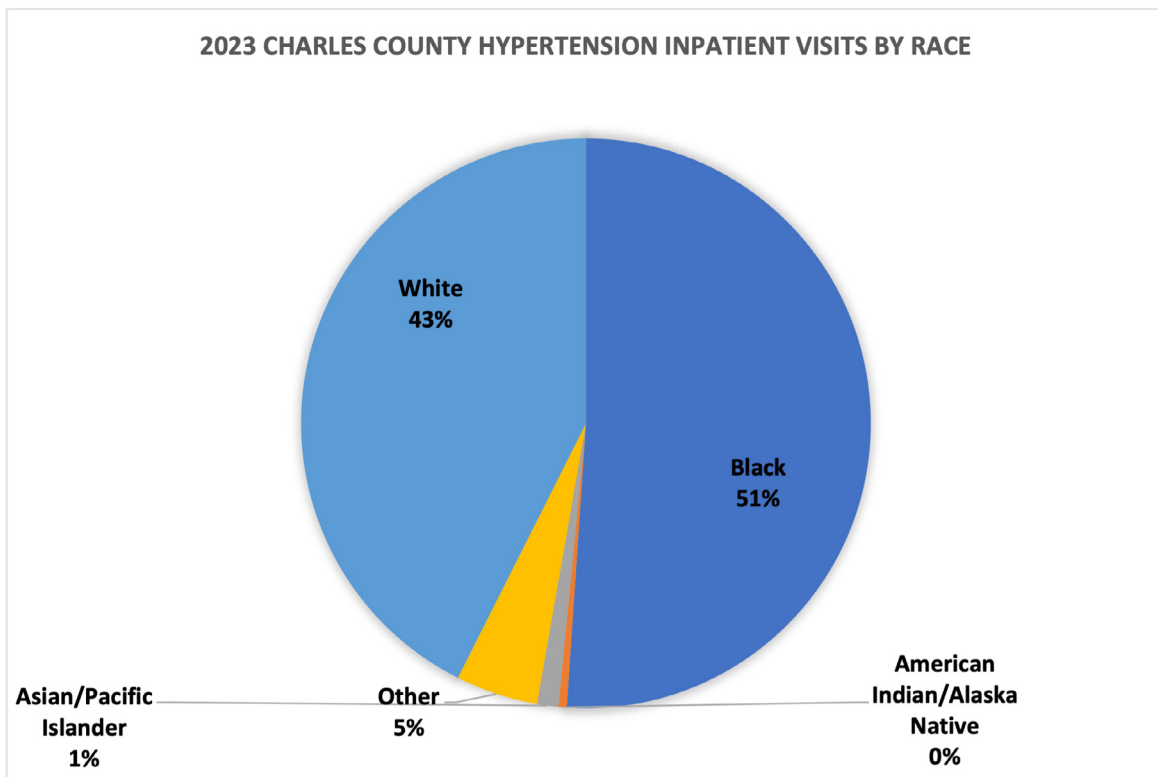


The age group with the largest number of hypertension-related ED visits is the 60-64-year-old age group who had 808 visits in 2021. They are followed closely by those aged 55-59 years.

| 2021 Charles County Hypertension-Related ED Visits by Age Group | Count |
|---|-------|
| 0-4 years | <11 |
| 5-9 years | <11 |
| 10-14 years | <11 |
| 15-17 years | <11 |
| 18-24 years | 34 |
| 25-29 years | 79 |
| 30-34 years | 176 |
| 35-39 years | 300 |
| 40-44 years | 430 |
| 45-49 years | 421 |
| 50-54 years | 658 |
| 55-59 years | 795 |
| 60-64 years | 808 |
| 65-69 years | 669 |
| 70-74 years | 579 |
| 75-79 years | 604 |
| 80-84 years | 471 |
| 85+ years | 433 |

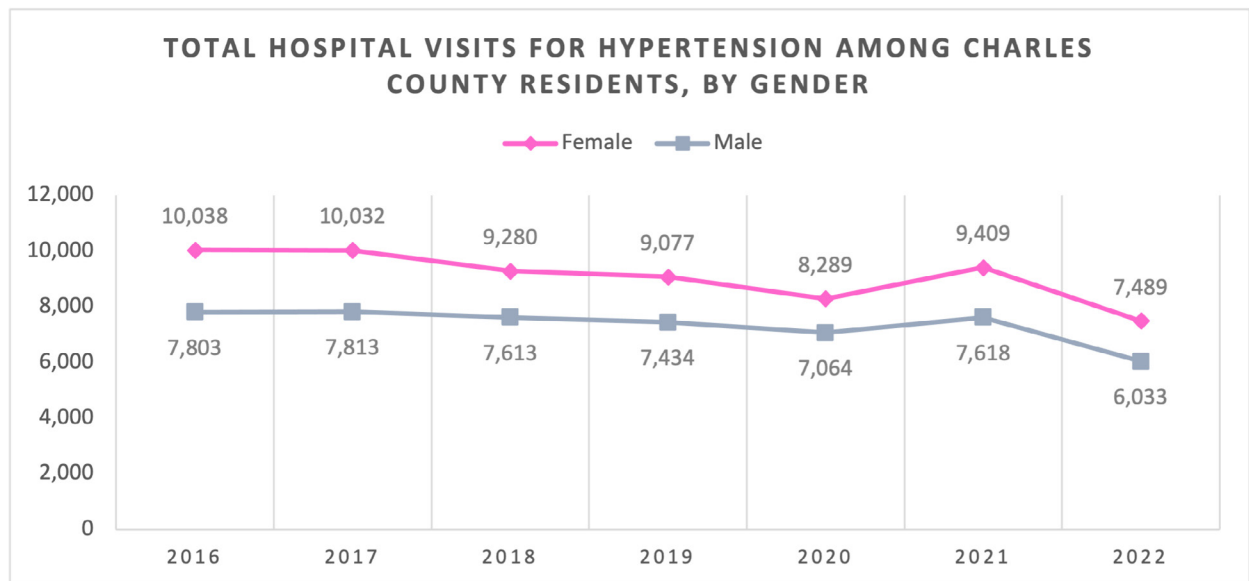
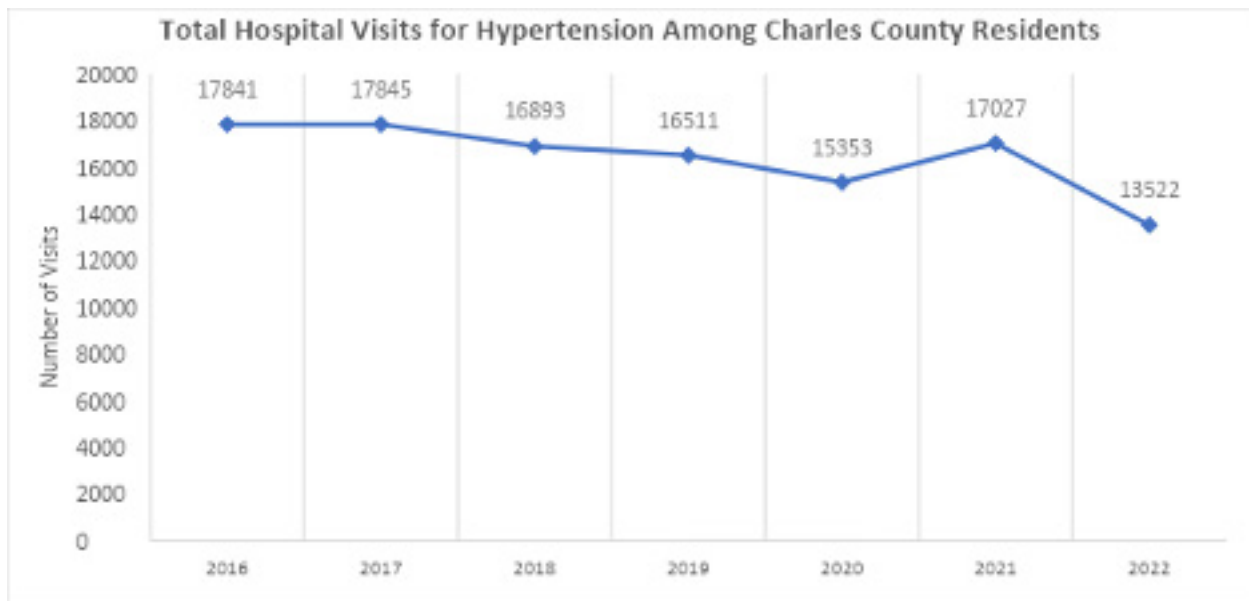
The same data source can be used to examine hypertension-related Inpatient visits for Charles County for 2023. There was a total of 5,139 hypertension related inpatient visits for Charles County residents in 2023. 56.0% of the hypertension inpatient visits for Charles County residents occurred at the University of Maryland Charles Regional Medical Center followed by the neighboring hospitals of MedStar Southern Maryland and MedStar St Mary's. Females have more hypertension-related inpatient visits than males (2,737 vs. 2,402). Charles County Whites and

African Americans make up the majority of the hypertension-related inpatient visits (94%). Medicare is the largest payer source for hypertension-related patient stays (65%). The age group with the most inpatient visits are those aged 75-79 years.



| 2023 Charles County Hypertension-Related Inpatient Visits by Age Group | Count |
|--|-------|
| 0-4 years | <11 |
| 5-9 years | 0 |
| 10-14 years | <11 |
| 15-17 years | <11 |
| 18-24 years | 41 |
| 25-29 years | 39 |
| 30-34 years | 72 |
| 35-39 years | 116 |
| 40-44 years | 160 |
| 45-49 years | 189 |
| 50-54 years | 354 |
| 55-59 years | 483 |
| 60-64 years | 550 |
| 65-69 years | 614 |
| 70-74 years | 628 |
| 75-79 years | 725 |
| 80-84 years | 525 |
| 85+ years | 636 |

Looking at all types of hospital visits for Hypertension, trends show stability from 2016-2022, even with the 2020 COVID-19 pandemic. Rates are slightly higher for females than males.



Heart Disease/Stroke/Hypertension References

1. 2021 Charles County Heart Disease, Stroke, and Hypertension Mortality Rates, Overall and by gender and race. 2021 Maryland Vital Statistics Report. Maryland Department of Health. Available at: <https://health.maryland.gov/vsa/Pages/reports.aspx>.
2. 2021 Charles County Heart Disease, Heart Attack, and Stroke Prevalence. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at <https://ibis.health.maryland.gov/>.
3. 2021 Charles County Hypertension. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at <https://ibis.health.maryland.gov/>.
4. 2017 Charles County and Maryland Hypertension Emergency Department Visit Rates by race.

Maryland State Health Improvement Process website. Available at: <https://pophealth.health.maryland.gov/Pages/SHIP-Lite-Home.aspx>.

4. 2016-2023 Charles County Emergency Department and Inpatient Visits by Demographic. CRISP Reporting Services. Public Health Dashboards. Chesapeake Regional Information Sharing for our Patients (CRISP). Available at <https://reports.crisphealth.org>.

Qualitative Data Relating to Heart Disease, Stroke, and High Blood Pressure

On the long community health survey, 26 health issues were listed, and participants were asked to rate the severity of those issues in Charles County. Two-thirds of the participants (67.6%) viewed high blood pressure as a health problem in the county. Over one-third of the participants (37.6%) listed high blood pressure as a “serious problem.” On the same listing, heart disease was listed as a health problem by 59.1% of the survey participants. One-quarter of the participants (27.9%) felt that heart disease was a serious problem in the county. Stroke was listed as a health problem by 57.9% of the respondents. 25.5% viewed stroke as a “serious problem.”

Looking at the top 5 serious health problems by groups, high blood pressure was the 5th most common answer for Males and for Hispanics. It did not rise to the top for any other races, gender, or ethnicities.

Long survey participants were asked if they have seen improvements in the county on any of 13 listed health topics. 18.03% reported that they have seen improvements in the county regarding heart disease, 24.03% reported that they have seen improvements in the county regarding high blood pressure, and 12.45% reported that they have seen improvements in the county regarding stroke.

Long survey participants were also asked a series of questions regarding risk factors that might increase their chances for chronic disease such as high blood pressure/stroke and heart disease. Some of the risk factors included physical activity, healthy eating, and stress levels. Only 8.5% reported that they always eat 5 or more servings of fruits and vegetables each day; 16.2% always get an hour of physical activity each day; 46.8% take a vitamin each day, and 6.2% never feel stressed out.

Short survey participants were asked what the biggest health problems are in Charles County. High blood pressure/stroke was the 3rd most answered health topics on the short survey with 38.5% of respondents listing it as the one of the biggest health problems. Heart disease was the 4th most common response with 38.2% of respondents listing it as a big health problem in Charles County.

Short survey respondents recognized community resources to address heart disease, stroke, and high blood pressure. 40% reported that the county had some or many resources for heart disease. 36.9% reported that the county had some or many resources to address stroke. 45.8% felt that the county had some or many resources for high blood pressure.

Heart disease, high blood pressure, and stroke were not commonly discussed health conditions at the 6 focus groups. There was discussion on chronic disease and availability of programs within Charles County to address self-management such as the Stanford Chronic Disease Self-Management Program and Building Better Caregivers.

Charles County Cancer Incidence and Mortality - A State and Jurisdictional Comparison:

Introduction

2021 Maryland Vital Statistics Report:

Cancer is the leading cause of in Charles County for 2021. In 2021, a total of 277 deaths occurred in Charles County due to cancer (2021 Maryland Vital Statistics Report).

The 2021 Charles County all-cancer site age-adjusted death rate was 149.2 per 100,000 population. This rate was higher than the Maryland state average cancer death rate of 136.8 per 100,000.

The greatest numbers of cancer deaths were from cancer of the lung, trachea, or bronchus (63) and other sites (74). Lung, trachea, and bronchus cancer accounted for nearly one-quarter of all 2021 cancer deaths (23%) in Charles County. This cancer site was followed by “Other” cancer sites, pancreas, and colon/rectum/anus.

| Charles County Deaths by Cancer Site: | Number of Deaths |
|---------------------------------------|------------------|
| Stomach | 12 |
| Colon/Rectum/Anus | 30 |
| Pancreas | 30 |
| Trachea, Lung, Bronchus | 63 |
| Breast | 24 |
| Cervix, Uteri, Ovary | 14 |
| Prostate | 13 |
| Urinary Tract | 9 |
| Non-Hodgkin’s Lymphoma | 4 |
| Leukemia | 4 |
| Other | 74 |

| Charles County Deaths by Cancer Site: | Number of Deaths |
|---------------------------------------|------------------|
| Stomach | 12 |
| Colon/Rectum/Anus | 30 |
| Pancreas | 30 |
| Trachea, Lung, Bronchus | 63 |
| Breast | 24 |
| Cervix, Uteri, Ovary | 14 |
| Prostate | 13 |
| Urinary Tract | 9 |
| Non-Hodgkin’s Lymphoma | 4 |
| Leukemia | 4 |
| Other | 74 |

2021 Maryland DHMH Cigarette Restitution Fund Program's Cancer Reports:

Cancer incidence and mortality data for the time period 2014-2018 and for 2018 only are presented below. Data was extracted from the Cigarette Restitution Fund Program's 2021 Cancer Data Report. Charles County rates for overall cancer rates, as well as site specific rates, were compared to the United States and Maryland average rates as well as the rates for the neighboring southern jurisdictions of Calvert and St Mary's counties.

All Cancer Sites Incidence

2018 Results:

For the year 2018, Charles County had a total of 752 new cases of cancer overall; this corresponds to a 2018 all site incidence rate of 420.9 per 100,000 population. Charles County had the 5th lowest all cancer site incidence rate among the 24 Maryland jurisdictions. This rate is lower than the Maryland average rate (445.9), the US national rate (431.4), the Calvert County rate (427.9), and the St Mary's County rate (460.7).

When stratified by gender, the Charles County males have generally higher cancer incidence rates than Charles County females. The 2018 all cancer site incidence rate for Charles County males was 460.4 versus 390.4 for Charles County females.

When stratified by race, rates are higher for the White population than the African American population in Charles County. The white all site incidence rate was 426.2 compared to the black all site rate of 418.5, and the other race all site rate was suppressed (Rates based on case counts of 1-15 are suppressed).

When compared with the Maryland state average rate for all cancer site incidences, Charles County males have a lower rate than Maryland males (460.4 vs. 488.1). Charles County females also have a lower rate than Maryland females (390.4 vs. 417.6). Charles County African Americans have a lower incidence rate compared to the rate for Maryland African American males (418.5 vs. 441.9). Charles County Whites also have a lower rate than Maryland Whites (426.2 vs. 454.6).

2018 Number of New Cancer Cases: All Cancer Sites Combined

| | Total | Male | Female | White | Black | Other |
|-------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 32,569 | 16,325 | 16,241 | 21,806 | 9,029 | 1,314 |
| <i>Charles County</i> | 752 | 377 | 373 | 416 | 313 | 15 |
| <i>Calvert County</i> | 479 | 263 | 216 | 406 | 60 | 10 |
| <i>St Mary's County</i> | 570 | 292 | 278 | 470 | 93 | 6 |

2018 All Cancer Site Age-Adjusted Incidence Rates (per 100,000 population)

| | Total | Male | Female | White | Black | Other |
|-------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 445.9 | 488.1 | 417.6 | 454.6 | 441.9 | 267.4 |
| <i>Charles County</i> | 420.9 | 460.4 | 390.4 | 426.2 | 418.5 | ** |
| <i>Calvert County</i> | 427.9 | 482.2 | 389.3 | 434.9 | 364.7 | ** |
| <i>St Mary's County</i> | 460.7 | 491.4 | 437.1 | 461.6 | 536.4 | ** |

*** Rates are not calculated for case counts less than 15.*

All site cancer incidence rates were also examined for the Hispanic population in Maryland. A total of 986 Hispanic Marylanders were diagnosed with cancer in 2018; this corresponds to an all-site incidence rate of 252.6 per 100,000 population. For the Southern Maryland region, there were 23 new cancer cases in the Hispanic population with an all-site incidence rate of 258.8 per 100,000. There were 14 cases from Charles County. Rates based on case counts of 1-15 are suppressed.

2014-2018 Combined Age-Adjusted Incidence Rate Results:

The 2014-2018 Charles County all site incidence rate was 436.1 per 100,000. This rate is less than the Maryland state average rate of 446.1 and less than the US average rate of 442.4. The Charles County rate is lower than the Calvert County rate of 442.2 but higher than the St. Mary's County rate of 427.6. For this time period, Charles County has the 6th lowest all cancer site incidence rate among the 24 Maryland jurisdictions.

Disparities between the White and Black populations in Charles County are seen for the time period 2014-2018. The all-site incidence rate for the White population was 468.6 which was higher than the Black all site incidence rate of 400.4. The "Other Race" all site incidence rate was much lower at 2,371.1 per 100,000. This may be due to small numbers of people in the county who represent the "Other Race" category. This population has been migrating into Charles County in the last decade and tends to be younger. Therefore, they are a small portion of the county's overall deaths and cancer deaths each year.

Consistent with rates from 2012-2016, cancer continues to disproportionately affect the male population. From 2014-2018, the Charles County all cancer site incidence rate for males was 499.2 compared to 389.8 for females. Charles County males have a higher all cancer site incidence rate compared to males in Calvert County (486.6), St Mary's County (452.9), and the state of Maryland (485.7). The Charles County female all site incidence rate was the 4th lowest for that category among the 24 Maryland jurisdictions; the Charles County male all site incidence rate is the 10th lowest in the state.

2014-2018 All Cancer Site Incidence Rates (per 100,000 population)

| | Total | Male | Female | White | Black | Other |
|------------------|-------|-------|--------|-------|-------|-------|
| Maryland | 446.1 | 485.7 | 420.4 | 456.7 | 438.7 | 265.5 |
| Charles County | 436.1 | 499.2 | 389.8 | 468.6 | 400.4 | 237.1 |
| Calvert County | 442.2 | 486.6 | 410.5 | 447.4 | 435.6 | 205.4 |
| St Mary's County | 427.6 | 452.9 | 407.2 | 427.1 | 458.3 | 223.9 |

** Rates are not calculated for case counts less than 15.

All Cancer Sites Mortality

2018 Results:

In 2018, there were 285 deaths in Charles County attributed to cancer. This constitutes a mortality rate of 171.3 per 100,000. Charles County had the 18th lowest (6th highest) all sites mortality rate among the 24 Maryland jurisdictions for 2018. In 2016, Charles County had the 10th lowest all sites mortality rate. This rate is significantly higher than the Maryland state average rate (149.9) and the Calvert County rate (136.6). This rate is slightly higher than the St. Mary's County rate (169.5).

On a county level, Charles County African Americans experienced higher all cancer site mortality rates than Charles County Whites (159.6 for Whites and 197.7 for African Americans). A disparity is also seen on a state level where African Americans have a higher all-site mortality rate than Whites or Asian/Pacific Islander (170.4 vs. 147.3 vs. 82.9).

All site mortality rates by gender mirror the same trends as the incidence rates. Males experienced greater all cancer site mortality rates than females. This was true for Charles County, Maryland, and Calvert County. St. Mary's County females experienced a slightly higher mortality rate than males (172.5 for females and 168.6 for males. In Charles County, the 2018 all site mortality rate for males was 196.7 compared to 150.9 for females in the county.

2018 Number of Deaths: All Cancer Site Combined

| | Total | Male | Female | White | Black | Other |
|------------------|--------|-------|--------|-------|-------|-------|
| Maryland | 10,927 | 5,591 | 5,336 | 7,263 | 3,282 | 382 |
| Charles County | 285 | 145 | 140 | 157 | s | <10 |
| Calvert County | 155 | 86 | 69 | 123 | s | <10 |
| St Mary's County | 203 | 95 | 108 | 167 | s | <10 |

<10= Case counts were suppressed to prevent disclosure of data in other cells.
s = Death counts are suppressed to prevent disclosure of data in other cell(s).

2018 All Cancer Sites Age-Adjusted Mortality Rates (per 100,000 population)

| | Total | Male | Female | White | Black | Other |
|-------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 149.5 | 177.5 | 130.6 | 147.3 | 140.4 | 82.9 |
| <i>Charles County</i> | 171.3 | 196.7 | 150.9 | 159.6 | 197.7 | ** |
| <i>Calvert County</i> | 136.6 | 162.9 | 115.7 | 128.5 | 183.9 | ** |
| <i>St Mary's County</i> | 169.5 | 168.6 | 172.5 | 167.7 | 199.2 | ** |

** Rates are not calculated for case counts less than 15.

2014-2018 Results:

For the time period 2014-2018, the Charles County all cancer site mortality rate was 161.4 per 100,000. Charles County had a higher rate than Calvert County (158.2), a lower rate than St. Mary's County (169.9), and a higher rate than Maryland (154.8). Charles County's rate is the 12th lowest all site mortality rate among the Maryland jurisdictions. The Charles County rate falls between 10% below and 10% above the United States national rate (155.5 per 100,000).

The 2014-2018 Charles County all cancer sites mortality rate is higher in white individuals than black individuals (164.4 vs. 161.5). The Charles County White all site mortality rate was higher than the Maryland White state average rate (164.4 vs. 153.0). The Charles County African American all site mortality rate was below than the state average rate for African Americans (161.5 vs. 174.0). The Charles County Other Race all site mortality rate was higher than the Maryland Other Race state average rate (93.6 vs. 83.1).

From 2014-2018, males were more likely to die from cancer than females. Charles County males had an all-site mortality rate of 189.6 vs. 141.8 for Charles County females. The Charles County rates for males and females were slightly higher than Maryland state average rates.

2014-2018 All Cancer Site Mortality Rates (per 100,000 population)

| | Total | Male | Female | White | Black | Other |
|-------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 154.8 | 182.7 | 135.5 | 153.0 | 174.0 | 83.1 |
| <i>Charles County</i> | 161.4 | 189.6 | 141.8 | 164.4 | 161.5 | 93.6 |
| <i>Calvert County</i> | 158.2 | 187.6 | 137.0 | 157.4 | 179.0 | ** |
| <i>St Mary's County</i> | 169.9 | 197.0 | 147.1 | 171.9 | 174.9 | ** |

** Rates are not calculated for case counts less than 15.

Lung/Bronchus Cancer Incidence

2018 Results:

The 2018 Charles County lung and bronchus cancer incidence rate was 53.0 per 100,000 population, which is an increase from the 2016 rate of 40.7 per 100,000 population. This is the 11th lowest lung cancer incidence rate in the state of Maryland, while it was the 5th lowest incidence rate in the state of Maryland in 2016. The Charles County lung and bronchus cancer incidence rate is now above the Maryland state average rate of 50.6 per 100,000.

A comparison of Maryland lung cancer incidence by race found that rates for Whites exceeded the rates of African Americans (53.1 vs. 49.6). If you compare White lung cancer incidence rates, Charles County has a higher rate than the Maryland state average rate (59.1 vs. 53.1). Charles County African Americans had a lower rate than the Maryland state average rate (42.6 vs. 49.6).

The incidence of lung cancer was also higher among men than women in Charles County (58.0 vs. 49.1). Charles County men have a lower rate (58.0) than the Maryland state average incidence rate of 55.6 for men.

2018 Number of New Cases: Lung Cancer

| | Total | Male | Female | White | Black | Other |
|-------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 3807 | 1839 | 1967 | 2691 | 984 | 127 |
| <i>Charles County</i> | 92 | 43 | 48 | 61 | 28 | <6 |
| <i>Calvert County</i> | 54 | 31 | 23 | 51 | <6 | 0 |
| <i>St Mary's County</i> | 76 | 40 | 36 | 70 | <6 | <6 |

2018 Lung Cancer Incidence Rates

| | Total | Male | Female | White | Black | Other |
|-------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 50.6 | 55.6 | 47.0 | 53.1 | 49.6 | 27.0 |
| <i>Charles County</i> | 53 | 58.0 | 49.1 | 59.1 | 42.6 | ** |
| <i>Calvert County</i> | 47.0 | 61.5 | 36.6 | 53.2 | ** | 0.0 |
| <i>St Mary's County</i> | 63.5 | 69.4 | 58.9 | 70.4 | ** | ** |

** Rates are not calculated for case counts less than 15.

2014-2018 Results:

Between 2014-2018, the Charles County lung cancer incidence rate was 51.5 per 100,000

population. This rate is lower than the Maryland state average rate (54.1). This rate is lower than the rates for the other Southern Maryland jurisdictions. The Charles County rate is similar to the United States average rate of 51.4 per 100,000 population.

The lung cancer incidence rate for this time period for African Americans in Charles County is less than the rate for the Charles County white population (40.4 vs. 60.1). The African American lung cancer incidence rate is lower than the Maryland state average rate (52.3). It is higher than the Calvert County rate and higher than the St Mary’s County rate. The Charles County White lung cancer incidence rate is higher than the Maryland state average rate (60.1 vs. 56.9) and is higher than the rates in the Calvert County and lower than the rate in St. Mary’s County.

The rate of lung cancer incidence in Charles County was much higher for men than women (60.6 vs. 44.9). This difference is significant ($p < .05$). The rate among Charles County females was lower than the state; the rate among males was slightly higher than the state. The highest male lung cancer incidence rate in the Southern Maryland region was St Mary’s County (69.9); the highest female lung cancer incidence rate in the Southern Maryland region was St. Mary’s County (both at 62.6).

2014-2018 Lung Cancer Incidence Rates

| | Total | Male | Female | White | Black | Other |
|-------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 54.1 | 59.9 | 49.9 | 56.9 | 52.3 | 26.6 |
| <i>Charles County</i> | 51.5 | 60.6 | 44.9 | 60.1 | 40.4 | ** |
| <i>Calvert County</i> | 52.7 | 56.7 | 51.1 | 56.5 | 33.1 | ** |
| <i>St Mary’s County</i> | 66.1 | 69.9 | 62.6 | 69.8 | 52.3 | ** |

** Rates are not calculated for case counts less than 15.

Lung/Bronchus Cancer Mortality

2018 Results:

In 2018, the lung cancer mortality rate in Charles County was 28.6 per 100,000, which is lower than the Maryland state average rate of 33.4 per 100,000. The Charles County 2018 lung cancer mortality rate was higher than the Calvert County rate of 27.7 and lower than the St Mary’s County rate of 45.2.

For all jurisdictions analyzed, the lung cancer mortality rate for men was greater than the rate for women. In Charles County, men were 1.2 times more likely to die from lung cancer in 2018 than women.

2018 lung cancer mortality rate for Black individuals in Charles County was higher than the mortality rate for Charles County Whites (37.3 vs. 24.9).

2018 Number of Lung Cancer Deaths

| | Total | Male | Female | White | Black | Other |
|-------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 2,468 | 1,267 | 1,201 | 1,705 | 686 | 77 |
| <i>Charles County</i> | 50 | 35 | 25 | 26 | s | <10 |
| <i>Calvert County</i> | 33 | 19 | 14 | 27 | <10 | <10 |
| <i>St Mary's County</i> | 56 | 29 | 27 | 50 | <10 | <10 |

S= Case counts were suppressed to prevent disclosure of data in other cells.

2018 Lung Cancer Mortality Rates

| | Total | Male | Female | White | Black | Other |
|-------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 33.4 | 39.2 | 28.8 | 34.1 | 35.4 | 17.4 |
| <i>Charles County</i> | 28.6 | 31.1 | 26.7 | 24.9 | 37.3 | ** |
| <i>Calvert County</i> | 27.7 | ** | ** | 26.3 | ** | ** |
| <i>St Mary's County</i> | 45.2 | 46.8 | 44.3 | 48.8 | ** | ** |

** Rates are not calculated for case counts less than 15.

2014-2018 Lung and Bronchus Age-Adjusted Mortality Results:

The Charles County 2014-2018 lung and bronchus cancer age-adjusted mortality rate was 35.7 per 100,000. This rate is similar to the Maryland state average rate of 37.1. The Charles County rate is lower than the other 2 Southern Maryland counties: 36.5 in Calvert and 49.0 in St. Mary's. The Charles County lung cancer mortality rate also falls 10% below and 10% above the United State national rate of 38.5 per 100,000.

The Charles County lung and bronchus cancer mortality rates were higher for men than women. Charles County men were 1.4 times more likely to die from lung cancer from 2014-2018 than Charles County women. The Charles County rate for men was similar to the state average rate (43.5 vs 43.9) and the Charles County rate for women was similar to the state average (30.1 vs 32.0).

When comparing rates by race, White individuals in Charles County had a greater rate of lung and bronchus cancer mortality than African Americans (39.8 vs 31.4). The lung and bronchus cancer mortality rate among Charles County White individuals was similar to the Maryland state average rate (39.8 vs 38.6), and the lung and bronchus cancer mortality rate among Charles County African Americans was lower than the Maryland state average rate (31.4 vs 37.3).

2014-2018 Lung Cancer Mortality Rates

| | Total | Male | Female | White | Black | Other |
|-------------------------|-------|------|--------|-------|-------|-------|
| <i>Maryland</i> | 37.1 | 43.9 | 32.0 | 38.6 | 37.3 | 17.4 |
| <i>Charles County</i> | 35.7 | 43.5 | 30.1 | 39.8 | 31.4 | ** |
| <i>Calvert County</i> | 36.5 | 39.1 | 34.6 | 37.7 | 30.5 | ** |
| <i>St Mary's County</i> | 49.0 | 57.5 | 41.5 | 49.4 | 52.3 | ** |

** Rates are not calculated for case counts less than 15.

Colon and Rectal Incidence

2018 Results:

For 2018, Charles County had a colon and rectal cancer incidence rate of 34.6 per 100,000. This rate is slightly lower than the Maryland state average rate of 36.4 per 100,000.

The colon and rectal cancer incidence rates for Charles County males is higher than Charles County females for 2018 (38.4 vs 32.0). The Charles County male colon and rectal cancer incidence rate for 2018 was 38.4 per 100,000, which is slightly lower than the Maryland state average rate for males at 41.1. The Charles County female colon and rectal cancer rate is 32.0, like the Maryland state rate of 32.8.

The 2018 Charles County colon and rectal cancer incidence rate was higher for African Americans compared to White individuals (46.6 vs 26.3). This is a significant change from 2016, where White individuals (43.9) had a higher rate compared to African Americans (37.4). The 2018 Charles County White colon and rectal cancer incidence rate was lower than the Maryland state rate (26.3 vs 35.0), lower than the Calvert County rate (36.6), and lower than the St. Mary's County rate (32.7). The 2018 Charles County African American colon and rectal cancer incidence rate was higher than the Maryland African American colon and rectal cancer incidence rate (46.6 vs 40.8).

Number of New Colon and Rectal Cancer Cases, 2018

| | Total | Male | Female | White | Black | Other |
|-------------------------|-------|-------|--------|-------|-------|-------|
| <i>Maryland</i> | 2,597 | 1,327 | 1,270 | 1,635 | 801 | 129 |
| <i>Charles County</i> | 60 | 30 | 30 | 26 | 31 | <6 |
| <i>Calvert County</i> | 39 | 23 | 16 | 32 | 6 | 0 |
| <i>St Mary's County</i> | 42 | 21 | 21 | 33 | s | <6 |

s= Case counts were suppressed to prevent disclosure of data in other cells.

2018 Colon and Rectal Cancer Incidence Rates

| | Total | Male | Female | White | Black | Other |
|------------------|-------|------|--------|-------|-------|-------|
| Maryland | 36.4 | 41.1 | 32.8 | 35.0 | 40.8 | 26.7 |
| Charles County | 34.6 | 38.4 | 32.0 | 26.3 | 46.6 | ** |
| Calvert County | 37.3 | 44.5 | 32.5 | 36.6 | ** | 0.0 |
| St Mary's County | 33.3 | 35.5 | 31.7 | 32.7 | ** | ** |

*** Rates are not calculated for case counts less than 15.*

2014-2018 Results:

For the time period 2014-2018, Charles County had a colon and rectal cancer incidence rate higher than the Maryland state average rate (40.1 vs. 36.1). This rate is between 10% below to 10% above the United States rate of 38.0 per 100,000.

Rates were higher for Charles County men than Charles County women (42.9 vs. 37.8). This gender disparity was much larger for the state of Maryland (40.6 for MD males vs. 32.5 for MD females).

Charles County Whites and African Americans had a similar colon and rectal incidence rate (40.9 vs. 41.1). Charles County Whites had a higher rate than Maryland Whites (40.9 vs. 35.1), and Charles County African Americans also had a slightly higher rate compared to Maryland African Americans (41.1 vs. 39.6).

2014-2018 Colon and Rectal Cancer Incidence Rates

| | Total | Male | Female | White | Black | Other |
|-------------------------|-------|------|--------|-------|-------|-------|
| <i>Maryland</i> | 36.1 | 40.6 | 32.5 | 35.1 | 39.6 | 24.8 |
| <i>Charles County</i> | 40.1 | 42.9 | 37.8 | 40.9 | 41.1 | ** |
| <i>Calvert County</i> | 40.9 | 46.8 | 35.9 | 40.1 | 50.9 | 0 |
| <i>St Mary's County</i> | 32.9 | 37.5 | 29.0 | 32.6 | 38.3 | ** |

*** Rates are not calculated for case counts less than 15.*

Colon and Rectal Cancer Mortality

2018 Results:

The Charles County colon and rectal cancer mortality rate for 2018 was 15.0 per 100,000. This is slightly above than the Maryland state average rate of 13.6. Rates for Calvert and St. Mary's are not available due to small case counts.

Gender and race comparisons cannot be done since case counts were too few to calculate mortality rates.

Number of Colon and Rectal Cancer Deaths, 2018

| | Total | Male | Female | White | Black | Other |
|------------------|-------|------|--------|-------|-------|-------|
| Maryland | 982 | 528 | 454 | 617 | 327 | 38 |
| Charles County | 24 | s | <10 | <10 | 16 | <10 |
| Calvert County | <10 | <10 | <10 | <10 | <10 | <10 |
| St Mary's County | 15 | <10 | <10 | 14 | <10 | <10 |

s= Case counts were suppressed to prevent disclosure of data in other cells.

2018 Colon and Rectal Cancer Mortality Rates

| | Total | Male | Female | White | Black | Other |
|------------------|-------|------|--------|-------|-------|-------|
| Maryland | 13.6 | 16.5 | 11.3 | 12.7 | 17.3 | 8.0 |
| Charles County | 15.0 | ** | ** | ** | ** | ** |
| Calvert County | ** | ** | ** | ** | ** | ** |
| St Mary's County | ** | ** | ** | ** | ** | ** |

** Rates are not calculated for case counts less than 15.

2014-2018 Results:

The 2014-2018 Charles County colon and rectal cancer mortality rate of 15.8 per 100,000 is higher than the Maryland state average rate of 13.7 and the other Southern Maryland counties (12.6 for Calvert and 12.6 for St. Mary's County).

Charles County males were more likely to die from colon and rectal cancer than Charles County females (17.6 vs. 13.8) from 2014-2018. This trend was also seen for Maryland and the other Southern Maryland counties.

2014-2018 Charles County colon and rectal cancer mortality rates for African Americans were higher than the rates for Charles County Whites (17.5 vs. 14.7).

2014-2018 Colon and Rectal Cancer Mortality Rates

| | Total | Male | Female | White | Black | Other |
|--------------------------|--------------|-------------|---------------|--------------|--------------|--------------|
| <i>Maryland</i> | 13.7 | 16.4 | 11.6 | 13.0 | 17.0 | 7.3 |
| <i>Charles County</i> | 15.8 | 17.6 | 13.8 | 14.7 | 17.5 | ** |
| <i>Calvert County</i> | 12.6 | 16.3 | 9.7 | 12.2 | ** | ** |
| <i>St. Mary's County</i> | 12.6 | 16.6 | 8.9 | 13.1 | ** | ** |

** Rates are not calculated for case counts less than 15.

Breast Cancer Incidence

2018 Results:

The 2018 Charles County female breast cancer incidence rate was 110.9, which was lower than the Maryland state average rate of 129.9 per 100,000. The 2018 female Charles County rate (110.9) was lower than the rate of St. Mary's County (133.5) and lower than the rate of Calvert County (148.0). This is significantly different from 2016, where the Charles County rate (122.6) was higher than the St. Mary's County rate (106.2) and the Calvert County rate (106.7).

The 2018 Charles County female breast cancer incidence rate was higher for Black individuals (126.8) compared to White (104.2). This is different from 2016, where the Charles County incidence for Black individuals was 120.8 and the White incidence rate was 125.1. The 2018 Charles County breast cancer incidence for White individuals was lower than the Maryland rate (104.2 vs. 132.3) and the rate for Black individuals was similar to the Maryland rate (126.8 vs. 126.5). The Maryland rate for White individuals was higher than Black Individuals in 2018 (132.3 vs. 126.5).

Number of New Breast Cancer Cases, 2018

| | Total | White | Black | Other |
|--------------------------|--------------|--------------|--------------|--------------|
| <i>Maryland</i> | 4,967 | 3,179 | 1,472 | 255 |
| <i>Charles County</i> | 108 | s | 58 | <6 |
| <i>Calvert County</i> | 80 | 67 | 10 | <6 |
| <i>St. Mary's County</i> | 86 | 68 | s | <6 |

s= Case counts were suppressed to prevent disclosure of data in other cells.

2018 Breast Cancer Incidence Rates

| | Total | White | Black | Other |
|-------------------------|-------|-------|-------|-------|
| <i>Maryland</i> | 129.9 | 132.3 | 126.5 | 92.2 |
| <i>Charles County</i> | 110.9 | 104.2 | 126.8 | ** |
| <i>Calvert County</i> | 148.0 | 151.3 | ** | ** |
| <i>St Mary's County</i> | 133.5 | 129.0 | 189.8 | ** |

** Rates are not calculated for case counts less than 15.

2014-2018 Results:

From 2014-2018, Charles County had a female breast cancer incidence rate of 118.6. This rate was lower than the Maryland state average rate of 130.8 and the Calvert County rate of 129.5, and similar to the St. Mary's County rate of 118.9. It is below the US rate of 127.4 per 100,000.

The Charles County White breast cancer incidence rate was 124.0, which was less than the Maryland White state average rate (132.3). The Charles County Black breast cancer incidence rate was also below the Maryland state average rate (117.3 vs. 129.3).

Charles County African Americans had a lower incidence of breast cancer (117.3) than Charles County White women (124.0) from 2014-2018.

2014-2018 Breast Cancer Incidence Rates

| | Total | White | Black | Other |
|-------------------------|-------|-------|-------|-------|
| <i>Maryland</i> | 130.8 | 132.3 | 129.3 | 90.4 |
| <i>Charles County</i> | 118.6 | 124.0 | 117.3 | ** |
| <i>Calvert County</i> | 129.5 | 128.1 | 137.7 | ** |
| <i>St Mary's County</i> | 118.9 | 118.7 | 135.5 | ** |

** Rates are not calculated for case counts less than 15.

Breast Cancer Mortality

2018 Results:

The 2018 Charles County female breast cancer mortality rate was 32.4 per 100,000. This rate was higher than Maryland state average rate of 21.2 per 100,000. This was the highest rate among the other Maryland jurisdictions with a calculated rate. The Maryland rate for White Individuals was lower than the rate for Black Individuals (19.1 vs. 27.7). County Breast cancer mortality rates could not be calculated by race or gender for 2018 due to small case counts in Charles County and other jurisdictions.

Number of Breast Cancer Deaths, 2018

| | Total | White | Black | Other |
|-------------------------|-------|-------|-------|-------|
| <i>Maryland</i> | 838 | 499 | 311 | 28 |
| <i>Charles County</i> | 29 | 14 | s | <10 |
| <i>Calvert County</i> | 12 | <10 | <10 | <10 |
| <i>St Mary's County</i> | 17 | 11 | <10 | <10 |

s= Case counts were suppressed to prevent disclosure of data in other cells.

2018 Breast Cancer Mortality Rates

| | Total | White | Black | Other |
|-------------------------|-------|-------|-------|-------|
| <i>Maryland</i> | 21.2 | 19.1 | 27.7 | 10.6 |
| <i>Charles County</i> | 32.4 | ** | ** | ** |
| <i>Calvert County</i> | ** | ** | ** | ** |
| <i>St Mary's County</i> | ** | ** | ** | ** |

** Rates are not calculated for case counts less than 15.

2014-2018 Results:

From 2014-2018, Charles County experienced a breast cancer mortality rate of 26.8 per 100,000. The 2014-2018 Charles County rate is higher than the Maryland state average rate of 21.8. The Charles County rate is higher than the rate for St. Mary's County (22.7) and higher than the rate for Calvert County (23.9). The Charles County breast cancer mortality rate is 25-30% above the United States breast cancer mortality rate of 20.1 per 100,000.

The 2014-2018 Charles County African American female breast cancer mortality rate was 31.0, which was higher than the rate for Charles County Caucasians of 23.6 per 100,000. Rates by race could not be calculated for the other Southern Maryland counties due to small case counts.

2014-2018 Breast Cancer Mortality Rates

| | Total | White | Black | Other |
|-------------------------|-------|-------|-------|-------|
| <i>Maryland</i> | 21.8 | 19.8 | 27.8 | 10.3 |
| <i>Charles County</i> | 26.8 | 23.6 | 31.0 | ** |
| <i>Calvert County</i> | 23.9 | 22.1 | ** | ** |
| <i>St Mary's County</i> | 22.7 | 20.5 | ** | ** |

** Rates are not calculated for case counts less than 15.

Prostate Cancer Incidence

2018 Results:

The 2018 Charles County prostate cancer incidence rate was 144.2 per 100,000. This rate was higher than the Maryland state average rate of 135.3. The Charles County incidence rate is higher than the rates in the other Southern Maryland counties (104.7 in Calvert and 102.5 in St. Mary's counties).

Disparities are evident for African Americans in terms of prostate cancer incidence. The 2018 Charles County African American prostate cancer incidence rate was 189.7, which was higher than the rate for Charles County Caucasians of 111.3 per 100,000. This disparity is also seen on the state level where Maryland African Americans had a rate of 191.0 and Maryland Whites had a rate of 117.4 per 100,000. These disparities are statistically significant.

Number of New Prostate Cancer Cases, 2018

| | Total | White | Black | Other |
|-------------------------|--------------|--------------|--------------|--------------|
| <i>Maryland</i> | 4,849 | 2,874 | 1,776 | 119 |
| <i>Charles County</i> | 125 | 56 | 65 | <6 |
| <i>Calvert County</i> | 65 | 50 | 13 | <6 |
| <i>St Mary's County</i> | 65 | 48 | 15 | <6 |

S= Case counts were suppressed to prevent disclosure of data in other cells.

2018 Prostate Cancer Incidence Rates

| | Total | White | Black | Other |
|-------------------------|--------------|--------------|--------------|--------------|
| <i>Maryland</i> | 135.3 | 117.4 | 191.0 | 53.2 |
| <i>Charles County</i> | 144.2 | 111.3 | 189.7 | ** |
| <i>Calvert County</i> | 104.7 | 96.9 | ** | ** |
| <i>St Mary's County</i> | 102.5 | 90.3 | ** | ** |

** Rates are not calculated for case counts less than 15.

2014-2018 Results:

The Charles County prostate cancer incidence rate for 2014-2018 was 147.1 per 100,000 population. This rate is higher than the Maryland state average rate of 126.3. Charles County had the second highest 2014-2018 prostate cancer incidence rate among the 24 Maryland jurisdictions. The Charles County rate was also higher than the other Southern Maryland counties for this time period (112.4 for Calvert and 89.7 for St Mary's). The Charles County rate is more than 25% above the United States rate of 108.2 per 100,000.

Disparities are again visible for African Americans. The 2014-2018 Charles County African American prostate cancer incidence rate was 190.4, which was significantly higher than the rate for

Charles County Caucasians of 117.7 per 100,000. This disparity is also seen on the state level where Maryland African Americans had a rate of 186.7 and Maryland Whites had a rate of 107.2. The same disparities were also seen for Calvert and St Mary’s counties.

The 2014-2018 Charles County African American prostate cancer incidence rate was higher than the Maryland state average rate and the other Southern Maryland counties (112.4 for Calvert and 89.7 for St. Mary’s County). It is the second highest rate among the Maryland jurisdictions.

2014-2018 Prostate Cancer Incidence Rates

| | Total | White | Black | Other |
|-------------------------|--------------|--------------|--------------|--------------|
| <i>Maryland</i> | 126.3 | 107.2 | 186.7 | 59.6 |
| <i>Charles County</i> | 147.1 | 117.7 | 190.4 | ** |
| <i>Calvert County</i> | 112.4 | 102.6 | 190.8 | ** |
| <i>St Mary’s County</i> | 89.7 | 80.0 | 149.6 | ** |

*** Rates are not calculated for case counts less than 15.*

Prostate Cancer Mortality

2018 Results:

For 2018, case counts for Charles, St Mary’s, and Calvert counties were too small to calculate prostate cancer mortality rates. The Maryland prostate cancer rate was 19.1 per 100,00 in 2018. The number of case counts is presented in the table below.

Number of Prostate Cancer Deaths, 2018

| | Total | White | Black | Other |
|-------------------------|--------------|--------------|--------------|--------------|
| <i>Maryland</i> | 559 | 337 | 210 | 12 |
| <i>Charles County</i> | 15 | <10 | <10 | <10 |
| <i>Calvert County</i> | <10 | <10 | <10 | <10 |
| <i>St Mary’s County</i> | 12 | 11 | <10 | <10 |

2014-2018 Results:

The 2014-2018 Charles County prostate cancer mortality rate was 20.5 per 100,000. This rate is above the Maryland state average rate of 19.9. The Charles County rate is similar to the Calvert County rate (22.1) and the St. Mary’s rate (18.9). The county prostate cancer mortality rate is similar to the United States rate of 19.0 per 100,000.

Disparities are again seen for the African American population. Charles County African Americans have a higher prostate cancer mortality rate of 29.3 compared to 17.9 for Charles County Caucasians.

2014-2018 Prostate Cancer Mortality Rates

| | Total | White | Black | Other |
|-------------------------|-------|-------|-------|-------|
| <i>Maryland</i> | 19.9 | 16.3 | 35.4 | 7.4 |
| <i>Charles County</i> | 20.5 | 17.9 | 29.3 | ** |
| <i>Calvert County</i> | 22.1 | 18.9 | ** | ** |
| <i>St Mary's County</i> | 18.9 | 18.9 | ** | ** |

*** Rates are not calculated for case counts less than 15.*

Note: For three of the remaining cancer sites: oral, melanoma of the skin, and cervical, only 2014-2018 incidence data will be presented. Case counts for 2018 alone were few, and rate calculations could not be performed.

Oral Cancer Incidence

The Charles County oral cancer incidence rate for 2014-2018 was 13.2. This rate is greater than the Maryland state average rate of 11.1. The Charles County oral cancer incidence rate is about 15% above the United States rate of 11.5 per 100,000.

Charles County White individuals had a higher oral cancer incidence rate than Charles County Black individuals (16.6 vs. 8.0).

Males are disproportionately affected by oral cancer compared to women. The 2014-2018 Charles County oral cancer incidence rate for males was 23.3, which is significantly higher than the oral cancer incidence rate for women (5.0).

2014-2018 Oral Cancer Incidence Rates

| | Total | Male | Female | White | Black | Other |
|-------------------------|-------|------|--------|-------|-------|-------|
| <i>Maryland</i> | 11.1 | 16.9 | 6.2 | 12.7 | 8.0 | 6.2 |
| <i>Charles County</i> | 13.2 | 23.3 | 5.0 | 16.6 | 8.0 | ** |
| <i>Calvert County</i> | 11.7 | 16.3 | 6.9 | 12.1 | ** | 0.0 |
| <i>St Mary's County</i> | 17.5 | 25.6 | 9.6 | 17.7 | 17.9 | ** |

*** Rates are not calculated for case counts less than 15.*

Note: For the remaining three cancer sites: oral, melanoma of the skin, and cervical, only 2014-2018 mortality data will be presented. Charles County case counts for 2018 alone were few, and rate calculations could not be performed.

Oral Cancer Mortality

For 2014-2018, the Charles County oral cancer mortality rate was 3.4 per 100,000. This is higher than the Maryland state average rate of 2.5 per 100,000. The Charles County oral cancer mortality for 2014-2018 was about 35% above the US average rate of 2.5 per 100,000.

Even for a combined time period of 2014-2018, deaths due to oral cancer are few, and rate calculations by race and gender were not possible.

2014-2018 Oral Cancer Mortality Rates

| | Total | Male | Female | White | Black | Other |
|-------------------------|-------|------|--------|-------|-------|-------|
| <i>Maryland</i> | 2.5 | 3.9 | 1.3 | 2.6 | 2.4 | 1.5 |
| <i>Charles County</i> | 3.4 | 5.8 | ** | ** | ** | ** |
| <i>Calvert County</i> | ** | ** | ** | ** | ** | ** |
| <i>St Mary's County</i> | 3.4 | ** | ** | 4.0 | ** | ** |

** Rates are not calculated for case counts less than 15.

Melanoma of the Skin Incidence

2014-2018 Results:

For 2014-2018, the Charles County melanoma cancer incidence rate of 15.9 was per 100,000. This rate was less than the Maryland state average rate of 24.1 per 100,000, and it was less than the rates in the other Southern Maryland counties (Calvert 30.8 and St Mary's 27.5). The Charles County rate was about 33% below the United States rate of 23.9 per 100,000.

The incidence rate for melanoma cancer is higher for Charles County males than females (24.3 vs. 9.7). This rate difference is also seen on the state level for men and women (31.8 vs. 18.5).

A comparison of incidence rates by race can't be done due to small case counts for minorities in Charles County. However, it should be noted that Charles County Whites had a lower melanoma cancer incidence rate (26.9) than Maryland Whites (35.6). On a state level, Maryland Whites were disproportionately affected by melanoma cancer incidence compared to Maryland African Americans (35.6 vs. 1.0).

2014-2018 Melanoma Incidence Rates

| | Total | Male | Female | White | Black | Other |
|-------------------------|-------|------|--------|-------|-------|-------|
| <i>Maryland</i> | 24.1 | 31.8 | 18.5 | 35.6 | 1.0 | 1.7 |
| <i>Charles County</i> | 15.9 | 24.3 | 9.7 | 26.9 | ** | ** |
| <i>Calvert County</i> | 30.8 | 39.6 | 23.8 | 35.9 | 0.0 | 0.0 |
| <i>St Mary's County</i> | 27.5 | 32.6 | 23.0 | 31.8 | ** | 0.0 |

** Rates are not calculated for case counts less than 15.

Melanoma of the Skin Mortality

Mortality rates on a county level are not available due to small case counts. For the state of Maryland, the 2014-2018 melanoma of the skin cancer mortality rate was 1.9 per 100,000. The rates were higher for males than females (2.8 vs. 1.2), and the rates were much higher for Whites than Blacks (2.6 vs. 0.3).

2014-2018 Melanoma of the Skin Mortality Rate

| | Total | Male | Female | White | Black | Other |
|-------------------------|-------|------|--------|-------|-------|-------|
| <i>Maryland</i> | 1.9 | 2.8 | 1.2 | 2.6 | 0.3 | ** |
| <i>Charles County</i> | ** | ** | ** | ** | ** | ** |
| <i>Calvert County</i> | ** | ** | ** | ** | ** | ** |
| <i>St Mary's County</i> | ** | ** | ** | ** | ** | ** |

** Rates are not calculated for case counts less than 15.

Cervical Cancer Incidence

The 2014-2018 Charles County cervical cancer incidence rate was 6.2 per 100,000, which is slightly below the Maryland state average rate of 6.6. Rates could not be calculated for Calvert County due to a small case count. St Mary's County had a rate of 5.4. Charles County had a cervical cancer incidence rate that was greater than 18% below the United States rate of 7.6 per 100,000.

A rate comparison by gender and race is not included due to small case counts and the inability to calculate specific rates on a county level.

2014-2018 Cervical Cancer Incidence Rates

| | Total | White | Black | Other |
|-------------------------|-------|-------|-------|-------|
| <i>Maryland</i> | 6.6 | 6.5 | 6.9 | 4.6 |
| <i>Charles County</i> | 6.2 | ** | ** | ** |
| <i>Calvert County</i> | ** | ** | 0.0 | 0.0 |
| <i>St Mary's County</i> | 5.4 | ** | ** | 0.0 |

** Rates are not calculated for case counts less than 15.

Cervical Cancer Mortality

Mortality rates on a county level are not available due to small case counts. For the state of Maryland, the 2014-2018 cervical cancer mortality rate was 1.9 per 100,000. The rate was double for Maryland African Americans compared to Maryland Caucasians (2.8 vs. 1.6).

2014-2018 Cervical Cancer Mortality Rates

| | Total | White | Black | Other |
|-------------------------|-------|-------|-------|-------|
| <i>Maryland</i> | 1.9 | 1.6 | 2.8 | 1.7 |
| <i>Charles County</i> | ** | ** | ** | ** |
| <i>Calvert County</i> | ** | ** | ** | ** |
| <i>St Mary's County</i> | ** | ** | ** | ** |

*** Rates are not calculated for case counts less than 15.*

Cancer References

1. 2021 Maryland Vital Statistics Report. Available at: <https://health.maryland.gov/vsa/Pages/reports.aspx>
2. 2021 Cancer in Maryland Report. Available at: https://health.maryland.gov/phpa/cancer/Documents/2021%20CRF%20Cancer%20Report_FINAL.pdf

Qualitative Data Relating to Cancer

On the long survey, Cancer had the 18th highest percentage of people reporting it as a serious health problem. 57% felt that it was a health problem in Charles County on any level, and 27.4% reported it as a “serious problem.”

16.31% of long survey participants reported that they have seen improvements in Charles County in terms of cancer. There are many long-standing programs for early screening, detection, treatment, and support of cancer.

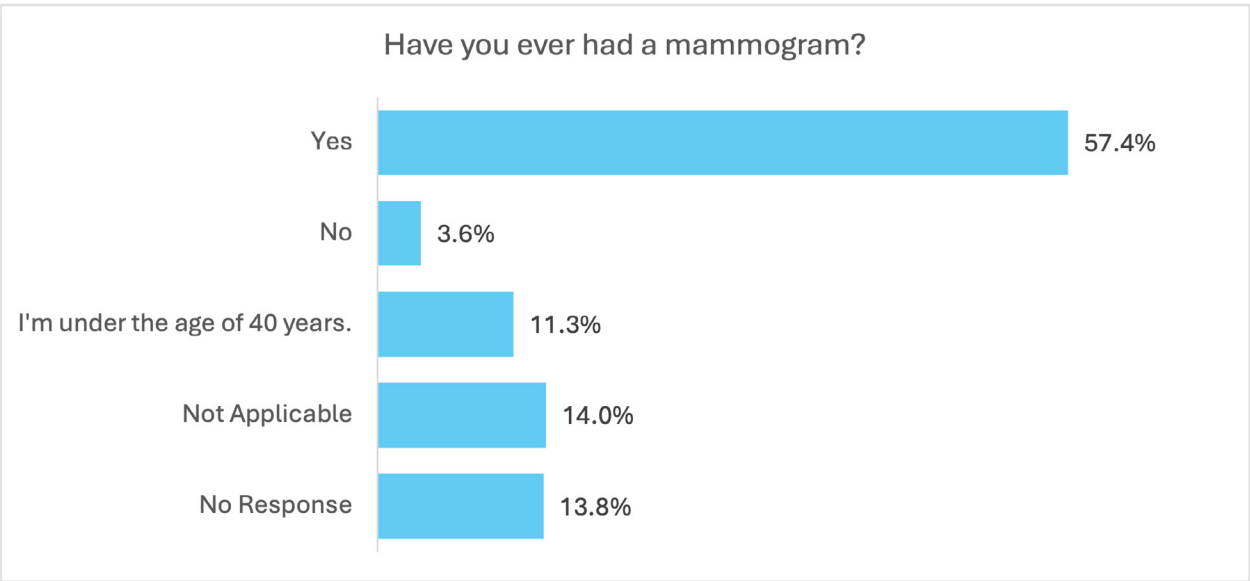
In regard to health behaviors and risk factors that could increase or decrease county residents’ chances of developing cancer, 9.0% smoke cigarettes or cigars, 4% use e-cigarettes, 20.6% are exposed to secondhand smoke at home or work, 8.5% eat 5 or more servings of fruit and vegetables each day, 8.3% always perform cancer self-exams, 17.9% report always using sunscreen, and 16.2% participate in physical activity each day.

Long survey participants were asked a series of questions regarding cancer screenings and exposure to secondhand smoke.

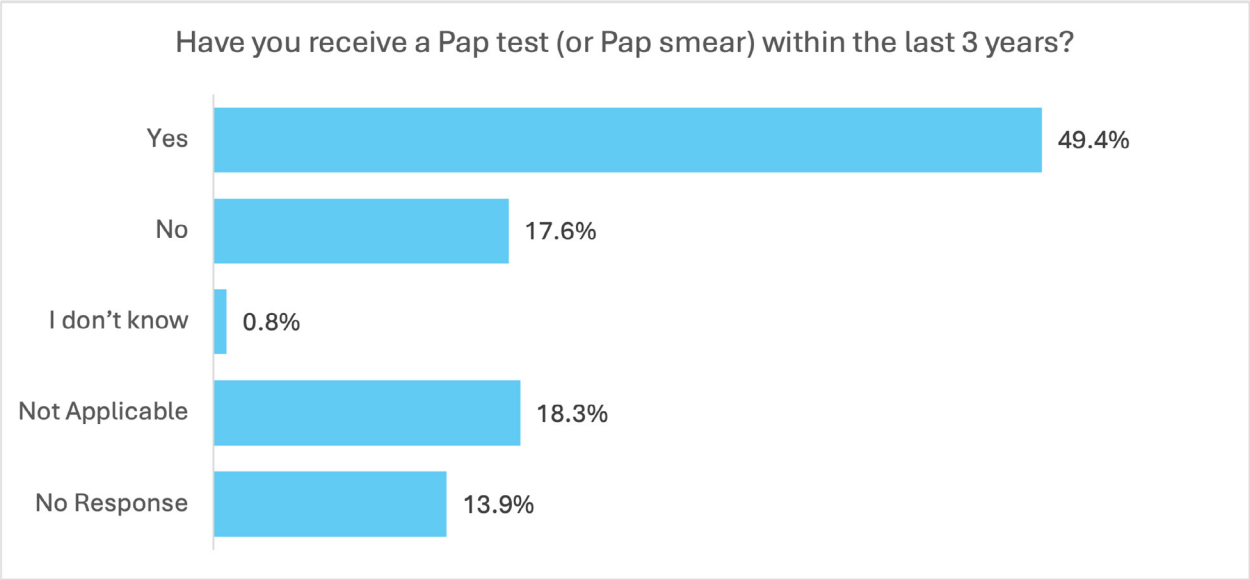
Cancer Screenings/Prevention

Screening for cancer has become a vital prevention strategy in detecting cancer early in patients and increasing the chances of survival. Survey participants were asked to answer questions regarding their own cancer prevention strategies by using screenings.

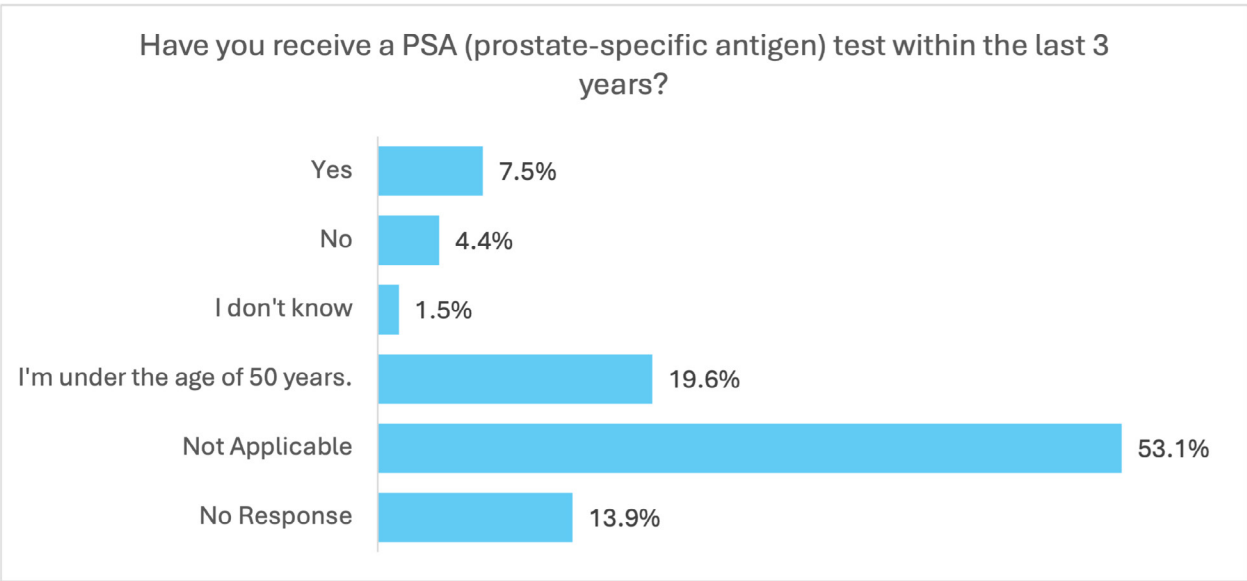
When asked if they have ever had a mammogram, 57.4% of participants reported that they have had a mammogram in the past compared to 3.6% who reported they have not had a mammogram. Over 11% of survey participants reported that they are under the age of 40, meaning they are too young to have mammogram.



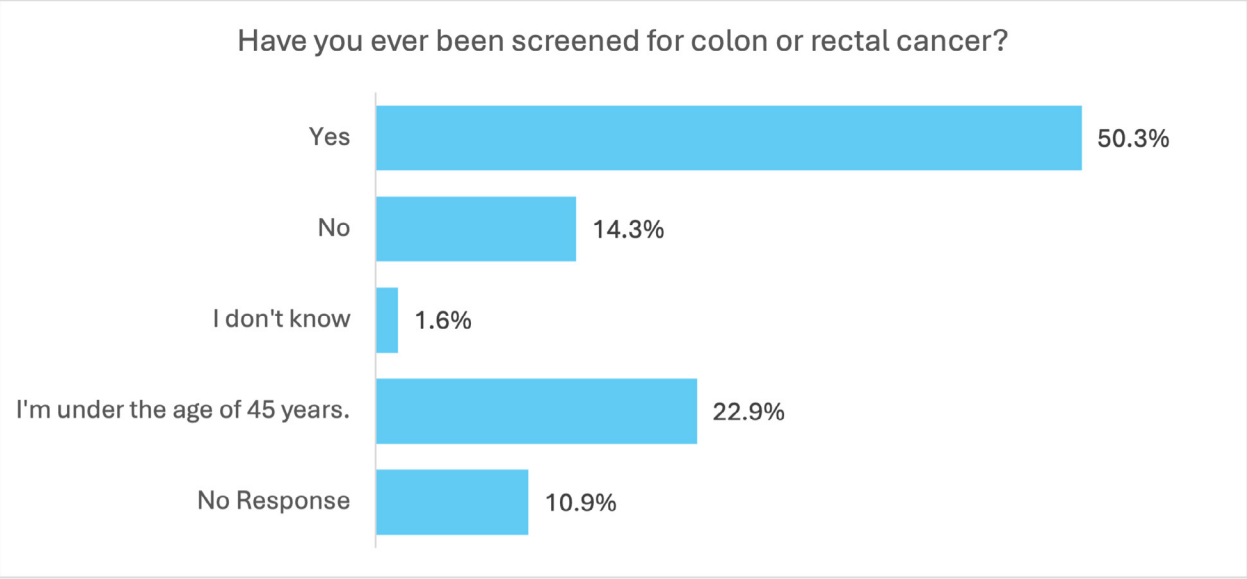
Almost 50% of survey participants reported that they have received a Pap test or Pap smear in the last 3 years, while over 17% of participants reported that they have not received a Pap test in the last 3 years.



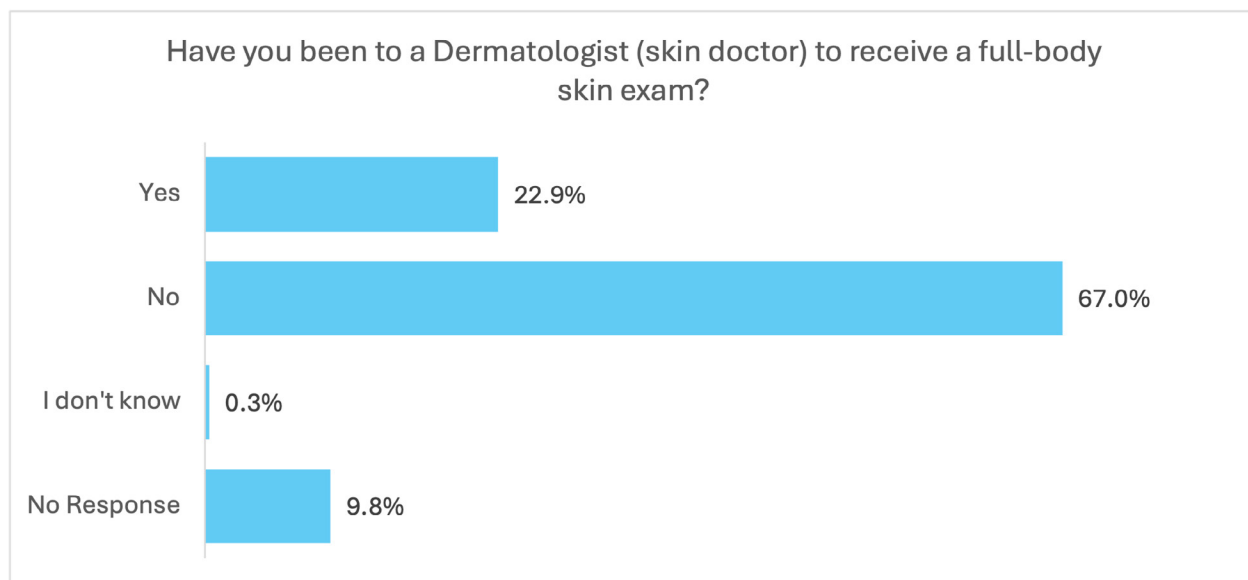
A smaller percentage of participants reported having a PSA test in the last 3 years, at 7.5%. This small percentage may be due to the fact that almost 80% of survey participants reported female as their sex assigned at birth. 53.1% reported that this question was not applicable to them.



0.3% of survey respondents reported that they have been screened for colon or rectal cancer in the past, while 14.3% of respondents reported they have not been screened for colon or rectal cancer. About 23% of respondents reported that they are under the age of 45, resulting in them being too young for colon or rectal screenings at this time.

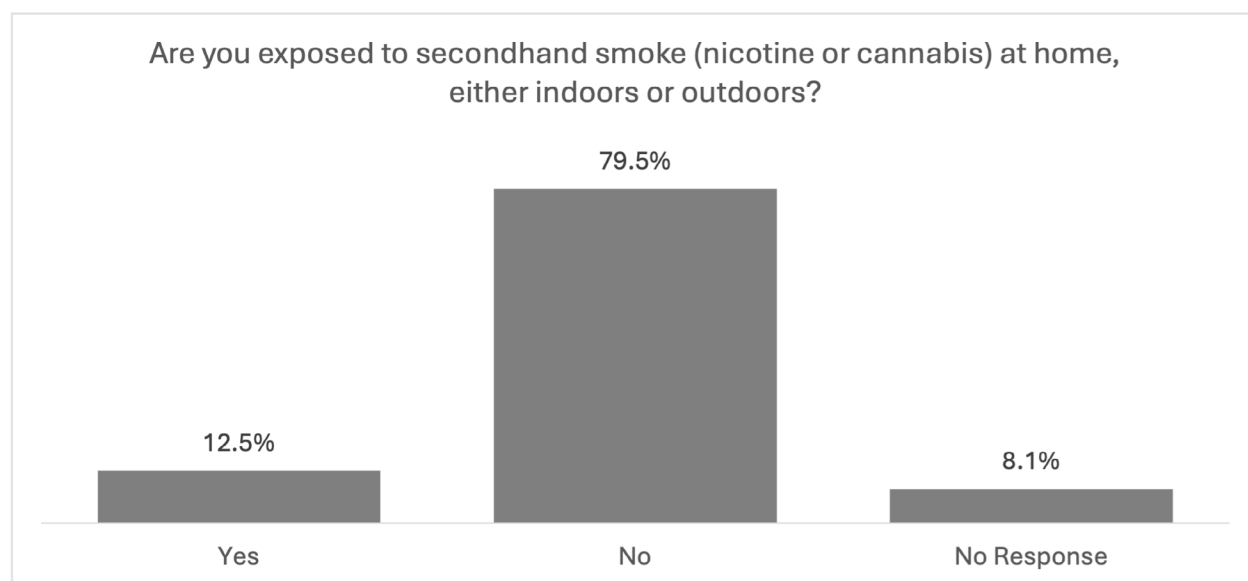


The majority of survey respondents reported that they have not been to a Dermatologist in the last year for a full-body skin exam (67.0%). About 23% of respondents reported that they have received a full-body skin exam in the last year.

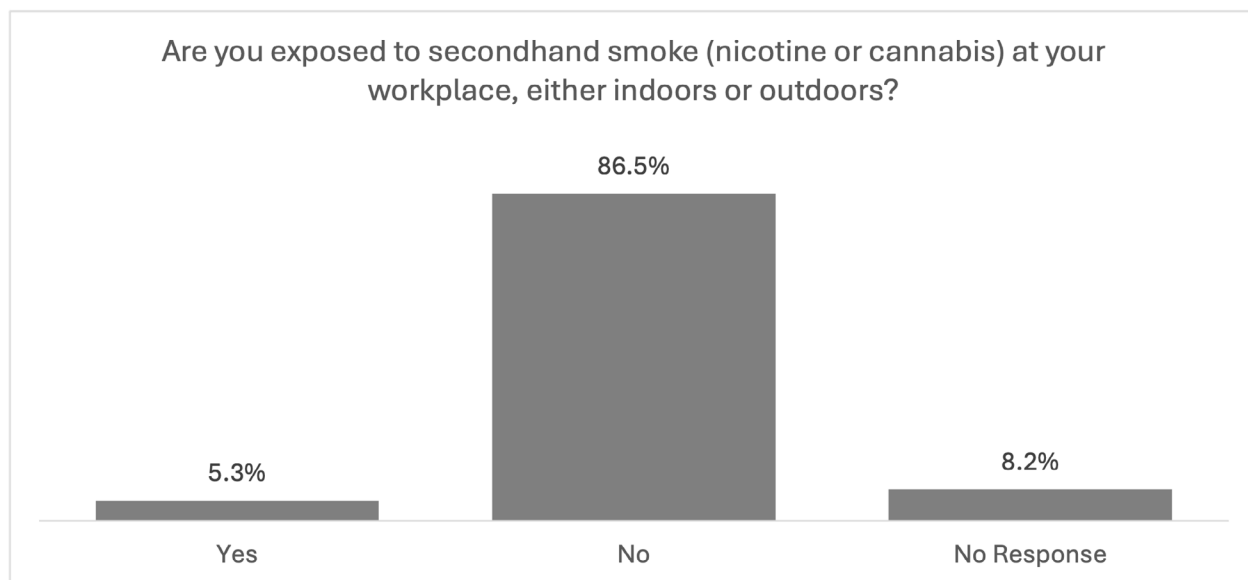


Secondhand Smoke

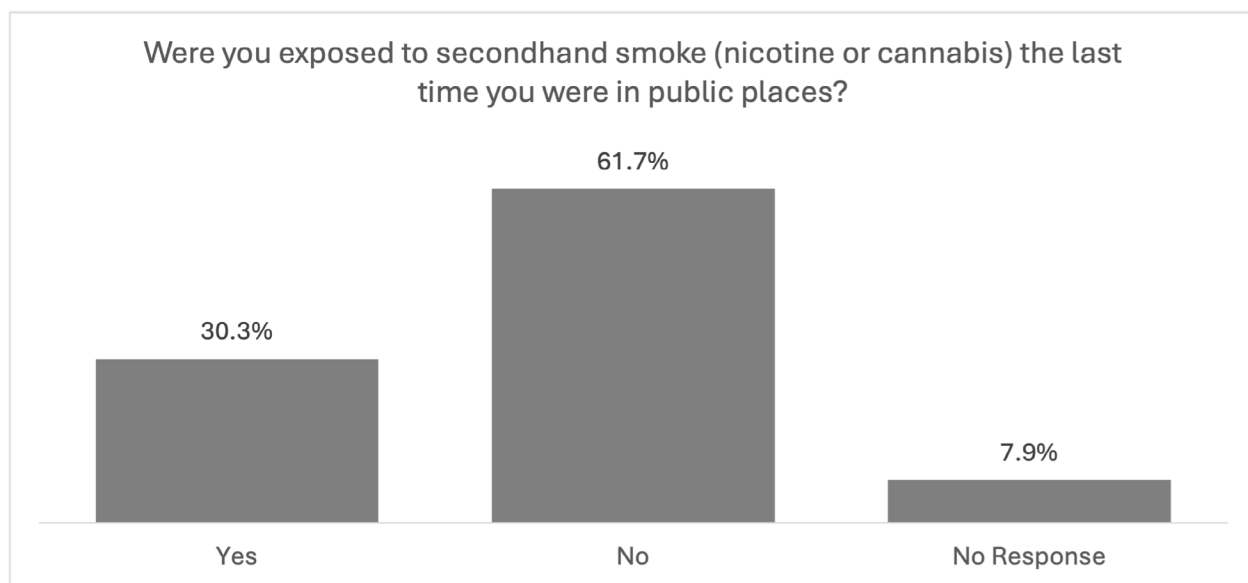
Survey respondents were also asked about their exposure to secondhand smoke, in their home or out in the community. Almost 80% of respondents reported that they are not exposed to secondhand smoke at home. 12.5% of respondents reported that they are exposed to secondhand smoke at their home, either indoors or outdoors.



A larger percentage of respondents reported that they are not exposed to secondhand smoke at their workplace. Just over 5% of respondents reported that they are exposed to secondhand smoke at work.



When asked if they were exposed to secondhand smoke in public places, a larger percentage of survey respondents reported that they were (30.3%). Just under 62% of respondents reported that they were not exposed to secondhand smoke the last time they were in public places.



Over one-third of short survey participants (36.2%) felt that Cancer is big health problems in Charles County. 40.3% of respondents believe that there are some or many resources available in Charles County for cancer.

The Access to Care focus group participants discussed the need for preventive cancer screenings. It is important for women to get mammograms. The University of Maryland Charles Regional Imaging offers services such as 3D mammography to detect smaller masses and provide a

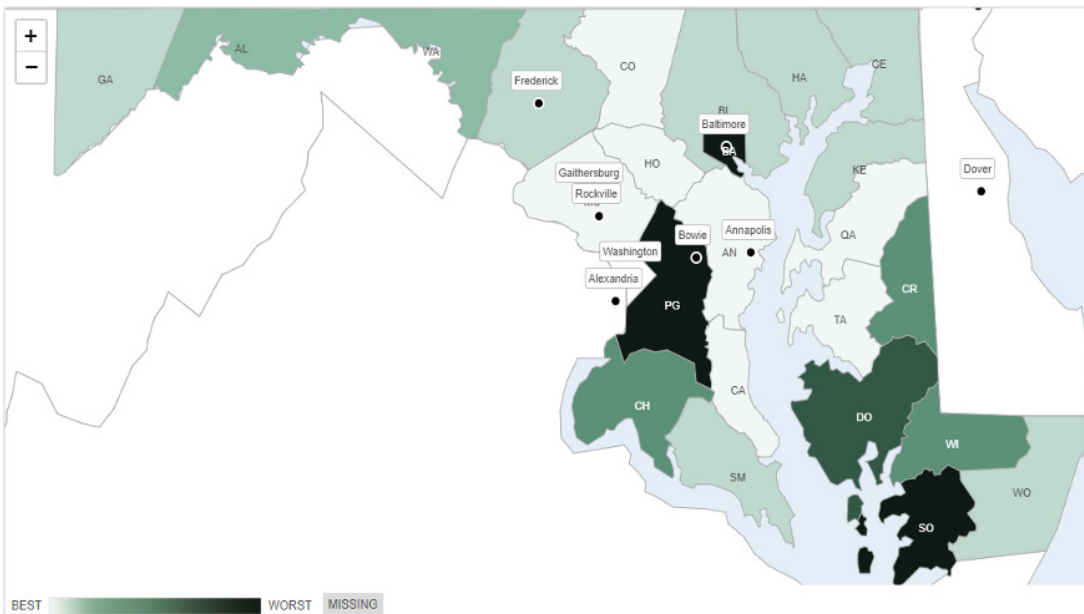
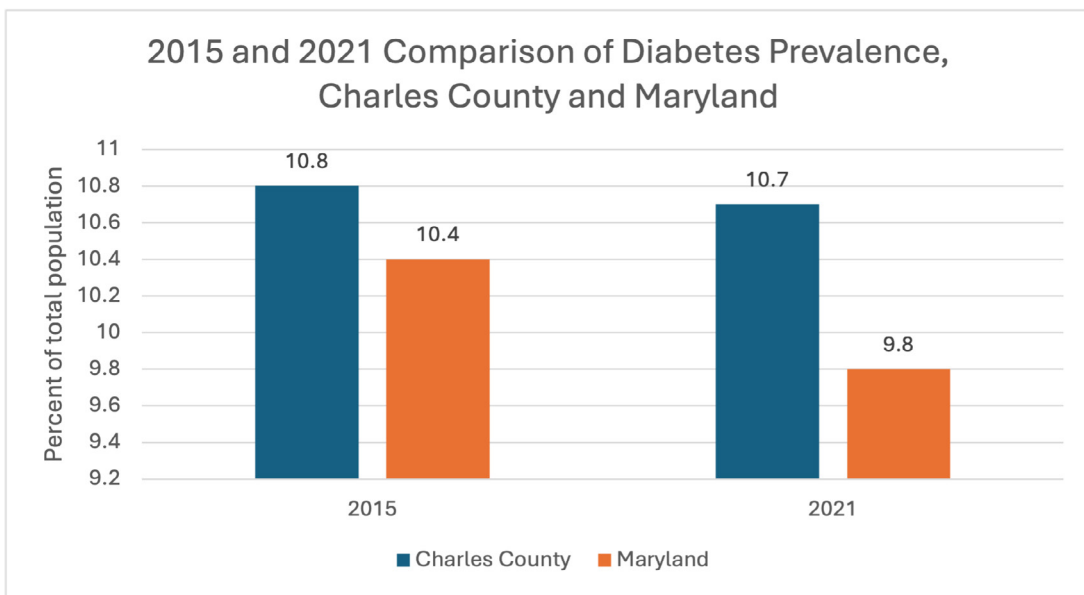
holistic view of breast tissue, ultrasound (with extended hours), low dose CT, walk-in x-rays, and provides lower rates than hospitals (40-60% less for uninsured). The Charles County Department of Health offer a cancer program to assist residents with access to recommended cancer screening services at no cost to them. The following services may be provided based on screening and medical history: Clinical Breast Exam, Mammogram, PAP test, Diagnostic services following an abnormal breast or cervical cancer screening, and Colonoscopy. They must be a Maryland resident, be uninsured or underinsured, and have limited income.

Diabetes Mellitus:

Diabetes Prevalence

2021 Maryland Behavioral Risk Factor Surveillance System (BRFSS) can be used to estimate diabetes prevalence within Charles County and Maryland. Diabetes prevalence percentages have been age-adjusted and weighted to reflect the Maryland and Charles County populations.

BRFSS participants were asked the question, “Have you ever been told by a doctor that you have diabetes?” The estimated prevalence of diabetes in Charles County is 10.7%, higher than the state diabetes prevalence of 9.8%. The county diabetes prevalence has remained stable over the last few years, and the 2021 rate is similar to the 2019 rate from the last needs assessment report (10.7% vs. 10.4%).



Diabetes Mellitus Death Rates

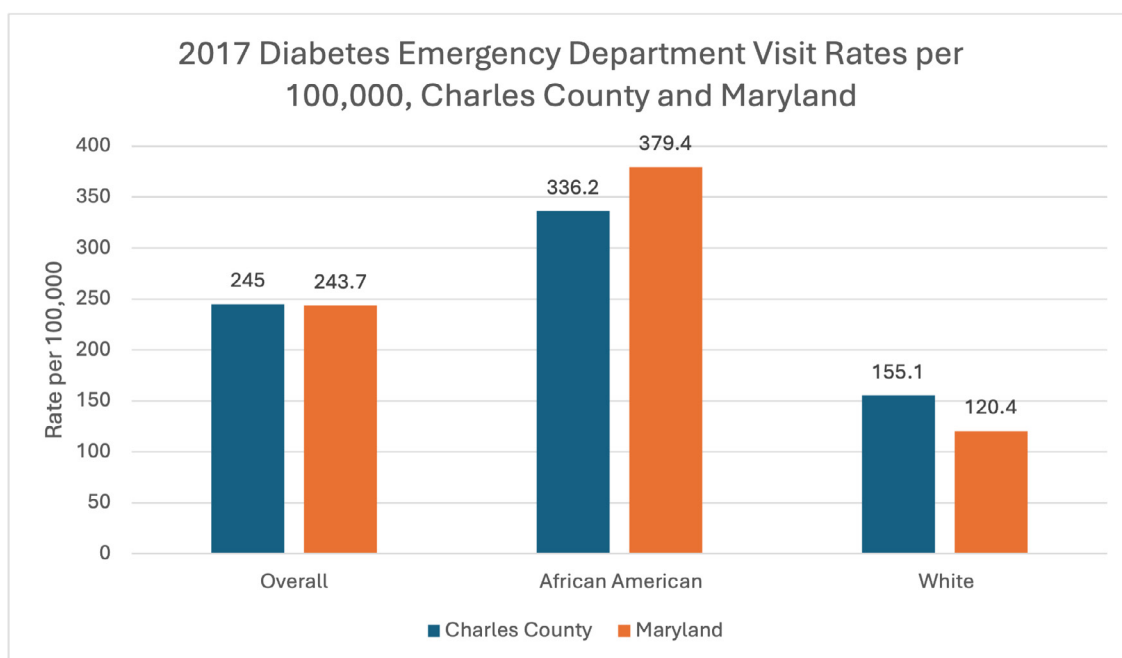
According to the 2021 Maryland Vital Statistics Report, there were 70 deaths in Charles County attributed to Diabetes mellitus in 2021. When comparing the 2021 crude diabetes death rates per 100,000 population, the Charles County rate of 41.5 per 100,000 was greater than the state rate of 28.0 per 100,000. This is a large increase from the 2018 diabetes death rate of 29.1 per 100,000 reported in the previous needs assessment report.

| Number of Diabetes Deaths and Crude Diabetes Death Rates, Charles County vs. Maryland, 2021 | | |
|---|------------------|------------------------|
| Jurisdiction | Number of Deaths | Death Rate per 100,000 |
| Charles County | 70 | 41.5 |
| Maryland | 1731 | 28.0 |

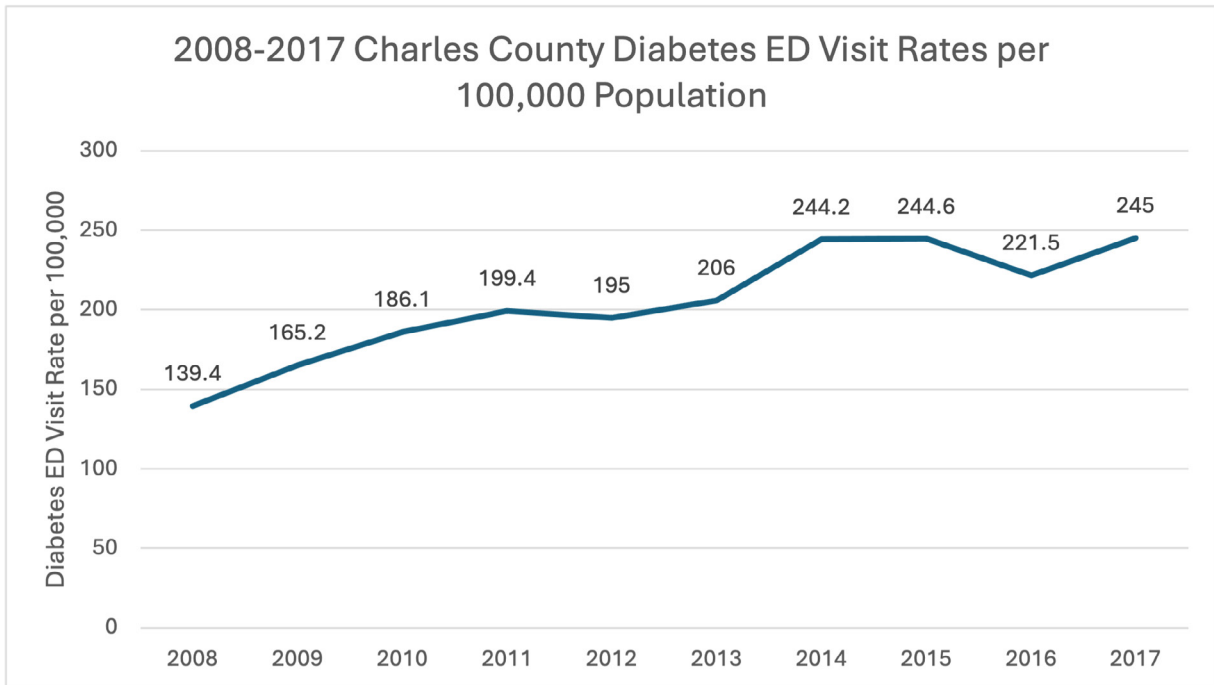
The age-adjusted death rate for Diabetes mellitus for 2021 in Charles County was 39.6 (per 100,000 populations). It was higher than the state diabetes death rate of 22.7 per 100,000.

Diabetes Emergency Department Visit Rates

The 2017 Charles County Diabetes Emergency Department (ED) Visit Rate was 245.0 per 100,000. This rate was similar to the Maryland state average rate of 243.7 per 100,000. Disparities can be seen on a state and county level where African Americans have a much higher diabetes ED visit rate than Whites. For Charles County, the African American diabetes ED visit rate was 336.2, which was significantly higher than the White rate of 155.1 per 100,000.



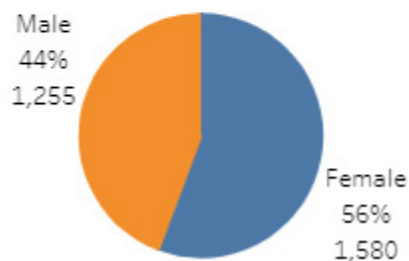
Looking at trends over the past 7 years, the Charles County Diabetes ED visit rate has increased from 139.4 in 2008 to 245 in 2017.



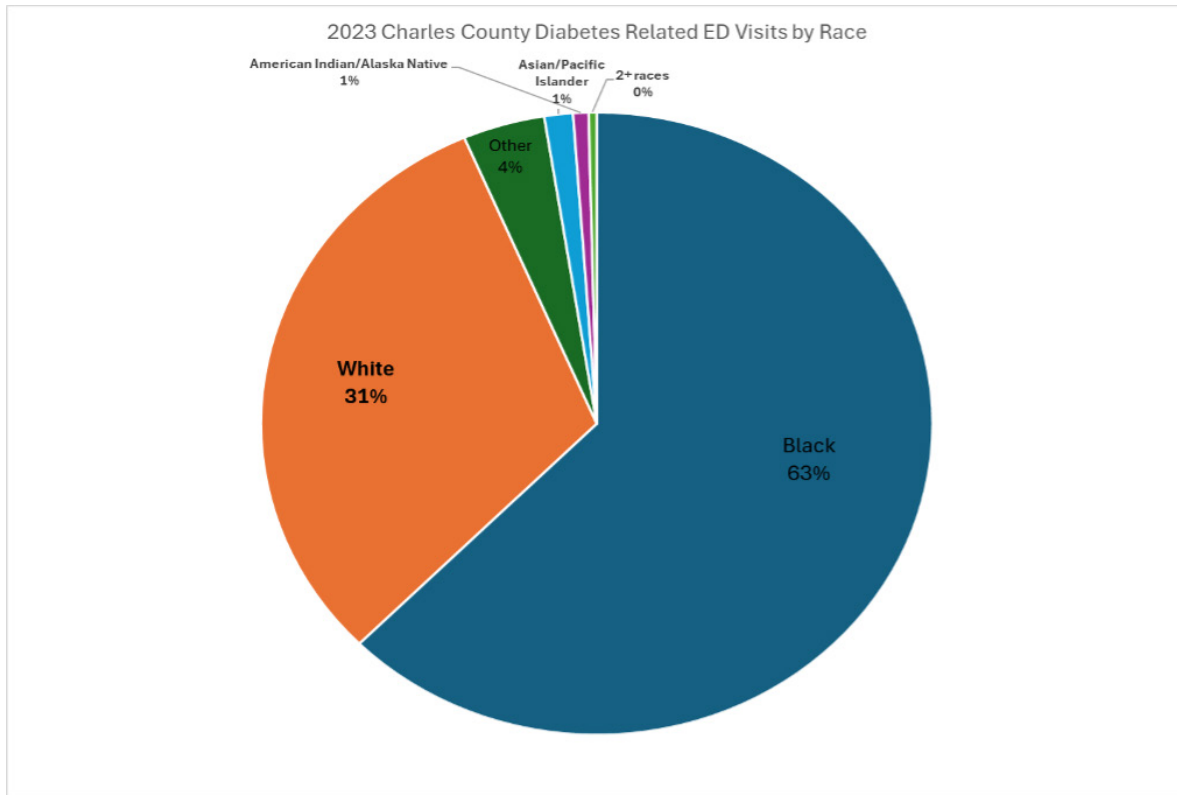
The Chesapeake Regional Information Sharing for our Patients or CRISP, is the health information exchange for the state of Maryland. CRISP Reporting Services provides public health dashboards with queries for emergency department and inpatient stays by demographics for many health conditions including diabetes.

In 2023, there were 2,835 emergency department (ED) visits for Charles County residents related to diabetes. 66.3% of those ED visits were at the University of Maryland Charles Regional Medical Center. The next highest facility was MedStar Southern Maryland Hospital with 13.7% of the ED visits. In Charles County, females have more diabetes-related ED visits than males (1,580 vs. 1,255).

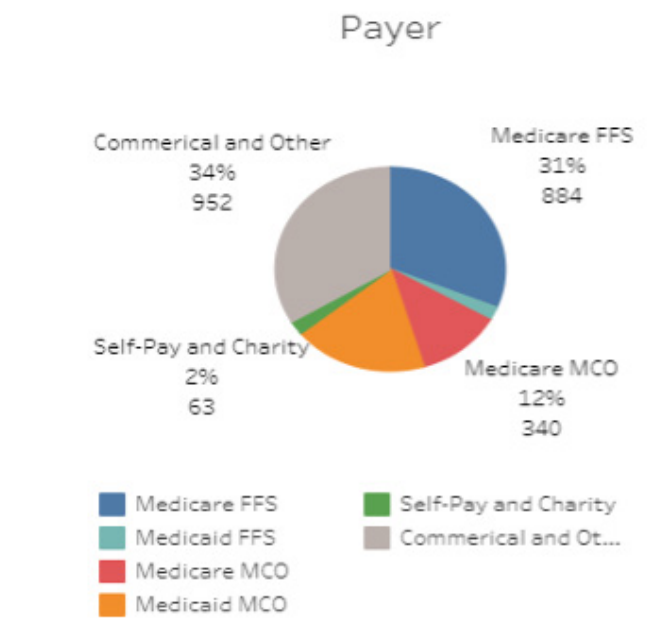
Gender



Charles County African Americans are disproportionately affected by diabetes-related ED visits and make up 63% of the total diabetes-related ED visits for Charles County residents.



When examining by payer source, the largest payer is Medicare followed by Commercial/Other insurance.



The age group with the largest number of diabetes-related ED visits is the 55-59-year-old age group who had 394 visits in 2023. They are followed closely by those aged 60-64 years.

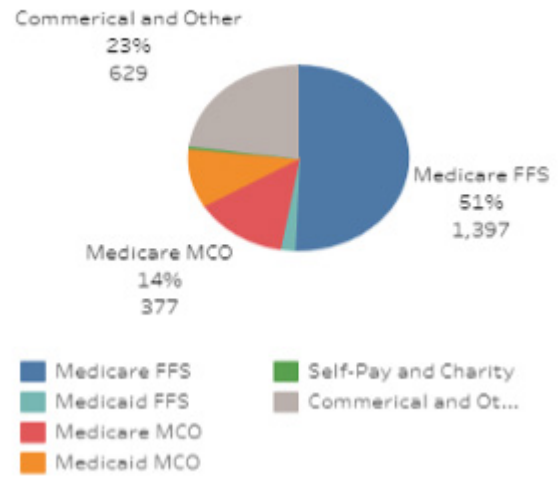
| 2023 Charles County Diabetes-Related ED Visits by Age Group | Count |
|---|-------|
| 0-4 years | <11 |
| 5-9 years | <11 |
| 10-14 years | 17 |
| 15-17 years | <11 |
| 18-24 years | 38 |
| 25-29 years | 59 |
| 30-34 years | 73 |
| 35-39 years | 109 |
| 40-44 years | 152 |
| 45-49 years | 167 |
| 50-54 years | 304 |
| 55-59 years | 394 |
| 60-64 years | 374 |
| 65-69 years | 332 |
| 70-74 years | 277 |
| 75-79 years | 230 |
| 80-84 years | 168 |
| 85+ years | 123 |

The same data source can be used to examine diabetes-related Inpatient visits for Charles County for 2023. There were a total of 2,758 diabetes-related inpatient visits for Charles County residents in 2023. Females have more diabetes-related inpatient visits than males (1,403 vs. 1,355). Charles County Whites and African Americans make up the majority of the diabetes-related inpatient visits (93%). Medicare is the largest payer source for diabetes-related patient stays (65%). The age group with the most inpatient visits are those aged 75-79 years.

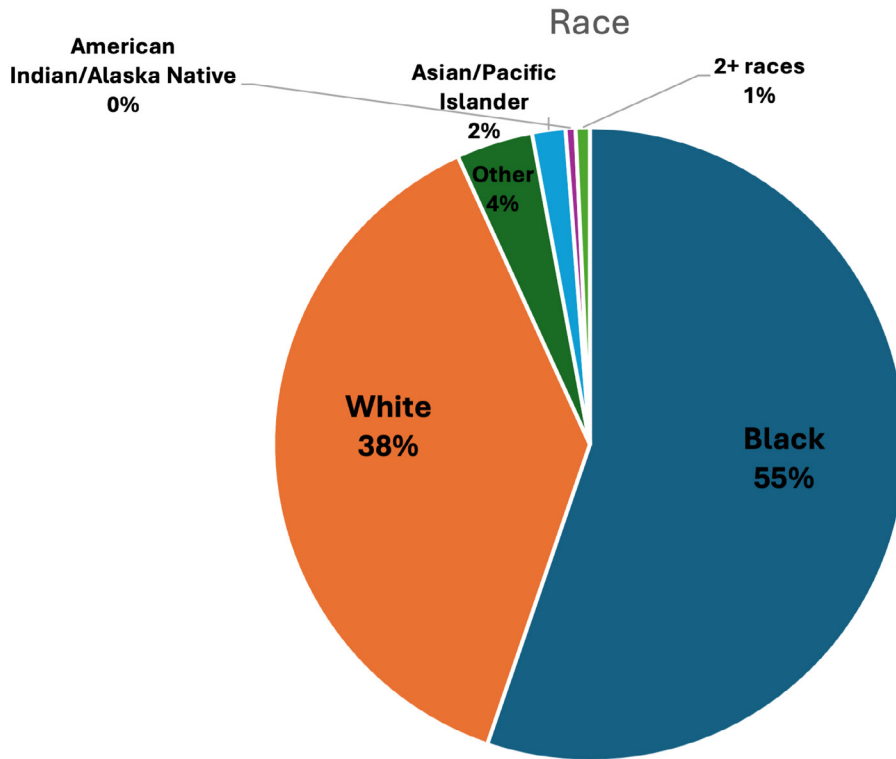
Gender



Payer



2023 Charles County Diabetes-Related Inpatient Visits by Race



| 2023 Charles County Diabetes-Related Inpatient Visits by Age Group | Count |
|--|-------|
| 0-17 years | <11 |
| 18-24 years | 40 |
| 25-29 years | 25 |
| 30-34 years | 36 |
| 35-39 years | 60 |
| 40-44 years | 81 |
| 45-49 years | 110 |
| 50-54 years | 189 |
| 55-59 years | 298 |
| 60-64 years | 307 |
| 65-69 years | 347 |
| 70-74 years | 334 |
| 75-79 years | 391 |
| 80-84 years | 275 |
| 85+ years | 265 |

Pre-Diabetes

The 2020 Maryland Behavioral Risk Factor Surveillance System asked respondents if they have ever been diagnosed with pre-diabetes or borderline diabetes. 13.8% of Charles County adults and 13.5% of Maryland adults reported that they have been diagnosed with pre-diabetes.

Additionally, BRFSS respondents were asked if they had a blood sugar test in the last 3 years. 51.4% of Charles County adults reported that they have had a blood sugar test in the last 3 years. This is similar to the state percentage of 53.7%.

Diabetes Care

In 2020, the Maryland Behavioral Risk Factor Surveillance System asked respondents with diabetes a series of questions regarding diabetes care. The percentages of Charles County adults reporting that they engage in diabetes care activities were below the Maryland state average percentages.

- 66.7% of Charles County adults with diabetes and 59.3% of Maryland adults with diabetes ever took a class or course to manage diabetes themselves.
- 8.6% of Charles County adults with diabetes and 15.7% of Maryland adults with diabetes reported that they have had a fully dilated eye exam in the last month.
- 64.9% of Charles County adults with diabetes and 52.7% of Maryland adults with diabetes check feet daily or more frequently.

Diabetes References

1. 2021 Charles County and Maryland Diabetes Prevalence Data. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at: <https://ibis.health.maryland.gov/>.
2. 2021 Charles County Diabetes mellitus mortality counts and rates. 2021 Maryland Vital Statistics Report. Maryland Department of Health. Available at: <https://health.maryland.gov/vsa/Pages/reports.aspx>.
3. 2008-2017 Charles County Diabetes Emergency Department Visit Rates. Maryland Health Services Cost Review Commission. Accessed through the Maryland State Health Improvement Process website. Available at <https://pophealth.health.maryland.gov/Pages/SHIP-Lite-Home.aspx>.
4. 2023 Charles County Diabetes Emergency Department Visits and Inpatient Stays by Demographic. CRISP Reporting Services. Public Health Dashboards. Chesapeake Regional Information Sharing for our Patients (CRISP). Available at <https://reports.crisphealth.org>.
5. 2020 Charles County Pre-Diabetes and Diabetes Care data. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at: <https://ibis.health.maryland.gov/>.

Qualitative Data Relating to Diabetes

65.6% of long survey participants felt that diabetes was a health problem in Charles County. Approximately one-third (36.2%) felt that diabetes is a “serious problem” in Charles County. 36.91% of long survey respondents reported that they have seen improvements in Charles County in terms of Diabetes.

Some health behaviors exhibited by Charles County survey respondents that might affect their chances of diabetes included: only 8.5% always eat 5 or more servings of fruits and vegetables each day, 18.5% always or most of time eat fast food at least once a week, and 16.2% participate in physical activity each day.

51.7% of the short survey participants felt that Diabetes is the greatest health problem in Charles County. This was the highest-ranking health condition on the short survey. Additionally, 46.2% of the respondents felt that there are “many” or “some” services available in Charles County to address diabetes.

Focus group participants expressed concern for Diabetes and the need for more prevention education, especially among those with pre-diabetes. Participants also felt that education campaigns and programs need to be in place for chronic conditions, including diabetes.

The Access to Care focus group discussed the disparities in diabetes within the county. Resources

must be allocated to those who are most impacted by the condition. Efforts must be directed to areas of the county where resources are limited, including the western and southern regions of the county.

The Chronic Disease focus group discussed the lack of providers in the county to address diabetes and obesity. There are limited specialists for weight loss. Health Partners was cited as a good source for care as their new provider works with individuals with diabetes.

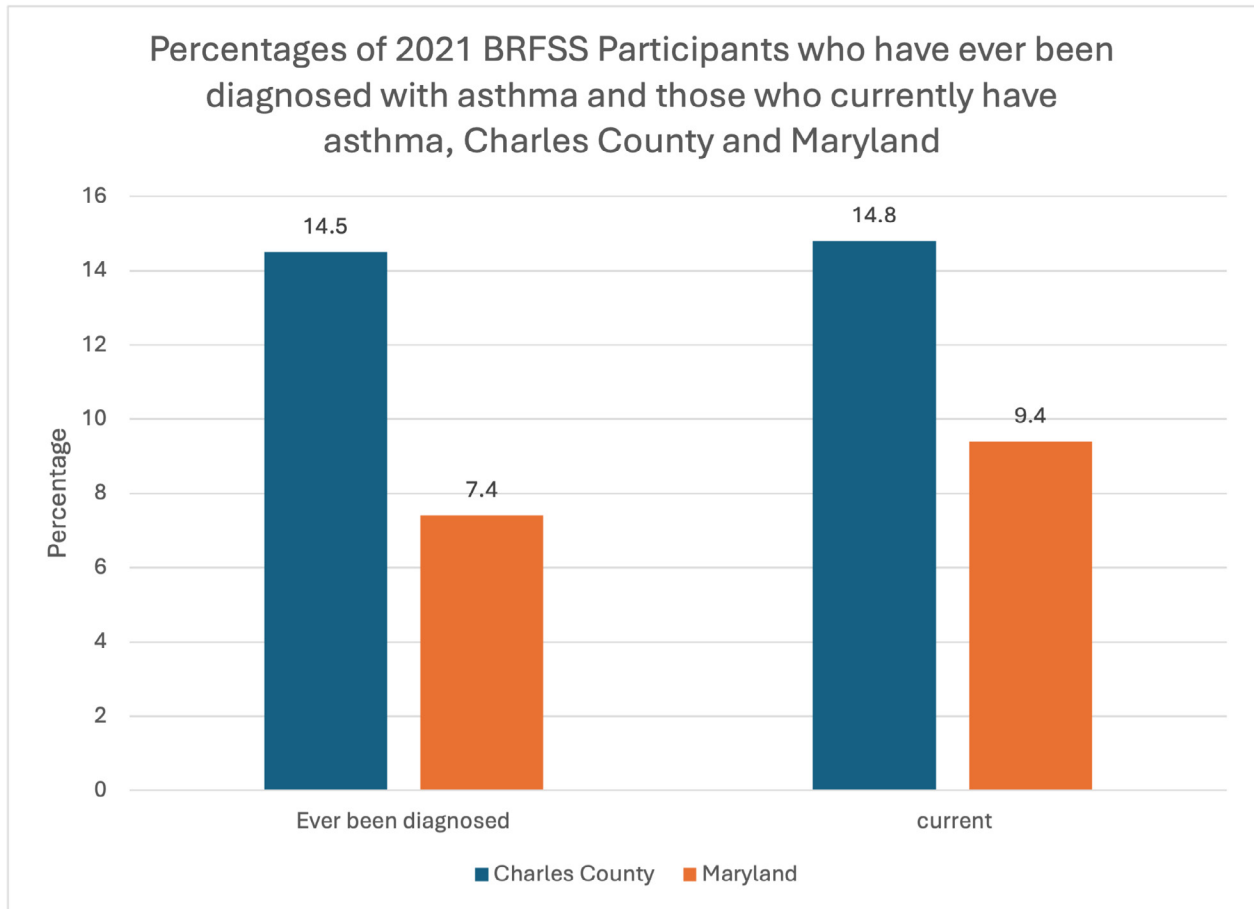
Individuals with diabetes need to see an endocrinologist. The University of Maryland Charles Regional Medical Center has brought more specialists like endocrinology, GI, general surgery, urology. However, for endocrinology, the wait is 2-3 months for an appointment.

Focus group cited the Living Well, chronic disease self-management program, diabetes self-management program, and the Diabetes Prevention Program are strengths and valuable resources within the county. The facilitators show compassion to participants.

Charles County Asthma Prevalence:

Adult Asthma Prevalence

Asthma is an emerging health problem in the United States and in Maryland. The problems associated with asthma have been felt at the local level as well. In 2021, approximately 14.8% of adults in Maryland and 14.5% of adults in Charles County have ever been diagnosed with asthma (2021 Maryland BRFSS). An estimated 9.4% of Maryland adults and 7.4% of Charles County adults reported that they currently have asthma (2021 Maryland BRFSS).



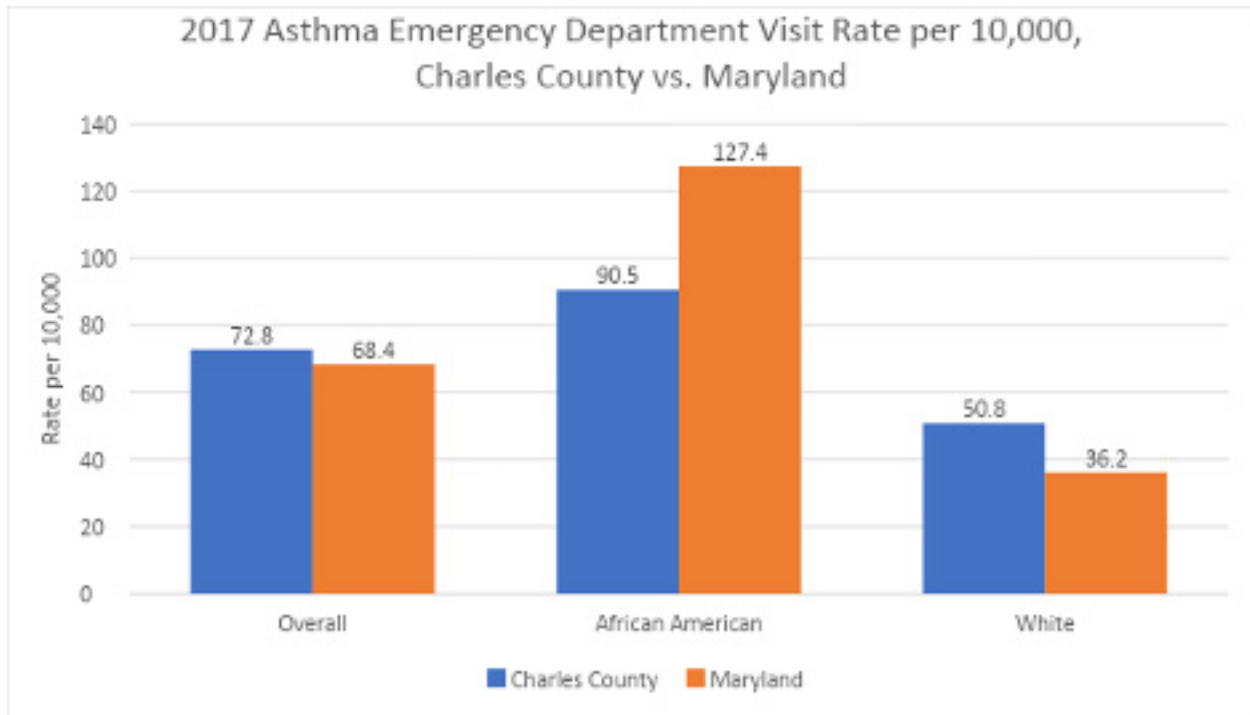
2021 BRFSS participants with children were also asked if their child has ever been diagnosed with asthma. 13.4% of Charles County respondents reported that their children have been diagnosed with asthma. This is higher than the Maryland percentage of 11.5%.

Asthma Emergency Department and Hospitalization Rates

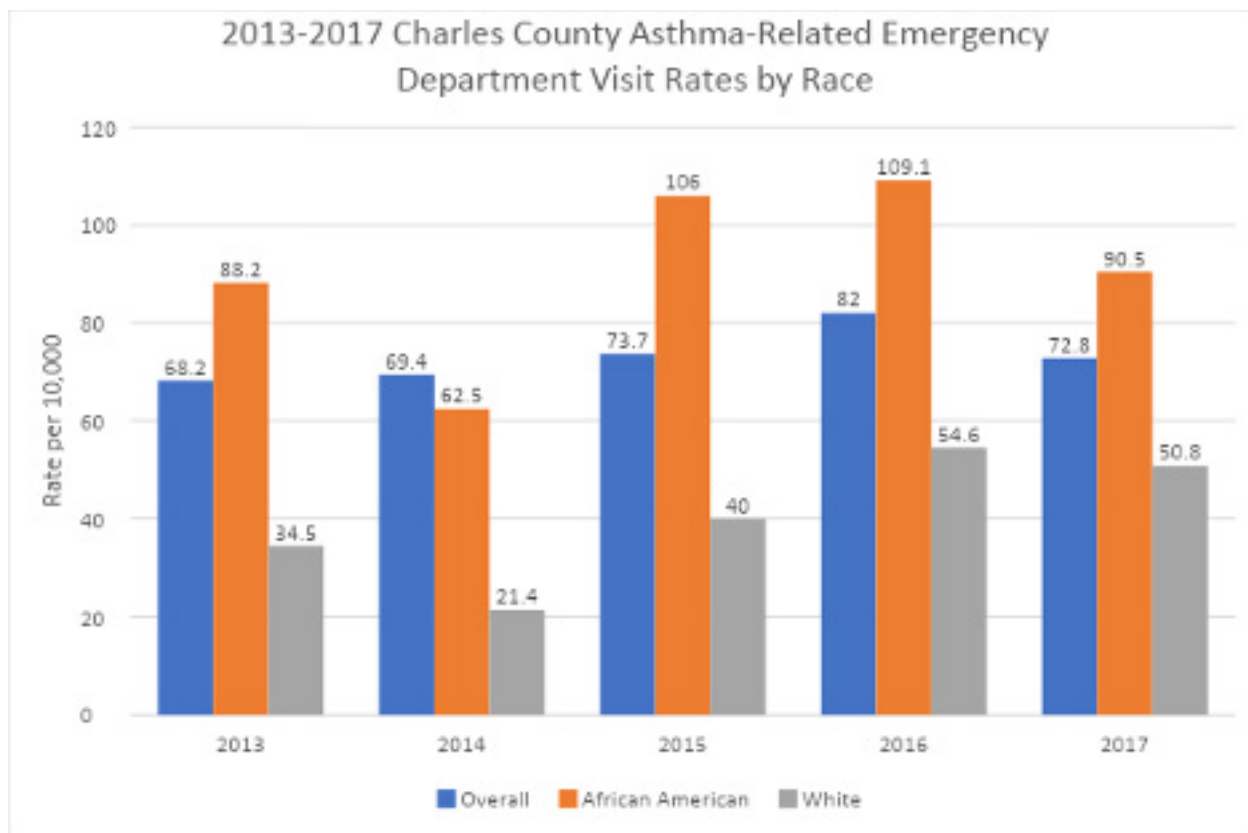
This indicator shows the rate of emergency department (ED) visits due to asthma per 10,000 population in 2017. Asthma is a chronic health condition which causes very serious breathing problems. When properly controlled through close outpatient medical supervision, individuals and families can manage their asthma without costly emergency intervention. In Maryland, there are nearly 50,000 emergency department visit related to asthma each year.

The 2017 Charles County asthma ED visit rate was 72.8 per 10,000 population. This rate is slightly above the Maryland state asthma ED visit rate of 68.4 per 10,000. Racial disparities are clearly seen on the state and county level. Charles County African Americans had a 2017 asthma ED visit rate of 90.5 per 10,000 population. This was significantly higher than the rate for Charles County Whites (50.8).

The 2017 Charles County asthma ED visit rate of 72.8 per 10,000 is a small decrease from the rate reported in the last needs assessment report of 69.4 per 10,000 for 2014. Additionally, the 2017 Charles County asthma ED visit rate is the 8th highest among the Maryland jurisdictions.



Charles County has seen a lot of fluctuation in the asthma-related ED visit rates from 2013-2017. The 2013 Charles County asthma ED visit rate was 68.2 versus 73.7 in 2017. The Charles County African American population have seen an increase from 88.2 in 2013 to 90.5 in 2017. Charles County Whites have seen an increase from 34.5 in 2013 to 50.8 in 2017.

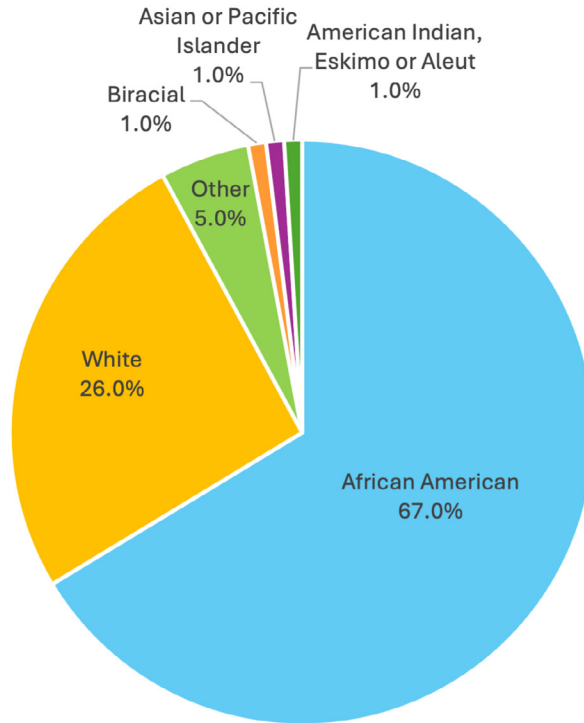


The Chesapeake Regional Information Sharing for our Patients or CRISP, is the health information exchange for the state of Maryland. CRISP Reporting Services provides public health dashboards with queries for emergency department and inpatient stays by demographics for many health conditions including asthma.

In 2022, there were 2,563 emergency department (ED) visits for Charles County residents related to asthma. 60.0% of those ED visits were at the University of Maryland Charles Regional Medical Center. In Charles County, females have more asthma-related ED visits than males (1,751 vs. 812).

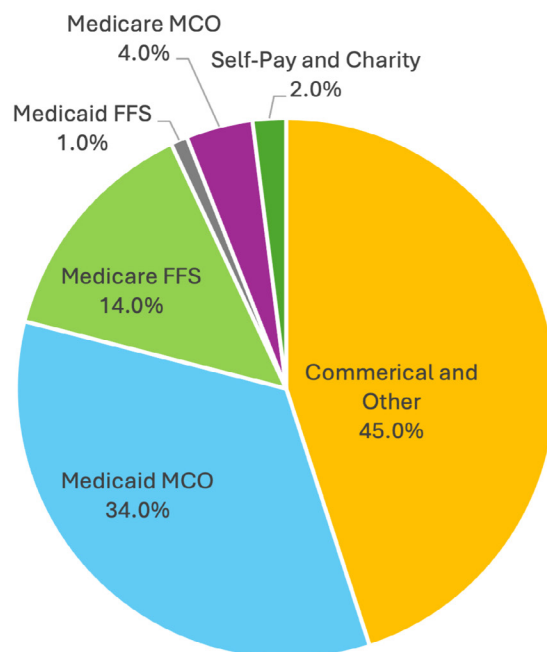
Charles County African Americans are disproportionately affected by asthma-related ED visits and make up 67% of the total asthma-related ED visits for Charles County residents.

2020 Charles County Asthma-Related ED Visits by Race



When examining by payer source, the largest payer is Commercial/Other insurance (45.0%) followed by Medicaid MCO (34.0%).

2020 Charles County Asthma-Related ED Visits by Payer

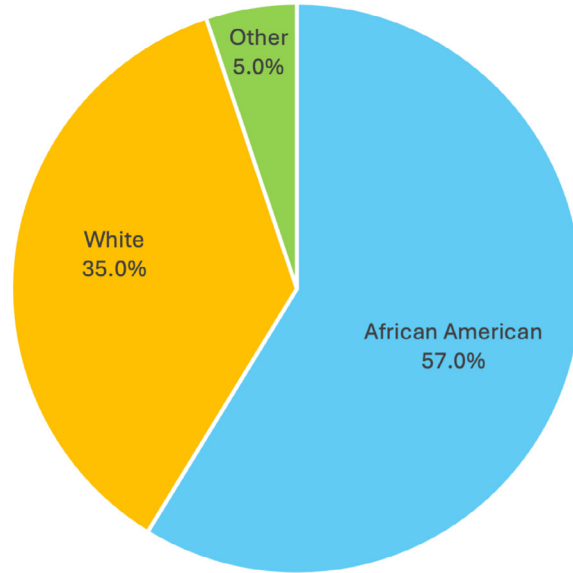


The age group with the largest number of asthma-related ED visits is the 18-24-year-old age group who had 258 visits in 2022. They are followed closely by those aged 30-34 years.

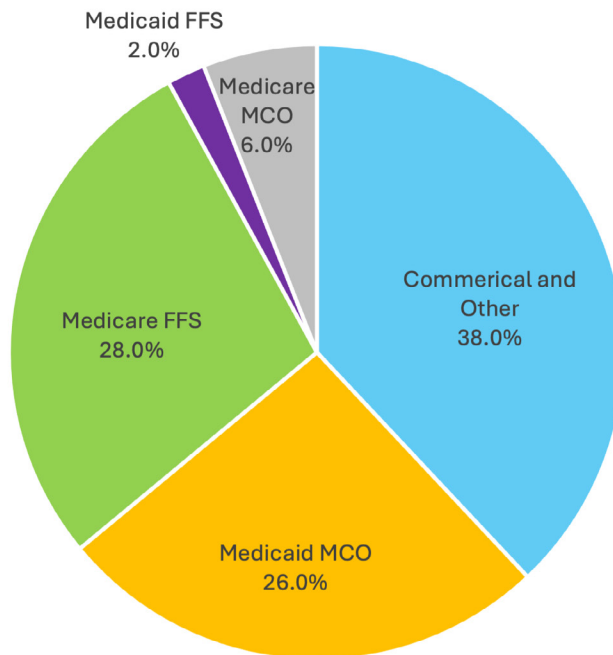
| 2022 Charles County Asthma-Related ED Visits by Age Group | Count |
|---|-------|
| 0-4 years | 127 |
| 5-9 years | 175 |
| 10-14 years | 115 |
| 15-17 years | 75 |
| 18-24 years | 258 |
| 25-29 years | 182 |
| 30-34 years | 230 |
| 35-39 years | 226 |
| 40-44 years | 181 |
| 45-49 years | 169 |
| 50-54 years | 202 |
| 55-59 years | 166 |
| 60-64 years | 109 |
| 65-69 years | 114 |
| 70-74 years | 72 |
| 75-79 years | 71 |
| 80-84 years | 51 |
| 85+ years | 40 |

The same data source can be used to examine asthma-related Inpatient visits for Charles County for 2022. There were 673 asthma-related inpatient visits in 2022. Females have more asthma-related inpatient visits than males (520 vs. 153). Charles County Whites and African Americans make up the majority of the asthma-related inpatient visits (92%). Commercial or Other insurance is the largest payer source for asthma-related patient stays (38%). The age group with the most inpatient visits are those aged 30-34 years.

2022 Charles County Asthma-Related Inpatient Visits by Race



2022 Charles County Asthma-Related Inpatient Visits by Payer



| 2022 Charles County Asthma-Related Inpatient Visits by Age Group | Count |
|--|-----------------|
| 0-17 years | Data Suppressed |
| 18-24 years | 61 |
| 25-29 years | 43 |
| 30-34 years | 67 |
| 35-39 years | 57 |
| 40-44 years | 46 |
| 45-49 years | 42 |
| 50-54 years | 53 |
| 55-59 years | 55 |
| 60-64 years | 40 |
| 65-69 years | 51 |
| 70-74 years | 34 |
| 75-79 years | 42 |
| 80-84 years | 33 |
| 85+ years | 23 |

Asthma Prevalence Among Middle and High School Students

In the 2018-2019 Maryland Youth Risk Behavior Survey for Middle and High School students, participants are asked if they have ever been told by a doctor or nurse that they have asthma. For the 2018-2019 school year, 21.5% of Charles County middle school students and 29.2% of Charles County high school students report that they have been told by a doctor or a nurse that they have asthma. Data on asthma prevalence was not available in the 2021-2022 Maryland YRBS results.

| 2018-2019 Middle and High School Asthma Prevalence | Middle School | High School |
|--|---------------|-------------|
| Charles County | 21.5% | 29.2% |
| Maryland | 21.0% | 25.9% |

COPD Prevalence

The 2021 Maryland Behavioral Risk Factor Surveillance System provides estimates on the prevalence of Chronic Obstructive Pulmonary Disease (COPD) in the community. The 2021 Charles County COPD prevalence was 6.2%. This is much higher than the 2021 Maryland state average COPD prevalence of 4.3%.

Asthma References

1. 2021 Charles County and Maryland Adult Asthma Prevalence. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at: <https://ibis.health.maryland.gov/>.
2. 2017 Charles County and Maryland Asthma Emergency Department Visit rates. Maryland Health Services Cost Review Commission. Accessed through the Maryland State Health Improvement Process website. Available at: <https://opendata.maryland.gov/Health-and-Human-Services/SHIP-Emergency-Department-Visit-Rate-Due-To-Asthma/b5i6-2qym>.
3. 2023 Charles County Asthma Emergency Department and Inpatient Visits by Demographics. CRISP Reporting Services. Public Health Dashboards. Chesapeake Regional Information Sharing for our Patients (CRISP). Available at <https://reports.crisphealth.org>.
4. 2018-2019 Middle and High School Asthma Prevalence for Charles County and Maryland. 2018-2019 Maryland Youth Risk Behavior Survey. Available at https://ibis.health.maryland.gov/ibisph-view/query/result/yrbs2021/HS_AsthmaCurYN/Crude.html.
5. 2021 Charles County and Maryland Adult COPD Prevalence. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at: <https://ibis.health.maryland.gov/>.

Qualitative Data Pertaining to Asthma

School nurse focus group and chronic disease focus group participants mentioned the need for increased specialists in Charles County including pulmonologists. They explained that many individuals have to wait up to a month to be seen.

Short survey participants did not feel that asthma is a significant problem in Charles County. Only 14.5% of short survey respondents felt that asthma was the biggest health problem in Charles County. This was the third lowest percentage among the listed health conditions. 35.6% of short survey respondents felt that the county has “many” or “some” services regarding asthma.

On the long survey, 53.8% of respondents felt that asthma was a problem on some level in Charles County. 18.5% thought that asthma is a serious problem in Charles County. 9.44% reported that they have seen improvements in Charles County regarding asthma.

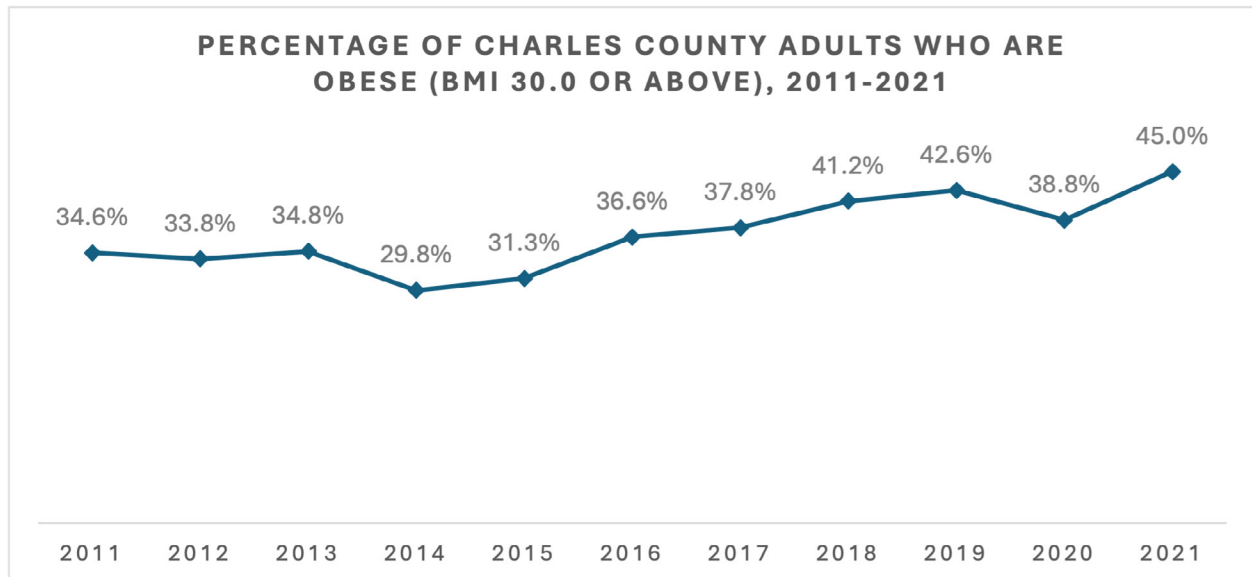
Food, Physical Activity, and Weight Classification:

Maryland Behavioral Risk Factor Surveillance System

In 2021, 76.8% of Charles County adults were either overweight or obese. This is an increase from 71.9% reported during the last Community Health Needs Assessment survey. 31.8% of Charles County adults were overweight (BMI 25.0-29.9), and 45.0% were Obese (BMI 30.0 or above). The percentage of Charles County adults who are obese is much higher than the Maryland state percentage of 34.7%. However, the percentage of Charles County adults who are overweight is lower than the Maryland percentage of 34.0%.

| BMI Status: Charles County | Healthy Weight | Overweight | Obese |
|-----------------------------------|-----------------------|-------------------|--------------|
| 2021 | 23.2% | 31.8% | 45.0% |
| Previous CHNA | 28.2% | 28.4% | 43.5% |

Source: 2021 Maryland BRFSS



Source: 2021 Maryland BRFSS

Childhood Obesity

High School Students Aged 15-18 Years:

In the 2021-2022 Youth Risk Behavior Survey, 16.1% of Charles County High School students reported being overweight and 15.5% reported being obese. The Maryland percentage of High School students who are overweight is lower than Charles County (15.3% vs 16.1%), whereas the Maryland percentage of High School students who are obese is slightly higher than Charles County (15.9% vs 15.5%).

Breaking down the data by demographics, Charles County Black High School students had the highest percentage of being overweight, at 17.6%, compared to any other race or ethnic group.

However, multiracial non-Hispanic High School students had the highest percentage of obesity, at 19.7%.

Charles County High School females had a higher percentage of being overweight compared to males at 17.3% vs 15.0%, but Charles County High School males had a higher percentage of obesity at 17.2% compared to 13.8% for females.

9th grade students had the highest percentage of being overweight and obese, compared to all other High School grade levels. 17.6% of 9th graders were overweight and 17.0% were obese. High School students under the age of 16 had the highest percentage of being overweight at 18.3%, but High School students between the ages of 16 and 17 had the highest percentage of obesity at 16.0%.

| Overweight and Obesity Prevalence in Charles County High School Students: 2021-2022 YRBS | Overweight | Obese |
|---|-------------------|--------------|
| Total | | |
| Total | 16.1% | 15.5% |
| Race/Ethnicity | | |
| Asian | 15.2% | 18.1% |
| Black | 17.6% | 16.8% |
| Hispanic/Latino | 16.7% | 15.4% |
| Multiracial non-Hispanic | 14.6% | 19.7% |
| White | 13.5% | 10.1% |
| Age | | |
| 15 or younger | 18.3% | 15.6% |
| 16 or 17 | 14.1% | 16.0% |
| 18 or older | 17.6% | 10.3% |
| Sex | | |
| Female | 17.3% | 13.8% |
| Male | 15.0% | 17.2% |
| Grade | | |
| 9th Grade | 17.6% | 17.0% |
| 10th Grade | 17.4% | 14.6% |
| 11th Grade | 14.8% | 15.0% |
| 12th Grade | 14.6% | 15.2% |

Source: 2021-2022 Maryland YRBS/YTS

In addition, Charles County high school students were asked several questions regarding their perceptions of their weight and questions regarding their diet and activities. All these factors could impact obesity and overweight.

- 27.1% consider themselves slightly or very overweight.
- 21.4% did not eat fruit in the past week.
- 10.2% did not eat vegetables in the past week.
- 11.2% drank soda one or more times a day.
- 34.2% were physically active for at least 60 minutes 5 times a week.
- 76.0% spent 3 or more hours per day on screen time.

These same questions were also asked of Charles County middle school students on the 2021-2022 YRBS.

- 25.3% describe themselves as slightly or very overweight.
- 43.9% are trying to lose weight.
- 21.1% did not eat breakfast each day.
- 39.3% were physically active at least 60 minutes 5 times a week.
- 21.8% did not participate in physical activity at least 1 day a week.
- 77.1% spent 3 or more hours per day on screen time.

The State of Childhood Obesity report by the Robert Wood Johnson Foundation provides data on low-income children 2-4 years of age in the WIC Program. The 2020 average obesity rate for Maryland children 2-4 years was 17.0%. This is the 4th highest obesity rate in the United States. The 2020 obesity rate of 17.0% is an increase from 15.6% reported in 2016.

The National Survey of Children's Health (NSCH) provides data on youth aged 10-17. The 2021-2022 average obesity rate for Maryland children 10-17 years was 20.5%. This is the 9th highest obesity rate in the United States. This percentage is an increase from the 2018-2019 report where the obesity rate for Maryland children aged 10-17 was 17.6%.

Determinants of Health

Physical Activity:

A sedentary lifestyle increases the risk of obesity, heart disease, hypertension, diabetes, and other chronic diseases and conditions. The Healthy People 2030 objective recommends engaging in moderate physical activity for at least 150 minutes/week, or at least 75 minutes/week of vigorous intensity, for health benefits. Despite the benefits of physical activity, 2021 Maryland BRFSS data found that 74.8% of Charles County residents report leisure time physical activity. This is lower than the Maryland state average percentage of 78.8%.

| Leisure Time Physical Activity 2021 BRFSS | Yes, leisure time physical activity | No leisure time physical activity |
|--|--|--|
| Charles County | 74.8% | 25.2% |
| Maryland | 78.8% | 21.2% |

Source: 2021 Maryland BRFSS

High Cholesterol:

An indicator of poor nutrition is high cholesterol. The 2021 BRFSS found that an estimated 29.2% of Charles County residents and 33.5% of Marylanders have been told that their cholesterol is high.

Daily Fruit and Vegetable Consumption:

According to the 2021 BRFSS, 55.8% of Charles County residents reported consuming at least 1 fruit each day, and 78.1% of Charles County residents reported consuming at least 1 vegetable per day.

| Daily Fruit and Vegetable Consumption, 2021 BRFSS | Percent who consume at least 1 fruit per day | Percent who consume at least 1 vegetable per day |
|--|---|---|
| Charles County | 55.8% | 78.1% |
| Maryland | 62.5% | 80.4% |

Source: 2021 Maryland BRFSS

The 2020 Robert Wood Johnson Foundation's County Health Rankings calculate a food environment index based on factors that contribute to a good food environment. They calculate a score for each county with 0 being the worst and 10 being the best. For 2020, Charles County's food environment index was 8.3. This is a fairly strong score based on the fact that 5% of Charles County residents have limited access to healthy foods and 11% food insecurity in Charles County. It is below the Maryland average score of 9.0.

Additionally, the Robert Wood Johnson Foundation calculates the percentage of Charles County residents with access to exercise opportunities. In 2020, 77% of county residents had adequate access to exercise opportunities. This is below the Maryland state percentage of 93%.

Community Support:

2020 BRFSS collected data on various community support indicators. These indicators may influence health behaviors within a community. When asked if there are sidewalks in their neighborhood, 52.8% reported having sidewalks. Sidewalks in a community promote safe physical activity such as walking or running.

The 2020 BRFSS captured data on the safety and promotion of bicycling in Charles County. Residents were asked how many of the roads and streets in their neighborhood have shoulders or lanes that are marked for bicycling. 73.8% of Charles County residents reported no shoulders or lanes being marked for bicycling.

62.6% of Charles County residents described the lighting in their neighborhood as “poor” or “very poor” for walking at night. 34.4% of that percentage described the street lighting in their neighborhood as “very poor”.

| Walking at Night, 2020 BRFS | Percent |
|-----------------------------|---------|
| Very Good | * |
| Good | 25.1% |
| Poor | 28.2% |
| Very Poor | 34.4% |

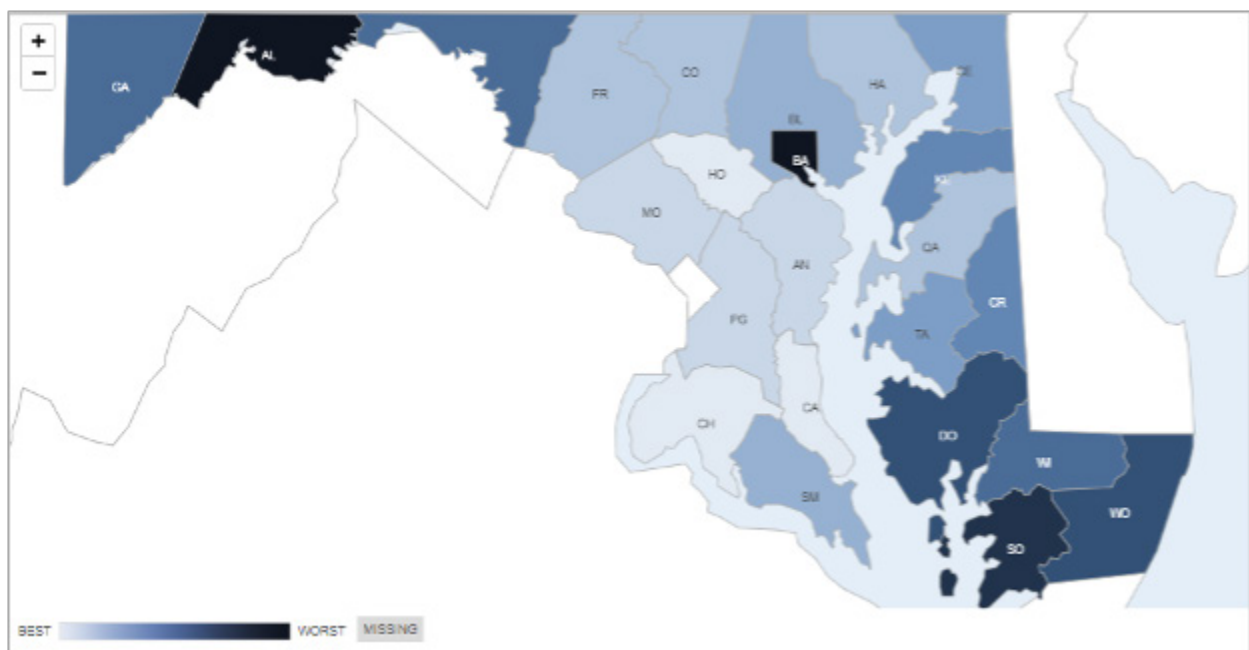
Source: 2020 Maryland BRFS
 *Estimate has been suppressed

In the past 30 days, 46.2% of Charles County adults reported not walking in their neighborhood for leisure or as a way to get to their destination. 29.7% of Charles County adults reported walking between 1-7 days in the past month around their neighborhood or to get to their destination.

When asked how often Charles County residents felt safe in their neighborhood, 63.5% said they felt safe all the time, and 33.4% reported feeling safe most of the time.

Food Insecurity

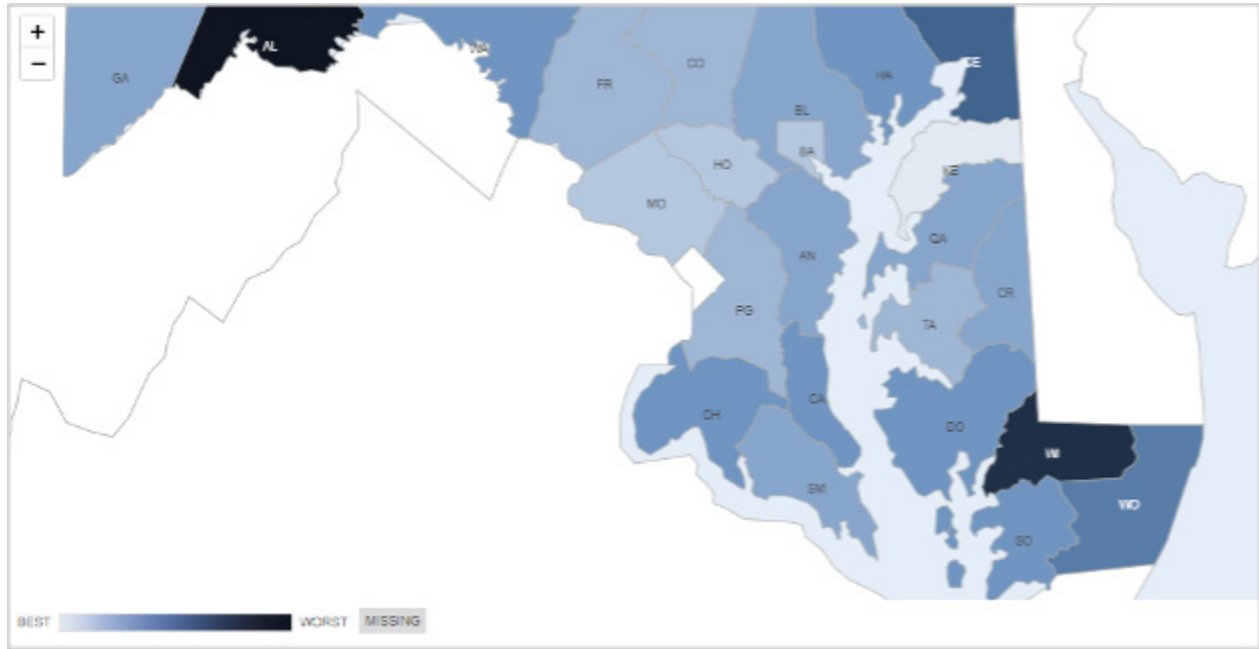
According to the 2020 Robert Wood Johnson Foundation’s County Health Rankings, in Charles County 7% of people did not have a reliable source of food in 2020. This is lower than the Maryland percentage of 9%, and the United States percentage of 12%. Charles County had one of the lowest percentages of food insecurity in the state of Maryland, tied with Calvert County and Howard County at 7%. Allegany County and Baltimore City had the highest percentage of food insecurity in the state of Maryland in 2020 at 16%.



Source: 2023 County Health Rankings

Limited Access to Healthy Foods

In 2019, 5% of people in Charles County had low incomes and did not live close to a grocery store, limiting their ability to access healthy foods. Charles County is higher than the Maryland percentage of 4%, but lower than the United States percentage of 6%.



Source: 2023 County Health Rankings

Youth Risk Behavior Survey- Food Insecurity

In 2021, 14.6% of Charles County High School students and 17.3% of Charles County Middle School students reported that their family was often or sometimes worried that their food money would run out before they got money to buy more. Among Charles County High School students, Asian students had the highest percentage of those who reported their family was often or sometimes worried food money would run out, at 19.2%, followed by Hispanic/Latino students at 16.5%. Among Charles County Middle School students, Hispanic/Latino students had the highest percentage of those who reported their family was often or sometimes worried food money would run out, at 23.0%.

| Percentage of students who reported that their family was often or sometimes worried that their food money would run out, 2021 | High School | Middle School |
|--|-------------|---------------|
| Total | | |
| Total | 14.6% | 17.3% |
| Race/Ethnicity | | |
| Asian | 19.2% | * |
| Black | 15.3% | 18.9% |
| Hispanic/Latino | 16.5% | 23.0% |
| Multiracial non-Hispanic | 12.7% | 19.0% |
| White | 9.5% | 10.1% |
| Sex | | |
| Female | 14.1% | 19.1% |
| Male | 14.8% | 15.3% |

**Middle School Asian population data not available*

In 2021, 11.5% of Charles County High School students and 15.8% of Charles County Middle School students reported that often or sometimes the food their family bought did not last and they did not have money to get more. The Charles County High School percentage is slightly lower than the Maryland percentage of 12.2%, and Charles County Middle School percentage is higher than the Maryland percentage of 13.0%. Hispanic/Latino High School students had the highest percentage of reported food not lasting at 15.9%, whereas Black Middle School students had the highest percentage of reported food not lasting at 18.8%.

| Percentage of students who reported that often or sometimes the food their family bought did not last and they did not have money to get more, 2021 | High School | Middle School |
|---|-------------|---------------|
| Total | | |
| Total | 11.5% | 15.8% |
| Race/Ethnicity | | |
| Asian | 4.6% | * |
| Black | 12.5% | 18.8% |
| Hispanic/Latino | 15.9% | 14.6% |
| Multiracial non-Hispanic | 13.0% | 15.2% |
| White | 6.8% | 10.8% |
| Sex | | |
| Female | 10.8% | 15.5% |
| Male | 11.6% | 16.5% |

**Middle School Asian population data not available*

Community Health Needs Assessment

Long Survey Data

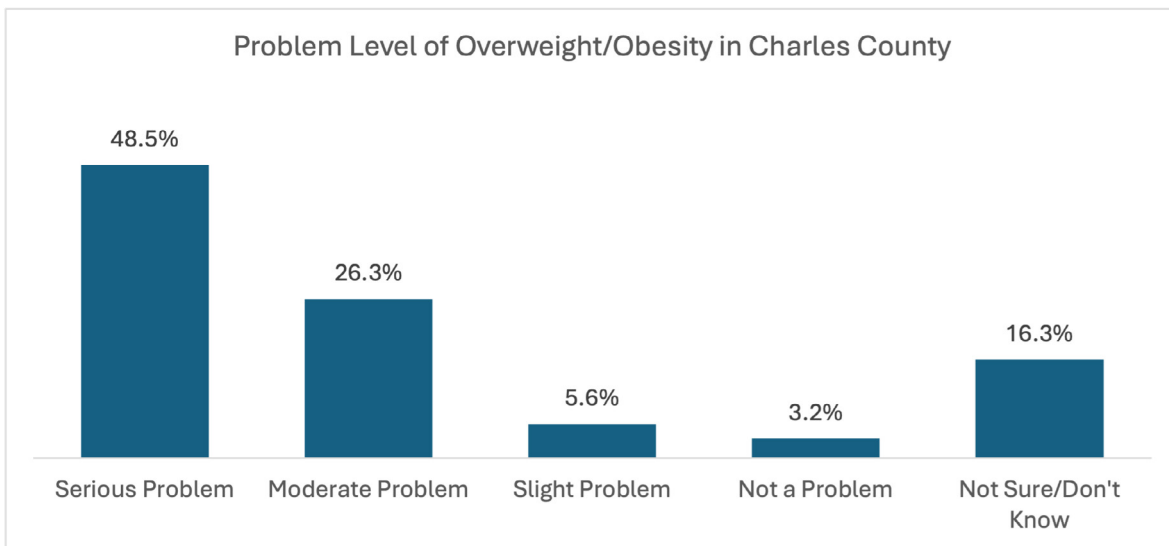
40.9% of survey respondents reported sometimes eating 5 or more servings of fruits and vegetables each day. Almost 20% responded that they rarely eat 5 or more servings of fruits and vegetables each day.

35.9% of survey respondents reported that they sometimes eat fast food more than once a week, and 34.3% reported that they rarely eat fast food more than once a week. 11.5% of survey respondents reported that they eat fast food more than once a week most of the time.

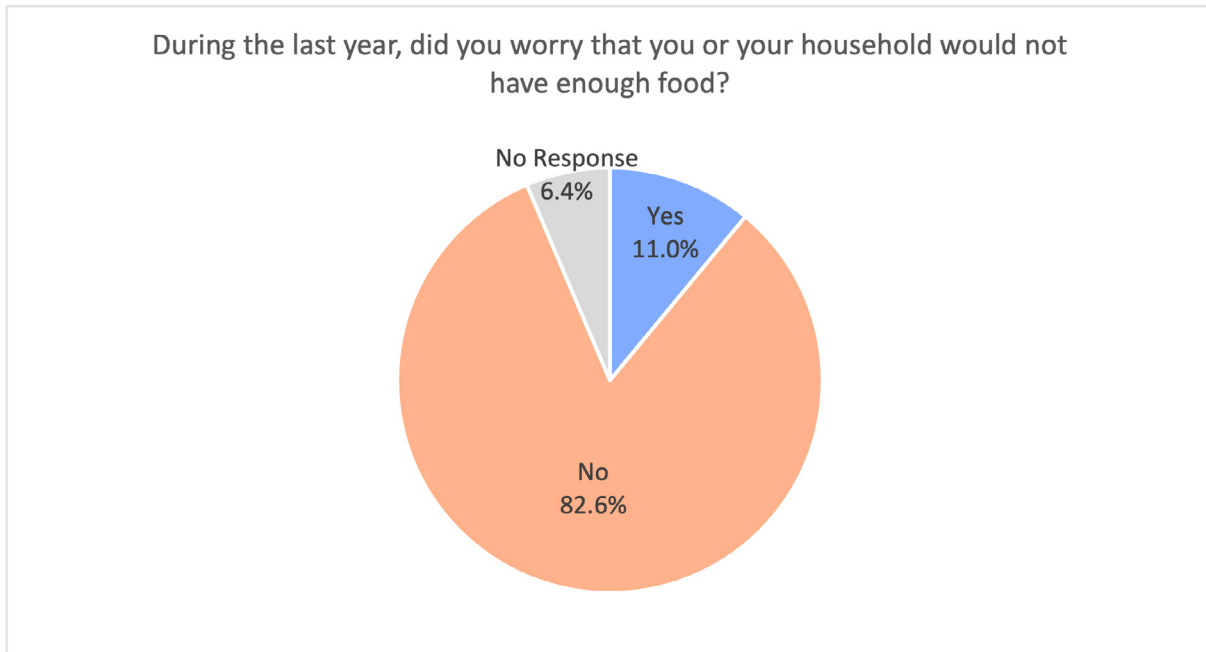
16.2% of survey respondents reported that they always participate in 30 minutes of physical activity each day. 30.6% reported that they participate in 30 minutes of physical activity each day most of the time. Only 3.5% reported that they never participate in 30 minutes of physical activity each day.

| Risk and Behavioral Factors | Always | Most of the time | Sometimes | Rarely | Never | Not applicable |
|--|--------|------------------|-----------|--------|-------|----------------|
| Eat 5 or more servings of fruits and vegetables each day? | 8.5% | 25.9% | 40.9% | 19.7% | 4.7% | 0.3% |
| Eat fast food more than once a week? | 6.9% | 11.5% | 35.9% | 34.3% | 9.9% | 1.5% |
| Participate in 30 minutes of physical activity each day? | 16.2% | 30.6% | 35.5% | 13.5% | 3.5% | 0.6% |

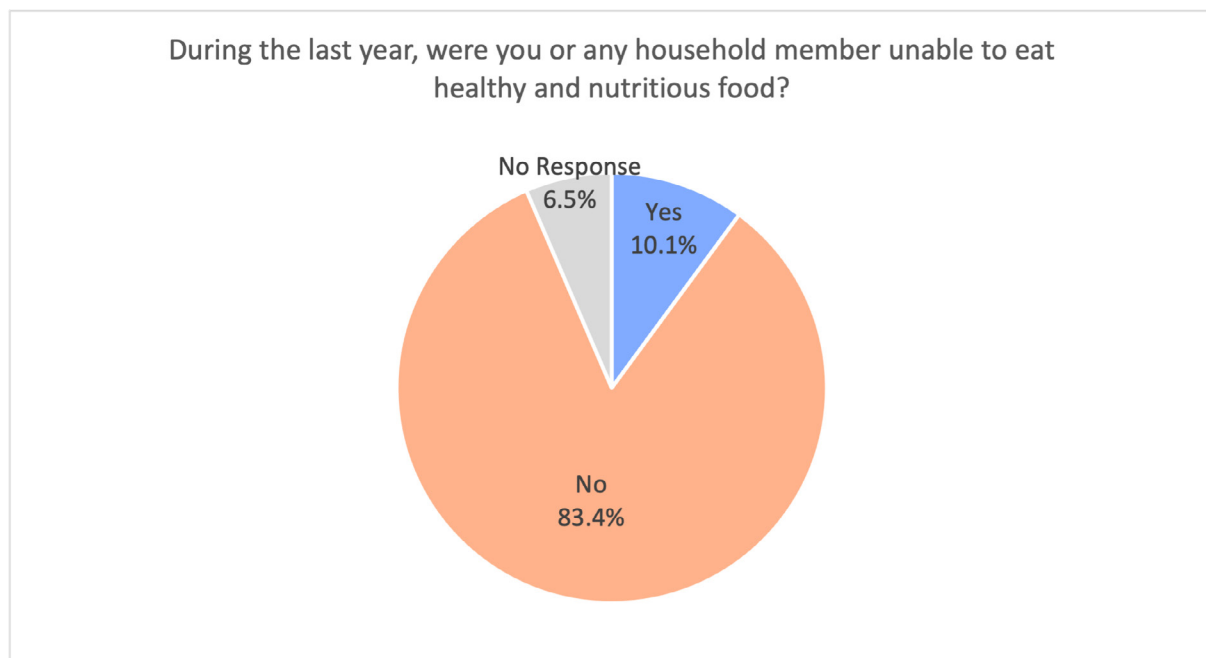
Almost half of survey respondents felt that overweight and obesity was a serious problem in Charles County (48.5%), and only 3.2% felt that overweight and obesity was not a problem in Charles County.



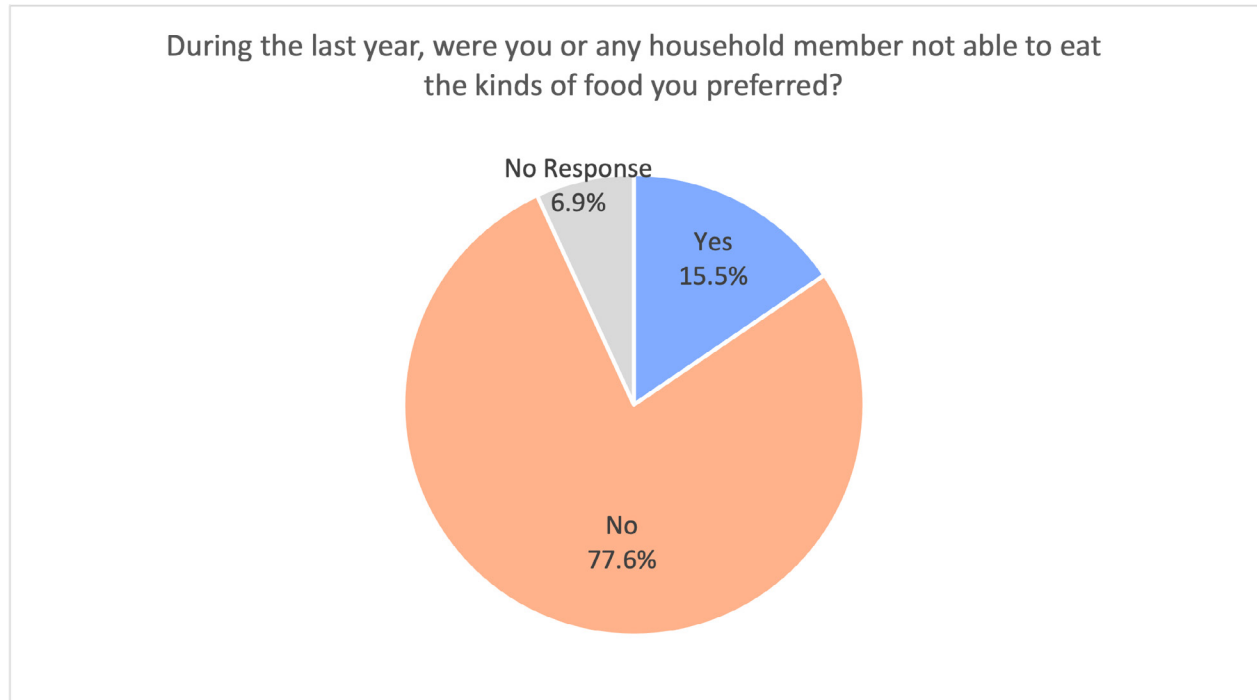
Survey respondents were asked questions related to food insecurity. These questions were designed to understand the community needs and concerns around food and obtaining food. Almost 83% of survey respondents reported not worrying about food for themselves or their household in the last year. However, 11% of survey respondents did worry about having enough food in the last year.



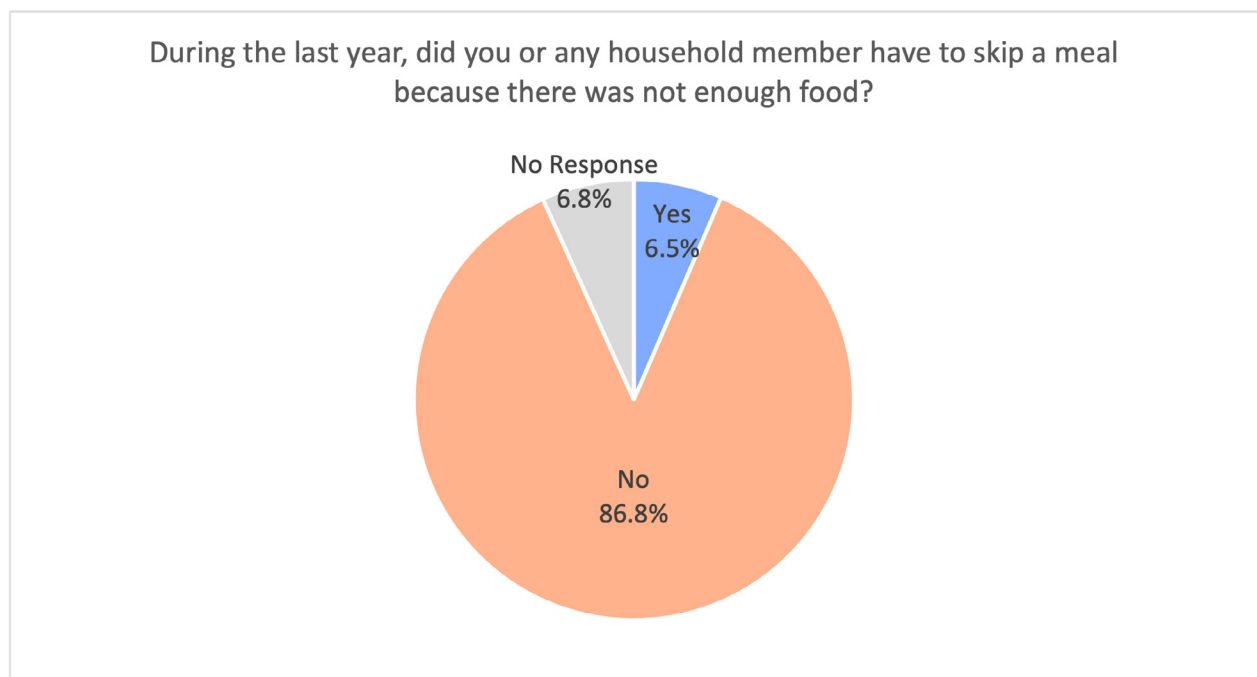
A very similar percentage of survey respondents also reported not being able to eat healthy and nutritious food in the last year (10.1%).



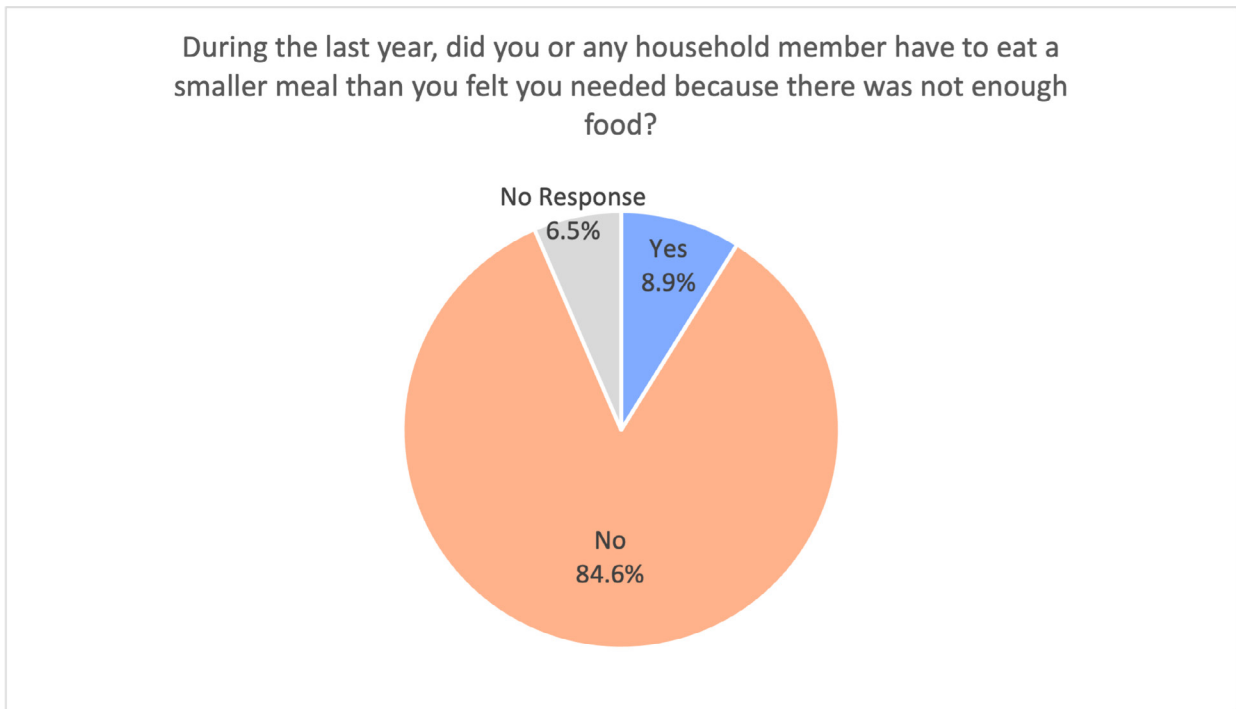
A larger percentage of survey respondents reporting not being able to eat the kinds of food they preferred in the last year, at 15.5%.



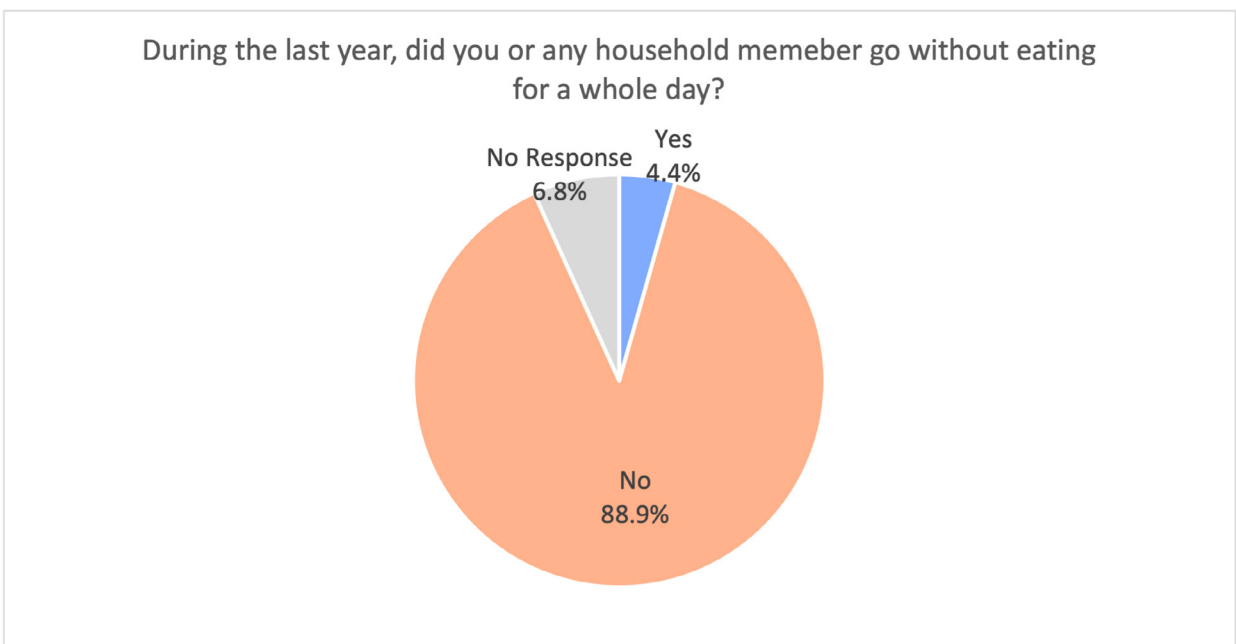
Over 86% of survey participants reported that they or a household member did not have to skip a meal because there was not enough food in the last year. 6.5% of respondents did report that they or a household member had to skip a meal in the last year.



Similarly, almost 85% of respondents reported that in the last year they or a household member did not have to eat a smaller meal than they felt they needed because there was not enough food. Almost 9% of survey respondents reported “Yes” to this question.



Almost 89% of survey respondents reported that in the last year they or a household member did not go without eating for a whole day. 4.4% of respondents reported that either they or a household member did go a whole day without eating in the last year.



Short Survey Data

When asked to identify the biggest health problems in Charles County, Overweight/Obesity was a common response among short survey respondents. 46.9% of respondents felt that Overweight/Obesity was the biggest health problem in Charles County. This was the second most commonly cited health problem among short survey respondents, behind Diabetes.

Short survey respondents were also asked if there are sufficient services or resources for Overweight/Obesity in Charles County. Of those who responded to the question, 36.3% felt that there are some Overweight/Obesity services available in Charles County. This was the highest percentage among survey respondents. 17% felt that there are many Overweight/Obesity services available, and 7.3% felt that there are no Overweight/Obesity services available in the county. 39.4% of respondents did not know if there were Overweight/Obesity services in Charles County.

When asked if there were sufficient services or resources around access to food and nutritious meals, 42.8% of short survey respondents believed there were some services available in Charles County. This was the highest percentage among survey respondents. Almost one quarter of respondents believed there were many services available for access to food and nutritious meals, at 23.5%. Only 4.5% of respondents believe there were no services available, and 29.1% did not know.

| | No Services Available | Some Services Available | Many Services Available | I don't know |
|--|------------------------------|--------------------------------|--------------------------------|---------------------|
| Overweight/Obesity | 7.3% | 36.3% | 17.0% | 39.4% |
| Access to food and nutritious meals | 4.5% | 42.8% | 23.5% | 29.1% |

**Percentages based on those who answered the question. Blanks are not included in the denominator.*

Focus Groups

Amongst the focus groups conducted for this year's needs assessment, participants agreed that Obesity was one of the health conditions most affecting Charles County. Obesity was the second most common response among focus groups members, behind Behavioral Health. In past need's assessments, Obesity was also a common response among focus groups.

Barriers and gaps associated with Obesity were expressed in the focus groups. Transportation was a common barrier that focus group members felt impacted active lifestyles for school-aged children. Participants stated that children need to be involved in more activities, but transportation becomes a barrier to those activities. Whether it's the lack of after school activity buses or the inability of parents to get their children to after school activities, the lack of transportation has limited the access of physical activity opportunities for kids after school. The increase in screen time among children was also mentioned. When there are no activities for children to participate in after school, they fall back to screen time for entertainment.

Other barriers that were identified in the focus groups related to Obesity were food deserts within the county and the need for more healthy food options, and the lack of physical activity.

Focus group participants were also asked to identify any strengths in the community. Many

strengths relating to Obesity were mentioned. Strengths such as food pantries, school meal programs, and farmer’s markets accepting SNAP were mentioned among focus group members. They believed all these programs were providing healthy food options for community members and targeting those who may have limited access to resources for healthy food.

Lastly, focus group participants were asked to provide any key changes the community could implement to improve health. Some key changes that were mentioned in the focus groups were adding more back to basics classes, including cooking classes and knife skills classes, and starting more classes in Nanjemoy, Swan Point, Cobb Island, and the libraries. Back to basics classes would help educate the community on how to make basic recipes with healthy ingredients, and help individuals learn their way around a kitchen. This would promote cooking at home and healthy eating, as opposed to eating fast food or take out.

Overweight and Obesity References

1. 2011- 2021 Maryland BRFSS accessed at ibis.health.maryland.gov on March 1, 2024.
2. 2021-2022 Maryland YRBS/YTS accessed at ibis.health.maryland.gov on March 1, 2024.
3. 2020 2-4-year-old and 2021-22 10-17-year-old Maryland Obesity Estimates. The State of Obesity Report. The Robert Wood Johnson Foundation. Available at: <https://stateofchildhoodobesity.org/state-data/?state=md>
4. 2020 Maryland BRFSS or Maryland YRBS/YTS accessed at ibis.health.maryland.gov on March 4, 2024.
5. 2023 Charles County and Maryland Food Environment Indexes. Robert Wood Johnson Foundation’s County Health Rankings. Available at: <https://www.countyhealthrankings.org/app/maryland/2020/measure/factors/133/map>.
6. 2023 Charles County and Maryland Access to Exercise Opportunities Percentages. Robert Wood Johnson Foundation’s County Health Rankings. Available at: <https://www.countyhealthrankings.org/app/maryland/2020/measure/factors/132/map>.
7. 2023 Charles County and Maryland Food Insecurity Percentages. Robert Wood Johnson Foundation’s County Health Rankings. Available at: <https://www.countyhealthrankings.org/explore-health-rankings/county-health-rankings-model/health-factors/health-behaviors/diet-and-exercise/food-insecurity?state=24&year=2023#map-anchor>
8. 2023 Charles County and Maryland Limited Access to Health Foods. Robert Wood Johnson Foundation’s County Health Rankings. Available at: <https://www.countyhealthrankings.org/explore-health-rankings/county-health-rankings-model/health-factors/health-behaviors/diet-and-exercise/limited-access-to-healthy-foods?state=24&year=2023&tab=1>

Charles County Aging Population Health Statistics:

Life Expectancy

The 2019-2021 average life expectancy at birth for a Charles County resident was 77.2 years. This is below the Maryland average life expectancy at 78.2 years. Charles County Non-Hispanic Whites have a higher life expectancy at 77.0 years, compared to Non-Hispanic Blacks at 75.8 years.

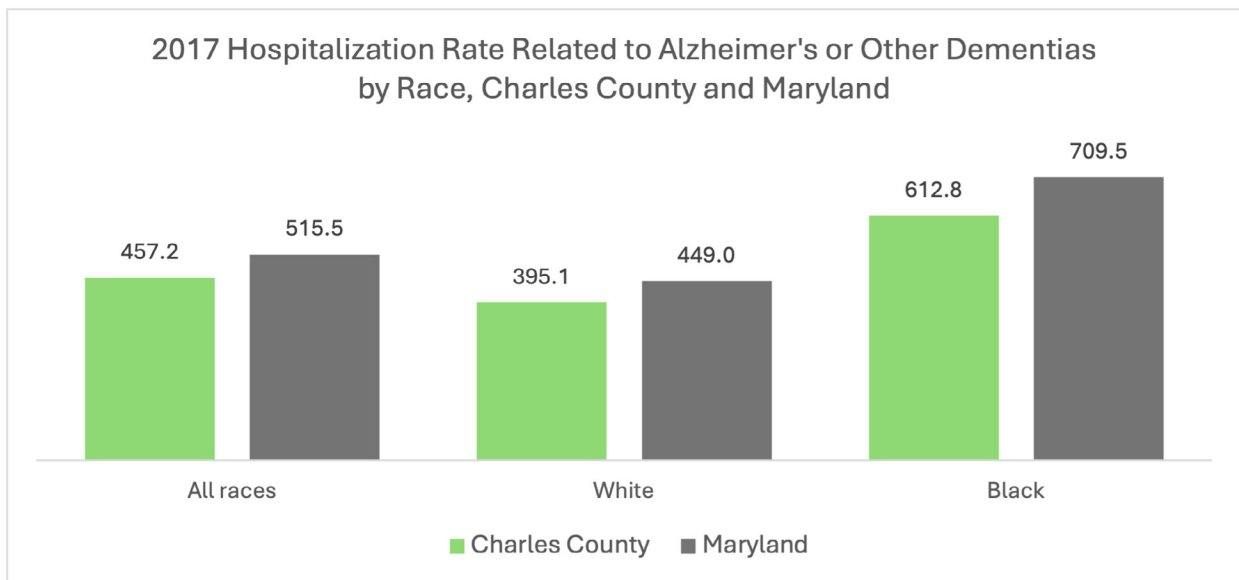
Alzheimer's Disease

In 2021, there were a total of 1,130 Alzheimer's Disease deaths reported in Maryland. About 71% of deaths were among females and 29% were among males. The 2021 Maryland Alzheimer's Disease crude death rate was 18.3 per 100,000. The female crude death rate was higher than males at 25.5 per 100,000 compared to 10.8 per 100,000. In 2021, Alzheimer's Disease was the 8th leading cause of death across all age groups in the state of Maryland.

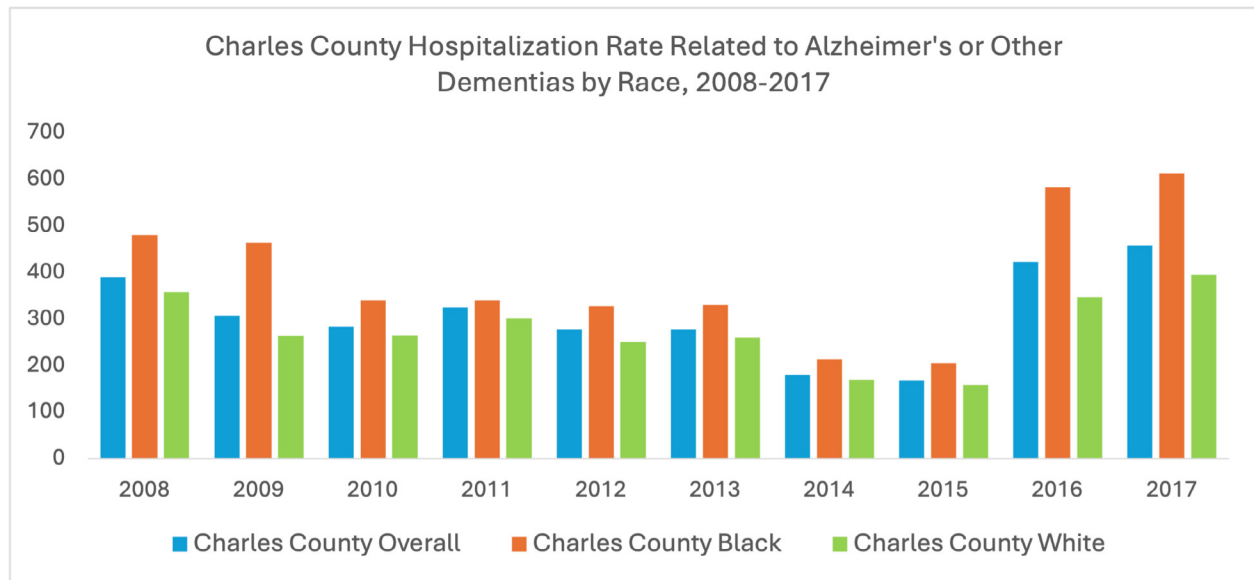
In 2021, Charles County had a total of 10 Alzheimer's Disease deaths. This was 27% of the total Alzheimer's Disease deaths reported in the Southern Area of Maryland in 2021. The Southern Area of Maryland (Calvert County, Charles County, and St. Mary's County) had a total of 37 Alzheimer's Disease deaths in 2021. The Southern Area of Maryland had an Alzheimer's crude death rate of 9.8 per 100,000 in 2021. This was below the Maryland crude death rate of 18.3 per 100,000.

Hospitalization Rate Related to Alzheimer's or Other Dementias

In 2017, the Charles County hospitalization rate for Alzheimer's disease and other dementias was 457.2 per 100,000. This is slightly below the Maryland state average rate of 515.5 per 100,000. The Charles County rates are lower than the state overall, for African Americans, and for Whites. Racial disparities are seen on a county level where Charles County African Americans have a higher Alzheimer's disease hospitalization rate than Charles County Whites (612.8 vs. 395.1).



When looking at trends in the hospitalization rates from 2008 to 2017, increases can be seen in the last 2 years of data for Charles County Overall, for Charles County African Americans, and Charles County Whites. The disparity in rates between African Americans and Whites appears to be widening.



Arthritis

As of 2021, 25.6% of Charles County adults had been diagnosed with arthritis. This is above the Maryland percentage of 23.6% of adults. Of those adults who are currently living with arthritis, 48.0% reported that they are limited in their usual activities. Further questions were asked to determine the level of pain adults with diagnosed arthritis were living with. The largest percentage of adults rated their pain between 4 to 6, at 39.5%. 13.8% of adults reported their pain a 7 to 8. All other levels of pain were suppressed due to low numbers. Lastly, 65.4% of Charles County adults living with arthritis in 2021 reported that their doctor or other health professional has suggested physical activity or exercise to help with their arthritis or joint pain.

Chronic Kidney Disease

The CDC estimates that more than 1 in 7 U.S. adults, or 14%, have chronic kidney disease. In 2021, 2.3% of Charles County adults reported having doctor diagnosed kidney disease. This is slightly lower than the Maryland percentage of 2.6%. Compared to other Maryland counties, Charles County falls in the middle, with the highest percentage of chronic kidney disease in the state at 4.7% in Allegany County and the lowest percentage at 1.4% in Worcester County.

Disability and Health Impairment

In 2021, almost 20% of Charles County adults reported having one or more disabilities, including hearing disability. This is lower than the Maryland percentage of 22.5%. Among Charles County adults, 10.6% reported having a cognitive disability. This was the highest percentage among all the disabilities presented in the 2021 BRFSS. The Charles County percentage is just slightly above the Maryland percentage of 10.0%. The second highest percentage among Charles County adults was mobility disability at 7.9%.

| 2021 BRFSS Disability and Health Impairment, Charles County and Maryland | Charles County | Maryland |
|---|-----------------------|-----------------|
| One or more disability | 19.9% | 22.5% |
| Vision Disability | 4.5% | 4.1% |
| Cognitive Disability | 10.6% | 10.0% |
| Mobility Disability | 7.9% | 9.5% |
| Self-Care Disability | * | 2.5% |
| Independent Living Disability | 4.6% | 5.1% |
| Hearing Disability | 3.4% | 4.5% |

**Estimate has been suppressed*

Chronic Lower Respiratory Disease

Mortality

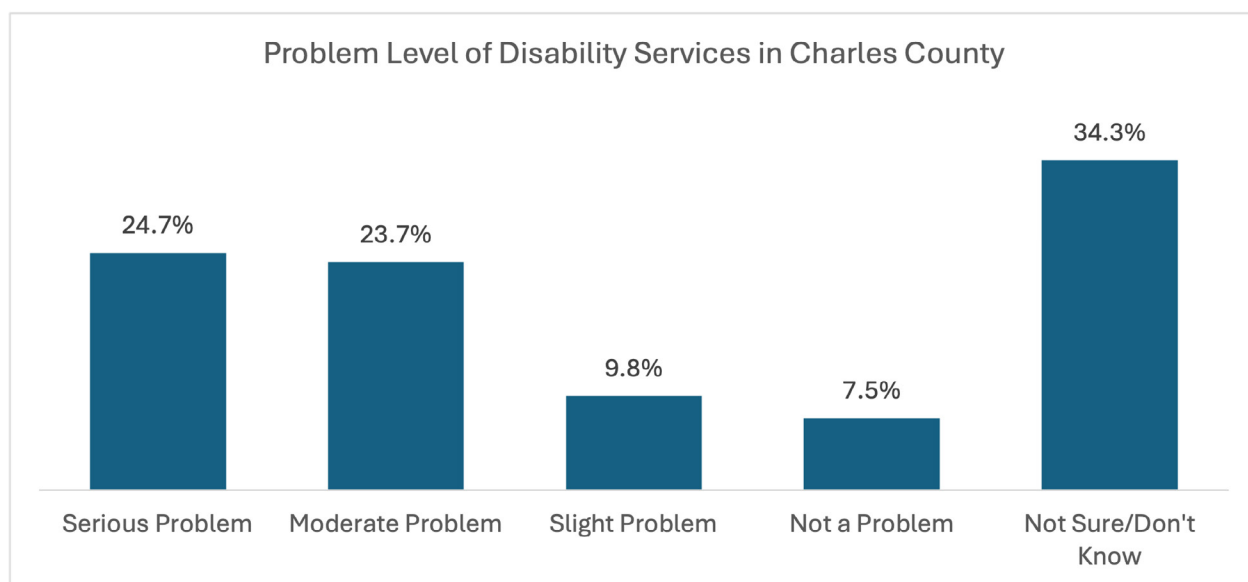
In 2021, there were a total of 1,813 deaths from chronic lower respiratory disease in Maryland. About 85% of these deaths were aged 65 years or older. Chronic lower respiratory disease was the 6th leading cause of death in Maryland in 2021. The 2021 age-adjusted death rate for chronic lower respiratory disease was 23.8 per 100,000 across all races.

In Charles County, there were a total of 44 deaths from chronic lower respiratory disease in 2021. The age-adjusted death rate for Charles County was 26.0 per 100,000, which is higher than the Maryland age-adjusted death rate of 23.8 per 100,000.

Community Health Needs Assessment

Long Survey Data

When asked to rate the problem level of Disability Services in Charles County, many survey respondents were not sure or did not know (34.3%). This could mean that community members are not aware of the various disability services offered in Charles County. Almost a quarter of survey respondents believed Disability Services was a serious problem in Charles County (24.7%), and 23.7% believed Disability Services was a moderate problem in Charles County. 7.5% of survey respondents believed that Disability Services was not a problem in the county.



Focus Groups

The senior population of Charles County was a popular topic amongst focus group participants. Many believed a key change that could be implemented in the county was to put more focus on the senior population. Participants mentioned that seniors want to be more active and that there is a need for more fitness activities for the senior population, including giving them better access to the pools. Senior isolation was also brought up in the focus group, and participants believe there needs to be more resources for those seniors who live in isolation, either by choice or by circumstance.

Another key change that was discussed was establishing a contractor in Charles County that can help the senior population with home repairs. The goal of this program is to help people age in their homes and keep their independence and mental health.

Lastly, focus group members mentioned the importance of medication adherence and understanding amongst the senior population. Sometimes older individuals do not understand how to take their medication and they can make mistakes on dosage timing and amounts. Having a support system, either a health professional or family member, assisting with their medications could make a difference.

The topic of chronic kidney disease in Charles County was also discussed in the focus group. Focus group members mentioned that there is a need for dialysis in Charles County. Currently, there is only 1 skilled nursing facility (Formerly Sagepoint now available at Green Acres) that can provide dialysis, and there are no other services in Charles County for chronic kidney failure. Focus group participants also mentioned that dialysis is only available at the hospital for acute inpatients, but not chronic patients. Lastly, it was discussed that there needs to be more education on the signs and symptoms of chronic kidney disease before it progresses to end-stage renal disease (ESRD), and more overall kidney disease prevention.

Aging Resources

1. 2021 Maryland Vital Statistics Annual Report Accessed at <https://health.maryland.gov/vsa/Pages/reports.aspx>
2. 2008-2017 and 2017 Charles County Alzheimer’s disease and other dementia hospitalization rates. Maryland Health Services Cost Review Commission. Accessed at https://opendata.maryland.gov/Health-and-Human-Services/Hospitalization-Rate-Related-To-Alzheimer-s-Or-Oth/bp3u-42uv/about_data
3. 2021 Maryland BRFSS accessed at <ibis.health.maryland.gov> on March 6, 2024.
4. Chronic Kidney Disease Initiative. Centers for Disease Control and Prevention. Accessed at <https://www.cdc.gov/kidneydisease/basics.html>

Injury and Violence Statistics:

Injury-Related Mortality

There are various deaths recorded in the Maryland Vital Statistics Report related to accidental and intentional injuries. Accidents were the fourth leading cause of death in Charles County and the number one cause of death in individuals under the age of 24 years. In 2021, there were 70 deaths in Charles County and 3,071 deaths in Maryland due to accidents. 24 of the Charles County accident deaths were due to motor vehicle accidents. There were also 46 deaths due to other accidents, 19 deaths due to intentional self-harm or suicide and 11 homicides.

The 2021 Charles County crude accident death rate was 41.5 per 100,000. This is below the Maryland state rate of 49.7 per 100,000. However, Charles County has seen an increase in the accident rate from 31.0 in 2018 to 41.5 in 2021.

The 2021 age-adjusted Charles County accident death rate was 40.6 per 100,000 compared to 45.1 for the state of Maryland.

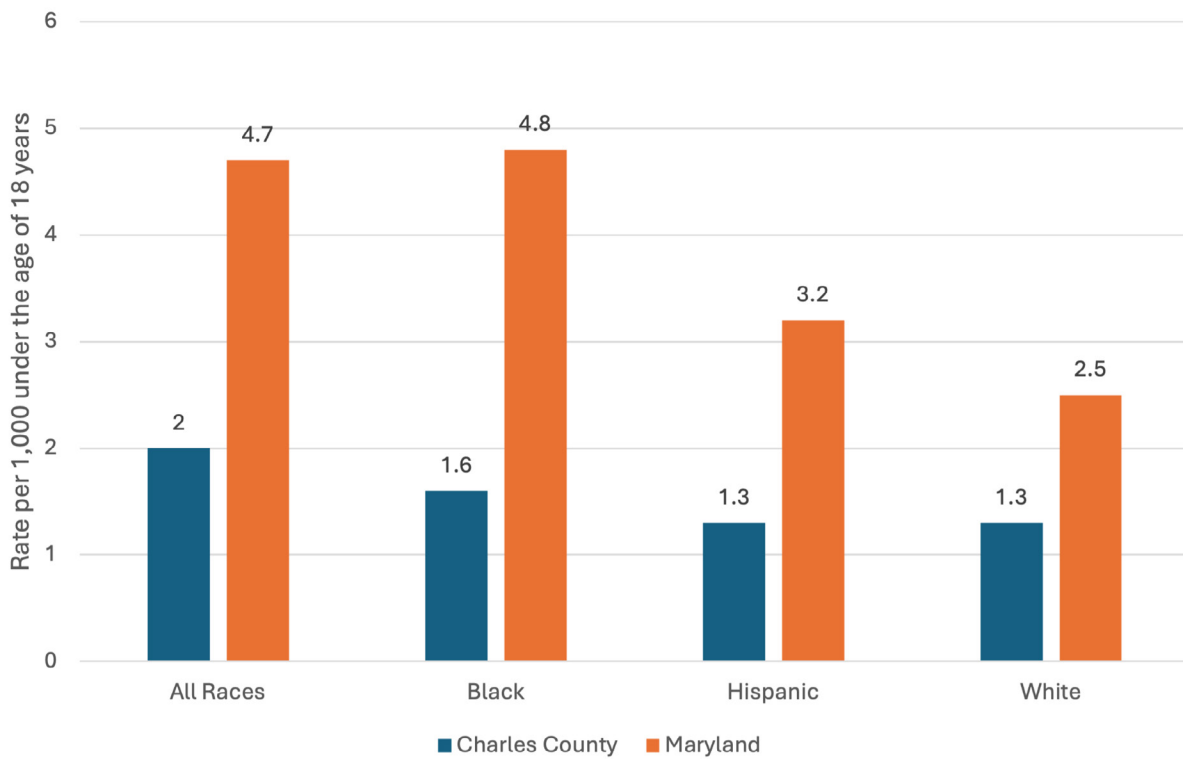
When looking at Charles County violent deaths among adolescents aged 10-19 years, there were 2 violent deaths in 2021. One was classified as an accident. The other was due to Assault/Homicide. No violent adolescent deaths were reported as intentional self-harm or suicide. Both violent deaths occurred among individuals who were Non-Hispanic Black.

Injury-Related Morbidity

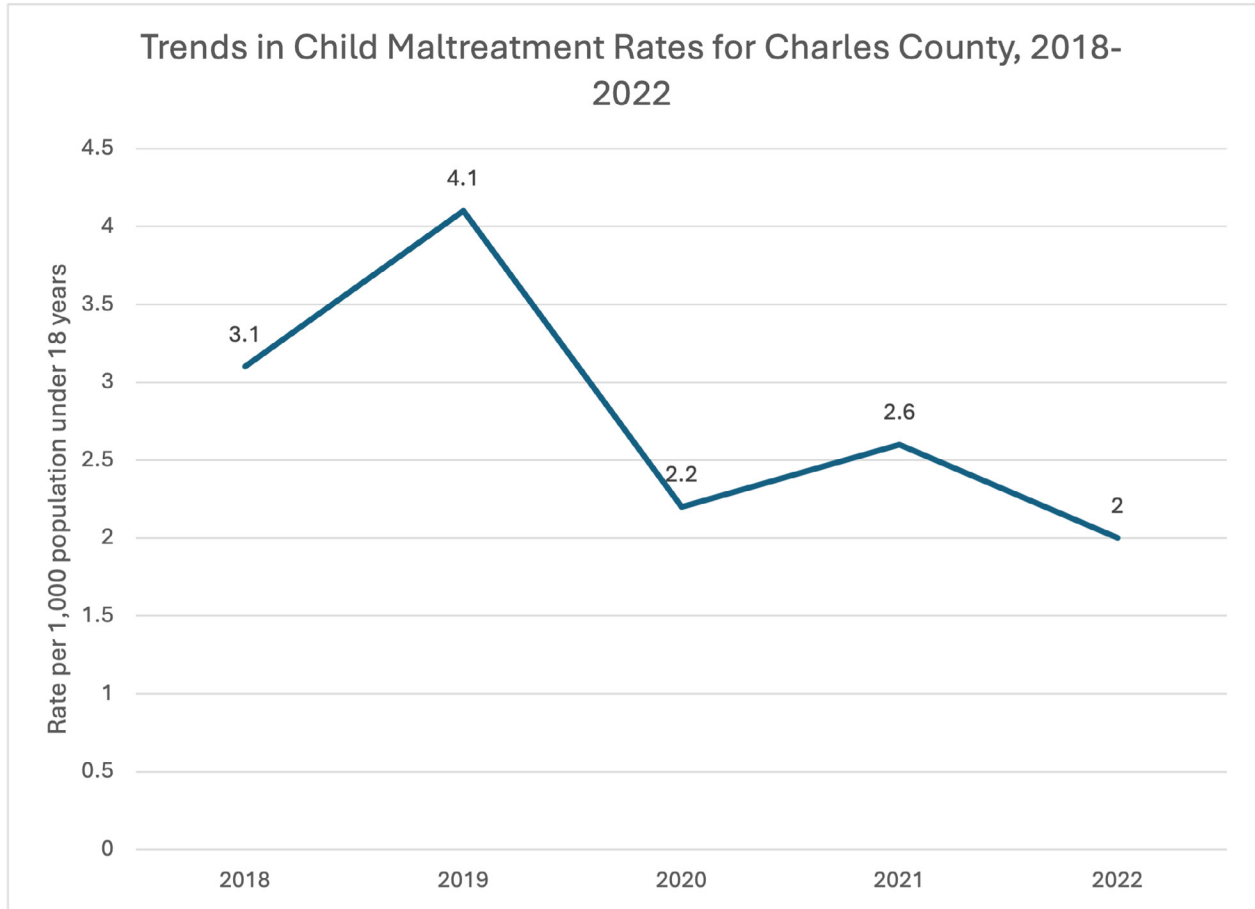
Child Maltreatment:

This indicator shows the rate of children who are maltreated per 1,000 population under the age of 18. Child abuse or neglect can result in physical harm, developmental delays, behavioral problems, or death. Abused and neglected children are at greater risk than other children for delinquency and mistreatment of their own children. The 2022 Charles County rate of children who were maltreated per 1,000 population was 2.0. This is below the Maryland state average rate of 4.7 per 1,000 population under the age of 18 years.

2022 Charles County Child Maltreatment Rates per 1,000 population under 18 years by Race



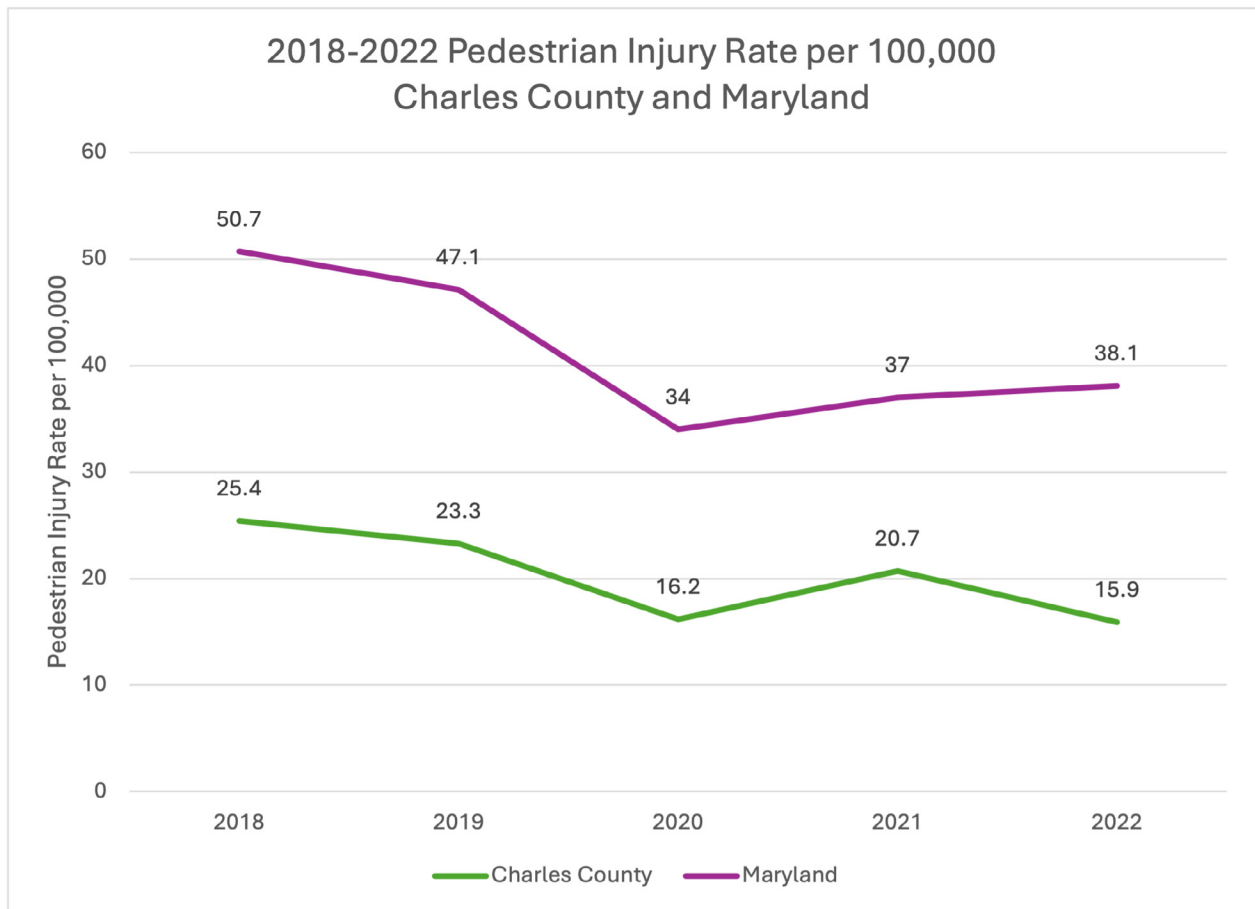
Looking at the trends in the Charles County child maltreatment rate, there has been a lot of fluctuation in the last 5 years; however, it does appear to be on the decline.



Pedestrian Injury Rate:

This indicator shows the rate of pedestrian injuries on public roads per 100,000 population. Maintaining pedestrian safety is a key element in preventing motor vehicle injuries and fatalities. Children are especially at risk for pedestrian injuries and fatalities.

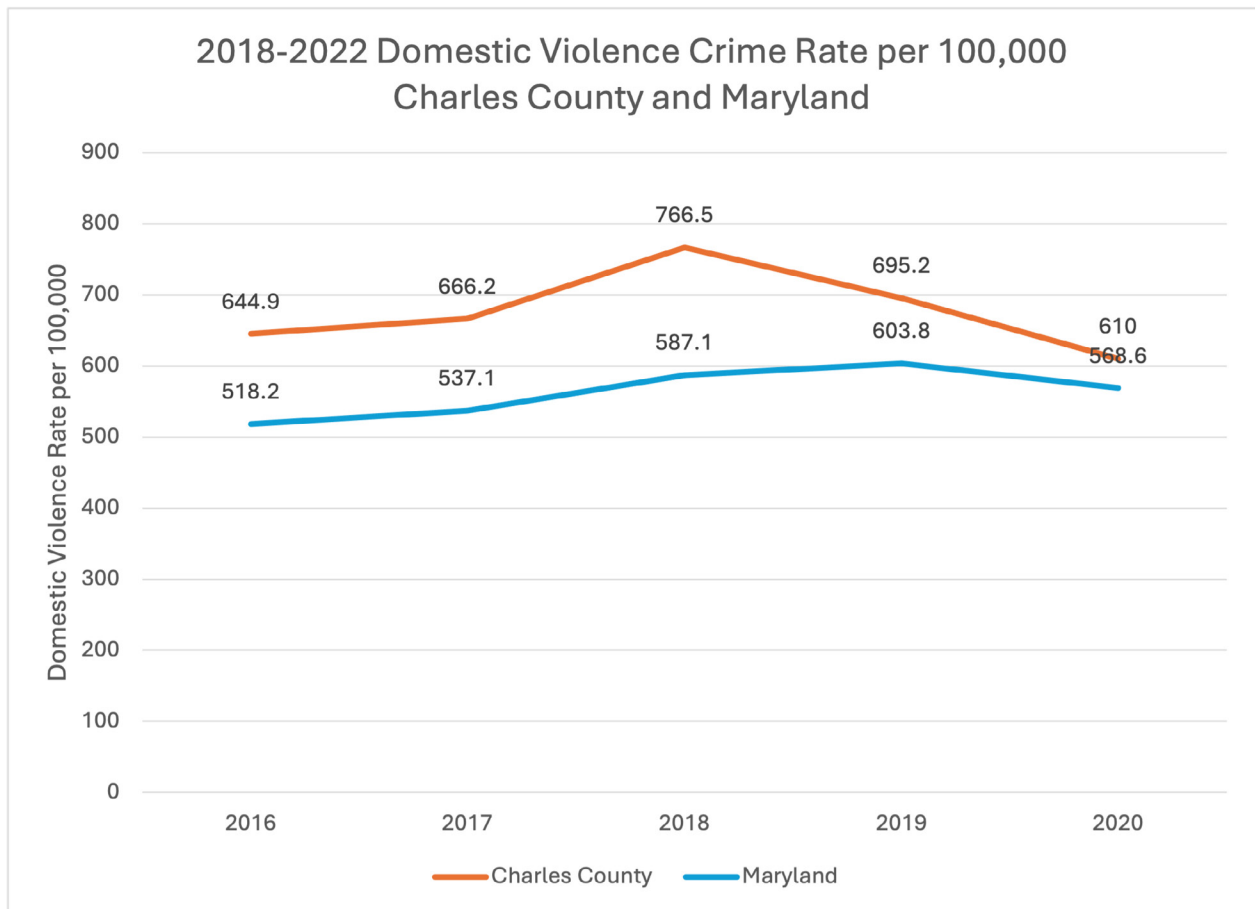
The 2022 Charles County pedestrian injury rate on public roads was 15.9 per 100,000. This is significantly lower than the Maryland state average rate of 38.1 per 100,000.



Domestic Violence:

Domestic violence contributes greatly to the morbidity and mortality of Maryland citizens. Up to 40% of violent juvenile offenders witnessed domestic violence in the homes, and 63% of homeless women and children have been victims of intimate partner violence as adults.

Charles County has consistently had a higher rate of domestic violence crimes than Maryland as whole. The 2020 Charles County domestic violence rate was 610 per 100,000 population. This is higher than the Maryland state rate of 568.6. Looking at trends, the rate of domestic violence crimes has been on the decline for Charles County.



Brain Injury:

The 2021 Maryland BRFSS asked, “In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example, falling from a bike or horse, rollerblading, falling on ice, being hit by a rock, playing sports, or on the playground)?” 29.6% of Charles County respondents reported Yes. This is similar to the Maryland percentage of 28.5%.

An additional question asked about possible brain injury. Respondents were asked if they had ever experienced multiple blows to the head. 12.3% of Charles County respondents reported Yes. This is higher than the state percentage of 8.3%.

26.7% of Charles County BRFSS respondents reported that they have been hospitalized in their lifetime for a head or neck injury. The Maryland state percentage was 29.7%.

Fall Prevalence:

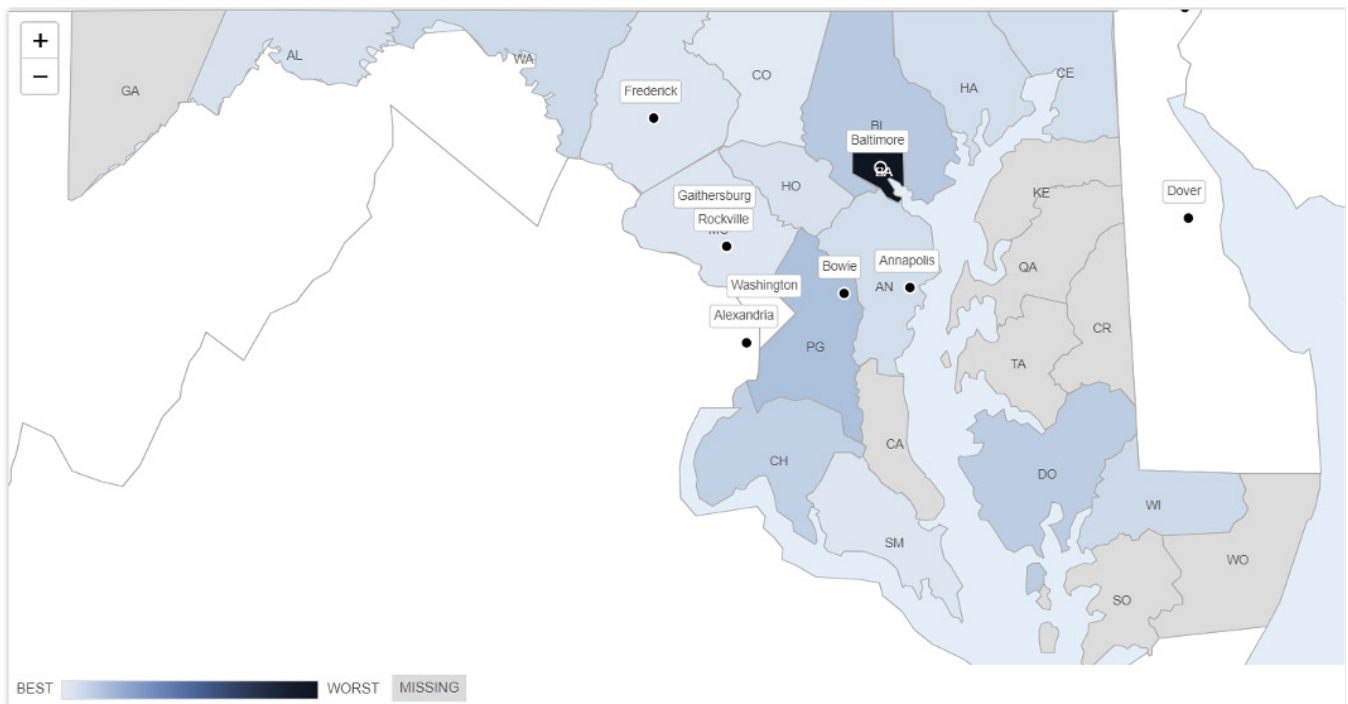
The 2020 BRFSS asked respondents if they have fallen in the last 12 months. 21.7% of Charles County respondents reported that they have fallen in the last 12 months. This percentage is identical to the Maryland state level percentage for this question.

They were also asked if the fall resulted in an injury. 78.3% of Charles County respondents reported that they had not had a fall in the last year. 16.4% reported that they had fallen, but they were not injured. 5.3% reported that they had been injured by 1 or more falls in the last year.

Homicides:

From 2014-2020, the average homicide rate in Charles County was 7 per 100,000 people. The Charles County rate is below the state rate of 9 per 100,000 people. Charles County and Maryland are above the US rate of 6 per 100,000.

In Maryland, the highest homicide rate was seen in Baltimore City.



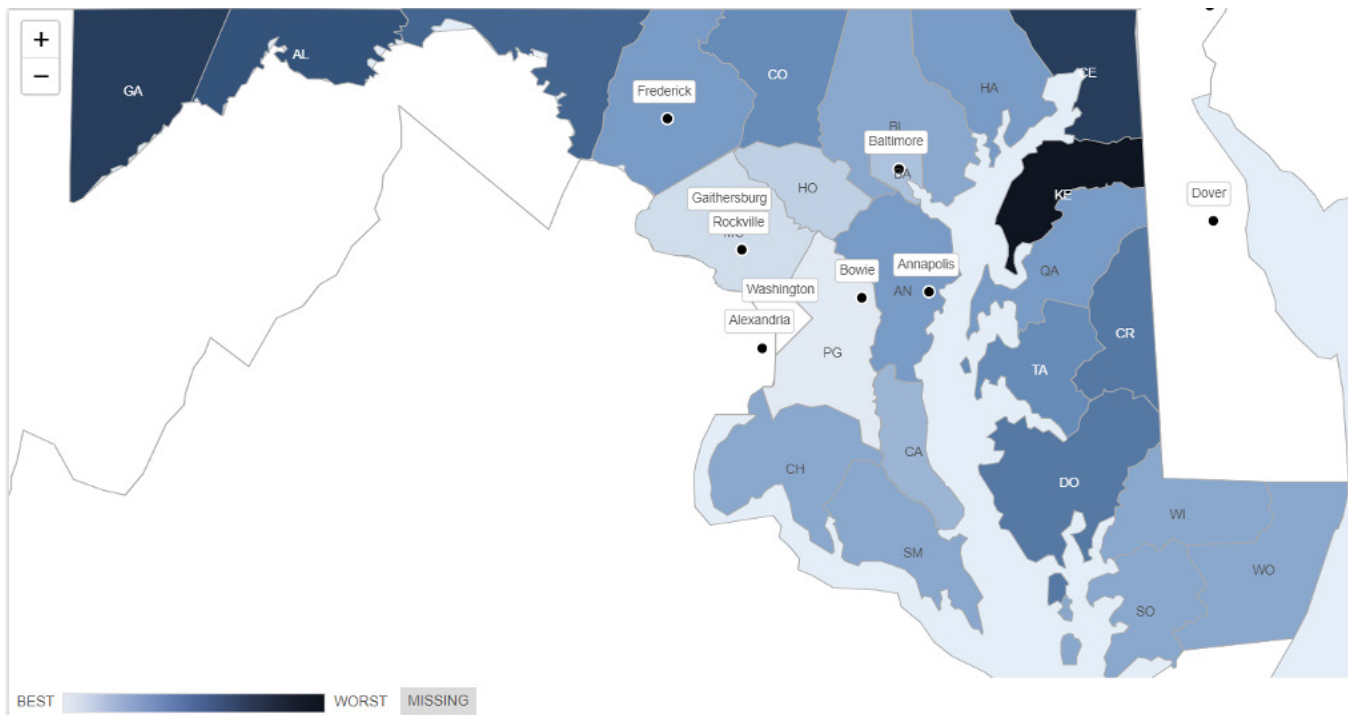
When examining rates by race, there is a clear disparity between Charles County Blacks and Charles County Whites. The homicide rate among Charles County Blacks was 12 per 100,000 compared to 3 for Charles County Whites. All other race data was suppressed due to small sample sizes.

Suicides:

The 2016-2020 age-adjusted suicide rate in Charles County was 11 per 100,000 people. The Charles County rate is slightly higher than the Maryland rate of 10 but below the national rate of 14 per 100,000.

When analyzing the suicide rate by race, Charles County Whites have a higher suicide rate than Charles County Blacks (15 vs. 4).

In Maryland, the highest suicide rates were in Kent, Cecil, and Garrett Counties.

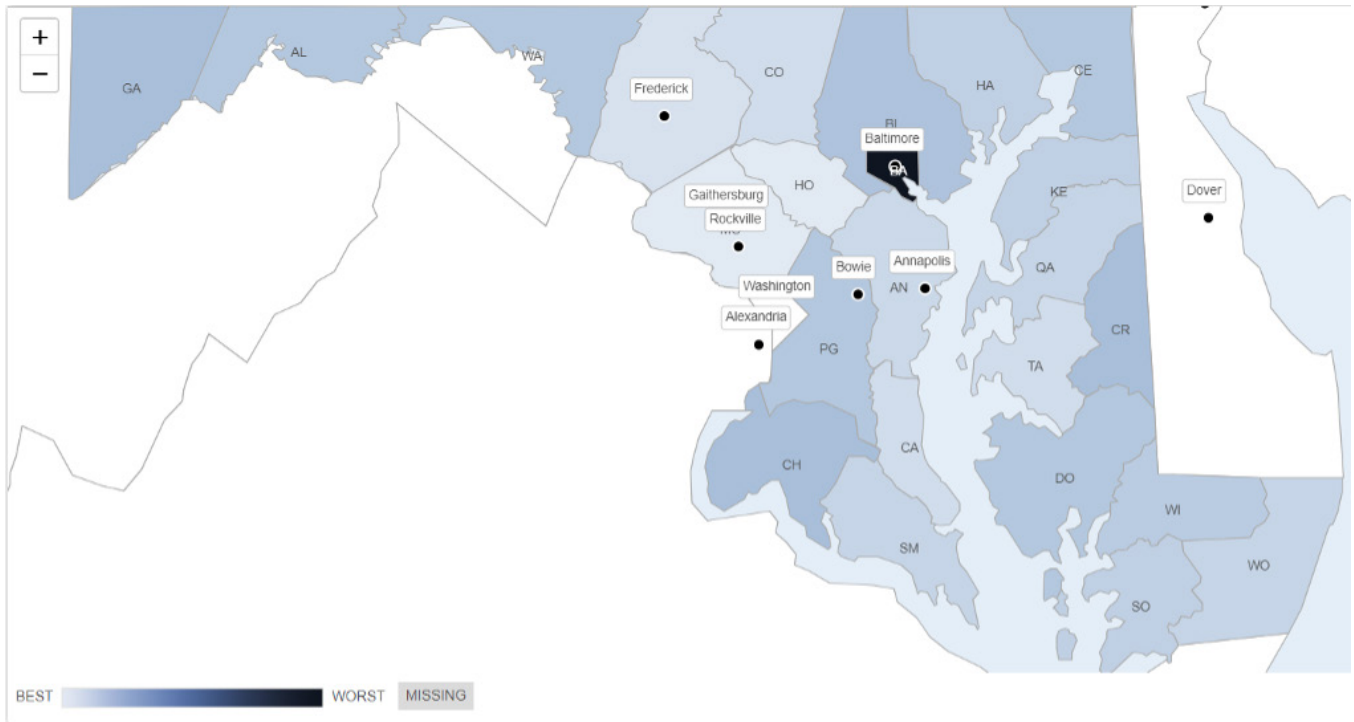


Firearm Fatalities:

From 2016-2020, the Charles County firearm fatality rate was 14 per 100,000. This is higher than the Maryland and US rates which were both 12 per 100,000.

The firearm fatality rates were similar when examined by race. The Charles County Black firearm fatality rate was 14 per 100,000. The Charles County White firearm fatality rate was 15 per 100,000.

In Maryland, the highest firearm fatality rate was in Baltimore City at 44 per 100,000.

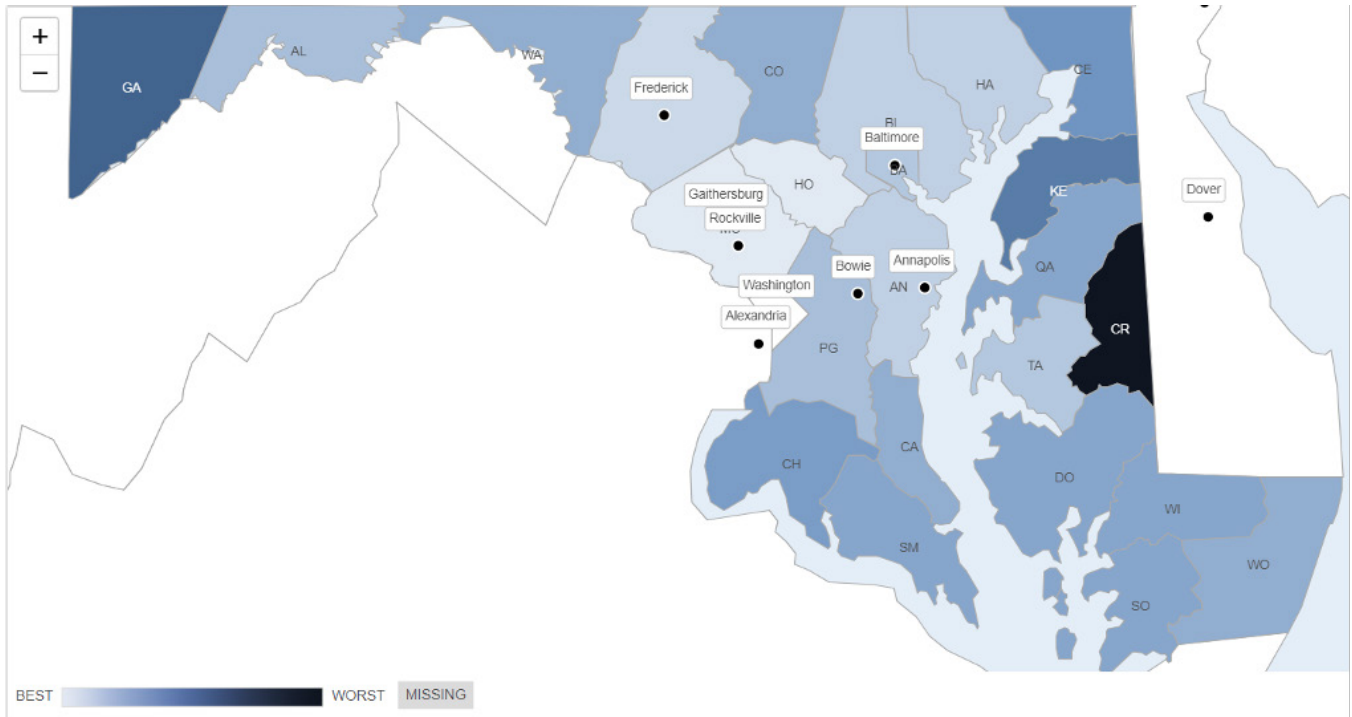


Motor Vehicle Crash Deaths:

From 2016-2020, the Charles County motor vehicle crash death rate was 14 per 100,000. This is higher than the Maryland rate of 9 and the US rate, which was 12 per 100,000.

The motor vehicle crash death rates were similar when examined by race. The Charles County Black firearm fatality rate was 15 per 100,000. The Charles County White motor vehicle fatality rate was 14 per 100,000.

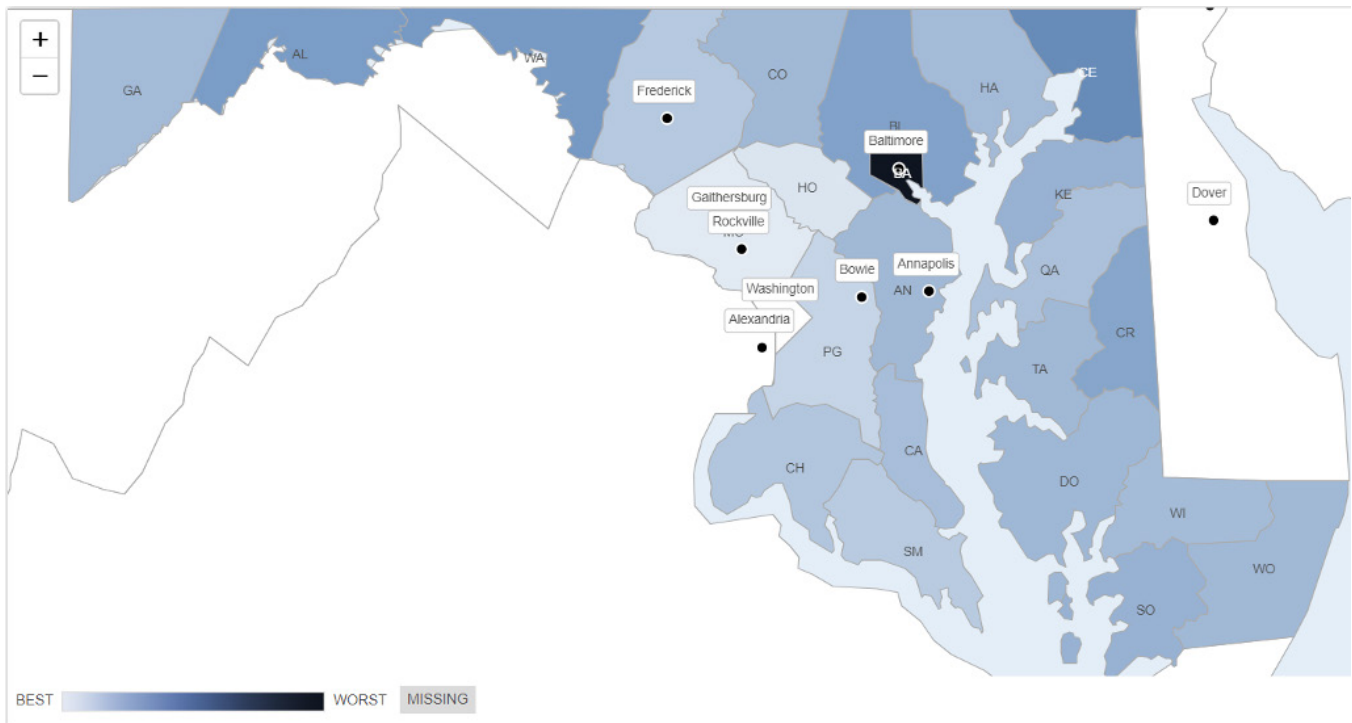
In Maryland, the highest motor vehicle fatality rate was in Caroline County.



Injury Death Rate:

The 2016-2020 rate of deaths due to injury per 100,000 in Charles County was 76 per 100,000. The Charles County injury death rate was lower than the Maryland state average rate of 88 per 100,000. There are disparities when examining the Charles County injury death rates by race. The rate is highest in Whites at 107 per 100,000.

In Maryland, the highest injury death rate was in Baltimore City.



| Injury-related Death Rates per 100,000 people by Race/Ethnicity, 2016-2020: | Count |
|---|-------|
| White | 107 |
| African American | 59 |
| Hispanic | 53 |

Maryland Violence and Injury Prevention Data

Maryland state level data was extracted from the 2016 Maryland Violence and Injury Prevention Resource Guide for all-terrain vehicle safety, child abuse and neglect, distracted driving, home fires, intimate partner violence, teen driver safety, motorcycle safety, and traumatic brain injury.

All-Terrain Vehicle (ATV) Safety:

- From 1982-2011, ATV-related crashes accounted for 91 deaths in Maryland.
- From 2001-2006, more than 9,000 individuals were injured in off-road vehicle incidents and required treatment at Maryland emergency departments.
- Approximately two-thirds of trauma patients in ATV-related incidents were not wearing a helmet.

Child Abuse and Neglect:

- In 2014, there were an estimated 31,469 referrals screened for investigation for child abuse and neglect by Child Protective Services in Maryland.
- Of those screened reports, about 15,762 victims were indicated, at a rate of 11.7 per 1,000 children (1-17 years of age).
- In 2014, 11 children in Maryland died as the results of child abuse and neglect.

Distracted Driving:

- From 2009-2013, an average of 232 people were killed and 2,348 people were injured each year in crashes involving a distracted driver.
- Distracted driving in Maryland in 2013 led to 182 deaths and 26,995 injuries.

Home Fires:

The 2010-2014 Charles County fire-related death rate was 0.4 per 100,000. This is below the Maryland fire-related death rate of 1.1 per 100,000 for the same time period.

Intimate Partner Violence:

- In 2010, 1.23 of women in Maryland reported being a victim of rape, physical violence, and/or stalking by an intimate partner in their lifetime.
- Maryland has the 6th highest lifetime rate of Intimate Partner Violence in the country
- In 2010, 2.97 million men in Maryland reported being a victim of rape, physical violence, and/or stalking by an intimate partner in their lifetime.
- In 2010, 18 women and 3 men in Maryland were murdered as a result of Intimate Partner Violence.

Teen Driver Safety:

- From 2008-2014, motor vehicle crashes were the leading cause of death for Maryland teenagers, with 279 deaths and a rate of 13 per 100,000.
- In 2014, 26 teen drivers were killed in Maryland due to a motor vehicle crash.

Motorcycle Safety:

- In 2014, there were 69 motorcycle rider deaths in Maryland with a rate of 55 deaths per 100,000 registered drivers.

Traumatic Brain Injury:

- In 2013, approximately 43,600 Marylanders suffered from a traumatic brain injury (TBI).
- Most common causes of TBI-related hospitalizations in Maryland were falls and motor vehicle crashes.
- In 2013, TBI-related Emergency Department visits were highest in people aged 15-24 years. Deaths due to TBI were highest among those 85 and older.

Injury References

1. 2021 Charles County Injury/Motor Vehicle Accident Mortality Data. 2021 Maryland Vital Statistics Report. Maryland Department of Health. Available at https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/2021AnnualReport_Final_v1023.pdf.
2. 2018-2022 Child maltreatment data. Maryland Department of Human Resources. Accessed through the Maryland State Health Improvement Process website. Available at: <https://health.maryland.gov/pophealth/Pages/SHIP-Lite-Home.aspx>.
3. 2018-2022 Pedestrian Injury Rate on public roads. Maryland State Highway Administration. Accessed through the Maryland State Health Improvement Process website. Available at: <https://health.maryland.gov/pophealth/Pages/SHIP-Lite-Home.aspx>.
4. 2020 Domestic Violence Data, 2021 Brain Injury Data, and 2020 Fall Prevalence Data for Charles County and Maryland. 2020 and 2021 Maryland Behavioral Risk Factor Surveillance System. Available at: <https://ibis.health.maryland.gov/>.
5. 2016-2020 Homicide Rates, Injury related death rates, Suicide Rates, Firearm Fatality Rates, and Motor Vehicle Crash Death Rates for Charles County, Maryland, and US. Accessed through the Robert Wood Johnson Foundation's County Health Rankings. Available at www.county-healthrankings.org.
6. Injury-related data on all-terrain vehicles, child abuse and neglect, distracted driving, home fires, intimate partner violence, teen driver safety, motorcycle safety, traumatic brain injury. 2016 Maryland Violence and Injury Prevention Resource Guide. Maryland Department of Health Violence and Injury Prevention Program. Available at <https://phpa.health.maryland.gov/ohpet-up/Pages/EIPResourceGuide.aspx>.

Qualitative Data Relating to Traffic Safety, Violence, and Injury

On the long health survey, participants were asked the severity of several health issues in Charles County. The community perceives crime as a problem in Charles County. Crime had the highest percentage reporting it as a problem on a slight, moderate, and serious problem combined (83.2%). Crime also had the 3rd highest number of people who felt that it is a serious problem in Charles County.

Traffic safety was also seen as a problem in Charles County. 78.3% of the long survey participants thought it was a problem on some level.

| Health Issue/Condition: | Percent Reporting No Problem in county | Percent Reporting this as a problem at any level | Percent Reporting this as a serious problem |
|---|---|---|--|
| <i>Injuries</i> | 6.5 | 52.1 | 13.6 |
| <i>Highway Safety/Traffic Accidents</i> | 7.0 | 78.3 | 38.0 |
| <i>Child Abuse and Neglect</i> | 6.7 | 53.3 | 18.9 |
| <i>Domestic Violence</i> | 6.3 | 62.7 | 29.8 |
| <i>Traumatic brain injury</i> | 7.5 | 40.4 | 11.2 |
| <i>Crime</i> | 6.6 | 83.2 | 47.7 |

Survey participants reported improvements in traffic safety in Charles County (12.02%). This was the 13th highest percentage among the health conditions. Injuries reported the lowest percentage of people reporting any improvement (4.29%).

| Health Issues where improvements have been seen | Response Percent |
|--|-------------------------|
| Traffic Accidents | 12.02% |
| Injuries | 4.29% |

Long survey behavioral risk factor data related to Traffic Safety or Injury:

- 95.13% always wear a seat belt
- 55.57% always follow road safety rules
- 25.11% always wear a helmet when riding a bike
- 19.97% always wear a helmet when riding an ATV, scooter, or motorcycle
- 16.20% always participate in daily physical activity

Injuries and Traffic Safety scored low on the short survey when participants were asked to choose the biggest health problems in Charles County. 5.8% felt that injuries were the biggest health problem in Charles County. This was the lowest among the health conditions listed. 21.1% of the short survey participants chose Traffic Safety as the biggest health problem in Charles County. This was the 7th lowest percentage among the health conditions listed. Several short survey participants recommended programming to help reduce crime in Charles County.

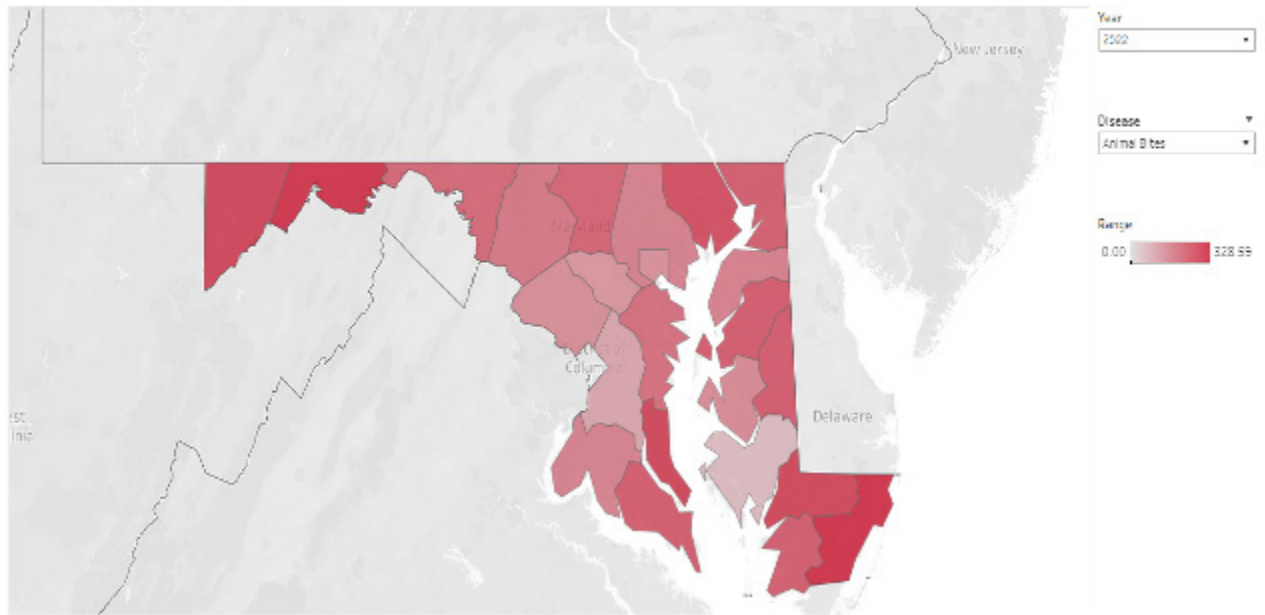
Charles County Infectious Disease and Environmental Health Data:

The table below shows the incidence for the twelve most reported communicable diseases in Charles County in 2022. Chlamydia had the highest incidence rate in Charles County for 2022 at 506.66 per 100,000. The top two communicable diseases with the highest incident counts in 2022 in Charles County were both sexually transmitted diseases, Chlamydia and Gonorrhea. The next two most reported conditions were animal bites and Lyme Disease.

| Selected Notifiable Conditions Reported in Charles County, 2022 | Case Counts | Incidence Rates per 100,000 population |
|--|--------------------|---|
| Chlamydia | 826 | 506.66 |
| Gonorrhea | 267 | 181.10 |
| Animal Bites | 295 | 175.55 |
| Invasive Strep Group B | 20 | 8.74 |
| Invasive Strep Group A | 7 | 6.10 |
| Legionellosis | 4 | 3.29 |
| Mycobacteriosis, Other than TB & Leprosy | 14 | 11.66 |
| Salmonellosis- Other than Typhoid Fever | 18 | 13.95 |
| Syphilis- Primary and Secondary | 9 | 12.67 |
| Invasive Strep pneumoniae | 10 | 6.52 |
| Campylobacteriosis | 9 | 17.71 |
| Lyme Disease | 28 | 33.03 |
| Invasive H. influenzae | 4 | 1.78 |
| Aseptic Meningitis | 4 | 2.38 |
| Shiga toxin producing E coli | 4 | 4.87 |

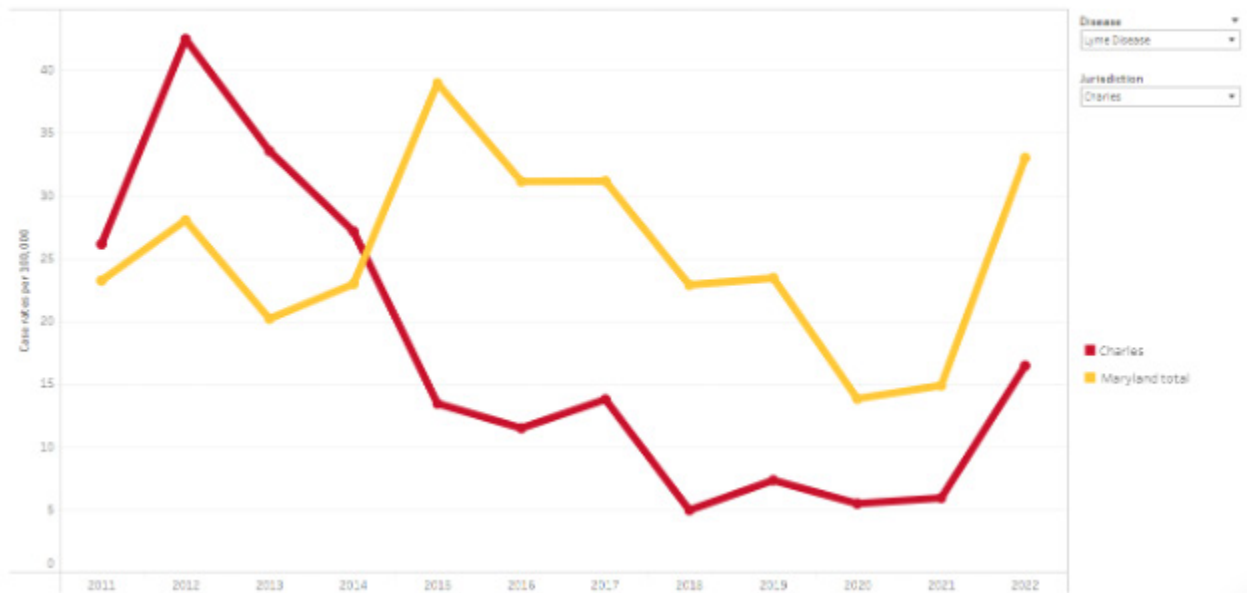
Cases of Selected Notifiable Conditions Reported in Maryland*

Case Rates per 100,000 Population by Jurisdiction



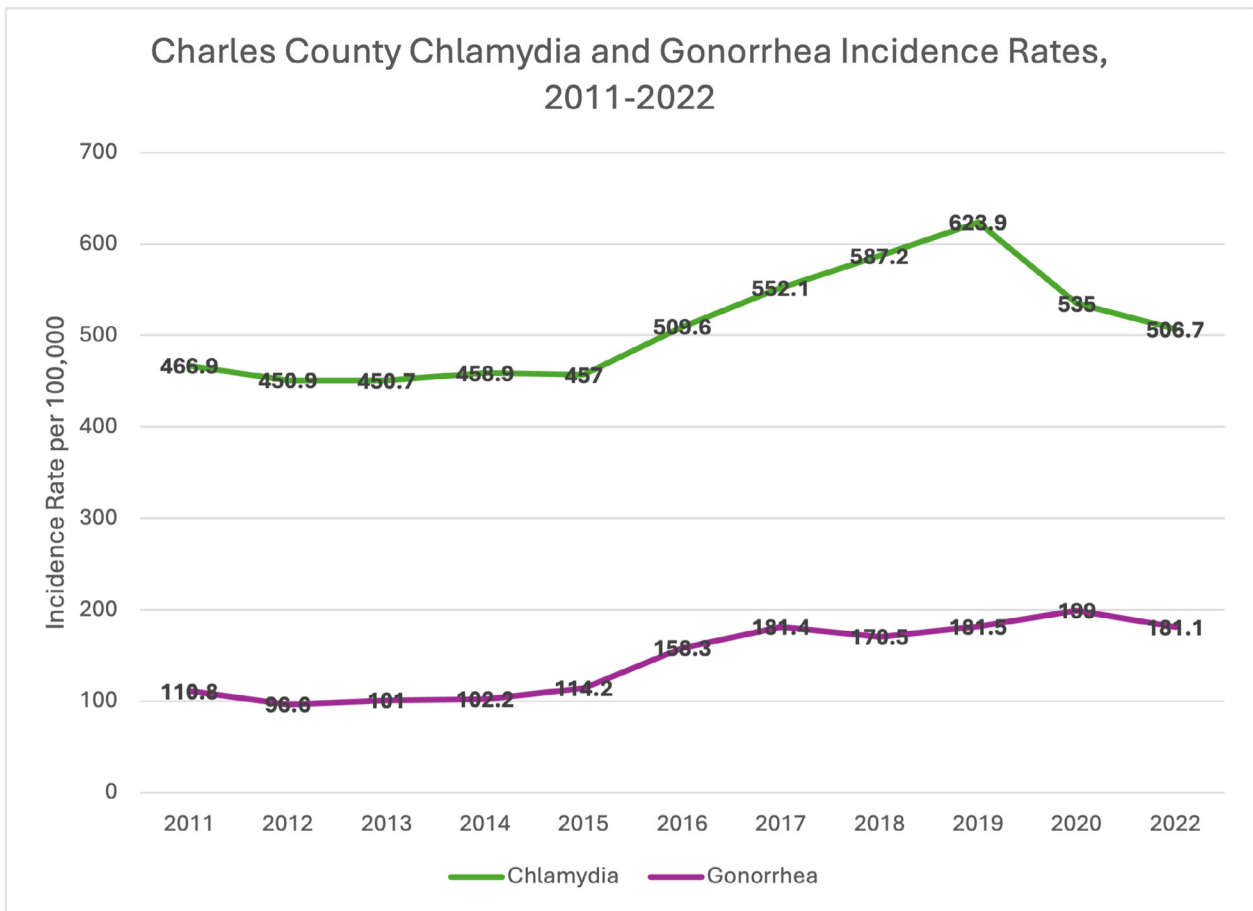
Cases of Selected Notifiable Conditions Reported in Maryland*

Case Rates per 100,000 Population by Jurisdiction



Chlamydia and Gonorrhea incidence rates are on the decline after a steady increase from 2015-2019. Data for 2021 is not available due to a network security incident at the Maryland Department of Health.

The 2022 incidence rate for Chlamydia in Charles County was 506.66 per 100,000, compared to the 2011 incident rate of 466.9 per 100,000. The 2022 Gonorrhea incident rate in Charles County was 181.1 per 100,000, compared to the 2011 rate of 110.80 per 100,000.



Rabies

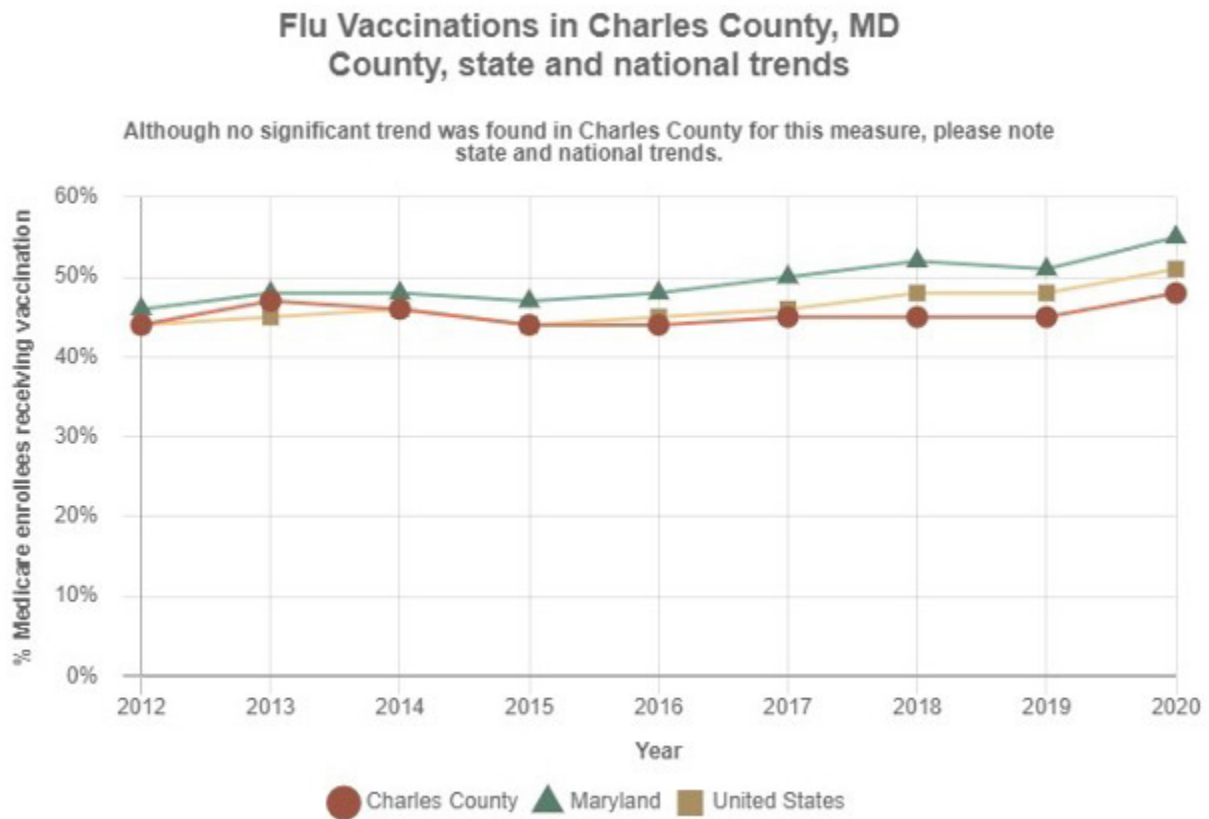
No human rabies cases were reported in Charles County from 2010-2022. Charles County has seen a decline in animal rabies cases from 12 in 2010 to 3 in 2022. With such small case counts, it is not uncommon to see fluctuation in counts from year to year. Raccoons and bats are commonly reported animal rabies cases. Case counts from 2010 to 2022 are presented below for overall animal rabies cases, bats, raccoons, and skunks.

| 2010-2020 Animal Rabies Case Counts for Charles County | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Total Animal Rabies Cases | 12 | 14 | 14 | 9 | 11 | 5 | 7 | 8 | 6 | 7 | 6 | 4 | 3 |
| Bat Rabies Cases | 1 | 0 | 7 | 1 | 1 | 0 | 1 | 3 | 0 | 1 | 1 | 1 | 1 |
| Raccoon Rabies Cases | 7 | 6 | 6 | 3 | 5 | 1 | 1 | 3 | 4 | 4 | 3 | 1 | 0 |
| Skunk Rabies Cases | 1 | 1 | 1 | 0 | 3 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 1 |

Vaccinations

Influenza/Flu:

In 2020, 48% of Charles County adult Medicare enrollees received the flu vaccine. This percentage has been increasing each year since 2015.



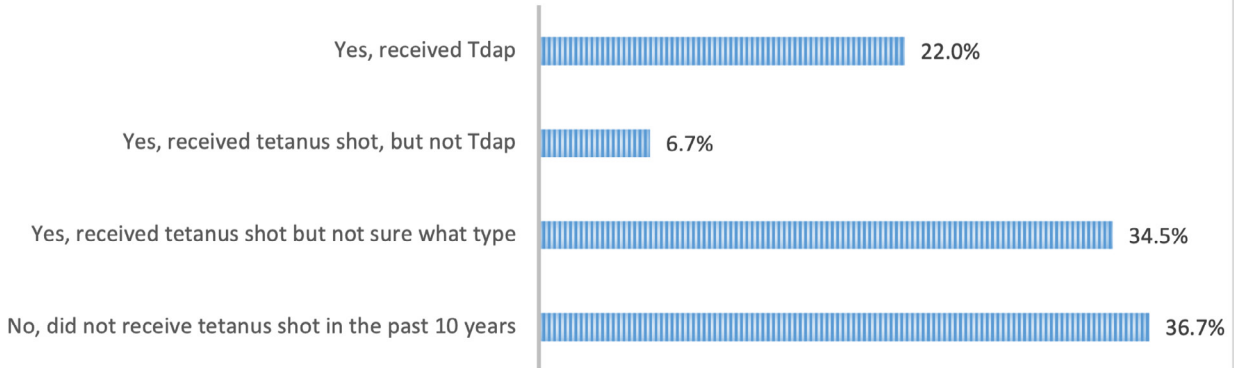
Pneumonia:

In 2019, 37.0% of Charles County adults received the pneumonia shot at some point. This percentage is an increase from the 2018 percentage of 28.1%. The Maryland state average percentage in 2019 for adults who received the pneumonia shot was 36.9%.

Tetanus:

The BRFSS captured data on the percentage of adults who received a tetanus shot in the past ten years. In 2019, 63.2% of Charles County adults reported receiving a tetanus shot of some kind; 36.7% reported not receiving a tetanus shot in the past ten years. This data is also broken down into the whether individuals received Tdap specifically.

PERCENTAGE OF CHARLES COUNTY ADULTS WHO HAVE RECEIVED A TETANUS SHOT IN THE PAST 10 YEARS, 2019



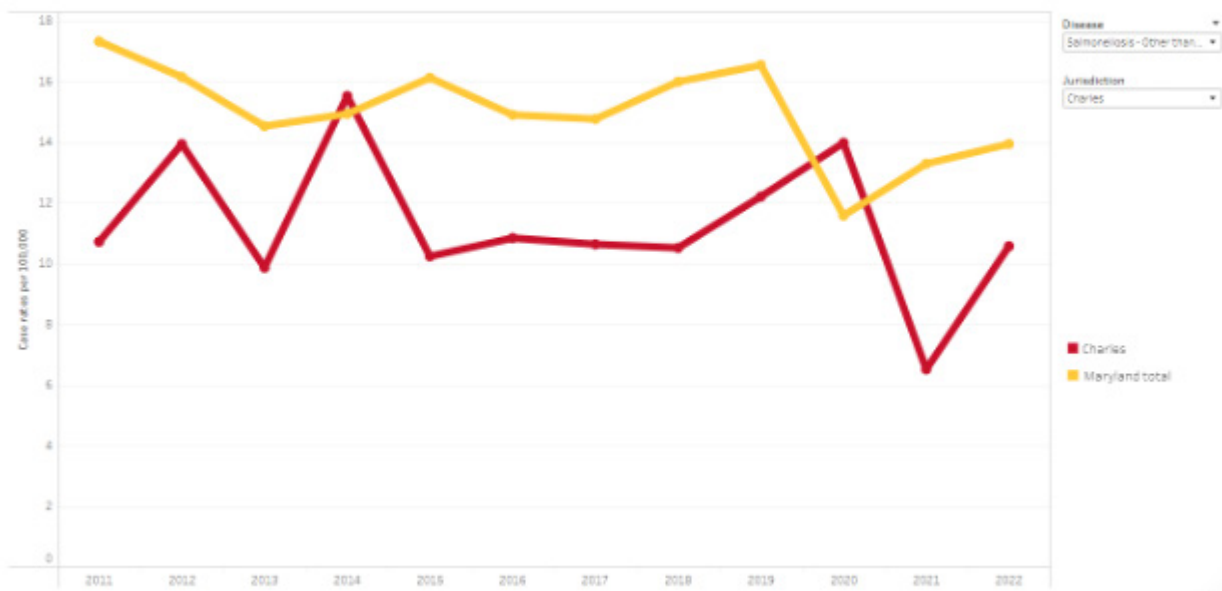
The Maryland state average percent of adults who received a tetanus shot in the past ten years was 72.7% in 2019. 27.2% of Maryland adults reported not receiving a tetanus shot in the past 10 years.

Salmonella

The 2022 Charles County case rate for Salmonella was 13.95 per 100,000. This is higher than the 2018 rate of 10.5 per 100,000. Trends cannot be established since the rate fluctuates each year.

Cases of Selected Notifiable Conditions Reported in Maryland*

Case Rates per 100,000 Population by Jurisdiction



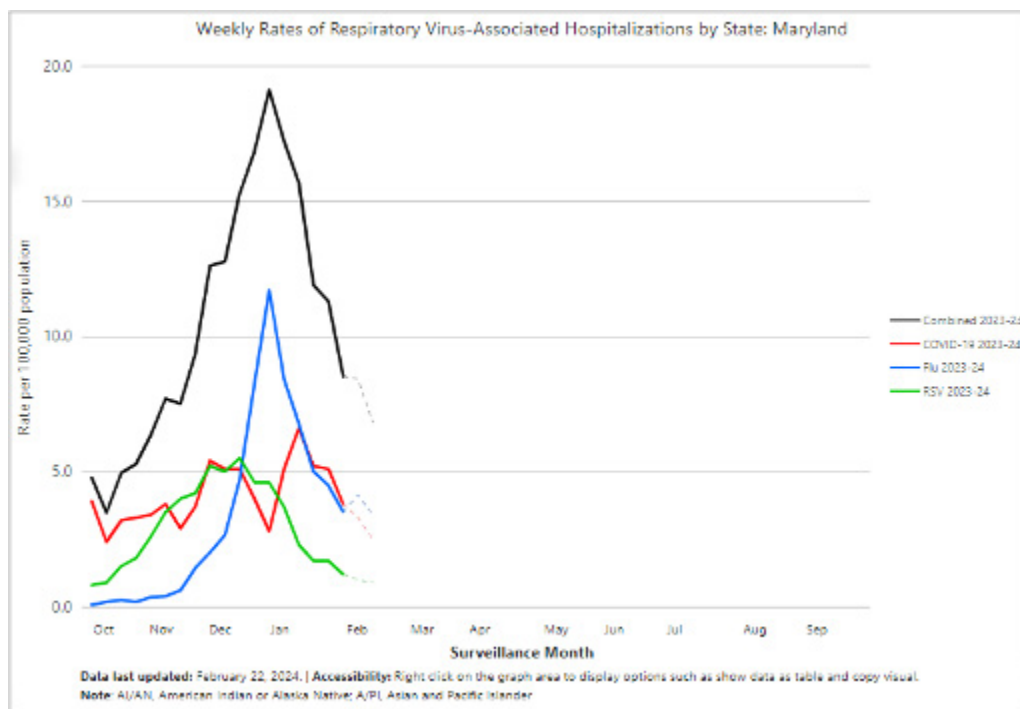
Respiratory Viruses

COVID-19, Influenza, and RSV:

At the time of this report, there have been 40,723 confirmed cases of COVID-19 in Charles County since the start of the COVID-19 pandemic. Additionally, there have been 438 confirmed and 3 probable deaths since the start of the pandemic in 2020.

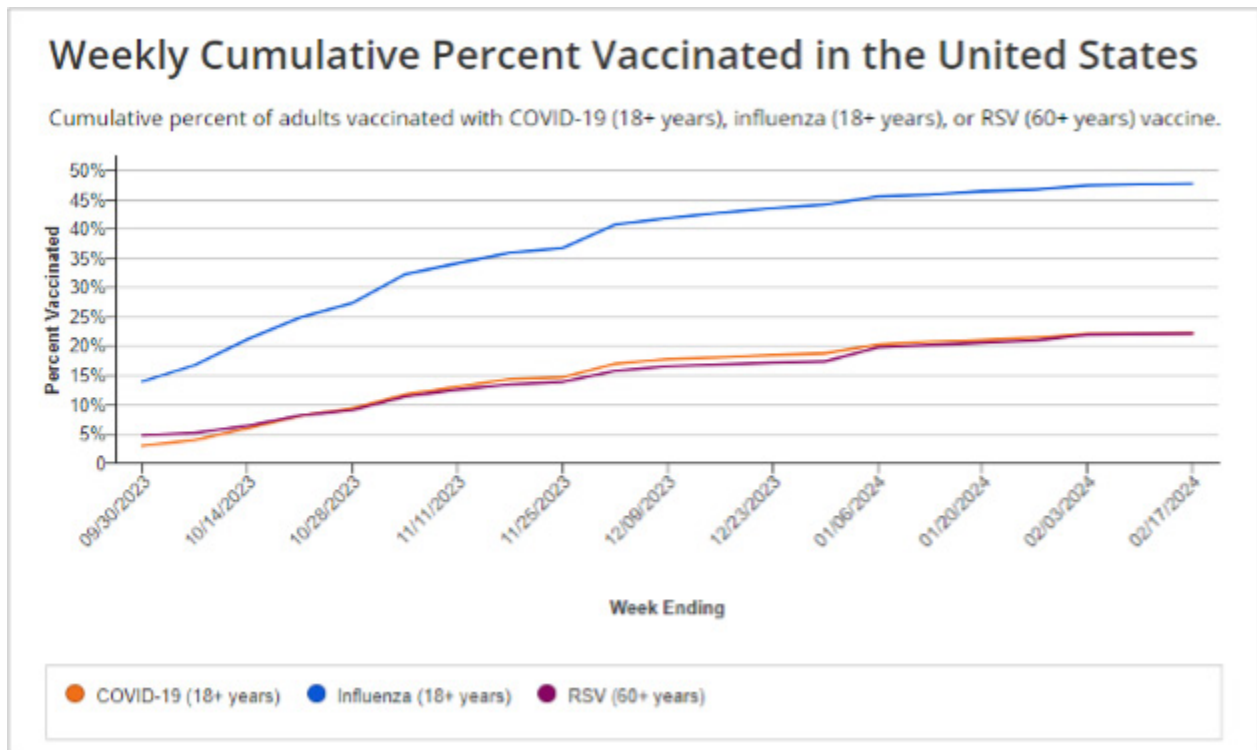
Respiratory Viruses include COVID-19, Influenza, and RSV. Hospitalization rates are monitored in Maryland to determine what prevention and surveillance measures are needed. The graph below shows the weekly respiratory virus associated hospitalization for Maryland for the 2023-2024 respiratory virus season.

Weekly Rates of Respiratory Virus-Associated Hospitalizations by State: Maryland



Maryland Weekly Rate of Respiratory Virus-Associated Hospitalizations (Combined): 8.5

**Weekly Cumulative Percent Vaccinated in the United States:
Adults for the 2023-24 Respiratory Virus Season**



COVID-19 (18+ years): 22.3%

Influenza (18+ years): 47.8%

RSV (60+ years): 22.2%

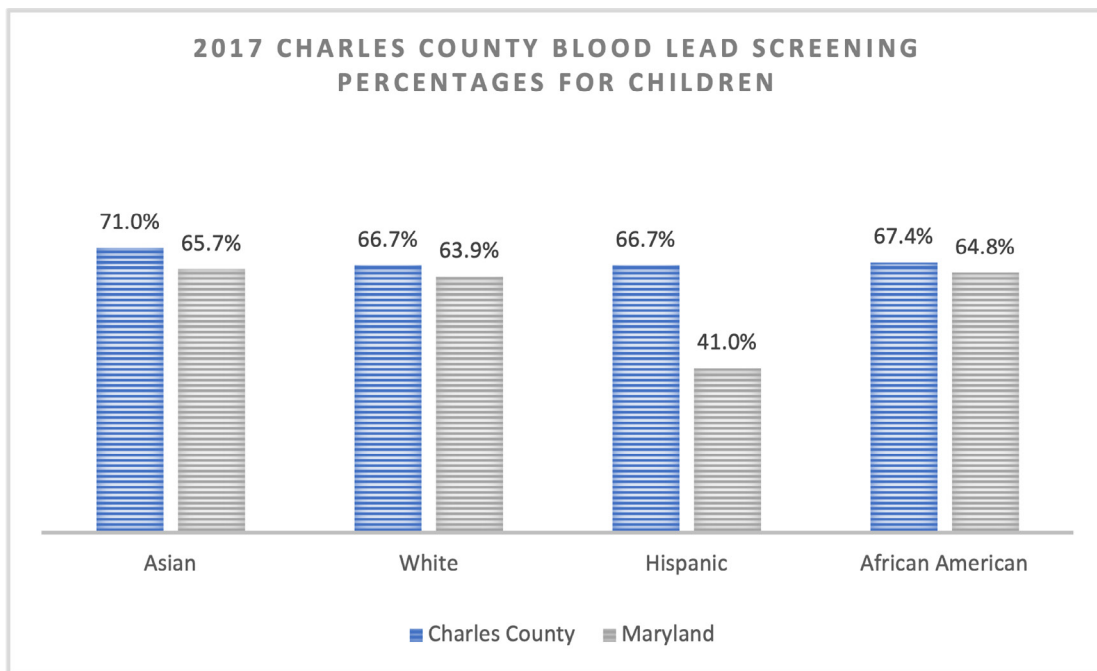
Environmental Health

Blood Lead Levels:

This indicator reflects the percentage of children (aged 12-35 months) enrolled in Medicaid (90+ days) screened for lead in their blood. Each pediatric Medicaid enrollee should be screened for blood lead during their 12 and 24 month well child visit. Common sources of pediatric lead exposure include dust and paint chips from chipping or peeling lead paint, as well as lead contaminated: soil, toys, water, cosmetics, and folk medicines.

In 2017, 65.7% of Charles County children enrolled in Medicaid had a blood lead screening. This is equal to the state percentage of 65.7%. Blood lead screenings were highest in Charles County Asians (71.0%) and lowest in Charles County Hispanics and Charles County Whites (66.7%).

The Charles County blood lead screening percentage has increased from 61.6% of Medicaid children in 2016 to 65.7% in 2017.



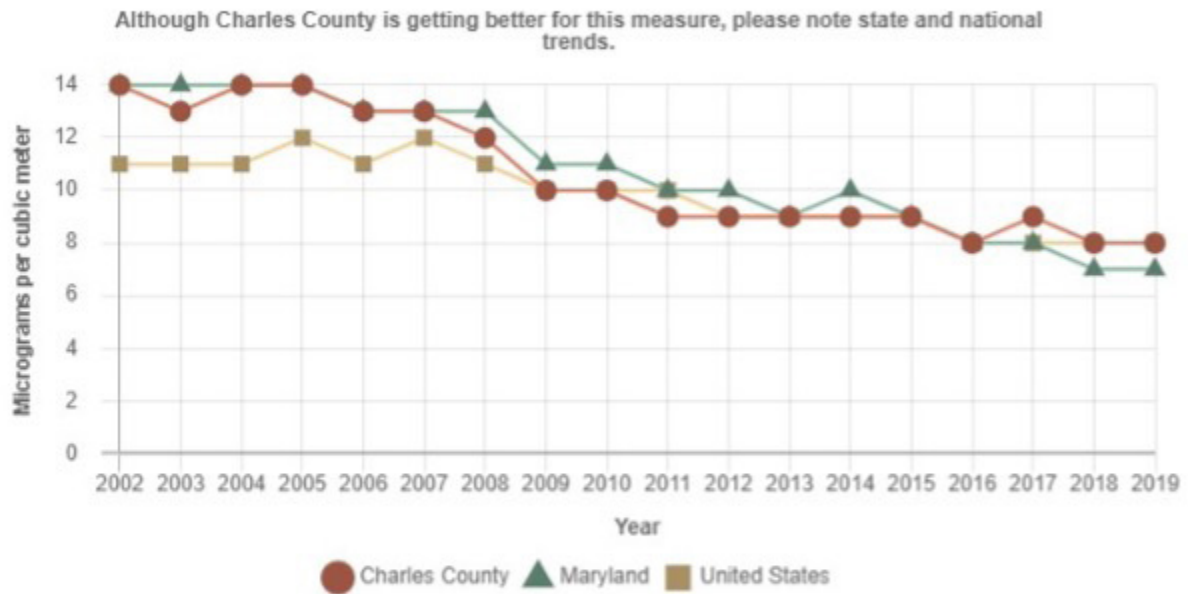
In 2020, among those screened for blood lead, 0.2% of Charles County children had a blood lead levels greater than 10 mg/dL. This is the same as the Maryland state percentage of 0.2%.

| Percent of children with blood lead levels above 10 mcg/dL | Charles County | Maryland |
|--|----------------|----------|
| 2016 | 0.1 | 0.3 |
| 2017 | 0.1 | 0.3 |
| 2018 | 0 | 0.3 |
| 2019 | 0 | 0.2 |
| 2020 | 0.2 | 0.2 |

Air Pollution: Particulate Matter

The 2019 average daily density of fine particulate matter in micrograms per cubic meter in Charles County was 8 micrograms per cubic meter. The county measure is above the Maryland measure of 7 micrograms per cubic meter. The Environmental Protection Agency (EPA) has primary annual average standards of 12.0 micrograms per cubic meter. Charles County and Maryland are well below those standards.

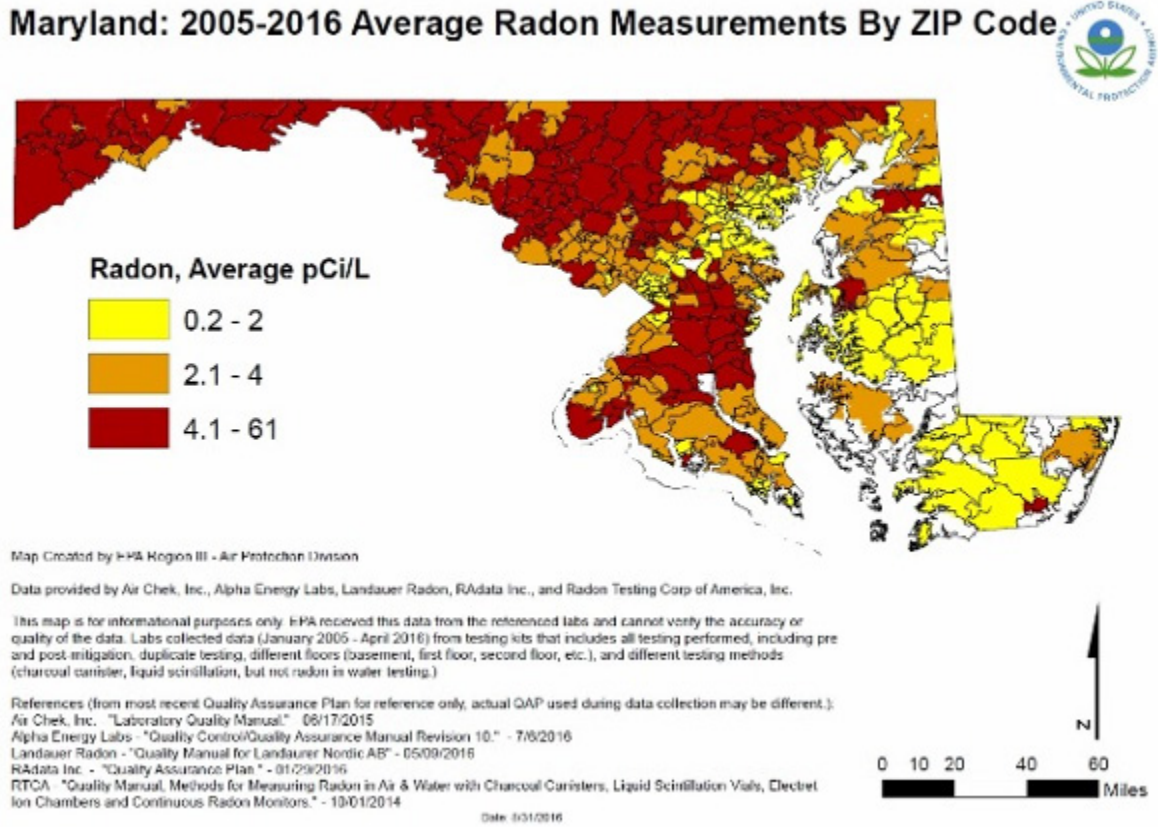
Air Pollution - Particulate Matter in Charles County, MD
Average daily density of fine particulate matter: county, state and national trends



Notes:
Data in this trend graph are taken from the Environmental Public Health Tracking Network, and will not match data used in the 2014-2016 Rankings.

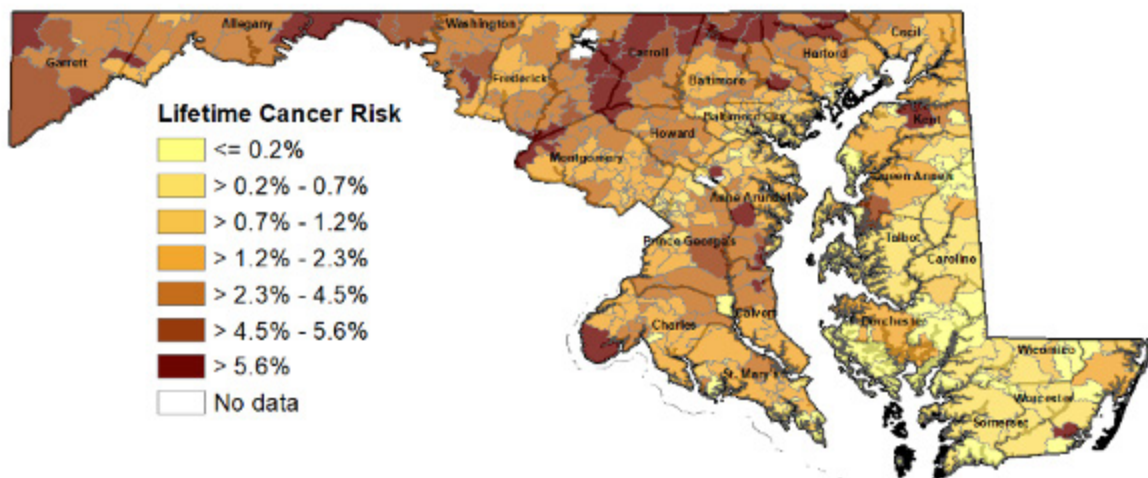
Radon:

The map below shows radon levels measured in homes by ZIP code in Maryland from 2005-2016. The U.S. Environmental Protection Agency (EPA) recommends testing all homes for radon, and fixing homes if their levels are higher than 4 picocuries per liter (pCi/L).



After smoking, radon is the most important preventable cause of lung cancer in the United States and in Maryland. The map below, based on the radon test data from 2005 - 2016, shows how much radon could increase the lifetime risk of lung cancer if it were not tested and abated in homes. The highest risk appears to be in the zip code of Nanjemoy, 20662, located in the western region of the county.

Lifetime Maryland Radon Lung Cancer Risk by ZIP Code Based on Measured Home Radon Concentrations 2005 - 2016



Source: Radon home testing data provided by U.S. Environmental Protection Agency.
Lifetime risk estimates based on average home radon concentration by ZIP code and lifetime risk estimates in:
U.S. EPA. "EPA Assessment of Risks from Radon in Homes," EPA 402-R-03-003, June, 2003, Washington, DC: Appendix D, p. 82.

Qualitative Data Relating to Infectious Disease and Environmental Health

60.6% of long survey participants believed Infectious Disease (i.e. COVID-19) was a problem on some level in Charles County. 12.8% of participants believed Infectious Disease was a serious problem in Charles County; this is a large decrease from 30.4% reported on the last needs assessment when the county was amid the COVID-19 pandemic.

64.3% of long survey participants believed Environmental Health was a problem on some level in Charles County. 19.3% of participants believed Environmental Health was a serious problem in Charles County.

Protective factors that can reduce transmission of infectious diseases:

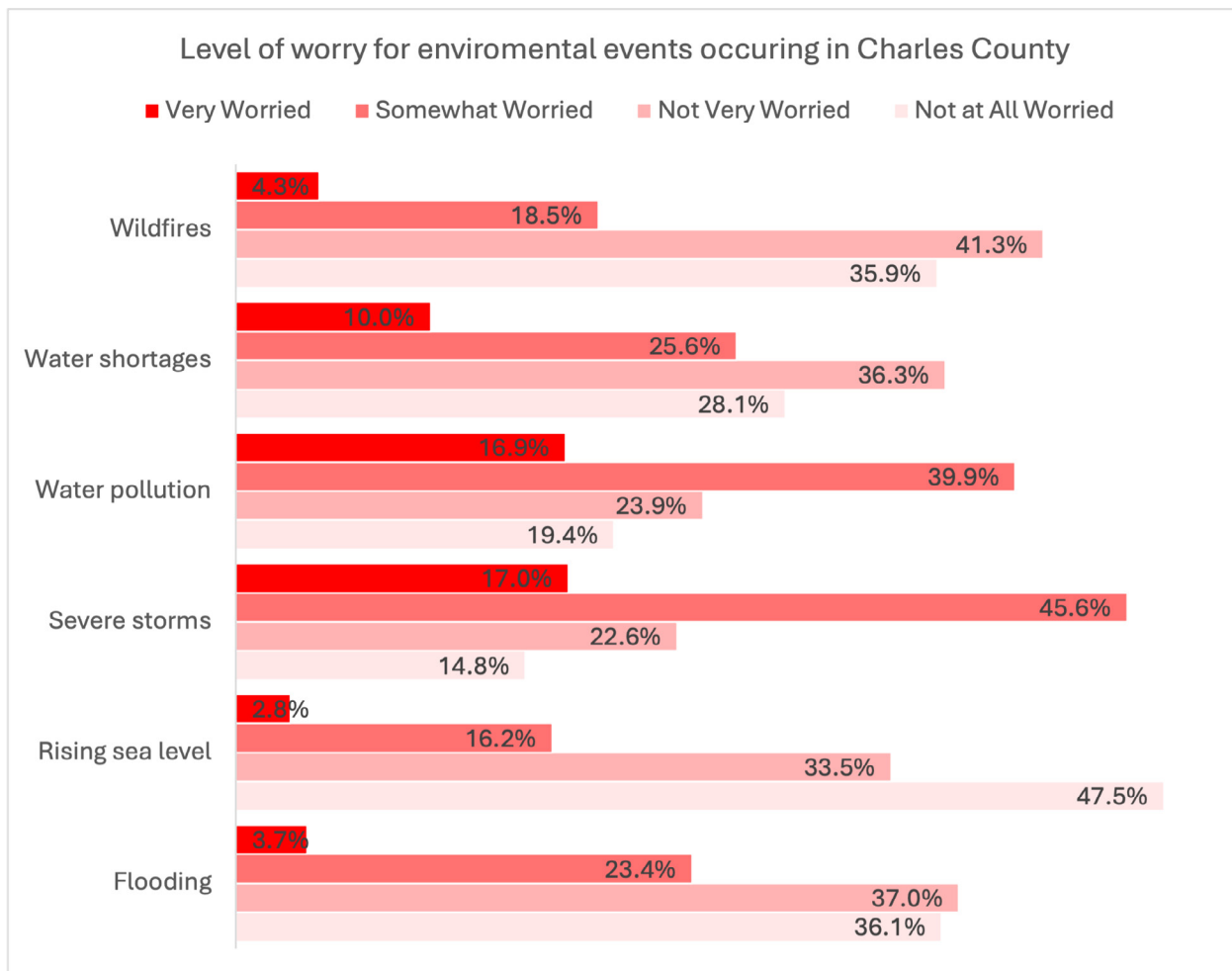
1. 86% of participants report always washing their hands after using the bathroom or before making food.
2. 49% of participants report always receiving a flu shot every year.

Risk factors that can increase transmission of infectious diseases:

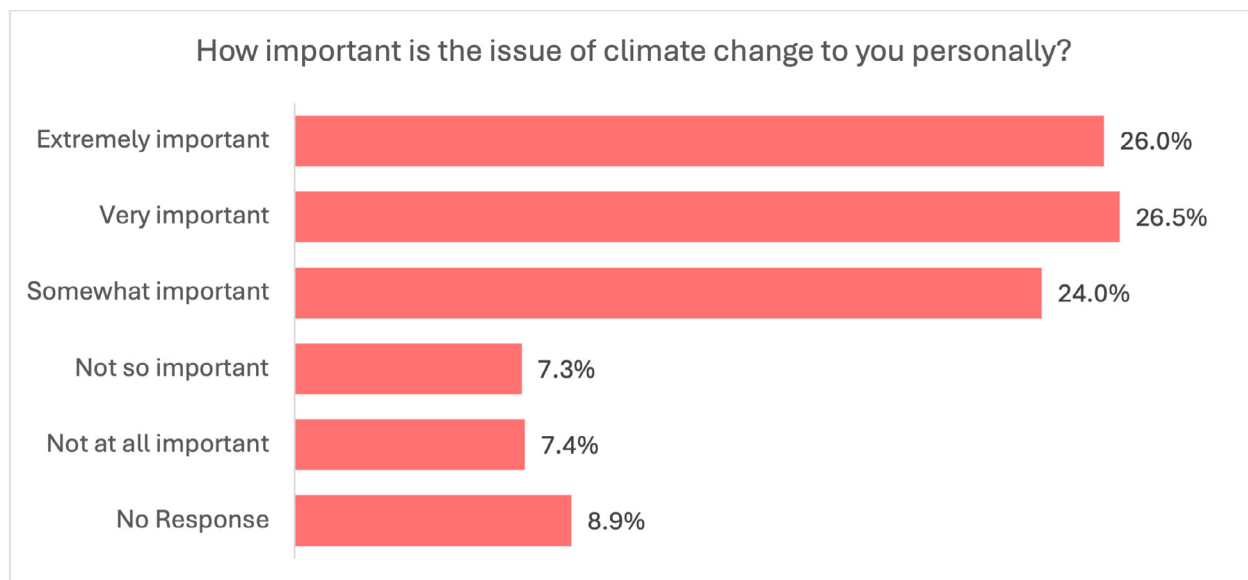
1. 29.4% of participants report always practicing safe sex (ex. use a condom, get tested)

Few short survey participants reported COVID-19 and sexually transmitted diseases as some of the biggest health problems in Charles County. When asked if there are sufficient services and resources available in Charles County for infectious disease specifically, 43.8% of participants reported some or many services are available. 10.6% reported Infectious Diseases as a big health problem in the county.

Long survey participants were asked to rate their level of worry about various environmental events that could occur in the county. Overall, many participants were not worried about these events occurring in Charles County. Water pollution and severe storms had the highest percentage of participants who reported being either very or somewhat worried that they could harm the community. About 17% of participants reported they were very worried about water pollution and severe storms harming the community. Water pollution and severe storms also had the highest percentage of participants who reported being somewhat worried about these events harming Charles County, at 39.9% and 45.6% respectively. Rising sea level was the environmental event most participants reported not being worried about. 81% of survey participants reported not being very worried or not at all worried about rising sea levels harming Charles County.



Although many participants were not worried about specific environmental events harming Charles County, a large percentage reported that climate change was important to them. Over half of survey respondents reported that the issue of climate change was either very or extremely important to them (52.5%). Over a quarter of participants reported that climate change was extremely important to them (26.0%). Only 14.7% of respondents reported that climate change is not so important to them or not at all important to them.



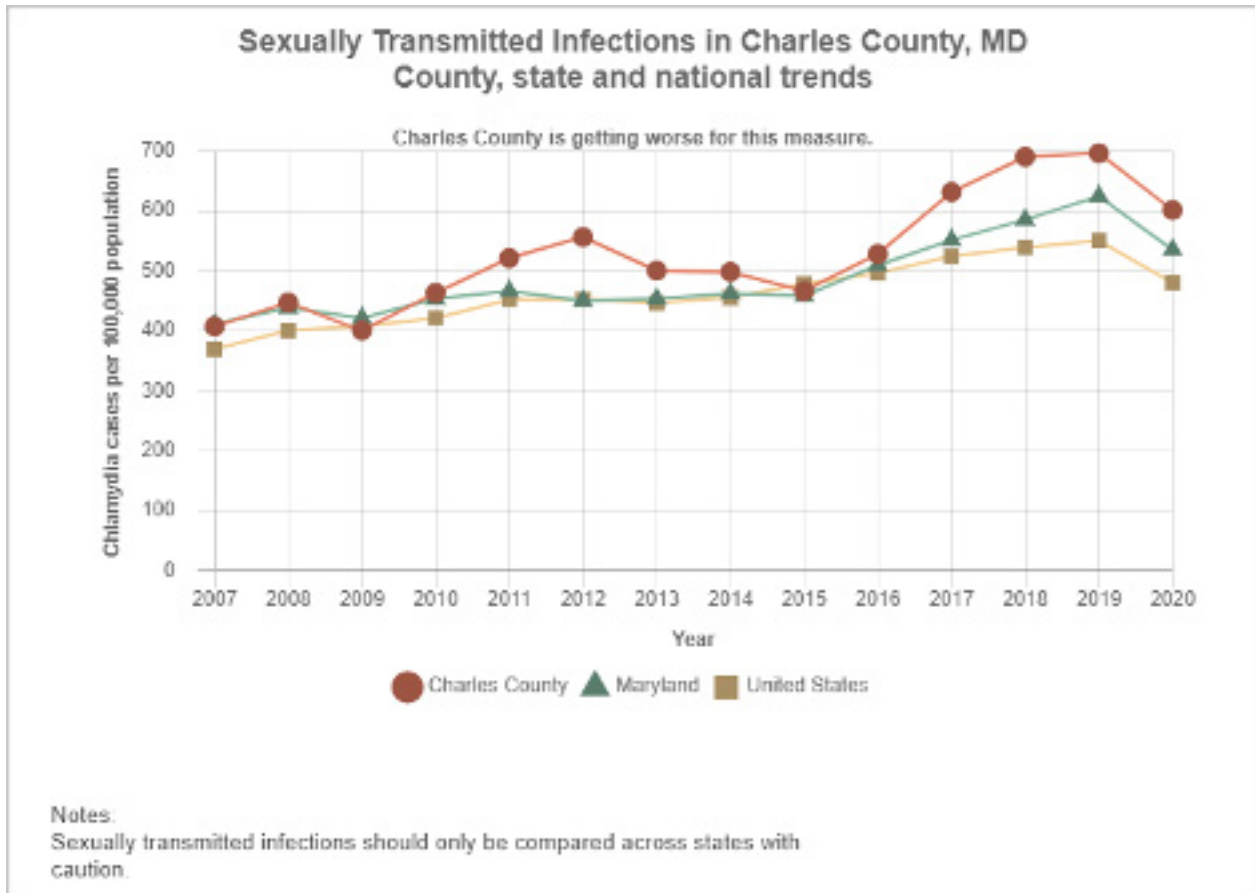
Infectious Disease and Environmental Health References:

1. 2011-2022 Charles County Reportable Communicable Disease Data, Salmonella data, Respiratory Virus Data. Infectious Disease Bureau. Maryland Department of Health. Available at: https://phpa.health.maryland.gov/Pages/infectious_disease.aspx.
2. 2010-2022 Charles County and Maryland Rabies Data. Infectious Disease Bureau. Maryland Department of Health. Available at: http://phpa.dhmf.maryland.gov/Pages/infectious_disease.aspx.
3. 2020 Charles County and Maryland Influenza Vaccination Rates. Centers for Medicare and Medicaid. Office of Minority Health’s Mapping Medicare Disparities Tool. Measure accessed through the Robert Wood Johnson Foundation’s County Health Rankings. Available at: countyhealthrankings.org.
4. 2019 Pneumonia and Tetanus Vaccination Rates. Maryland Behavioral Risk Factor Surveillance System and the National Immunization Survey Estimates. Accessed through the Maryland State Health Improvement Process website (Under Quality Preventative Care). Available at: <https://pophealth.health.maryland.gov/Pages/SHIP-Lite-Home.aspx>
5. 2011-2017 Charles County Blood Screening (Under Healthy Beginnings) and 2016-2020 elevated blood lead Percentages in Medicaid enrolled children (Under Healthy Communities). 2017 and 2020 Maryland Medicaid Service Utilization data. Accessed through the Maryland State Health Improvement Process website. Available at <https://pophealth.health.maryland.gov/Pages/SHIP-Lite-Home.aspx>
6. 2019 Air pollution data for Charles County and Maryland. Robert Wood Johnson Foundation’s County Health Rankings. Available at countyhealthrankings.org.
7. Radon maps by Maryland zip codes. Maryland Department of Health. Environmental Health Bureau. Available at: <https://health.maryland.gov/phpa/OEHFP/EH/Pages/Radon.aspx>.

HIV/AIDS and STI's:

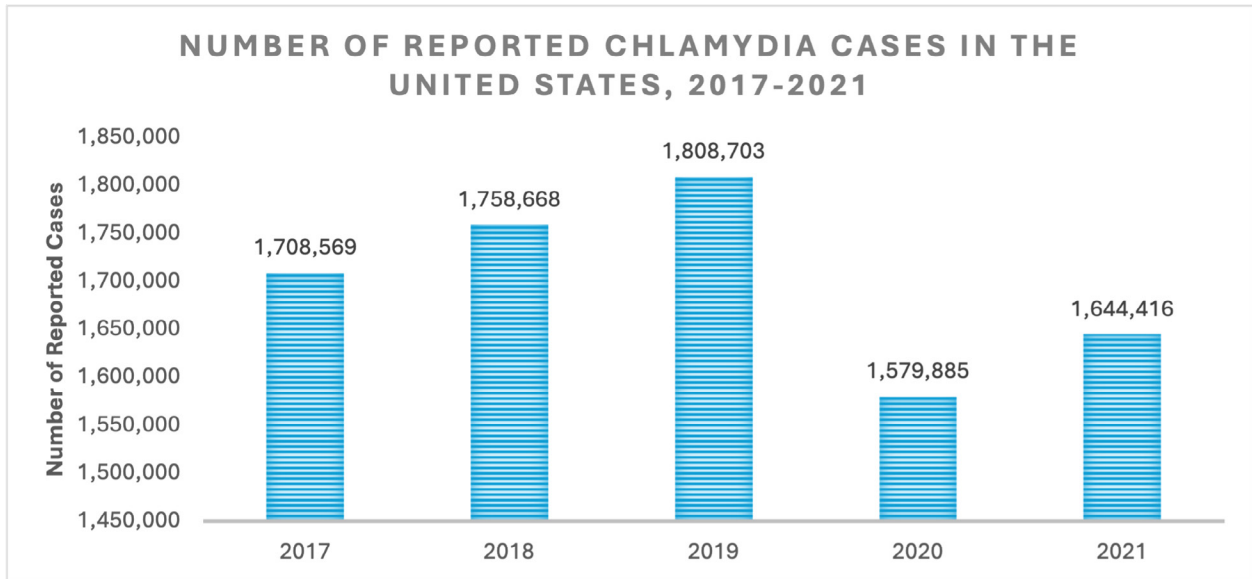
Sexually Transmitted Infections

The incidence of sexually transmitted infections in Charles County continued to increase from the years 2015 to 2019, but recently saw a decrease in infections in 2020. According to the Robert Wood Johnson Foundation County Health Rankings, the 2020 Charles County Chlamydia incidence rate was 602.1 per 100,000, down from 697 per 100,000 in 2019. Although there was a decline, the Charles County incidence rate remains higher than the state of Maryland (535.9 per 100,000) and the United States (481.3 per 100,000).



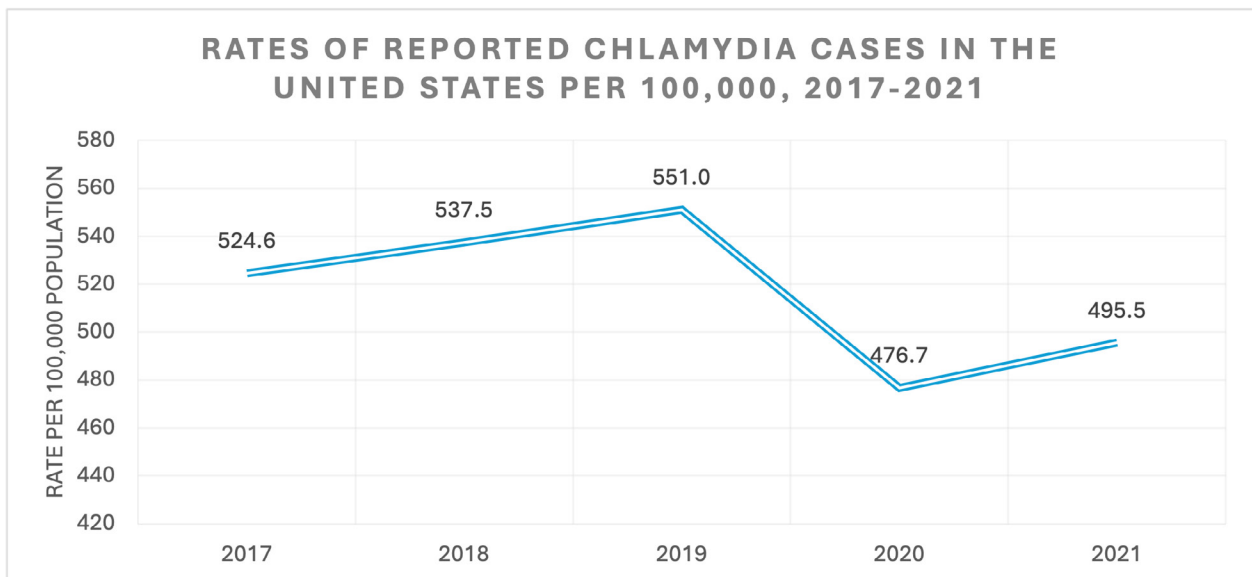
Chlamydia:

The STI incidence rates for Chlamydia, Gonorrhea, and Syphilis were all seeing increases on the national, state, and local level, prior to the COVID-19 pandemic. In the United States, there were over 1.6 million reported cases of chlamydia in 2021. This total is lower than the 2019 total of over 1.8 million cases, but higher than the 2020 total. However, the COVID-19 pandemic may have had an impact on the lower number of cases in 2020 and 2021.



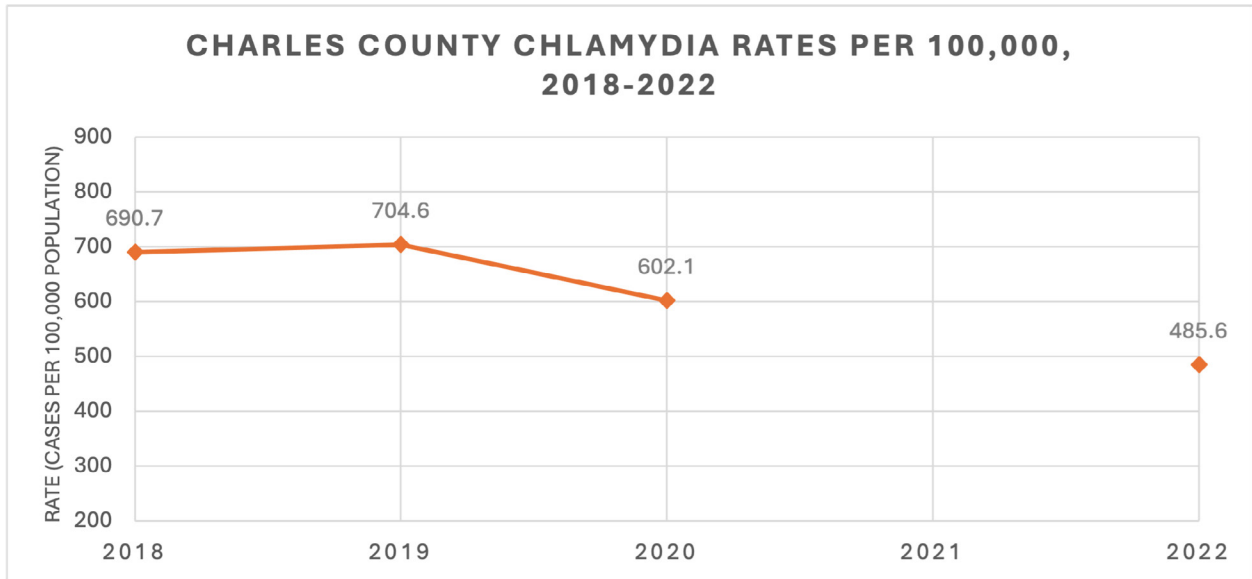
Source: CDC. Sexually Transmitted Disease Surveillance 2021.

The rate of reported chlamydia cases in the United States in 2021 was 495.5 per 100,000, an increase from 476.6 per 100,000 reported in 2020. Before the pandemic, rates were on the rise from 2017 to 2019, with the rate reaching 551.0 per 100,000 in 2019.

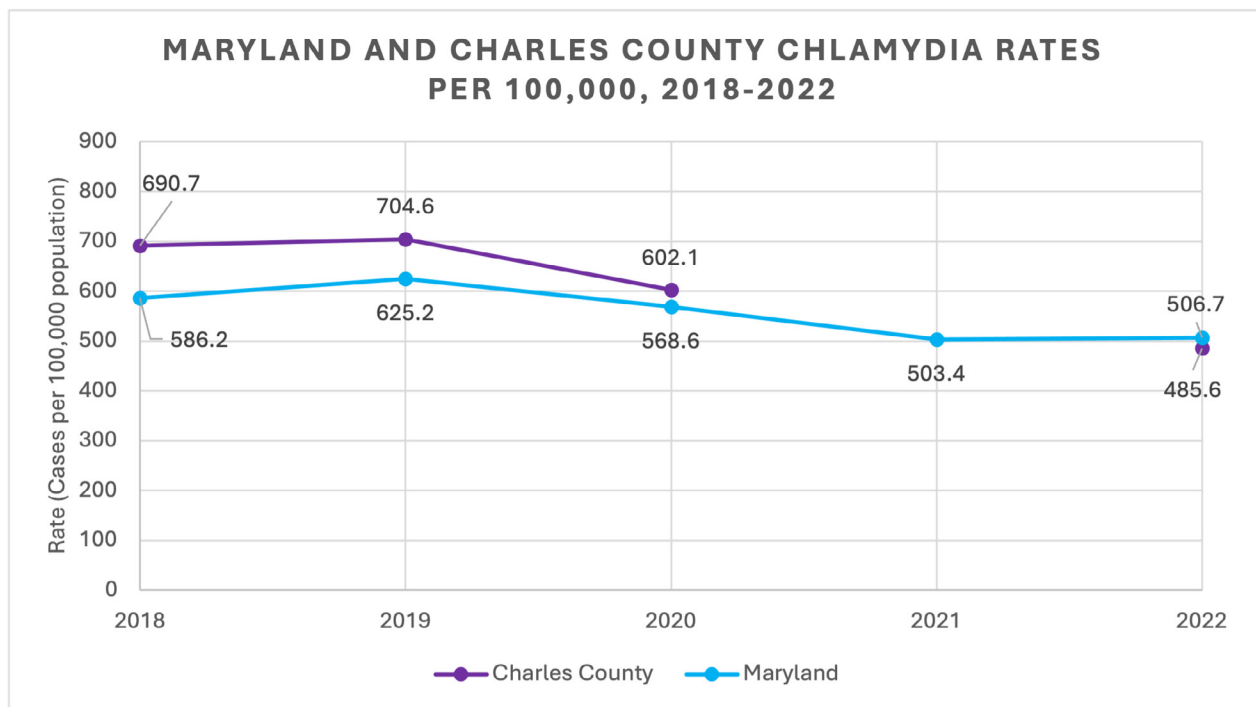


Source: CDC. Sexually Transmitted Disease Surveillance 2021.

Similar to the United States chlamydia trend, Charles County also saw a decrease in cases in 2020. Unfortunately, due to a security incident in 2021, cases for chlamydia in Charles County are not available. In 2022, the Charles County chlamydia rate was 485.6 per 100,000. Up until 2021, Charles County had a higher chlamydia rate than the state of Maryland from 2018 to 2020. In 2022, the Charles County chlamydia rate (485.6) fell below the Maryland rate of 506.7 per 100,000.



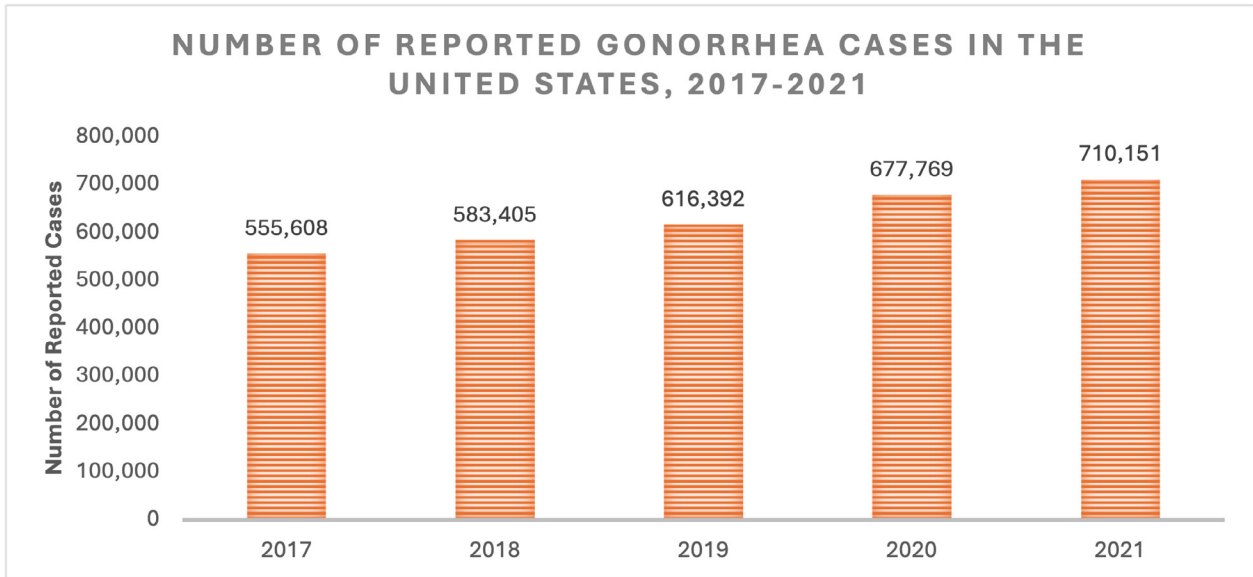
Source: Maryland Department of Health. 2022



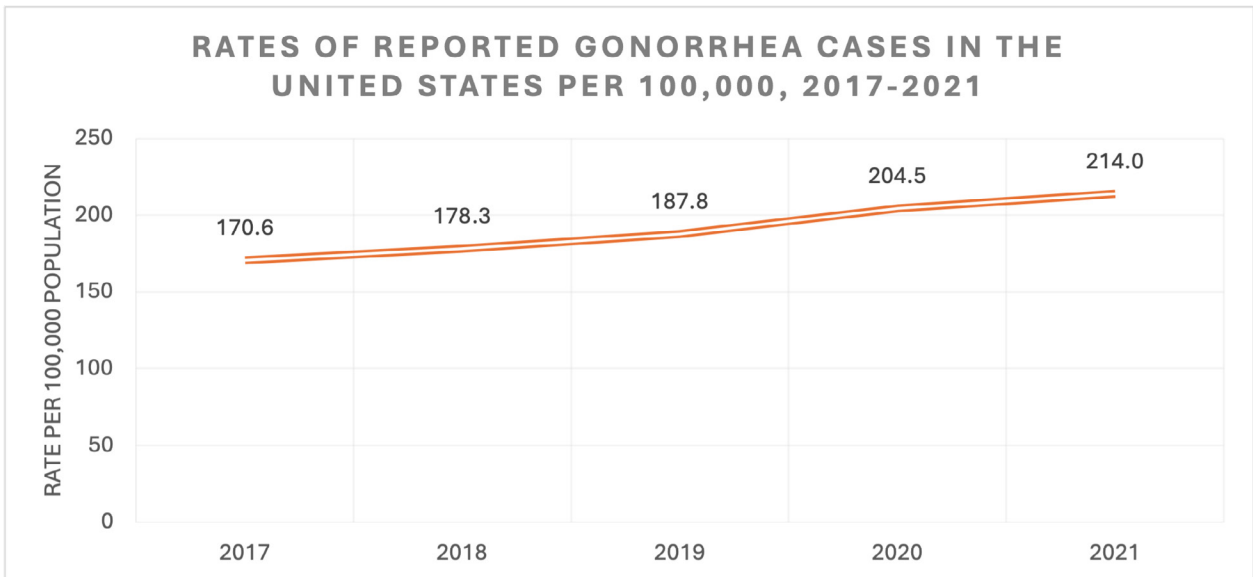
Source: Maryland Department of Health. 2022

Gonorrhea:

In the United States, gonorrhea cases have been on the rise since 2017. The CDC reports that rates of reported gonorrhea have increased 118% since a historic low in 2009. In 2021, the number of reported gonorrhea cases in the United States reached 710,151. The rate of gonorrhea in the United States was 214.0 in 2021, with a continuing increase since 2017 when the rate was 170.6 per 100,000.



Source: CDC. Sexually Transmitted Disease Surveillance 2021

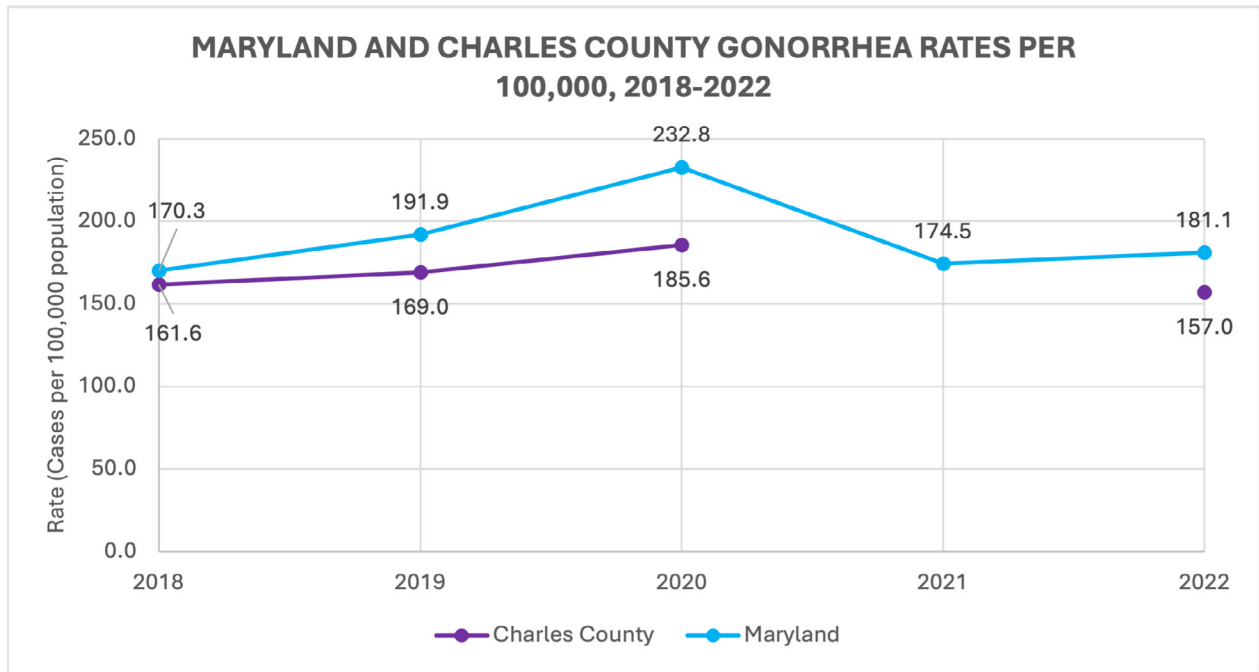


Source: CDC. Sexually Transmitted Disease Surveillance 2021

In Maryland and in Charles County, gonorrhea rates are experiencing the same trends as the United States. From 2018 to 2020, Maryland had an increasing rate of gonorrhea. In 2020, the Maryland

gonorrhoea rate reached 232.8 per 100,000, but dropped in 2021 to 174.5 per 100,000. This decrease in reported cases was most likely due to the COVID-19 pandemic. Rates increased again in 2022 to 181.1 per 100,000.

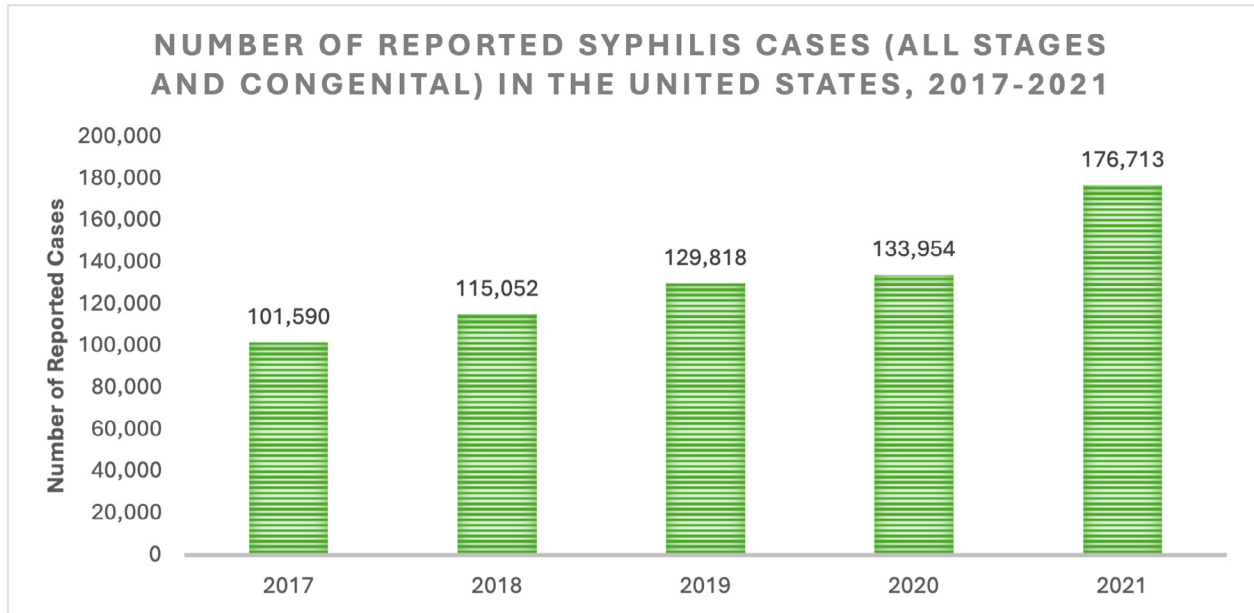
In Charles County gonorrhoea rates were below the state, but still increasing from 2018 to 2020. In 2020, the Charles County gonorrhoea rate was 185.6 per 100,000. The 2021 data for Charles County is unavailable, but in 2022 the gonorrhoea rate dropped to 157.0 per 100,000 which is below the state rate of 181.1 per 100,000.



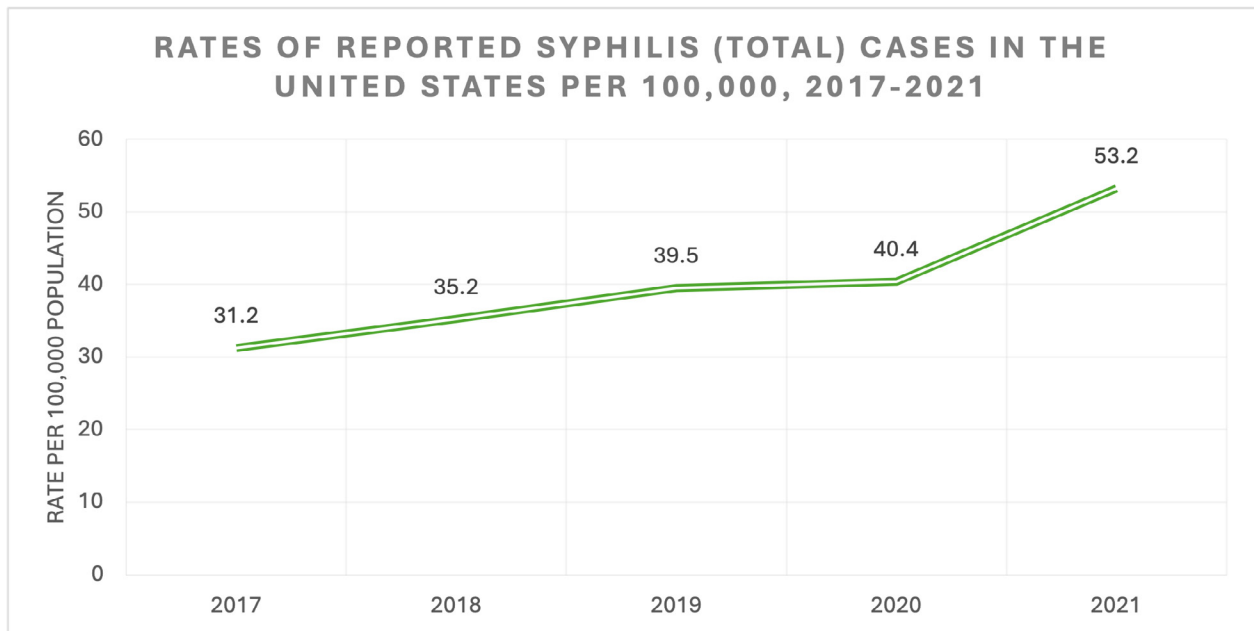
Source: Maryland Department of Health. 2022.

Syphilis:

In the United States the number of syphilis cases (all stages and congenital) have increased every year, with almost a 29% increase from 2020 to 2021. In 2021, the total number of reported syphilis cases reached 176,713. The rate of total syphilis hit 53.2 per 100,000 in 2021, an increase from 40.4 per 100,000 reported in 2020.



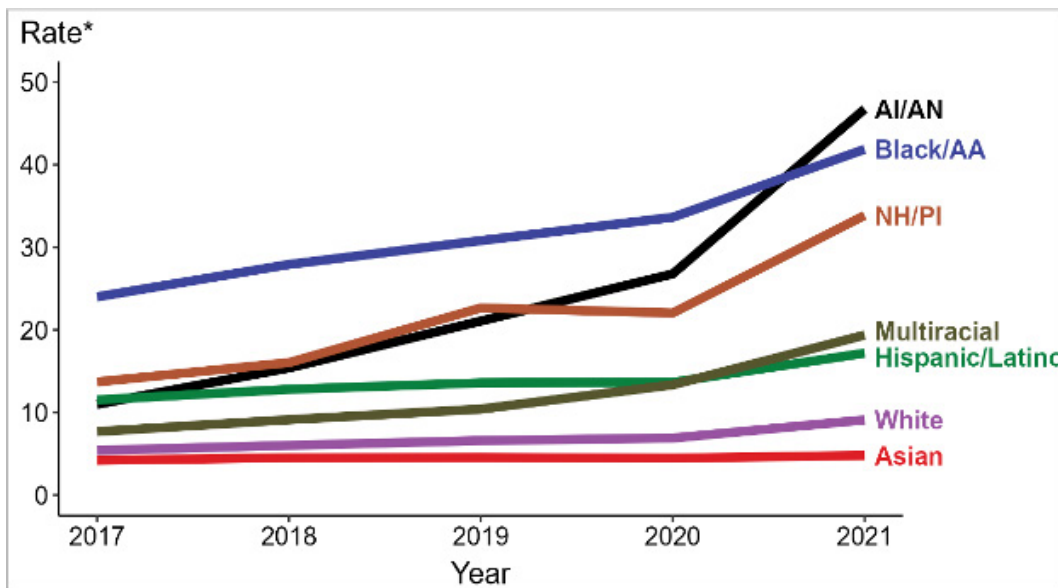
DC. Sexually Transmitted Disease Surveillance 2021.



DC. Sexually Transmitted Disease Surveillance 2021.

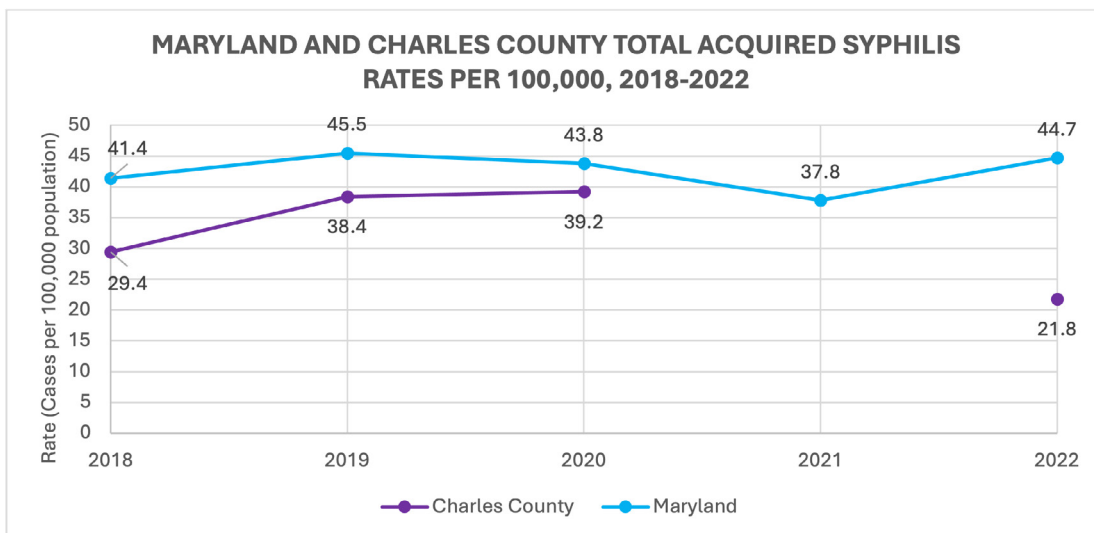
All racial groups in the United States have experienced increases in the rate of primary and secondary syphilis. However, the greatest increases have been seen among non-Hispanic American Indian or Alaska Native persons.

Primary and Secondary Syphilis Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2017-2021



DC. Sexually Transmitted Disease Surveillance 2021.

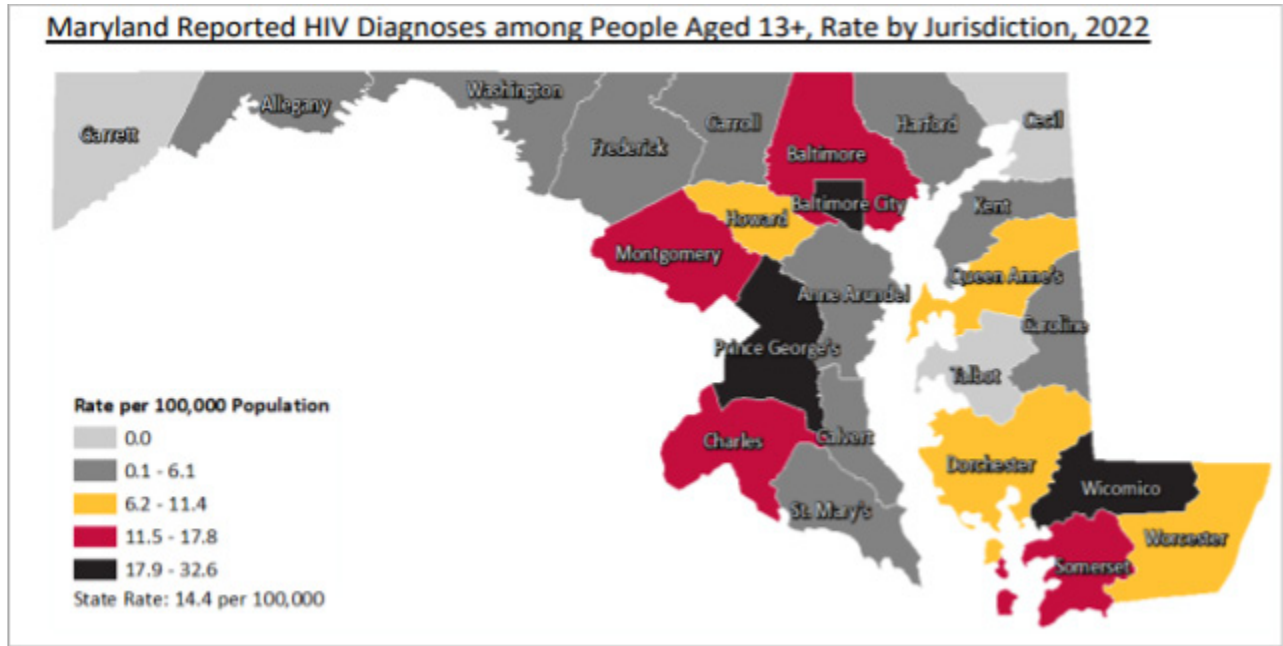
In 2020, the Maryland total acquired syphilis rate was 44.7 per 100,000, which is above the Charles County rate of 21.8 per 100,000. The 2020 rate for Maryland was an increase from the rate of 37.8 reported in 2021. From 2019 to 2021, the Maryland total acquired syphilis rate was on the decline, most likely due to the pandemic, but saw an increase again in 2022.



Source: Maryland Department of Health. 2022.

HIV Incidence:

This indicator shows the rate of adult/adolescent cases (age 13+) diagnosed with HIV (per 100,000 population). HIV is a significant and preventable public health problem. An estimated 9.1% of people with HIV in Maryland are undiagnosed, as of 2021. We have the knowledge and tools needed to slow the spread of HIV infection and improve the health of people living with HIV.

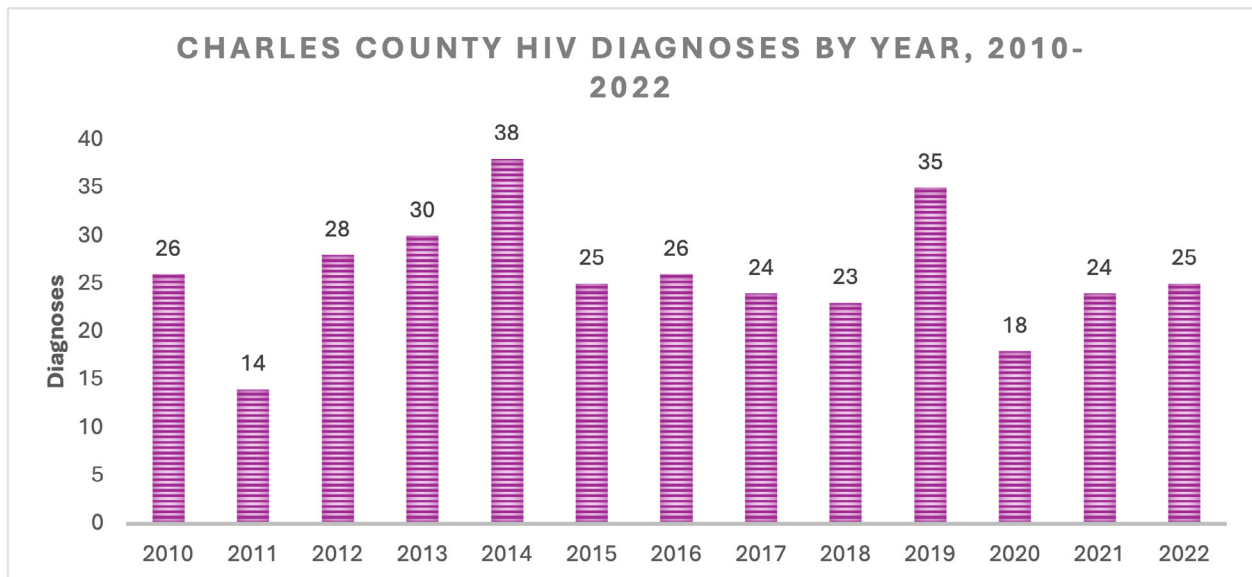
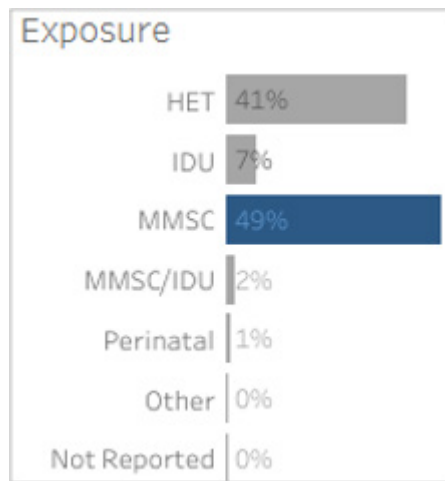
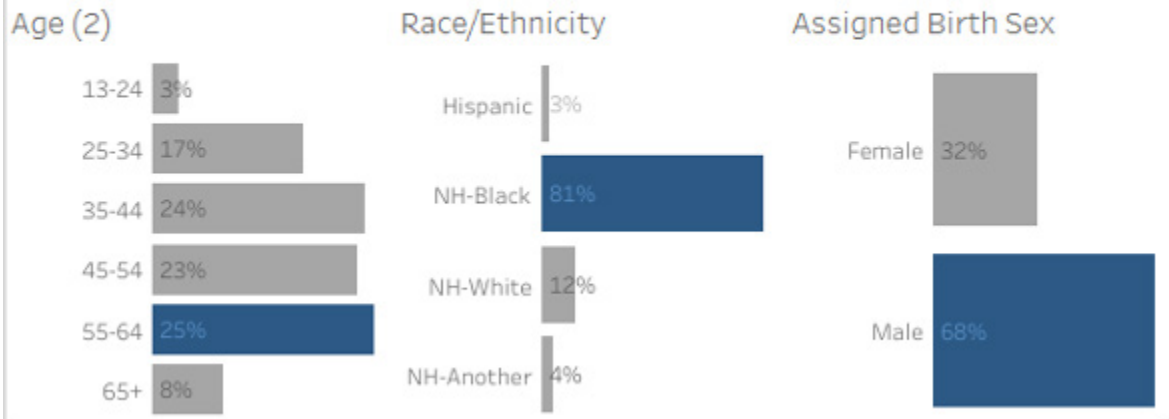


Source: 2022 Maryland Annual HIV Epidemiological Profile. Center for HIV Surveillance, Epidemiology and Evaluation. Infectious Disease Prevention and Health Services Bureau. Maryland Department of Health.

The 2022 Charles County rate of new HIV diagnoses was 17.6 per 100,000. This is above the Maryland state average rate of 14.4 per 100,000. The Charles County rate is the 4th highest among the Maryland jurisdictions, behind Baltimore City (32.6), Prince George’s County (32.3) and Wicomico County (21.5).

In 2022, there were 25 adult/adolescent (age 13+) HIV cases diagnosed in Charles County. Of the 697-living adult/adolescent cases in Charles County at the end of 2022, 68% were male, 25% were among adults aged 55-64 years old, and 24% were among adults aged 35-44 years old. Non-Hispanic (NH) Blacks made up the majority (81%) of living adult/adolescent cases. Among living adult/adolescent cases, the most common estimated or reported exposure category was men who have sex with men (MSM) (49%), followed by heterosexual exposure (HET) (41%), and injection drug use (IDU) (7%).

Select Demographics during 2022



HIV/AIDS/STI References

1. 2007-2020 Chlamydia Rates for Charles County, Maryland, and United States. Robert Wood Johnson Foundation County Health Rankings. Available at: <https://www.countyhealthrankings.org/explore-health-rankings/county-health-rankings-model/health-factors/health-behaviors/sexual-activity/sexually-transmitted-infections?state=24&year=2023&tab=1#map-anchor>.
1. Sexually Transmitted Disease Surveillance 2021. The Centers for Disease Control and Prevention. Available at: <https://www.cdc.gov/std/statistics/2021/default.htm>.
1. 2018-2022 Charles County STI Data. Maryland Department of Health. Accessed 20 December 2023.
1. Maryland HIV 5-year Aggregate County Dashboard. Maryland Department of Health HIV Surveillance. Available at: <https://public.tableau.com/app/profile/maryland.department.of.health.hiv.surveillance/viz/MarylandHIV5-yearAggregateCountyDashboard/Dashboard?publish=yes>.
1. Maryland HIV County Overview Dashboard. Maryland Department of Health HIV Surveillance. Available at: <https://public.tableau.com/app/profile/maryland.department.of.health.hiv.surveillance/viz/MarylandHIVCountyOverviewDashboard/Dashboard-Menu?publish=yes>.
1. 2022 Maryland Annual HIV Epidemiological Profile. Center for HIV Surveillance Epidemiology and Evaluation. Infectious Disease Prevention and Health Services Bureau. Prevention and Health Promotion Administration. Maryland Department of Health. Available at: <https://health.maryland.gov/phpa/OIDEOR/CHSE/SiteAssets/Pages/statistics/Maryland-Annual-HIV-Epidemiological-Profile-2022.pdf>.

Qualitative Data Relating to Sexually Transmitted Infections and HIV/AIDS

Over one-third of the long survey participants reported that HIV/AIDS (38.9%) and sexually transmitted diseases (42.7%) are a problem in Charles County on some level. Only 9.8% felt that HIV/AIDS is a “serious problem.” 13.0% reported that sexually transmitted diseases are a “serious problem” in the county.

| Health Issue/Condition: | Percent Reporting No Problem in county | % Reporting this as a problem at any level | Percent Reporting this as a serious problem |
|--------------------------------------|---|---|--|
| <i>HIV/AIDS</i> | 7.2% | 38.9% | 9.8% |
| <i>Sexually transmitted diseases</i> | 6.6% | 42.7% | 13.0% |

Behavioral risk factor data relating to STI’s, HIV/AIDS included:

- 29.4% always practice safe sex;
- 81.7% never use illegal drugs.

Tobacco Statistics:

**Adult Current Tobacco Use By Product
(Any Tobacco, Cigarettes, Cigars, Smokeless, ESDs) 2014-2021**

The Maryland Behavior Risk Factor Surveillance System is used to provide estimates for Maryland and Charles County on smoking status. In 2021, approximately 17.5% of Charles County residents reported use of any tobacco product. This is similar to the Maryland percentage of 16.9% of Maryland residents who use any tobacco product. Charles County has seen a decrease in tobacco product usage from 20.3% in 2014 to 17.5% in 2021. This same trend was seen on a state level.

Use of cigarettes in Charles County has decreased significantly from 12.2% in 2014 to 9.1% in 2021. The 2021 cigarette percentage for Charles County is lower than the Maryland percentage of 10.1%.

The 2021 Charles County cigar use percentage was 5.5%. This is higher than the Maryland state cigar percentage of 3.3%. 2021 data is not available on a county level for smokeless tobacco usage.

Lastly, the use of electronic smoking devices or ESD's was available for Charles County in 2016 only. 4.0% of Charles County residents reported use of an ESD. This is slightly higher than the percentage reported for Maryland overall (3.2%). 2021 data was not available on a county level due to an insufficient sample size.

Maryland

| CURRENT USE OF TOBACCO/ELECTRONIC SMOKING DEVICES (ESDs) | | | | | |
|---|--|--|--|--|--|
| <i>Estimated Prevalence (%)</i> | 2014 | 2016 | 2018 | 2020 | 2021 |
| <i>Confidence Interval (CI)</i> | % CI N | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | | |
| Any Tobacco <i>(Any tobacco includes cigarettes, cigars, smokeless tobacco, other tobacco products, and ESDs)</i> | 21.6 (20.1-23.1) 918,606 | 20.3 (19.3-21.3) 842,991 | 20.0 (19.0-21.1) 865,325 | 18.0 (17.0-19.1) 728,537 | 16.9 (15.7-18.1) 738,034 |
| Cigarettes | 14.6 (13.4-15.9) 655,824 | 13.7 (12.9-14.5) 608,816 | 12.5 (11.7-13.4) 569,871 | 10.9 (10.1-11.7) 477,204 | 10.1 (9.4-10.8) 449,567 |
| Cigars | 4.5 (3.6-5.4) 192,448 | 3.7 (3.2-4.2) 154,865 | 4.6 (4.0-5.2) 199,575 | 3.3 (2.8-3.8) 137,923 | 3.3 (2.8-3.9) 146,795 |
| Smokeless Tobacco | 1.7 (1.3-2.2) 76,683 | 1.6 (1.3-1.9) 70,410 | 2.0 (1.7-2.4) 93,401 | 1.7 (1.3-2.1) 74,868 | 1.4 (1.1-1.6) 62,041 |
| ESDs | 3.2 (2.5-3.8) 135,090 | 3.2 (2.8-3.7) 141,529 | 4.3 (3.7-4.9) 185,728 | 3.8 (3.2-4.4) 150,720 | 4.5 (3.9-5.0) 198,161 |

Charles County

| CURRENT USE OF TOBACCO/ELECTRONIC SMOKING DEVICES (ESDs) | | | | | |
|---|---|---|---|---|---|
| <i>Estimated Prevalence (%)</i> | 2014 | 2016 | 2018 | 2020 | 2021 |
| <i>Confidence Interval (CI)</i> | % CI N | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | | |
| Any Tobacco <i>(Any tobacco includes cigarettes, cigars, smokeless tobacco, other tobacco products, and ESDs)</i> | 20.3 (13.7-26.8) 22,966 | 19.7 (15.4-24.1) 21,877 | 19.7 (14.2-25.1) 22,841 | 26.0 (19.5-32.5) 28,370 | 17.5 (12.5-22.4) 28,334 |
| Cigarettes | 12.2 (7.2-17.1) 13,972 | 13.1 (9.8-16.5) 15,086 | 12.4 (8.6-16.2) 14,953 | 13.9 (9.3-18.6) 16,082 | 9.1 (6.1-12.0) 10,993 |
| Cigars | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | 5.5 (2.5-8.6) 8,988 |
| Smokeless Tobacco | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available |
| ESDs | BRFSS Data Not Available | 4.0 (1.7-6.3) 4,485 | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available |

Adult Current Tobacco Uses By Gender and Race/Ethnicity (White, AA/Black, Asian, Hispanic/Latino, American Indian/Alaskan Native) 2014-2021

When examining current tobacco use by gender, males are more likely to report use than females. For Charles County, 24.7% of men and 10.2% of women reported current tobacco use in 2021. The percentage of Charles County men reporting current tobacco use decreased from 2014 to 2021. The same trend has been seen for Charles County females. On a state level, current tobacco usage for both males and females decreased from 2014 to 2021.

When analyzing rates by race and ethnicity, current tobacco use percentages are only available for Whites, Blacks, and all minority combined in Charles County. Due to small case counts, percentages cannot be calculated for Asian, Hispanic, and American Indian/Alaskan Native. Current tobacco use is higher for Charles County Whites than Blacks or All Minorities Combined (20.9% vs. 14.0% and 15.5%). The same was true on a state level. The county rates of current tobacco use have fluctuated yearly for Whites, African Americans, and All Minorities Combined. Therefore, data is unstable, and caution must be taken when making any conclusions based on this data.

Maryland

| CURRENT TOBACCO USE — Gender and Race/Ethnicity | | | | | | |
|--|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <i>Estimated Prevalence (%)</i> | | 2014 | 2016 | 2018 | 2020 | 2021 |
| <i>Confidence Interval (CI)</i> | | % CI N | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | | | |
| Female | | 16.7 (14.9-18.4) 371,735 | 15.4 (14.2-16.6) 333,588 | 15.2 (14.0-16.4) 345,157 | 12.5 (11.4-13.6) 263,293 | 14.0 (12.5-15.5) 322,118 |
| Male | | 27.0 (24.5-29.4) 546,871 | 25.5 (23.9-27.2) 509,403 | 25.3 (23.6-27.0) 519,099 | 24.2 (22.5-25.9) 465,244 | 20.1 (18.3-21.9) 415,915 |
| White | | 22.8 (20.9-24.6) 521,532 | 21.6 (20.3-22.9) 484,462 | 20.5 (19.2-21.8) 467,068 | 18.8 (17.5-20.0) 383,733 | 18.6 (17.0-20.1) 410,529 |
| Black | | 24.2 (20.9-27.5) 294,004 | 20.6 (18.5-22.7) 238,933 | 22.1 (19.9-24.3) 275,274 | 19.9 (17.7-22.0) 231,686 | 17.1 (14.8-19.4) 211,841 |
| Asian | | 8.7 (3.7-13.7) 21,057 | 7.0 (4.1-9.9) 17,381 | 11.8 (7.4-16.3) 31,327 | 14.9 (9.7-20.1) 39,627 | 8.0 (4.1-12.0) 21,691 |
| Hispanic/Latino | | 14.2 (8.8-19.5) 49,841 | 16.6 (12.8-20.5) 57,237 | 14.4 (10.7-18.2) 55,505 | 10.2 (7.6-12.9) 40,500 | 10.1 (6.7-13.4) 43,057 |
| All Other Races | | 24.8 (17.5-32.1) 22,041 | 31.3 (25.6-37.0) 31,234 | 27.2 (21.8-32.6) 26,034 | 20.8 (15.9-25.7) 17,649 | 28.1 (19.2-37.1) 34,500 |
| **Minority Combined (Race & Female) | | 19.5 (17.8-21.3) 609,873 | 17.8 (16.7-18.9) 541,501 | 18.6 (17.4-19.8) 595,771 | 15.8 (14.7-17.0) 475,942 | 15.6 (14.3-17.0) 507,447 |

Charles County

| CURRENT TOBACCO USE — Gender and Race/Ethnicity | | | | | | |
|--|--|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <i>Estimated Prevalence (%)</i> | | 2014 | 2016 | 2018 | 2020 | 2021 |
| <i>Confidence Interval (CI)</i> | | % CI N | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | | | |
| Female | | 13.7 (6.4-20.9) 8,336 | 14.1 (9.1-19.0) 8,071 | 17.1 (10.8-23.4) 10,359 | 14.6 (7.9-21.4) 8,124 | 10.2 (4.9-15.5) 8,245 |
| Male | | 28.0 (17.1-39.0) 14,629 | 25.8 (18.4-33.1) 13,806 | 22.5 (13.5-31.5) 12,482 | 37.7 (27.5-47.8) 20,246 | 24.7 (16.3-33.0) 20,088 |
| White | | 21.8 (15.0-28.7) 11,781 | 26.1 (19.6-32.6) 12,852 | 20.4 (12.4-28.5) 9,507 | 29.2 (19.8-38.7) 12,004 | 20.9 (12.7-29.1) 12,255 |
| Black | | BRFSS Data Not Available | 15.1 (8.6-21.7) 7,006 | 21.0 (12.0-30.0) 11,297 | 24.9 (15.2-34.6) 14,125 | 14.0 (7.4-20.6) 10,980 |
| Asian | | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available |
| Hispanic/Latino | | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available |
| All Other Races | | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available |
| **Minority Combined (Race & Female) | | 17.7 (10.0-25.4) 15,743 | 16.0 (11.4-20.7) 13,724 | 19.6 (13.5-25.7) 18,191 | 22.3 (15.2-29.4) 18,994 | 15.5 (10.0-20.9) 20,194 |

Adult Current Tobacco Use By Education Level (No HS diploma, HS diploma/GED, Some College, 4-Yr. College Degree) 2014-2021

As the level of education increases, the rate of tobacco use decreases. For Maryland, those without a high school diploma are more likely to report tobacco use than those with a high school diploma or some college. Information on tobacco use for individuals with no high school diploma is not available for Charles County. The tobacco use rate among those with a high school diploma/GED is lower in Charles County than Maryland (15.5% vs. 23.4%). The opposite trend is seen for some college and college graduates. The Charles County tobacco use rate for individuals with some college was 19.8% compared to 18.1% for Maryland. The Charles County tobacco use rate for individuals with a college degree was 14.2%, substantially higher than the Maryland rate of 9.3%. Tobacco use among individuals with a college degree has been increasing each year for Charles County but decreasing for Maryland.

Maryland

| | 2014 | 2016 | 2018 | 2020 | 2021 |
|---------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Education | | | | | |
| No High School | 35.0 (28.6-41.5) 183,917 | 31.5 (26.9-36.1) 149,219 | 31.2 (26.7-35.8) 143,879 | 28.8 (24.4-33.2) 119,893 | 26.6 (21.1-32.0) 110,670 |
| High School or GED | 27.6 (24.4-30.7) 316,375 | 26.6 (24.5-28.6) 294,537 | 26.6 (24.4-28.7) 301,876 | 25.0 (22.7-27.2) 254,199 | 23.4 (20.8-26.0) 252,900 |
| Some College | 21.7 (19.0-24.4) 261,390 | 21.8 (19.8-23.8) 254,639 | 22.3 (20.1-24.4) 269,755 | 19.4 (17.3-21.5) 214,683 | 18.1 (15.7-20.4) 218,421 |
| College Grad | 11.3 (9.7-12.9) 154,655 | 10.3 (9.3-11.4) 144,147 | 9.9 (8.8-10.9) 148,573 | 9.4 (8.3-10.4) 137,852 | 9.3 (8.1-10.5) 151,437 |

Charles County

| | 2014 | 2016 | 2018 | 2020 | 2021 |
|---------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Education | | | | | |
| No High School | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available | BRFSS Data Not Available |
| High School or GED | 22.2 (10.3-34.0) 8,917 | 32.0 (22.7-41.3) 10,921 | 24.3 (15.5-33.2) 10,394 | 29.0 (16.1-41.9) 9,250 | 15.5 (7.8-23.2) 8,895 |
| Some College | 15.7 (8.3-23.1) 5,712 | 15.0 (8.6-21.4) 6,168 | 14.4 (6.1-22.8) 5,560 | 25.0 (14.4-35.7) 11,082 | 19.8 (10.4-29.2) 11,599 |
| College Grad | BRFSS Data Not Available | 11.6 (6.3-17.0) 3,382 | 10.3 (5.1-15.5) 2,891 | 14.4 (7.3-21.4) 3,729 | 14.2 (6.2-22.3) 5,494 |

**Adult Current Tobacco Use By Annual Household Income
(<\$15K, Up to \$25K, Up to \$50K, Up to \$75K, >\$75K) 2014-2021**

The following tables demonstrate that the higher the income level, the lower the rate of tobacco use among adults. Those earning more than \$50,000 per year in Charles County are less likely to report tobacco use than those who make less than \$50,000 (16.9% vs. 21.0%). Charles County has seen decreases in tobacco use among those who earn more than \$50,000 a year and those who make less than \$50,000 a year.

Maryland

| <i>Estimated Prevalence (%)</i> | 2014 | 2016 | 2018 | 2020 | 2021 |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|
| <i>Confidence Interval (CI)</i> | % CI N | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | | |
| Income | | | | | |
| < \$35k | 28.4 | 28.4 | 28.1 | 27.8 | 25.5 |
| | (24.9-31.9) | (25.9-30.9) | (25.5-30.8) | (25.3-30.3) | (22.3-28.7) |
| | 317,520 | 277,182 | 268,606 | 231,913 | 201,312 |
| \$35k- \$75k | 25.1 | 21.7 | 21.0 | 19.6 | 18.5 |
| | (21.7-28.6) | (19.5-23.9) | (18.8-23.2) | (17.3-21.8) | (15.8-21.2) |
| | 228,050 | 194,103 | 190,405 | 167,419 | 162,411 |
| >\$75k | 15.2 | 15.1 | 15.3 | 14.2 | 13.6 |
| | (13.4-17.0) | (13.7-16.5) | (13.8-16.8) | (12.8-15.6) | (12.0-15.2) |
| | 239,536 | 236,119 | 257,634 | 233,621 | 244,242 |

Charles County

| <i>Estimated Prevalence (%)</i> | 2014 | 2016 | 2018 | 2020 | 2021 |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|
| <i>Confidence Interval (CI)</i> | % CI N | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | | |
| Income | | | | | |
| < \$50k | 30.2 | 27.0 | 34.3 | 30.6 | 21.0 |
| | (13.2-47.2) | (16.4-37.7) | (19.8-48.7) | (15.5-45.7) | (9.2-32.8) |
| | 9,123 | 6,392 | 8,296 | 7,338 | 5,991 |
| > \$50k | 18.5 | 17.4 | 15.4 | 27.4 | 16.9 |
| | (11.7-25.3) | (12.3-22.5) | (9.7-21.1) | (19.1-35.6) | (10.5-23.3) |
| | 12,665 | 11,902 | 11,910 | 19,687 | 16,989 |

**Middle School Tobacco Use By Product
(Any Tobacco, Cigarettes, Cigars, Smokeless, ESDs) 2014-2021**

7.0% of Charles County middle school students reported use of any tobacco product in 2021. There has been stability in this percentage for 2016, 2018, and 2021. The 2021 Charles County middle school tobacco use percentage is above the Maryland state average percentage (7.0% vs. 6.3%). Cigarette usage (2.8% to 1.3%) and cigar usage (3.2% to 1.5%) have decreased in Charles County middle school students. The percentage of Charles County middle school students reporting smokeless tobacco use has also decreased from 2.4% to 1.0% and is now similar to the Maryland percentage of 1.4%. Charles County saw a decline in middle school students reporting use of electronic smoking devices (ESD's) from 9.3% in 2014 to 5.7% in 2021. The 2021 Charles County ESD percentage of 5.7% is still greater than the Maryland percentage of 5.2%, but the disparity gap is closing.

Maryland

| CURRENT TOBACCO USE | | | | |
|---|-----------------------------|---------------------------|----------------------------|----------------------------|
| <i>Estimated Prevalence (%)</i> | 2014 | 2016 | 2018 | 2021 |
| <i>Confidence Interval (CI)</i> | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | |
| Middle School Students | | | | |
| Any Tobacco <i>(Any tobacco includes cigarettes, cigars, smokeless tobacco, and ESDs)</i> | 9.3 (8.4-10.1) 15,483 | 5.4 (4.9-5.8) 9,105 | 7.1 (6.5-7.6) 12,292 | 6.3 (5.7-6.9) 12,107 |
| Cigarettes | 2.5 (2.2-2.9) 4,431 | 1.3 (1.1-1.6) 2,513 | 1.1 (0.9-1.3) 2,158 | 1.3 (1.0-1.5) 2,581 |
| Cigars | 3.6 (3.1-4.1) 6,416 | 2.5 (2.2-2.9) 4,743 | 1.8 (1.6-2.1) 3,482 | 1.9 (1.6-2.2) 3,820 |
| Smokeless Tobacco | 1.9 (1.6-2.2) 3,349 | 1.9 (1.6-2.2) 3,545 | 2.2 (1.9-2.5) 4,068 | 1.4 (1.1-1.6) 2,735 |
| ESDs | 7.6 (6.9-8.4) 13,318 | 4.7 (4.3-5.2) 8,396 | 5.9 (5.4-6.5) 10,799 | 5.2 (4.7-5.8) 10,331 |

Charles County

| CURRENT TOBACCO USE | | | | |
|---|---------------------------|-------------------------|-------------------------|-------------------------|
| <i>Estimated Prevalence (%)</i> | 2014 | 2016 | 2018 | 2021 |
| <i>Confidence Interval (CI)</i> | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | |
| Middle School Students | | | | |
| Any Tobacco <i>(Any tobacco includes cigarettes, cigars, smokeless tobacco, and ESDs)</i> | 10.6 (8.3-12.9) 557 | 7.1 (5.2-9.1) 362 | 7.5 (5.3-9.6) 391 | 7.0 (5.5-8.5) 428 |
| Cigarettes | 2.8 (1.8-4.2) 154 | 1.6 (0.7-2.5) 92 | 1.7 (0.7-2.7) 103 | 1.3 (0.7-1.9) 83 |
| Cigars | 3.2 (2.2-4.7) 181 | 2.7 (1.6-3.7) 153 | 2.5 (1.5-3.5) 146 | 1.5 (0.7-2.2) 92 |
| Smokeless Tobacco | 2.4 (1.1-5.1) 137 | 2.6 (1.4-3.8) 151 | 3.3 (2.0-4.6) 187 | 1.0 (0.4-1.6) 62 |
| ESDs | 9.3 (7.3-11.3) 508 | 5.7 (3.9-7.5) 303 | 6.3 (4.3-8.2) 350 | 5.7 (4.1-7.2) 353 |

**Middle School Current Tobacco Use By Gender and Race/Ethnicity
(White, AA/Black, Asian, Hispanic/Latino, American Indian/Alaskan Native) 2014-2021**

Charles County male middle school students had similar levels of current tobacco use to Charles County female middle school students (6.9% vs. 7.0%). The percentages of middle school males and females using tobacco in Charles County have decreased since 2014. The percentage for males in Charles County is higher than those reported for Maryland males (males 6.9% vs. 5.2%). For females, the percentages are nearly identical (7.0% for CC vs. 7.3% for MD).

On a county level, data is only available for White, African American/Black, All Other Races, and Hispanic middle school students in Charles County. The highest rate of current tobacco use is in the Hispanic/Latino population at 10.5%.

Maryland

| CURRENT TOBACCO USE — Gender and Race/Ethnicity | | | | |
|--|--|--|---|---|
| <i>Estimated Prevalence (%)</i> | 2014 | 2016 | 2018 | 2021 |
| <i>Confidence Interval (CI)</i> | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | |
| Middle School Students | | | | |
| Middle School Female | 8.3 (7.5-9.2) 6,919 | 5.4 (4.8-6.1) 4,561 | 7.1 (6.4-7.7) 6,083 | 7.3 (6.4-8.3) 6,810 |
| Middle School Male | 10.0 (9.0-11.1) 8,401 | 5.2 (4.6-5.8) 4,441 | 7.0 (6.3-7.6) 6,059 | 5.2 (4.6-5.8) 5,077 |
| White | 7.4 (6.5-8.3) 4,937 | 4.3 (3.6-5.0) 2,852 | 7.0 (6.2-7.7) 4,482 | 5.1 (4.4-5.7) 3,178 |
| African American/Black | 11.7 (10.4-13.0) 5,961 | 5.2 (4.4-6.0) 2,750 | 6.6 (5.6-7.6) 3,488 | 6.8 (5.8-7.9) 4,209 |
| Asian | 3.7 (2.2-5.2) 345 | 2.2 (1.2-3.2) 200 | 3.1 (2.0-4.2) 334 | 2.3 (1.3-3.4) 277 |
| Hispanic/Latino | 11.6 (9.9-13.4) 2,394 | 9.2 (7.7-10.8) 2,076 | 8.9 (8.0-9.9) 2,312 | 7.9 (6.5-9.3) 2,784 |
| American Indian/Alaskan Native | 13.7 (9.7-17.8) 296 | 10.4 (6.6-14.1) 194 | 8.8 (6.1-11.5) 165 | 9.6 (5.2-14.0) 214 |
| Native Hawaiian/Other Pacific Islander | 6.9 (2.1-11.6) 50 | 12.7 (5.2-20.2) 103 | 10.7 (4.4-17.0) 73 | YRBS Data Not Available |
| Multiracial-Non Hispanic | 10.7 (8.5-12.8) 658 | 6.4 (5.0-7.9) 468 | 9.9 (8.0-11.8) 672 | 9.5 (6.7-12.2) 745 |

Charles County

| CURRENT TOBACCO USE — Gender and Race/Ethnicity | | | | |
|--|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <i>Estimated Prevalence (%)</i> | 2014 | 2016 | 2018 | 2021 |
| <i>Confidence Interval (CI)</i> | % CI N | % CI N | % CI N | % CI N |
| <i>Estimated Number (N)</i> | | | | |
| Middle School Students | | | | |
| Middle School Female | 9.0 (6.4-11.6) 228 | 6.5 (3.9-9.0) 156 | 7.3 (4.6-10.0) 192 | 7.0 (4.7-9.2) 204 |
| Middle School Male | 11.9 (8.8-15.0) 322 | 7.8 (5.3-10.4) 207 | 7.5 (4.8-10.1) 190 | 6.9 (4.6-9.1) 211 |
| White | 10.5 (7.5-13.5) 156 | 7.8 (3.4-12.1) 101 | 5.4 (2.3-8.6) 69 | 6.7 (3.3-10.2) 75 |
| African American/Black | 10.3 (7.1-13.4) 275 | 6.5 (4.2-8.7) 166 | 7.9 (4.8-11.0) 219 | 6.6 (4.6-8.6) 222 |
| Asian | YRBS Data Not Available | YRBS Data Not Available | YRBS Data Not Available | YRBS Data Not Available |
| Hispanic/Latino | 9.7 (3.9-15.4) 27 | 9.5 (1.7-17.3) 26 | 9.0 (3.7-14.3) 30 | 10.5 (6.1-14.9) 68 |
| All Other Races | 14.9 (9.4-20.4) 59 | 5.9 (1.5-10.2) 24 | 7.2 (1.2-13.2) 29 | 8.6 (3.4-13.7) 42 |

High School Tobacco Use By Product (Any Tobacco, Cigarettes, Cigars, Smokeless, ESDs) 2014-2021

13.2% of Charles County high school students reported using any type of tobacco product in 2021. This is a large decrease from the percentages reported in both 2014 and 2016 (27.1% and 18.8%). Charles County high school students have reported less use of cigarettes, smokeless, electronic smoking devices, and cigars from 2014 to 2021. This same trend can be seen on a state level. The percentage of Charles County high school students reporting use of smokeless tobacco has fluctuated and is currently lower than the percentage reported in 2016 (5.4% vs. 7.4%). The Charles County tobacco use percentage of 13.2% in 2021 is lower than the state percentage of 15.6%.

The reported use of ESD's among Charles County high school students decreased from 23.1% in 2014 to 12.6% in 2021. This may be due to extensive efforts of the local CRF tobacco program to educate students on the dangers associated with use of ESD's. The Charles County high school ESD percentage is below the Maryland ESD percentage of 14.7%.

Maryland

2014 2016 2018 2021

| High School Students | | | | |
|---|----------------------------|----------------------------|----------------------------|----------------------------|
| Any Tobacco <i>(Any tobacco includes cigarettes, cigars, smokeless tobacco, and ESDs)</i> | 23.5 (22.8-24.2) | 17.8 (17.1-18.5) | 24.5 (23.2-25.8) | 15.6 (14.8-16.4) |
| | 51,945 | 39,428 | 55,921 | 37,744 |
| Cigarettes | 8.7 (8.2-9.1) | 8.2 (7.8-8.6) | 5.0 (4.5-5.4) | 3.6 (3.2-3.9) |
| | 20,677 | 20,653 | 12,557 | 9,398 |
| Cigars | 10.3 (9.9-10.8) | 9.0 (8.5-9.5) | 6.0 (5.5-6.5) | 3.2 (2.8-3.5) |
| | 25,460 | 22,136 | 15,135 | 8,235 |
| Smokeless Tobacco | 5.8 (5.4-6.1) | 6.2 (5.8-6.6) | 4.6 (4.1-5.1) | 3.0 (2.7-3.4) |
| | 13,769 | 15,225 | 11,524 | 7,829 |
| ESDs | 20.0 (19.4-20.5) | 13.3 (12.7-13.9) | 23.0 (21.9-24.1) | 14.7 (13.8-15.5) |
| | 47,542 | 30,026 | 53,920 | 36,640 |

Charles County

2014 2016 2018 2021

| High School Students | | | | |
|---|----------------------------|----------------------------|----------------------------|----------------------------|
| Any Tobacco <i>(Any tobacco includes cigarettes, cigars, smokeless tobacco, and ESDs)</i> | 27.1 (25.1-29.1) | 18.8 (16.9-20.8) | 19.3 (17.3-21.4) | 13.2 (11.7-14.7) |
| | 2,021 | 1,356 | 1,415 | 1,044 |
| Cigarettes | 9.2 (8.0-10.7) | 8.6 (7.3-9.9) | 5.0 (4.0-6.0) | 3.4 (2.5-4.3) |
| | 744 | 720 | 412 | 291 |
| Cigars | 10.5 (9.2-12.0) | 9.2 (7.8-10.6) | 6.0 (4.9-7.1) | 2.3 (1.5-3.2) |
| | 886 | 748 | 494 | 198 |
| Smokeless Tobacco | 6.7 (5.5-8.1) | 7.4 (6.2-8.7) | 5.4 (4.3-6.6) | 2.6 (1.8-3.4) |
| | 543 | 606 | 449 | 215 |
| ESDs | 23.1 (21.3-24.8) | 15.2 (13.4-17.0) | 17.7 (15.8-19.6) | 12.6 (11.1-14.0) |
| | 1,883 | 1,115 | 1,329 | 1,030 |

High School Current Tobacco Use By Gender and Race/Ethnicity (White, AA/Black, Asian, Hispanic/Latino, American Indian/Alaskan Native) 2014-2021

Charles County high school females are more likely to report use of tobacco products than males (14.9% vs. 11.1%). Tobacco use percentage for Charles County high school males and females remain slightly lower than the Maryland state average percentages (Males 11.1% vs. 13.0% and Females 14.9% vs. 17.8%). The percentages for Charles County males and females have been decreasing since 2014.

When examining by race, Charles County Whites and Hispanic/Latinos have similar percentages (18.9% and 18.8%) that are well above the percentage for Charles County African Americans (9.7%) and Charles County Asians (11.0%). Charles County tobacco use percentages for all races have seen decreases from 2014 to 2021.

Maryland

2014 2016 2018 2021

| High School Students | | | | |
|--|---|---|---|---|
| <i>High School Female</i> | 22.2 (21.2-23.1) 24,511 | 15.9 (15.1-16.7) 17,310 | 24.5 (23.0-26.0) 27,659 | 17.8 (16.7-19.0) 21,180 |
| <i>High School Male</i> | 24.7 (23.9-25.5) 26,935 | 19.3 (18.4-20.2) 21,374 | 24.2 (22.7-25.8) 27,515 | 13.0 (12.1-13.9) 15,637 |
| <i>White</i> | 26.6 (25.7-27.4) 25,066 | 20.5 (19.6-21.5) 18,650 | 34.0 (32.4-35.7) 30,568 | 19.4 (18.2-20.6) 17,047 |
| <i>African American/Black</i> | 19.7 (18.6-20.9) 14,001 | 14.1 (13.0-15.1) 10,181 | 15.6 (14.1-17.1) 11,046 | 11.4 (10.2-12.7) 8,621 |
| <i>Asian</i> | 10.4 (8.7-12.1) 1,341 | 7.0 (5.7-8.4) 878 | 13.5 (10.8-16.1) 1,979 | 7.7 (5.3-10.1) 1,231 |
| <i>Hispanic/Latino</i> | 25.5 (24.0-26.9) 6,648 | 19.0 (17.6-20.5) 5,265 | 21.2 (19.0-23.4) 7,234 | 16.3 (14.5-18.2) 6,919 |
| <i>American Indian/Alaskan Native</i> | 33.0 (28.0-37.9) 447 | 29.2 (24.2-34.2) 358 | 23.6 (16.8-30.4) 295 | 24.4 (16.6-32.2) 342 |
| <i>Native Hawaiian/Other Pacific Islander</i> | 33.0 (26.8-39.3) 334 | 35.5 (28.3-42.7) 279 | 36.7 (26.2-47.1) 328 | 17.1 (7.6-26.6) 110 |
| <i>Multiracial-Non Hispanic</i> | 26.8 (24.9-28.6) 2,065 | 20.7 (18.8-22.6) 1,933 | 26.9 (23.6-30.1) 2,523 | 18.9 (16.3-21.6) 1,939 |

Charles County

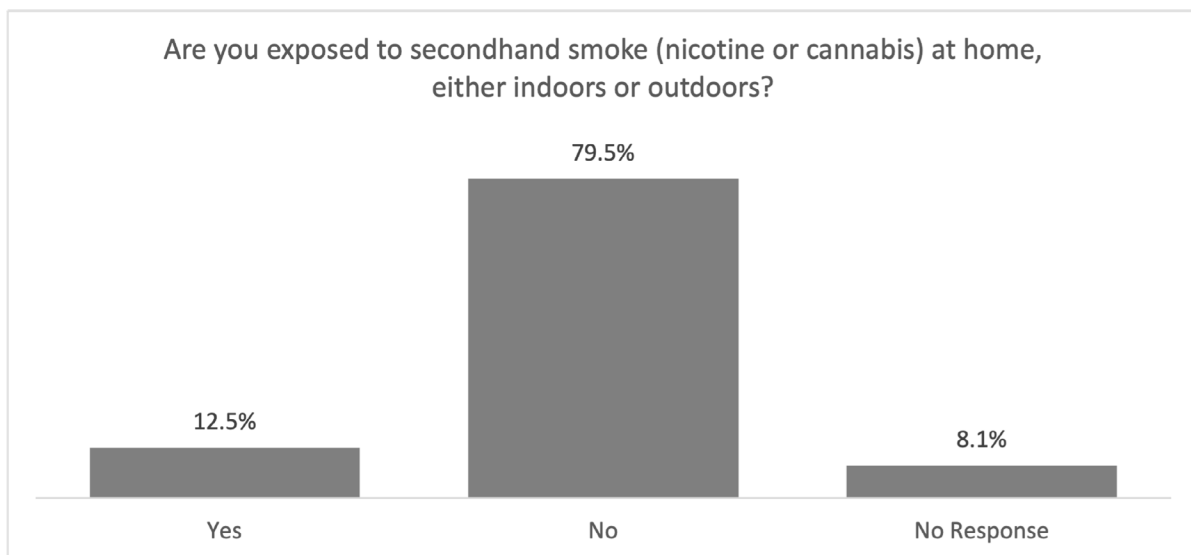
2014 2016 2018 2021

| High School Students | | | | |
|-------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| High School Female | 26.4 (24.1-28.7) 990 | 17.3 (14.8-19.9) 603 | 17.3 (14.5-20.2) 617 | 14.9 (12.8-16.9) 585 |
| High School Male | 27.5 (24.4-30.7) 1,010 | 20.1 (17.5-22.7) 739 | 20.7 (17.6-23.8) 762 | 11.1 (9.1-13.2) 429 |
| White | 32.6 (29.0-36.2) 769 | 24.8 (21.1-28.6) 523 | 32.1 (27.3-36.8) 617 | 18.9 (15.4-22.5) 326 |
| African American/Black | 23.4 (20.8-26.0) 913 | 15.0 (12.6-17.4) 581 | 12.2 (10.2-14.3) 488 | 9.7 (7.9-11.4) 433 |
| Asian | 20.6 (11.5-29.8) 24 | 17.8 (9.6-25.9) 25 | 10.2 (3.5-16.8) 20 | 11.0 (4.3-17.7) 27 |
| Hispanic/Latino | 26.9 (20.6-33.1) 91 | 20.1 (14.8-25.3) 72 | 25.5 (19.7-31.4) 121 | 18.8 (13.9-23.7) 124 |
| All Other Races | 30.3 (24.6-36.1) 161 | 20.6 (15.8-25.4) 99 | 19.1 (13.6-24.6) 97 | 15.5 (10.7-20.3) 89 |

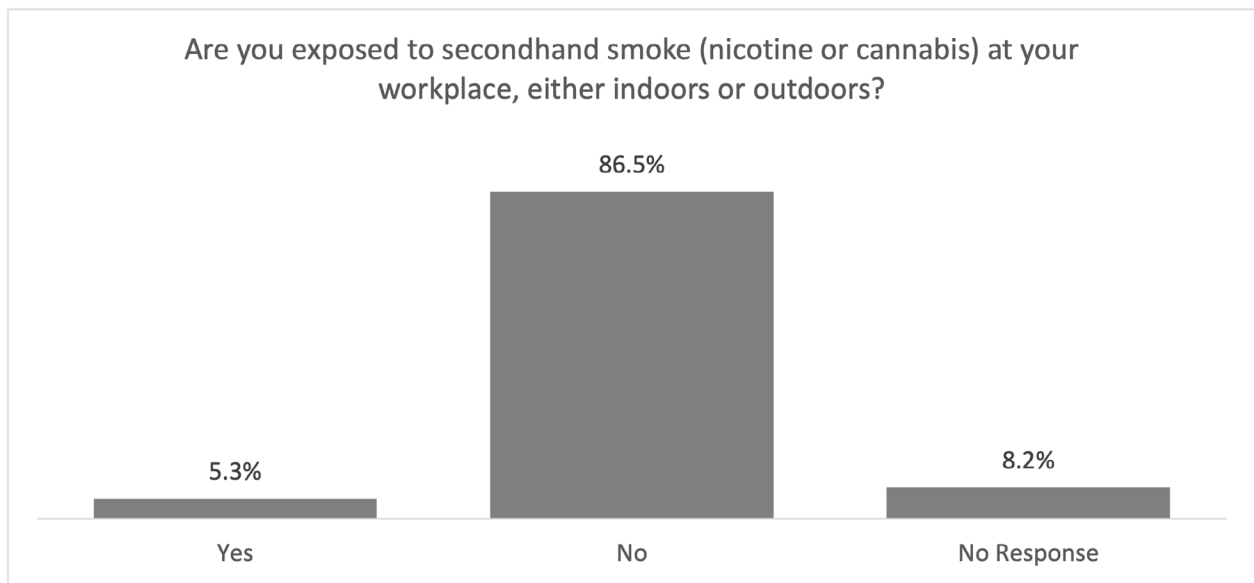
Qualitative Data on Tobacco Use and Smoking

Long Survey Questions On Secondhand Smoke:

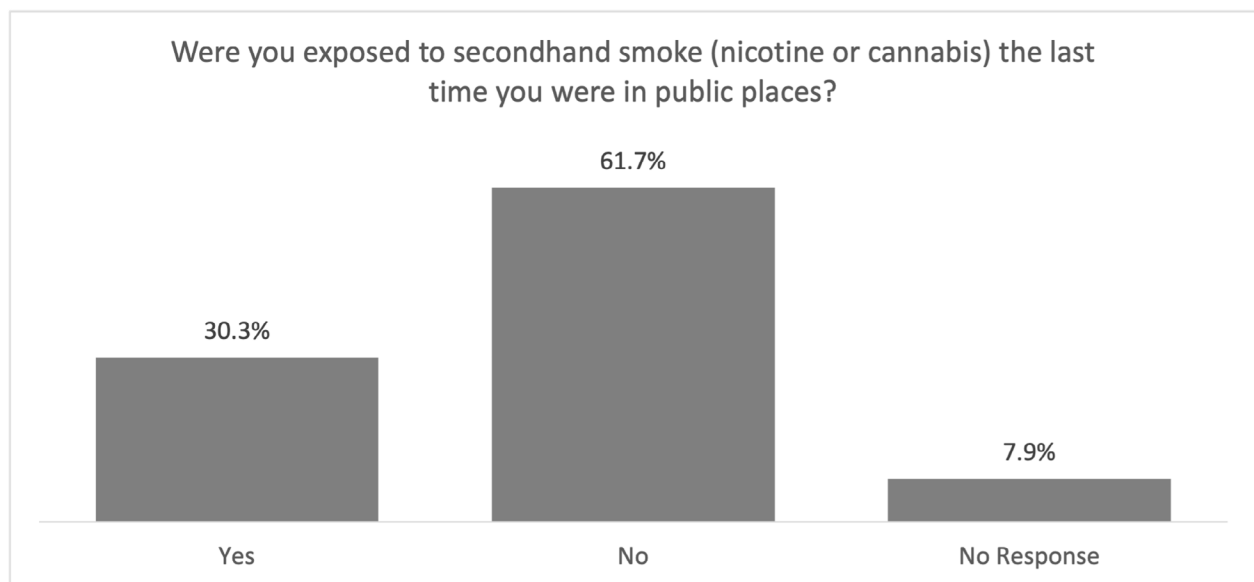
Survey respondents were also asked about their exposure to secondhand smoke, in their home or out in the community. Almost 80% of respondents reported that they are not exposed to secondhand smoke at home. 12.5% of respondents reported that they are exposed to secondhand smoke at their home, either indoors or outdoors.



A larger percentage of respondents reported that they are not exposed to secondhand smoke at their workplace. Just over 5% of respondents reported that they are exposed to secondhand smoke at work.



When asked if they were exposed to secondhand smoke in public places, a larger percentage of survey respondents reported that they were (30.3%). Just under 62% of respondents reported that they were not exposed to secondhand smoke the last time they were in public places.

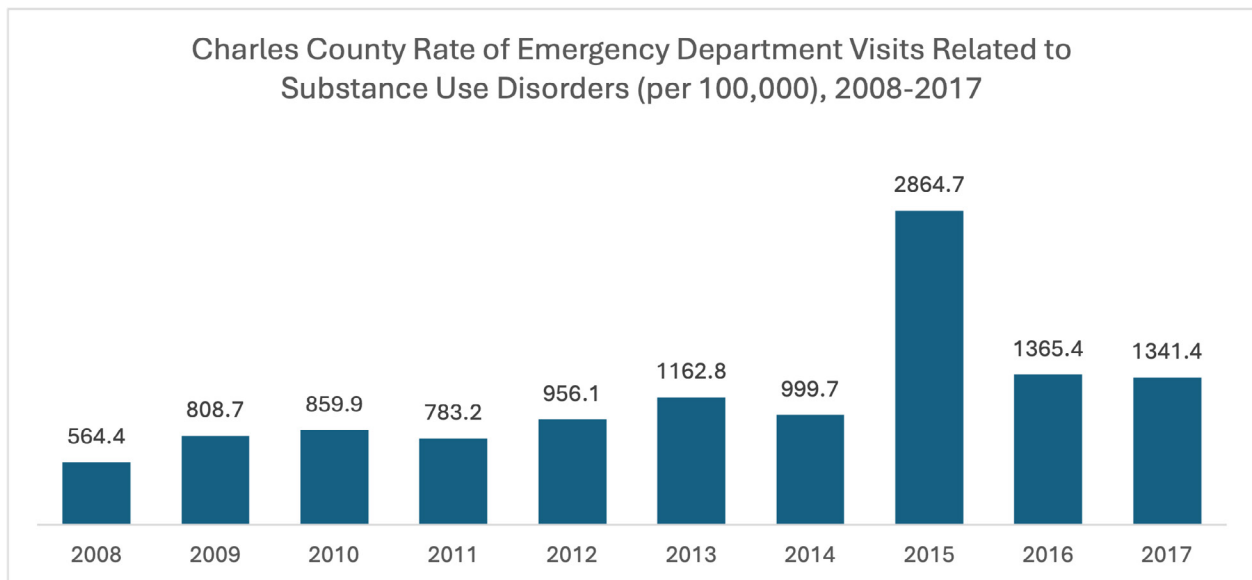


Charles County Substance Use Disorder Data:

Substance Use Disorder Hospitalization and Emergency Department Visit Rates

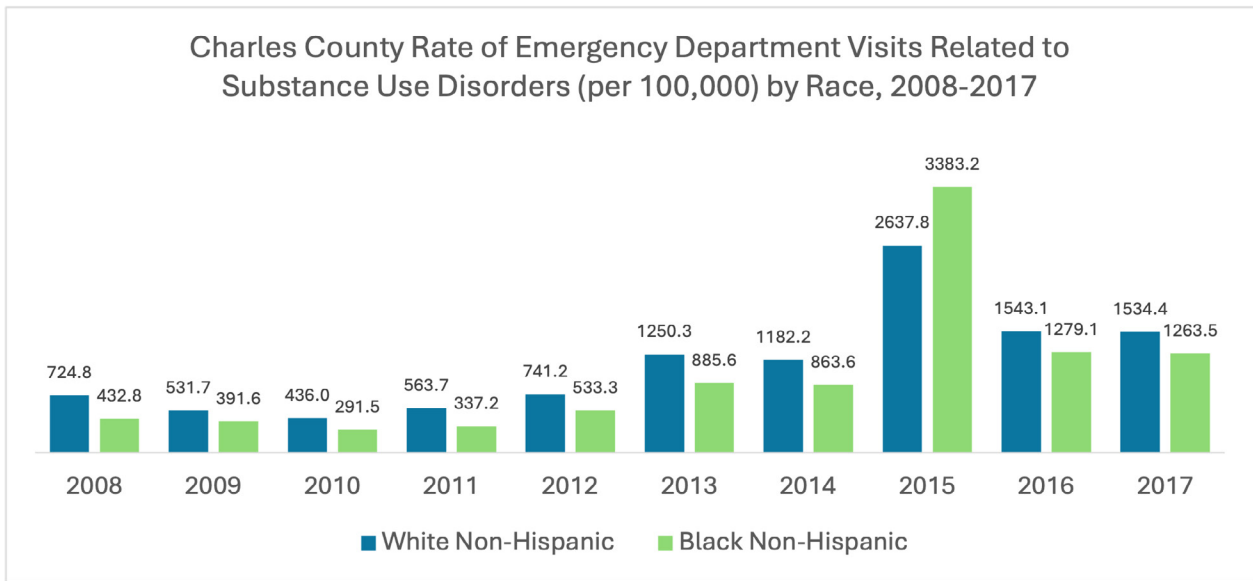
Emergency department visits for addiction-related have continued to increase in Maryland and in Charles County. The 2017 Charles County emergency department visit rate for addiction-related conditions was 1,341.4 per 100,000. This rate is below the state average rate of 2,017.0 per 100,000. The county rate is highest among Non-Hispanic Whites with an ED visit rate of 1,534.4 compared to 1,263.5 for Charles County Blacks and 1,095.5 for Charles County Hispanics. The 2017 Addictions-related ED visit rate for Maryland Hispanics was not calculated and presented.

The Charles County Addiction-related ED visit rate has continued to climb each year from 564.4 in 2008 to 1,341.4 in 2017. There has been a great deal of fluctuation in this yearly rate with a large spike in the rate for 2015. The 2016 and 2017 rates have remained fairly consistent.



Source: Maryland SHIP Emergency Department Visits for Addictions-Related Conditions 2008-2017
*Diagnoses include alcohol-related disorders and drug-related disorders

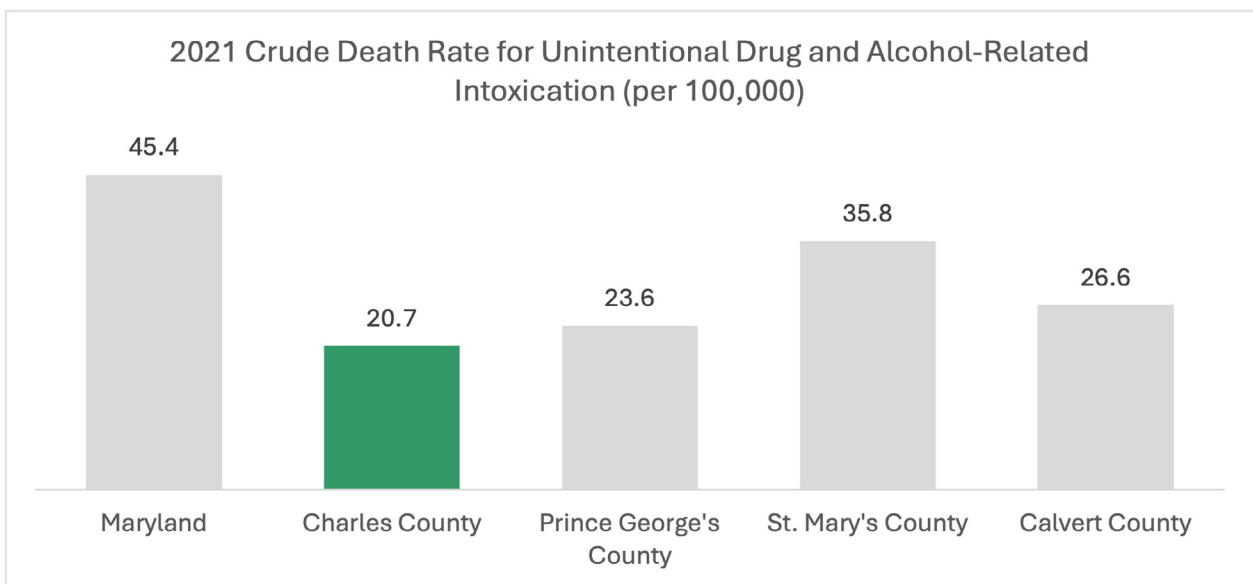
Since 2008, Non-Hispanic Whites have consistently had higher rates of emergency department visits related to substance use disorders in Charles County, compared to Non-Hispanic Blacks. However, in 2015 this trend shifted. In 2015, the rate of emergency department visits for Non-Hispanic Blacks increased to 3,383.2 per 100,000, exceeding the Non-Hispanic White rate of 2,637.8 per 100,000. However, in 2016 and 2017, the rate for Non-Hispanic Blacks decreased and fell below the Non-Hispanic White rate again for both years.



Source: Maryland SHIP Emergency Department Visits for Addictions-Related Conditions 2008-2017
 *Diagnoses include alcohol-related disorders and drug-related disorders

The CDC reports that in 2021, there were 106,699 drug overdose deaths in the United States. The age-adjusted rate of overdose deaths increased by 14% from 2020 (28.3 per 100,000) to 2021 (32.4 per 100,000). Of these deaths, Opioids were involved in 75.4%.

Since 2012, Charles County has seen an increase in the number of intoxication deaths, both drug and alcohol related. In 2021, Charles County had a crude death rate of 20.7 per 100,000 for unintentional drug and alcohol-related intoxications. This rate was lower than Maryland rate of 45.4 per 100,000 and lower than all surrounding counties (Prince George’s County, St. Mary’s County, and Calvert County).



Source: 2021 Maryland Vital Statistics Unintentional Drug- and Alcohol-Related Intoxication Deaths Report

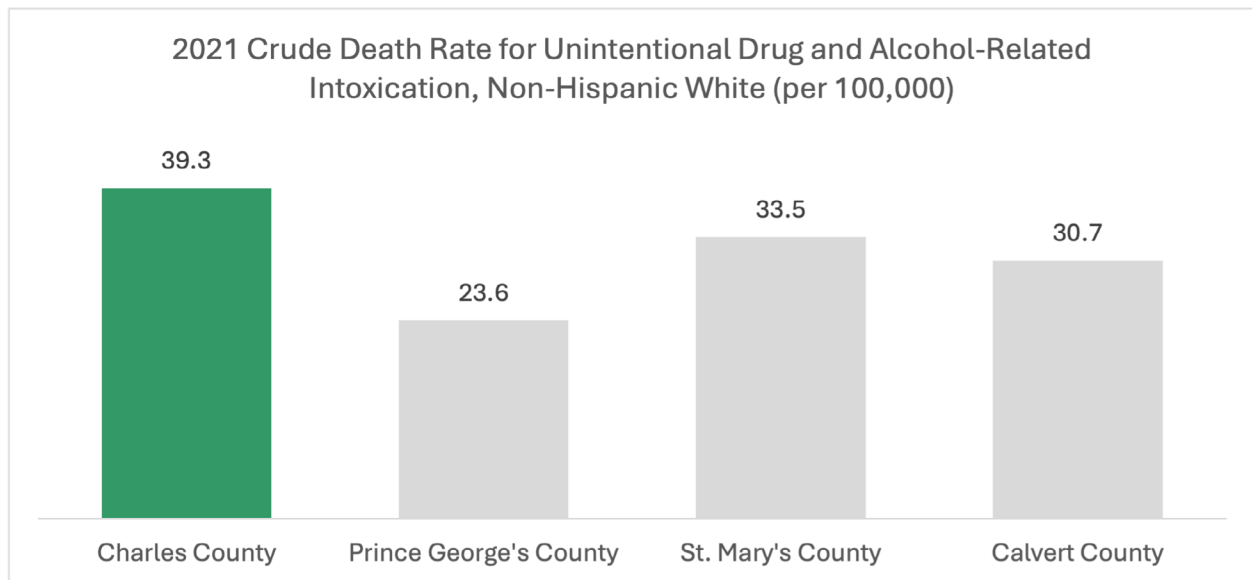
Unintentional drug and alcohol-related intoxication deaths vary by racial and ethnic groups, both in Maryland and in Charles County. In Maryland, Non-Hispanic Whites accounted for 1,427 out of the 2,800 total intoxication deaths in 2021. In Charles County, Non-Hispanic Whites accounted for 23 out of the 35 intoxication deaths.

| Total Number of Drug- and Alcohol-Related Intoxication Deaths by Race and Hispanic Origin, 2021 | Total | Non-Hispanic White | Non-Hispanic Black | Hispanic |
|--|--------------|---------------------------|---------------------------|-----------------|
| Maryland | 2,800 | 1,427 | 1,198 | 124 |
| Charles County | 35 | 23 | 12 | 0 |

Source: 2021 Maryland Vital Statistics Unintentional Drug- and Alcohol-Related Intoxication Deaths Report

Although Non-Hispanic Whites had a higher number of deaths compared to Non-Hispanic Blacks in Maryland, the crude death rate for Non-Hispanic Blacks was significantly higher at 64.3 per 100,000 compared to 47.2 per 100,000 for Non-Hispanic Whites.

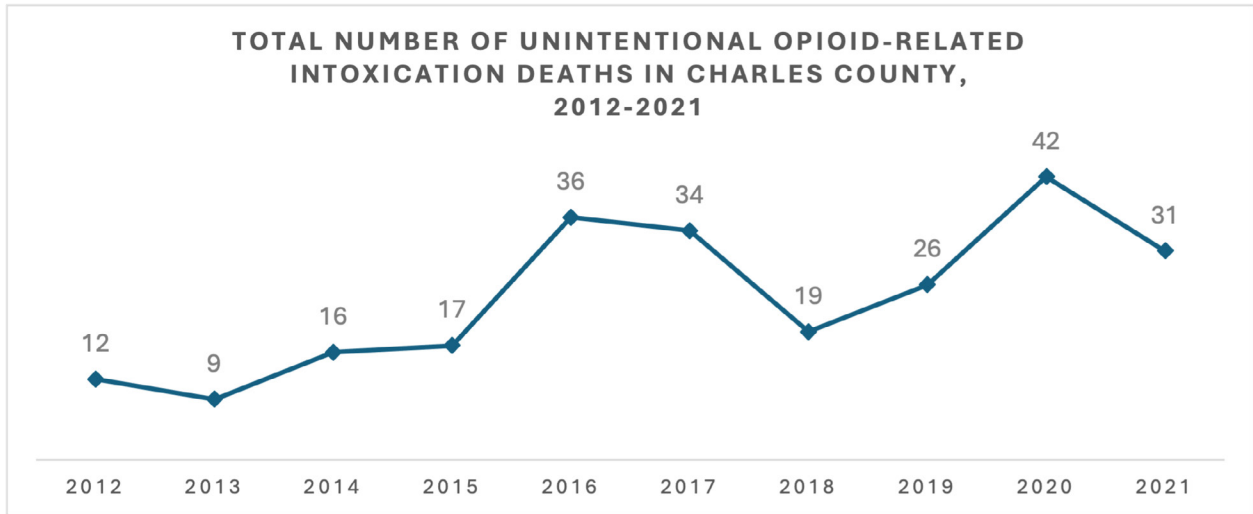
In Charles County, the drug and alcohol-related intoxication crude death rate for Non-Hispanic Whites is lower than the Maryland rate, but higher than surrounding counties. In 2021, the crude death rate for Non-Hispanic Whites in Charles County was 39.3 per 100,000. The next highest county was St. Mary's with a rate of 33.5 per 100,000.



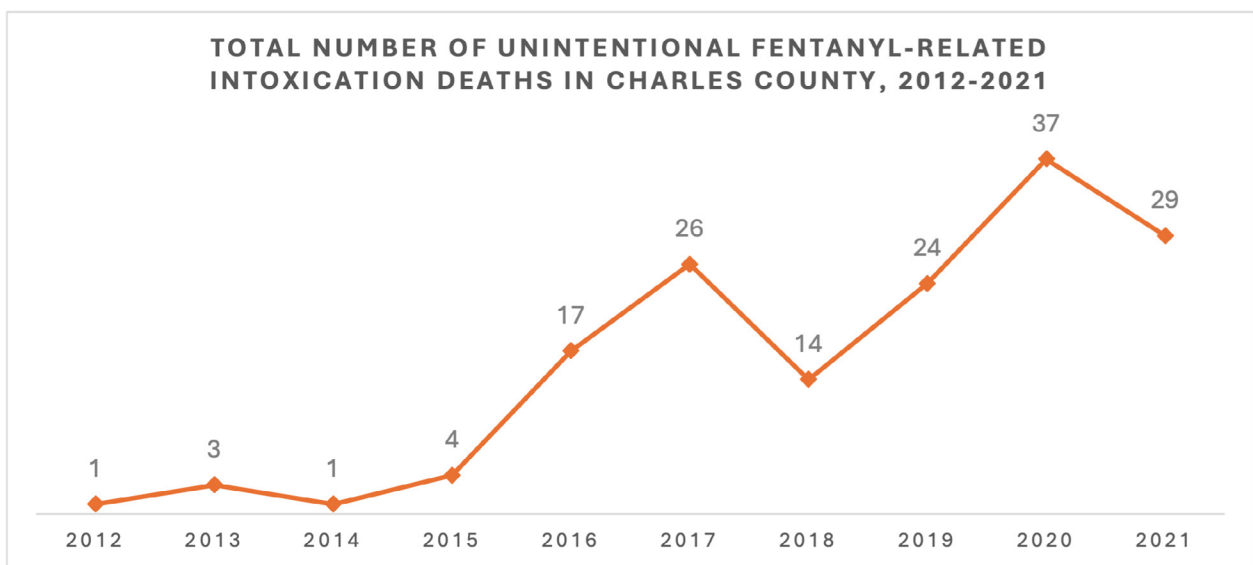
Source: 2021 Maryland Vital Statistics Unintentional Drug- and Alcohol-Related Intoxication Deaths Report

Since 2012, Charles County has seen an increase in the number of unintentional intoxication deaths, with the largest increases being in opioid-related deaths and fentanyl-related deaths. In 2021, there were a total of 31 opioid-related intoxication deaths reported in Charles County. This number is less than the 2020 total of 42 reported deaths. However, the 2021 total of 31 deaths

is more than double the number of deaths reported in 2012, which had a total of 12 opioid-related intoxication deaths.



Along with opioid-related deaths, fentanyl-related deaths have also been on the rise in Charles County. The increases in fentanyl-related deaths have exceeded any other drug or alcohol-related deaths in the county. In 2021, there were a total of 29 reported fentanyl-related intoxication deaths in Charles County. This number is a decrease from 37 deaths reported in 2020. However, the total of 29 deaths in 2021 is a large increase from 1 death reported in 2012. From 2012 to 2015, fentanyl-related deaths in Charles County remained low, with a high of 4 deaths reported in 2015. This number jumped to 17 deaths in 2016 and then to 26 deaths in 2017. After a decrease in deaths in 2018, fentanyl-related deaths were on the rise again until they fell in 2021.

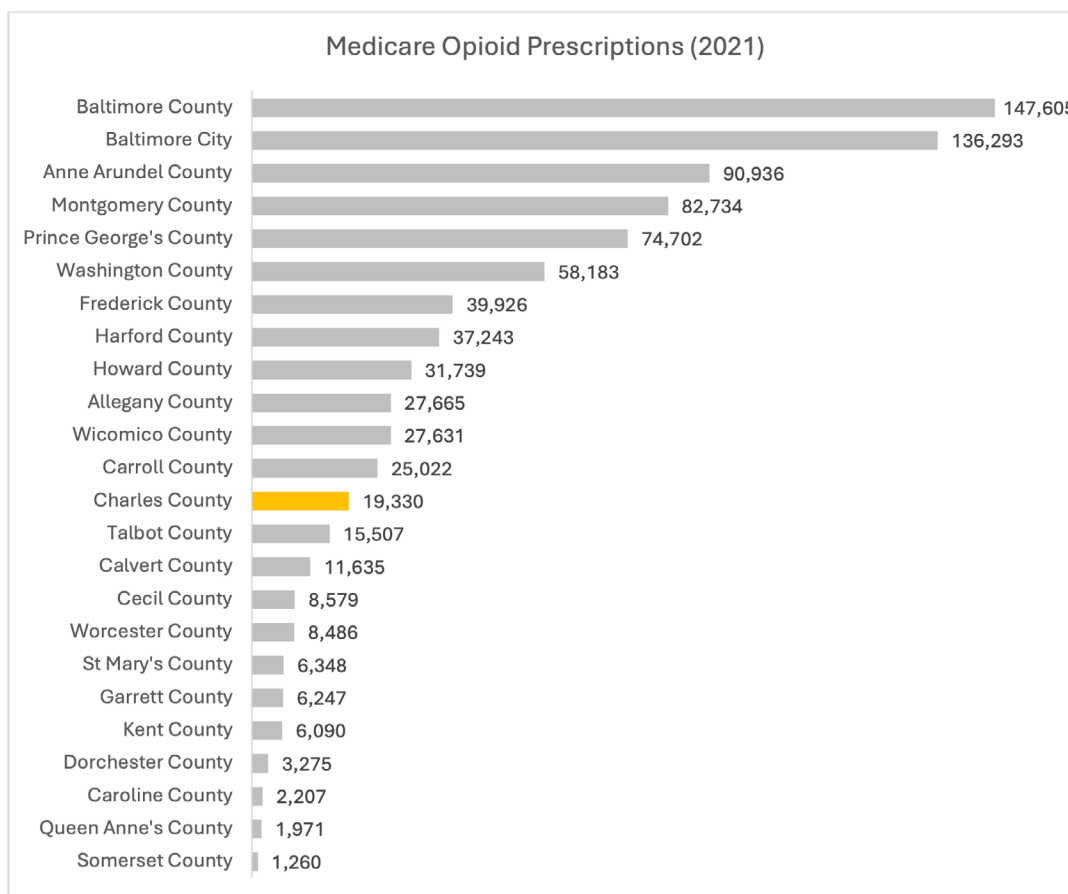


| Total Number of Unintentional Intoxication Deaths in Charles County | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|---|------|------|------|------|------|------|------|------|------|------|------------|
| Opioid-Related Deaths | 12 | 9 | 16 | 17 | 36 | 34 | 19 | 26 | 42 | 31 | 242 |
| Heroin-Related Deaths | 5 | 5 | 10 | 8 | 22 | 16 | 11 | 12 | 15 | 5 | 109 |
| Prescription Opioid-Related Deaths | 7 | 5 | 9 | 8 | 10 | 11 | 8 | 7 | 8 | 5 | 78 |
| Oxycodone-Related Deaths | 3 | 1 | 5 | 8 | 4 | 7 | 5 | 4 | 3 | 1 | 41 |
| Fentanyl-Related Deaths | 1 | 3 | 1 | 4 | 17 | 26 | 14 | 24 | 37 | 29 | 156 |
| Cocaine-Related Deaths | 1 | 0 | 0 | 2 | 4 | 10 | 13 | 12 | 16 | 8 | 66 |
| Alcohol-Related Deaths | 2 | 4 | 5 | 4 | 12 | 9 | 3 | 10 | 14 | 7 | 70 |

Source: 2021 Maryland Vital Statistics Unintentional Drug- and Alcohol-Related Intoxication Deaths Report

Medicare Opioid Prescriptions

The following data reflects Medicare Part D opioid drug claims, including original prescriptions and refills. In 2021, Maryland had a total of 870,614 Medicare Opioid prescriptions. Of this total, Charles County comprised of 2.2% of Maryland opioid prescriptions with a total of 19,330 in 2021.



Source: 2021 CMS Medicare Opioid Prescriptions

Maryland Youth Risk Behavior Survey

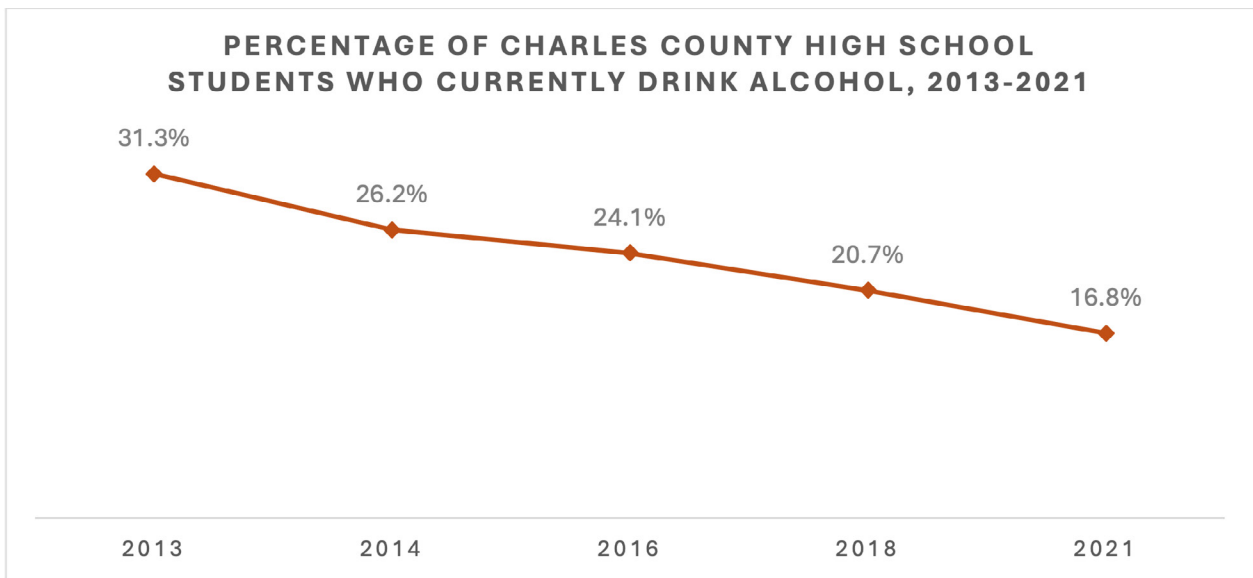
Charles County middle and high school students participated in the 2021-2022 Maryland Youth Risk Behavior Survey (YTRBS) to determine any changes in the percentage of children engaging in high-risk behaviors that can lead to chronic and infectious disease conditions. All responses have been weighed to reflect the county's school-aged population.

Among Charles County High School students, 16.8% reported currently drinking alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey). This was the highest percentage among all substances for High School students. However, the percentage of High School students who currently drink alcohol has been on the decline since 2013, when the percentage was 31.3%. High School students who currently use marijuana had the second highest percentage at 14.7%, followed by ever taking prescription pain medications at 14.5%.

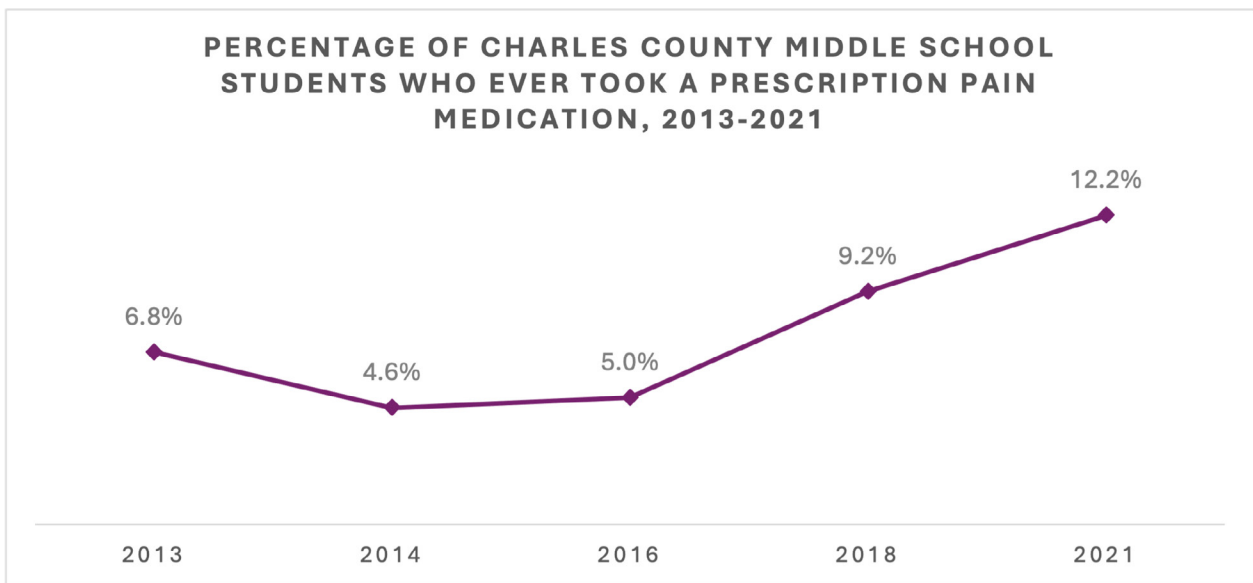
Among Charles County Middle School students, 12.2% reported ever taking a prescription pain medication. This was an increase from 9.2% reported in 2018. Since 2013, prescription pain medication use has increased among Charles County Middle School students. Middle school students who reported currently drinking alcohol had the second highest percentage at 6.7%. This is a decrease from 10.4% reported in 2018.

| Charles County Alcohol and Other Drug Use Among Middle and High School Students | Middle School | High School |
|--|----------------------|--------------------|
| Currently drink alcohol | 6.7% | 16.8% |
| Currently use Marijuana | 3.8% | 14.7% |
| Ever took prescription pain medication without a doctor's prescription or differently than how a doctor told them to use it | 12.2% | 14.5% |
| Ever used Cocaine | 2.1% | 3.4% |
| Ever used Heroin | NA | 2.8% |
| Ever used Methamphetamines | NA | 2.7% |
| Ever used Ecstasy | NA | 3.2% |
| Ever inject any illegal drug | NA | 3.1% |

*NA: Not applicable. This question was not asked on the middle school survey.
Source: 2021-2022 Maryland Youth Risk Behavior Survey*



Source: 2021-2022 Maryland Youth Risk Behavior Survey

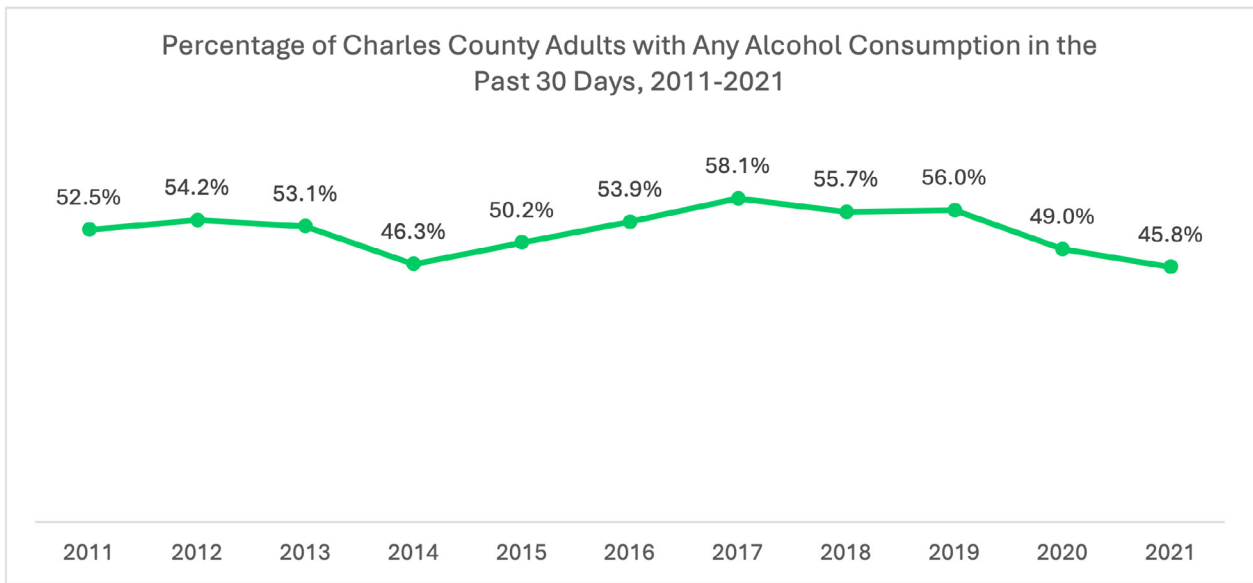


Source: 2021-2022 Maryland Youth Risk Behavior Survey

Maryland Behavior Risk Factor Surveillance System Data

Alcohol Consumption:

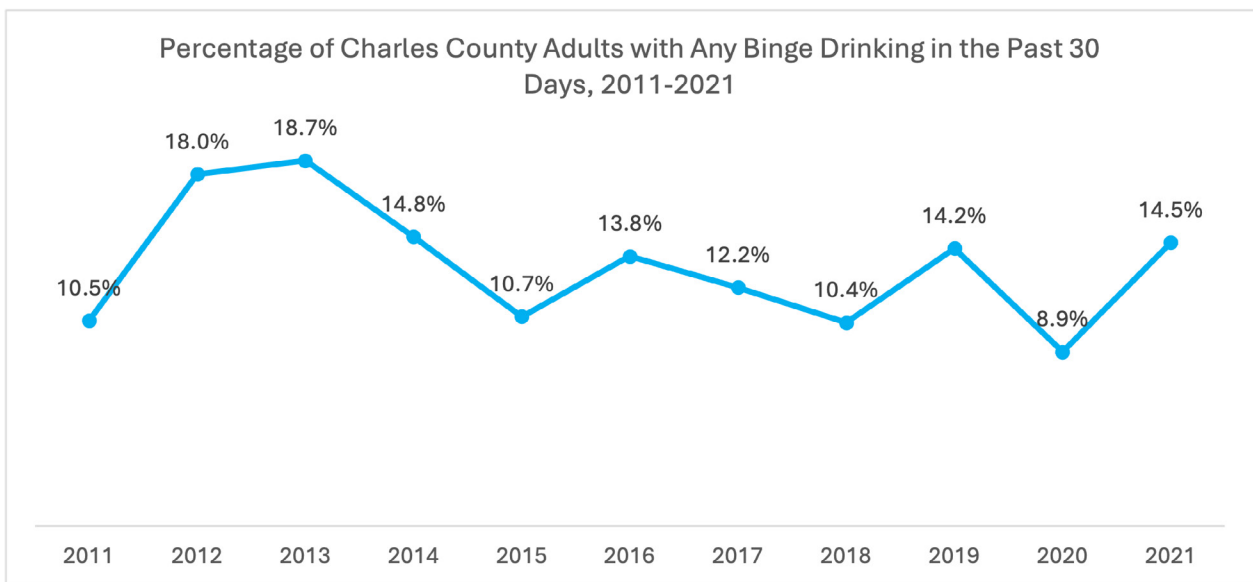
In 2021, 45.8% of Charles County adults reported consuming alcohol in the past 30 days. This percentage is lower than the Maryland percentage of 53.1%. In 2017, the percentage of Charles County adults who reported any alcohol consumption in the past 30 days reached 58.1% but has since been on the decline.



Source: 2011-2021 Maryland BRFSS

Binge Drinking

Binge drinking is considered as 5 or more drinks on any occasion for men, and 4 or more drinks for women. In 2021, 14.5% of Charles County adults reported binge drinking in the past 30 days. This is slightly higher than the Maryland percentage of 14.1%. From 2020 to 2021, there was an increase in the percentage of adults who reported binge drinking. In 2020, 8.9% of Charles County adults reported binge drinking in the past 30 days. Since 2011, the trend in binge drinking among Charles County adults has been very unstable. In 2012 and 2013, Charles County reached the highest percentage of binge drinking among adults at 18.0% and 18.7%, respectively. Since 2015, the percentage of binge drinking did not reach over 14% again until 2019 (14.2%), and 2021 (14.5%).



Source: 2011-2021 Maryland BRFSS

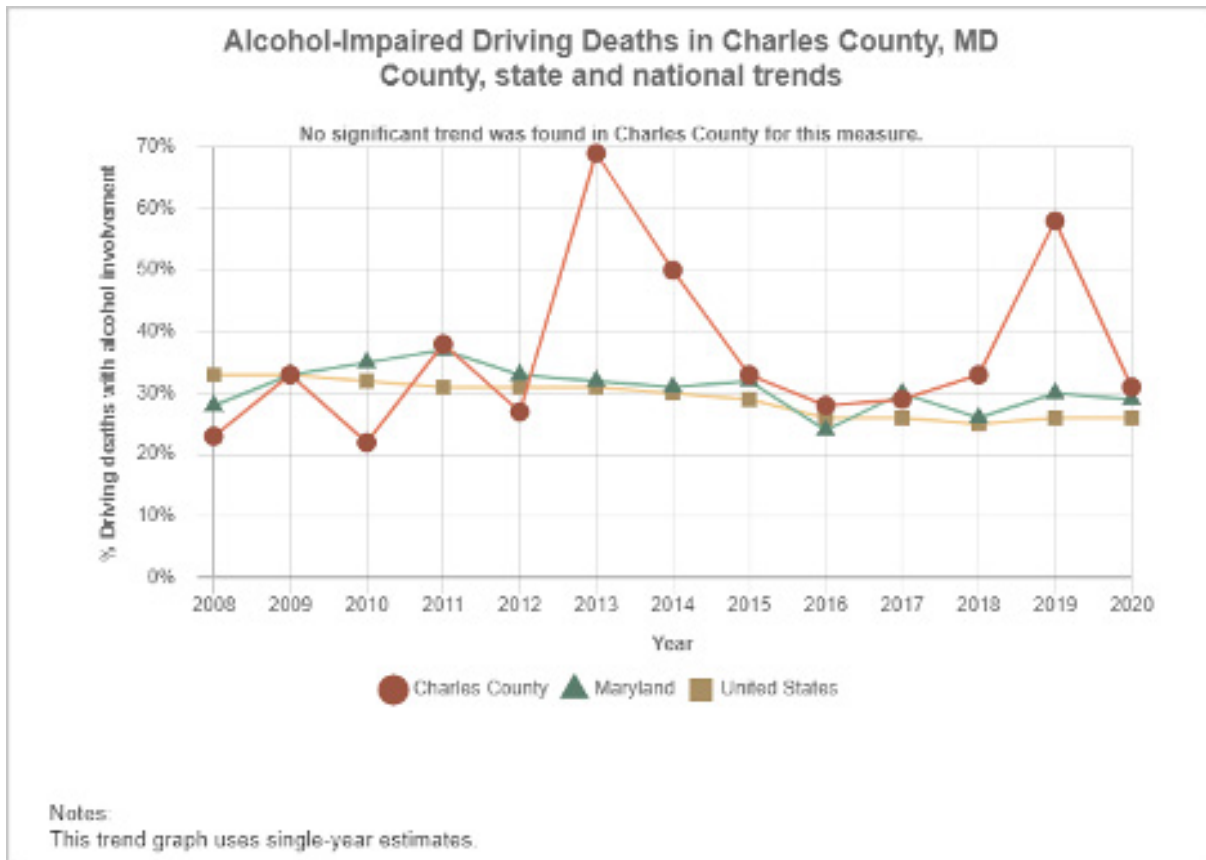
Chronic Drinking

In 2021, 4.2% of Charles County adults reported being chronic drinkers. This is considered as adult men having more than 14 drinks per week and adult women having more than 7 drinks per week. The percentage of Charles County adults who are chronic drinkers is below the Maryland percentage of 5.0% for 2021.

Alcohol Involved Driving Deaths

According to County Health Rankings, 35% of motor vehicle crash deaths in Charles County involved alcohol. This is higher than the Maryland percentage of 28%. Out of the surrounding counties, Charles County has the second highest percentage of driving deaths involving alcohol, behind St. Mary’s County at a percentage of 42%.

| | Percentage of Driving Deaths with Alcohol Involvement |
|-------------------------------|---|
| Maryland | 28% |
| Charles County | 35% |
| Calvert County | 30% |
| Prince George's County | 31% |
| St. Mary's County | 42% |



Source: 2023 County Health Rankings

Qualitative Data Regarding Substance Use

Long Survey Data:

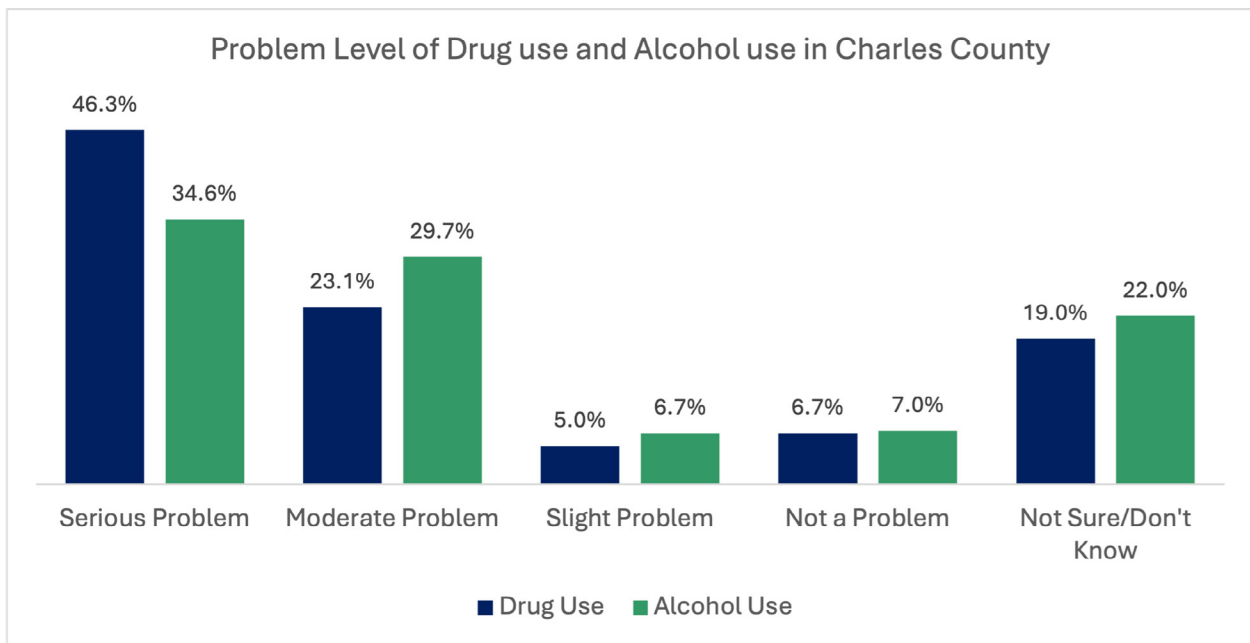
Charles County survey participants reported how often they engage in various behaviors related to substance use. A large majority of survey participants reported never engaging in substance use behaviors. About 60% of respondents reported they never drink more than 5 alcoholic beverages in one sitting. An even higher percentage of respondents reported never drinking more than three alcoholic beverages per day (61.7%). 6.3% of respondents reported that they sometimes drink more than 5 alcoholic beverages in one sitting, and 5.9% reported that they sometimes drink more than three alcoholic beverages per day.

When asked if they use marijuana, 73.5% of survey respondents reported that they have never used marijuana. 2.9% of respondents reported that they rarely use marijuana, and 2.9% also reported that they sometimes use marijuana. A small percentage of respondents reported that they always use marijuana, at 1.6%.

A large percentage of respondents reported that they have never misused prescription opioids or used heroin, and 81.0%. A slightly higher percentage reported that they have never used any other illegal drug (81.7%). There were zero survey respondents who reported always using illegal drugs or misuse of prescription opioids.

| Risk and Behavioral Factors | Always | Most of the time | Sometimes | Rarely | Never | Not applicable |
|--|---------------|-------------------------|------------------|---------------|--------------|-----------------------|
| Drink more than 5 alcoholic beverages in one sitting? | 0.3% | 1.3% | 6.3% | 18.9% | 60.3% | 12.8% |
| Drink more than three alcoholic beverages per day? | 0.1% | 0.3% | 5.9% | 18.4% | 61.7% | 13.5% |
| Use Marijuana? | 1.6% | 1.3% | 2.9% | 2.9% | 73.5% | 17.7% |
| Misuse prescription opioids or use heroin? | 0.0% | 0.2% | 0.2% | 0.2% | 81.0% | 18.5% |
| Use other illegal drugs? | 0.0% | 0.1% | 0.7% | 0.0% | 81.7% | 17.4% |

Survey participants were also asked to rank the problem level of drug use and alcohol use in Charles County. Just under half of survey respondents felt that drug use was a serious problem in Charles County at 46.3%, compared to 34.6% of respondents that felt alcohol use was a serious problem. Almost 30% of respondents felt that alcohol use was a moderate problem in the county, compared to 23.1% for drug use.



Short Survey Data:

Short survey respondents were asked to identify the biggest health problems in Charles County. 40.7% reported that alcohol and drug use were the biggest health problems in the county. This was the fourth most commonly cited health problem after Diabetes, Overweight/Obesity, and Mental Health.

Short survey respondents also provided ideas and recommendations to help decrease health problems in the county. Many respondents expressed ideas and recommendations related to substance use. Recommendations such as, the need for fentanyl awareness and more Narcan training throughout the county. Also, more support for drug addictions, prescription pill addicts, and cut down on the number of tobacco and alcohol stores in the area.

Lastly, short survey respondents were asked if there are sufficient services or resources for drug and alcohol use in Charles County. Of those who responded to this question, 41.3% felt that there are some services available for drug and alcohol use in the county. 21.6% felt there are many services available in the county, and 3.9% felt that there are no services available. 33.1% of respondents did not know if there were services available for drug or alcohol use in Charles County.

| | No Services Available | Some Services Available | Many Services Available | I don't know |
|-----------------------------|-----------------------|-------------------------|-------------------------|--------------|
| Drug and Alcohol Use | 3.9% | 41.3% | 21.6% | 33.1% |

**Percentages based on those who answered the question. Blanks are not included in the denominator.*

Focus Groups:

Across all six focus groups, Behavioral Health was one of the top health conditions that participants believed to be affecting Charles County the most. Behavioral health includes both mental health and substance use disorders. In past needs assessments, Behavioral health was also seen as a top health condition affecting Charles County among focus group participants.

Focus group members expressed that behavioral health practitioners are limited in Charles County. Barriers of commercial insurance and behavioral health services were also identified in the focus groups. Focus group participants mentioned that most people develop behavioral health conditions in childhood or adolescence, yet if they have commercial insurance, they have limited options when it comes to accessing services. Related to substance use, drug affected newborn (DAN) babies were brought up as a concern among focus group members. Drug affected newborns refers to newborns who are exposed to drugs in the womb. Focus group participants expressed that the care for drug affected newborn babies is not offered in Charles County, and families need to travel out of the county to receive care.

Focus group participants also mentioned the current issue of behavioral health services in the Emergency Department. They believe this is one of many reasons why healthcare has gotten worse in Charles County since the last needs assessment. The lack of behavioral health providers or the resources needed to treat individuals with behavioral health needs. There was also discussion around the growth of the community, and that the behavioral health services also need to expand to meet the growing population.

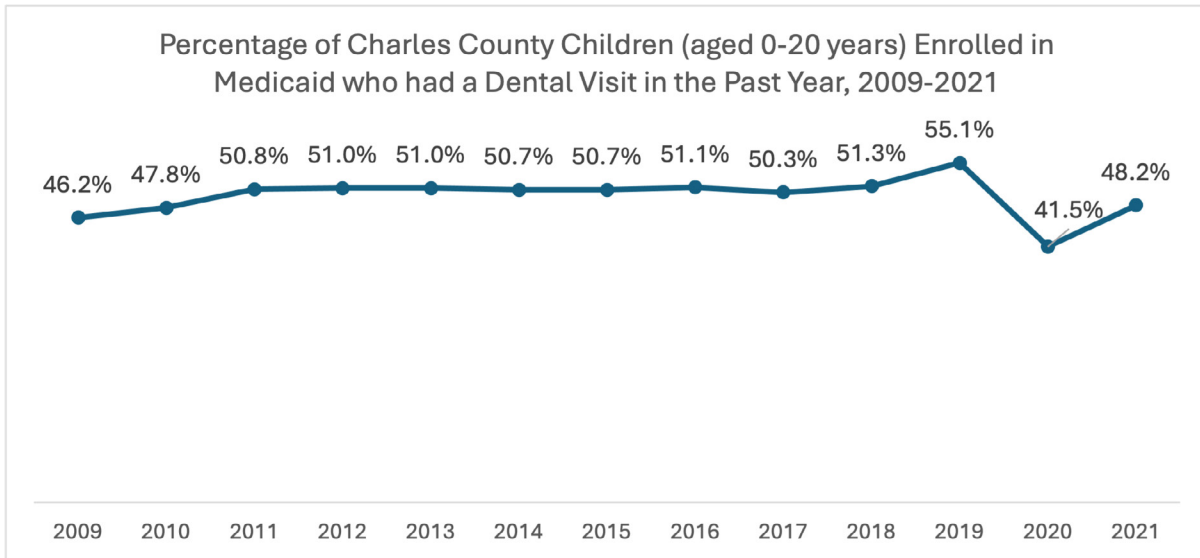
Overall, substance use was a common topic survey participants and focus group members expressed as a top health issue facing Charles County. From the increases in opioid and fentanyl-related intoxication deaths to the limited resources available to care for substance use disorders. The Charles County community has expressed concern for the growing substance

Substance Use Disorder References

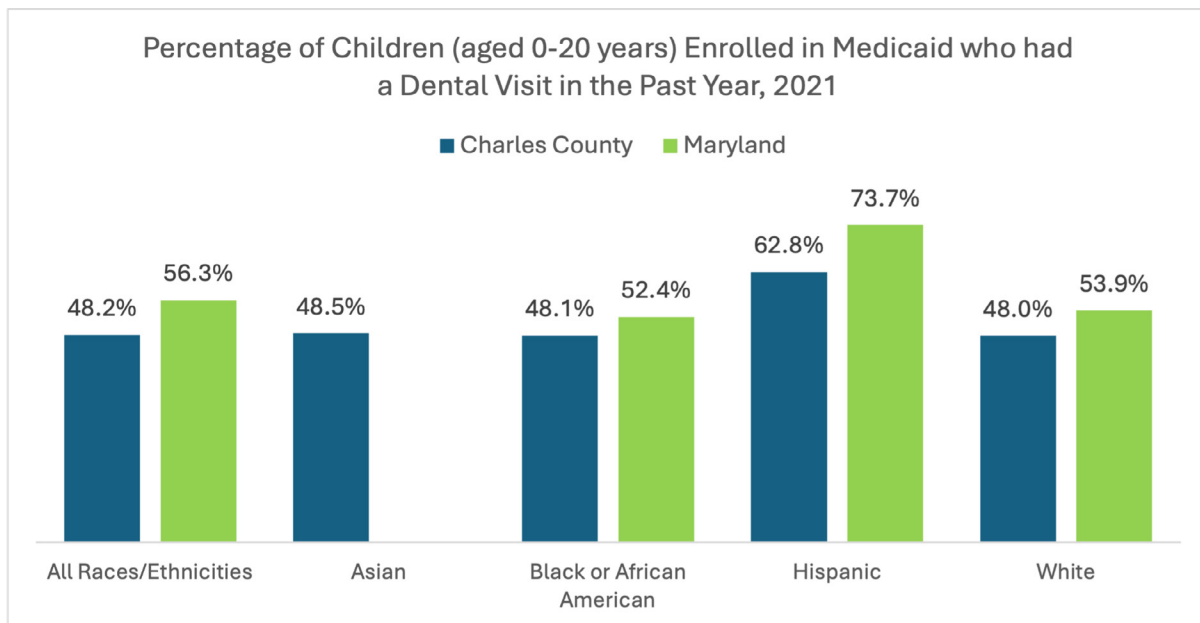
1. 2008-2017 Maryland SHIP Emergency Department Visits for Addictions-Related Conditions accessed at <https://health.maryland.gov/pophealth/Pages/SHIP-Lite-Home.aspx>
2. 2021 Maryland Vital Statistics Unintentional Drug- and Alcohol-Related Intoxication Deaths Report accessed at <https://health.maryland.gov/vsa/Pages/overdose.aspx>
3. 2021 CMS Medicare Opioid Prescriptions accessed at <https://data.cms.gov/summary-statistics-on-use-and-payments/medicare-medicare-opioid-prescribing-rates/medicare-part-d-opioid-prescribing-rates-by-geography>
4. 2011- 2021 Maryland BRFSS or Maryland YRBS/YTS accessed at ibis.health.maryland.gov on February 28, 2024.
5. 2023 County Health Rankings accessed at <https://www.countyhealthrankings.org/>

Charles County Dental/Oral Health Statistics:

In 2021, less than half of Charles County children enrolled in Medicaid have had a dental visit in the past year (48.2%). This is an increase from the 2020 percentage of 41.5%. The Charles County 2021 percentage is the 3rd lowest percentage in the state of Maryland following Dorchester County (47.7%) and Washington County (45.9%).



Across all racial and ethnic populations, Charles County had a lower percentage of children who had received a dental visit in the past year, compared to the Maryland state percentages. The percentage for Asian children was not available at the state level. In both Charles County and Maryland, Hispanic children enrolled in Medicaid had the highest percentage of receiving a dental visit in the past year compared to any other race or ethnic group.



Routine Dental Care for Adults

The 2018 Maryland Behavioral Risk Factor Surveillance System asked 2 questions regarding oral health. The Charles County BRFSS data for 2018 has been evaluated below.

How long since you last visited a dentist for any reason?

The majority of the Charles County participants reported that they had seen a dentist in the last year (66.6%). This is similar to the state average percentage of 66.3%.

Number of Permanent Teeth Removed:

Over half of the Charles County BRFSS participants have not had any of their permanent teeth removed (57.4%).

Oral Cancer Statistics

Incidence (New Cases)

In 2018, there were a total of 857 oral cancer cases in Maryland. Oral cancer is cancer of the oral cavity and pharynx. The age-adjusted incidence rate for oral cancer in Maryland in 2018 was 11.3 per 100,000. In 2018, Charles County had a total of 27 oral cancer cases, with an age-adjusted incidence rate of 14.0 per 100,000. From 2014-2018, there have been a total of 4,023 oral cancer cases in Maryland and 113 oral cancer cases in Charles County.

| Oral Cancer Cases and Incidence Rates, 2018 | Cases | Incidence Rate |
|--|--------------|-----------------------|
| Charles County | 27 | 14.0 |
| Maryland | 857 | 11.3 |

Source: Maryland Department of Health 2021 Cancer Data

In 2018, Charles County males comprised of over 80% of the oral cancer cases, resulting in an age-adjusted incidence rate of 24.9 per 100,000. This is well above the Maryland age-adjusted incidence rate for males at 17.2 per 100,000. The age-adjusted incidence rate for Charles County females was suppressed due to low case counts.

Charles County Whites also had a higher incidence rate than that of Maryland, at 17.2 per 100,000 compared to 13.0 per 100,000.

| Oral Cancer Incidence Rates, 2018 | Male | Female | White | Black | Other |
|--|-------------|---------------|--------------|--------------|--------------|
| Charles County | 17.2 | 6.4 | 13.0 | 7.8 | 7.2 |
| Maryland | 24.9 | * | 17.2 | * | 0.0 |

**Rates based on case counts less than 15 are suppressed.
Source: Maryland Department of Health 2021 Cancer Data*

From 2014 to 2018, Charles County males have a higher oral cancer age-adjusted incidence rate than females at 23.3 per 100,000 compared to 5.0 per 100,000. The Charles County males age-adjusted incidence rate is also higher than the Maryland incidence rate of 16.9 per 100,000. Between the years 2014-2018, Charles County Whites have been impacted more by oral cancer compared to any other race or ethnicity. The Charles County White oral cancer incidence rate from 2014-2018 was 16.6 per 100,000, compared to 8.0 per 100,000 for Charles County Blacks. This is also higher than the Maryland incidence rate for Whites at 12.7 per 100,000.

| Oral Cancer Incidence Rates, 2014-2018 | Male | Female | White | Black | Other |
|---|-------------|---------------|--------------|--------------|--------------|
| Charles County | 16.9 | 6.2 | 12.7 | 8.0 | 6.2 |
| Maryland | 23.3 | 5.0 | 16.6 | 8.0 | * |

**Rates based on case counts less than 15 are suppressed.
Source: Maryland Department of Health 2021 Cancer Data*

Oral Cancer Mortality:

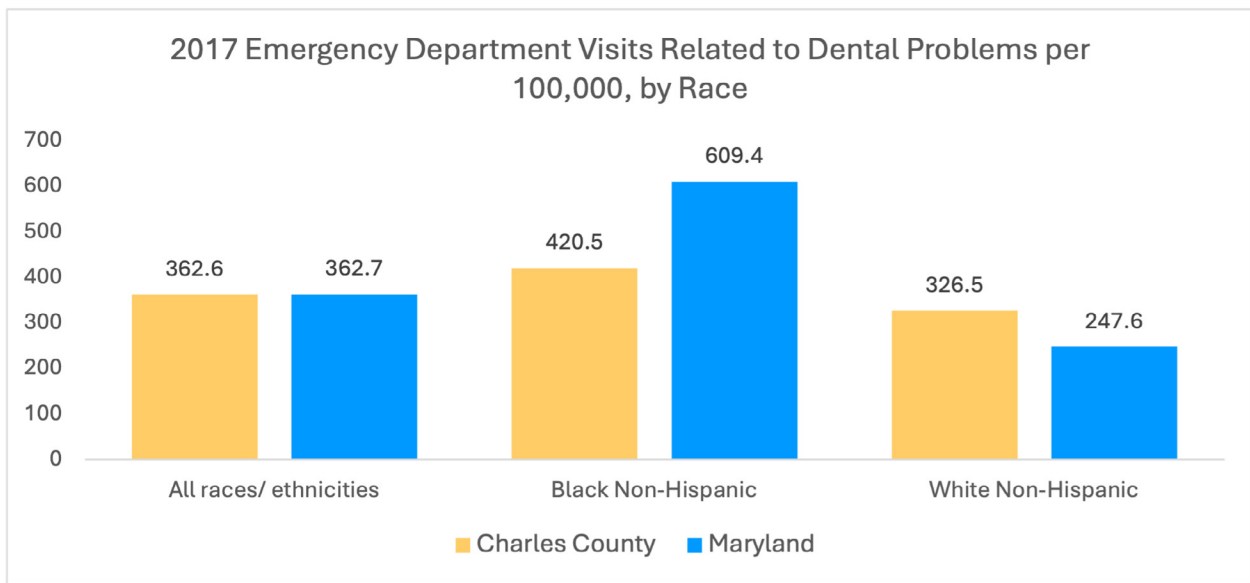
From 2014-2018, the Charles County oral cancer mortality rate was 3.4 per 100,000, this is greater than the Maryland incidence rate of 2.5 per 100,000. Charles County males also had a higher mortality rate than Maryland at 5.8 per 100,000 compared to 3.9 per 100,000.

| Oral Cancer Mortality Rates, 2014-2018 | Total | Male | Female | White | Black | Other |
|---|--------------|-------------|---------------|--------------|--------------|--------------|
| Charles County | 3.4 | 5.8 | * | * | * | * |
| Maryland | 2.5 | 3.9 | 1.3 | 2.6 | 2.4 | 1.5 |

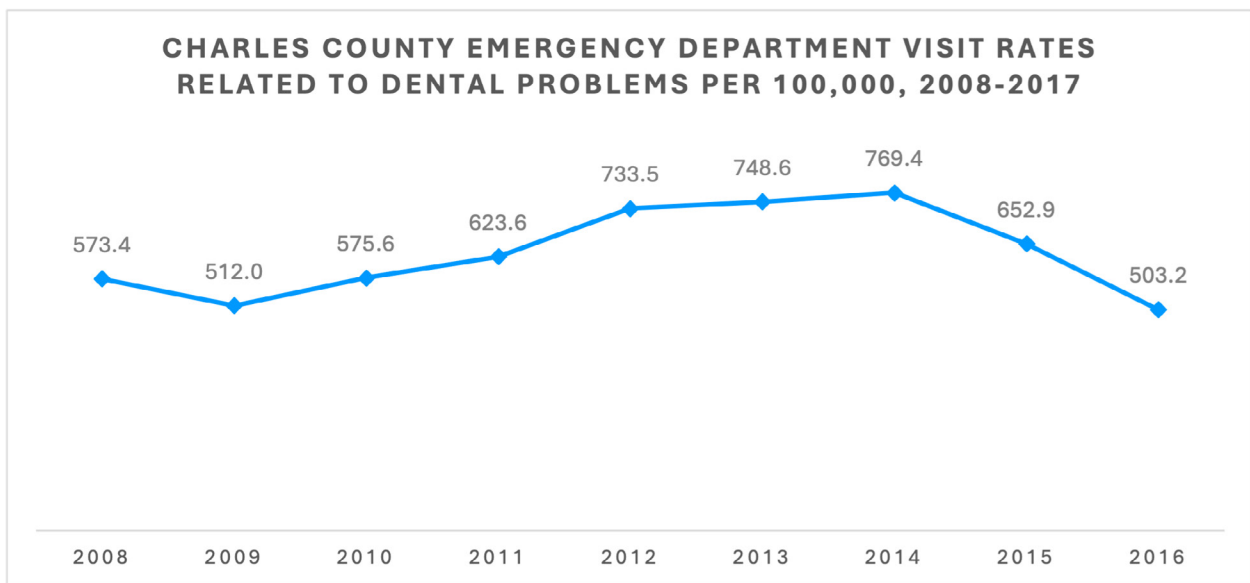
**Rates based on case counts less than 19 are suppressed.
Source: Maryland Department of Health 2021 Cancer Data*

Emergency Department Visit Rates for Dental Care

The 2017 Charles County ED visit rate for dental care was 362.6 per 100,000. This is similar to the Maryland state average rate of 362.7 per 100,000. For Charles County, the ED dental visit rate was higher for Blacks vs Whites (420.5 vs. 326.5). The dental ED visit rate for Charles County African Americans is far below the rate for Maryland African Americans (420.5 vs. 609.4). The dental ED visit rate for Charles County Whites is above the rate for Maryland Whites (326.5 vs. 247.6).

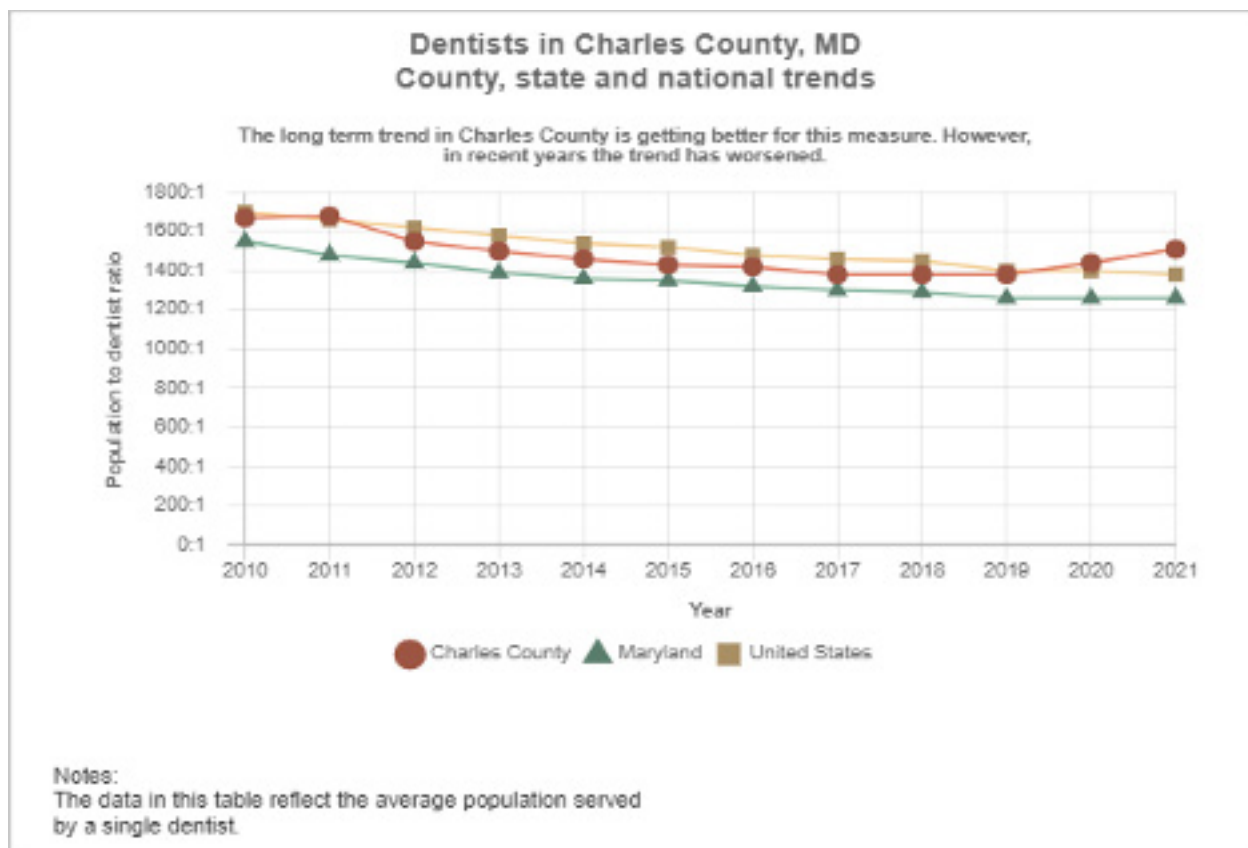


The Charles County ED visit rate for dental care increased every year from 512 per 100,000 in 2009 to 769.4 in 2014. Since then, Charles County has seen a decline in ED visit rates for dental care.



Dentist to Population Ratio

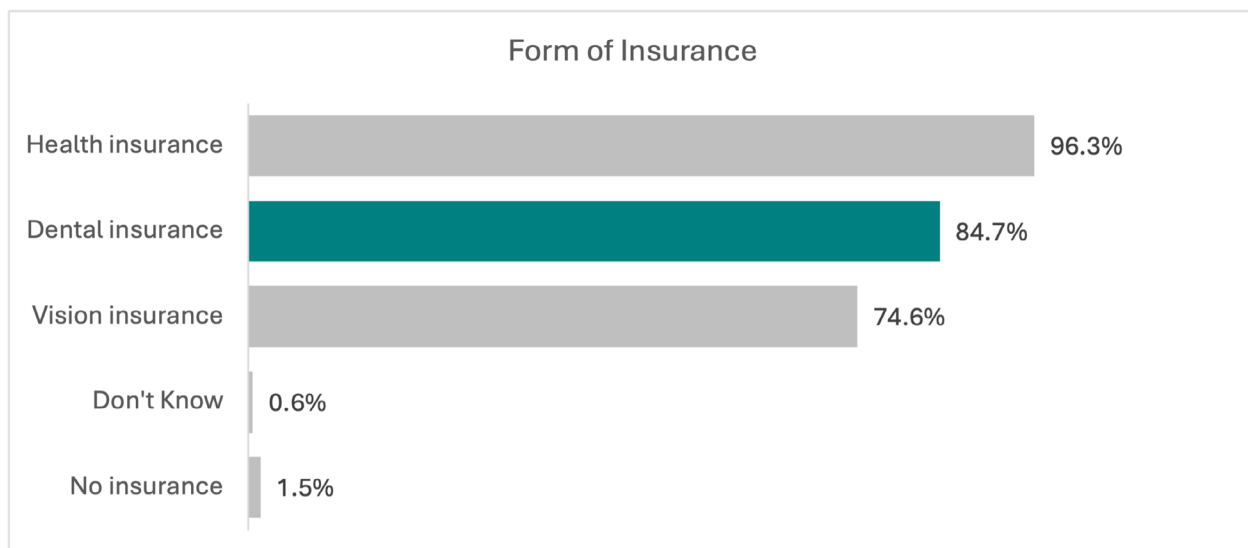
The 2023 dentist ratio in Charles County was 1,510:1. This is greater than the Maryland ratio of one dentist to 1,260 people. Since 2021, the dentist to population ratio has been increasing in Charles County. In 2021 the ratio was 1,380:1, in 2022 the ratio was 1,440:1, and 2023 is 1,510:1.



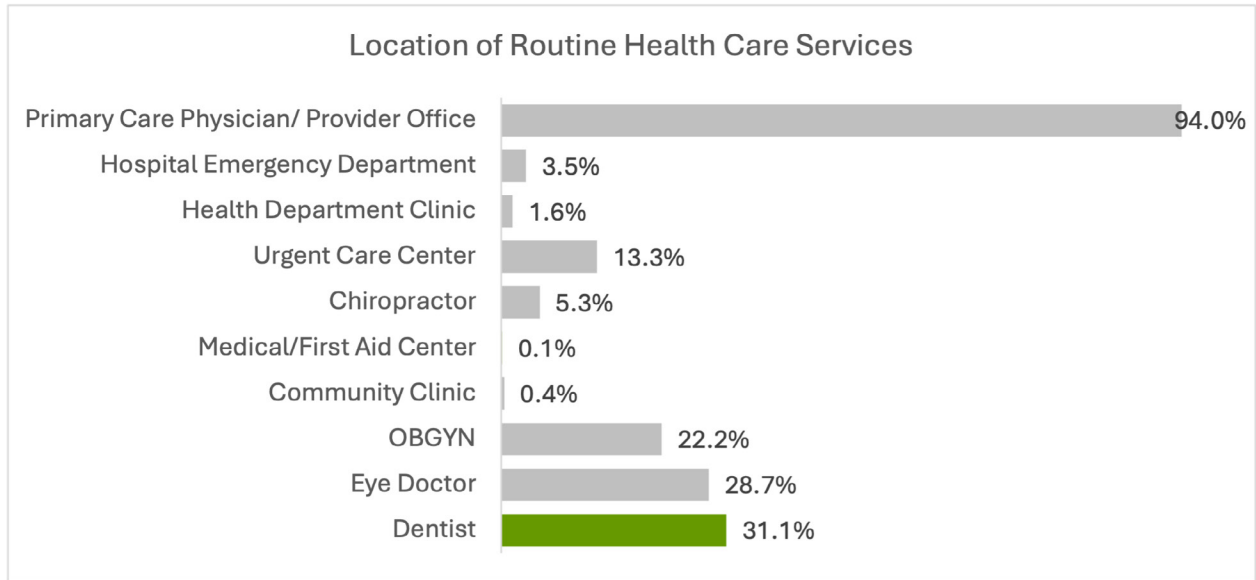
Community Health Needs Assessment

Long Survey Data:

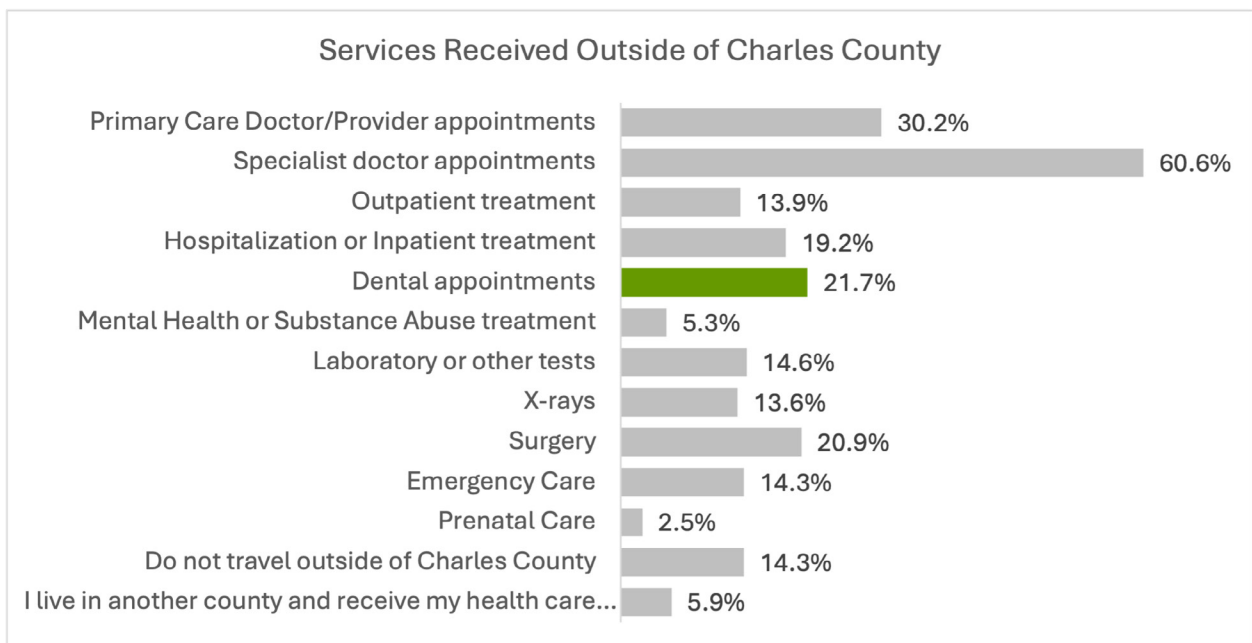
A large percentage of survey respondents reported having dental insurance, at 84.7%. This was the second most common form of insurance after health insurance at 96.3%.



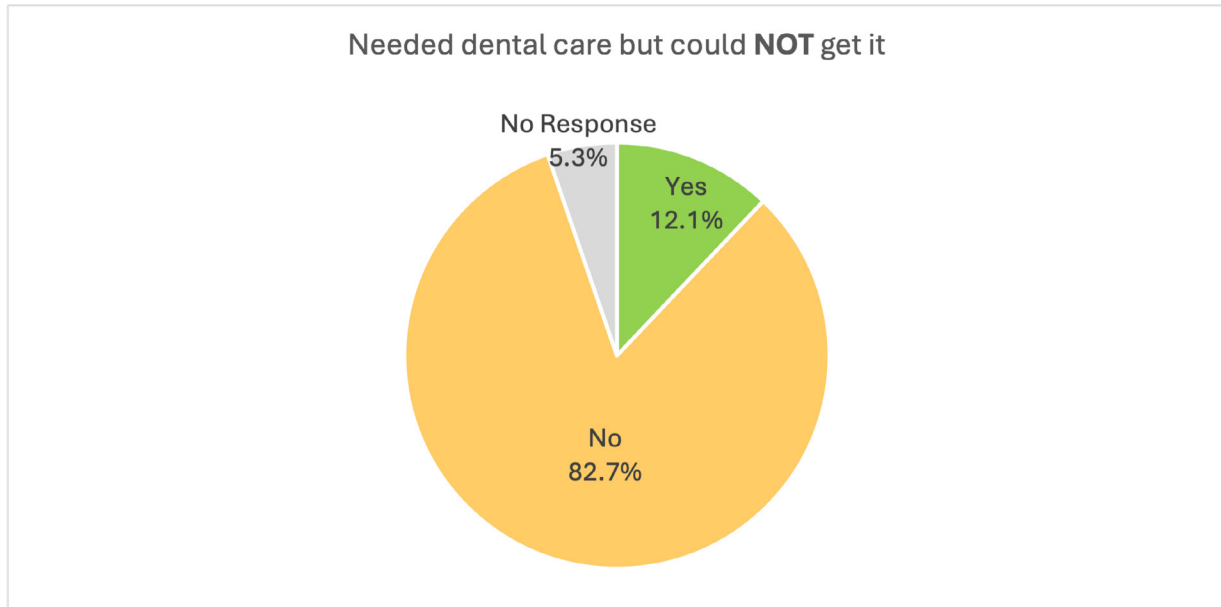
Over 30% of survey respondents reported receiving routine health care services from a dentist (31.1%). This was the second most common response among survey respondents after Primary Care Physician/Provider Office, where 94% of respondents reported receiving their routine health care services.



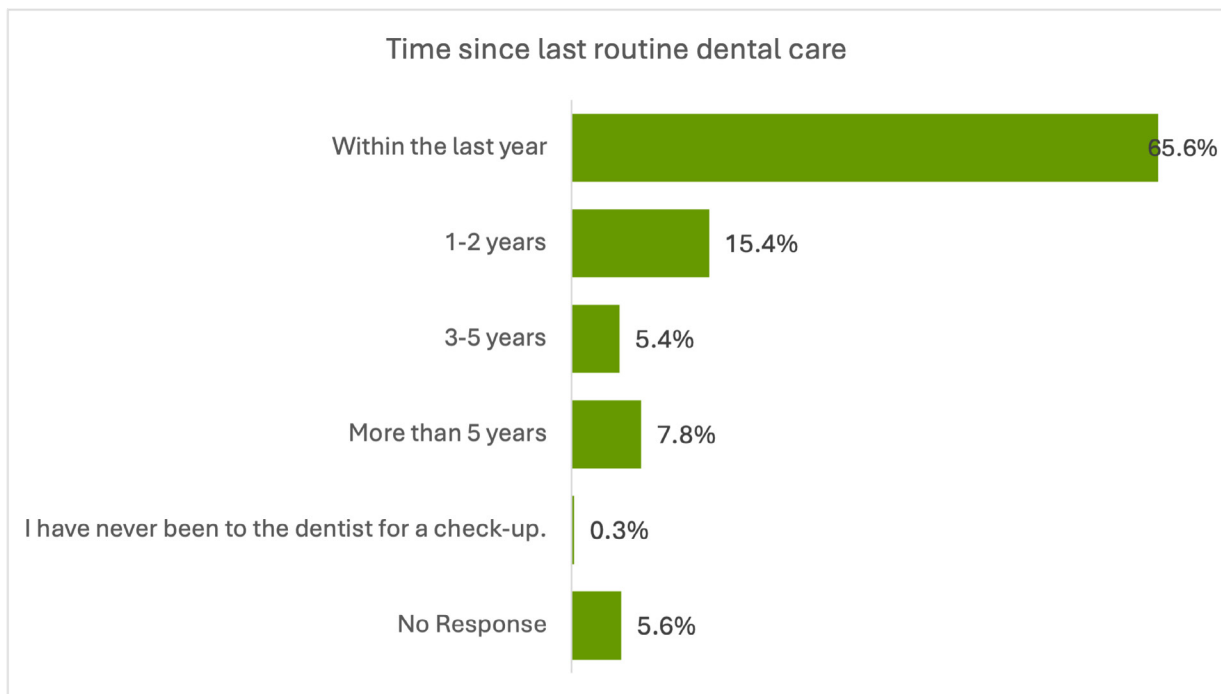
When asked what services survey respondents receive outside of Charles County, 21.7% reported they receive their dental care services outside of Charles County. This was the third most common response among survey respondents, behind specialist doctor appointments and primary care provider appointments.



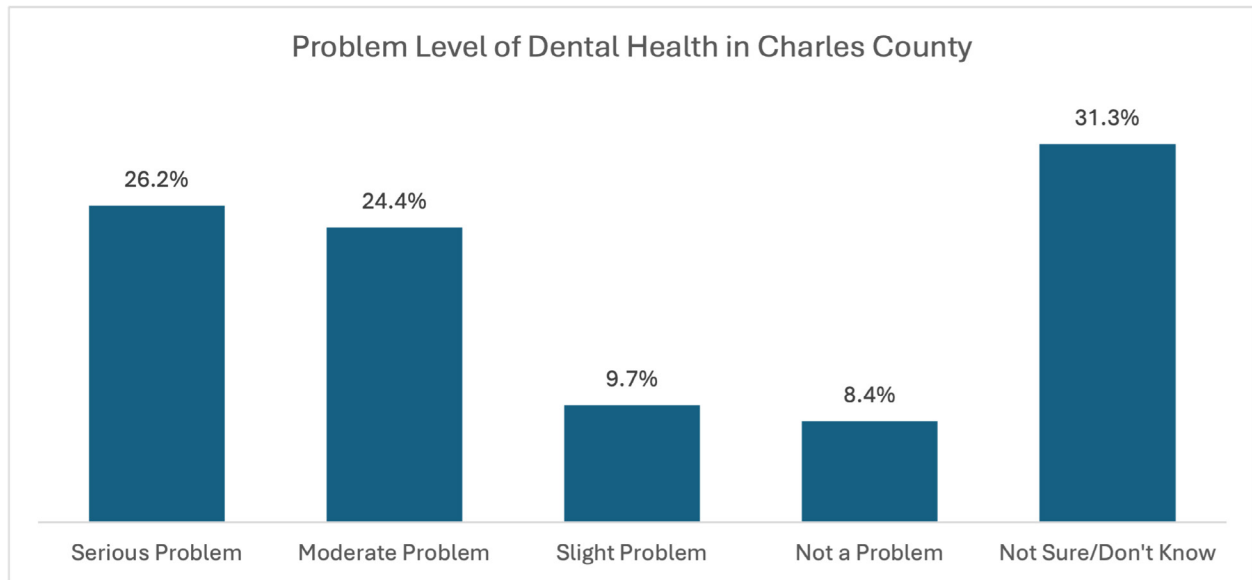
Access to care questions regarding oral health were asked among survey respondents. The majority of survey respondents reported that in the last year they were able to receive dental care if they needed it (82.7%). Around 12% of respondents reported that in the last year they needed dental care but could not get it.



65.6% of survey respondents reported having routine dental care within the last year. However, over 10% of respondents reported not having routine dental care in over 3 years (13.2%). Only 0.3% of respondents have never been to the dentist for a check-up.



When asked how serious of a problem dental health was in Charles County, about half of survey respondents believed dental health was a serious problem or a moderate problem in the county. 26.2% believe dental health was a serious problem, and 24.4% believed it was a moderate problem. 31.3% were not sure or did not know.



Short Survey:

When asked what the biggest health problems in Charles County are, only a small percentage of survey respondents believed Dental Health was the biggest problem. 14.8% of survey respondents believed Dental Health was the biggest problem facing Charles County. This was the 5th lowest percentage response amongst short survey respondents.

Short survey respondents were also asked if there are sufficient services or resources for Dental Health in Charles County. Of those who responded to this question, one third believed that there are some dental health services available in Charles County. 31.4% of respondents did not know if there were services available in the county, which was the second highest response percentage. 28.6% of respondents believed there are many dental health services available in Charles County, and 6.6% believed there are no dental health services available.

| | No Services Available | Some Services Available | Many Services Available | I don't know |
|---------------|-----------------------|-------------------------|-------------------------|--------------|
| Dental Health | 6.6% | 33.3% | 28.6% | 31.4% |

**Percentages based on those who answered the question. Blanks are not included in the denominator.*

Oral Health Resources

1. 2021 Charles County Percentages of Children with Dental Visit in past year. Medicaid data 2021 for Maryland. Accessed through the Maryland State Health Improvement Process website. Available at: https://opendata.maryland.gov/Health-and-Human-Services/SHIP-Children-Receiving-Dental-Care-In-The-Last-Ye/g72j-3f3c/about_data
2. 2018 Charles County Oral Cancer Incidence and Mortality Rates. 2019 Maryland Cigarette Restitution Fund Program's Cancer Reports. Maryland Department of Health. Available at: https://health.maryland.gov/phpa/cancer/Documents/2021%20CRF%20Cancer%20Report_FINAL.pdf
3. 2014-2018 Charles County Oral Cancer Incidence and Mortality Rates. 2019 Maryland Cigarette Restitution Fund Program's Cancer Reports. Maryland Department of Health. Available at: https://health.maryland.gov/phpa/cancer/Documents/2021%20CRF%20Cancer%20Report_FINAL.pdf
4. 2008- 2017 Charles County and Maryland Emergency Department Visit Rates for Dental Care. Maryland Health Services Cost Review Commission Outpatient Discharge File. Accessed through the Maryland State Health Improvement Process website. Available at: <https://opendata.maryland.gov/Health-and-Human-Services/SHIP-Emergency-Department-Visit-Rate-For-Dental-Ca/uwst-7igm/data>
5. 2023 Charles County dentist to population ratio. Area Health Resource File. Robert Wood Johnson Foundation's County Health Rankings. Available at: <https://www.countyhealthrankings.org/explore-health-rankings/county-health-rankings-model/health-factors/clinical-care/access-to-care/dentists?year=2023&county=24017>

Mental Health:

Maryland Behavioral Risk Factor Surveillance System

The Maryland Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing telephone surveillance program designed to collect data on the behaviors and conditions that place Marylanders at risk for chronic diseases, injuries, and preventable infectious diseases.

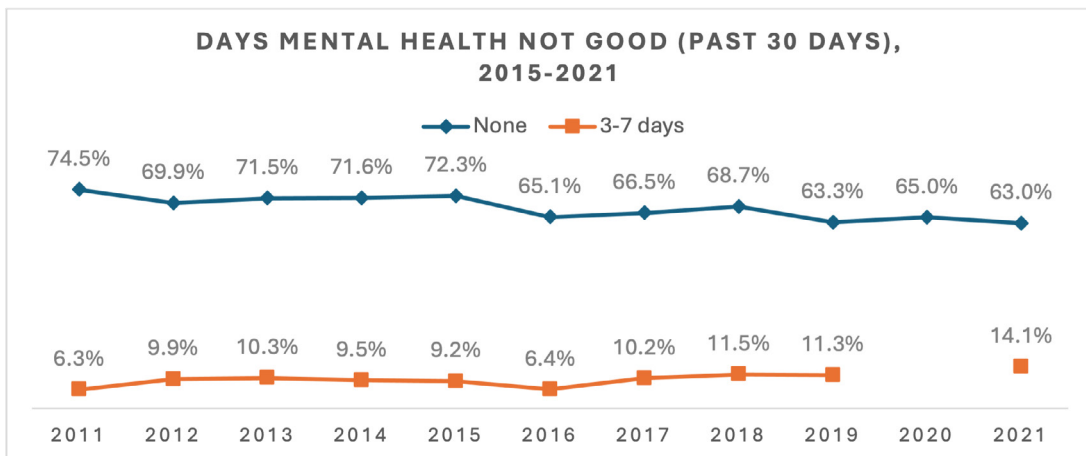
The data collected are used to characterize health behaviors, ascertain the prevalence of risk factors, and target demographic groups with increased needs. Knowing the type and frequency of health issues and risky behaviors enables the public health professionals to devise and implement programs geared toward the prevention of chronic diseases, injury, and disability. Questions pertaining to mental health were extracted and analyzed for Charles County and Maryland as a whole.

In 2021, 63.0% of Charles County adults reported that in the past 30 days, there were no days that their mental health was not good. This is above the Maryland percentage of 57.3%. However, 14.1% reported that their mental health was not good between 3 to 7 days, in the past month. This percentage is also lower than the Maryland percentage of 15.4%.

| Days Mental Health Not Good (Past 30 Days), 2021 | Charles County | Maryland |
|--|----------------|----------|
| None | 63.0% | 57.3% |
| 1 to 2 days | 8.7% | 8.7% |
| 3 to 7 days | 14.1% | 15.4% |
| 8 to 29 days | 10.3% | 13.3% |
| 30 days | 3.9% | 5.3% |

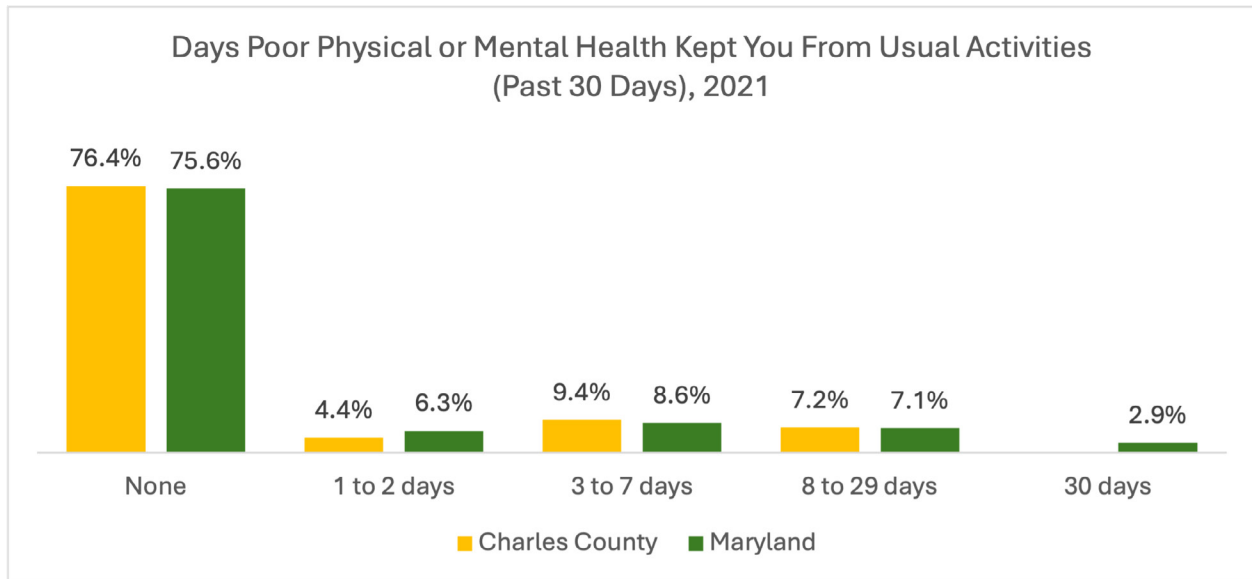
Source: 2021 Maryland BRFSS

Since 2011, the percentage of Charles County adults who reported no bad mental health days in the past 30 days has slowly decreased, from 74.5% in 2011 to 63.0% in 2021. While there has been a slight increase in the percentage of adults who reported 3 to 7 days of not good mental health, from 6.3% in 2011 to 14.1% in 2021. The 2020 Charles County estimate was suppressed for this measure.



Source: 2015-2021 Maryland BRFSS

When examining the number of days poor physical or mental health has kept adults from usual activities, Charles County and Maryland were very comparable in 2021. 76.4% of Charles County adults reported no days due to poor physical or mental health, compared to the slightly lower 75.6% for Maryland adults. The largest difference between the two populations was in those adults reporting that poor physical or mental health kept them from usual activities 1 to 2 days in the past month, with Charles County at 6.3% and Maryland at 4.4%.



Source: 2021 Maryland BRFSS

Adverse Childhood Experiences

Adverse childhood experiences, or ACEs, are potentially traumatic events that occur in childhood (0-17 years). For example:

- Experiencing violence, abuse, or neglect
- Witnessing violence in the home or community
- Having a family member attempt or die by suicide

Also included are aspects of the child’s environment that can undermine their sense of safety, stability, and bonding such as growing up in a household with:

- Substance misuse
- Mental health problems
- Instability due to parental separation or household members being in jail or prison.

ACEs are common and are also preventable. ACEs are linked to chronic health problems, mental illness, and substance misuse in adulthood. ACEs can also negatively impact education and job opportunities.

An ACE score is a tally of different types of abuse, neglect, and other hallmarks of a rough

childhood. First developed in the 1990s, the 10 questions of the Adverse Childhood Experiences test are designed to measure the occurrence of common traumatic experiences in early life. Since higher numbers of ACEs often correlate to challenges later in life, including higher risk of certain health problems, the quiz is intended as an indicator of how likely a person might be to face these challenges.

According to the 2020 BRFSS, 64.2% of Charles County reported having at least one ACE. This is higher than the Maryland state average percentage of 61.6%. Charles County also had a higher percentage than Maryland of people who reported an ACE score of 3 to 8 (32.5% vs. 23.3%).

| Number of ACEs | Charles County | Maryland |
|--------------------|----------------|----------|
| 0 ACEs | 35.8% | 38.4% |
| 1 to 2 ACEs | 31.7% | 38.3% |
| 3 to 8 ACEs | 32.5% | 23.3% |

Source: 2020 Maryland BRFSS

The 2020 BRFSS looked at the prevalence of each ACE. The table below displays this data for Charles County and Maryland. The most commonly reported ACEs in Charles County included Parental Separation or Divorce (32.1%) and Emotional Abuse (30.7%).

| 2020 BRFSS ACE Prevalence | Charles County | Maryland |
|---------------------------------------|----------------|----------|
| Household Substance Abuse | 20.9% | 23.2% |
| Parental Separation or Divorce | 32.1% | 29.7% |
| Emotional Abuse | 30.7% | 30.5% |
| Physical Abuse | 20.5% | 22.3% |
| Sexual Abuse | 13.0% | 11.0% |

Source: 2020 Maryland BRFSS

Suicide

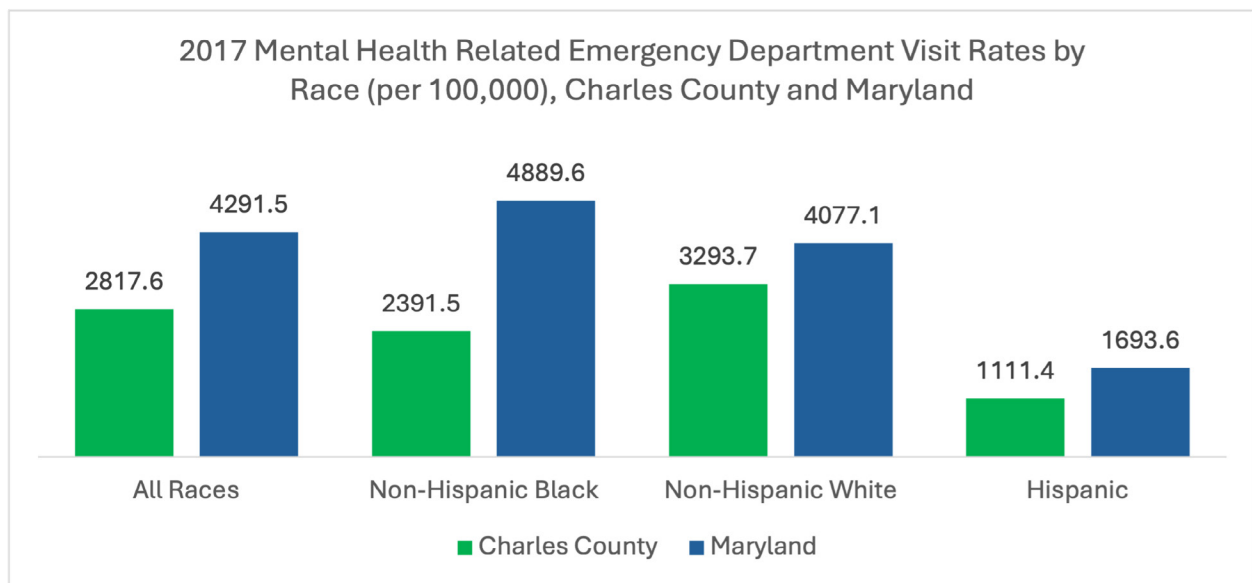
In 2021, there were 19 suicides reported in Charles County and 623 suicides in Maryland. The 2021 age-adjusted Maryland Suicide death rate was 9.7 per 100,000. The 2021 Southern Maryland suicide rate was 13.2 per 100,000. A Charles County level suicide rate could not be calculated due to small case counts. Rates based on less than 20 events are subject to instability.

Emergency Department Visit Rates for Mental Health Conditions

This indicator shows the 2017 rate of emergency department visits related to mental health disorders (per 100,000 population). Mental health problems can place a heavy burden on the healthcare system, particularly when persons in crisis utilize emergency departments instead of other sources of care when available. Mental health disorder diagnoses include adjustment disorders, anxiety disorders, attention deficit disorders, disruptive behavior disorders, mood disorders, personality disorders, schizophrenia and other psychotic disorders, suicide and

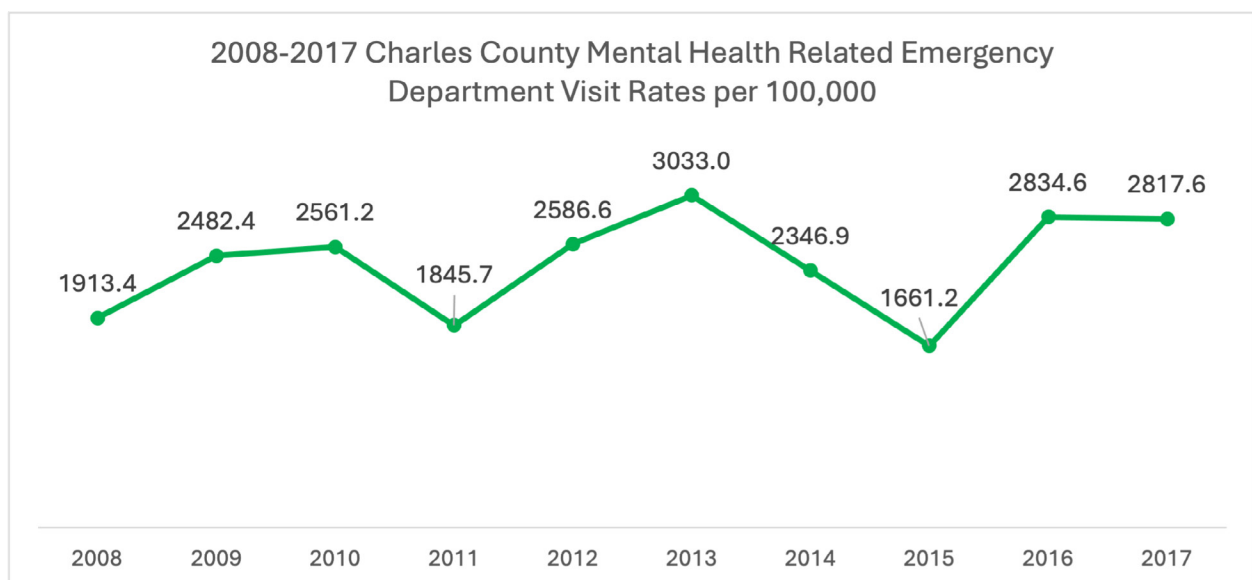
intentional self-inflicted injury and miscellaneous mental disorders.

The 2017 Charles County Mental Health ED Visit Rate was 2,817.6 per 100,000. This is below the Maryland state average mental health ED visit rate of 4,291.5 per 100,000. The Charles County mental health ED visit rate is the 4th lowest rate in the state of Maryland. When examining rates by race, Charles County Non-Hispanic Whites had a higher ED visit rate for mental health than Charles County Non-Hispanic Blacks or Hispanics (3,293.7 vs. 2,391.5 and 1,111.4). All Charles County rates are well below the state average rates.



Source: Maryland SHIP Emergency Department Visits Related to Mental Health Conditions 2008-2017

The ED visit rate for mental health conditions in Charles County has fluctuated yearly since 2008. The 2016 and 2017 rates have remained fairly stable.



Source: Maryland SHIP Emergency Department Visits Related to Mental Health Conditions 2008-2017

Health Professional Shortage Areas (HPSA) for Mental Health Services in Charles County, Maryland

As of August 27, 2021, Charles County is a federally designated health professional shortage area (HPSA) for mental health services. The whole county is designated as a HPSA geographic area, not just one population or facility within the county.

Mental Health HPSA Scoring

Mental Health HPSAs can receive a score between 0-25.

What goes into the score?

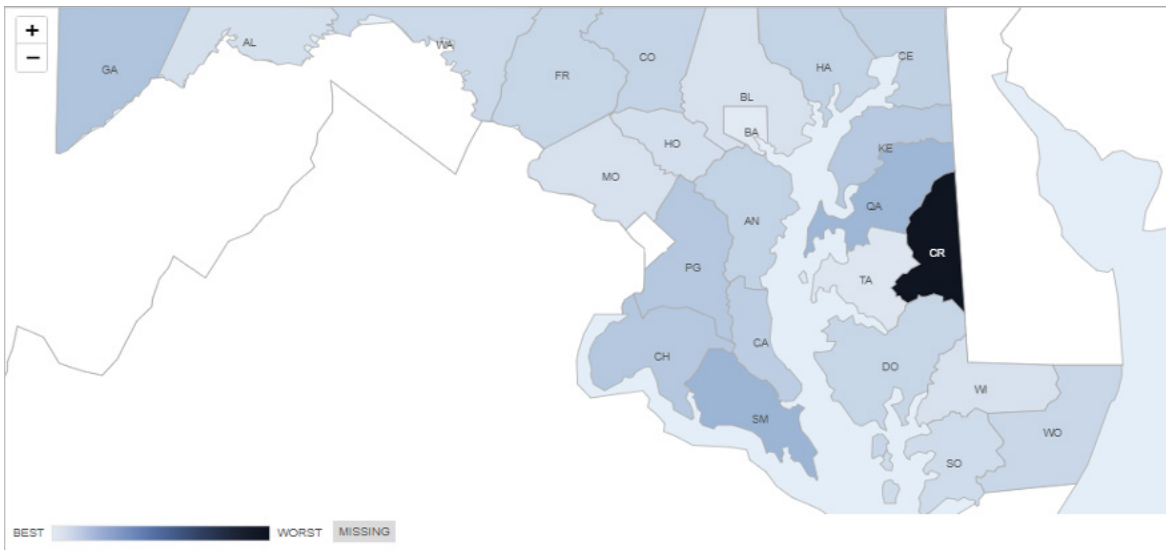
- Population-to-Provider Ratio
- Percent of population below 100% Federal Poverty Level (FPL)
- Elderly Ratio (percent of people over the age 65)
- Youth Ratio (percent of people under age 18)
- Alcohol Abuse Prevalence
- Substance Abuse Prevalence
- Travel time to Nearest Source of Care (NSC) outside the HPSA designation area.

The Charles County HPSA score for mental health is 11. This is an increase from the HPSA score of 9 reported during the last needs assessment survey. There is a shortage of 6.86 FTE mental health providers. This is an increase from 4.01 FTE last reported. The National Health Services Corps uses a scaling system from 0-26 to determine priorities for assignment of mental health clinicians. The higher the score is the greater the priority.

Information on HPSA designations can be found on the US Health Resources and Services Administration's HPSA website at: <https://data.hrsa.gov/tools/shortage-area/hpsa-find>.

Availability of Mental Health Providers

The population to mental health provider ratio in Charles County is 520:1. This is well above the Maryland state average ratio of 310:1. The Charles County ratio is the 6th worst ratio in the state of Maryland.



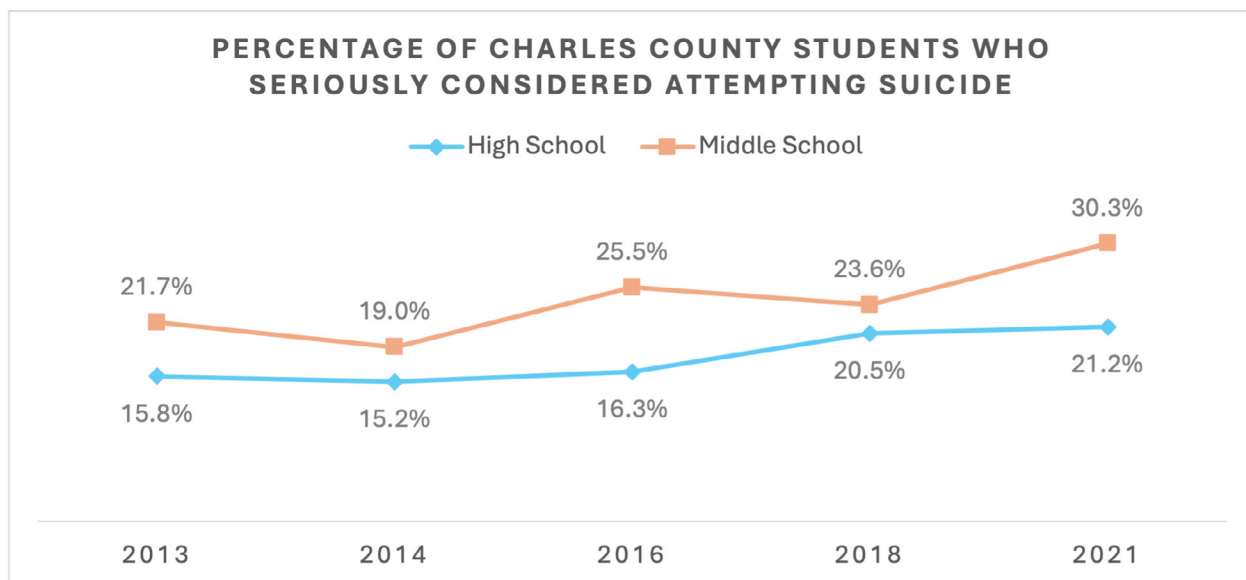
Source: 2022 National Provider Identification Registry data from the 2023 Robert Wood Johnson Foundation's County Health Rankings

2021-2022 Maryland Youth Risk Behavior Survey

Suicide:

In 2021-2022, 21.2% of Charles County High School students reported seriously considering attempting suicide during the past 12 months. This is higher than the Maryland percentage of 20.6%. This percentage has been on the rise since 2013 and 2014 when the percentage of students was around 15%.

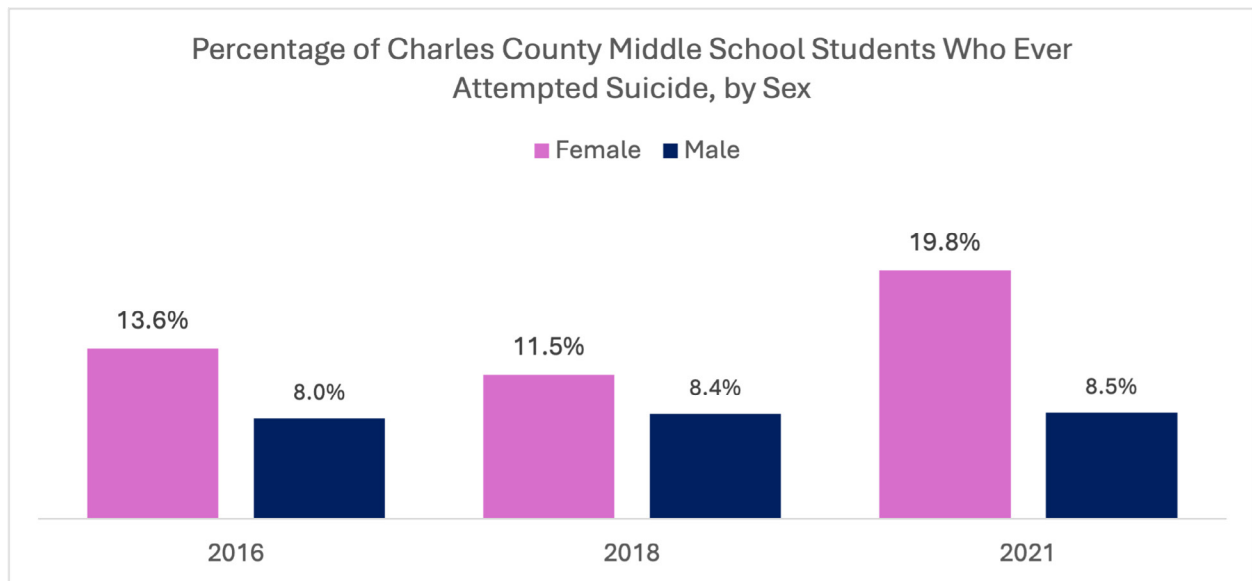
30.3% of Charles County Middle School students reported seriously considering attempting suicide during the past 12 months. This is an increase from 23.6% reported in 2018. This is also higher than the Maryland percentage of 26.8%.



Source: 2021-2022 Maryland YRBS/YTS

In 2021, 15.9% of Charles County High School students reported planning how they would attempt suicide. This is a decrease from 18.8% reported in 2018. Charles County Middle School students reported a higher percentage of planned suicide at 21.8% for 2021. This is an increase from 14.6% reported in 2018. Among both Middle School and High School students, females had a higher percentage of planning how they would attempt suicide over males. In 2021, 20.5% of High School females reporting planning suicide compared to 10.5% for High School males. 28.3% of Middle School females reported planning suicide compared to 15.1% for Middle School males.

In 2021, 14.2% of Charles County Middle School students reported attempting suicide. This is an increase from 9.9% reported in 2018. 19.8% of Middle School females reported attempting suicide compared to 8.5% of Middle School males.



Source: 2021-2022 Maryland YRBS/YTS

Bullying:

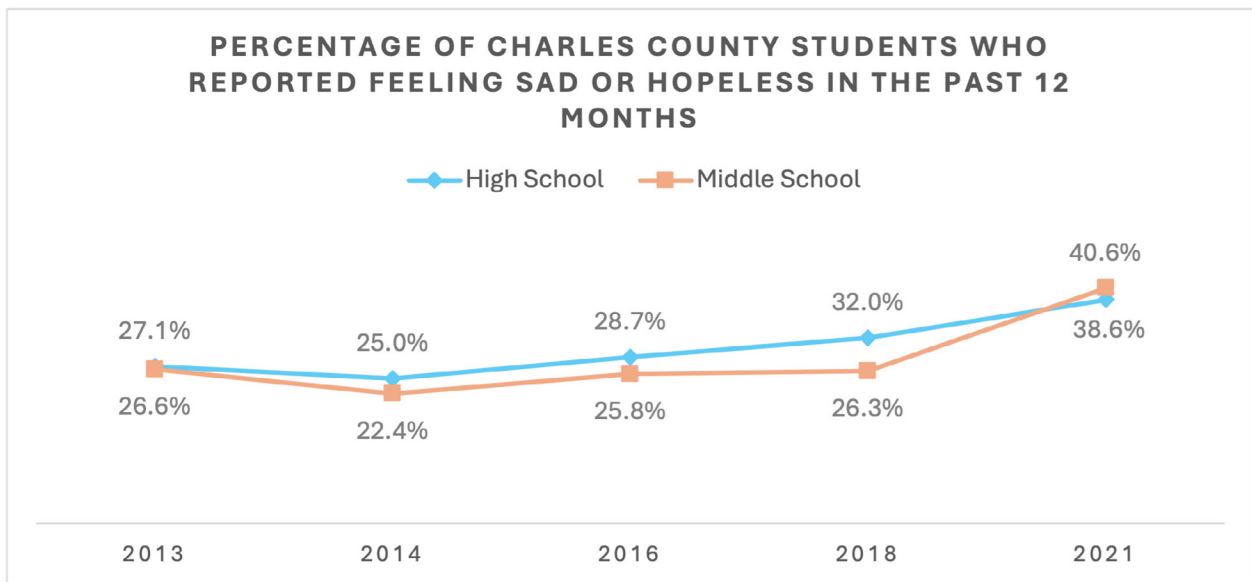
12.0% of Charles County High School students and 37.8% of Charles County Middle School students reported that they have been bullied at school in the past 12 months.

For High School students, females are more likely to report being bullied than males (14.6% vs. 8.9%). Younger students under 15 years of age (13.0%), All Other Races (29.7%), and 9th grade students (15.3%) had higher rates of bullying than older students in the other grades in high school.

Students were also asked if they have ever been bullied electronically. A slightly higher percentage of Charles County High School students reported that they have been bullied electronically in the past 12 months, at 12.9%. The percentage of Middle School students who have bullied electronically in the past 12 months was 26.0%. For high school students, females were more likely to report being electronically bullied than males (14.2% vs. 11.1%). Younger students under 15 years of age (13.9%), Asian and White students (19.1%), and 9th grade students (16.0%) had higher rates of electronic bullying than older students in the other grades in high school.

Feeling of Hopelessness:

Since 2013, both Charles County High School students and Middle School students have seen an increase in the percentage of those who have felt sad and hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months. In 2021, 38.6% of High School students reported feeling sad and hopeless compared to 40.6% of Middle School students. Females, both High School and Middle School students, had a higher percentage of those feeling sad or hopeless than those of males. 51.7% of High School females reported feeling sad and hopeless, compared to 24.9% for males. 50.5% of Middle School females reported feeling sad and hopeless compared to 30.6% of males.

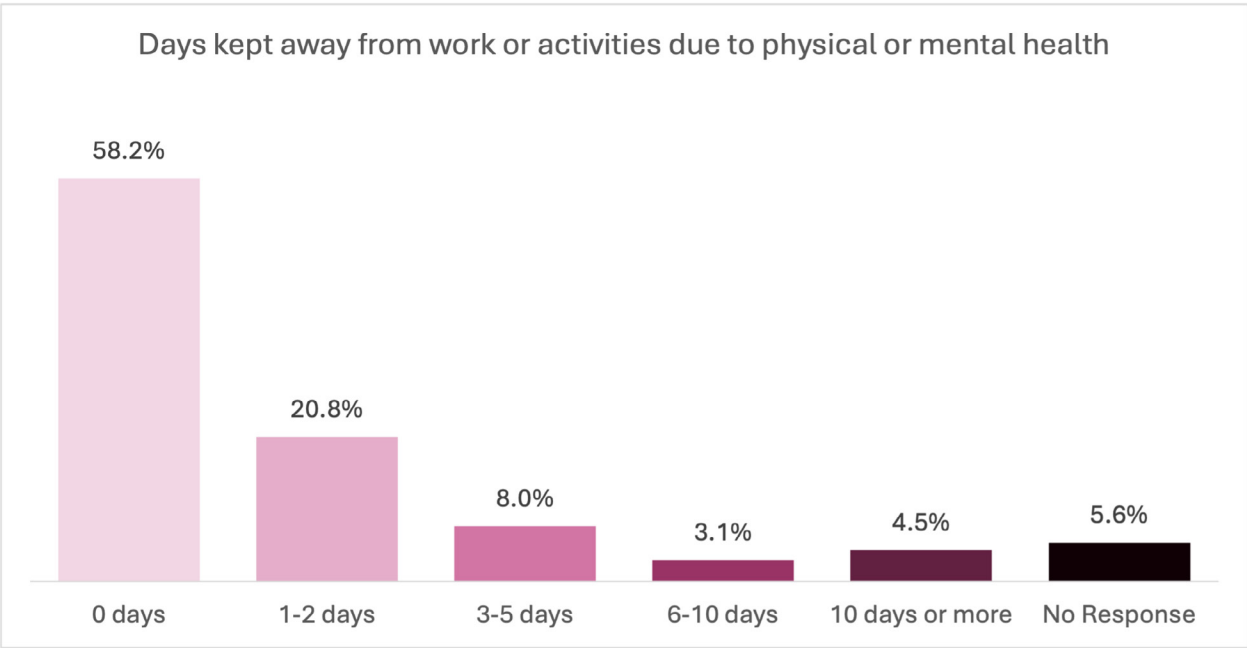


Source: 2021-2022 Maryland YRBS/YTS

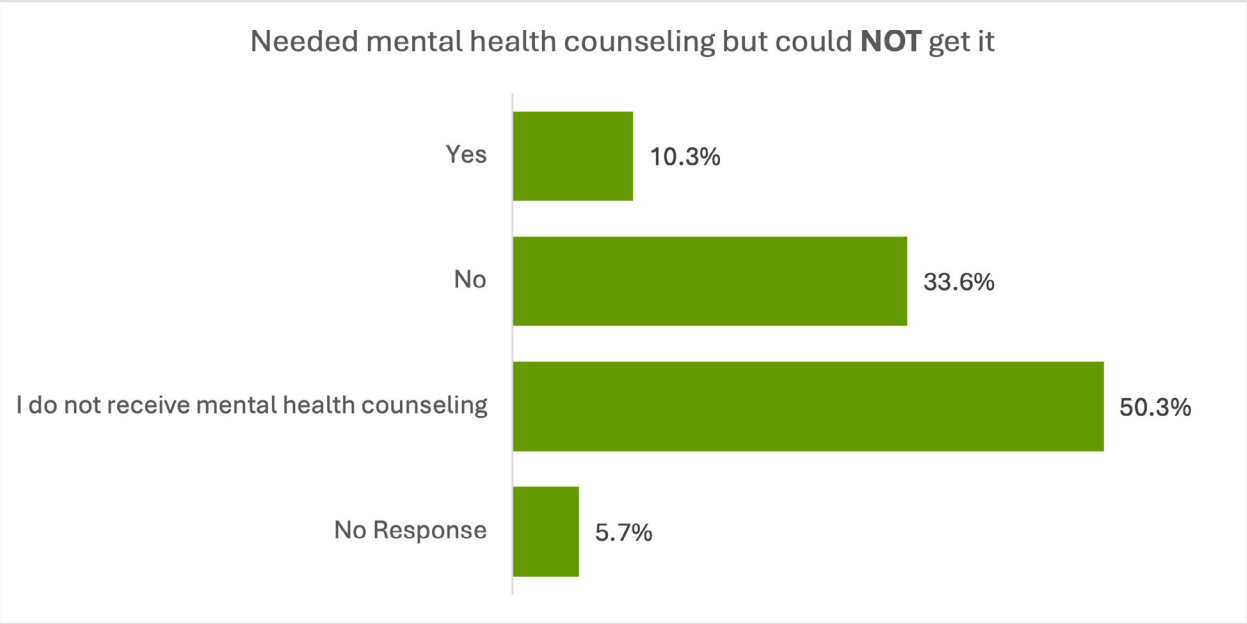
Community Health Needs Assessment

Long Survey Data:

A little over 58% of participants reported that there were no days in the past month that prevented them from working or activities. This percentage is a decrease from 62.9% reported in the 2021 needs assessment. Over 20% of participants reported that their physical or mental health has kept them from work or activities for 1-2 days in the past month. This is a slight increase from 18.7% reported during the previous needs assessment. The percentage of participants that reported 10 or more days decreased from the previous need assessment from 8.4% to 4.5% of total responses.



Survey participants were also asked in the last year if they needed mental health counseling but were unable to get it. About half of respondents reported that they do not receive mental health counseling. 33.6% of respondents reported they were able to receive mental health counseling when they needed it, and 10.3% reported they were not able to receive mental health counseling when they needed it.

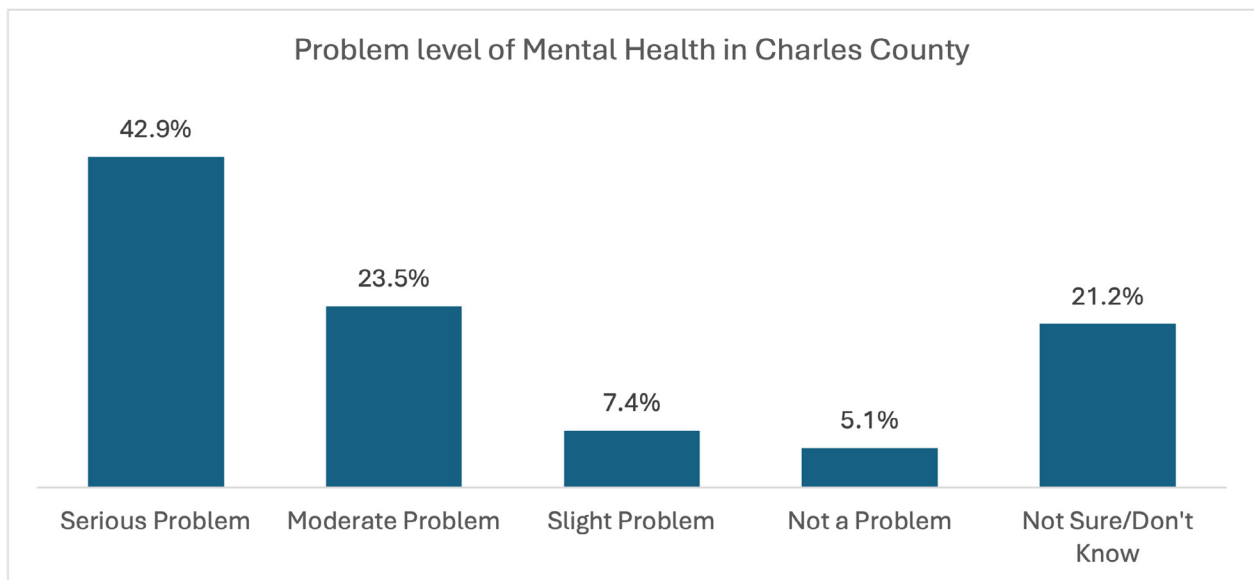


Charles County survey participants were asked how often they feel stressed out or overwhelmed. The largest percentage of respondents reported sometimes feeling stressed out or overwhelmed,

at 43.4%. 20.5% of respondents reported feeling stressed out or overwhelmed most of the time, and 10.2% reported always feeling stressed out or overwhelmed.

| Risk and Behavioral Factors | Always | Most of the time | Sometimes | Rarely | Never | Not applicable |
|-----------------------------------|--------|------------------|-----------|--------|-------|----------------|
| Feel stressed out or overwhelmed? | 10.2% | 20.5% | 43.4% | 19.0% | 6.2% | 0.7% |

42.9% of survey respondents felt that mental health was a serious problem in Charles County. The second highest percentage of respondents felt that mental health was a moderate problem in Charles County, at 23.5%. Only 5.1% of respondents felt that mental health was not a problem in Charles County.



Short Survey Data:

When asked to identify the biggest health problems in Charles County, Mental Health was a common response among short survey respondents. 45.8% of respondents felt that Mental Health was the biggest health problem in Charles County. This was the third most commonly cited health problem among short survey respondents, behind Diabetes and Overweight/Obesity.

Ideas and recommendations to help solve health problems in the county were mentioned by survey respondents, a few related to Mental Health. Respondents expressed the need for mental health emergency services to be separate from traditional emergencies, and the need for better mental health options in Charles County.

Lastly, short survey respondents were asked if there are sufficient services or resources for Mental Health in Charles County. Of those who responded to the question, 40.9% felt that there are some

Mental Health services available in Charles County. This was the highest percentage among survey respondents. Almost 17% felt that there are many mental health services available, and 9.5% felt that there are no mental health services available in the county. 32.7% of respondents did not know if there were mental health services in Charles County.

| | No Services Available | Some Services Available | Many Services Available | I don't know |
|----------------------|------------------------------|--------------------------------|--------------------------------|---------------------|
| Mental Health | 9.5% | 40.9% | 16.9% | 32.7% |

**Percentages based on those who answered the question. Blanks are not included in the denominator.*

Focus Groups:

Amongst the focus groups conducted for this year’s needs assessment, participants agreed that Behavioral health was the health condition most affecting Charles County. Behavioral Health includes both Mental Health and Substance Use Disorder. Some focus groups members specifically chose Behavioral Health because of the homeless population in the county. They stated that a homeless population is visible in the woods of Walmart in La Plata, and there may be a correlation between homelessness and mental health. Other focus group members mentioned that there is a high level of depression and anxiety in tobacco cessation clients. They stated that it is difficult for these clients to get into behavioral health services. The long wait lists for these services are a barrier for clients.

Barriers and gaps associated with mental health were expressed in the focus groups. Participants stated that there is a lack of psychiatrists in the county and that there needs to be more education on how to access mental health services. Focus group members also mentioned that behavioral health practitioners are limited in Charles County. Among the school nurses, many agreed that there was a lack of mental health providers and services for youth, and too much screen time. Also related to mental health, participants mentioned that there is a lack of behavioral health prescribers in Charles County and trouble with the school systems filling their school psychiatrist positions.

Some key changes that focus group members believed would improve health in Charles County involve tackling the loneliness and isolation of people that may have been brought on by the COVID-19 pandemic. Senior isolation was identified in the focus groups, and participants believe there needs to be more resources for those seniors who live in isolation, either by choice or by circumstance. Many seniors do not want to leave their homes for an assisted living facility. There is a need in the community to provide seniors with resources that will assist them when they are living alone in their own home. Overall, since COVID-19, the world has become more mobile (ordering groceries, shopping online) and there is less interaction for people resulting in lonelier lifestyles. Isolation and loneliness can have an impact on one’s mental health, so finding solutions to reach these individuals would help the overall mental health of those impacted.

Mental Health References

1. 2011- 2021 Maryland BRFSS or Maryland YRBS/YTS accessed at ibis.health.maryland.gov on February 29, 2024.
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Access to Care:

Access to Routine Exams

From 2021, 84.4% of Charles County Behavioral Risk Factor Surveillance System (BRFSS) respondents reported that they had been to a doctor for a routine checkup in the last year.

| Time since last routine checkup | < 1 year | 1-2 years | 2-5 years | 5+ years or never |
|--|--------------------|------------------|------------------|--------------------------|
| Charles County | 84.4% | 9.8% | 4.2% | 1.6% |

2021 Charles County BRFSS respondents were also asked if there was a time in the past 12 months when they were unable to see a doctor when needed due to cost. 8.8% of Charles County residents reported that there was time in the past 12 months when they were unable to see a doctor due to cost. This is below the Maryland state average percentage of 9.3%.

Charles County BRFSS respondents were asked if they have one or people that they think of as their personal doctor or health care provider. The majority of those surveyed (87.7%) reported that they do have a personal doctor or health care provider. Among those with a personal doctor, 50.5% reported that they have one doctor. 37.2% reported that they have more than one personal doctor.

Health Status

2021 Charles County BRFSS data indicates that the health status of most county residents is positive. Most county residents report themselves in Good, Very Good to Excellent health (83.1%). A small portion considers their health to be fair to poor (16.9%).

There was an increase from the last needs assessment in the percentage reporting that they are in Fair or Poor Health (11.4% to 16.9%). Charles County has a greater portion of people who report fair or poor health than Maryland as a whole (16.9% vs. 13.1%).

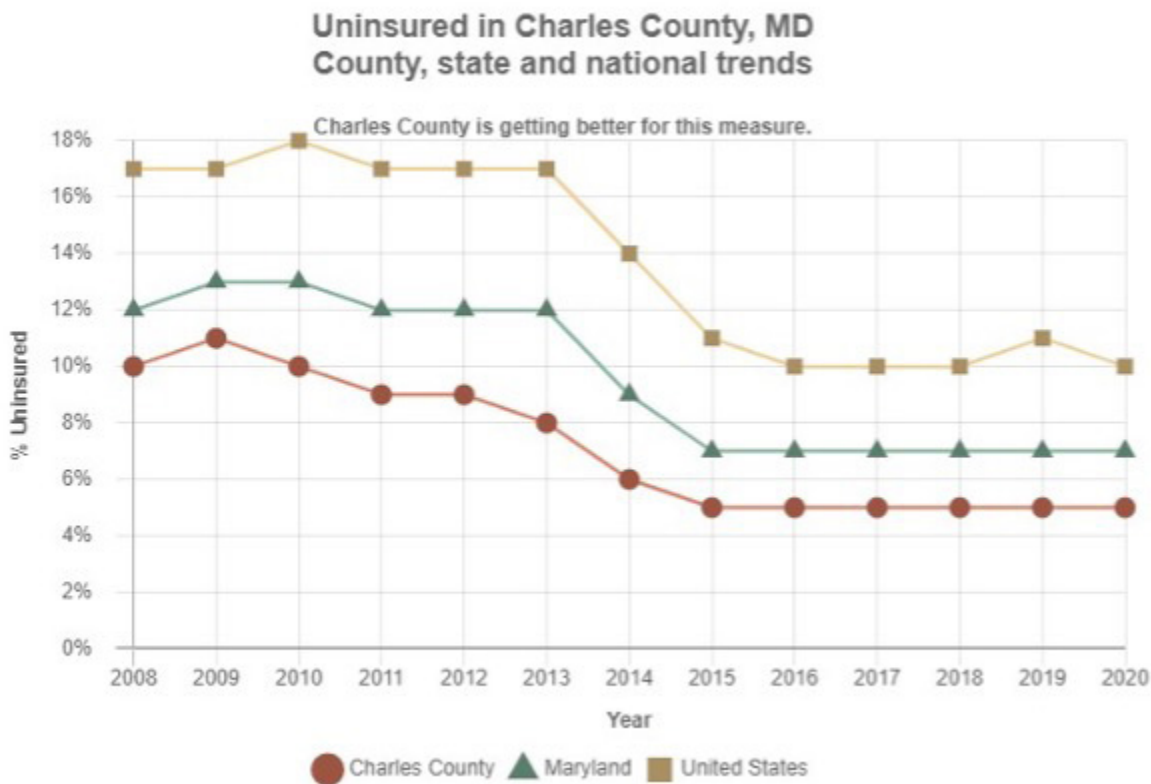
| Health Status: | Good, Very Good, or Excellent | Fair or Poor |
|-----------------------|--------------------------------------|---------------------|
| Charles County | 83.1% | 16.9% |
| Maryland | 86.9% | 13.1% |

Health Insurance

The 2021 Charles County BRFSS estimates the prevalence of different sources of health insurance among Charles County residents. 48.8% of Charles County BRFSS respondents reported that they have an employer or union purchased plan. 5.8% have a private, non-governmental plan that they buy on their own. 16.3% of Charles County BRFSS respondents reported that they have Medicare. 8.2% have a military-related healthcare such as Tricare, VA healthcare or CHAMP-VA. The

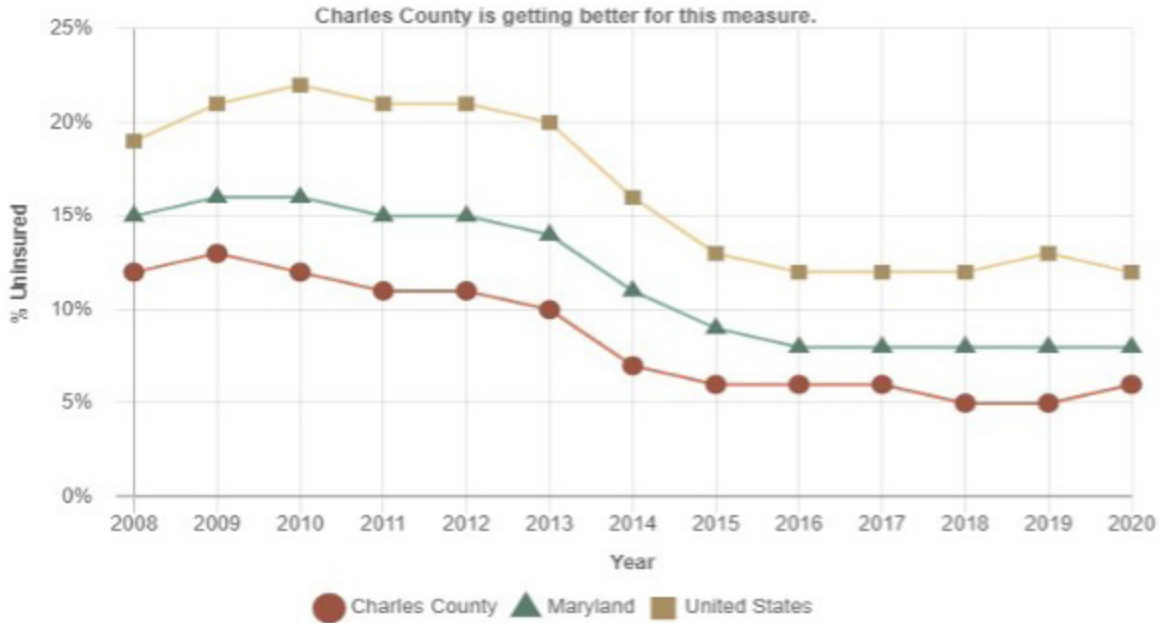
remaining group of respondents were either a state or government sponsored program such as Medicaid, or they did not have health insurance coverage. The exact percentages were suppressed due to small case counts and unreliable statistics.

2020 Charles County health un-insurance estimate as determined by the US Census Bureau's Current Population Survey is 5%. This data accessed through the Robert Wood Johnson Foundation's County Health Rankings. This is identical to the 2017 Charles County health un-insurance rate of 5% that was reported in the previous needs assessment report. The 2020 Charles County estimate is below the Maryland state health un-insurance estimate of 7% for 2020. The Charles County estimate has remained consistent for the last 6 years.

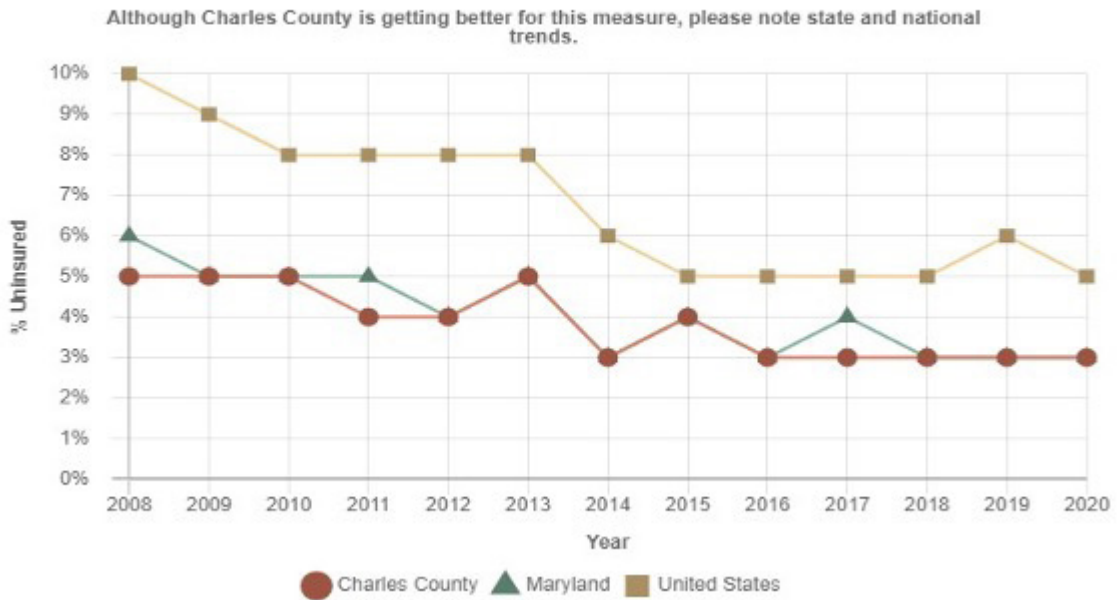


The percent of the population who are uninsured is also broken down by adults and children. 6% of Charles County adults are uninsured, compared to 8% for Maryland. 3% of Charles County children are uninsured, which is identical to the percentage for Maryland. The US rate is a little higher at 5%.

Uninsured adults in Charles County, MD County, state and national trends

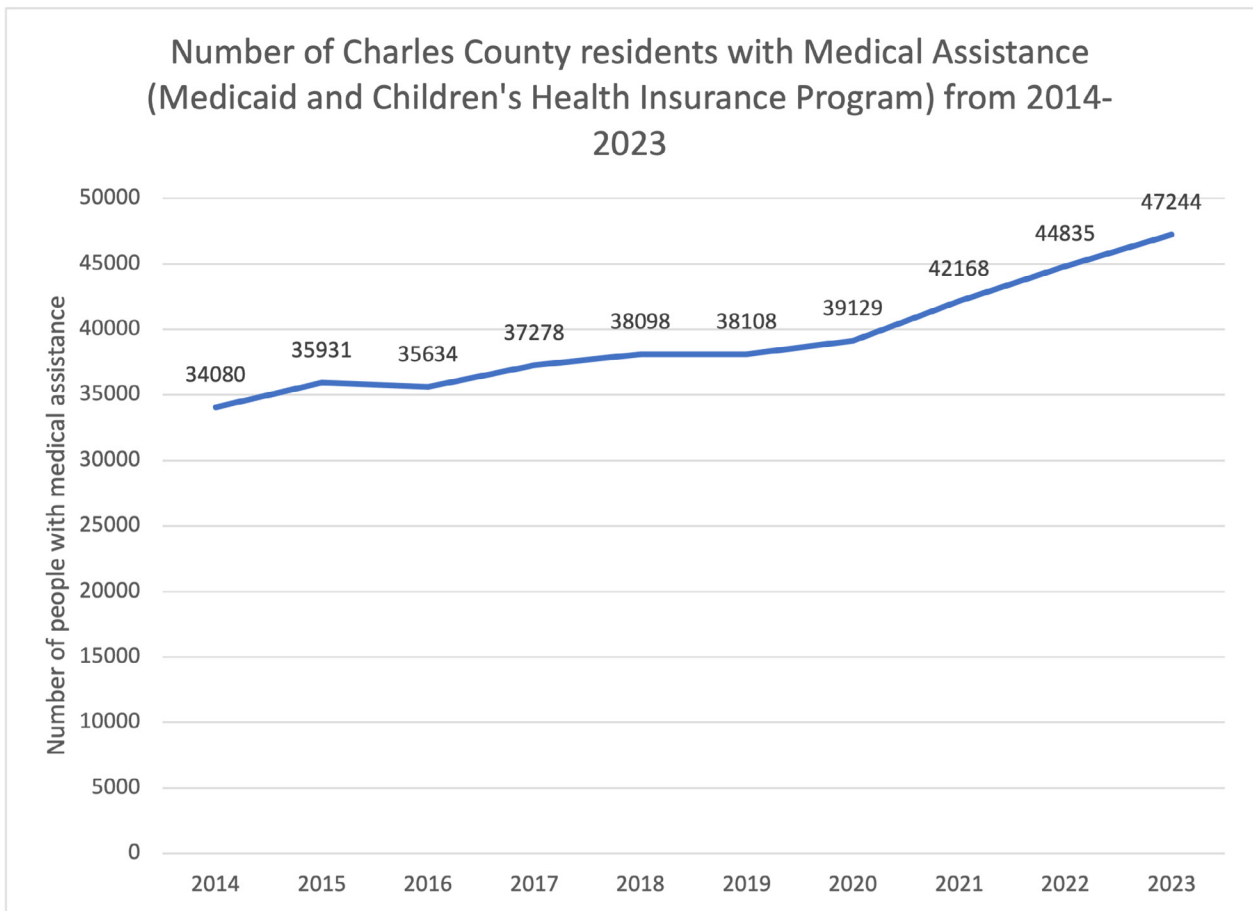


Uninsured children in Charles County, MD County, state and national trends



Medicaid Enrollment Rates

For the past decade, Charles County has seen an increase in the number of persons with medical assistance. Medical assistance can be either Medicaid or the Children’s Health Insurance Program (CHIP).

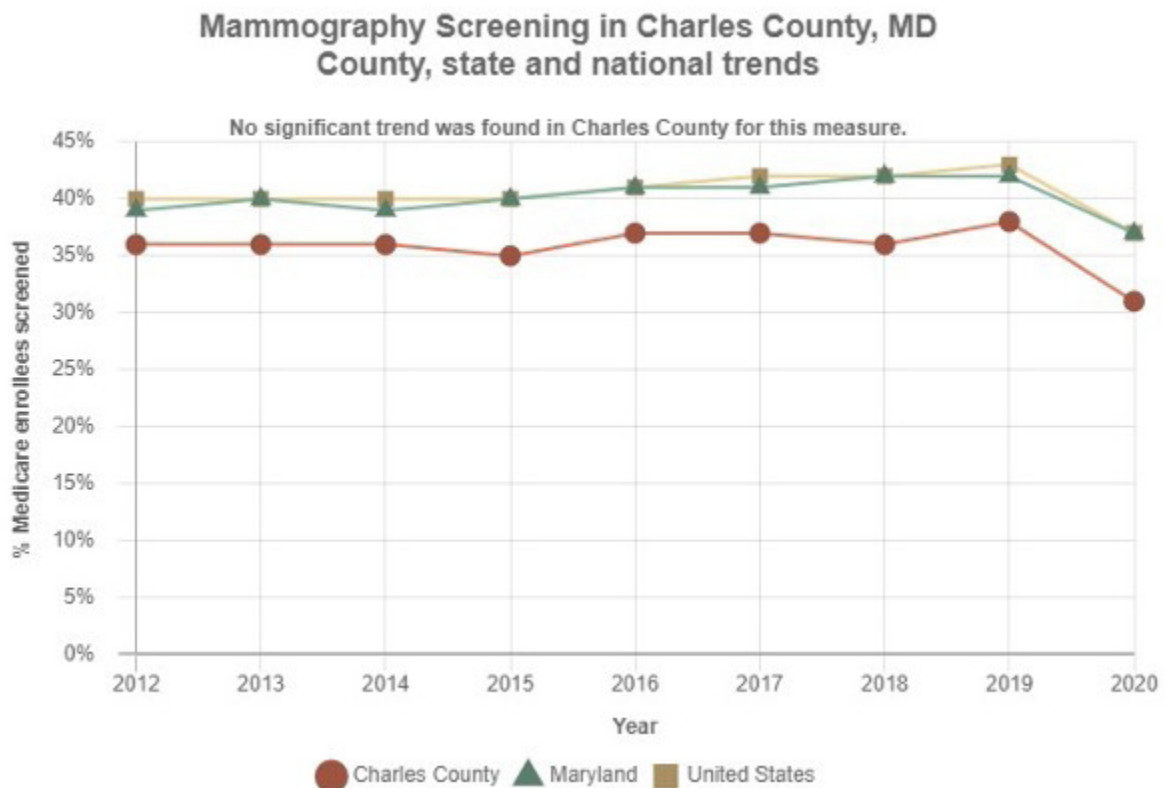


Screening Practices

The Robert Wood Johnson Foundation's County Health Rankings provide roadmaps for each state and its jurisdictions for data measures relating to health outcomes and social determinants of health. One of the health outcomes is access to mammograms health screenings for women aged 65-74 currently enrolled in Medicare. 31% of Charles County individuals assigned female at birth who are aged 65-74 years and enrolled in Medicare who received a mammography screening in 2020. The county percentage is lower than the Maryland state percentage of 37%. The 2020 Charles County rate of mammography screening is a reduction from previous years when the rate appeared to be stable.

The mammogram screening rate can also be compared by race. The highest rate of screening was seen for Hispanic and Black individuals. The lowest mammogram screening rate was seen in the Asian population.

| Mammogram Screening | Percentage of Medicare enrollees aged 65-74 years |
|---------------------|---|
| Total | 31% |
| Asian | 19% |
| Black | 32% |
| Hispanic | 32% |
| White | 30% |



Health Professional Shortage Areas/ Medically Underserved Populations and Areas

Health Professional Shortage Areas (HPSA):

There is 1 federally designated health professional shortage area in Charles County for dental health. The dental health HPSA is for Greater Baden Medical Services in Bryans Road and La Plata in Charles County. This HPSA was updated on September 11, 2021. The HPSA score is 26, the highest score you can get for dental health. Scores range from 1 to 26 for dental. The higher the score is, the greater the priority.

There is a federally designated mental health professional shortage area for the entire county. This

was last updated on August 27, 2021. Charles County received a score of 11 out of 25. HPSA Scores are developed for use by the National Health Service Corps in determining priorities for assignment of clinicians. Scores range from 1 to 25 for primary care and mental health, 1 to 26 for dental. The higher the score is, the greater the priority. An additional HPSA was identified for Greater Baden Medical Services located in Bryan's Road and La Plata for Charles County. The Greater Baden HPSA score is 23 for mental health.

There is a federally designated primary care professional shortage area for the Medicaid eligible population. Charles County received a score of 16 out of 25. HRSA estimates that 9.46 full-time equivalent (FTE) practitioners are needed in the Health Professional Shortage Area (HPSA) so that it will achieve the population to practitioner target ratio. This HPSA was last updated on 4/5/2022. There is also a second primary care HPSA identified for Greater Baden Medical Services located in Bryan's Road and La Plata for Charles County. The Greater Baden HPSA score is 22 for primary care. HPSA Scores are developed for use by the National Health Service Corps in determining priorities for assignment of clinicians. Scores range from 1 to 25 for primary care and mental health, 1 to 26 for dental. The higher the score is, the greater the priority.

Medically Underserved Populations and Areas:

Medically Underserved Areas/Populations (MUA/MUP) are areas or populations designated by HRSA as having too few primary care providers, high infant mortality, high poverty and/or high elderly population.

There are 6 population/areas in Charles County with MUA/MUP designation.

There is one medically underserved population (MUP) in Charles County. An MUP is a group of people who face economic, cultural, or linguistic barriers to health care. In Charles County, the MUP is located in the Brandywine Service Area. This population is a government MUP, which means it was designated at the request of a State Governor based to documented unusual local conditions and barriers to accessing personal health services. This designation has been in place since 1992 and was last updated on February 1, 1994.

The Index of Medical Underservice (IMU) score. The lowest score (highest need) is 0; and the highest score (lowest need) is 100. The Brandywine MUP received a 0 IMU score. That means the need for medical services in this region is of the highest priority.

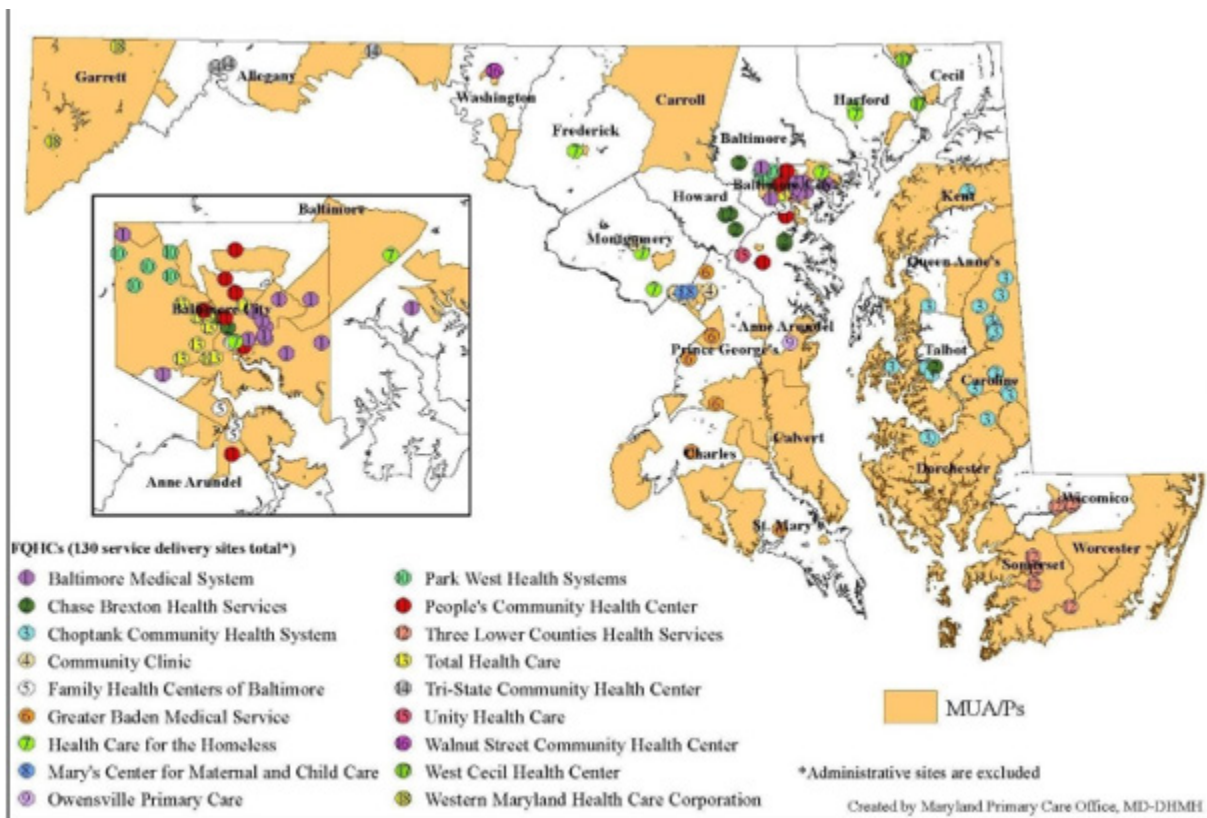
In addition to the MUP, there are 5 medically underserved areas (MUA) in Charles County. Medically Underserved Areas may be a whole county or a group of contiguous counties, groups of county or civil divisions or a group of urban census tracts in which residents have a shortage of personal health services. Those areas include:

- **Medically Underserved Area (MUA):** Score 52.0
 - District 4, Allens Fresh
 - District 5, Thompkinsville
 - District 9, Hughesville
- **Medically Underserved Area:** Score 61.3
 - District 10, Marbury
 - District 3, Nanjemoy

The IMU scale for Medically Underserved Areas is from 0 to 100, where 0 represents completely underserved and 100 represents best served or least underserved. Under the established criteria, each service area found to have an IMU of 62.0 or less qualifies for designation as an MUA.

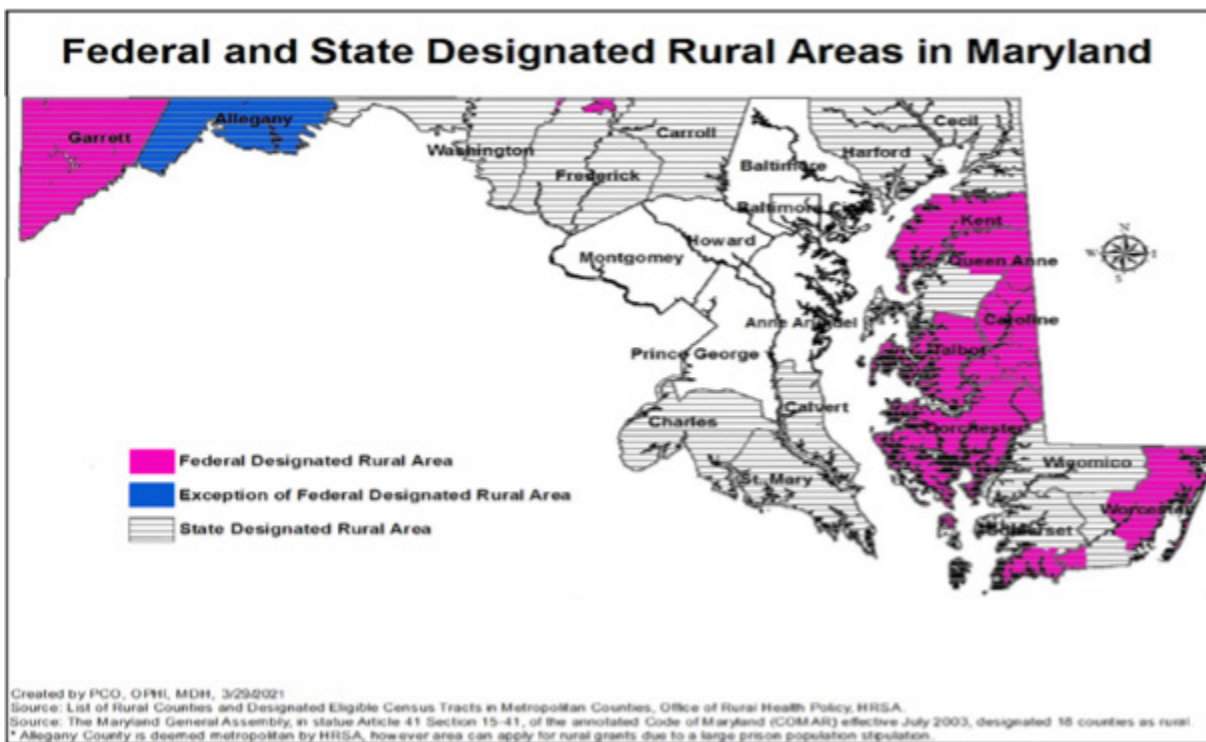
The IMU involves four variables - ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over. The value of each of these variables for the service area is converted to a weighted value, according to established criteria. The four values are summed to obtain the area's IMU score.

The Allens Fresh/Thompkinsville/Hughesville areas received an IMU score of 52.0. The Marbury/Nanjemoy areas received an IMU score of 61.3, which is close to the 62 cut off for MUA designation. These designations have been in place since 1994.



Rural Health Designation:

Charles County no longer holds a federal designation as a rural area. All Southern Maryland counties have lost their rural designation. However, Charles County has hold a state rural designation.



Availability of Health Services

Maryland Primary Care Needs Assessment 2021:

The 2021 Maryland Primary Care Office Needs Assessment was based on the integration of two health data tracking methods: Prevention Quality Indicators (PQIs) and the State Health Improvement Process (SHIP) measures.

Based on this Needs Assessment findings, the Primary Care Office (PCO) will prioritize in the following ways:

- For any competing requests from stakeholders for shortage analyses, workforce development, or technical assistance, the PCO will give priority first to those that pertain to areas of the state with greatest need as demonstrated by the results of the analyses of PQI and SHIP indicators for jurisdictions within the Bottom Quartile.
- The PCO will continue to pursue shortage analyses in all parts of the state, with priority given to the areas of greater need in the state before proceeding to others.
- The PCO will also continue to monitor health status and health care access in Maryland and will update the PCO Needs Assessment per HRSA grant requirements.

A quartile ranking was used to order the PQI, and SHIP indicator results by Maryland jurisdictions. The Health Indicator Rankings by Jurisdiction matrix can be found in Appendix A, Table 1. The information in this matrix was compiled from data from the Maryland Vital Statistics Administration, and the SHIP. The matrix focuses on 49 indicators and ranks those indicators at the jurisdictional level. Charles County is ranked 14th out of the 24 jurisdictions. This is an improvement from the 2016 needs assessment when Charles County was ranked 16th in the state. Charles County has remained in the third quartile.

Chart 1: Quartile Rankings by Jurisdiction Based on PQI & SHIP Indicators, 2021 PCO Needs Assessment*

| 2021 Jurisdictions | Rate | Rankings | Quartile |
|-------------------------------------|------|----------|-------------------------|
| Montgomery County | 221 | 1 | First Quartile (Best) |
| Howard County | 227 | 2 | |
| Frederick County | 279 | 3 | |
| Queen Anne's County | 284 | 4 | |
| Talbot County* (↑ from 11) | 308 | 5 | |
| Carroll County | 324 | 6 | |
| Calvert County | 366 | 7 | Second Quartile |
| Anne Arundel | 387 | 8 | |
| Harford County* (↓ from 6) | 409 | 9 | |
| Caroline County* (↑ from 15) | 424 | 10 | |
| Kent County* (↑ from 19) | 430 | 11 | |
| Prince George's County* (↑ from 13) | 432 | 12 | |
| Garrett County* (↓ from 8) | 438 | 13 | Third Quartile |
| Charles County | 439 | 14 | |
| Worcester County* (↓ from 10) | 469 | 15 | |
| Somerset County | 491 | 16 | |
| Cecil County* (↓ from 12) | 492 | 17 | |
| Baltimore County | 508 | 18 | |
| Saint Mary's County* (↓ from 14) | 515 | 19 | Fourth Quartile (Worst) |
| Washington County | 536 | 20 | |
| Wicomico County | 566 | 21 | |
| Dorchester County | 587 | 22 | |
| Allegany | 602 | 23 | |
| Baltimore City | 718 | 24 | |

*Quartile ranking changed from the 2016 Needs Assessment.

Data on the 49 health indicators is listed below for each county. Health indicators where Charles County scored favorably: Diabetes with long term complications, COPD or asthma in older adults, students entering kindergarten ready to learn, and children with elevated blood levels. Health indicators where Charles County scored the lowest in the state: Chlamydia infection rate, domestic violence, affordable housing, children receiving dental care in the last year, emergency department visits for hypertension, annual flu vaccinations, early prenatal care, and adults who are at a healthy weight.

Table 1: Health Indicator Rankings by Jurisdiction, Maryland, 2021 (PQI and SHIP)

| Prevention Quality Indicators (PQI) & State Health Improvement Process (SHIP) Rankings by Jurisdiction | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|----------|--------------|----------------|------------------|---------|----------|---------|-------|---------|------------|-----------|---------|---------|--------|------|------------|----------------|-------------|-------------|----------|--------|------------|----------|-----------|
| | Jurisdictions | Allegany | Anne Arundel | Baltimore City | Baltimore County | Calvert | Caroline | Carroll | Cecil | Charles | Dorchester | Frederick | Garrett | Harford | Howard | Kent | Montgomery | Prince Georges | Queen Annes | Saint Marys | Somerset | Talbot | Washington | Wicomico | Worcester |
| Indicators/Tables | | | | | | | | | | | | | | | | | | | | | | | | | |
| PQI Data | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Diabetes with short-term complications | | 20 | 7 | 24 | 12 | 17 | 14 | 4 | 10 | 16 | 18 | 5 | 11 | 6 | 2 | 21 | 3 | 9 | 1 | 13 | 19 | 8 | 22 | 23 | 15 |
| 3. Diabetes with long-term complications | | 23 | 9 | 24 | 21 | 19 | 22 | 10 | 18 | 4 | 15 | 8 | 12 | 14 | 3 | 20 | 2 | 16 | 11 | 13 | 5 | 7 | 17 | 6 | 1 |
| 4. Chronic Obstructive Pulmonary Disease (COPD) or asthma in older adults | | 23 | 14 | 24 | 21 | 11 | 7 | 10 | 19 | 3 | 15 | 6 | 12 | 17 | 1 | 9 | 2 | 8 | 5 | 20 | 16 | 4 | 22 | 13 | 18 |
| 5. Hypertension | | 22 | 8 | 23 | 21 | 9 | 2 | 10 | 8 | 11 | 19 | 6 | 12 | 15 | 3 | 1 | 13 | 17 | 4 | 14 | 20 | 5 | 18 | 16 | 7 |
| 6. Heart failure | | 22 | 10 | 24 | 21 | 16 | 3 | 14 | 4 | 8 | 18 | 5 | 2 | 15 | 6 | 11 | 1 | 13 | 7 | 17 | 19 | 9 | 12 | 20 | 23 |
| 7. Community Acquired Bacterial pneumonia | | 20 | 8 | 21 | 13 | 3 | 19 | 22 | 18 | 6 | 24 | 9 | 7 | 11 | 2 | 10 | 1 | 4 | 5 | 16 | 14 | 15 | 23 | 12 | 17 |
| 8. Urinary tract infection | | 17 | 14 | 24 | 23 | 5 | 1 | 22 | 15 | 7 | 19 | 9 | 10 | 18 | 3 | 8 | 11 | 13 | 6 | 12 | 16 | 2 | 4 | 20 | 21 |
| 9. Uncontrolled diabetes without complications | | 20 | 11 | 24 | 16 | 12 | 5 | 4 | 13 | 6 | 22 | 3 | 8 | 10 | 9 | 23 | 7 | 17 | 1 | 14 | 19 | 2 | 15 | 18 | 21 |
| 10. Asthma in younger adults | | 19 | 5 | 24 | 21 | 4 | 14 | 10 | 22 | 8 | 16 | 11 | 9 | 20 | 12 | 3 | 7 | 15 | 2 | 18 | 13 | 1 | 23 | 17 | 6 |
| 11. Lower extremity amputations among admissions for diabetes | | 23 | 11 | 24 | 21 | 7 | 3 | 8 | 12 | 4 | 10 | 5 | 20 | 13 | 2 | 22 | 1 | 6 | 19 | 15 | 18 | 9 | 17 | 14 | 16 |
| SHIP Data | | | | | | | | | | | | | | | | | | | | | | | | | |
| Healthy Beginnings | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12. Infant Death Rate | | | 2 | 9 | 6 | 7 | | | | 11 | | 5 | | 1 | 4 | | 3 | 8 | | 7 | 13 | | 10 | 11 | 12 |
| 13. Babies With Low Birth Weight | | 3 | 10 | 20 | 14 | 10 | 8 | 4 | 8 | 19 | 7 | 5 | 18 | 6 | 11 | 17 | 9 | 15 | 12 | 2 | 21 | 7 | 13 | 16 | 1 |
| 14. Sudden Unexpected Infant Death Rate (SUIDs) | | | 2 | 5 | 3 | | | | 5 | | | | | 4 | | | 1 | 3 | | | | | 4 | | |
| 15. Teen Birth Rate | | 21 | 11 | 23 | 9 | 3 | 15 | 2 | 17 | 14 | 20 | 4 | 16 | 6 | 1 | 5 | 8 | 18 | 7 | 6 | 13 | 10 | 22 | 19 | 12 |
| 16. Early Prenatal Care | | 8 | 17 | 20 | 19 | 9 | 16 | 1 | 7 | 21 | 6 | 3 | 5 | 8 | 14 | 2 | 18 | 22 | 11 | 12 | 10 | 13 | 15 | 15 | 4 |
| 17. Students Entering Kindergarten Ready to Learn | | 14 | 8 | 13 | 9 | 7 | 10 | 3 | 12 | 14 | 11 | 6 | 2 | 10 | 6 | 1 | 9 | 16 | 8 | 12 | 4 | 10 | 19 | 9 | 5 |
| 18. High School Graduation Rate | | 13 | 14 | 21 | 11 | 2 | 20 | | 9 | 1 | 13 | 4 | 5 | 12 | 6 | 9 | 10 | 19 | | 3 | 16 | 15 | 7 | 17 | 8 |
| 19. Children Receiving Blood Lead Screening | | 1 | 10 | 6 | 4 | 22 | 5 | 17 | 14 | 8 | 11 | 10 | 19 | 12 | 13 | 21 | 3 | 9 | 15 | 16 | 2 | 7 | 20 | 13 | 18 |
| Healthy Living | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20. Adults Who are a Healthy Weight | | 9 | 6 | 13 | 11 | 3 | 15 | 14 | 12 | 21 | 20 | 8 | 16 | 4 | 5 | 1 | 2 | 23 | 19 | 22 | | 10 | 18 | 17 | 7 |
| 21. Adolescents Who Have Obesity (2018) | | 18 | 7 | 21 | 9 | 6 | 15 | 3 | 8 | 12 | 22 | 4 | 19 | 6 | 1 | 17 | 2 | 16 | 5 | 11 | 23 | 14 | 13 | 20 | 10 |
| 22. Adults Who Currently Smoke | | 19 | 10 | 16 | 4 | 14 | 17 | 7 | 18 | 6 | 20 | 5 | 13 | 8 | | 3 | 1 | 2 | 8 | 15 | 21 | 8 | 11 | 9 | 12 |
| 23. Public High School Students Currently Using Tobacco (2018) | | 18 | 7 | 4 | 5 | 14 | 16 | 11 | 17 | 4 | 19 | 8 | 21 | 6 | 2 | 22 | 3 | 1 | 20 | 12 | 9 | 13 | 10 | 11 | 15 |
| 24. HIV Incidence Rate | | 6 | 11 | 19 | 13 | 7 | 1 | 4 | 5 | 14 | 17 | 9 | 2 | 12 | 8 | 5 | 10 | 18 | | 7 | | | 10 | 15 | 3 |

The following table displays the healthcare provider ratios for Charles County zip code and the county as a whole.

| County/Neighborhoods by Census Tracts | | Resident Civilian Population ^{1,2} | Primary Care FTE ^{3,5} | Primary Care Provider to Population Ratio ⁶ | Mental Health FTE ^{4,5} | Mental Health Provider to Population Ratio ⁶ |
|--|--|---|---------------------------------|--|----------------------------------|---|
| Charles County | Nanjemoy (850400) | 3,562 | 0.0 | 0 : 3,562 | 0.0 | 0 : 3,562 |
| | Welcome (850500) | 2,884 | 0.0 | 0 : 2,884 | 0.0 | 0 : 2,884 |
| | La Plata (850600, 850904, 851001, 851002) | 26,422 | 18.9 | 1 : 1,400 | 0.0 | 0 : 26,422 |
| | Waldorf (850706, 850708, 850709, 850710, 850711, 850712, 850713, 850801, 850802, 850901, 850902, 850905, 850906, 851500) | 80,964 | 52.8 | 1 : 1,533 | 1.0 | 1 : 80,964 |
| | Port Tobacco/Charlotte Hall (851100, 851301, 851302) | 12,381 | 0.0 | 0 : 12,381 | 0.0 | 0 : 12,381 |
| | Newburg (851200) | 4,960 | 0.0 | 0 : 4,960 | 0.0 | 0 : 4,960 |
| | Hughesville (851400) | 8,692 | 0.0 | 0 : 8,692 | 0.0 | 0 : 8,692 |
| | Whole County | 163,257 | 73.7 | 1 : 2,216 | 1.0 | 1 : 163,257 |
| Charles County | Bryans Road (850101, 850102) | 8,038 | 1.0 | 1 : 8,038 | 0.0 | 0 : 8,038 |
| | Indian Head/Marbury (850201, 850202, 850300) | 7,432 | 1.0 | 1 : 7,432 | 0.0 | 0 : 7,432 |
| ¹ Annual Estimates of Resident Population in 2019. | | | | | | |
| ² Annual Estimates of Resident Population in 2018. | | | | | | |
| ³ Primary Care FTE: Includes family practice, general practice, internal medicine, obstetric and gynecology and pediatric. | | | | | | |
| ⁴ Mental Health FTE: Only includes psychiatrists | | | | | | |
| ⁵ Excluded FTE: Physicians solely working at hospitals, non-acute care facilities, or providing academia or research services. | | | | | | |
| ⁶ Blue font indicates possible eligibility for a Mental Health or Primary Care Geographic HPSA based on provider to population ratio factors below: Primary Care Geographic HPSA - If FTE = 0, then population should be at least 500 - FTE > 0, then provider: population ratio should be at least 1:3,500 and include a minimum population of 20,000 unless a full county. Mental Health Geographic HPSA - If FTE = 0, then population should be at least 3,000 - If FTE > 0, then provider: population ratio should be 1:30,000 for only psychs and include a minimum population of 20,000 unless a full county. | | | | | | |
| Source: U.S. Census Bureau, Population Division, https://www.census.gov/data/tables/time-series/demo/popest/2010s-counties-total.html ; Health Resources and Services Administration (HRSA), HPSA Find, https://data.hrsa.gov/tools/shortage-area/hpsa-find | | | | | | |

The report also identified safety net providers for each county. For Charles County, 3 organizations were identified.

| CHARLES COUNTY SAFETY NET SITES | | | | | | | | | | | | | | |
|---------------------------------|--|---|------------------|---|---------------|--------------------------------------|--------------|----------------|----------|---------|---------|---------------|---------|---------------|
| Site Type | Site Name | Site Address | Telephone Number | Web Address | Location Type | Type Description | Contact Name | Migrant Health | Homeless | Medical | Dental | Mental Health | Vision | Substance Use |
| FQHC | Greater Baden Medical Services at La Plata | 6 Garrett Ave La Plata, MD 20646-5959 | 301-539-5100 | www.gbms.org | Permanent | Service Delivery Site | Unknown | Yes | No | Yes | Yes | Yes | No | Yes |
| Hospital | University of Maryland Charles Regional Medical Center | 5 Garrett Avenue, La Plata, MD 20646 | 301-609-4000 | https://www.umms.org/charles | Permanent | Service Delivery Site | Unknown | No | Yes | Yes | Unknown | Yes | No | Yes |
| LHD | Charles County Health Department | 4545 Crain Hwy, White Plains, MD 20695 | 301-609-6900 | https://charlescountyhealth.org/ | Permanent | Administrative/Service Delivery Site | Unknown | Unknown | Unknown | Yes | Yes | Yes | Unknown | Yes |

FQHC - Federally Qualified Health Center

LHD - Local Health Department

SBHC - School Based Health Center

Sources:

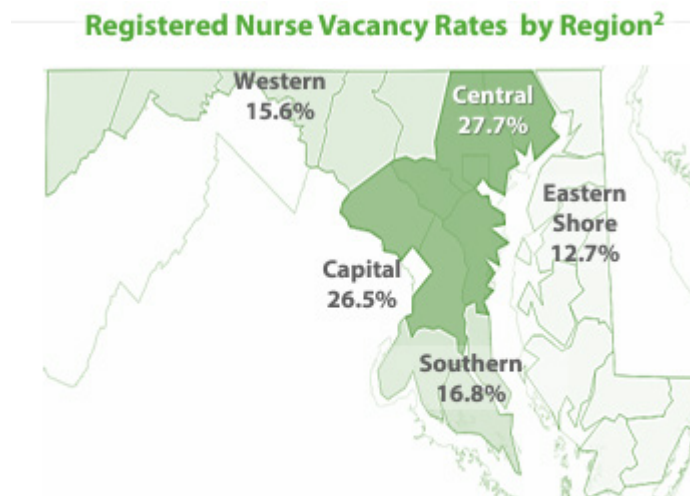
1. 2019 Program Awardee Data
<https://data.hrsa.gov/tools/data-reporting/program-data?type=AWARDEE&state=MD,2/8/21>
2. Health Resources and Services Administration, accessed 2/1/2021
<http://datawarehouse.hrsa.gov/tools/hdwreports/reports.aspx>
3. Maryland Hospital Association, accessed 3/22/2021
<https://www.mhaonline.org/about-mha/member-hospitals>
4. University of Maryland Charles Regional Medical Center, accessed 3/24/21
<https://www.umms.org/charles>
5. Charles County Health Department, accessed 3/24/21
<https://charlescountyhealth.org/>

Maryland Hospital Association 2022 State of Maryland's Health Care Workforce Report:

The 2022 State of Maryland's Health Care Workforce Report looked at the healthcare professions with high vacancy rates. Nursing positions were at the top of the list. They were higher than the overall Maryland vacancy rate of 21.2%.

| Top 10 Hospital Occupations by Vacancy Rate² (as of 12/31/2021) | |
|--|--------------|
| Licensed Practical (Vocational) Nurses | 37.7% |
| Registered Nurses | 25.4% |
| Respiratory Therapists | 23.7% |
| Nursing Assistive Personnel | 22.9% |
| Overall Vacancy Rate | 21.2% |
| Nurse Practitioners | 21.0% |
| Surgical Technicians | 20.5% |
| Pharmacy Technicians | 19.0% |
| Sterile Processing Technicians | 17.2% |
| Laboratory Technicians | 17.1% |
| Radiology Technicians | 16.9% |

Southern Maryland has a registered nurse vacancy rate of 16.8%. This is the third highest in the state.



Note: Data represents submissions by 49 of 51 Maryland hospitals (Survey Response Rate = 96.1%). Data will be updated as new submissions are received.

Maryland Health Workforce Study Phase 2 Report, January 2014:

In January 2014, the Maryland Health Care Commission (MHCC) released a second report detailing Phase 2 of the Maryland Health Workforce Study. This study assessed health workforce distribution and the adequacy of supply. Using funding from the Robert Wood Johnson Foundation, the MHCC was able to study the Maryland healthcare workforce on the state and jurisdictional level. Phase II presents estimates of current supply and demand for health professions designated by MHCC has high priority in supporting Maryland's transition to health reform, and for which data were readily available for estimating supply and demand. These professions included primary care specialties and psychiatrists. Current supply estimates were also presented for psychologists, social workers, counselors, physician assistants, pharmacists, registered nurses, and dentists.

Demand modeling: Estimates of the current demand for healthcare providers were developed using the IHS Healthcare Demand Micro-simulation Model. The major components of this model include: 1. A population database that contains characteristics and health risk factors for a representative sample of the population in each Maryland county; 2. Equations that relate a person's characteristics to his or her demand for healthcare services by care delivery setting; and 3. Staffing patterns that convert demand for healthcare services to demand for full time equivalent (FTE) providers.

This report has not been updated since 2014.

In Charles County, the primary care FTE demand is greater than the primary care FTE supply (7.4 vs. 6.1). There is an 18% shortfall in the demand for primary care services. Charles County falls in the up to 20% shortage area for primary care physician supply.

Map 1: Maryland County-Level Adequacy of FTE Primary Care Physician Supply

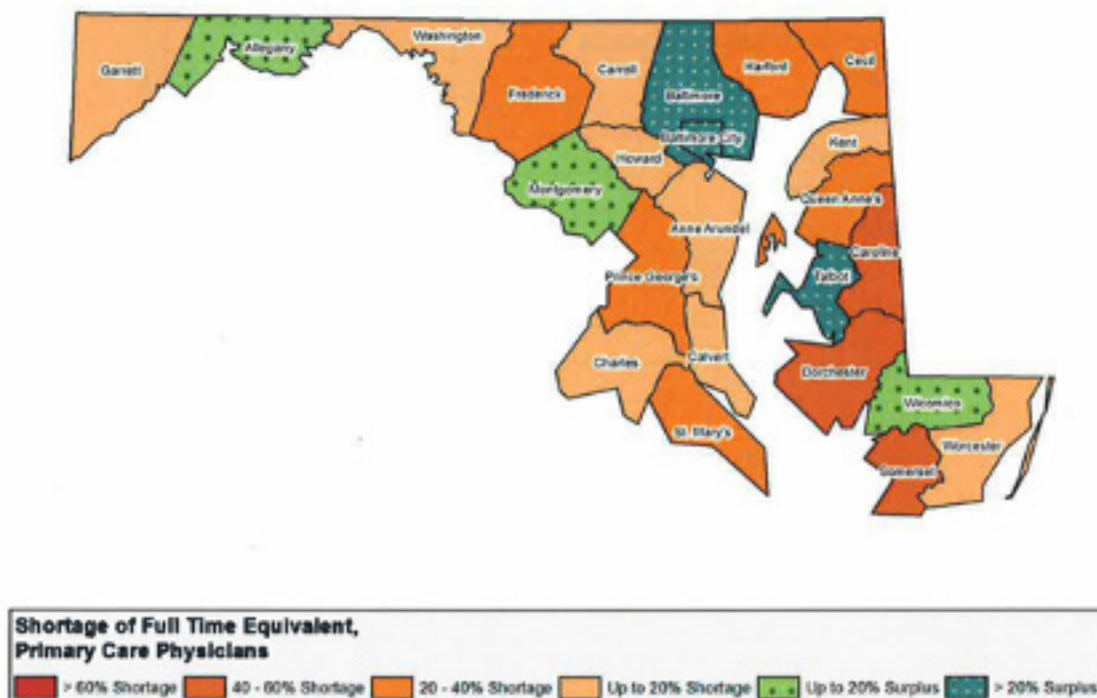


Exhibit 3: Adequacy of Supply for Primary Care Physicians by County, 2012

| County | Total FTEs | | | FTEs/10,000 Population | |
|------------------|--------------|--------------|-----------------|------------------------|------------|
| | FTE Demand | FTE Supply | Supply - Demand | FTE Demand | FTE Supply |
| Allegheny | 57 | 63 | 6 | 7.6 | 8.5 |
| Anne Arundel | 407 | 379 | (28) | 7.4 | 6.9 |
| Baltimore City | 464 | 817 | 353 | 7.5 | 13.1 |
| Baltimore County | 621 | 788 | 167 | 7.6 | 9.6 |
| Calvert | 66 | 56 | (10) | 7.5 | 6.2 |
| Caroline | 25 | 14 | (11) | 7.5 | 4.2 |
| Carroll | 125 | 103 | (22) | 7.5 | 6.2 |
| Cecil | 75 | 60 | (15) | 7.5 | 5.9 |
| Charles | 111 | 91 | (20) | 7.4 | 6.1 |
| Dorchester | 25 | 14 | (11) | 7.9 | 4.1 |
| Frederick | 176 | 140 | (36) | 7.4 | 5.8 |
| Garrett | 23 | 20 | (3) | 7.7 | 6.6 |
| Harford | 186 | 142 | (44) | 7.5 | 5.7 |
| Howard | 218 | 197 | (21) | 7.3 | 6.6 |
| Kent | 16 | 16 | 0 | 8.0 | 7.9 |
| Montgomery | 729 | 833 | 104 | 7.2 | 8.3 |
| Prince George's | 637 | 471 | (166) | 7.2 | 5.3 |
| Queen Anne's | 37 | 25 | (12) | 7.6 | 5.1 |
| St. Mary's | 80 | 53 | (27) | 7.3 | 4.9 |
| Somerset | 19 | 8 | (11) | 7.3 | 2.9 |
| Talbot | 31 | 42 | 11 | 8.1 | 11.0 |
| Washington | 112 | 111 | (1) | 7.5 | 7.4 |
| Wicomico | 75 | 81 | 6 | 7.5 | 8.0 |
| Worcester | 42 | 41 | (1) | 8.0 | 7.9 |
| Total | 4,357 | 4,565 | 208 | 7.4 | 7.8 |

Note: Primary care specialties include general and family practice, general internal medicine, geriatrics, and general pediatrics.

The supply versus demand for pediatric services in Charles County is similar.

Exhibit 4: Adequacy of Supply for Pediatricians by County, 2012

| County | Total FTEs | | | FTEs/10,000 Children | |
|------------------|------------|--------------|-----------------|----------------------|------------|
| | FTE Demand | FTE Supply | Supply - Demand | FTE Demand | FTE Supply |
| Allegany | 10 | 11 | 1 | 7.0 | 7.9 |
| Anne Arundel | 87 | 85 | (2) | 7.1 | 6.9 |
| Baltimore County | 125 | 185 | 60 | 7.1 | 10.4 |
| Baltimore City | 99 | 168 | 69 | 7.3 | 12.3 |
| Calvert | 15 | 13 | (2) | 7.0 | 6.1 |
| Caroline | 6 | 1 | (5) | 7.0 | 0.9 |
| Carroll | 26 | 21 | (5) | 6.9 | 5.4 |
| Cecil | 16 | 9 | (7) | 7.0 | 3.9 |
| Charles | 26 | 26 | 0 | 7.1 | 7.0 |
| Dorchester | 5 | 1 | (4) | 7.1 | 1.9 |
| Frederick | 40 | 34 | (6) | 7.0 | 5.9 |
| Garrett | 4 | - | (4) | 6.9 | - |
| Harford | 40 | 40 | 0 | 7.0 | 7.0 |
| Howard | 51 | 52 | 1 | 7.1 | 7.2 |
| Kent | 2 | 1 | (1) | 7.0 | 2.6 |
| Montgomery | 163 | 234 | 71 | 7.1 | 10.1 |
| Prince George's | 148 | 104 | (44) | 7.2 | 5.1 |
| Queen Anne's | 7 | 6 | (1) | 6.9 | 5.7 |
| St. Mary's | 19 | 12 | (7) | 7.0 | 4.3 |
| Somerset | 3 | 2 | (1) | 7.1 | 3.6 |
| Talbot | 5 | 9 | 4 | 7.0 | 13.4 |
| Washington | 23 | 21 | (2) | 7.0 | 6.5 |
| Wicomico | 16 | 26 | 10 | 7.1 | 11.1 |
| Worcester | 7 | - | (7) | 7.0 | - |
| Total | 943 | 1,061 | 118 | 7.1 | 8.0 |

The FTE per 10,000 supply rates for professional counselors, social workers, and psychologists in Charles County is much lower than the rates for Maryland. The Charles County FTE rate for physician assistants is the only rate that came close to the Maryland state supply rate.

Exhibit 6: Supply of Selected Health Professions by County, 2012

| County | Professional Counselors | | Social Workers | | Psychologists | | Physician Assistants | |
|------------------|-------------------------|-------------|----------------|-------------|---------------|------------|----------------------|------------|
| | FTEs | FTE/10,000 | FTEs | FTE/10,000 | FTEs | FTE/10,000 | FTEs | FTE/10,000 |
| Allegany | 267 | 36.1 | 222 | 29.9 | 27 | 3.6 | 27 | 3.6 |
| Anne Arundel | 684 | 12.4 | 833 | 15.1 | 144 | 2.6 | 162 | 2.9 |
| Baltimore City | 2,132 | 34.3 | 4,030 | 64.9 | 405 | 6.5 | 570 | 9.2 |
| Baltimore County | 1,294 | 15.8 | 2,124 | 26.0 | 357 | 4.4 | 330 | 4.0 |
| Calvert | 118 | 13.2 | 128 | 14.2 | 8 | 0.8 | 20 | 2.2 |
| Caroline | 17 | 5.2 | 61 | 18.6 | - | - | 1 | 0.3 |
| Carroll | 277 | 16.5 | 315 | 18.8 | 48 | 2.9 | 52 | 3.1 |
| Cecil | 97 | 9.5 | 175 | 17.2 | 25 | 2.4 | 23 | 2.3 |
| Charles | 193 | 12.8 | 126 | 8.4 | 14 | 0.9 | 49 | 3.2 |
| Dorchester | 79 | 24.3 | 150 | 45.9 | 5 | 1.4 | 3 | 0.8 |
| Frederick | 320 | 13.3 | 530 | 22.1 | 56 | 2.3 | 62 | 2.6 |
| Garrett | 53 | 17.6 | 73 | 24.3 | 1 | 0.2 | 5 | 1.5 |
| Harford | 351 | 14.1 | 355 | 14.3 | 46 | 1.9 | 63 | 2.5 |
| Howard | 407 | 13.6 | 667 | 22.3 | 181 | 6.0 | 40 | 1.3 |
| Kent | 41 | 20.1 | 52 | 25.5 | 8 | 3.7 | 3 | 1.5 |
| Montgomery | 1,200 | 11.9 | 2,927 | 29.1 | 754 | 7.5 | 300 | 3.0 |
| Prince George's | 833 | 9.4 | 913 | 10.4 | 129 | 1.5 | 154 | 1.7 |
| Queen Anne's | 29 | 5.9 | 70 | 14.4 | 9 | 1.7 | 3 | 0.5 |
| St. Mary's | 105 | 40.0 | 115 | 43.8 | 18 | 1.6 | 22 | 8.4 |
| Somerset | 45 | 4.1 | 79 | 7.2 | - | - | 4 | 0.3 |
| Talbot | 62 | 16.3 | 167 | 43.8 | 7 | 1.8 | 11 | 2.8 |
| Washington | 273 | 18.3 | 435 | 29.1 | 18 | 1.2 | 65 | 4.4 |
| Wicomico | 193 | 19.1 | 334 | 33.2 | 20 | 1.9 | 72 | 7.1 |
| Worcester | 67 | 12.9 | 106 | 20.6 | 5 | 0.9 | 11 | 2.1 |
| Total | 9,131 | 15.5 | 14,982 | 25.5 | 2,278 | 3.9 | 2,045 | 3.5 |

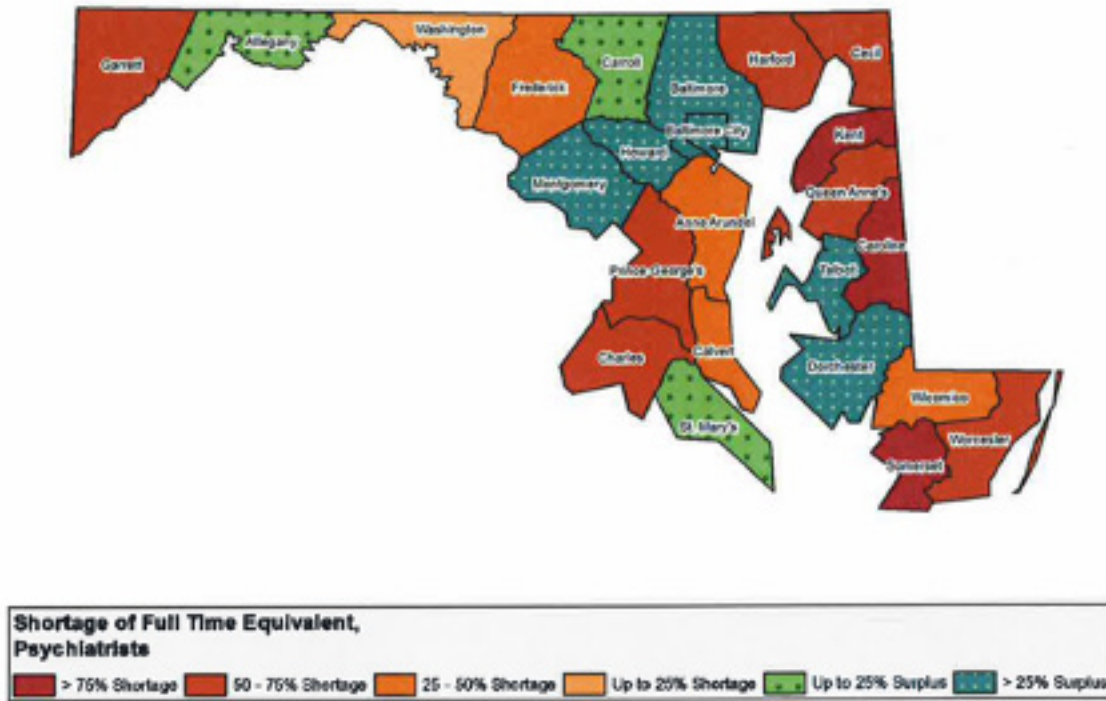
Note: These are professions for which only FTE supply analysis was possible at this time.

The demand for psychiatrists in Charles County is much higher than the county supply for psychiatry. Charles County has a shortage between 50-75% of full time equivalent psychiatrists.

Exhibit 5: Adequacy of Supply for Psychiatrists by County, 2012

| County | Total FTEs | | | FTEs/10,000 Population | |
|------------------|------------|------------|-----------------|------------------------|------------|
| | FTE Demand | FTE Supply | Supply - Demand | FTE Demand | FTE Supply |
| Allegany | 10 | 10 | 0 | 1.3 | 1.4 |
| Anne Arundel | 74 | 41 | (33) | 1.3 | 0.7 |
| Baltimore City | 94 | 233 | 139 | 1.5 | 3.7 |
| Baltimore County | 113 | 242 | 129 | 1.4 | 3.0 |
| Calvert | 12 | 6 | (6) | 1.3 | 0.7 |
| Caroline | 4 | - | (4) | 1.3 | - |
| Carroll | 22 | 26 | 4 | 1.3 | 1.6 |
| Cecil | 13 | 6 | (7) | 1.3 | 0.6 |
| Charles | 22 | 6 | (16) | 1.5 | 0.4 |
| Dorchester | 5 | 8 | 3 | 1.4 | 2.5 |
| Frederick | 32 | 18 | (14) | 1.3 | 0.8 |
| Garrett | 4 | 2 | (2) | 1.3 | 0.5 |
| Harford | 33 | 15 | (18) | 1.3 | 0.6 |
| Howard | 40 | 64 | 24 | 1.3 | 2.1 |
| Kent | 3 | - | (3) | 1.4 | - |
| Montgomery | 134 | 214 | 80 | 1.3 | 2.1 |
| Prince George's | 135 | 47 | (88) | 1.5 | 0.5 |
| Queen Anne's | 6 | 3 | (3) | 1.3 | 0.6 |
| St. Mary's | 14 | 5 | (9) | 1.3 | 0.4 |
| Somerset | 4 | 1 | (3) | 1.5 | 0.3 |
| Talbot | 5 | 8 | 3 | 1.3 | 2.2 |
| Washington | 20 | 18 | (2) | 1.3 | 1.2 |
| Wicomico | 14 | 8 | (6) | 1.4 | 0.8 |
| Worcester | 7 | 2 | (5) | 1.3 | 0.5 |
| Total | 820 | 983 | 163 | 1.4 | 1.7 |

Map 2: Maryland county-Level Adequacy of FTE Psychiatrist Supply



2019-2020 Maryland Physician Workforce Profile:

The current state of the physician workforce in Maryland is present below in the following three charts. The data is based on the American Medical Association’s Masterfile and is compiled each year into the State Physician Workforce Data Report. The results for Maryland from the 2019-2020 State Physician Workforce Data Report state that there are 23,791 active physicians and 7,075 primary care physicians practicing in Maryland.

Maryland Physician Workforce Profile

| | | | | |
|-----------|--------------------------|-----------|--------------------------|-------|
| 2019-2020 | State Population: | 6,045,680 | Total Female Physicians: | 9,984 |
| | Population ≤ age 24 | 1,861,822 | Total MD or DO Students: | 1,939 |
| | Total Active Physicians: | 23,791 | Total Residents: | 3,031 |
| | Primary Care Physicians: | 7,075 | | |

For additional data, including maps and tables, please see the 2021 State Physician Workforce Data Report online at www.aamc.org/workforce

| | | MD | MD Rank | State Median |
|---------------------------------------|---|-------|---------|--------------|
| Physician Supply | Active Physicians per 100,000 Population, 2020 | 393.5 | 2 | 272.0 |
| | Total Active Patient Care Physicians per 100,000 Population, 2020 | 309.4 | 6 | 239.8 |
| | Active Primary Care Physicians per 100,000 Population, 2020 | 117.0 | 7 | 94.7 |
| | Active Patient Care Primary Care Physicians per 100,000 Population, 2020 | 98.0 | 9 | 84.5 |
| | Active General Surgeons per 100,000 Population, 2020 | 9.2 | 14 | 7.7 |
| | Active Patient Care General Surgeons per 100,000 Population, 2020 | 7.3 | 17 | 7.0 |
| | Percentage of Active Physicians Who Are Female, 2020 | 42.0% | 4 | 36.1% |
| | Percentage of Active Physicians Who Are International Medical Graduates (IMGs), 2020 | 27.0% | 9 | 19.7% |
| | Percentage of Active Physicians Who Are Age 60 or Older, 2020 | 35.8% | 13 | 32.9% |
| | Percent of Active Physicians Who Identify as Asian, 2020 | 20.5% | 9 | 13.7% |
| | Percent of Active Physicians Who Identify as Black or African American, 2020 | 12.3% | 2 | 3.8% |
| | Percent of Active Physicians Who Identify as Hispanic, Latino or of Spanish Origin, 2020 | 3.3% | 22 | 3.2% |
| | Percent of Active Physicians Who Identify as American Indian or Alaska Native, 2020 | 0.3% | 40 | 0.4% |
| | Percent of Active Physicians Who Identify as Native Hawaiian or Other Pacific Islander, 2020 | 0.2% | 18 | 0.1% |
| | Percent of Active Physicians Who Identify as Other Race/Ethnicity, 2020 | 1.6% | 19 | 1.4% |
| | Percent of Active Physicians Who Identify as White, 2020 | 50.6% | 46 | 67.3% |
| Undergraduate Medical Education (UME) | MD and DO Student Enrollment per 100,000 Population, AY 2019-2020 & 2020-2021 | 32.1 | 28 | 38.6 |
| | Student Enrollment at Public MD and DO Schools per 100,000 Population, AY 2019-2020 & 2020-2021 | 22.3 | 19 | 21.5 |
| | Percentage Change in Student Enrollment at MD and DO Schools, 2010-2020 | 0.1% | 44 | 31.2% |
| | Percentage of MD Students Matriculating In-State, AY 2020-2021 | 24.8% | 42 | 67.6% |
| Graduate Medical Education (GME) | Total Residents/Fellows in ACGME Programs per 100,000 Population as of December 31, 2019 | 50.1 | 12 | 32.7 |
| | Total Residents/Fellows in Primary Care ACGME Programs per 100,000 Population as of Dec. 31, 2019 | 16.4 | 15 | 12.7 |
| | Percentage of Residents in ACGME Programs Who Are IMGs as of December 31, 2019 | 24.7% | 14 | 19.2% |
| | Ratio of Residents and Fellows (GME) to Medical Students (UME), AY 2019-2020 & 2020-2021 | 1.6 | 6 | 1.0 |
| | Percent Change in Residents and Fellows in ACGME-Accredited Programs, 2010-2020 | 5.2% | 48 | 24.4% |
| Retention | Percentage of Physicians Retained in State from Undergraduate Medical Education (UME), 2020 | 21.6% | 40 | 39.7% |
| | Percentage of Physicians Retained in State from Public UME, 2020 | 24.1% | 40 | 43.7% |
| | Percentage of Physicians Retained in State from Graduate Medical Education (GME), 2020 | 37.6% | 43 | 45.1% |
| | Percentage of Physicians Retained in State from UME and GME Combined, 2020 | 52.6% | 43 | 69.7% |

State Rank: How the state ranks compared to the other 49. Rank of 1 goes to the state with the highest value for the category.
 State Median: The value in the middle of the 50 states, with 25 states above the median and 25 states below (excludes the District of Columbia and Puerto Rico).
 Due to changes in the Census data tables, population data was only available for ages ≤ 24, compared to ages ≤ 21 in previous reports.
 * Data not shown, for states with less than 10 physicians.
 --- Indicated that category is not applicable because some states do not have data on this.
 N.R. = "Not Ranked"

Source: 2021 State Physician Workforce Data Report. Population estimates as of July 1, 2019 are from the U.S. Census Bureau (Release date: December 2019).

The specialty with the highest people to physician ratios was pediatric cardiology. Females make up 42.0% of all specialists. Additionally, 35.8% of specialists in Maryland are 60 years of age and older.

Maryland Physician Workforce Profile

| Specialty | Total Active Physicians | People Per Physician | Female | | Age 60 or Older | |
|---------------------------------------|-------------------------|----------------------|--------|---------|-----------------|---------|
| | | | Number | Percent | Number | Percent |
| All Specialties | 23,791 | 254 | 9,984 | 42.0 | 8,507 | 35.8 |
| Allergy & Immunology | 215 | 28,119 | 98 | 45.6 | 105 | 48.8 |
| Anatomic/Clinical Pathology | 384 | 15,744 | 160 | 41.7 | 211 | 54.9 |
| Anesthesiology | 974 | 6,207 | 342 | 35.1 | 374 | 38.4 |
| Cardiovascular Disease | 561 | 10,777 | 105 | 18.8 | 310 | 55.3 |
| Child & Adolescent Psychiatry** | 334 | 5,574 | 213 | 64.0 | 102 | 30.5 |
| Clinical Cardiac Electrophysiology | 54 | 111,957 | * | * | * | * |
| Critical Care Medicine | 410 | 14,746 | 126 | 30.8 | 57 | 13.9 |
| Dermatology | 307 | 19,693 | 166 | 54.1 | 106 | 34.5 |
| Emergency Medicine | 939 | 6,438 | 346 | 36.8 | 199 | 21.2 |
| Endocrinology, Diabetes & Metabolism | 301 | 20,085 | 177 | 58.8 | 103 | 34.2 |
| Family Medicine/General Practice | 1,627 | 3,716 | 899 | 55.3 | 569 | 35.0 |
| Gastroenterology | 391 | 15,462 | 104 | 26.6 | 167 | 42.7 |
| General Surgery | 555 | 10,893 | 135 | 24.3 | 226 | 40.7 |
| Geriatric Medicine*** | 181 | 7,553 | 89 | 49.2 | 57 | 31.5 |
| Hematology & Oncology | 541 | 11,175 | 205 | 37.9 | 194 | 35.9 |
| Infectious Disease | 498 | 12,140 | 209 | 42.0 | 164 | 32.9 |
| Internal Medicine | 3,537 | 1,709 | 1,432 | 40.5 | 1,360 | 38.5 |
| Internal Medicine/Pediatrics | 119 | 50,804 | 81 | 68.1 | * | * |
| Interventional Cardiology | 61 | 99,110 | * | * | * | * |
| Neonatal-Perinatal Medicine | 131 | 46,150 | 91 | 69.5 | 52 | 39.7 |
| Nephrology | 279 | 21,669 | 102 | 36.6 | 86 | 30.8 |
| Neurological Surgery | 124 | 48,755 | 13 | 10.5 | 42 | 33.9 |
| Neurology | 458 | 13,200 | 151 | 33.0 | 217 | 47.4 |
| Neuroradiology | 105 | 57,578 | 25 | 23.8 | 12 | 11.4 |
| Obstetrics & Gynecology | 1,073 | 5,634 | 723 | 67.4 | 349 | 32.5 |
| Ophthalmology | 577 | 10,478 | 196 | 34.0 | 218 | 37.8 |
| Orthopedic Surgery | 403 | 15,002 | 28 | 6.9 | 187 | 46.4 |
| Otolaryngology | 240 | 25,190 | 64 | 26.7 | 85 | 35.4 |
| Pain Medicine & Pain Management | 152 | 39,774 | 38 | 25.0 | 17 | 11.2 |
| Pediatric Anesthesiology & Anesthesia | 57 | 106,065 | 33 | 57.9 | * | * |
| Pediatric Cardiology | 50 | 120,914 | 20 | 40.0 | 15 | 30.0 |
| Pediatric Critical Care Medicine | 64 | 94,464 | 44 | 68.8 | * | * |
| Pediatric Hematology & Oncology | 135 | 44,783 | 72 | 53.3 | 34 | 25.2 |
| Pediatrics** | 1,591 | 1,170 | 1,058 | 66.7 | 627 | 39.5 |
| Physical Medicine & Rehabilitation | 252 | 23,991 | 96 | 38.4 | 77 | 30.6 |
| Plastic Surgery | 182 | 33,218 | 37 | 20.3 | 77 | 42.3 |
| Preventive Medicine | 395 | 15,306 | 174 | 44.1 | 219 | 55.4 |
| Psychiatry | 1,111 | 5,442 | 490 | 44.1 | 599 | 53.9 |
| Pulmonary Disease | 121 | 49,964 | 16 | 13.2 | 108 | 89.3 |
| Radiation Oncology | 134 | 45,117 | 56 | 41.8 | 36 | 26.9 |
| Radiology & Diagnostic Radiology | 628 | 9,627 | 222 | 35.5 | 274 | 43.6 |
| Rheumatology | 220 | 27,480 | 110 | 50.0 | 80 | 36.4 |
| Sports Medicine | 56 | 107,959 | 18 | 32.1 | * | * |
| Sports Medicine Orthopedic Surgery | 64 | 94,464 | * | * | 11 | 17.2 |
| Thoracic Surgery | 100 | 60,457 | * | * | 46 | 46.0 |
| Urology | 240 | 25,190 | 26 | 10.8 | 84 | 35.0 |
| Vascular & Interventional Radiology | 76 | 79,548 | 13 | 17.1 | * | * |
| Vascular Surgery | 114 | 53,032 | 23 | 20.2 | 29 | 25.4 |

Sources: AMA Physician Masterfile (December 31, 2020). Population estimates as of July 1, 2019 are from the U.S. Census Bureau (Release date: December 2019)

* Counts and percentages for specialties with fewer than 10 physicians are not shown

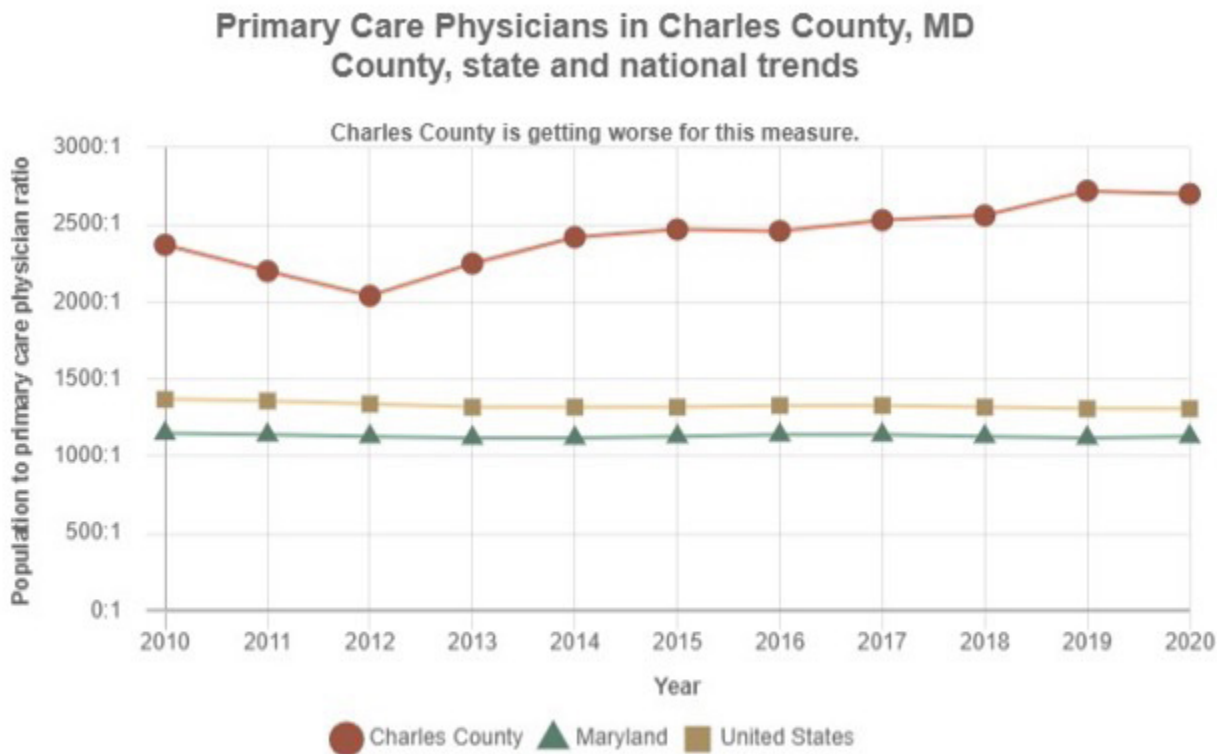
** Only those 24 years or younger are included in People Per Physician

*** Only those 60 years or older are included in People Per Physician

Primary Care Physicians and Mental Health Provider Ratios:

Access to care requires not only financial coverage, but also, access to providers. While high rates of specialist physicians have been shown to be associated with higher, and perhaps unnecessary utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and when needed, referrals to appropriate specialty care. Using data from the Area Health Resource File and the American Medical Association, the County Health Rankings were able to provide 2020 primary care physician ratios for all United States counties. For 2020, the Charles County primary care physician ratio was 2,700:1. Primary Care Physicians (PCP) is the ratio of the population to total primary care physicians. Primary care physicians include non-federal, practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. The 2020 Charles County PCP ratio is more than twice

as high as the Maryland state ratio of 1,130:1. The Charles County PCP ratio has gotten worse since the last needs assessment report when the ratio was 2,530:1.



Notes:
The data in this table reflect the average population served by a single primary care physician.

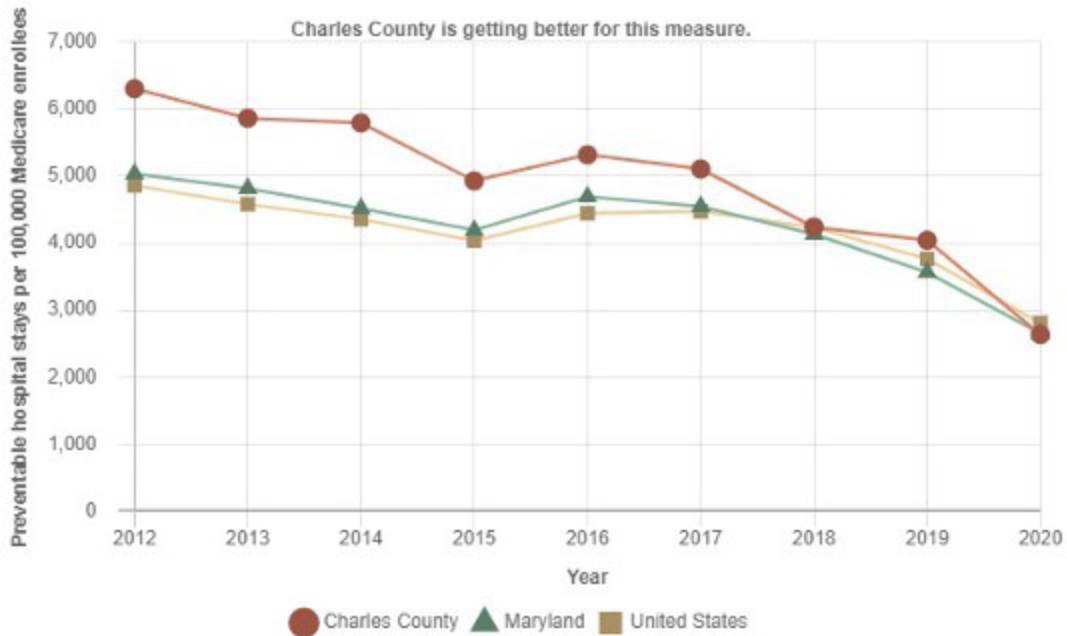
The 2022 ratio of population to primary care providers other than physicians for Charles County was 1,030:1. This was higher than the Maryland other primary care provider ratio of 770:1 and the national ratio of 810:1.

The 2022 ratio of population to mental health providers for Charles County was 520:1. This was higher than the Maryland mental health provider ratio of 310:1 and the national ratio of 340:1.

Preventive Hospital Stays:

The Robert Wood Johnson Foundation’s County Health Rankings examine the number of hospital stays for ambulatory care sensitive conditions among county Medicare enrollees. The 2020 Charles County preventive hospital stay rate was 2,635 per 100,000 Medicare enrollees and is similar to the Maryland state average rate of 2,653 per 100,000 Medicare enrollees. Charles County has seen decreases since 2008, and the Charles County rate is now similar to the state and national rates. The 2020 Charles County preventable hospital stay rate is a decrease from the 2017 rate of 5,108 per 100,000 Medicare enrollees reported in the last needs assessment.

Preventable hospital stays in Charles County, MD County, state and national trends

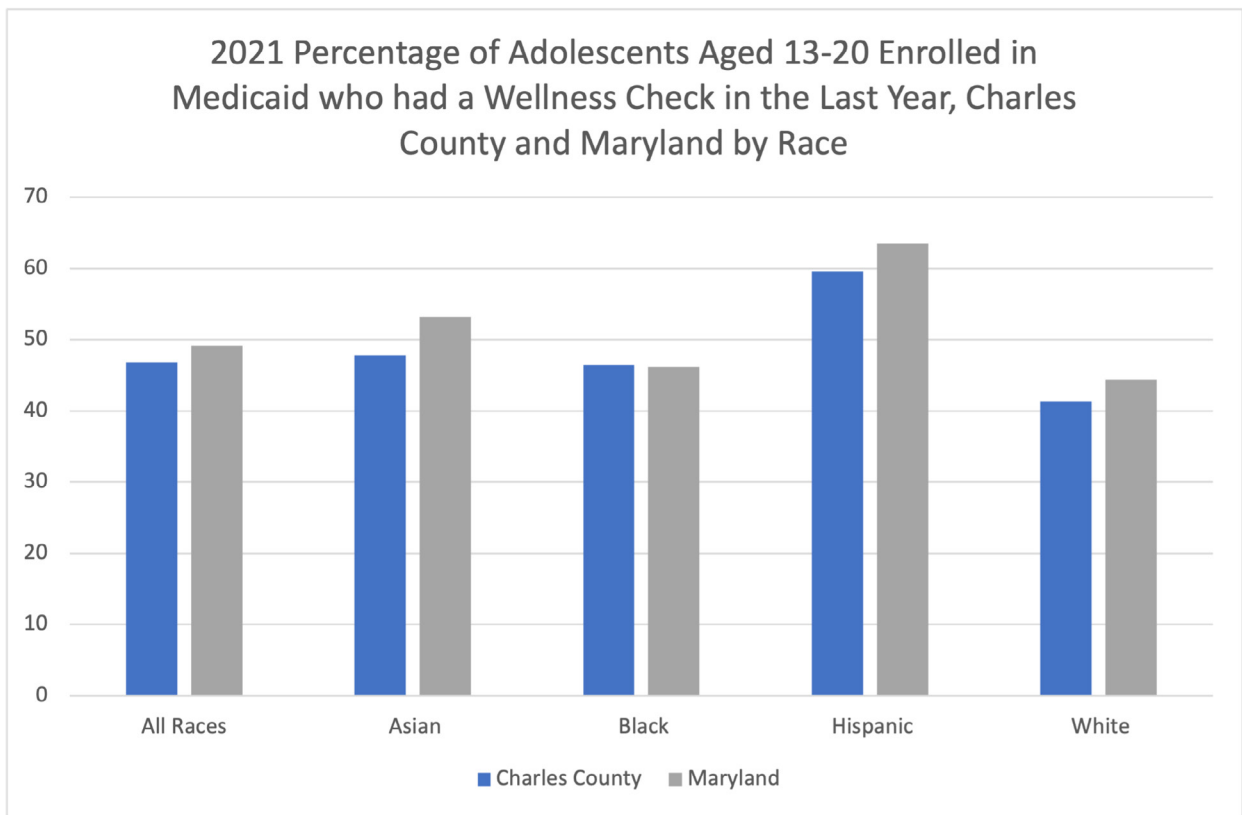


Data on this measure is also available by race for Charles County. The preventable hospital stay rate is highest for Blacks in Charles County at 2849 per 100,000 population. It is lowest for Hispanics at 976 per 100,000.

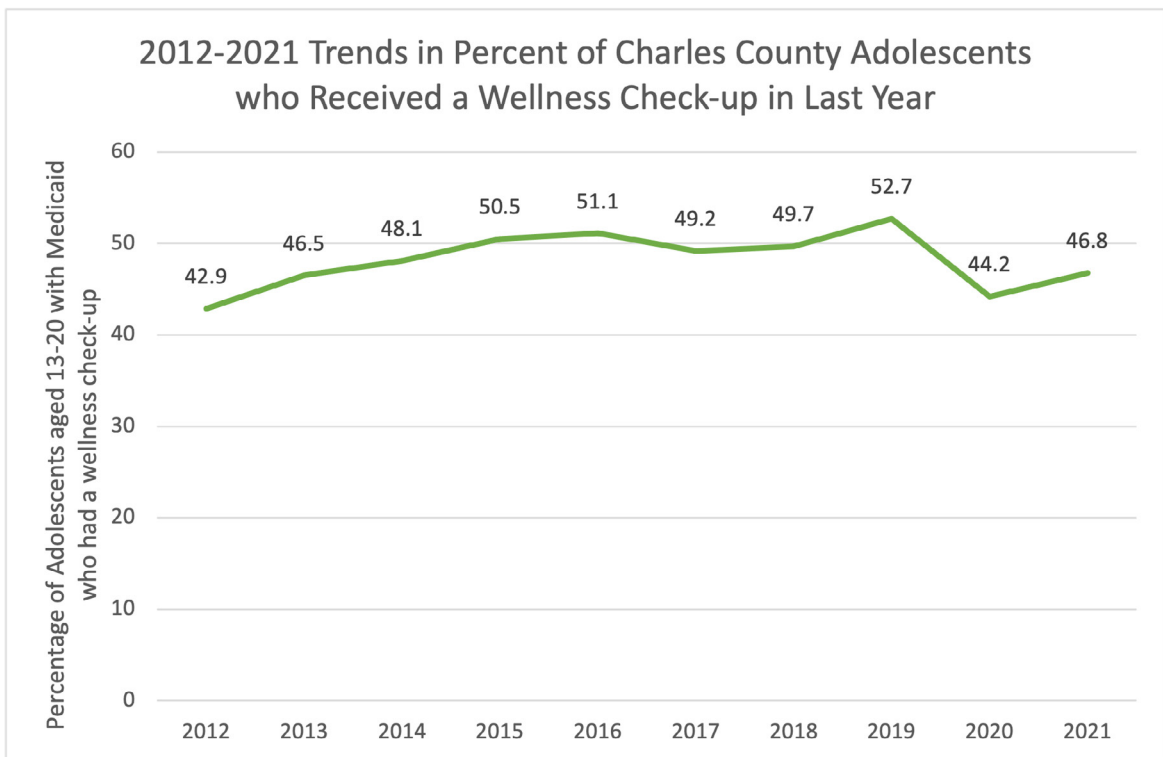
| 2020 Preventable Hospital Stay Rate | Rate per 100,000 |
|-------------------------------------|------------------|
| Total | 2635 |
| Asian | 1315 |
| Black | 2849 |
| Hispanic | 976 |
| White | 2622 |

Adolescent Wellness Check-Ups:

In 2021, 46.8% of Charles County adolescents aged 13-20 years enrolled in Medicaid had a wellness checkup. This is below the Maryland state average percentage of 49.2% of adolescents with a wellness checkup. The percentage of wellness checkups is highest for Charles County Hispanics (59.6%) and lowest among Charles County Whites (41.3%). The same racial disparities are seen on a state level.



The percentage of Charles County adolescents receiving a wellness checkup has remained fairly steady with some increases over the past decade.



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Qualitative Data Relating to Access to Care

Long Survey Responses:

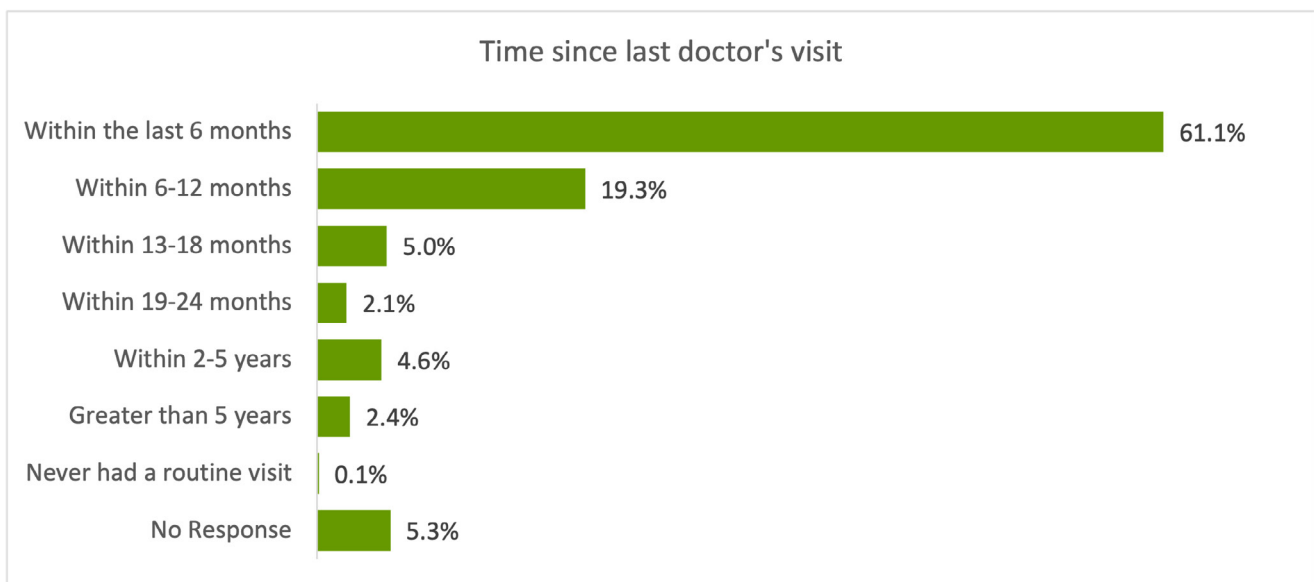
Approximately two-thirds or 69.6% of long survey participants reported that access to healthcare is a health problem in Charles County on some level. 35.3% felt that access to health care is a “serious problem” in the county.

69.5% of the long survey participants reported that affordable health care is a health problem in Charles County on some level. Almost half or 43.3% felt that access to affordable health care is a “serious problem” in Charles County.

65.4% of the long survey participants reported that health insurance is a health problem in Charles County on some level. 34.9% felt that health insurance is a “serious problem” in Charles County.

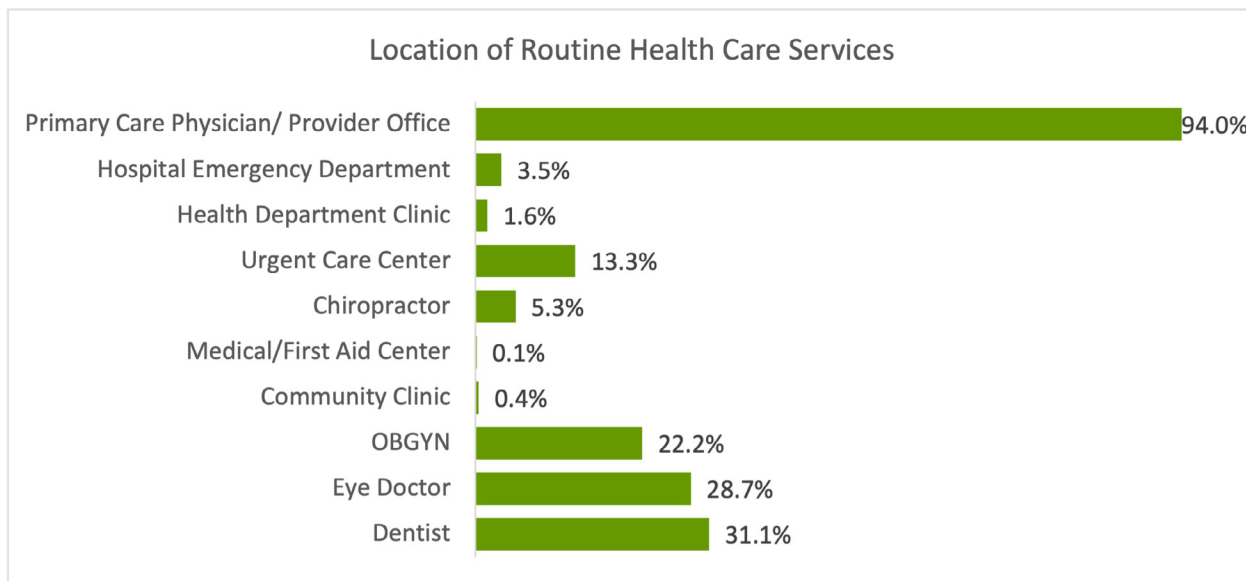
Long survey participants were also asked if they have seen improvements in Charles County in terms of health. Almost one-third of the respondents to this question (31.76%) have seen improvements to increase access to health care within the county. 15.02% reported improvements in access to needed medications.

Most of the survey participants reported having a routine doctor’s visit within the last 12 months (80.4%). This percentage is down from the 2021 survey where 88.2% of participants reported having a routine doctor’s visit in the last 12 months. 4.6% of participants reported that their last routine doctor’s visit was within the last 2-5 years, which is an increase from 2.3% reported on the previous needs assessment. Those who haven’t been to a doctor for a routine visit in more than 5 years also increased from 1.3% in 2021 to 2.4% in 2023. Only 0.1% of participants reported that they have never had a routine doctor’s visit.

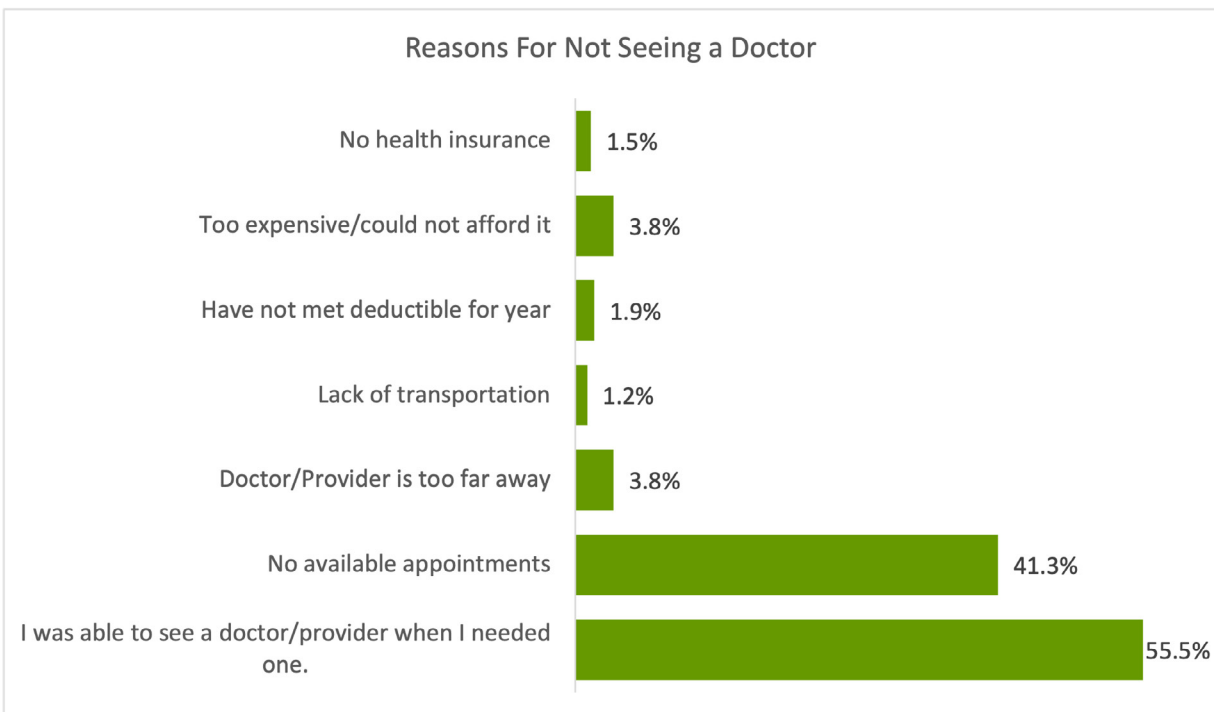
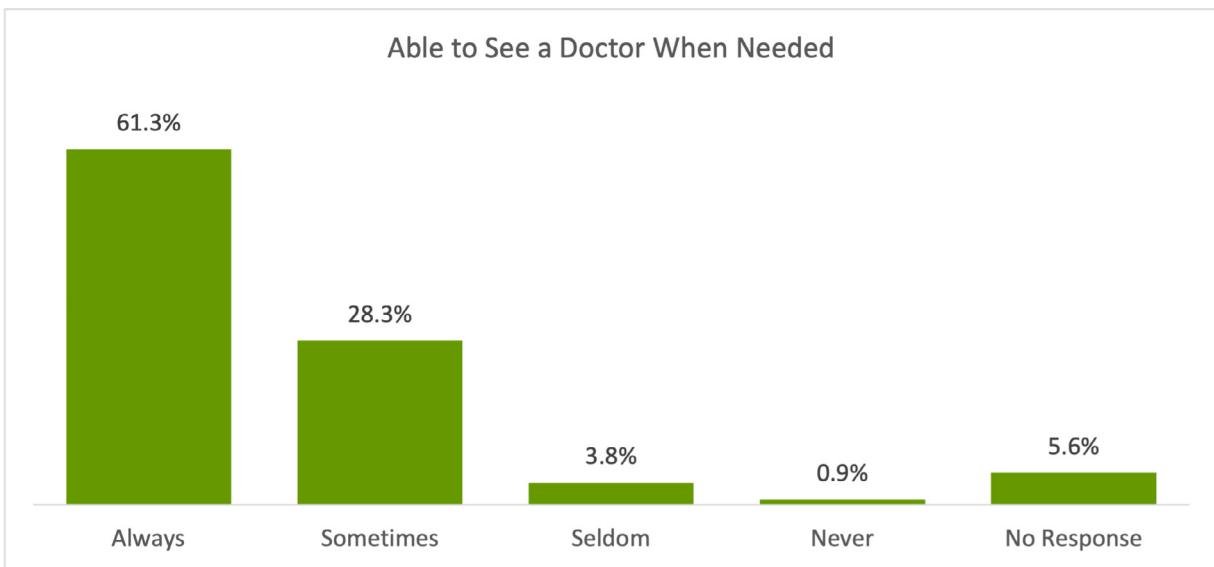


About 94% of survey participants reported that they receive their routine health care at a Primary Care Physician or Provider Office. Just under one third of participants reported receiving routine care from a Dentist (31.1%), followed by 28.7% from an Eye Doctor, and 22.2% from an OBGYN. 13.3% of survey respondents reported that they receive their routine health care from an Urgent Care Center. This percentage is a slight increase from 13% reported in the 2021 survey.

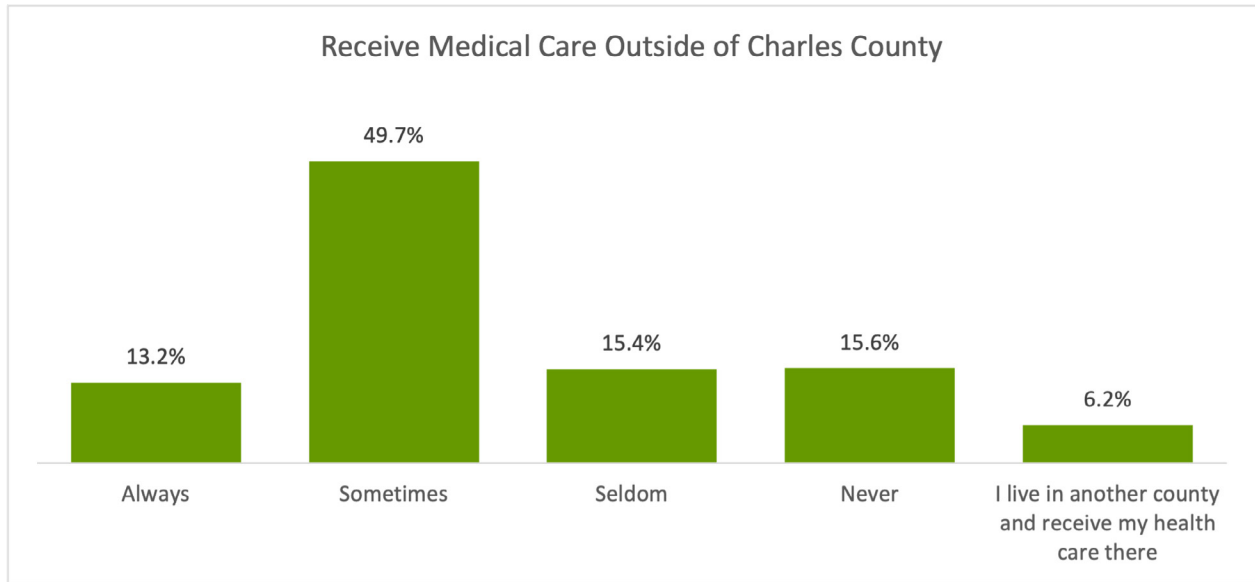
The percentage of survey participants who reported receiving routine health care from the hospital emergency department decreased from 4.2% in 2021 to 3.5% in 2023. However, this is still up from the 2018 survey where only 2.4% of participants reporting receiving routine care from the hospital emergency department.



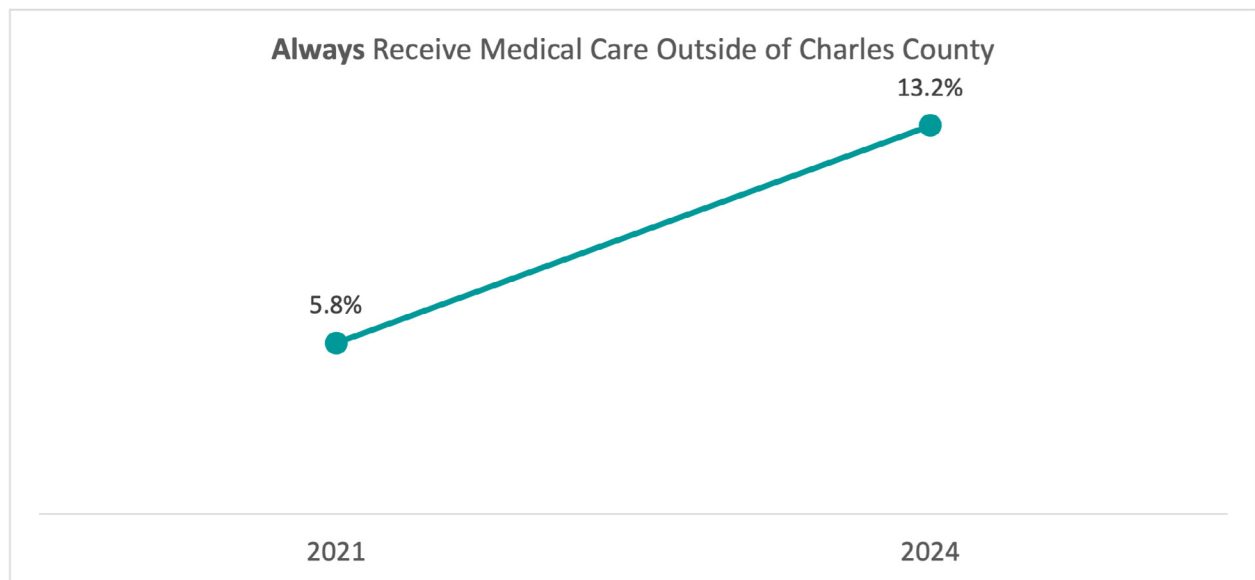
61.3% of survey respondents were able to see a doctor when needed. This percentage is a decrease from 75.3% reported in the 2021 survey. Just under 5% of respondents reported that they were seldom or never able to see a doctor when needed. This is an increase from 1.9% reported in 2021. If participants were unable to see a doctor when needed, the most common reasons were that there were no available appointments (41.3%), that it was too expensive/could not afford it (3.8%), or the doctor/provider was too far away (3.8%). The percentage of respondents who reported they were unable to see a provider when needed because there were no available appointments saw a 41% increase since the 2021 needs assessment survey when the percentage was 29.3%. However, 55.5% of survey respondents reported that they were able to see a doctor/provider when they needed one.



When asked if they receive medical care outside of Charles County, almost 16% of respondents reported that they never receive care outside of Charles County. This is a decrease from 22% reported in the 2021 survey. Almost half of respondents reported that they sometimes receive medical care outside of Charles County. The largest increase since the 2021 survey was in those who reported they always receive medical care outside of Charles County. 13.2% of respondents reported always receiving care outside of the county, compared to 5.8% in 2021.

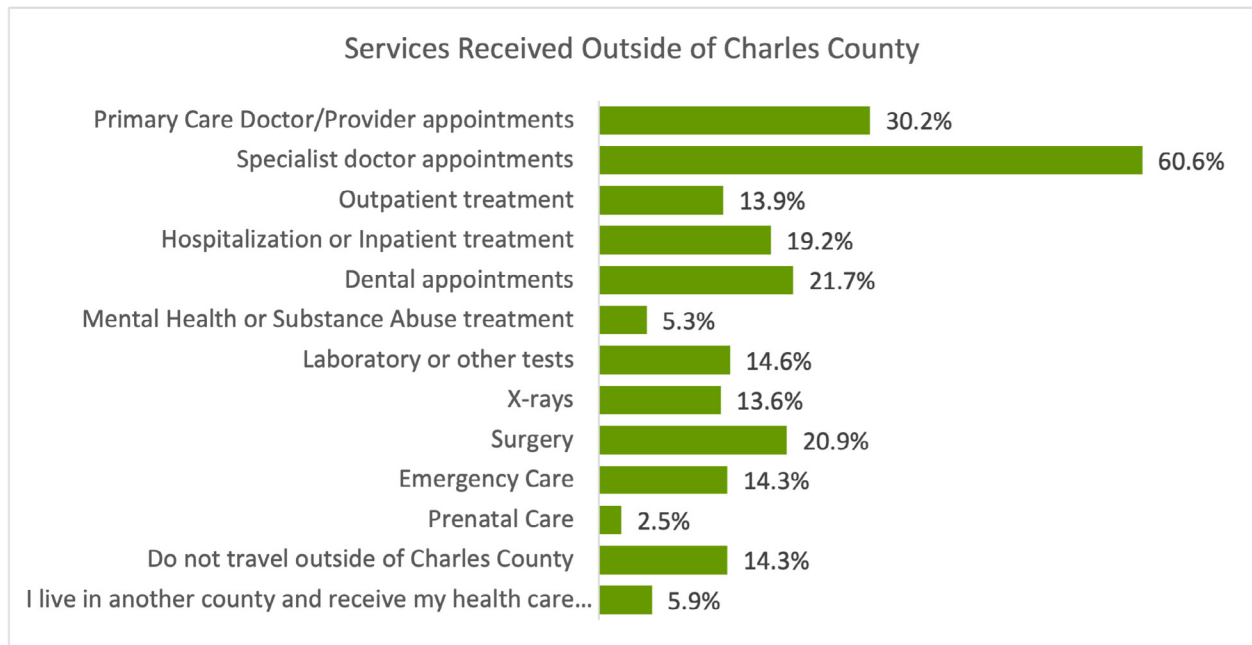


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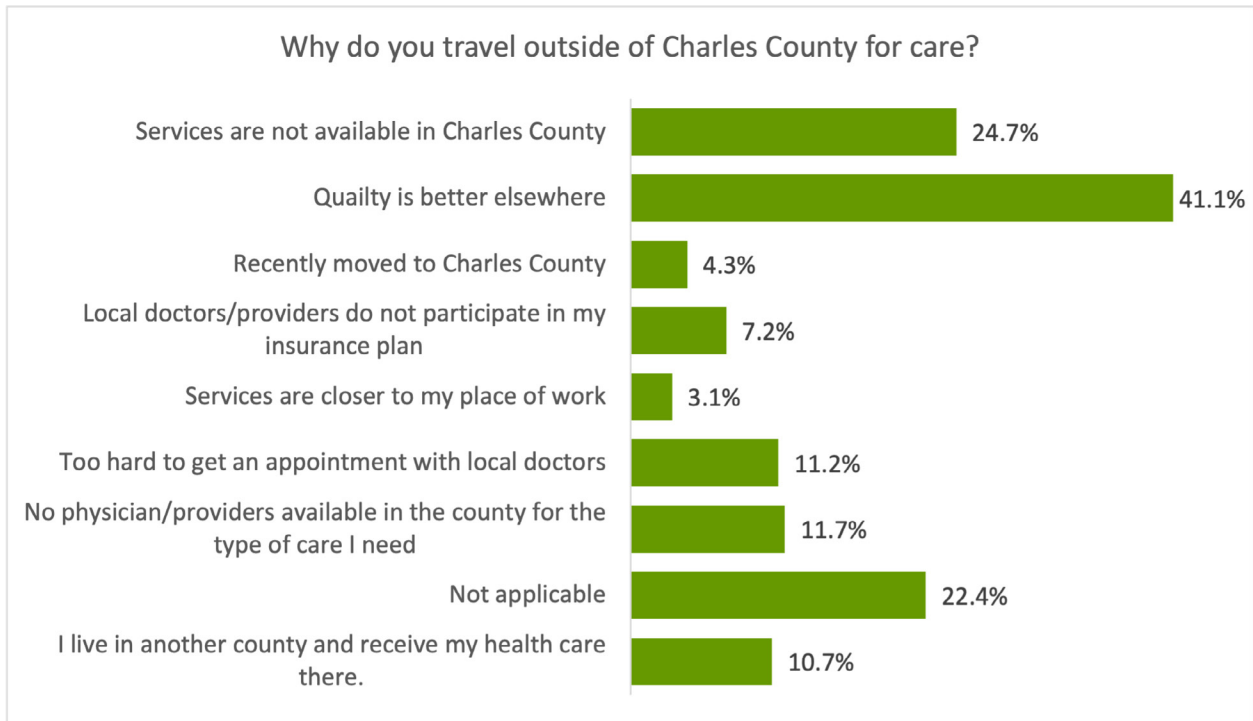


Participants were asked what medical services they receive outside of Charles County. They were asked to check all services that were applicable. The most common services that people receive outside of Charles County are specialist doctor appointments (60.6%), Primary Care Doctor/Provider appointments (30.2%), Dental appointments (21.7%), and Surgeries (20.9%). These were the most common responses reported in the 2021 survey as well.

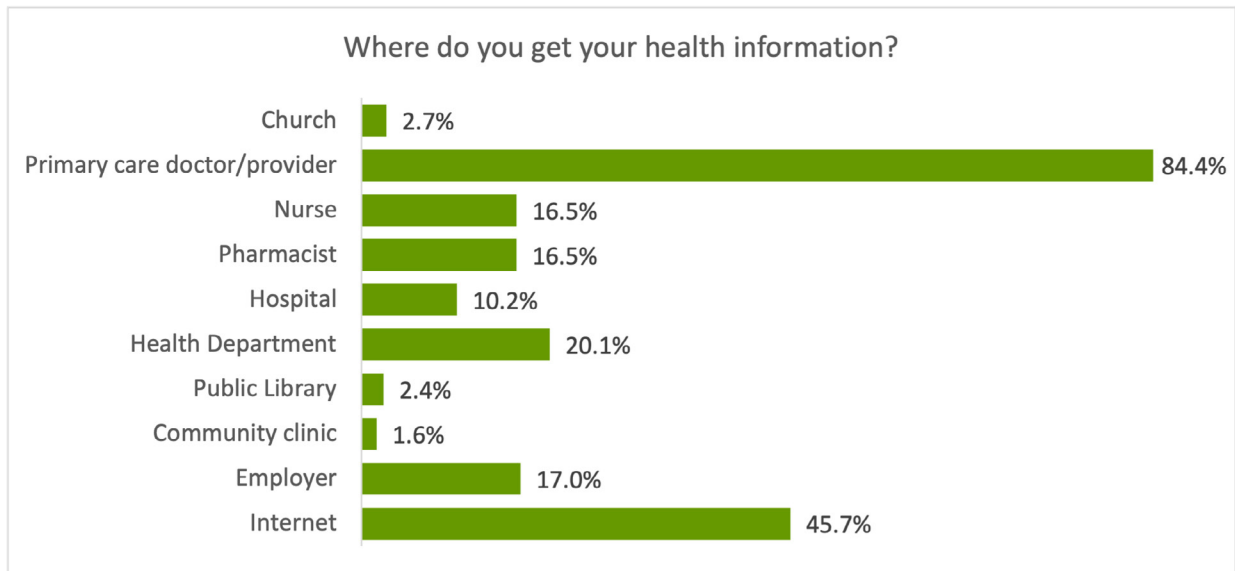
The percentage of respondents who reported receiving primary care services outside of Charles County increased to 30.2% from 19.0% reported in the 2021 survey.



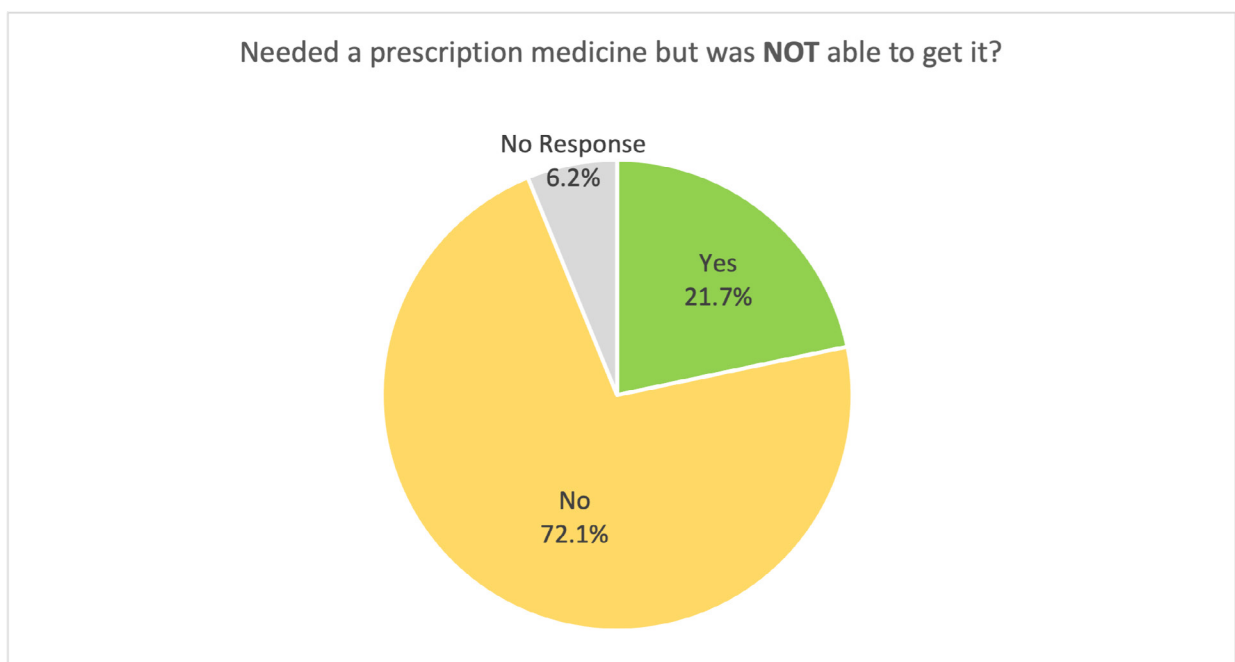
Participants were also asked why they choose to receive those medical services outside of Charles County. The most common responses were that quality is better elsewhere (41.1%) and that those services are not available in Charles County (24.7%). These were also the most common responses in the 2021 survey. The percentage of respondents that reported quality is better elsewhere increase from the 2021 survey from 37.1% to 41.1%.



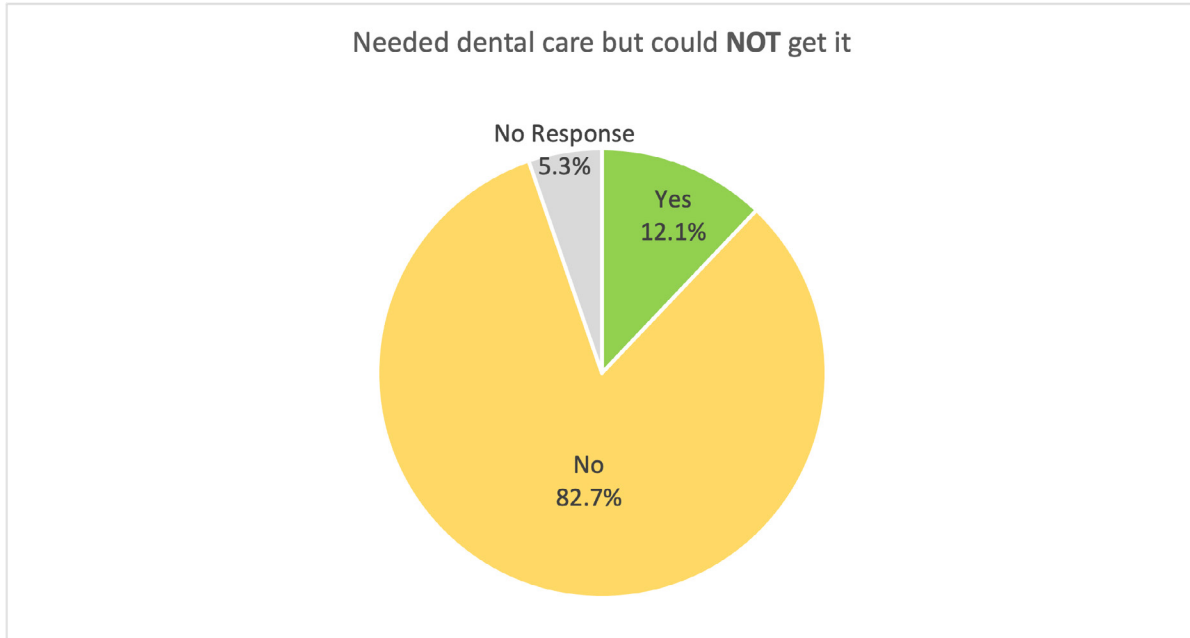
There are various sources in which individuals can get health information. The majority of survey respondents reported getting their health information from a Primary Care doctor/provider (84.4%). The second highest response was the Internet at 45.7% of responses. The percentage of respondents who reported receiving health information from the health department increased from 16.0% in 2021 to 20.1% in 2024.



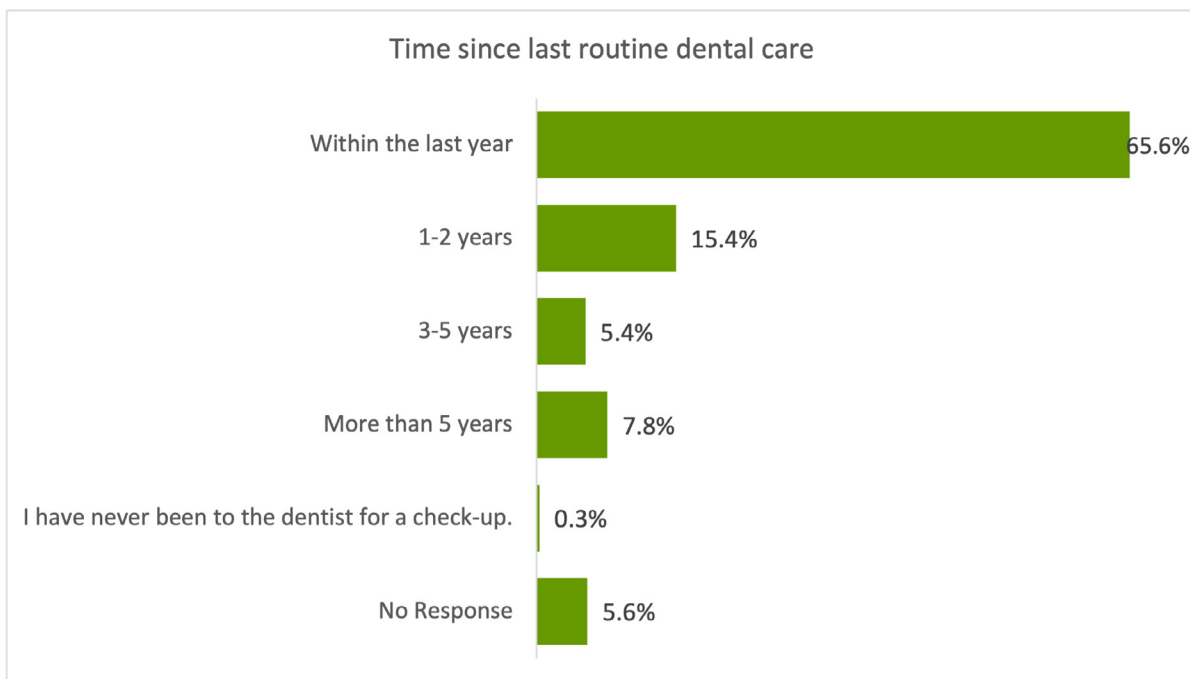
Various questions were asked to determine specific barriers in the county around access to care. The first question for respondents was in the last year, did they need a prescription medicine but were not able to get it? Almost 22% of respondents reported that in the last year they needed prescription medicine but were unable to get it.



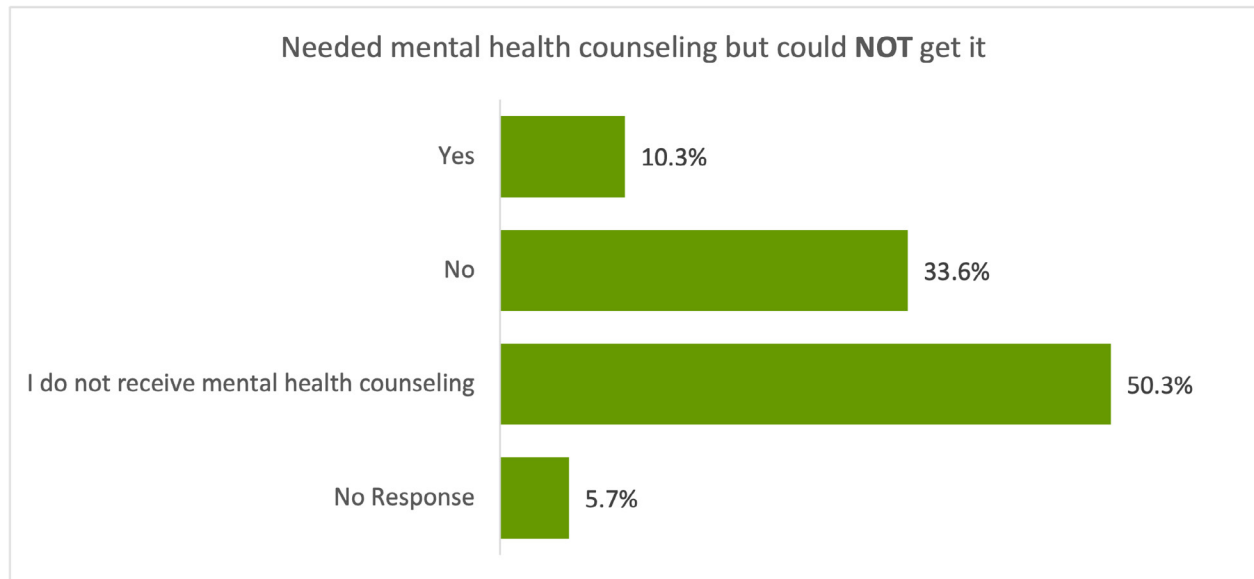
Access to care questions regarding oral health were also asked. The majority of survey respondents reported that in the last year they were able to receive dental care if they needed it (82.7%). Around 12% of respondents reported that in the last year they needed dental care but could not get it.



65.6% of survey respondents reported having routine dental care within the last year. However, over 10% of respondents reported not having routine dental care in over 3 years (13.2%). Only 0.3% of respondents have never been to the dentist for a check-up.



Survey participants were also asked in the last year if they needed mental health counseling but were unable to get it. About half of respondents reported that they do not receive mental health counseling. 33.6% of respondents reported they were able to receive mental health counseling when they needed it, and 10.3% reported they were not able to receive mental health counseling when they needed it.



Short Survey Responses:

17.3% of the short survey participants reported that access to healthcare and no health insurance is a big health problem in Charles County. This condition scored somewhere in the middle of the health conditions listed on the survey (10th highest).

The most commonly cited barriers to needed health care were care is too expensive/can't afford it (56.6%) and lack of health insurance (41.0%). Over 20% of respondents also identified transportation and not being able to get an appointment with their doctor as barriers to needed health care as well. Under "Other", several respondents explained that there is an issue trying to get in to see a provider. Respondents expressed that there's not enough health care providers, no available appointments for months, hard to find new doctors when needed, not enough doctor's offices, hard to get appointments, not enough specialist providers, hard to find a primary care doctor they like, providers not accepting new patients, and lack of providers that take Medicaid in the psychiatric department. Other barriers were distrust of health care providers, no time off from work, poverty, lack of education, unreliable services, overcrowded ER facility, insurance is not accepted, limited eye doctors, and no prevention.

| Barriers to getting health care: | Response Count (N) | Response Percent (%) |
|--|---------------------------|-----------------------------|
| <i>Couldn't get an appointment with my doctor</i> | 265 | 22.3% |
| <i>Doctor is too far away from my home</i> | 135 | 11.4% |
| <i>Local doctors are not on insurance plan</i> | 225 | 18.9% |
| <i>No health insurance</i> | 487 | 41.0% |
| <i>No transportation</i> | 262 | 22.0% |
| <i>Service is not available in my own county</i> | 128 | 10.8% |
| <i>Too expensive/Can't afford it</i> | 673 | 56.6% |
| <i>Other</i> | 121 | 10.1% |
| <i>No Response</i> | 5 | 0.4% |

43.2% of short survey respondents felt that there are many or some resources available for access to care for children and adults. 33.1% felt that there are many or some resources available for access to care in rural Charles County. 41.3% felt that there are many or some resources available to address access to needed prescriptions.

Recommendations surrounding Access to Care included:

- Affordable healthcare/insurance
 - Many respondents expressed the need for lower health care costs and more affordable health care. Better insurance policies and lower costs for health insurance were also noted.
- Public Transportation
 - Recommendations for more VanGo stops, partnering with Uber or Lyft to provide transportation to appointments, provide rides to the hospital, and creating a transportation program were all mentioned by respondents.
- Increase the number of doctors, hospitals/facilities, and provider hours.
 - Many short survey respondents expressed the need to expand the hospital to meet the county population, addition of weekend or holiday hours, increase the number of doctors in the county, build more doctor's offices, and add more primary care doctors.
- Other access to care ideas and recommendations from short survey respondents included the addition of mobile health services in the community and the need for better providers in the county (ENTs, providers in Indian Head, and more reputable doctors).

Focus Groups:

Access to care was also seen as a major barrier to healthcare services in Charles County among focus group participants. Across the six focus groups, participants mentioned there is a lack of facilities in the county and inpatient beds. A lack of proximity to services was also expressed as a barrier. Many of the perceived barriers in the community that were mentioned were related to mental health services. In the Healthcare Consumers and Community Leaders focus group, participants stated that there is a lack of psychiatrists in the county and that there needs to be more education on how to access mental health services. Focus group members within the Partnerships for a Healthier Charles County Coalition also stated that behavioral health practitioners are limited in Charles County. Among the school nurses, many agreed that there was a lack of mental health providers and services for youth, and too much screen time. Also related to mental health, participants mentioned that there is a lack of behavioral health prescribers in Charles County and trouble with the school systems filling their school psychiatrist positions. Lastly, barriers of commercial insurance and behavioral health services were identified. Focus group participants stated that those with public insurance have access to community-based services and case management. If those services can be offered through Medicaid, they should also be available for those with commercial insurance. It was also mentioned that most people develop behavioral health conditions in childhood or adolescence, yet if they have commercial insurance, they have limited options when it comes to accessing services. Other barriers mentioned among participants related to access to care included the need for a bigger hospital, more specialists in the county, long wait-times, health literacy, the lack of health care centers and urgent care centers, and the care for Drug Affected Newborns (DAN) babies that is not offered in the county. Those patients currently must travel outside of the county to receive those services and parents may not be able to make that trip.

Conclusions:

Progress From the Last Needs Assessment Report

Data from the Fiscal Year 2024 Charles County Community Health Needs Assessment Report was examined against the baseline Fiscal Year 2021 needs assessment data. The previous needs assessment data was used to develop the FY2022-2024 Charles County Health Improvement Plan objectives. An update on the status of the Charles County health priority objectives is discussed below.

There were 2 objectives within the Charles County Health Improvement Plan that reached the anticipated goals. These measures were focused on Physician Recruitment and Retention.

There were 5 health objectives that did not reach their expected goals. 3 of those 5 objectives did not see any progress, and data moved in the opposite direction. 2 out of the 5 objectives saw some progress but did not reach the goals set.

For 3 of the long-term objectives, updated information is unknown. Objective fulfillment cannot be established. All 3 objectives were based on measures within the Maryland Department of Health's State Health Improvement Process. All measures related to emergency department visit rates have not been updated since 2017. This is what was used in the last needs assessment report.

Access to Care Objectives

1. Physician Recruitment and Retention

2 out of 2 Objectives Fulfilled:

- *Establish 3 medical practices within Charles County that will provide health care to the underserved population, with particular emphasis on mental health/psychiatry and primary care.*

Update: The University of Maryland Charles Regional Medical Group has established a primary care practice in Bryans Road, MD. They have also opened a Behavioral Health practice in La Plata, MD.

Other organizations who have opened practices within Charles County in the last 3 years include a new Greater Baden Medical Center practice in Bryans Road, MD and the Alpas Wellness Maryland Recover Center in La Plata, MD, focusing on behavioral health.

- *Reduce the Charles County preventable hospital stay rate from 5,108 per 100,000 Medicare enrollees to 4852.6 (5% reduction) per 100,000 Medicare enrollees.*

Update: In the 2023 County Health Rankings Report, the 2020 Charles County preventable hospital stay rate was 2,635 per 100,000 Medicare enrollees. This was below the goal of 5,108 per 100,000 Medicare enrollees.

2. Social Determinants of Health:

0 out of 1 Objective Fulfilled:

- *Decrease the percentage of Charles County residents who report that they were unable to see a doctor in the past 12 months due to cost from 8.6% to 8.2% (5% reduction).*

Update: Unfortunately, this objective moved in the opposite direction. 8.8% of Charles

County BRFSS respondents reported that they were unable to see a doctor in the last year due to cost. This is an increase from 8.6% reported in the last needs assessment report.

Behavioral Health Objectives:

1 Objective Not Fulfilled, 1 Objective Fulfillment Unknown

3. Mental Health:

- *Reduce the Charles County mental health emergency department visit rate from 2,817.6 per 100,000 to 2,676.7 per 100,000 (5% reduction).*

Update: This data measure has not been updated by the Maryland Department of Health's State Health Improvement Process. Therefore, we cannot evaluate the progress on this objective. The 2017 measure that was used to create this objective is still the most recent year displayed at <https://health.maryland.gov/pophealth/Pages/SHIP-Lite-Home.aspx>.

4. Substance Use Disorders:

- *Reduce the Charles County drug-induced death rate from 27 per 100,000 to 25 per 100,000.*

Update: The 2019-2021 Charles County drug-induced death rate was 26.8 per 100,000 population. This is a small reduction from the metric reported in the last needs assessment report, but it is still higher than the anticipated goal of 25 per 100,000.

Disease Prevention and Management Objectives:

5. Obesity:

0 out of 2 Objectives Fulfilled:

- *Increase the percentage of Charles County adults who are at a healthy weight from 28.2% to 29.6%.*

Update: This objective moved in the opposite direction. The percentage of Charles County adults who are at a healthy weight decreased from 28.2% in 2019 to 23.2% in 2021.

- *Maintain the percentage of Charles County high school students who are obese at 14.6%*

Update: This objective moved in the opposite direction. There was an increase in the percentage of Charles County high school students who were obese. The percentage went from 14.6% in 2018-2019 to 15.5% in 2021-2022.

6. Diabetes:

Objective Fulfillment Unknown

- *Reduce the Charles County diabetes emergency department visit rate from 245 per 100,000 to the Maryland rate of 232.75 per 100,000.*

Update: This data measure has not been updated by the Maryland Department of Health's State Health Improvement Process. Therefore, we cannot evaluate the progress on this objective. The 2017 measure that was used to create this objective is still the most recent year displayed at <https://health.maryland.gov/pophealth/Pages/SHIP-Lite-Home.aspx>.

7. Major Cardiovascular Disease:

Objective Fulfillment Unknown

- *Reduce the Charles County hypertension emergency department visit rate from 469.9 per 100,000 to 446.4 per 100,000.*

Update: This data measure has not been updated by the Maryland Department of Health's State Health Improvement Process. Therefore, we cannot evaluate the progress on this objective. The 2017 measure that was used to create this objective is still the most recent year displayed at <https://health.maryland.gov/pophealth/Pages/SHIP-Lite-Home.aspx>.

8. Infectious Diseases:

0 of 1 Objective Fulfilled

- *Increase the percentage of Charles County residents who receive a flu vaccination from 45.6% to the Maryland percentage of 49.6%.*

Update: The 2020 percentage of Charles County who received a flu vaccination was 48%. This was an increase from 45.6% reported in the last needs assessment report; however, it did not reach our lofty goal of 49.6%.

Next Steps

The data presented in this report will be used by the University of Maryland Charles Regional Medical Center, the Charles County Department of Health, and all other participating agencies of the Partnerships for a Healthier Charles County to undertake health prioritization and to create the county health improvement plan.

After a thorough analysis of all quantitative data on the health of Charles County and of the qualitative data gathered from the community, a list of health priorities will be developed to help guide future endeavors to improve the health of Charles County.

The Steering Committee of the Partnerships for a Healthier Charles County will use the National Association of City and County Health Officials (NACCHO) recommended Hanlon Method for health prioritization. The Hanlon Method for Prioritizing Health Problems is a well-respected technique which objectively takes into consideration explicitly defined criteria and feasibility factors. Though a complex method, the Hanlon Method is advantageous when the desired outcome is an objective list of health priorities based on baseline data and numerical values.

Once the health priorities are established, the action teams of the Partnerships for a Healthier Charles County will be restructured to address the current needs of the county. From there, the teams will develop 3-year action or work plans for Fiscal Years 2025-2027 using the SMARTIE template. SMARTIE stands for Strategic, Measurable, Ambitious, Realistic, Time-bound, Inclusive, and Equitable.

A SMARTIE goal is:

- Specific — It reflects some important dimension of what an organization seeks to accomplish.
- Measurable — It includes a standard or benchmark to be met.

- Achievable or Ambitious — It is challenging to the degree that accomplishment would mean significant progress or even a “stretch” for the organization.
- Relevant or Realistic — It isn’t overly challenging or reflective of too little thought to resources or execution.
- Timebound — It includes a clear deadline.
- Inclusion is an opportunity to bring traditionally excluded individuals and groups into processes, activities, decisions, and policy making in a way that shares power. While diversity is about who is present at the table, inclusion is about who is empowered to make decisions or participate in a meaningful way.
- Equity means including an element of fairness or justice to address systemic injustice, inequity, or oppression.