Q1. COMMUNITY BENEFIT NARRATIVE REPORTING INSTRUCTIONS

The Maryland Health Services Cost Review Commission (HSCRC or Commission) is required to collect community benefit information from individual hospitals in Maryland and compile into an annual statewide, publicly available report. The Maryland General Assembly updated §19-303 of the Health General Article in the 2020 Legislative Session (HB1169/SB0774), requiring the HSCRC to update the community benefit reporting guidelines to address the growing interest in understanding the types and scope of community benefit activities conducted by Maryland's nonprofit hospitals in relation to community health needs assessments. The reporting is split into two components, a Financial Report and a Narrative Report. This reporting tool serves as the narrative report. In response to the legislation, some of the reporting questions have changed for FY 2021. Detailed reporting instructions are available here: s/init_ch.asnx

In this reporting tool, responses are mandatory unless specifically marked as optional. If you submit a report without responding to each question, your report may be rejected. You would then be required to fill in the missing answers before resubmitting. Questions that require a narrative response have a limit of 20,000 characters. This report need not be completed in one session and can be opened by multiple users.

For technical assistance, contact HCBHelp@hilltop.umbc.edu.

92 Section I - General Info Part 1 - Hospital Identification

O3. Please confirm the information we have on file about your hospital for the fiscal year.

	ls t inforn corr	nation	
	Yes	No	If no, please provide the correct information here:
The proper name of your hospital is: UM Charles Regional Medical Center	•	0	
Your hospital's ID is: 210035	•	0	
Your hospital is part of the hospital system called University of Maryland Medical System.	•	0	
The primary Narrative contact at your hospital is Donna Jacobs	0	•	Mary Levy and Donna Jacobs
The primary Narrative contact email address at your hospital is optimaloutcomesmd@gmail.com	0	0	Mary.Levy@umm.edu and optimaloutcomesmd@gmail.com
The primary Financial contact at your hospital is UNKNOWN	0	0	Albert Zanger
The primary Financial email at your hospital is ACUNNINGHAM@UMM.EDU	0	0	azanger@umm.edu

Q4. The next group of questions asks about the area where your hospital directs its community benefit efforts, called the Community Benefit Service Area. You may find these community health statistics useful in preparing your responses.

Q5. Please select the community health statistics that your hospital uses in its community benefit efforts.

✓ Median household income	Race: percent white
✓ Percentage below federal poverty line (FPL)	✓ Race: percent black
✓ Percent uninsured	✓ Ethnicity: percent Hispanic or Latino
✓ Percent with public health insurance	✓ Life expectancy
Percent with Medicaid	✓ Crude death rate
✓ Mean travel time to work	Other
Percent speaking language other than English at home	

Q6. Please describe any other community health statistics that your hospital uses in its community benefit efforts.

The 2020 Maryland Vital Statistics Report is used for birth and death data by race, along with life expectancy data, infant mortality data by race. The Maryland Department of Planning is also a source of population data for Charles County. The Maryland State Health Improvement Process data measures provide information on health disparities and hospitalization/ED visit rates by health condition such as diabetes and heart disease prevalence and mental health and substance use ED visit rates. Additionally, cancer incidence and mortality are available through the 2021 Cigarette Restitute Fund Program's Cancer in Maryland Report. The Maryland Behavioral Risk Factor Surveillance System is used to determine estimates for adult obesity and overweight. The Youth Risk Behavior Survey provides an obesity estimate for youth aged 13-18 years. The Maryland Sexually Transmitted Infections Program at the Maryland Department of Health provides Chlamydia and gonorrhea rates for the county. The Maryland Peptagram of the Program of Stortage Ages are vigored on the HISA Maryland Physician Workforce Study provides information on physician shortages in Southern Maryland. Health Professional Shortage Areas are viewed on the HRSA website. Medicaid data is accessed through the e-health Medicaid database for Maryland.

The Community Benefit Service Area for the Charles/County/Community-Health/Statistics/2022.docx 27.7KB application/vnd.openxmlformats-officedocument.wordprocessingml.document

$_{\mbox{\scriptsize Q8}}$ Section I - General Info Part 2 - Community Benefit Service Area

Q9. Please select the county or counties located in you	ır hospital's CBSA.							
Allegany County	✓ Charles County	Prince George's County						
Anne Arundel County	Dorchester County	Queen Anne's County						
Baltimore City	Frederick County	Somerset County						
Baltimore County	Garrett County	St. Mary's County						
Calvert County	Harford County	Talbot County						
Caroline County	Howard County	Washington County						
Carroll County	Kent County	Wicomico County						
Cecil County	Montgomery County	Worcester County						
Q10. Please check all Allegany County ZIP codes local This question was not displayed to the respondent. Q11. Please check all Anne Arundel County ZIP codes This question was not displayed to the respondent. Q12. Please check all Baltimore City ZIP codes located This question was not displayed to the respondent. Q13. Please check all Baltimore County ZIP codes located This question was not displayed to the respondent. Q14. Please check all Calvert County ZIP codes located This question was not displayed to the respondent.	located in your hospital's CBSA. If in your hospital's CBSA. ated in your hospital's CBSA. If in your hospital's CBSA.							
Q15. Please check all Caroline County ZIP codes local	ed in your hospital's CBSA.							
This question was not displayed to the respondent.								
Q16. Please check all Carroll County ZIP codes located This question was not displayed to the respondent.	d in your hospital's CBSA.							
Q17. Please check all Cecil County ZIP codes located	in your hospital's CBSA.							
This question was not displayed to the respondent.								
Q18. Please check all Charles County ZIP codes locate ✓ 20601	ed in your hospital's CBSA.	₹ 20658						
✓ 20602	✓ 20622	✓ 20659						
✓ 20603	✓ 20625	✓ 20661						
✓ 20604	✓ 20617✓ 20622✓ 20625							
✓ 20607	20602 20622 20659 20603 20625 20661 20604 20632 20662							
✓ 20611	✓ 20675							
✓ 20612	✓ 20643	✓ 20677						

2 061	.6 20646
	e check all Dorchester County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q20. Pleas	e check all Frederick County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q21. Pleas	e check all Garrett County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q22. Pleas	e check all Harford County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q23. Pleas	e check all Howard County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q24. Pleas	e check all Kent County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q25. Pleas	e check all Montgomery County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q26. Pleas	e check all Prince George's County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
O27 Pleas	e check all Queen Anne's County ZIP codes located in your hospital's CBSA.
	on was not displayed to the respondent.
∩28 Dlass	e check all Somerset County ZIP codes located in your hospital's CBSA.
	on was not displayed to the respondent.
	e check all St. Mary's County ZIP codes located in your hospital's CBSA. on was not displayed to the respondent.
rno questi	
	e check all Talbot County ZIP codes located in your hospital's CBSA.
This question	n was not displayed to the respondent.
Q31. Pleas	e check all Washington County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q32. Pleas	e check all Wicomico County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q33. Pleas	e check all Worcester County ZIP codes located in your hospital's CBSA.
This question	on was not displayed to the respondent.
Q34. How (did your hospital identify its CBSA?

0645

✓ 20693✓ 20695

0613

Based on ZIP codes in your Financial Assistance Policy. Please describe.
Based on ZIP codes in your global budget revenue agreement. Please describe.
Based on patterns of utilization. Please describe.
✓ Other. Please describe.
The Community Benefit Service Area
for the University of Maryland
Charles Regional Medical Center is all 28 zip codes located within the
borders of Charles County. This
includes the seven zip codes identified above as the Primary
Service Area. The University of
Maryland Charles Regional Medical Center is Charles County's only
hospital and, as such, serves the
residents of the entire county.
35. Provide a link to your hospital's mission statement.
https://www.umms.org/charles/about/mission-values
https://www.unins.org/chanes/auduumission-values
136. (Optional) Is there any other information about your hospital's Community Benefit Service Area that you would like to provide?
oc. (Optional) is there any other information about your hospital's Community benefit Service Area that you would like to provide:
The Community Benefit Service Area for the University of Maryland Charles Regional Medical Center is all 28 zip codes located within the borders of Charles County. This
includes the seven zip codes identified as the Primary Service Area. The University of Maryland Charles Regional Medical Center is Charles County's only hospital and, as such, serves the residents of the entire county. Heart disparities and vulnerable populations reside in all regions of the county as evidenced by the data below. The 2019
heart disease hospital encounters rate per 1000 residents was highest in the zip codes: 20658, Marbury: 76.15 20693, Welcome: 67.31 20612, Benedict: 67.04 The 2019 Diabetes admission rate per 1000 residents was highest in the zip codes: 20695, White Plains: 2.84 20640, Indian Head: 2.72 The 2019 Hypertension hospital encounter
rate per 1000 residents was highest in the zip codes: 20658, Marbury: 251.44 20695, White Plains: 193.72 20617, Bryantown: 189.57 The 2019 Mental Health Emergency Department Visit Rate per 1000 residents was highest in the zip codes: 20612, Benedict: 100.56 20664, Newburg: 62.84 The 2019 Substance Use Emergency Department
Visit Rate per 1000 residents was highest in the zip codes: 20625, Cobb Island: 71.54 20658, Marbury: 70.86 The 2019 Asthma Emergency Department Visit Rate per 1000
residents was highest in the zip codes: 20625, Cobb Island: 19.51 20695, White Plains: 16.91 The zip codes with the highest percentages of low-birth-weight babies in 2019 included: 20616, Bryans Road: 18.52% 20602, Waldorf: 12.99% The zip codes with the highest percentages of people living in poverty in 2019 included: 20662, Nanjemoy:
14.7% 20664, Newburg: 14.4% The unemployment rate is the highest in 20658, Marbury, at 14.2%. The zip code with the highest percentage of people without a high school diploma is 20662, Nanjemoy, at 18.9%.
37. Section II - CHNAs and Stakeholder Involvement Part 1 - Timing & Format
38.
fithin the past three fiscal years, has your hospital conducted a CHNA that conforms to IRS requirements?
Non
Yes
○ No
20. Diagon avalain ubu yaya bannital ban nat anglustad a CUNA that anglarma to IDC requirements, on well anyong benefatle alon and timeframe for any lating a
39. Please explain why your hospital has not conducted a CHNA that conforms to IRS requirements, as well as your hospital's plan and timeframe for completing a HNA.
This question was not displayed to the respondent.
This question was not displayed to the respondent.
This question was not displayed to the respondent. 240. When was your hospital's most recent CHNA completed? (MM/DD/YYYY) 06/30/2021

https://www.umms.org/charles/community/assessment-implementation-plan

Q41. Please provide a link to your hospital's most recently completed CHNA. Please provide the entire CHNA, not just an Executive Summary.

CHNA 2021 Charles.pdf 10.2MB application/pdf

_{Q43.} Section II - CHNAs and Stakeholder Involvement Part 2 - Internal CHNA Partners

Q44. Please use the table below to tell us about the internal partners involved in your most recent CHNA developmen

					CHNA A	ctivities					
	N/A - Person or Organization was not Involved		Member of CHNA Committee	Participated in development of CHNA process	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your e: below:
CB/ Community Health/Population Health Director (facility level)			~		~	~	~	~	~		
	N/A - Person or Organization was not Involved	Department	Member of CHNA Committee	Participated in development of CHNA process	on	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided	Other (explain)	Other - If you selected "Other (explain)," please type your e- below:
CB/ Community Health/ Population Health Director (system level)	✓				~						
	N/A - Person or Organization was not Involved	Department	Member of CHNA Committee	Participated in development of CHNA process	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your e below:
Senior Executives (CEO, CFO, VP, etc.) (facility level)			~	~	~	~	~	~			
	N/A - Person or Organization was not Involved		Member of CHNA Committee	Participated in development of CHNA process	on	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your e below:
Senior Executives (CEO, CFO, VP, etc.) (system level)					~						
	N/A - Person or Organization was not Involved	Department	Member of CHNA Committee	in development	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your e below:
Board of Directors or Board Committee (facility level)				~	~		✓				
	N/A - Person or Organization was not Involved	Department	Member of CHNA Committee	Participated in development of CHNA process	on	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your e below:
Board of Directors or Board Committee (system level)	✓										
	N/A - Person or Organization was not Involved		Member of CHNA Committee	Participated in development of CHNA process	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your e below:
Clinical Leadership (facility level)			Z		~		~				

	N/A - Person or Organization was not Involved		Member of CHNA Committee	Participated in development of CHNA process	on	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Clinical Leadership (system level)	~										
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Member of CHNA Committee	Participated in development of CHNA process	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Population Health Staff (facility level)			~	~	~	~	✓	~	✓		
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Member of CHNA Committee	Participated in development of CHNA process	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Population Health Staff (system level)	~										
	N/A - Person or Organization was not Involved		Member of CHNA Committee	Participated in development of CHNA process	on	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Community Benefit staff (facility level)			<u>~</u>	~	~	~	~	~	~		
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Member of CHNA Committee	Participated in development of CHNA process	on	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Community Benefit staff (system level)					~			~			
	N/A - Person or Organization was not Involved		Member of CHNA Committee	Participated in development of CHNA process	on	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Physician(s)					~		~				
	N/A - Person or Organization was not Involved	Department	Member of CHNA Committee	Participated in development of CHNA process	on	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Nurse(s)							~	~			
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Member of CHNA Committee	Participated in development of CHNA process	on	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Social Workers						✓	✓	~			
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Member of CHNA Committee	Participated in development of CHNA process	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Hospital Advisory Board				~	~		~				

	N/A - Person or Organization was not Involved	Position or	Member of CHNA Committee	in development	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Other (specify) Manager, Population Health			~		~	~	~	~	~		
	N/A - Person or Organization was not Involved	Position or	Member of CHNA Committee	Participated in development of CHNA process	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:

Q45. Section II - CHNAs and Stakeholder Involvement Part 3 - Internal HCB Partners

Q46. Please use the table below to tell us about the internal partners involved in your community benefit activities during the fiscal year.

	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	health needs that will be	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
CB/ Community Health/Population Health Director (facility level)			~	~	~	Z		~	~		
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
CB/ Community Health/ Population Health Director (system level)											
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Senior Executives (CEO, CFO, VP, etc.) (facility level)			~	✓		~					
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Senior Executives (CEO, CFO, VP, etc.) (system level)					~						
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Board of Directors or Board Committee (facility level)			~	~							
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Board of Directors or Board Committee (system level)	Z										
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	health needs that will be	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Clinical Leadership (facility level)				~							
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Clinical Leadership (system level)	Z										

	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Population Health Staff (facility level)			~								
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Population Health Staff (system level)	~										
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	the initiatives that will be	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Community Benefit staff (facility level)			~	~	~	~	~	~	~		
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Community Benefit staff (system level)				~			~				
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Physician(s)			~	~							
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Nurse(s)				~							
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Social Workers				~							
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Hospital Advisory Board				✓							
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	for	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Other (specify)											
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiatives	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:

Q47. Section II - CHNAs and Stakeholder Involvement Part 4 - Meaningful Engagement

Q48. Community participation and meaningful engagement is an essential component to changing health system behavior, activating partnerships that improve health outcomes and sustaining community ownership and investment in programs. Please use the table below to tell us about the external partners involved in your most recent CHNA. In the first column, select and describe the external participants. In the second column, select the level of community engagement for each participant. In the third column, select the recommended practices that each stakeholder was engaged in. The Maryland Hospital Association worked with the HSCRC to develop this list of eight recommended practices for engaging patients and communities in the CHNA process.

		Lev	el of Commur	nity Engageme	nt		Recommended Practices									
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	- To partner with the	- To place the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress		
Other Hospitals Please list the hospitals here:																
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	- To place the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress		
Local Health Department Please list the Local Health Departments here: Charles County Department of Health						~	~	~	✓	~	~	~	~	~		
Local Health Improvement Coalition	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	- To place the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress		
Please list the LHICs here: Partnerships for a Healthier Charles County						✓	✓	~	~	~	~	~	~	✓		
, and the second	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	- To partner with the	- To place the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress		
Maryland Department of Health			Involved -	Collaborated					✓					~		
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions		To work directly with community throughout the process to ensure their concerns and aspirations are	- To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	- To place the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress		
Other State Agencies Please list the agencies here:																
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress		
Local Govt. Organizations Please list the organizations here: Charles County Government	2						~	~								

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	- To place the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Faith-Based Organizations			~							~			~	
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	- To place the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
School - K-12 Please list the schools here: Charles County Public Schools							~	~	~	~	~	~	~	~
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
School - Colleges, Universities, Professional Schools Please list the schools here: College of Southern Maryland						~	✓	~	✓	~	~	~	~	~
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Behavioral Health Organizations Please list the organizations here: harles County Local Behavioral Health Authority, Center for Children, Charles County Department of Health's Substance Use and Mental Health Clinics							~	Z	~	~	~	~		✓
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, altermatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	- To place the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Social Service Organizations Please list the organizations here: Charles County Department of Social Services						✓	~	~	✓	~	~	~	~	~
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	community feedback on analysis,	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Post-Acute Care Facilities please list the facilities here: Sagepoint, Fenwick Landing, The Charleston Senior Community, Genesis, Restore Health, Morningside, Hospice of Charles County										✓			2	

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision- making in the hands of the community	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Community/Neighborhood Organizations Please list the organizations here:														
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision- making in the hands of the community	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Consumer/Public Advocacy Organizations Please list the organizations here: Health Partners Inc, United Way of Charles County, Lifelong Learning Center, UM Extension, Lifestyles of Maryland, Charles County Service and Advocacy Council						~	✓	Z	☑	~		Z		
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	to ensure their concerns and aspirations are	 To partner with the 	Delegated - To place the decision- making in the hands of the community	Community- Driven/Led - To support the actions of community initiated, driven and/or led processes	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Other If any other people or organizations were involved, please list them here:														
		community feedback on analysis,	to ensure their concerns and aspirations are	- To partner	- To place the decision-	initiated, driven	ldentify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
₂ Section II - CHNAs and St	takeholder	· Involve	ement P	art 5 - Fo	ollow-up	0								

Q50. Has your hospital adopted an implementation strategy following its most recent CHNA, as required by the IRS?

)	es/
---	-----

○ No

 $\label{eq:Q51.Please} \textit{Please enter the date on which the implementation strategy was approved by your hospital's governing body.}$

June 28, 2021

Q52. Please provide a link to your hospital's CHNA implementation strategy.

https://www.umms.org/charles/community/assessment-implementation-plan

Q54. Please explain why your hospital has not adopted an implementation strategy. Please include whether the hospital has a plan and/or a timeframe for an implementation strategy.
This question was not displayed to the respondent.
Q55. (Optional) Please use the box below to provide any other information about your CHNA that you wish to share.
Q56. (Optional) Please attach any files containing information regarding your CHNA that you wish to share.
Q57. Were all the needs identified in your most recently completed CHNA addressed by an initiative of your hospital?
Yes
○ No
Q58. Using the checkboxes below, select the Community Health Needs identified in your most recent CHNA that
were NOT addressed by your community benefit initiatives.
This question was not displayed to the respondent.
Q59. Why were these needs unaddressed?
This question was not displayed to the respondent.
O60. Please describe the hospital's efforts to track and reduce health disparities in the community it serves.
Qoo. Please describe the hospital's enorts to track and reduce neath dispantes in the community it serves.
The University of Maryland Charles Regional Medical Center contracts with Amber Starn, an epidemiologist, to complete the Charles County Community Health Needs Assessment every 3 years. All data is analyzed by demographic, racial, geographical, and ethnic populations when available. This data is used to select our health priorities, to determine the locations most in need of health education programs, and to establish partners who can help us to reach the populations who are underserved and disproportionately affected by those health conditions. Work plans with short- and long-term objectives are developed to track any changes in individual and population data. Differences in population level data help us to determine if our efforts have led to a community impact.
Q61. If your hospital reported rate support for categories other than Charity Care, Graduate Medical Education, and the Nurse Support Programs in the financial report template, please select the rate supported programs here:
☐ None
Regional Partnership Catalyst Grant Program
The Medicare Advantage Partnership Grant Program
☐ The COVID-19 Long-Term Care Partnership Grant ☐ The COVID-19 Community Vaccination Program
The Population Health Workforce Support for Disadvantaged Areas Program
Other (Describe)
Q62. If you wish, you may upload a document describing your community benefit initiatives in more detail.

Q64. Does your hospital conduct an internal audit of the annual community benefit financial spreadsheet? Select all that apply.
Yes, by the hospital's staff
Yes, by the hospital system's staff
Yes, by a third-party auditor
□ No
Q65. Please describe the third party audit process used.
Ernst and Young
Q66. Does your hospital conduct an internal audit of the community benefit narrative?
Yes
○ No
Q67. Please describe the community benefit narrative audit process.
Albert Zanger, Chief Financial Officer (CF)) oversees all HSCRC and 990 Reporting. In this capacity he internally audits Community Benefit (CB) reports and allocates resources for CB operations. The CFO reviews the report (narrative and spreadsheet) and presents the final report to the Finance Committee of the Board of Directors for approval. The Finance Committee of the Board conducts the review and approval of the report, and a summary of key points are presented to the full Board. Craig Renner, Director, Marketing and Community Health, administers CB reporting operations including plan implementation, collaboration with strategic community partners, oversees data collection and reporting, provides management for LHIC, and compiles reports. Jud Edgue, Decision Support Analyst, inputs inancial data into the CB data collection tool for reporting and assists with internal audits. Ruth Case, Revenue Integrity Analyst inputs salary data into CB data collection tool. Mary Levy, Community Health Specialist implements community benefit qualifying activities and community outreach programs, collaborates with strategic community partners, trains departmental CB reporters, manages data collection and provides LHIC management and support. Consultant and Epidemiologist, Amber Starn, MPH provides data and reporting for CB planning, monitors and reports outcomes of the CB Strategic Plan and reports SHIP data to CCDOH and UM Charles Regional. Hospital system contracted staff; Donna Jacobs provides the final audit for the hospital.
Q68. Does the hospital's board review and approve the annual community benefit financial spreadsheet?
Yes No
Q69. Please explain:
This question was not displayed to the respondent.
Q70. Does the hospital's board review and approve the annual community benefit narrative report?
Yes No
Q71. Please explain:
This question was not displayed to the respondent.
Q72. Does your hospital include community benefit planning and investments in its internal strategic plan?
Yes No

Q73. Please describe how community benefit planning and investments were included in your hospital's internal strategic plan during the fiscal year.

UM CRMC's current strategic plan, which covers fiscal years 2022 through 2024, includes significant investments in programs and initiatives that benefit members of our community who are uninsured or underinsured. The plan outlines efforts for CRMC to work collaboratively with key community stakeholders such as Partners for a Healthier Charles County to address chronic disease issues, mental health, substance abuse and access to care. Since many of the individuals who are targeted to benefit from these initiatives are uninsured, UM Charles Regional and its partners absorb the costs of treatment. Our Mobile Integrated Health (MIH) visitation program is an example of community benefits planning and investment. This program, which is geared to reduce readmissions and over-utilization of emergency services, is jointly funded by financial support from UM Charles Regional and the Charles County Government. Further, the UM Charles Regional's annual budget includes approximately \$1 million to cover the cost of providing care that addresses local health needs. Our population health initiatives, which include health literacy, chronic care management, education and training for our patients are additional examples that demonstrate our efforts at strategic community benefit planning.

Q74. If available, please provide a link to your hospital's strategic plan.

Q75. Do any of the hospital's community benefit operations/activities align with the Statewide Integrated Health Improvement Strategy (SIHIS)? Please select all that apply and describe how your initiatives are targeting each SIHIS goal. More information about SIHIS may be found here.

✓ Diabetes - Reduce the mean BMI for Maryland residents DPP Participant Data for Fiscal Year 2022 Number of workshops: 7 Average participants per workshop: 10.6 Number of participants: 74 Participants with attendance data: DPRP-Attend-Qual. Participants: 6 of 51 (12%) DPRP-Qual. Participants: 6 of 74 (8%) Number who are caregivers: 0 of 0 A1c Pre Post Decrease No A1c 48 One A1c 26 6.0 Two A1c's 0 0 Age Count Percent 0-44 14% 10 44-49 7% 50-54 10 14% 55-59 13 18% 60-64 8 11% 65-69 12 16% 70-74 11% 8 75-79 10% Unknown 1 Attended Session Count Percent 49 96% 49 96% 50 98% 50 98% 48 94% 48 94% 49 96% 42 82% 39 76% 40 78% 40 78% 39 38 76% 75% 39 76% 38 75% 38 75% 36 71% 33 31 31 65% 61% 61% 31 61% 26 51% 24 47% 24 47% 13 25% 13 25% Chronic Condition Count Percent Hypertension 44 98% Diabetes 2 4% Unknown 25 Completers Count Percent No 68 92% Yes 6 8% Condition Count Count One chronic condition 90% No chronic conditions 8% Multiple chronic conditions 1

```
Unknown 25
Disabilities Count Percent
Diff. walking or climbing stairs
        7%
Diff. remembering
                                      5%
Diff. with errands
                                      3%
Diff. dressing 1
                             1%
Disability Count
                            Count
Percent
No disabilities 56
One disability 4
Multiple disabilities
                                      5%
Unknown 11
Education
                   Count
                            Percent
Completed College
                             41
Some College 17
Completed High School
Some High School
Unknown 1
                             23%
                                      18%
                            13
                                      3%
Ethnicity/Race Count Percent
Black or African American
72%
Mhite/Caucasian 20 28%
Asian or Asian American 2
American Indian or AK Native
                                      3%
Hispanic/Latino 1
Unknown 3
GDM
                   Percent
         Count
Gender Count
                   Percent
Female 61
Male 12
                   84%
                   16%
Unknown 1
How Did You Hear
                            Count
Percent
Other: mail 24
                            34%
Media: poster/flyer, etc.
                                      13
Friends or family 7
Media: radio, newspaper 5
Social media 4 6%
Media: TV, internet ad 4
Organization 4 6%
                                      10%
                                      7%
                                      6%
Other: CDC-recognized org.
                                      2
Media: billboard
Other 7 1
                                      1%
                  10%
Impacted by COVID-19
Percent
No 6
                   100%
Unknown 68
              Count Percent
Insurance
Carefirst BlueCross BlueShield 13
31%
Medicare Part B ("Regular" Medicare)
10 24%
United Health Care 9 21%
United Hear...
No Insurance 6
10%
10%
                            14%
Johns Hopkins Family Health Plan
3 7%
Cigna 2
                   5%
Medicare Part C (Medicare Advantage)
         5%
Kaiser Permanente
                                      5%
UnitedHealthcare (HC MCO)
CareFirst BCBS Comm (HC MCO)
                                      1
Medstar Family Choice (HC MCO) 1
Unknown 32
Last Session Attended Count
Percent
         0
                   0%
                   2%
2%
                   0%
                   0%
                   6%
```

0

0%

```
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
             0
                          0%
                          0%
                         0%
0%
0%
4%
8%
2%
0%
0%
12%
                         4%
4%
                         22%
             11
             0
                          0%
             13
                          25%
Minutes of Activity for DPRP-Qual.
Participants Count Percent
                         Count
0-19 Minutes
                         0
                                      0%
30-74 Minutes
75-149 Minutes
                                      33%
150+ Minutes
                                      50%
Number of Sessions Attended
                                                   Count
Percent
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
                         0%
2%
2%
2%
0%
8%
4%
2%
6%
0%
0%
4%
8%
2%
0%
0%
12%
             0
2
4
1
0
             0
                         4%
4%
                         18%
26
             12
                          24%
                         Count Percent
Organization Count Percent
Charles County Department of Health
74 100%
Participant County
                                      Count
Percent
Charles, MD
                                      100%
Participant Funding
                                      Count
Percent
Prevention Link 23
                                      100%
None
            51
Payment Source Count
                                      Percent
Not reported 74
                                      100%
Percent Weight Change For DPRP-Qual.
Participants Count
                                      Percent
7.00%+ Loss
                         2
                                      33%
7.00%+ LUSS

5.00%-6.99% LOSS

3.00%-4.99% LOSS

1.00%-2.99% LOSS

0.99% LOSS-0.99% Gain
                                                   17%
                                                   17%
                                                   33%
                                                   0%
1.00%-2.99% Gain
                                                   0%
1.00%-2.99% Gain 0

3.00%-4.99% Gain 0

5.00%-6.99% Gain 0

7.00%+ Gain 0 0%

Average Weight Loss Percent

5.86%
Prediabetes
                         Count
                                      Percent
Yes 47
No 12
                          80%
No 12
Unknown 15
                         20%
Served in Military
                                      Count
Serveu
Percent
74
                         100%
Type of Test
A1C 33
                          Count
                                      Percent
                          45%
Risk Test
                                      34%
                          25
```

Fasting Glucos OGTT 1	se 11 1%	15%		
Virtual Worksh Percent No 42 Unknown 32	100%	Count		
Workshop Fundi Percent Other State Fu Prevention Lir None 56	ınding	Count 12 33%	67%	
Opioid Use Disorder - In	mprove overdo	se mortality	//	
Maternal and Child Hea	alth - Reduce s	evere materna	l morbidity i	rate
Maternal and Child Hea	alth - Decrease	asthma-relate	d emergend	cy department visit rates for children aged 2-17
None of the Above				

Q76. (Optional) Did your hospital's initiatives during the fiscal year address other state health goals? If so, tell us about them below.

Mobile Integrated Healthcare: The Charles County Department of Health, the University of Maryland Charles Regional Medical Center, and the Charles County Department of Emergency Services, collectively implement the Charles County Mobile Integrated Healthcare project that is intended to address the healthsocial determinants leading to repeated use of emergent care. The Mobile Integrated Healthcare (MIH) Team includes a paramedic employed by Emergency Services and a registered nurse and community health worker, employed by the health department. During the initial visit to the patient's home, the MIH team assesses the patient's vital signs, reviews discharge paperwork, evaluates compliance with discharge instructions, completes a medical conclusion evaluation/reconciliation, conducts an environmental scan of the home for safety issues, and provides health education and chronic disease self-management information when appropriate. After the initial visit, the community health worker works to keep the patients engaged in this program and out of the emergency department. Enrollment: Must be: 18 years of age, or older (and) Charles County resident (and) 1 or more chronic health conditions "ALL 3 MUST APPLY* Criteria for Hospital and Emergency Medical Services Inclusion: 3 or more visits to the ED in 3 months 3 or more calls to EMS in 3 months Criteria for Primary Care Clinic Inclusion: Must display one or more 2 missed appointments/no-show's to scheduled appointments (and/or) Have not followed up with recommended specialist/sagencies pertaining to health needs (and/or) Poor review Individual concerns regarding health conditions Social and Emotional Health Questionnaire Physical Assessment Vital signs Respiratory/Neuro/Integumentary/Gl/GU Cardiovascular/Musculoskeltal/Pain Assessments Immunization history review Assessment of ADL's Medication reconciliation Ablility to safely dispose of unused/unwanted medications Carbon copied lists for convenience Thorough Home Safety Assessment of ADL's Medication reconciliation Ab

Q77. Section IV - Physician Gaps & Subsidies

Q78. Did your hospital report physician gap subsidies on Worksheet 3 of its community benefit financial report for the fiscal year?

O No

Yes

Q79. As required under HG\$19-303, please select all of the gaps in physician availability resulting in a subsidy reported in the Worksheet 3 of financial section of Community Benefit report. Please select "No" for any physician specialty types for which you did not report a subsidy.

Is there a gap resulting in a subsidy?

Yes No

Allergy & Immunology	0	0	·
Anesthesiology	O	0	Non-resident house staff and hospitalists 🕶
Cardiology	O	0	Coverage of emergency department call
Dermatology	0		~
Emergency Medicine	0		~
Endocrinology, Diabetes & Metabolism	0	O	~
Family Practice/General Practice	0	O	~
Geriatrics	0	O	~
Internal Medicine	0	O	~
Medical Genetics	0	O	~
Neurological Surgery	0	O	~
Neurology	•	0	Coverage of emergency department call
Obstetrics & Gynecology	•	0	Non-resident house staff and hospitalists 🕶
Oncology-Cancer	0	O	~
Ophthalmology	0	O	~
Orthopedics	•	0	Coverage of emergency department call
Otolaryngology	0	•	~
Pathology	0	•	~
Pediatrics	•	0	Non-resident house staff and hospitalists 🕶
Physical Medicine & Rehabilitation	0	O	~
Plastic Surgery	0	O	~
Preventive Medicine	0		~
Psychiatry	•	0	Physician recruitment to meet community need $ ightharpoonup$
Radiology	0	•	~
Surgery	•	0	Physician recruitment to meet community need $ ightharpoonup$
Urology	•	0	Coverage of emergency department call
Other. (Describe) Gastroenterology	0	0	Physician recruitment to meet community need ${f v}$

Q80. Please explain how you determined that the services would not otherwise be available to meet patient demand and why each subsidy was needed, including relevant data. Please provide a description for each line-item subsidy listed in Worksheet 3 of the financial report.

Hospital-Based Physicians Due to the significant physician shortage in the Southern region, UM CRMC does not have adequate pool of community physicians to provide 24 hour professional and administrative services for many required specialties. Contracts with these physicians and groups are needed to provide 24-hour services for patients regardless of their insurance status or ability to pay and make it necessary for UM CRMC to assure that Contractor receives fair market value compensation for the services it is rendering to or for the heapfield. Non-Resident House Staff and Hospitalists N/A Coverage of Emergency Department Call As a result of the prevailing physician shortage (southern Maryland has the highest number of physician specialty shortages in the state); the University of Maryland Charles Regional Medical Center has an insufficient number of specialists within the medical staff. In all of these areas there are not enough physicians to care for patients including uninsured and underinsured in the hospital. Therefore, subsidies are paid to the physicians to provide on call coverage for the Emergency Department and patient care departments. Physician Provision of Financial Assistance N/A Physician Recruitment to meet Community Need Southern Maryland had the highest percentage of physician shortages of all of the regions in Maryland (89.9%). To address the shortage, the University of Maryland Charles Regional Medical Center hired both a Chief Medical Officer and Physician Recruiter and Liaison who are working to successfully attract and retain physicians to the community. Private practice within the community is preferred, but the hospital will employ those physicians when necessary. Other — (provide detail of any subsidy not listed above – add more rows if needed) N/A Please see the attached file for data justifying physician subsidies at the hospital.

Q81. Please attach any files containing further information and data justifying physician subsidies at your hospital.

2022PhysicianWorkforceGapStatistics.docx

3.9MB

application/vnd.openxml formats-office document. word processing ml. document application for the contraction of the contract

Q82. Section VI - Financial Assistance Policy (FAP)

O83. Upload a copy of your hospital's financial assistance policy.

English UMMS Financial Assistance Policy Final 101920.pdf 328.8KB application/pdf

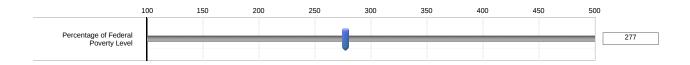
Q84. Provide the link to your hospital's financial assistance policy.

https://www.umms.org/charles/patients-visitors/for-patients/financial-assistance

No, the FAP has not changed.
 Yes, the FAP has changed. Please describe:

Q86. Maryland hospitals are required under Health General §19-214.1(b)(2)(i) COMAR 10.37.10.26(A-2)(2)(a)(i) to provide free medically necessary care to patients with family income at or below 200 percent of the federal poverty level (FPL).

Please select the percentage of FPL below which your hospital's FAP offers free care.



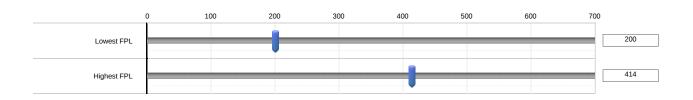
Q87. Maryland hospitals are required under COMAR 10.37.10.26(A-2)(2)(a)(ii) to provide reduced-cost, medically necessary care to low-income patients with family income between 200 and 300 percent of the federal poverty level.

Please select the range of the percentage of FPL for which your hospital's FAP offers reduced-cost care.

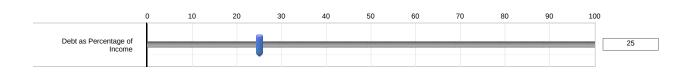


Q88. Maryland hospitals are required under Health General §19-214.1(b)(2)(iii) COMAR 10.37.10.26(A-2)(3) to provide reduced-cost, medically necessary care to patients with family income below 500 percent of the federal poverty level who have a financial hardship. Financial hardship is defined in Health General §19-214.1(a)(2) and COMAR 10.37.10.26(A-2)(1)(b)(i) as a medical debt, incurred by a family over a 12-month period that exceeds 25 percent of family income.

Please select the range of the percentage of FPL for which your hospital's FAP offers reduced-cost care for financial hardship.



Q89. Please select the threshold for the percentage of medical debt that exceeds a household's income and qualifies as financial hardship.



Q90. Per Health General Article §19-303 (c)(4)(ix), list each tax exemption your hospital claimed in the preceding taxable year (select all that apply)

✓ Federal corporate income tax

✓ State corporate income tax

State sales tax

✓ Local property tax (real and personal)

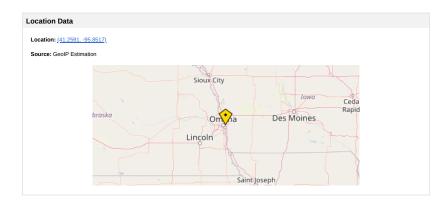
Other (Describe)

Q91. Summary & Report Submission

You have reached the end of the questions, but you are not quite finished. Your narrative has not yet been fully submitted. Once you proceed to the next screen using the right arrow button below, you cannot go backward. You cannot change any of your answers if you proceed beyond this screen.

We strongly urge you to contact us at hcbhelp@hilltop.umbc.edu to request a copy of your answers. We will happily send you a pdf copy of your narrative that you can share with your leadership, Board, or other interested parties. If you need to make any corrections or change any of your answers, you can use the Table of Contents feature to navigate to the appropriate section of the narrative.

Once you are fully confident that your answers are final, return to this screen then click the right arrow button below to officially submit your narrative.



The Community Benefit Service Area for the University of Maryland Charles Regional Medical Center is all 28 zip codes located within the borders of Charles County. This includes the seven zip codes identified above as the Primary Service Area. The University of Maryland Charles Regional Medical Center is Charles County's only hospital and, as such, serves the residents of the entire county.

Geography

Charles County is located 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 eighth 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 60 percent of the county's residents live in the greater Waldorf-La Plata area. By contrast, the southern (Cobb Neck area) and western (Nanjemoy, Indian Head, Marbury) areas of the region remain very rural with smaller populations.

Population

Charles County has experienced rapid growth since 1970, expanding its population from 47,678 in 1970 to 168,698 in the 2021 Census population estimate. The magnitude of growth can be seen in the changes in population density. The 1990 census showed that there were 219.4 individuals per square mile, which increased to 261.5 individuals per square mile by 2000, an increase of 19.2%, and to 320.2 individuals per square mile by 2010, an increase of 22.5%. it has further increased to 363.9 in 2020.

Source: 2000, 2010, and 2020 US Census Bureau's Census, 2021 Census Population Estimate

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 45.4 minutes which is higher than the Maryland average of 33.0 minutes (Source US Census Bureau's 2016-2020 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: 2016-2020 US Census Bureau's American Community Survey 5 year estimates

Diversity

As the population of the county changes, the diversity of the county also increases. The African American population has experienced the greatest increase. In 2000, African Americans made up 26% of the total Charles County population; by 2021, they comprise 52.0% of the total county population. As of 2021, minorities comprise roughly 65.3% of the Charles County population. The Hispanic community has also seen increases over the past few years. They now comprise 7.0% of the total county population. This is the one of the highest percentages among the 24 Maryland jurisdictions. Charles County also has one of the largest American Indian/Native American populations in the state of Maryland at 0.8% of the total county population.

The 2021 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.

Source: 2021 US Census Bureau's American Community Survey 1 year estimate

Economy

Employment and economic indicators for the county are fairly strong. The 2016-2020 US Census American Community Survey estimates that 66.8% of the Charles County population is currently in the labor work force. The 2016-2020 5-year estimate for Charles County found that approximately 7.4% of Charles County individuals are living below the poverty level; however, this is lower than the Maryland rate of 10.3%. The Charles County median household income was \$103,678, well above the Maryland median household income of \$87,063. The diversity of the county is also represented in the business community with 46% of all Charles County businesses being minority-owned firms. This is higher than the State of Maryland at 38%.

Source: 2016-2020 US Census Bureau's American Community Survey 5-year estimates

Education

Charles County has a larger percentage of high school graduates than Maryland (93.6% vs. 90.6%); however, Charles County has a smaller percentage than Maryland of individuals with a bachelor's degree or higher (30.0% vs. 40.9%).

Source: 2016-2020 US Census Bureau's American Community Survey 5 year estimates

Housing

There is a high level of home ownership in Charles County (76.9%). There is a greater percentage of home owners in Charles County than the percentage of homeowners for Maryland (76.9% vs. 67.1%). The median value of a housing unit in Charles County is slightly greater than the Maryland average (\$326,800 vs. \$325,400). The average household size in Charles County is 2.78 persons.

Source: 2016-2020 US Census Bureau's American Community Survey 5 year estimates

Life Expectancy

The life expectancy for a Charles County resident, as calculated for 2018-2020, was 77.9 years. This is slightly below the state average life expectancy of 78.6 years.

Source: 2020 Maryland Vital Statistics Report

Births

There were 1,789 births in Charles County in 2020. Charles County represents 43.5% of the births in Southern Maryland and 2.61% of the total births in Maryland for 2020.

Minorities made up just over half of the babies born in Charles County in 2020 (67.8%).

Source: 2020 Maryland Vital Statistics Report

Health Disparities

Health topics where health disparities are seen for the minority population in Charles County:

Health Topic	Indicator	Rate	Source

Prevalence and Mortality 100,000 population Age-adjusted heart disease mortality rate 100,000 population Age-adjusted heart disease mortality rate Mortality 2015-2017 Maryland Vital Statistics Report) 2015-2017 Maryland Vital Statistics Report 2015-2017 Maryland Vital Statistics Report) 2015-2017 Maryland Vital Statistics Report 2016-2018 rates 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) 2021 Cigarette Re	Heart Disease	Rate of ED visits for	White: 271.8	Maryland SHIP Prevalence:
Age-adjusted heart disease mortality rate disease mortality and races: 166.7 Colon and Rectal Cancer Incidence 100,000		hypertension per		I -
Age-adjusted heart disease mortality rate Black: 153.3 All races: 166.7 Colon and Rectal Cancer Incidence Rates per 100,000 Mortality Mortality Rates per 100,000 Breast Cancer Incidence 100,000 Breast Cancer Incidence 100,000 Mortality Rates per 100,000 Black: 17.5 All races: 15.8 Breast Cancer Incidence 100,000 Mortality Rates per 100,000 Mortality Rat	Mortality	100,000 population	All races: 469.9	2015-2017 Maryland Vital
disease mortality rate Mite: 183.5 Black: 153.3 All races: 166.7				Statistics Report)
Black: 153.3 All races: 166.7				
Colon and Rectal Cancer Incidence Rates per 100,000 Black: 41.1 Program Cancer Report (2014-2018 rates) Mortality Mortality Rates per 100,000 Black: 17.5 All races: 15.8 Prestate Cancer Incidence		disease mortality rate		
Colon and Rectal Cancer Incidence Incidence Rates per 100,000 White: 40.9 Black: 41.1 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) Mortality Mortality Rates per 100,000 All races: 40.1 White: 14.7 Black: 17.5 All races: 15.8 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) Breast Cancer Incidence Incidence Rates per 100,000 White: 124.0 Black: 117.3 All races: 118.9 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) Mortality Mortality Rates per 100,000 White: 23.6 Black: 31.0 All races: 26.8 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) Mortality Mortality Rates per 100,000 White: 117.7 Black: 190.4 All races: 147.1 White: 17.9 Black: 29.3 All races: 20.5 2021 Cigarette Restitution Fund Program Cancer Report (2014-2018 rates) Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White: 151.2 Black: 359.2 Maryland 2017 HSCRC per SHIP Site				
Cancer Incidence Mortality Mortality Rates per 100,000 Black: 41.1 Mortality Mortality Rates per 100,000 Black: 17.5 All races: 15.8 Breast Cancer Incidence Incidence Mortality Mortality Rates per 100,000 All races: 26.8 Prostate Cancer Incidence Incidence Mortality Mortality Rates per 100,000 Mortal	Calan and Dastal	Incidence Dates non		2021 Cigaretta Bastitutian Fund
Mortality Mortality Rates per 100,000 Black: 41.1 White: 14.7 Black: 17.5 All races: 15.8 Breast Cancer Incidence Incidence Mortality Rates per 100,000 Mortality Rates per 100,000 Mortality Rates per 100,000 Mortality Rates per 100,000 All races: 26.8 Prostate Cancer Incidence Incidence Mortality Mortality Rates per 100,000 All races: 26.8 Mortality Mortality Rates per 100,000 Mortality Rates per 100,000 All races: 117.7 Black: 190.4 All races: 147.1 Mortality Mortality Rates per 100,000 Mortality Rates per 1		-	White: 40.9	_
Mortality Mortality Rates per 100,000 Breast Cancer Incidence Rates per 100,000 Mortality Mortality Rates per 100,000 Mortality Mortality Rates per 100,000 M	Cancer incluence	100,000	Black: 41.1	= -
Mortality Mortality Morta				2010 rates)
Breast Cancer Incidence Rates per 100,000 Black: 117.3 All races: 118.9 Mortality Mortality Rates per 100,000 All races: 26.8 Prostate Cancer Incidence Rates per 100,000 White: 117.7 Black: 190.4 All races: 147.1 Mortality Mortality Rates per 100,000 White: 17.9 Black: 29.3 All races: 20.5 Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race White: Rates per 100,000 White: 151.2 Black: 359.2 Mortality Mortality Rates per 100,000 Black: 359.2 Mortality Mortality Rates per 100,000 Black: 359.2 Mortality Mortality Rates per 100,000 Black: 359.2 Maryland 2017 HSCRC per SHIP site	Mortality	Mortality Rates per	All races: 40.1	
Breast Cancer Incidence Rates per 100,000 Mortality Mortality Rates per 100,000 Prostate Cancer Incidence Incidence Incidence Incidence Rates per 100,000 Mortality Rates per 100,000 Mortality Rates per 100,000 Mortality Rates per 100,000 All races: 26.8 Prostate Cancer Incidence Rates per 100,000 Mortality Rates Per 100,00		100,000	White: 14.7	
Breast Cancer Incidence Rates per 100,000 Black: 117.3 All races: 26.8 Prostate Cancer Incidence Rates per 100,000 White: 124.0 Black: 31.0 All races: 26.8 Prostate Cancer Incidence Rates per 100,000 White: 117.7 Black: 190.4 All races: 147.1 Mortality Rates per 100,000 White: 17.9 Black: 29.3 All races: 20.5 Diabetes Prevalence Visit Rates by Black or White Race White: 151.2 Black: 359.2 Maryland 2017 HSCRC per SHIP site			Black: 17.5	
Incidence			All races: 15.8	
Mortality Mortality Rates per 100,000 Mortality Rates per 100,000 White: 23.6 Black: 31.0 All races: 26.8 Prostate Cancer Incidence Incidence Mortality Mortality Rates per 100,000 Mortality Mortality Rates per 100,000 White: 117.7 Black: 190.4 All races: 147.1 Mortality Mortality Rates per 100,000 White: 17.9 Black: 29.3 All races: 20.5 Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race Mortality Mortality Rates per 100,000 Mortality Rates p			White: 124.0	_
Mortality Rates per 100,000 White: 23.6 Black: 31.0 All races: 26.8 Prostate Cancer Incidence Rates per 100,000 Mortality Rates per 100,000 Mortality Rates per 100,000 Mortality Rates per 100,000 White: 17.9 Black: 29.3 All races: 20.5 Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race White: 151.2 Black: 359.2 Maryland 2017 HSCRC per SHIP site	incidence	100,000	Black: 117.3	
Prostate Cancer Incidence Rates per 100,000 Mortality Mortality Rates per 100,000 Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race White: 23.6 Black: 31.0 All races: 26.8 White: 117.7 Black: 190.4 All races: 147.1 White: 17.9 Black: 29.3 All races: 20.5 Maryland 2017 HSCRC per SHIP site			All races: 118.9	
White: 23.6 Black: 31.0 All races: 26.8 Prostate Cancer Incidence Rates per 100,000 Incidence Mortality Mortality Rates per 100,000 Mortality Rates per 100,000 White: 17.9 Black: 29.3 All races: 20.5 Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race White: 151.2 Black: 359.2 White: 23.6 Black: 31.0 All races: 26.8 White: 117.7 Black: 190.4 All races: 147.1 Program Cancer Report (2014-2018 rates) All races: 20.5 Maryland 2017 HSCRC per SHIP site	Mortality			
Prostate Cancer Incidence Rates per 100,000 Mortality Mortality Rates per 100,000 Diabetes Prevalence Minidence Rates per 100,000 All races: 26.8 White: 117.7 Black: 190.4 All races: 147.1 White: 17.9 Black: 29.3 All races: 20.5 White: 151.2 Black: 359.2 All races: 26.8 White: 117.7 Black: 190.4 All races: 147.1 All races: 2015 White: 151.2 Black: 359.2		100,000	White: 23.6	
Prostate Cancer Incidence Rates per 100,000 Black: 190.4 Program Cancer Report (2014-2018 rates) Mortality Mortality Rates per 100,000 White: 17.9 Black: 29.3 All races: 20.5 Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race Black: 359.2 White: 151.2 Black: 359.2			Black: 31.0	
Incidence Incide			All races: 26.8	
Incidence Black: 190.4 2018 rates) All races: 147.1 White: 17.9 Black: 29.3 All races: 20.5 Diabetes Unadjusted Diabetes ED Visit Rates by Black or White Race Black: 359.2 Black: 359.2 All races: 2018 rates All races: 147.1 All races: 147.1 White: 17.9 Black: 29.3 All races: 20.5 Black: 359.2 Maryland 2017 HSCRC per SHIP site	Prostate Cancer	-	White: 117.7	
Mortality Mortality Rates per 100,000 White: 17.9 Black: 29.3 All races: 20.5 Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race Black: 359.2 Maryland 2017 HSCRC per SHIP site	Incidence	100,000	Black: 190.4	
Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race White: 17.9 Black: 29.3 All races: 20.5 White: 151.2 Black: 359.2 Maryland 2017 HSCRC per SHIP site	NA antalita		All races: 147.1	
White: 17.9 Black: 29.3 All races: 20.5 Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race White: 151.2 Black: 359.2 Maryland 2017 HSCRC per SHIP site	iviortality			
Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race All races: 20.5 White: 151.2 Black: 359.2 Maryland 2017 HSCRC per SHIP site		100,000	White: 17.9	
Diabetes Prevalence Unadjusted Diabetes ED Visit Rates by Black or White Race Unadjusted Diabetes ED Visit Rates by Black or White Race Black: 359.2 White: 151.2 Black: 359.2			Black: 29.3	
Prevalence Visit Rates by Black or White Race Black: 359.2 site			All races: 20.5	
White Race Black: 359.2	Diabetes	Unadjusted Diabetes ED	White: 151.2	Maryland 2017 HSCRC per SHIP
Write Nace	Prevalence		BL 1 070 0	site
All races: 245.0		White Race	Black: 359.2	
			All races: 245.0	

Obesity	Age-adjusted % Adults	Overall: 29.3	Maryland 2019 BRFSS (no
	at Healthy Weight	White: 31.1	updates are available due to MDH network security incident)
		Black: 27.9	
STD	Rate of Chlamydia	Overall: 704.6	Maryland STD Prevention
	infection for all ages per		Program Level data 2019
	100,000 (all ages)	Data not available	
		by race and	
		ethnicity	
Asthma	Rate of ED visits for	Overall: 72.8	HSCRC 2017 Per SHIP Site
	asthma per 10,000	White-50.8	
		Black-90.5	
Infant Mortality	Infant Mortality Rate	County Overall: 6.1	2020 Maryland Infant Mortality
	per 1,000 births	Black-9.9	Report, Vital Statistics Admin.
		White: Rates not	
		calculated due to	
		small case count.	

- 1. 2021 Charles County Current Population Survey Data. United States Census Bureau. Available at: www.census.gov.
- 2. 2020 Maryland Vital Statistics Report. Charles County Demographic and Population Data. Maryland Department of Health. Available at https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/2020Annual.pdf.
- 3. 2016-2020 US Census Bureau, American Community Survey 5-year estimates, Charles County and Maryland. Available at https://www.census.gov/quickfacts/fact/table/MD,charlescountymaryland,US/PST045221.
- 4. Maryland State Health Improvement Process Measures. Available at: https://pophealth.health.maryland.gov/pages/ship-lite-home.aspx.
- 5. 2021 Maryland Cigarette Restitution Fund Program's Cancer Report. Maryland Department of Health. Available at:

https://health.maryland.gov/phpa/cancer/Documents/2021%20CRF%20Cancer%20Report FINAL.pdf.

- 6. 2019 Adults with Healthy Weight by Race. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at: ibis.health.maryland.gov.
- 7. 2019 Chlamydia Infection Rates by Race. Maryland STI Annual Report. Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. Available at: https://health.maryland.gov/phpa/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx.
- 8. 2020 Maryland Infant Mortality Report. Maryland Vital Statistics Administration. Available at: https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/2020Annual.pdf.

Service Area Demographic Characteristics and Social Determinants:

Demographic Characteristic	Description	Source
Zip Codes included in the organization's CBSA, indicating which include geographic areas where the most vulnerable populations reside.	The Community Benefit Service Area for the University of Maryland Charles Regional Medical Center is all 28 zip codes located within the borders of Charles County. This includes the seven zip codes identified as the Primary Service Area. The University of Maryland Charles Regional Medical Center is Charles County's only hospital and, as such, serves the residents of the entire county. Heart disparities and vulnerable populations reside in all regions of the county as evidenced by the data below. The 2019 heart disease hospital encounters rate per 1000 residents was highest in the zip codes: 20658, Marbury: 76.15 20693, Welcome: 67.31 20612, Benedict: 67.04 The 2019 Diabetes admission rate per 1000 residents was highest in the zip codes:	2019 HSCRC Hospital Case-Mix Data, Communit y Survey Populatio n and Social Determin ants of Health Data 2014- 2018

20695, White Plains: 2.84

20640, Indian Head: 2.72

The 2019 Hypertension hospital encounter rate per 1000 residents was highest in the zip codes:

20658, Marbury: 251.44

20695, White Plains: 193.72

20617, Bryantown: 189.57

The 2019 Mental
Health Emergency
Department Visit Rate
per 1000 residents was
highest in the zip
codes:

20612, Benedict: 100.56

20664, Newburg: 62.84

The 2019 Substance Use Emergency Department Visit Rate per 1000 residents was highest in the zip codes:

20625, Cobb Island: 71.54

20658, Marbury: 70.86

The 2019 Asthma Emergency Department Visit Rate per 1000 residents was

	highest in the zip codes: 20625, Cobb Island: 19.51 20695, White Plains: 16.91 The zip codes with the highest percentages of low-birth-weight babies in 2019 included: 20616, Bryans Road: 18.52% 20602, Waldorf: 12.99% The zip codes with the highest percentages of people living in poverty in 2019 included: 20662, Nanjemoy: 14.7% 20664, Newburg: 14.4% The unemployment rate is the highest in 20658, Marbury, at 14.2%. The zip code with the highest percentage of people without a high school diploma is	
	people without a high	
Median Household Income within the CBSA	\$103,678	2016- 2020 US Census American Communit y

Percentage of households with incomes below the federal poverty guidelines within the CBSA	7.4%	Survey 5 year estimate 2016- 2020 US Census American
		Communit y Survey 5 year estimate
For counties within the CBSA, what is the percentage of uninsured for each county? This information may be available using the following links: http://census.gov/hhes/www/hlthins/data/acs/aff.html http://planning.maryland.gov/msdc/American_Community_Survey/2009ACS.shtml	5.0%	2016- 2020 American Communit y Survey 5-Year Estimate
Percentage of Medicaid recipients by County within the CBSA.	21.8%	Fiscal Year 2021 Maryland Medicaid e-Health Statistics: Medicaid Enrollmen t Rates
Life Expectancy by County within the CBSA (including by race and ethnicity where data are available).	The life expectancy from birth for a Charles County resident as calculated for 2018-2020 was 77.9 years. This is slightly below the state average life expectancy of 78.6 years. White: 78.2 Black: 77.0	Vital Statistics Report. Charles County Demogra phic and Populatio n Data. MDH
Mortality Rates by County within the CBSA (including by race and ethnicity where data are available).	All-cause death rate for Charles County for 2020 was 873.3 per 100,000	2020 Charles Co. Death

	population. This is below the Maryland state average death rate of 992.0 per 100,000. White: 1258.8 Black: 700.0 Asian/PI: 491.5 American Indian: 751.3 Hispanic: 276.3 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. Two-thirds of the 65+ population in Charles County (66%) are White. The minority populations are moving into Charles County and are a younger population; therefore,	data, 2020 Maryland Vital Statistics Report
Access to healthy food, transportation and education, housing quality and exposure to environmental factors that negatively affect health status by County within the CBSA. (to the extent information is available from local or county jurisdictions such as the local health officer, local county officials, or other resources)	median age in Charles County is 38.5 years. Access to healthy food:	USDA 2022, Food Access Research Atlas, updated in April 2021 2016- 2020 US Census ACS

Environmental 2017 MD Factors: Departme # of days Air nt of Quality Index Planning exceeds from 100: 1.7 Maryland % of children SHIP tested who have blood lead levels ≥ 10 mg/dl: 0.10% (2017) (Goal: .288) 2016-Housing: 2020 US Home Census ownership: Data, 76.9% American Renter Communit occupied y Survey housing: 23.1% 5-year **Affordable** estimates, housing: the % of houses sold 2016 that are Maryland affordable on a Departme median nt of teacher's Planning salary: 35.8% from Access to Care: Maryland SHIP 78% of Charles County FY2021 residents travel Charles outside of the County county for Health medical care at Needs some point. Assessme nt % Mothers who received prenatal care 1st trimester; 2020 64% Maryland Vital

		14/1 1/	
	0	White/	Statistics
		NH:	Report
		67%	
	0	Black:	
		66%	
	0	Hispani	
		c: 48%	
	0	Asian/	
		Pacific	
		Islande	
		r: 61%	2020
	0	Americ	Maryland
		an :	Vital
		Indian:	Statistics
	1	56%	Report
•	Infant	: D	
		ity Rate:	
	6.1 per		LUDGA
	live bir		HPSA
	0	White/	MUS/MU
		NH:	P
		Not	Designati
		calcula	ons as of
		ted	October
		due to small	20, 2022
		case	
		count	
	0	Black:	
	0	9.9	
	Numbe		
	federa		
	design		2007
	medica		Maryland
	unders		Physician
	areas i		Workforc
	Charles		e Study
	County		Column
	0	Brandy	
	-	wine	2011 MD
	0	Allens	workforce
		Fresh	Study
	0	Thomp	Health
		kinsvill	Resources
		е	and
İ	_	Hughe	Services
	0	rragne	Services
	O	sville	Services

		1
	 Marbu ry Nanje moy Number of physician shortage specialties in Southern Maryland: 28 Physician-to- population ratios in Southern Maryland below the HRSA benchmark for all types of physician 	2016- 2020 US Census Bureau's American Communit y Survey 5 year estimates
	Education: 93.6% persons 25+ high school graduates 30.0% persons 25+ bachelor's degree or higher	
Available detail on race, ethnicity, and language within CBSA	Population: 168,698 Sex: Female 51.6% Male: 48.4% Race and Ethnicity: White 39.6% Black 52.0% American Indian and Alaska native 0.8% Asian alone 3.5% Native Hawaiian and Other Pacific Islanders 0.1% Person reporting 2	2016- 2020 US Census , American Communit y Survey 5 year estimate and 2021 1 year estimates

 Hispanic or Latino 7.0% White not Hispanic 34.7%
Age:
 Persons under 5 years 5.8% Persons under 18 years 24.0% Persons 65 years and over 13.3%
Language:
 Language other than English spoken at home: 8.3%



Charles County Community Health Needs Assessment



Table of Contents

Executive Summary	3
Focus Groups	6
Key Informant Interviews	12
Long Survey Results	17
Short Survey Results	35
Geographic and Demographic Profile	4
Vital Statistics	51
Social Determinants of Health	59
Heart Disease, Stroke, and Hypertension	84
Cancer	95
Diabetes Mellitus	114
Asthma	124
Obesity and Overweight	13
Aging Population	138
Injuries	143
Communicable Disease and Environmental Health	149
HIV/AIDS/Sexually Transmitted Infections	158
Smoking and Tobacco Use	166
Substance Use Disorders	178
Dental Health	192
Mental Health	198
Access to Care	207
Conclusions	233



Charles County Health Needs Assessment Executive Summary

From July 2020 to February 2021, the University of Maryland Charles Regional Medical Center 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 plan was developed which included five different sources of data: a long online survey of Charles County resident perceptions of health and health behaviors, a short paper survey on health perceptions throughout the county, a focus group with community stakeholders, key informant interviews of community leaders and stakeholders, and a quantitative data analysis of secondary, published data. Data collection occurred between July 2020 and December 2020.

The use of the multiple data collection methods strengthened the validity of the assessment's findings and ensured that Charles County residents had an opportunity to participate in the assessment process and feel invested in its outcome.

Due to the COVID-19 pandemic and the limitations on in-person gatherings, only one small focus group was conducted in December 2020. This focus group targeted individuals working in healthcare and community roles focusing on access to care and chronic disease prevention and management. A total of eight people participated in this focus group.

The biggest issues to emerge from the focus groups included:

- Mental health resources and services
- Substance use disorders
- Transportation

- Chronic disease management
- Obesity/overweight
- COVID-19

561 Charles County residents completed the 27-question online survey that was created using Survey Monkey. The link to the survey was available on the University of Maryland Charles Regional Medical Center website and the Charles County Department of Health website. The first section of the survey asked participants about their perception of health and health services within the county. The second section asked them about their health behaviors, in order to determine their risk for the development of certain health conditions.

Most of the respondents were from Charles County (90.6%). The second largest percentage of respondents was from St. Mary's County (4.1%). Only 1.7% reported living outside of Southern Maryland (Charles, Calvert, St. Mary's, or Prince George's). Approximately 68.5% of the respondents were between the ages of 45-74 years. The highest percentage was in the 65-74-year age group (27.1%). The overwhelming majority of the respondents were female (77.4%). Minorities made up 26% of the total survey population. African Americans comprised 22.5% of the respondents. Approximately 3% of the survey respondents self-identified as Hispanic.



Charles County Health Needs Assessment Executive Summary

The survey participants were a highly educated group with 83.7% reporting having had any amount of college education. Just under half of the group had completed an undergraduate degree or higher (47.4%). Most of the participants were employed and working full-time. Individuals with a household income less than \$60,000 made up one-fifth of the 2020 survey (20.2%).

Nearly all of the survey participants (98.6%) reported having health insurance. The majority of the participants also reported having dental insurance (78.6%) though this percentage is smaller than those reporting health insurance. Many of the respondents also had vision insurance (64.3%). Only 1.1% of the survey population reported having no type of insurance.

The biggest health problems that surfaced from the online survey included: crime, overweight/obesity, infectious disease, drug/alcohol use, and affordable housing. 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.

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: 88.2% have had a routine doctor's visit in the past 12 months and 96.2% receive their routine health care in a primary care physician or provider's office.

Many residents (75.3%) were 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 (29.3%) or that it was too expensive, and they could not afford it (3.5%).

More than three-quarters of respondents (78%) travel outside of Charles County for medical care at some point. Only 5.8% 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 (61.4%), dental appointments (22.2%), primary care doctor appointments (19.0%), and surgeries (19.0%). The most common responses among participants were that the quality is better elsewhere (37.1%) and services are not available in Charles County (23.6%).

A short five-question survey was distributed throughout the county regarding perceptions of health within the county. A total of 755 short surveys were completed. Ongoing survey collection was conducted at the Charles County Department of Health; the University of Maryland Charles Regional Medical Center's Diabetes Education Center, Wound Healing Center, and Outpatient Rehabilitation. Short surveys were collected during blood drives at the University of Maryland Charles Regional Medical Center (CRMC) and the La Plata American Legion.



Charles County Health Needs Assessment Executive Summary

CRMC also coordinated with the Charles County Public schools to survey individuals at the meal distribution sites. The meal distribution sites included Indian Head Elementary (Indian Head), JC Parks Elementary (Indian Head), Milton Somers Middle School (La Plata), and Mt. Hope/Nanjemoy Elementary School (Nanjemoy). Particular emphasis was given to the western region of the county that is more geographically isolated. The community was also surveyed at large events such as Charles County Community Resource Day, United Way pop-up events, blood drives, the Indian Head Farmer's Market, and other community outreach events.

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

The short survey also identified factors that prevent people from receiving the health care that they need. The most commonly cited barriers to needed health care were lack of health insurance (35.4%) and care is too expensive/can't afford it (47.4%). Under "Other," several people explained that there is a shortage of county providers accepting Medicaid, current providers are not accepting new patients, quality of providers is better elsewhere, fear of COVID-19 keeps people from seeking care, lack of dental health coverage, lack of awareness of available services, no Veterans Affairs clinic nearby, long wait times to see providers, people cannot take the time off work for health care services, stigma surrounding mental health treatment, fear from past negative experiences, provider stereotyping and stigmatizing patients with certain health conditions, lack of providers in the western region of the county, and alternative treatments like acupuncture and massage are not covered by insurance providers.

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.

Access to care in rural Charles County received the greatest number of "many services available" responses, followed by mental health and obesity. Mental health received the greatest number of responses for "some services available" followed by infectious disease, access to food and nutritious meals, dental health, and drug and alcohol use. High blood pressure received the greatest number of responses in the "no services available" category.

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, obesity, arthritis, dementia/Alzheimer's disease, communicable disease, environmental health, sexually transmitted diseases, HIV/AIDS, mental health, dental health, substance use, disabilities, and tobacco use.



Charles County Health Needs Assessment Executive Summary

The current assessment findings are an update from the Fiscal Year 2018 community health needs assessment report and health improvement plan. 38% 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 County Providers Increased
- Percentage of Adults at a Healthy Weight Increased

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

- Mental Health Emergency Department Visit Rate Increased
- Addictions-Related Emergency Department Visit Rate Increased
- Diabetes Emergency Department Visit Rate Stayed the Same
- Childhood Obesity Percentage Increased
- Hypertension Emergency Department Visit Rate Increased

The data from this community health needs assessment will be used to develop the next Charles County Health Improvement Plan and subsequent action plans. These provide the county with measurable outcomes and benchmarks for three-year program implementation.



Focus Groups:

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

Due to the COVID-19 pandemic and the limitations on in-person gatherings, only one small focus group was conducted in December 2020. This focus group targeted individuals working in healthcare and community roles focusing on access to care as well as chronic disease prevention and management. A total of eight people participated in this focus group.

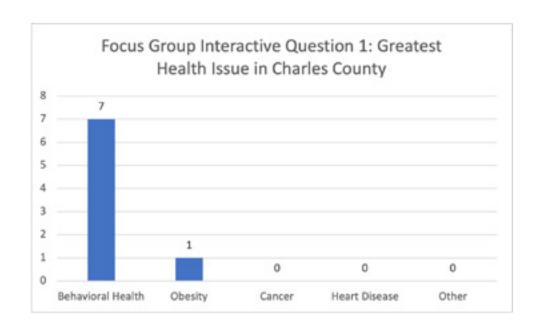
The focus group followed a pattern of health-related questioning. The questions included:

- Question 1: What do you believe is the greatest health issue affecting Charles County?
- Question 2: What do you perceive to the biggest health problems/issues affecting the community?
- Question 3: What are challenges and problems of the community?
- Question 4: Since the 2018 community health needs assessment, have you seen improves in health in Charles County?
- Question 5: What are the strengths of the community?
- Question 6: Are there adequate resources to address health conditions in Charles County?
- Question 7: What are your suggestions and recommendations to improve health locally?

In addition to the discussion questions, participants were given the opportunity to answer multiple-choice, interactive questions. The answers to those questions lead into the discussion questions.

Interactive Question 1: What do you believe is the greatest health issue affecting Charles County?

Obesity and Behavioral Health were the most commonly reported health conditions for Interactive Question 1. Approximately 87.5% of the focus group participants felt that behavioral health was the greatest health problem in Charles County. This is an increase from the last needs assessment where 60% chose behavioral health as the greatest health problem in the county. Obesity was the second most common choice with 12.5%. The choices of cancer, heart disease, and other were not chosen by the focus group participants as the greatest health issues for Charles County.



Interactive Question 2: Since the 2018 community health needs assessment, have you seen improvements in health in Charles County?

Most of the focus group participants felt that improvements have been made in terms of health in Charles County since the last needs assessment report. They acknowledged that there is more recognition of services. They also expressed that their answers differed pre- and post-COVID-19 pandemic. Pre-pandemic, there were more providers and more access to transportation. Post pandemic, those providers can pick whether to see patients in person or through telehealth. Some of the providers and practices have been temporarily closed when the providers themselves ended up sick.

Participants acknowledged that overall health has improved in the county; however, they did not feel that mental health has gotten better in Charles County. There are difficulties in getting care and getting it in a timely manner. Providers do not take every form of health insurance.

In terms of access to services addressing substance use disorders, the participants felt that improvements had been made in the last three years. The increased presence of peer recovery specialists is cited as a milestone for the county. Peer recovery specialists are able to engage those who have experienced an overdose and support them in finding options for treatment and/or harm reduction.

Since the 2018 needs assessment, has health improved in Charles County?	Count (#)	Percent (%)	
Improved	6	75%	
Stayed the same	2	25%	
Worse	0	0%	
l don't know	0	0%	

Interactive Question 3: Are there adequate resources to address health conditions in Charles County?

All of the respondents felt that more resources are needed to address health conditions in Charles County. There is not a place to advertise programs and services. People are not going to know about the evidence-based programs and services in the county unless we find more ways to get information out about them. The participants recognized that there is always room to do more and improve on current processes.

Discussion questions:

1. What do you perceive to be the health problems/issues of the local community?

Behavioral Health was identified as a health issue for the local community, especially during the time of COVID-19 due to socialization, isolation, and fear. The behavioral health issues that were already there have been amplified during this time of crisis. Resources for behavioral health are limited, and it is hard to get an appointment with a provider in a timely fashion. During the pandemic, there has been a rise in depression and domestic violence. All ages are dealing with issues of mental health and isolation. One respondent described how it controls how you think and how you react. You may engage in other unhealthy behaviors such as carb loading or substance and alcohol use. Financial stress is also having an impact on households due to the loss of income during the pandemic.

Obesity was also highlighted as an issue in Charles County. Obesity contributes to all other health conditions. It makes co-morbid conditions such as heart disease, hypertension, diabetes, and depression worse. People are eating more fast food. During the pandemic, many restaurants created new options for delivery. Participants cited how it is cheaper and more affordable to eat bad than good.

Participants were concerned about cancer in the county. They felt that people may delay preventative care, testing, and symptoms checks due to the fear of COVID-19 exposure in a clinical setting. This may lead to an increase in cancer diagnoses at a later stage.

Unnecessary hospital emergency department utilization was also cited as a health issue in the county. Some individuals in the local community use the hospital emergency department instead

of community resources. It is part of the culture. The emergency department is the catch all. People think that this is the solution to take care of it quickly. They also know that the emergency department will not turn them away, even if they do not have health insurance. They do not know what else exists in the community. Additional health education is needed.

2. Are there barriers and gaps in services affecting health?

Access to Behavioral Health Services: There are insurance restrictions. They dictate where, when, and why. If local providers won't take a certain insurance then those individuals end up in the emergency department. Some insurance providers, like Kaiser Permanente, have limited resources in the area. Transportation was also stated as a barrier to accessing behavioral health services.

Health Literacy: Many people do not understand the instructions given at hospital discharge or the instructions given by their provider. They will not reach out for clarification unless the provider reaches out to them. There are people in the community who cannot read or write. Others have difficulty with math skills and determining when to take medications. One participant talked about how a person is not able to listen well when they do not feel well.

Insurance literacy is another component and whether people understand what is covered by their insurance. One solution is advocacy. Community members need advocates to address the real health issues they are having. There is a lack of communication and understanding between health care consumers and providers.

Understanding of disease processes: Once people are diagnosed with a health condition, such as diabetes, they struggle with how to adapt in real life. They do not always know how to implement behavioral changes in their world. For example, those with pre-diabetes may need assistance in learning how to cook for themselves in order to eat healthier. Previously, they may have relied on foods that were cheap and easy to acquire. If they do not have money or transportation to shop at the grocery store, they will get the cheap food that is convenient.

Access to grocery stores: Some parts of the county, including Indian Head, Nanjemoy, and Marbury, do not have access to large grocery stores. Some individuals, including seniors, do not shop every week so they buy up non-perishable foods that will keep. If transportation is an issue, they may shop at the dollar store where items are not the healthiest.

Healthcare Workforce: Some healthcare agencies have difficulty in finding people who want to stay at the agency and want to stay in the region. They know that they can make more money someplace else like Washington, D.C. or Baltimore.

Lack of technology for telehealth services: Virtual telehealth appointments only work if individuals have access to reliable internet and the equipment to connect. There is a large portion of seniors who do not want to set up the virtual meetings for telehealth. Participants proposed a hybrid system where residents have access to health education classes in person or virtual. The group also acknowledged that technology has many positive aspects including the potential to show needed health services and screenings as well as benchmarks for health.

3. What are the strengths of the community?

Charles County is known for its ability to collaborate. Agencies communicate well and are willing to move outside of their silos to work together to address issues. All partners are "at the table." The county hospital is partnering with other hospitals to address common issues that span beyond the county lines. The people involved in the health projects have the drive to continue to improve the county.

There are many new educational programs in the county to address chronic conditions. The county now offers outpatient diabetes education, chronic disease self management classes, mobile integrated health care, and a diabetes prevention program. There is also work to move outside of traditional settings to address chronic conditions such as encouraging blood pressure screenings in dental practices.

4. What key changes could the community implement to improve health locally?

Communication was the theme to come out of this discussion. The county physicians and providers need to work on communication with their patients, with the hospital, and with community services and programming. Communication to county residents on available services and how to access them was repeated in each group.

Funding is always a barrier that needs to be overcome in order to effectively implement needed strategies for change.

Some participants offered new and innovative strategies to improve health locally such as telehealth and alternative means of transportation.

The biggest issues to emerge from the focus groups included:

- Mental health resources and services
- Substance use disorders
- Transportation
- Chronic disease management
- Obesity/overweight
- COVID-19

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

Key Informant Interviews:

Due to the COVID-19 pandemic, in-person focus groups could not be safely conducted with county residents and community stakeholders to gather qualitative information and data on people's perceptions and opinions regarding the health status of the county. Therefore, focus groups were substituted with online key informant interviews. Survey Monkey was used to ask residents, partners, and stakeholders the same set of questions that were previously asked during focus groups.

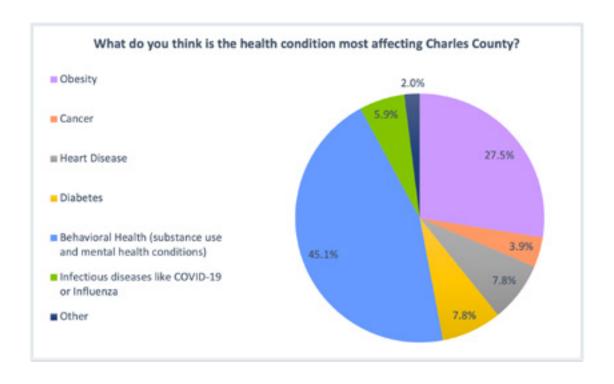
A total of 51 key informant interviews were completed between July 2020 and January 2021. The results of those interviews are presented below.

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

Behavioral Health and Obesity were the most commonly reported health conditions for Interactive Question 1. Approximately 45.1% of the participants felt that behavioral health was the health condition most affecting Charles County. Obesity was the second most popular response among participants with 27.5% of responses. This is an increase from the last needs assessment where only 22% of participants felt obesity was the health condition most affecting Charles County.

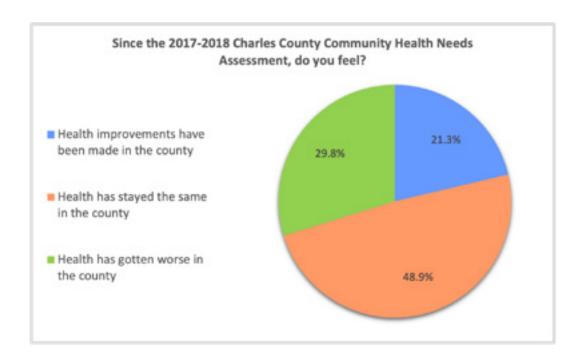
Almost half of participants reported a chronic disease as the most affecting health condition in Charles County.

Infectious Disease was added to the response options for the 2020 health needs assessment, and almost 6% of participants felt it was the health condition most affecting Charles County.



Interactive Question 2: Since the 2017-2018 Charles County community health needs assessment, do you feel?

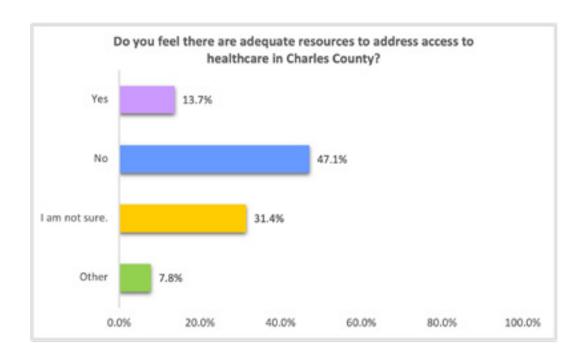
The largest percentage of participants reported that health has stayed the same in the county, with 48.9% of participants. The second most popular response amongst participants was that health has gotten worse in the county, with 29.8% of responses. This is an increase from the 2018 community health needs assessment where only 8% of participants felt that the health was worse in the county from the previous assessment. 21.3% of participants felt health improvements have been made in the county.



Interactive Question 3: Do you feel there are adequate resources to address access to healthcare in Charles County?

Almost half of focus group participants felt that there are not adequate resources to address access to healthcare in Charles County.

Of participants who chose "Other," few felt indifferent and believe resources improved, but gaps still exist.



Open-ended questions:

1. What do you perceive to be the health problems/issues of the local community?

The open-ended responses from participants were analyzed and categorized by various health problems/issues. Many participants listed numerous health problems, which could fall into multiple categories that were created. The results from this question are as follows:

Chronic Disease

Chronic disease was the most popular response among participants. Open-ended responses that fell into this category included obesity, diabetes, cancer, heart disease, hypertension, heart disease, congestive heart failure, and COPD. Along with chronic disease, some participants were concerned about the impact of COVID-19 on individuals with these pre-existing conditions.

Resources to help manage chronic diseases, such as health care providers, were also a concern for participants.

Mental Health

Mental health was the second most common response among participants. Responses from participants related to mental health included stress, anxiety, substance use, lack of mental health resources, and access to mental health services.

Access to mental health services for children and the impact COVID-19 may have on the mental health of children and adults in the community were seen as current health issues in Charles County.

Behavioral Health

Behavioral health was the third most popular response among participants. Participants whose responses fell into this health issue category included concerns about poor lifestyle habits and risky behaviors among community members. Particular examples of poor lifestyle choices that participants provided included smoking, unhealthy eating habits, unsafe driving, and substance use.

Access to Care

Access to care was another health issue participants perceived as affecting the local community. Issues related to access to care that were reported include: lack of specialty services and local providers, limited resources, limited access due to COVID-19, access to preventative care, and access to care for low-income individuals.

Other health issues reported by participants included COVID-19, elderly patient care, transportation, and quality of care.

2. Are there barriers or gaps in services affecting health of the county?

Perceived barriers and gaps reported by participants in open-ended question number two reflect the answers to the previous question. Similar to the previous question, many participants listed multiple barriers they perceived exist in Charles County. The responses were analyzed and categorized.

Access to Care

Based on participant responses, the most significant barriers or gaps in health services in the county are those related to access to care. Barriers and gaps reported by participants included access to providers, specifically specialists, access to mental health care, lack of transportation, long wait times, access for children, and the lack of health resources in the community. Many participants also reported barriers for low income individuals and minorities in the county. Reported barriers for these population groups include transportation, health care costs, geographic location of services, and lack of knowledge about health care resources in the community.

Mental Health

Barriers or gaps in services related to mental health was another popular response among participants. Many participants reported that the county lacks mental health providers. Child mental health services were also a concern among participants, who reported there is a shortage of child psychiatrists. The cost of mental health services was perceived as a barrier in the county as well.

Other Health Barriers or Gaps

Other barriers or gaps participants reported included health education/low health literacy, elderly patient care, COVID-19, cost of healthy food options, lack of trust in the health care system, and inequality/racism.

3. What are the strengths of the community?

Partnerships within the community were identified as a strength among majority of the participants. Partnerships between both public and private organizations were mentioned and highly praised among participants. Other strengths mentioned included Health Department programs and community collaboration around health issues, including COVID-19.

4. What key changes could the community implement to improve health locally?

Access to care was a key change that many focus group participants reported they would like to see in the community to improve health. This includes access to care for low income individuals, access to mental health services, an increase in specialty providers in the county, access to health services in rural areas, pediatric health care, and an overall increase in health care providers in Charles County.

Along with access to care, the addition of more health services that target preventative care was a change that participants hope to see in the county. These services include nutrition and fitness programs, community clinics, weight loss programs, and preventative care education. With many participants reporting a concern for chronic disease in the community, preventative care initiatives may be a strategy to tackle the burden.

Lastly, collaboration and communication among organizations in the community was another key change participants believed could improve health. This includes better alignment among community organizations and stakeholders, engagement from community members, and partnerships.

Other key changes that were mentioned included elderly care, increased transportation throughout the community, COVID-19 safety practices, and more focus on low income health in the county.

Long Survey Results:

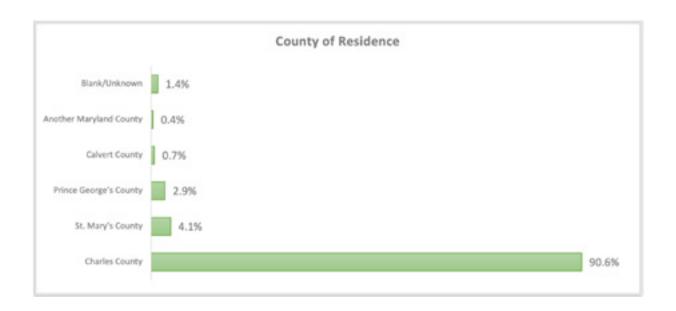
Introduction:

A 27-question online survey was developed in the summer of 2020. 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 questions 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.

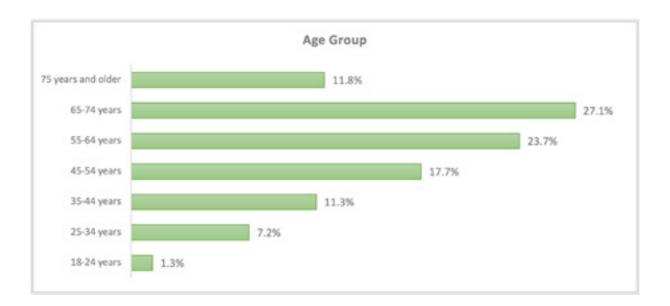
There was a total of 561 participants who took the survey. Some questions were not completed by all survey participants. Not every question was applicable to every participant. Some questions were skipped. Data for each question was compiled and analyzed.

Demographic Information:

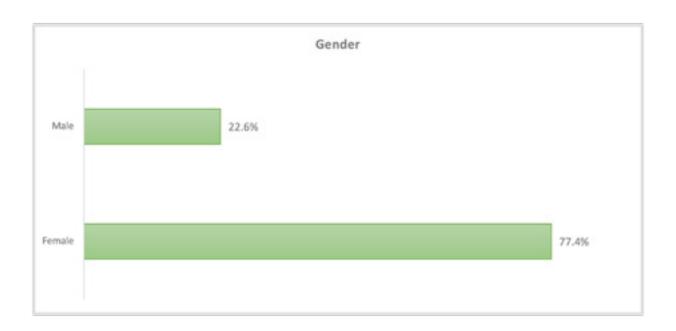
A majority of the survey participants were residents of Charles County (90.6%). The second largest population was from neighboring St. Mary's County (4.1%). Residents of neighboring counties were included in the analysis since there is a lot of movement between the counties. A large portion of individuals work or spend time in Charles County.



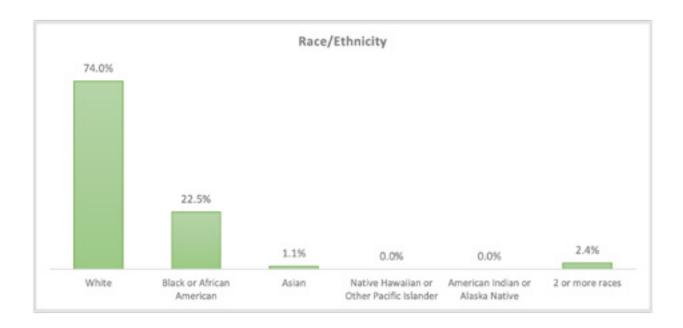
Survey participants varied among all age groups, with a majority of participants being over the age of 35 years. The largest percentage of survey participants were from the 65-74 age group with 27.1% of total participants.



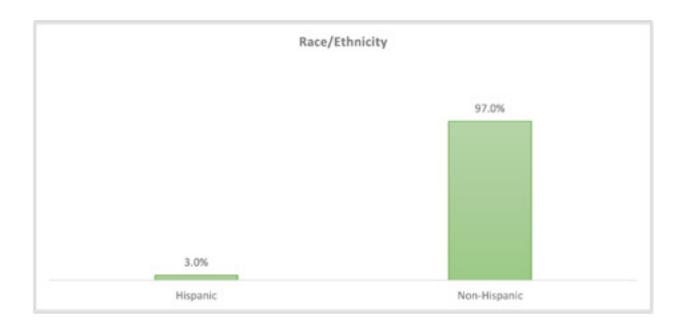
The majority of the long survey participants were female (77.4%). We worked very hard to increase participation among Charles County males and managed to increase from 20% in the 2018 survey to 22.6% in the 2020 survey.



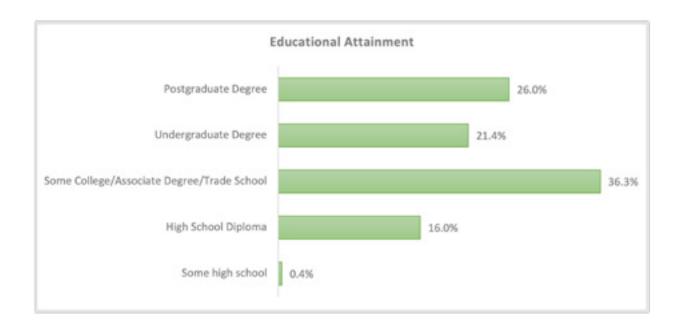
Minorities made up about 26% of all survey participants. Black or African American comprised 22.45% of survey participants, followed by two or more races (2.41%) and Asian (1.11%).



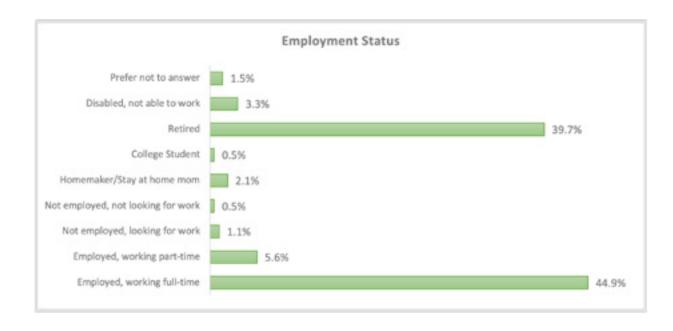
Participants were asked to give their ethnicity. Approximately 3% of the survey respondent's self-identified as Hispanic. This percentage is lower from the 2018 survey, where 4% of participants identified as Hispanic. The county's overall Hispanic population is about 5.8% (U.S. Census Bureau).



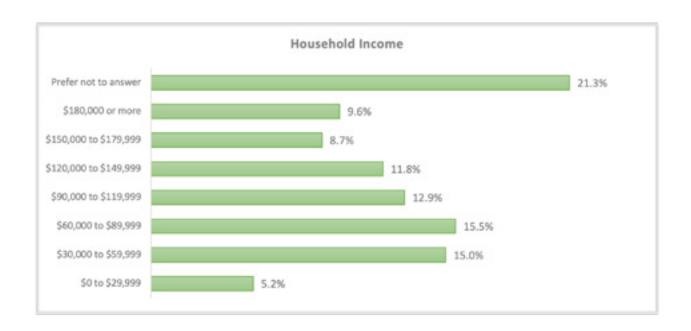
Survey participants were also asked to identify their educational attainment level. The majority of participants were highly educated with 83.7% having at least some type of college education. The largest participant group had some college education, an associate degree or trade school education with 36.3% of total respondents. The second largest group were participants with a postgraduate degree, with 26.0%.



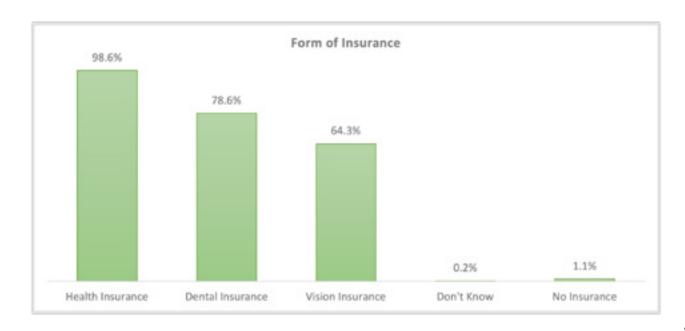
Along with educational attainment level, participants were also asked their employment status. Most survey participants reported being employed full time, with 44.9% of total responses. The second largest group were those who reported as being Retired, with 39.7% of total survey responses. It should be noted that this large employment status group may be related to the large amount of survey participants who were in the 65-74 age range group. Participants were asked to check all labels that were applicable. For example, they may be a full-time student who is also employed part-time.



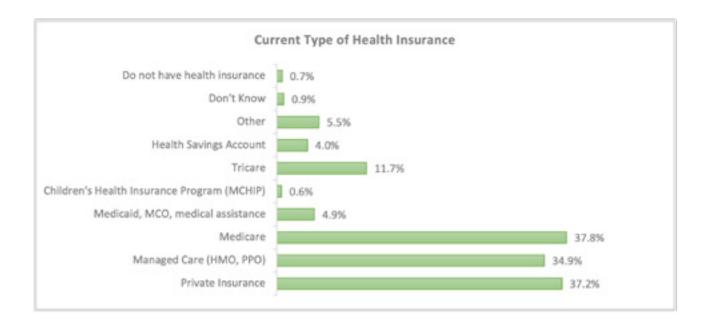
Participants were asked to report their household income. Unlike previous years, "Prefer not to answer" was the most common response for survey respondents, with 21.3% of total responses. This is a significant increase from the 2018 survey, that reported only 8.8% of survey respondents preferred not to answer the household income question. The second largest response was a household income of \$60,000-\$89,999 per year (15.5%), followed by \$30,000-\$59,999 (15.0%).



The participants were asked to report all types of health insurance that they currently have. Nearly all the survey participants (98.6%) reported having health insurance. Majority of the participants also reported having dental insurance (78.6%), although this percentage is lower than the 2018 survey where 85.92% of participants reported having dental insurance. A large number of participants also reported having vision insurance (64.3%). Only 1.1% of survey participants reported having no forms of insurance.

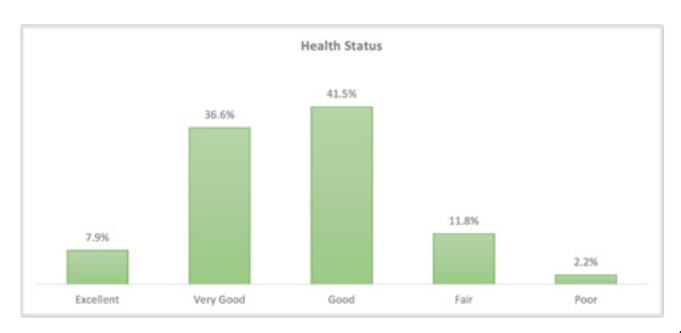


Among those having health insurance, Private insurance, Managed Care (HMO, PPO), and Medicare were the most common among survey participants with 37.2%, 34.9%, and 37.8% of total participants, respectively. Only 0.7% reported that they do not have health insurance.

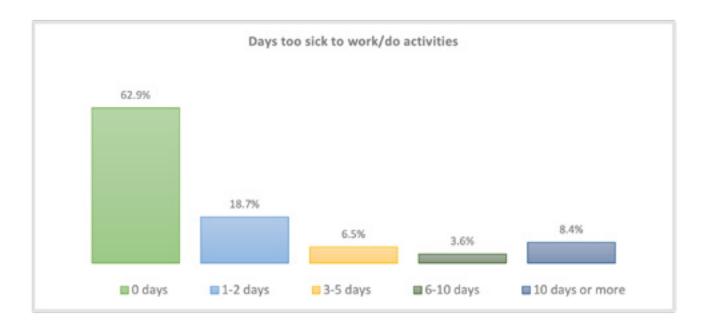


Health Status:

Participants were asked to rate their current health status as poor, fair, good, very good, or excellent. The most common answers were "Good" (41.5%) and "Very Good" (36.6%). 14.0% reported that they were in fair to poor health. That is an increase from the 2018 survey where only 12.4% reported being in fair to poor health, and an increase from the 2015 survey where only 8% reported that they were in fair to poor health. From 2015 to 2020, there has been a 6% increase in survey participants reporting their health being fair or poor.

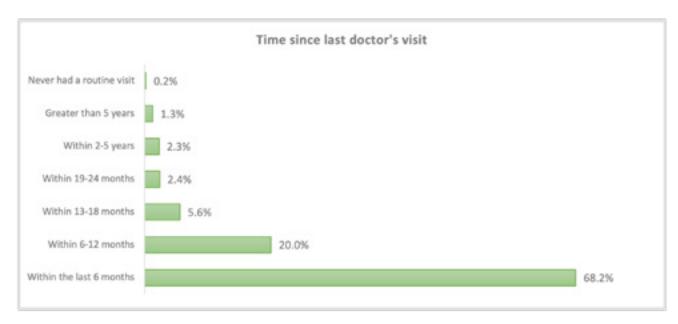


Participants were asked how many days in the past month they were too sick to work or do activities. Two-thirds of the respondents reported that there were no days in the past month that sickness prevented them from work or activities (62.9%). Among those reporting sick days, most reported having been prevented from work or activities 1-2 days in the past month (18.7%). Ten or more days in the past month was the second most common response among those who reported sick days (8.4%). This percentage is up 3.8% from the 2018 survey.



Access to Care

Most of the survey participants reported having a routine doctor's visit in the last 12 months (88.2%). This percentage is up from the 2018 survey where 84.8% of participants reported having a routine doctor's visit in the last 12 months. Only 0.2% reported that they have never had a routine doctor's visit.

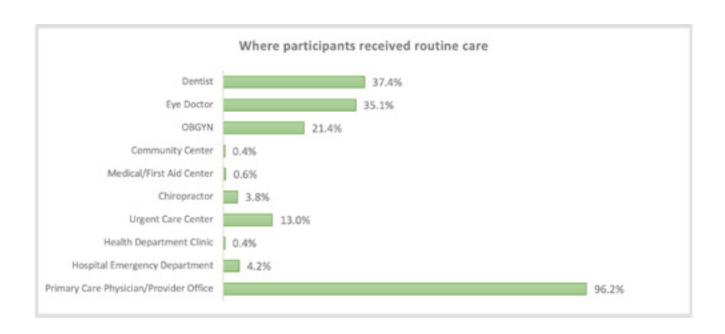


Most of the survey participants received their routine health care by a primary care physician or in a provider office (96.2%). In addition to routine medical care, 37.4% went to a dentist, 35.1% went to an eye doctor, and 21.4% went to an OB/GYN.

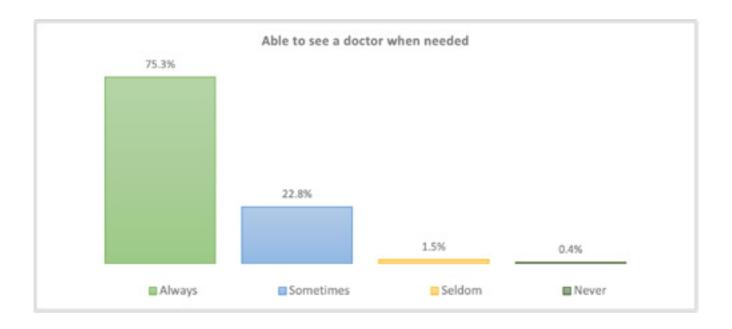
There was also a large population who reported that they get their routine care at an urgent care center (13.0%). However, this percentage is down from the 2018 survey where 15.6% of survey participants reported receiving their routine care at an urgent care center.

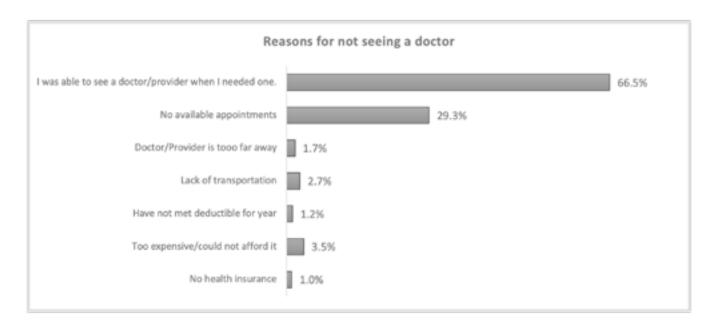
Of the survey respondents, 4.2% reported that they received their routine care at a hospital emergency department. This percentage is up from the 2018 survey where 2.4% of survey participants reported receiving their routine care at a hospital emergency department.

It is believed that the routine care by the listed specialists (dentist, eye doctor) was underreported. Participants were asked to check all locations that applied; however, it is theorized that they did not read all the responses and checked only primary care physician/provider office even if they also routinely see the dentist.

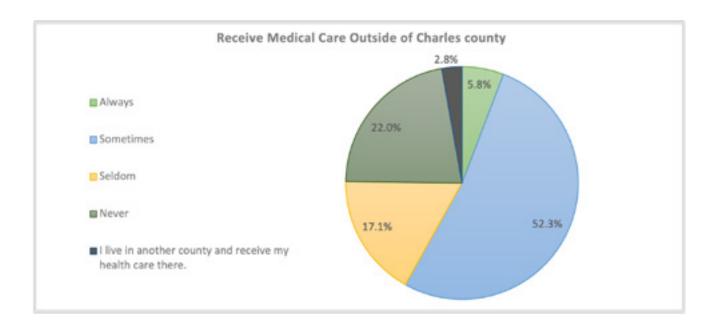


Majority of the survey participants were able to see the doctor when needed (75.3%). Just under 2% of survey participants reported that they were seldom or never able to see a doctor when needed. If they were unable to see the doctor when needed, the most common reasons were that there were no available appointments (29.3%) or that it was too expensive, and they could not afford it (3.5%). These reasons for not seeing a doctor are similar to the 2018 survey responses.



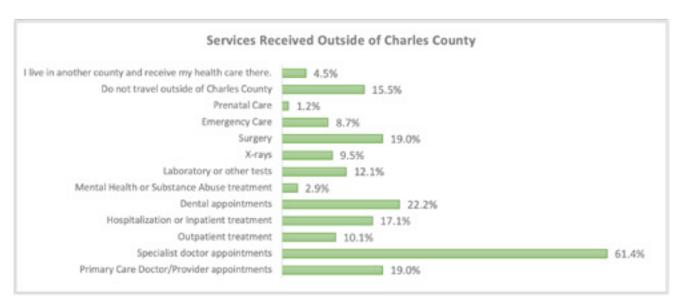


When asked if they receive medical care outside of Charles County, 22.0% of participants responded that they never received care outside the county. This is an increase from the 2018 survey where 15.9% of participants responded that they never receive care outside Charles County. Over half of the participants (52.3%) claimed that they sometimes receive medical care outside Charles County. This percentage is up over 2% from the 2018 survey.

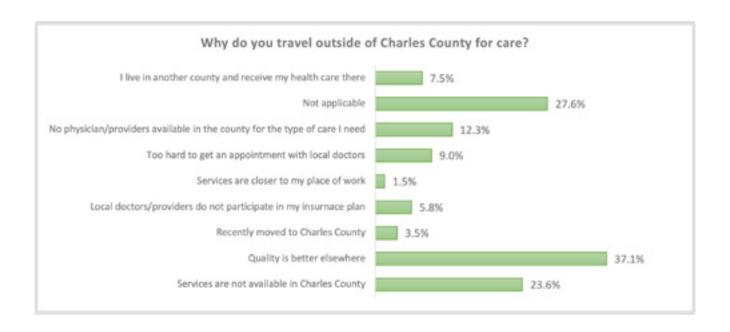


Participants were asked what medical services they received outside of Charles County. They were asked to check all services that were applicable. The most common medical services that people receive outside of Charles County are specialist doctor appointments (61.4%), dental appointments (22.2%), primary care doctor appointments (19.0%), and surgeries (19.0%).

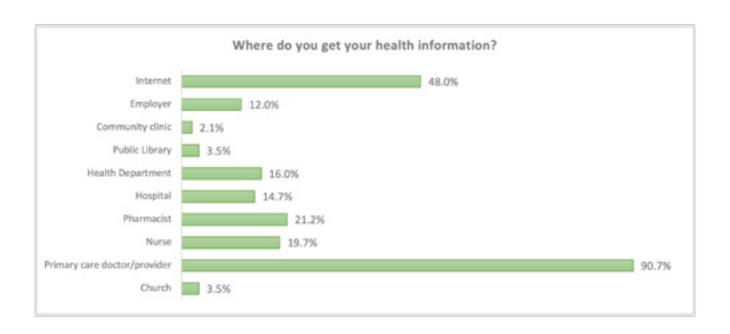
The percentage of participants who receive medical services from a specialist provider increased from 58.6% to 61.4% from 2018 to 2020. Dental appointments received outside of Charles County also increased from 2018 to 2020, from 18.5% to 22.2%. The percentage of participants who receive primary care doctor care outside the county decreased from 24.4% in 2018 to 19.0% in 2020.



Participants were also asked why they chose to receive those medical services outside of Charles County. The most common responses among participants were that the quality is better elsewhere (37.1%) and services are not available in Charles County (23.6%). Of the participants, 27.6% indicated that this question was not applicable to them.



Primary Care doctors/providers and the Internet are highly used methods for receiving health information among survey participants. This particular question stresses the importance of educating local health care providers and emphasizes the need for accurate medical information on the Internet and for employee wellness programming.



Behavioral Risk Factors:

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

- Always wear seat belt (97.1%)
- Always wash hands after using bathroom or before making food (85.9%)
- Always get a flu shot each year (66.7%)
- Always follow road safety rules (63.5%)
- Never misuse prescription opioids or use heroine (80.0%)
- Never use other illegal drugs (80.1%)
- Never use smokeless tobacco (chew, snuff, dip) (78.1%)
- Never smoke e-cigarettes (77.2%)
- Never use marijuana (73.0%)
- Never smoke cigarettes, cigars, pipes, cigarillos (67.0%)
- Never drink more than 5 alcoholic beverages in one sitting (67.6%)
- Never drink more than 3 alcoholic beverages per day (64.6%)
- Never get exposed to second hand smoke at home or work (61.1%)
- Always take a vitamin or supplement daily (58.6%)

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

- Participate in 30 minutes of physical activity each day (14.6%)
- Eat 5 servings of fruit and vegetables a day (8.8%)
- Perform self-exams for cancer (10.8%)
- Get 7-9 hours of sleep each night (21.5%)
- Use sunscreen regularly (22.0%)
- Practice safe sex (ex. Use a condom, get tested) (37.0%)

Risk and Behavioral Factors	Always	Most of the time	Sometimes	Rarely	Never	Not Applicable	Total
Use a seatbelt	507	11	1	1	2	0	522
Wear a helmet while riding a bicycle	85	25	18	16	34	338	516
Wear a helmet while riding a scooter, ATV, or motorcycle	75	3	3	5	8	421	515
Eat 5 or more servings of fruits and vegetables each day	46	178	199	82	17	2	524
Eat fast food more than once a week?	10	33	144	249	78	11	525
Drink more than 5 alcoholic beverages in one sitting?	1	3	20	68	354	78	524
Drink more than three alcoholic beverages per day?	0	1	25	77	338	82	523
Smoke cigarettes, cigars, pipes, or cigarillos?	19	12	9	14	362	109	525
Smoke e-cigarettes?	1	2	2	3	403	111	522
Use smokeless tobacco (chew, snuff, dip)?	0	0	2	0	409	113	524
Get exposed to second hand smoke at home or work?	10	6	28	59	319	100	522
Use marijuana?	7	6	11	9	382	108	523
Misuse prescription opioids or use heroin?	0	0	0	1	420	104	525
Use other illegal drugs?	1	0	0	0	414	102	517
Perform self-exams for cancer?	56	102	154	101	88	19	520
Wash hands after using the bathroom or before making food?	451	70	3	1	0	0	525
Use sunscreen regularly?	115	153	120	66	45	25	524
Get a flu shot every year?	348	45	27	24	70	8	522
Practice safe sex (ex. use a condom, get tested)?	190	22	8	6	23	264	513
Take a vitamin or supplement daily?	306	72	58	30	47	9	522
Get 7-9 hours of sleep each night?	112	177	128	75	28	1	521
Feel stressed out or overwhelmed?	35	81	234	113	41	16	520
Follow road safety rules?	329	160	13	2	0	14	518
Participate in 30 minutes of physical activity each day?	76	151	189	86	14	6	522

Health Issues:

Participants were given a list of 33 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.

Answer Options	Serious Problem	Moderate Problem	Slight Problem	Not a Problem	Not sure/Don't Know	Total
Drug Use	198	115	14	22	147	496
Obesity/Overweight	181	138	41	14	117	491
Affordable housing	177	102	50	29	134	492
Crime	151	171	62	26	86	496
Infectious Diseases (i.e. COVID-19)	150	136	74	26	107	493
Mental health	148	112	46	23	162	491
High Blood Pressure	146	128	27	19	174	494
Homelessness	146	123	54	25	140	488
Affordable health care	143	126	37	22	163	491
Alcohol Use	142	146	24	27	155	494
Diabetes/Sugar	140	127	39	20	167	493
Tobacco Use	138	123	43	23	165	492
Public Transportation	133	97	71	38	151	490
Highway Safety/Traffic Accidents	132	139	70	26	126	493
Cancer	129	116	28	22	198	493
Health Insurance	123	120	52	19	181	495
Heart Disease	114	127	24	19	200	484
Domestic Violence	108	139	33	23	188	491
Dental health	97	129	53	30	177	486
Stroke	93	112	50	17	221	493
Access to health care	91	135	66	48	153	493
Veteran Health	89	89	51	28	232	489
Child Abuse and Neglect	86	117	41	26	225	495
After school programs for kids	79	89	69	36	217	490
Disability Services	76	110	52	26	224	488
Asthma and lung diseases	68	128	41	20	236	493
Suicide	66	96	61	29	242	494
Environmental Health/Air Quality	51	106	99	43	191	490
Injuries	43	103	78	21	236	481
Flu/Pneumonia	42	105	83	35	221	486
Prenatal and Infant health	34	101	61	32	262	490
Traumatic Brain Injuries and Concussions	32	66	61	32	295	486
Sexually transmitted diseases	31	76	47	30	306	490
HIV/AIDS	24	58	56	35	314	487

The top five health issues seen as a problem at any level were: crime, overweight/obesity, infectious disease, highway safety/traffic accidents, and affordable housing.

The top five most seriously viewed health issues were: drug use, overweight/obesity, affordable housing, crime, and infectious disease.

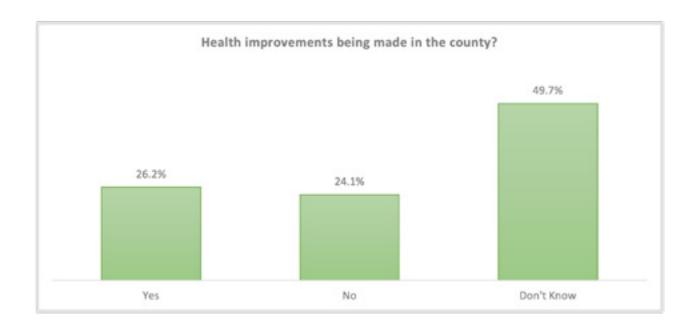
The top five health issues seen as a moderate problem were: crime, alcohol use, highway safety/traffic accidents, domestic violence, and obesity/overweight.

The top five health issues seen as a slight problem were: environmental health/air quality, flu/pneumonia, injuries, infectious diseases, and public transportation.

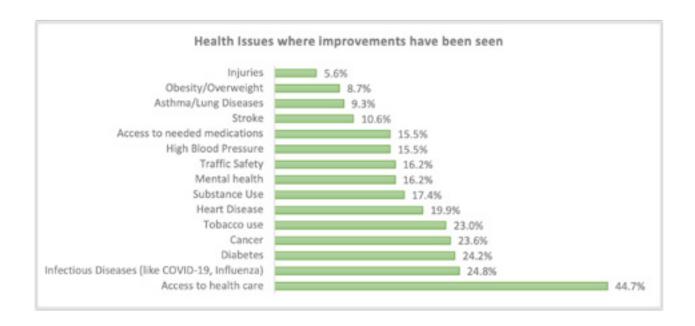
The top five health issues not seen as a problem in Charles County were: Access to health care, environmental Health, public transportation, after school programs for kids, and Flu/Pneumonia.

Health Improvements in Charles County:

Of the survey participants, 26.2% claimed they have seen health improvements in Charles County. This percentage has decreased from the 2018 survey, where one-third (33%) of participants claimed they saw health improvements in Charles County.



The top five health issues where participants have seen improvements include: access to health care, infectious diseases, diabetes, cancer, and tobacco use. 44.7% of the respondents have seen improvements to increase access to health care within the county. This percentage is down from the 58% of participants who saw improvements in access to health care in 2018.



Additional Long Survey Results: Most Serious Health Issues among Various Populations

Long survey data was stratified to determine the most serious health issues reported among different county populations. Only groups with a sample size greater than 50 participants were included to maintain data validity. The groups included in this analysis were: men, women, minorities, households with an income less than \$60,000, individuals with a low education level (high school diploma or less), and individuals with a high education level (some college or greater).

Data was first analyzed by those participants who reported health issues/conditions as a "serious problem." The top five most serious health issues vary among the populations analyzed. Drug use was seen as the most serious health issue among three out of the six population groups. These populations included women, individuals with a low education level, and individuals with a high education level. Affordable housing ranked in the top five serious health issues for five out of the six groups, and ranked number one for minorities.

Obesity was also seen as a top 5 serious health issue among five of the population groups, and was ranked number one among men.

Among the top ranked serious health issues by population, four are health issues related to substance use disorders.

Top 5 Most Serious Health Issues, by Population:	#1	#2	#3	#4	#5
Men	Obesity/Overweight	Tobacco Use	Drug Use	Infectious Diseases (i.e. COVID-19)	High Blood Pressure
Women	Drug Use	Affordable housing	Obesity/Overweight	Crime	Mental health
Minorities	Affordable housing	Homelessness	Health Insurance	Obesity/Overweight	Mental health
Low Income (Household income <\$60,000)	Alcohol Use	Affordable housing	Obesity/Overweight	Drug Use	Affordable health care
Individuals with low education level (High school diploma/GED or less)	Drug Use	Crime	Alcohol Use	Cancer	Affordable housing
Individuals with high education level (Some college, undergraduate degree, postgraduate /professional degree)	Drug Use	Obesity/Overweight	Affordable housing	Infectious Diseases (i.e. COVID-19)	Mental health

Table 1: Top five most serious health issues, by population. The health issues/conditions were ranked by those that had the largest sum of participants who reported these issues as a "serious problem."

Data was also analyzed by those participants who saw a health issue/condition as a problem on any level. This included participants who ranked a health issue as a "serious problem," "moderate problem," or "slight problem."

Crime was seen as the number one health issue among five out of the six population groups. These groups included men, women, minorities, individuals with a low education level, and individuals with a high education level. Crime was ranked second among low-income participants, following affordable housing.

Obesity was ranked second among a majority of the population groups. These population groups included men, women, minorities, and individuals with a high education level. Obesity was ranked third among low-income individuals and individuals with a low education level.

Infectious disease ranked in the top five health issues among men, women, minorities, individuals with a low education level, and individuals with a high education level.

Highway safety/traffic accidents were seen as a top five health issue for four out of the six population groups.

Men, women, minorities, and individuals with a high education level reported the same top three health issues within Charles County. These issues were crime, obesity/overweight, and infectious diseases, respectively.

Women and individuals with a high education level had the same top five health issues ranking. It should be noted that this may be because majority of participants who reported having a high education level were women.

Top 5 Health Issues seen as a problem on any level, by Population:	#1	#2	#3	#4	#5
Men	Crime	Obesity/Overweight	Infectious Diseases (i.e. COVID-19)	Tobacco Use	Alcohol Use
Women	Crime	Obesity/Overweight	Infectious Diseases (i.e. COVID-19)	Highway Safety/ Traffic Accidents	Affordable housing
Minorities	Crime	Obesity/Overweight	Infectious Diseases (i.e. COVID-19)	Affordable housing	Highway Safety/Traffic Accidents
Low Income (Household income <\$60,000)	Affordable housing	Crime	Obesity/Overweight	Affordable health care	Highway Safety/ Traffic Accidents
Individuals with low education level (High school diploma/GED or less)	Crime	Homelessness	Obesity/Overweight	Infectious Diseases (i.e. COVID-19)	Drug Use
Individuals with high education level (Some college, undergraduate degree, postgraduate /professional degree)	Crime	Obesity/Overweight	Infectious Diseases (i.e. COVID-19)	Highway Safety/ Traffic Accidents	Affordable housing

Table 2: Top five health issues seen as a problem on any level, by population. The health issues/conditions were ranked by those that had the largest combined sum of participants who reported these issues as a "serious problem," "moderate problem," or "slight problem."

Short Survey Results:

Introduction:

A short five-question survey was developed to distribute throughout the county for additional qualitative data from July 1, 2020 through January 15, 2021. A total of 755 surveys were completed throughout the community. Short survey data collection was particularly difficult during a pandemic since many of the community events were canceled including the Charles County Fair and Mission of Mercy.

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. Ongoing survey collection was conducted at the Charles County Department of Health; the University of Maryland Charles Regional Medical Center's Diabetes Education Center, Wound Healing Center, and Outpatient Rehabilitation. Short surveys were collected during blood drives at the University of Maryland Charles Regional Medical Center (CRMC) and the La Plata American Legion. CRMC also coordinated with Charles County Public Schools to survey individuals at the meal distribution sites. The meal distribution sites included Indian Head Elementary (Indian Head), J.C. Parks Elementary (Indian Head), Milton Somers Middle School (La Plata), and Mt. Hope/Nanjemoy Elementary School (Nanjemoy). Particular emphasis was given to the western region of the county that is more geographically isolated. The community was also surveyed at large events such as Charles County Community Resource Day, United Way pop-up events, blood drives, the Indian Head Farmer's Market, and other community outreach events.

From August 17-23, 2020, NCR Health was contracted by CRMC to conduct an online version of the short survey. An invitation was sent to recipients who met the criteria established by CRMC. All recipients were given the option to opt out of the survey. A total of 275 surveys were completed online by NCR Health. The results of those short surveys have been combined with the paper short surveys for a total of 755 completed short surveys.

The results of all the surveys combined are presented below.

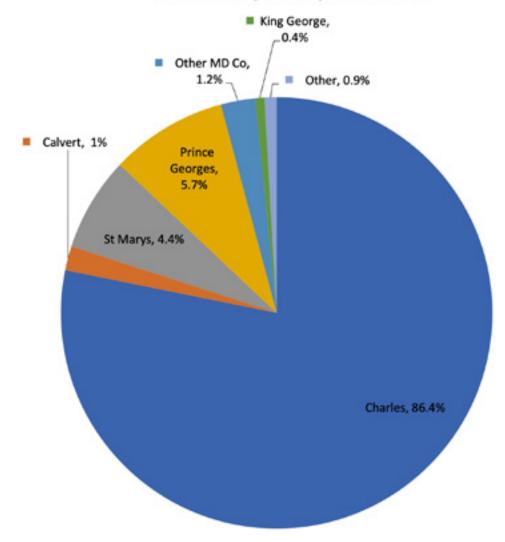
All accumulated surveys:

Question 1: County of residence?

The majority of the short survey respondents were residents of Charles County (86.4%). There were individuals from Calvert, St. Mary's, and Prince George's counties and individuals from King George, Virginia and Washington, D.C. Their answers were included since individuals may work, spend time, or access medical care in Charles County.

County of residence	Count	
Charles County	652	
St. Mary's County	33	
Calvert County	8	
Prince George's County	43	
Other Maryland County	9	
King George County, Virginia	3	
Other	7	

Short Survey: County of residence



Question 2: What do you believe to be the biggest health problems in Charles County today?

Half of the respondents (50.3%) felt that obesity 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 diabetes (47.7%).

Other health conditions that ranked high as major health problems include: alcohol and drug use (46.1%), mental health (44.0%), and high blood pressure/stroke (41.3%).

Issues that participants rarely reported as significant health problems included injuries (6%), asthma (18.4%), and traffic accidents and highway safety (17.7%).

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

Biggest Health Problems:	Response Count	Response Percent
Access to Care/No Health Insurance	189	25%
Alcohol and Drug Use	348	46.1%
Asthma/Lung Diseases	139	18.4%
Cancer	257	34%
Dental Health	146	19.3%
Diabetes	360	47.7%
High Blood Pressure/Stroke	312	41.3%
Heart Disease	263	34.8%
Injuries	45	6%
Mental Health	332	44%
Other	43	5.7%
Overweight/Obesity	380	50.3%
Tobacco/Smoking	231	30.6%
Traffic Accidents/Highway Safety	134	17.7%

Write-ins included sexually transmitted infections, HIV/AIDS, affordable housing, COVID-19, domestic violence, childhood and adolescent trauma, gastrointestinal disorders, MRSA, medical marijuana, racism, access to quality care, seizures, overcrowding, and dialysis.

Question 3: What do you think are the problems that keep you or other Charles County residents from getting the health care they need?

The most commonly cited barriers to needed health care was lack of health insurance (35.4%) and care is too expensive/can't afford it (47.4%). Under "Other," several people explained that there is a shortage of county providers accepting Medicaid, current providers are not accepting new patients, quality of providers is better elsewhere, fear of COVID-19 keeps people from seeking care, lack of dental health coverage, lack of awareness of available services, no Veterans Affairs clinic nearby, long wait times to see providers, people cannot take the time off work for health care services, stigma surrounding mental health treatment, fear from past negative experiences, provider stereotyping and stigmatizing patients with certain health conditions, lack of providers in the western region of the county, and alternative treatments like acupuncture and massage are not covered by insurance providers.

Barriers to getting health care:	Response Count	Response Percent
Couldn't get an appointment with my doctor	145	19.2%
Doctor is too far away from my home	108	14.3%
Local doctors are not on insurance plan	169	22.4%
No health insurance	268	35.4%
No transportation	150	19.9%
Service is not available in my own county	113	15.0%
Too expensive/Can't afford it	358	47.4%
Other	122	16.2%

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

Commonly cited Ideas and recommendations for improving the status of health in Charles County included:

- Access to providers within the county: faster access, recruitment to the county, particularly specialists
- Health insurance: availability and acceptance of all types of insurance, particularly Medicaid, by local physicians
- Lower cost of health services and medications
- Eating healthier
- Exercising more
- Better and increased communication and health education through health fairs, free screenings, information seminars, public service announcements
- Transportation to medical services, assistance for county seniors
- Free and low-cost fitness and recreational opportunities including rec centers and walking paths
- Expansion of community outreach programs, i.e., mobile van

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 weren't many respondents that felt like there are "many services available" for any of the listed health conditions. Access to care in rural Charles County received the greatest number of "many services available" responses, followed by mental health and obesity.

Respondents were given the option of "some services available" in Charles County to address this issue. Mental health received the greatest number of responses for some services available followed by infectious disease, access to food and nutritious meals, dental health, and drug and alcohol use.

High blood pressure received the greatest number of responses in the "no services available" category. This was followed closely by services for diabetes, access to food and nutritious meals, and dental health.

Resource Availability:	Many services available	Some services available	No services available	I don't know	Blank
Heart Disease	6	116	83	157	393
Cancer	9	115	72	158	401
Diabetes	6	129	96	128	396
Asthma	9	118	76	142	410
Smoking/Tobacco Use	10	111	69	148	417
Drugs and Alcohol Use	11	133	79	122	410
Stroke	10	100	72	155	418
High Blood Pressure	8	106	106	128	407
Traffic/Highway Safety	19	96	58	170	412
Overweight/Obesity	22	123	54	144	412
Access to care for children and adults	14	126	90	117	408
Mental Health	29	154	53	117	402
Dental Health	20	136	92	106	401
Access to care in rural Charles County	39	107	49	150	410
Access to needed prescriptions	12	123	88	127	405
Access to food and nutritious meals	16	143	97	104	395
Infectious Diseases/COVID-19	13	141	65	135	401

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 Community Resource Day. The elderly was surveyed at the hospital outpatient clinics and centers. The western and rural region of the county was surveyed at the school meal distribution sites and the farmer's market. 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. Only seven surveys were completed using the Spanish form.

Location of Data Collection:	Count
CRMC Blood Drive	42
United Way Pop-Up Events	140
Charles County Department of Health	19
American Legion La Plata Blood Drive	63
CRMC Diabetes Education Center	6
CRMC Wound Healing Center	9
Indian Head Elementary Meal Distribution Site	9
Indian Head Farmer's Market	34
JC Parks Elementary Meal Distribution Site	40
Milton Somers Middle School Meal Distribution Site	12
Mt Hope/Nanjemoy Elementary Meal Distribution Site	16
CRMC Birthing Center	10
CRMC Outpatient Rehabilitation	16
Community Resource Day	60
NCR Health Online Survey	275
Chronic Disease Self-Management Program	4

Conclusions of Short Survey Analysis:

Over half of the respondents (50.3%) felt that obesity 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 diabetes (47.7%). The most commonly cited barriers to needed health care was lack of health insurance (35.4%) and care is too expensive/can't afford it (47.4%).

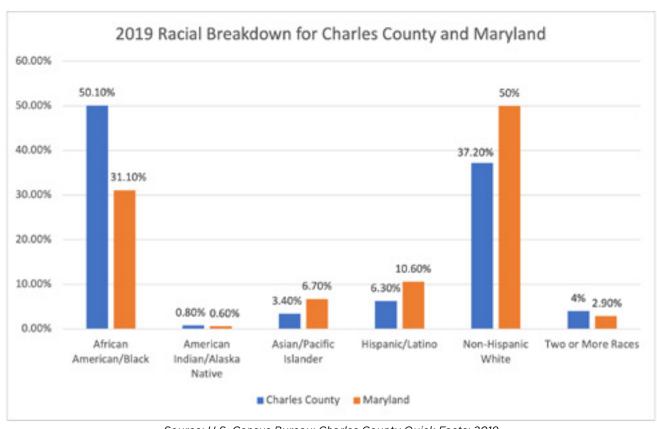
Charles County residents felt that there were no services in the county for diabetes, access to food and nutritious meals, and dental health. Many of the suggestions and ideas presented by survey respondents focused around the availability of low-cost or free health and dental services, more providers in the county, more education and awareness of county resources, and community outreach and education.

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 that are part of the Washington, DC-MD-VA metropolitan area. At 458 square miles, Charles County is the eighth largest of Maryland's 24 counties and accounts for about 5% 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 60% 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 146, 551 in the 2010 census.

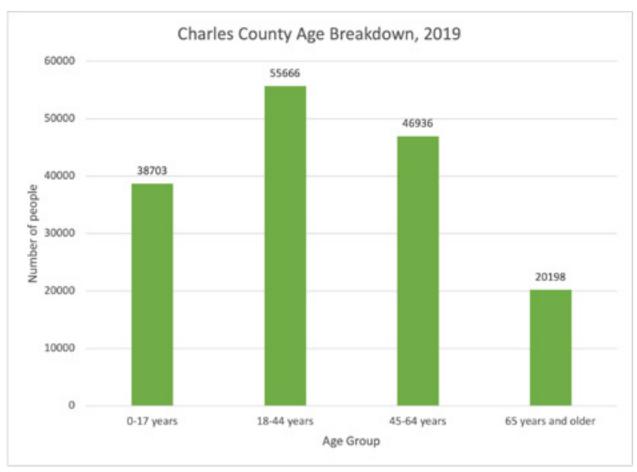
The 2019 Charles County population estimate was 163,257. The magnitude of growth can be seen in the changes in population density. The 2000 census showed that there were 219.4 individuals per square mile; by the 2010 census, this estimate rose to 320.2 individuals per square mile. The percent change in the population growth for Charles County from 2010 to 2019 was greater than the change seen in the Maryland state population growth (11.4% vs. 4.7%).

As the population of the county changes, the diversity of the county also increases. The African American population has experienced the greatest increase. In 2000, African Americans made up 26% of the total Charles County population; by 2019, they comprise 50.1% of the total county population. As of 2019, minorities make up roughly 58.4% of the Charles County population. The Hispanic community has also seen increases over the past few years. They now comprise 6.3% of the total county population. This is one of the highest percentages among the 24 Maryland jurisdictions. Charles County also has one of the largest American Indian/Native American populations in the state of Maryland at 0.8% of the total county population.



The 2019 Charles County gender breakdown is approximately 50/50. Males make up 48.2% of the population, and females make up 51.8% of the county population.

The age breakdown of the Charles County population shows a young population between the ages of 18-44 years (34.5%). The juvenile population (under 17 years) makes up 24.0% of the Charles County population. The 65+ age group has increased from 9% in 2010 to 12.4% in 2018. The age group 45-64 years has also seen increases from 27% in 2013 to 29.1% in 2018.



Source: Maryland Department of Health and Mental Hygiene. 2018 MD Vital Statistics Report.

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 45 minutes which is higher than the Maryland average of 33.2 minutes (Source U.S. Census Bureau's 2015-2019 American Community Survey five-year estimates). Public transportation consists of commuter buses for out-of-county travel and the county-run VanGo bus service for in-county transportation.

Source: 2015-2019 US Census Bureau's American Community Survey 5-year estimates

Economy

Employment and economic indicators for the county are fairly strong. The 2015-2019 U.S. Census American Community Survey estimates that 66.6% of the Charles County population is currently in the labor work force. The 2015-2019 five-year estimate for Charles County found that approximately 6.4% of Charles County individuals are living below the poverty level; however, this is lower than the Maryland rate of 9%. The Charles County median household income was \$100,003, well above the Maryland median household income of \$84,805. The diversity of the county is also represented in the business community with 46% of all Charles County businesses being minority-owned firms. This is higher than the state of Maryland at 38%.

Source: 2015-2019 U.S. Census Bureau's American Community Survey five-year estimates

Education

Charles County has a larger percentage of high school graduates than Maryland (93.2% vs. 90.2%); however, Charles County has a smaller percentage than Maryland of individuals with a bachelor's degree or higher (28.9% vs. 40.2%).

Source: 2015-2019 U.S. Census Bureau's American Community Survey five-year estimates

Housing

There is a high level of home ownership in Charles County (76.9%). There is a greater percentage of home owners in Charles County than the percentage of homeowners for Maryland (76.9% vs. 66.9%). The median value of a housing unit in Charles County is similar to the Maryland average (\$313,300 vs. \$314,800). The average household size in Charles County is 2.78 persons.

Source: 2015-2019 U.S. Census Bureau's American Community Survey five-year estimates

Social, Economic, and Housing Factors:	Charles County	Maryland
Living in same house 1 year ago, pct 1 yr old & over, 2015-2019	89.2%	86.4%
Foreign born persons, percent, 2015-2019	6.3%	15.2%
Language other than English spoken at home, pct age 5+, 2015-2019	8.2%	19.0%
High school graduates, percent of persons age 25+, 2015-2019	93.2%	90.2%
Bachelor's degree or higher, pct of persons age 25+, 2015-2019	28.9%	40.2%
Veterans, 2015-2019	16,132	365,356
Currently in labor force, 16+ years, 2015-2019	66.6%	67.1%
Mean travel time to work (minutes), workers age 16+, 2015-2019	45.0	33.2
Housing units, 2019	61,838	2,470,316
Homeownership rate, 2015-2019	76.9%	66.9%
Median gross rent, 2015-2019	\$1682	\$1392
Median value of owner-occupied housing units, 2015-2019	\$313,300	\$314,800
Households, 2015-2019	56,520	2,205,204
Persons per household, 2015-2019	2.78	2.67
Per capita money income in past 12 months (2019 dollars) 2015-2019	\$41,717	\$42,122
Median household income, 2015-2019	\$100,003	\$84,805
Persons below poverty level, percent, 2015-2019	6.4%	9.0%

Life Expectancy

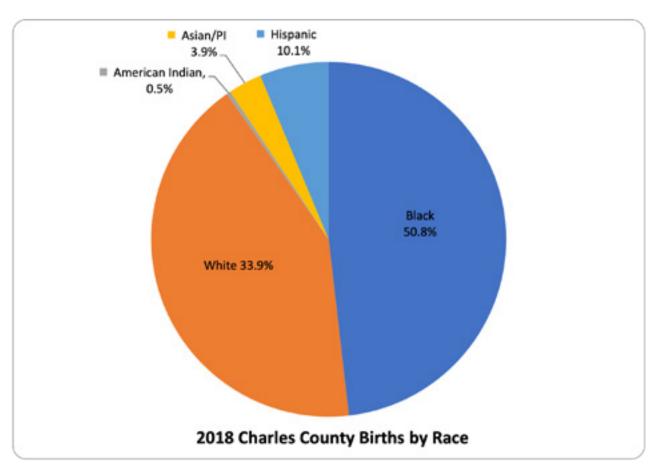
The life expectancy for a Charles County resident, as calculated for 2018, was 78.5 years. This is slightly below the state average life expectancy of 79.2 years.

Source: 2018 Maryland Vital Statistics Report

Births

There were 1,867 births in Charles County in 2018. Charles County represents 46% of the births in Southern Maryland and 2.6% of the total births in Maryland for 2018. Minorities made up over half of the babies born in Charles County in 2018 (66%).

Source: 2018 Maryland Vital Statistics Report



Source: 2018 Maryland Vital Statistics Report

In Charles County, birth rates were highest among the Hispanic population at 19.4 per 1,000 county population, compared to 11.9 for Blacks and 9.8 for Whites.

For all Charles County births and for Charles County non-Hispanic White, non-Hispanic Black, and Hispanic births, the most common age group for the mother was between 25-29 years. In 2018, there were no mothers less than 15 years and one mother greater than 49 years.

The birth rate for Charles County mothers aged 25-29 was 106.5. This is higher than the general fertility rate of 58.1 total births per 1,000 Charles County women aged 15-44 years. It is also higher than any other age group in Charles County.

2018 Births: Age of Mother	Total	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50+	Not Stated
Charles County Total	1867	0	16	59	308	563	561	283	75	1	1	0
White	799	0	8	25	121	244	270	104	26	1	0	0
Black	971	0	8	34	176	291	254	163	44	0	1	0
Hispanic	189	0	7	9	23	66	45	32	7	1	0	0

2018 Birth Rates per 1,000 births	Overall	Under 15	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49
Charles County All races	58.1	••	14.0	4.6	31.1	63.1	106.5	103.5	50.7	13.5	••

^{**}Rates based on less than 5 events are not calculated because rate instability.

Over one-third of the babies born in Charles County in 2018 were the first birth order (37.2%). Only a small percentage was the fifth or greater (4.2%).

Birth Order	1st	2nd	3rd	4th	5 or more	Not stated	Total
Charles County	695 (37.2%)	608 (32.6%)	336 (18.0%)	150 (8.0%)	78 (4.2%)	0	1867

Of all live births in 2018, 43.5% were to unmarried mothers. Of the unmarried mothers, 64.5% were African American.

Unmarried Mothers	All races	White	Black	American Indian	Asian/PI	Hispanic
Charles County	814 (43.5% of all live births)	190 (23.3%)	525 (64.5%)	6 (0.7%)	6 (0.7%)	84 (10.3%)

The percentage of women in Charles County receiving first trimester prenatal care was 62.2%, which was below the Maryland state average percentage of 66.7%. Charles County percentages for Whites, American Indians, Asians/Pacific Islanders, and Hispanics were below the Maryland state average percentages. Charles County percentage for Black/African American was similar to the Maryland state average percentages (60.4% vs. 60.8%). The largest disparity was seen in the American Indian population (60.0% for Charles County and 69.8% for Maryland).

In Charles County, Hispanic mothers received the least amount of first trimester prenatal care (45.5%). The highest percentages of women receiving first trimester prenatal care were seen in the White population (68.0%) and Asian/Pacific Islander population (68.9%).

Receiving 1 st Trimester Prenatal Care	All races	White	Black	American Indian	Asian/PI	Hispanic
Charles County	1161 (62.2%)	431 (68.0%)	577 (60.8%)	6 (60.0%)	51 (68.9%)	86 (45.5%)
Maryland	47,378 (66.7%)	23,312 (77%)	13,709 (60.4%)	88 (69.8%)	3632 (70.5%)	6455 (51.8%)

In Charles County, American Indians reported the largest percentage of late or no prenatal care (20%). This may be due to the small case counts on a county level. Small changes can impact the percentage. Charles County in general had a higher percentage of mothers with late or no prenatal care than Maryland mothers overall and for most races.

Receiving late or no Prenatal Care	All races	White	Black	American Indian	Asian/PI	Hispanic
Charles County	166 (8.9%)	49 (7.7%)	93 (9.8%)	2 (20%)	4 (5.4%)	18 (9.5%)
Maryland	4905 (6.9%)	1301 (4.3%)	2086 (9.2%)	12 (9.5%)	282 (5.5%)	1189 (9.5%)

Low birth weight means that a baby is born weighing less than 2500 grams. Of the births in Charles County, 10% were low birth weight in 2018. The highest percentage of low-birth-weight babies was among Charles County Blacks at 13.6%.

Low Birth	All races	White	Black	American	Asian/PI	Hispanic
Weight	9			Indian		
Charles County	187 (10.0%)	40 (6.3%)	129 (13.6%)	0	4 (5.4%)	10 (5.3%)
Maryland	6292 (8.9%)	2502 (8.3%)	2848 (12.5%)	15 (11.9%)	478 (9.3%)	864 (6.9%)

Very low birth weight is defined as a baby weighing less than 1,500 grams at birth. For Charles County, the largest percentage of very low birth weight babies is among the Black population (2.7%). This is also true for Maryland Blacks.

Very Low Birth Weight	All races	White	Black	American Indian	Asian/PI	Hispanic
Charles County	37 (2.0%)	9 (1.4%)	26 (2.7%)	0	1 (1.4%)	1 (0.5%)
Maryland	1205 (1.7%)	327 (1.1%)	650 (2.9%)	2 (1.6%)	74 (1.4%)	148 (1.2%)

The percentage of births leading to cesarean section in Charles County in 2018 was 33.3%. The largest percentage was seen among Charles County American Indians with 60% of babies delivered by c-section. All Charles County percentages, overall and by race, are lower than state percentages, except Charles County American Indian. This may be due to the small case counts for this small population.

Cesarean	All races	White	Black	American	Asian/PI	Hispanic
Section Delivery	3			Indian		
Charles County	622 (33.3%)	179 (28.2%)	364 (38.4%)	6 (60%)	22 (29.7%)	48 (25.4%)
Maryland	24043 (33.8%)	9685 (32%)	8887 (39.1%)	46 (36.5%)	1789 (34.7%)	3537 (28.4%)

In 2018, 1,549 out of 1,867 Charles County babies were born in the state of Maryland (83.0%). However, only 694 of those babies were born in Charles County (37.2%). This is much lower than the percentage for other surrounding jurisdictions. Half (50%) of Calvert County babies were born in Calvert County, and 73.2% of St. Mary's County babies are born in St. Mary's County. Over half of Charles County babies (1,173 or 62.8%) were born in another Maryland county.

Place of Birth	All Births	State Total	MD Co. same as residence	MD Co other than residence	DC	Other State
Charles County	1867	1549	694	855	124	194

Demographic Data by Charles County ZIP code:

There is much variation in demographic structure among the Charles County ZIP codes. The larger ZIP codes located in the eastern and northern regions of the county display wide diversity in race and ethnicity. The smaller ZIP codes, particularly those in the southern and western regions, are less diverse, less populated, and comprised mostly of individuals identifying as White alone.

The ZIP codes with the largest percentages of White alone were 20625 (Cobb Island) at 90% and 20645 (Issue) at 87.8%. Both ZIP codes are small and geographically isolated at the southern tip of Charles County.

The ZIP codes with the largest percentages of Black or African American alone were 20603 (Waldorf) at 57.1% and 20607 (Accokeek) at 66%. Accokeek and the Waldorf ZIP code of 20601 were the ZIP codes with the highest percentages of "Some Other Race" at 1.7 and 1.5%. All three ZIP codes are large and located in the northern, populated region of the county that borders Prince George's County.

The ZIP codes with the largest percentages of American Indian/Alaskan Native alone were 20693 (Welcome) at 8.3% and 20675 (Pomfret) at 3.5%. Both ZIP codes are small, rural, and located centrally within Charles County.

The ZIP codes with the largest percentages of individuals with 2 or more races were 20612 (Benedict) at 17.8% and 20617 (Bryantown) at 12.4%. Both ZIP codes are small and located in the eastern region of the county.

The ZIP codes with the largest Hispanic percentages were 20632 (Faulkner) at 10.8% and 20616 (Bryans Road) at 9.1%. These ZIP codes are located in very different regions of the county. Faulkner is in the southern region, whereas, Bryans Road is in the northern region.

ZIP code Racial Composition	Total Pop.	White Alone	Black Alone	American Indian/Alaskan Native Alone	Asian/ Pacific Islander	Some Other Race	2 or more races	Hispanic
20601, Waldorf	25938	39.6%	49.7%	0.2%	3.5%	1.7%	5.4%	7.1%
20602, Waldorf	26345	29.4%	54.4%	1.0%	3.7%	0.1%	4.8%	6.7%
20603, Waldorf	30949	27.3%	57.1%	0.4%	4.8%	0.1%	4.5%	5.8%
20607, Accokeek	10744	16.0%	66.0%	0.8%	7.7%	1.3%	5.2%	3.1%
20611, Bel Alton	1499	71.6%	19.4%	1.0%	0.9%	0%	4.5%	2.5%
20612, Benedict	422	82.2%	0%	0%	0%	0%	17.8%	0%
20613, Brandywine	14116	25.9%	59.8%	1.5%	1.7%	0.2%	3.1%	7.7%
20616, Bryans Road	6221	25.4%	53.4%	0.5%	4.5%	0.5%	6.6%	9.1%
20617, Bryantown	748	81%	6.6%	0%	0%	0%	12.4%	0%
20622, Charlotte Hall	6309	72.5%	17.6%	0.8%	1.2%	0.1%	4.8%	3.0%
20625, Cobb Island	657	90%	8.4%	0%	1.7%	0%	0%	0%
20632, Faulkner	381	86.9%	0%	0%	0%	0%	2.4%	10.8%
20637, Hughesville	5207	71.2%	15.8%	0%	2.7%	0.4%	5.2%	4.7%
20640, Indian Head	10611	41.3%	44.2%	0.7%	3.0%	0%	6.0%	4.8%
20645, Issue	920	87.8%	8.6%	0%	0%	0%	3.6%	0%
20646, La Plata	20351	69.7%	20.0%	0.5%	3.1%	0%	3.6%	3.0%
20658, Marbury	965	54.4%	21.6%	1.9%	2.5%	0%	10.9%	8.8%
20659, Mechanicsville	23484	84.9%	9.6%	0%	1.1%	0%	1.8%	2.5%
20662, Nanjemoy	2895	57.7%	31.6%	0.3%	0%	0%	10.4%	0%
20664, Newburg	3489	73.5%	20.3%	0.6%	2.1%	0%	1.3%	2.1%
20675, Pomfret	1924	70.5%	15.5%	3.5%	1.4%	0%	6.9%	2.2%
20677, Port Tobacco	2544	75.5%	22.6%	0%	0%	0%	1.9%	0%
20693, Welcome	1006	75.1%	6.9%	8.3%	0%	0%	8.8%	0.9%
20695, White Plains	7860	37.4%	53.6%	0%	1.8%	0%	2.1%	5.1%

Age data by ZIP code:

In 2017, the median age in Charles County was 38.1 years. When comparing by ZIP code, the median age is the highest in the southeastern region of the county in the small, rural ZIP codes of 20612 (Benedict) at 65.9 years and 20617 (Bryantown) at 50.2 years. The median age is lowest in the more populated ZIP codes of Waldorf (20601 and 20602) and in Indian Head (20640) and Newburg (20664) which are located in the western region of the county. This may be due to the influx of young professionals living in the suburban areas of Waldorf and Indian Head and commuting each day into Washington, D.C., and Northern Virginia.

The ZIP codes with the largest Hispanic percentages were 20632 (Faulkner) at 10.8% and 20616 (Bryans Road) at 9.1%. These ZIP codes are located in very different regions of the county. Faulkner is in the southern region, whereas, Bryans Road is in the northern region.

2013-2017 Avg Median Age by ZIP code	Median Age (in years)
20601, Waldorf	37.3
20602, Waldorf	35.2
20603, Waldorf	35.7
20607, Accokeek	43.3
20611, Bel Alton	39.3
20612, Benedict	65.9
20613, Brandywine	42.7
20616, Bryans Road	35.9
20617, Bryantown	50.2
20622, Charlotte Hall	36.8
20625, Cobb Island	45.6
20632, Faulkner	41.1
20637, Hughesville	44.8
20640, Indian Head	34.7
20645, Issue	43.1
20646, La Plata	41.7
20658, Marbury	38.3
20659, Mechanicsville	40.1
20662, Nanjemoy	44.5
20664, Newburg	35.0
20675, Pomfret	47.3
20677, Port Tobacco	43.3
20693, Welcome	45.7
20695, White Plains	43.4
	•

Geographic and Demographic Profile References:

- 1. 2019 Charles County Current Population Survey Data. United States Census Bureau. Available at: https://www.census.gov/quickfacts/fact/table/US/PST045219.
- 2. 2018 Maryland Vital Statistics Report. Charles County Demographic and Population Data. Maryland Department of Health. Available at https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/REV_2018annual.pdf.
- 3. 2015-2019 U.S. Census Bureau, American Community Survey five-year estimates, Charles County and Maryland. Available at https://www.census.gov/quickfacts/fact/table/US/PST045219.
- 4. Charles County Demographic and Population Data, County and ZIP code Level. 2013-2017 average and 2017 American Community Survey. United States Census Bureau. American FactFinder. Available at www.census.gov.

Qualitative Data Specific to the Geographic and Demographic Profile:

The focus group discussed the commuter population in Charles County. Due to its proximity to Washington, D.C., and Baltimore, many individuals who live in the county have long daily commutes for work. Participants expressed the need to get those commuting individuals involved in the community and make them aware of the health services that are available. They were concerned regarding their health status since many of them are sitting all day long. They are tired when they get home and are tempted to use fast food to feed their families. Programs on healthy eating options may be needed to educate this working population. It is also important to have a centralized location for health education resources where all citizens can go for information.

Charles County Vital Statistics Profile:

Marriage and Divorce:

A total of 822 marriage ceremonies were conducted in Charles County in 2018. Most of those marriages were Maryland residents (767).

Marriage	Total Marriages	Maryland Residents*	Non-MD Residents	% to non-MD residents
Charles County	822	767 (93.3%)	55	6.7%

^{*}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 2018, there were 59 divorces in Charles County. When examining the numbers of years of marriage at the time of their divorce, the most common response was 10-14 years.

Divorce and years of marriage at time of divorce	Total Divorces	<2 years	2-3 years	4-5 years			10-14 years	15-19 years			Not stated
Charles County	59	1	7	4	3	4	14	12	6	8	0

Mortality:

Death Rates:

There were a total of 1,150 deaths in Charles County in 2018.

The 2016-2018 Charles County all-cause mortality rate was 745.7 per 100,000 population. This rate is higher than the Maryland state all-cause mortality rate of 717.5 per 100,000 population.

The number one cause of death for the time period 2018 and for the time period 2016-2018 was heart disease. The 2016-2018 Charles County heart disease death rate was 166.7 per 100,000. This is also higher than the Maryland state rate of 163.8 per 100,000.

Charles County had higher 2016-2018 mortality rates than Maryland for cancer, accidents, chronic lower respiratory disease, and diabetes mellitus.

2016-2018 Ten Leading Causes of Death by Count and Rate, Charles County and Maryland

Cause of Death	Charles County Number, 2018	Charles County Rate, 2016-2018*	Maryland Number, 2018	Maryland Rate 2016-2018*
All Causes	1150	745.7	50668	717.5
Diseases of the Heart	256	166.7	11697	163.8
Cancer	288	165.4	10936	152.6
Chronic Lower Respiratory Disease	53	32.4	2235	30.5
Accidents	50	38.8	2320	36.0
Diabetes Mellitus	47	26.3	1421	19.8
Cerebrovascular Diseases	45	31.2	2884	40.1
Alzheimer's Disease	23	***	1126	16.8
Influenza and Pneumonia	21	***	974	14.3
Intentional Self-Harm (Suicide)	18	***	652	9.8
Essential Hypertension and Hypertensive Renal Disease	16	***	622	

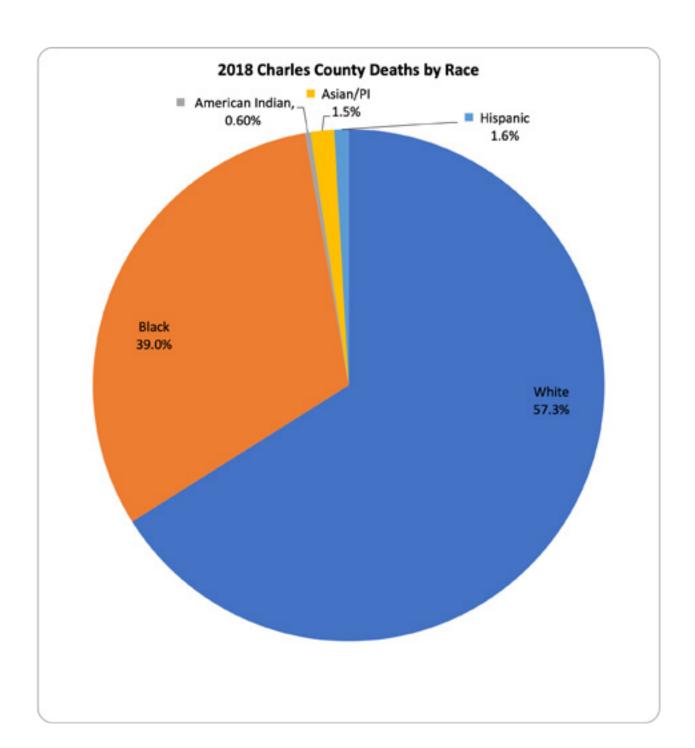
^{*}Per 100,000 population

All Cause Deaths by Race:

Whites make up 57.2% of the deaths in Charles County. African Americans make up the second highest at 38.9% 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.

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



When comparing by 2018 calculated crude death rates, the rate is much higher in the White population. The 2018 Charles County White death rate was 1,022.2 per 100,000. This is much higher than the Charles County total 2018 crude death rate of 712.1 per 100,000 and higher than the death rates for Blacks (560.0), for Asians and Pacific Islanders (276.1), American Indian (575.7), and for Hispanics (184.5).

2018 Crude Death Rates:	All Races	White	Black	American Indian	Asian/PI	Hispanic
Charles County	712.1	1022.2	560.0	575.7	276.1	184.5

All Cause Deaths by Age:

The number of reported deaths increased with age. The greatest number of deaths was seen in the 75-84 years age group. This age group accounted for one-quarter of the total county deaths for 2018.

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+
Charles County	1150	10	3	2	16	40	33	90	156	237	290	272

In 2018, 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
Charles County	23	10	3	0	2	4	3	1

Adolescent Violent Deaths:

There were four violent deaths to adolescents in Charles County in 2018. There were two accidents, and one suicide, and one assault.

Deaths from Selected Causes:

The number of deaths in Charles County for selected causes is presented on the next page.

All Causes of Death	1150
Tuberculosis	0
Septicemia	13
HIV Disease	1
Total Malignant Neoplasms	288
Malignant Neoplasms of Stomach	2
Malignant Neoplasms of Rectum, Colon, and Anus	24
Malignant Neoplasms of Pancreas	22
Malignant Neoplasms of Trachea, Bronchus, and Lung	50
Malignant Neoplasms of Breast	29
Malignant Neoplasms of Cervix, Uteri, Corpus Uteri, and Ovary	21
Malignant Neoplasms of Prostate	15
Malignant Neoplasms of Urinary Tract	14
Non-Hodgkin's Lymphoma	8
Leukemia	6
Other Malignant Neoplasms	97
Diabetes Mellitus	47
Alzheimer's Disease	23
Total Major Cardiovascular Diseases	332
Total Diseases of the Heart	256
Hypertensive Heart Disease	41
Ischemic Heart Disease	126
Other Diseases of the Heart	89
Essential Hypertension and Hypertensive Renal Disease	16
Cerebrovascular Diseases	45
Atherosclerosis	12
Other Diseases of the Circulatory System	3
Influenza and Pneumonia	21
Chronic Lower Respiratory Diseases	53
Peptic Ulcer	0
Chronic Liver Disease and Cirrhosis	13
Nephritis, Nephrotic Syndrome and Nephrosis	15
Pregnancy, Childbirth, and the Puerperium	0
Certain Conditions Originating in the Perinatal Period	6
Congenital Abnormalities	5
Sudden Infant Death Syndrome	1
Symptoms, Signs, and Abnormal Clinical and lab findings	2
All other Disease (residual)	219
Total Accidents	50
Motor Vehicle Accidents	19
All Other Accidents	31
Intentional Self Harm (Suicide)	18
Assault (Homicide)	15
All Other External Causes	28

Place of Death:

Of Charles County deaths, 20.9% occurred in a hospital, 11.8% occurred within a nursing home, and 10.78% were in a hospice facility. The other county deaths occurred outside of an institution such as a home.

Deaths in	Number of Deaths	Number of Deaths	Number of Deaths	Number of Deaths
Hospitals	Occurring in	Occurring in Hospitals:	Occurring in Hospitals:	Occurring in Hospitals:
1	Hospitals: All Races	White	Black	Hispanic
Charles County	241	128	109	1

Deaths in	Number of Deaths	Number of Deaths	Number of Deaths	Number of Deaths
Nursing Homes	Occurring in Nursing	Occurring in Nursing	Occurring in Nursing	Occurring in Nursing
	Homes: All Races	Homes: White	Homes: Black	Homes: Hispanic
Charles County	136	71	60	2

Deaths in	Number of Deaths	Number of Deaths	Number of Deaths	Number of Deaths
Hospices	Occurring in	Occurring in Hospices:	Occurring in Hospices:	Occurring in Hospices:
	Hospices: All Races	White	Black	Hispanic
Charles County	124	76	42	2

Out of the 1,150 deaths to Charles County residents in 2018, 980 of those deaths occurred in Maryland (85%). In addition, 785 (68%) of the Charles County deaths occurred within Charles County.

Deaths in	Percent of All Deaths			
Institutions	Occurring in Hospitals,	Occurring in Hospitals,	Occurring in Hospitals,	Occurring in Hospitals,
	Hospice, and Nursing	hospice, and Nursing	hospice, and Nursing	Hospice, and Nursing
6	Homes: All Races	Homes: White	Homes: Black	Homes: Hispanic
Charles County	43.5%	23.9%	18.3%	0.4%

Place of Death	All Deaths	Deaths within Maryland	Deaths within Charles County	Deaths within another Maryland county	Deaths with DC	Deaths in other states or countries
Charles County	1150	980	785	195	108	62

Infant Mortality:

In 2018, the 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.

2018 Data	Charles County Number	Charles County Rate	Maryland Number	Maryland Rate
Infant Mortality Rate (per 1000 live births)	10	5.4	432	6.1
Neonatal Mortality Rates (per 1,000 births)	7	3.7	296	4.2
Post neonatal Mortality Rates (per 1,000 births)	3	***	136	1.9
Fetal death rates (per 1,000 total deliveries: live births and fetal deaths)	6	3.2	503	7.0
Perinatal Mortality Rates (per 1,000 fetal deaths)	9	4.8	445	6.2

^{***}Rates based on less than five events are not presented since such rates are not stable.

2018 Charles County Infant and Fetal Death Rates and Counts	Total	White	Black
Infant Mortality	10 (5.4)	2	8 (8.4)
Neonatal Mortality	7 (3.7)	1	6 (6.3)
Post neonatal Mortality	3	1	2
Fetal Mortality	6 (3.2)	1	4
Perinatal Mortality	9 (4.8)	1	7 (7.2)

Mortality Rates per 1,000 live births are presented in parentheses when available. Rates could not be calculated for cells with fewer than five deaths.

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.

Vital Statistics References:

1. 2018 Charles County Marriage, Divorce, Mortality and Infant Mortality Statistics. 2018 Maryland Vital Statistics Report. Maryland Department of Health and Mental Hygiene. Available at https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/REV_2018annual.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 to 15 percent 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 each Charles County ZIP code using the American Factfinder tool from the United States Census Bureau. Data is based on five-year average estimates from 2013-2017 American Community Surveys. Data is aggregated for a five-year period in order to increase the sample size and the validity of the statistics.

<u>Disability:</u>

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.

Some ZIP codes in Charles County are disproportionately affected by disabilities and may need additional individual and community supports in order to achieve health equity. The highest percentage of people with disabilities is 41.7% and is found in the ZIP code 20612 (Benedict). This is a very small, rural ZIP code that also has the highest median age of 65.9 years. This is not surprising since the prevalence of disabilities increases with age.

The lowest prevalence of disabilities was 4.8% in 20617, Bryantown, followed by 5.9% in the Waldorf ZIP code of 20603. This population has a much lower median age.

2013 - 2017 Percent of Population	% of Total ZIP code
who are disabled	Population who are disabled
20601, Waldorf	8.3%
20602, Waldorf	10.0%
20603, Waldorf	5.9%
20607, Accokeek	8.0%
20611, Bel Alton	12.9%
20612, Benedict	41.7%
20613, Brandywine	11.4%
20616, Bryans Road	6.5%
20617, Bryantown	4.8%
20622, Charlotte Hall	8.5%
20625, Cobb Island	6.2%
20632, Faulkner	17.1%
20637, Hughesville	7.9%
20640, Indian Head	9.1%
20645, Issue	9.6%
20646, La Plata	9.2%
20658, Marbury	11.4%
20659, Mechanicsville	10.9%
20662, Nanjemoy	10.5%
20664, Newburg	10.3%
20675, Pomfret	15.3%
20677, Port Tobacco	10.1%
20693, Welcome	9.0%
20695, White Plains	12.0%

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:

The highest percentages of individuals reporting that they speak a language other than English at home were in 20622, Charlotte Hall, and 20658, Marbury. Charlotte Hall is a large, rural ZIP code that straddles Charles and St. Mary's counties. This ZIP code is known for its large Amish community, who often speak the Pennsylvania German language. The other ZIP code, 20658, Marbury, is a very diverse, small, rural community on the western side of the county. This ZIP code has a large Hispanic population who comprise 8.8% of the total ZIP code population.

Conversely, those ZIP codes with no individuals reporting a language other than English being spoken at home are small, rural ZIP codes that are primarily composed of older Caucasians. These include 20612, Benedict, and 20617, Bryantown.

2013 - 2017 Language	% of Total ZIP code Population reporting a
Other than English	language other than English spoken at home
20601, Waldorf	8.7%
20602, Waldorf	9.1%
20603, Waldorf	9.6%
20607, Accokeek	9.6%
20611, Bel Alton	1.8%
20612, Benedict	0%
20613, Brandywine	8.1%
20616, Bryans Road	8.5%
20617, Bryantown	0%
20622, Charlotte Hall	10.3%
20625, Cobb Island	7.9%
20632, Faulkner	2.5%
20637, Hughesville	5.4%
20640, Indian Head	5.7%
20645, Issue	4.5%
20646, La Plata	7.9%
20658, Marbury	10.4%
20659, Mechanicsville	5.1%
20662, Nanjemoy	1.4%
20664, Newburg	4.0%
20675, Pomfret	5.3%
20677, Port Tobacco	3.1%
20693, Welcome	2.8%
20695, White Plains	4.9%

Foreign born:

It is not surprising that the largest prevalence of foreign born individuals reside in the northern part of the county in the Waldorf ZIP code of 20601 and in Accokeek, 20607. These ZIP codes are more diverse in race and ethnicity and are located closer to the District and Prince George's County.

Conversely, those ZIP codes with low foreign-born populations are small, rural ZIP codes that are primarily composed of older Caucasians. These include 20612, Benedict, 20645, Issue, and 20617, Bryantown.

2013-2017 Percent Foreign Born	% of Total ZIP code Population who are Foreign Born
20601, Waldorf	10.2%
20602, Waldorf	7.2%
20603, Waldorf	7.5%
20607, Accokeek	10.6%
20611, Bel Alton	0.9%
20612, Benedict	0%
20613, Brandywine	6.2%
20616, Bryans Road	5.5%
20617, Bryantown	0%
20622, Charlotte Hall	1.9%
20625, Cobb Island	7.6%
20632, Faulkner	0%
20637, Hughesville	6.2%
20640, Indian Head	5.1%
20645, Issue	0%
20646, La Plata	5.3%
20658, Marbury	2.5%
20659, Mechanicsville	2.5%
20662, Nanjemoy	0.8%
20664, Newburg	3.0%
20675, Pomfret	5.6%
20677, Port Tobacco	3.2%
20693, Welcome	3.8%
20695, White Plains	4.8%

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.

Number of housing units available:

There are 76,304 housing units in Charles County. Just under half (41%) of those units are available in the Waldorf ZIP codes of 20601, 20602, and 20603.

There are also many small ZIP codes with low numbers of housing units such as 20632, Faulkner, with 125 housing units, 20612, Benedict, with 233 housing units, and 20632, Bryantown, with 306 housing units.

2013-2017 Housing Units	Number of housing units available
20601, Waldorf	9314
20602, Waldorf	10595
20603, Waldorf	11417
20607, Accokeek	3778
20611, Bel Alton	513
20612, Benedict	233
20613, Brandywine	5193
20616, Bryans Road	2328
20617, Bryantown	306
20622, Charlotte Hall	1742
20625, Cobb Island	447
20632, Faulkner	125
20637, Hughesville	1783
20640, Indian Head	4241
20645, Issue	392
20646, La Plata	7356
20658, Marbury	384
20659, Mechanicsville	8366
20662, Nanjemoy	1202
20664, Newburg	1562
20675, Pomfret	782
20677, Port Tobacco	895
20693, Welcome	418
20695, White Plains	2932

Household size:

The average household size in Charles County is 2.79 persons. The ZIP codes with the largest household sizes include 3.24 in Charlotte Hall, 3.11 in Bel Alton, and 3.10 in Port Tobacco. The ZIP codes with the smallest household sizes include 1.94 in Benedict and 2.44 in Bryantown. These are small ZIP codes with an older population. It is expected that they will have smaller households.

2013-2017 Average Household Size	Average Household Size (# of persons)
20601, Waldorf	2.93
20602, Waldorf	2.63
20603, Waldorf	2.83
20607, Accokeek	2.89
20611, Bel Alton	3.11
20612, Benedict	1.94
20613, Brandywine	3.01
20616, Bryans Road	2.85
20617, Bryantown	2.44
20622, Charlotte Hall	3.24
20625, Cobb Island	2.5
20632, Faulkner	3.05
20637, Hughesville	2.96
20640, Indian Head	2.72
20645, Issue	2.91
20646, La Plata	2.77
20658, Marbury	2.71
20659, Mechanicsville	3.05
20662, Nanjemoy	2.74
20664, Newburg	2.69
20675, Pomfret	2.53
20677, Port Tobacco	3.10
20693, Welcome	2.73
20695, White Plains	2.97

Home value:

The median home value in Charles County is \$294,000. There is much variation in median home values by ZIP code from \$220,700 in Indian Head to \$392,700 in Port Tobacco.

Charles County ZIP codes by Median Home Value Categories:

\$200,000-\$250,000: 20602, 20640

\$250,000-\$300,000: 20601, 20612, 20616, 20632, 20658, 20659, 20664

\$300,000-\$350,000: 20603, 20611, 20613, 20622, 20625, 20662, 20675, 20695

\$350,000-\$400,000: 20607, 20617, 20637, 20645, 20646, 20677, 20693

2013-2017 Median Home Value	Median Home Value (in dollars)
20601, Waldorf	\$275,500
20602, Waldorf	\$236,900
20603, Waldorf	\$303,800
20607, Accokeek	\$368,500
20611, Bel Alton	\$347,000
20612, Benedict	\$294,800
20613, Brandywine	\$349,800
20616, Bryans Road	\$263,100
20617, Bryantown	\$384,500
20622, Charlotte Hall	\$330,700
20625, Cobb Island	\$301,500
20632, Faulkner	\$268,500
20637, Hughesville	\$386,400
20640, Indian Head	\$220,700
20645, Issue	\$356,100
20646, La Plata	\$354,200
20658, Marbury	\$252,900
20659, Mechanicsville	\$296,700
20662, Nanjemoy	\$310,900
20664, Newburg	\$285,200
20675, Pomfret	\$317,600
20677, Port Tobacco	\$392,700
20693, Welcome	\$367,200
20695, White Plains	\$321,200

Home without indoor plumbing, phones, or kitchen facilities:

While the overwhelming majority of homes in Charles County have indoor plumbing, kitchen facilities, and phones, there are pockets where people live in homes without these facilities. For example, the ZIP code 20622, Charlotte Hall, has the highest percentage of homes without indoor plumbing (5.5%) and the highest percentage of homes without a phone (8.8%). It can be hypothesized that the Amish population living in that ZIP code accounts for the high percentage of homes without these modern conveniences.

The ZIP code, 20662, Nanjemoy, also had a high percentage of homes without phones (5.2%) and a high percentage of homes without kitchen facilities (1.4%).

2013-2017 5 Year Estimates, Census	Homes Without Indoor Plumbing	Homes Without Kitchen Facilities	Phone Without
20601, Waldorf	1.0%	0.2%	0.8%
20602, Waldorf	0.2%	1.5%	1.8%
20603, Waldorf	0%	0%	1.0%
20607, Accokeek	0.1%	0.3%	0.5%
20611, Belt Alton	0%	0%	0%
20612, Benedict	0%	0%	0%
20613, Brandywine	1.2%	1.0%	4.4%
20616, Bryans Road	0%	0%	2.0%
20617, Bryantown	0%	0%	0%
20622, Charlotte Hall	5.5%	0%	8.8%
20625, Cobb Island	0%	0%	0%
20632, Faulkner	0%	0%	0%
20637, Hughesville	0%	0%	0.4%
20640, Indian Head	0.1%	0.1%	1.2%
20645, Issue	0%	0%	0%
20646, La Plata	0%	0.4%	0.8%
20658, Marbury	0%	0%	0%
20659, Mechanicsville	0.7%	0.3%	3.0%
20662, Nanjemoy	0.9%	1.4%	5.2%
20664, Newburg	0%	0%	3.4%
20675, Pomfret	0%	0%	0%
20677, Port Tobacco	0%	0%	0%
20693, Welcome	0%	0%	0%
20695, White Plains	0%	0%	0.6%

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% and poorest 1% 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% of income distribution gaining about three years of life expectancy, while those in the bottom 5% gained virtually no additional years of life.

Median Income:

Employment and economic indicators for the county are fairly strong. The median household income in Charles County is \$93,973. However, there is significant variation when examining this data by ZIP code. The median household incomes among Charles County ZIP codes ranges from \$45,776 in 20601, Waldorf, to \$130,313 in 20693, Welcome. Other ZIP codes with a lower median household income include Bryantown, 20617, Indian Head 20640, and Faulkner, 20632.

2013-2017 Median Household Income	Median Household Income in Past 12 Months (in dollars)
20601, Waldorf	\$45,776
20602, Waldorf	\$87,546
20603, Waldorf	\$108,384
20607, Accokeek	\$121,524
20611, Bel Alton	\$91,071
20612, Benedict	Too few cases to compute estimate
20613, Brandywine	\$111,931
20616, Bryans Road	\$88,384
20617, Bryantown	\$69,100
20622, Charlotte Hall	\$91,458
20625, Cobb Island	Too few cases to compute estimate
20632, Faulkner	\$64,946
20637, Hughesville	\$124,806
20640, Indian Head	\$65,940
20645, Issue	\$122,083
20646, La Plata	\$98,737
20658, Marbury	\$70,000
20659, Mechanicsville	\$96,093
20662, Nanjemoy	\$75,638
20664, Newburg	\$79,375
20675, Pomfret	\$79,808
20677, Port Tobacco	\$109,125
20693, Welcome	\$130,313
20695, White Plains	\$101,310

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% and poorest 1% 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% of income distribution gaining about three years of life expectancy, while those in the bottom 5% gained virtually no additional years of life.

Median Income:

Employment and economic indicators for the county are fairly strong. The median household income in Charles County is \$93,973. However, there is significant variation when examining this data by ZIP code. The median household incomes among Charles County ZIP codes ranges from \$45,776 in 20601, Waldorf, to \$130,313 in 20693, Welcome. Other ZIP codes with a lower median household income include Bryantown, 20617, Indian Head 20640, and Faulkner, 20632.

2013-2017 Median Household Income	Median Household Income in Past 12 Months (in dollars)	
20601, Waldorf	\$45,776	
20602, Waldorf	\$87,546	
20603, Waldorf	\$108,384	
20607, Accokeek	\$121,524	
20611, Bel Alton	\$91,071	
20612, Benedict	Too few cases to compute estimate	
20613, Brandywine	\$111,931	
20616, Bryans Road	\$88,384	
20617, Bryantown	\$69,100	
20622, Charlotte Hall	\$91,458	
20625, Cobb Island	Too few cases to compute estimate	
20632, Faulkner	\$64,946	
20637, Hughesville	\$124,806	
20640, Indian Head	\$65,940	
20645, Issue	\$122,083	
20646, La Plata	\$98,737	
20658, Marbury	\$70,000	
20659, Mechanicsville	\$96,093	
20662, Nanjemoy	\$75,638	
20664, Newburg	\$79,375	
20675, Pomfret	\$79,808	
20677, Port Tobacco	\$109,125	
20693, Welcome	\$130,313	
20695, White Plains	\$101,310	

Adult and Child Poverty:

The highest rates of childhood poverty in Charles County were located in two ZIP codes in the western side of the county: 20664, Newburg, at 24.2% of the population and 20640, Indian Head, at 14.1% of the population.

The highest rate of adult poverty in Charles County were located in the ZIP codes, 20675, Pomfret, at 13.3% and 20658, Marbury, at 10.6%. Adult poverty was also high in Nanjemoy (10.5%) and Newburg (10.1%).

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 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 \$1618. This is above the national average gross rent of \$982.

When examining the percentage who are spending 35% of greater of their income on gross rent, the ZIP codes with the highest percentages were 20645 Issue (81.1%), 20607 Accokeek (83.3%), and 20637 Hughesville (67.0%). These ZIP codes are located in different parts of the county; however, they have high median household incomes and high home values as stated above.

2013-2017 Poverty levels	Child Poverty (% of total population)	Adult Poverty (% of total population)
20601, Waldorf	8.1%	5.3%
20602, Waldorf	12.1%	9.2%
20603, Waldorf	5.9%	3.4%
20607, Accokeek	5.1%	2.5%
20611, Bel Alton	5.1%	10.1%
20612, Benedict	Too few cases to compute estimate	8.8%
20613, Brandywine	6.6%	4.9%
20616, Bryans Road	10.1%	6.6%
20617, Bryantown	9.0%	7.3%
20622, Charlotte Hall	11.5%	7.4%
20625, Cobb Island	6.3%	9.0%
20632, Faulkner	0%	0%
20637, Hughesville	7.4%	5.7%
20640, Indian Head	14.1%	7.8%
20645, Issue	0%	1.7%
20646, La Plata	7.0%	4.2%
20658, Marbury	11.2%	10.6%
20659, Mechanicsville	8.3%	5.8%
20662, Nanjemoy	5.8%	10.5%
20664, Newburg	24.2%	10.1%
20675, Pomfret	2.1%	13.3%
20677, Port Tobacco	5.2%	6.7%
20693, Welcome	12.1%	2.4%
20695, White Plains	10.0%	3.9%

2013-2017 Gross Rent as Percent of Income	35% or more (in percent)	
20601, Waldorf	42.1%	
20602, Waldorf	37.80%	
20603, Waldorf	49.5%	
20607, Accokeek	83.3%	
20611, Bel Alton	26.7%	
20612, Benedict	0%	
20613, Brandywine	38.0%	
20616, Bryans Road	29.3%	
20617, Bryantown	Too few samples to compute estimate	
20622, Charlotte Hall	36.2%	
20625, Cobb Island	50%	
20632, Faulkner	0%	
20637, Hughesville	67.0%	
20640, Indian Head	57.8%	
20645, Issue	81.1%	
20646, La Plata	40.3%	
20658, Marbury	33.0%	
20659, Mechanicsville	46.4%	
20662, Nanjemoy	26.8%	
20664, Newburg	33.9%	
20675, Pomfret	0%	
20677, Port Tobacco	61.8%	
20693, Welcome	18.0%	
20695, White Plains	49.5%	

Health Insurance Coverage:

One of the key components of access to health care is the availability of health insurance coverage. According to the 2018 Charles County Community Health Needs Assessment Report, cost is the number one reason why individuals in the county do not get the care that they need.

The ZIP codes with the highest uninsured rates include 20612, Benedict, and 20622, Charlotte Hall. The large Amish community would account for the high rate in Charlotte Hall. Those individuals tend to be self-pay and seek medical services only in emergencies.

Two ZIP codes were fully insured for health care: 20617, Bryantown, and 20632, Faulkner. This may be due to the small size of those ZIP codes. There was a limited sample size for those ZIP codes so the data may not be reliable.

2013-2017 Health Insurance	Health Insurance	Uninsured
20601, Waldorf	95.3%	4.7%
20602, Waldorf	96.9%	3.1%
20603, Waldorf	96.4%	3.6%
20607, Accokeek	95.6%	4.4%
20611, Bel Alton	93.4%	6.6%
20612, Benedict	87.7%	12.3%
20613, Brandywine	94.1%	5.9%
20616, Bryans Road	93.8%	6.2%
20617, Bryantown	100%	0%
20622, Charlotte Hall	86.7%	13.3%
20625, Cobb Island	97.0%	3.0%
20632, Faulkner	100%	0%
20637, Hughesville	96.1%	3.9%
20640, Indian Head	94.8%	5.2%
20645, Issue	98.5%	1.5%
20646, La Plata	95.6%	4.4%
20658, Marbury	97.0%	3.0%
20659, Mechanicsville	93.5%	6.5%
20662, Nanjemoy	97.6%	2.4%
20664, Newburg	94.8%	5.2%
20675, Pomfret	92.6%	7.4%
20677, Port Tobacco	96.3%	3.7%
20693, Welcome	98.9%	1.1%
20695, White Plains	97.5%	2.5%

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.

The highest rates of computer access are in Waldorf and Accokeek where the majority of the county population resides. This is a very suburban region of the county. The lowest rates of computer access are in Benedict, 20612, and Cobb Island, 20625. Benedict is a rural area in the eastern part of the county. Cobb Island is a rural area in the southwestern region of the county.

Access to broadband internet is lowest in rural ZIP codes of 20612, Benedict, 20625, Cobb Island, 20632, Faulkner, and 20662, Nanjemoy. The rates of broadband internet are highest in the suburban ZIP codes of 20603, Waldorf, and 20607, Accokeek.

2013-2017 Internet and Computer Access	Computer Access	Broadband Internet
20601, Waldorf	93.4%	89.2%
20602, Waldorf	89.3%	84.6%
20603, Waldorf	96.2%	96.20%
20607, Accokeek	97.6%	94.4%
20611, Bel Alton	81.0%	68.4%
20612, Benedict	44.2%	37.8%
20613, Brandywine	90.6%	82.30%
20616, Bryans Road	90.4%	80.1%
20617, Bryantown	77.5%	71.2%
20622, Charlotte Hall	83.9%	77.0%
20625, Cobb Island	56.7%	56.7%
20632, Faulkner	76.0%	52.0%
20637, Hughesville	89.3%	84.2%
20640, Indian Head	86.1%	77.2%
20645, Issue	92.7%	89.2%
20646, La Plata	88.7%	83.2%
20658, Marbury	78.4%	72.50%
20659, Mechanicsville	90.3%	82.0%
20662, Nanjemoy	71.8%	60.8%
20664, Newburg	78.9%	69.6%
20675, Pomfret	87.6%	84.6%
20677, Port Tobacco	87.3%	80.0%
20693, Welcome	92.40%	86.7%
20695, White Plains	93.4%	88.5%

Education:

"Education is the single most important modifiable social determinant of health," said Anthony 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%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 (92.7% vs. 89.8%); however, Charles County has a smaller percentage than Maryland of individuals with a bachelor's degree or higher (28.5% vs. 39.0%).

The ZIP codes with the greatest percentages of residents with a high school diploma or higher include 20645, Issue, and 20658, Marbury. The ZIP codes with the lowest percentages of residents with a high school diploma or higher include 20622, Charlotte Hall, and 20662, Nanjemoy. Nanjemoy is a rural region of the county that is geographically isolated. It also has a low percentage of people with a bachelor's degree or higher (10.8%).

The ZIP codes with the greatest percentages of residents with a bachelor's degree or higher include 20607, Accokeek, 20617, Bryantown, and 20645, Issue. The ZIP codes with the lowest percentages with a bachelor's degree or higher include 20625, Cobb Island, 20632, Faulkner, and 20662, Nanjemoy. All of the low ZIP codes are in rural regions of the county.

2013-2017 Education	High School Diploma or Higher	Bachelor's Degree or Higher
20601, Waldorf	93.0%	25.9%
20602, Waldorf	91.9%	24.8%
20603, Waldorf	94.5%	38.5%
20607, Accokeek	94.8%	44.0%
20611, Bel Alton	86.2%	17.8%
20612, Benedict	87.0%	26.5%
20613, Brandywine	93.8%	30.3%
20616, Bryans Road	93.5%	28.9%
20617, Bryantown	98.2%	42.4%
20622, Charlotte Hall	85.2%	17.6%
20625, Cobb Island	92.1%	10.3%
20632, Faulkner	94.9%	5.9%
20637, Hughesville	93.7%	29.5%
20640, Indian Head	91.6%	22.6%
20645, Issue	98.1%	41.2%
20646, La Plata	92.2%	30.5%
20658, Marbury	98.5%	15.0%
20659, Mechanicsville	90.5%	21.6%
20662, Nanjemoy	80.3%	10.8%
20664, Newburg	90.4%	14.6%
20675, Pomfret	87.0%	17.9%
20677, Port Tobacco	92.8%	35.8%
20693, Welcome	94.6%	31.2%
20695, White Plains	95.6%	30.4%

<u>Transportation:</u>

Access to affordable, convenient transportation plays a crucial role in health. The cost and time required for daily travel between home, work, school, day care, 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.

In Charles County, most households have access to at least one vehicle. Most ZIP codes in Charles County have a no-vehicle rate of less than 5%. There are a few outliers such as 20612, Benedict, that has a no-vehicle rate of 29% and Charlotte Hall at 7.7%. Charlotte Hall may be explained by the presence of the Amish population who use carriages and bicycles as their primary means of transportation.

As stated previously, the sample size for the ZIP code 20612, Benedict, is very small, so caution should be taken before making any conclusions regarding the data. Even one change in response can skew the percentage in a small community.

2013-2017 Transportation	No Vehicle
2015-2017 Transportation	No venicie
20601, Waldorf	0.3%
20602, Waldorf	1.2%
20603, Waldorf	1.7%
20607, Accokeek	1.4%
20611, Bel Alton	0%
20612, Benedict	29.0%
20613, Brandywine	2.5%
20616, Bryans Road	3.9%
20617, Bryantown	0%
20622, Charlotte Hall	7.7%
20625, Cobb Island	0
20632, Faulkner	0%
20637, Hughesville	6.1%
20640, Indian Head	4.8%
20645, Issue	2.5%
20646, La Plata	3.0%
20658, Marbury	3.1%
20659, Mechanicsville	4.5%
20662, Nanjemoy	5.3%
20664, Newburg	1.8%
20675, Pomfret	2.2%
20677, Port Tobacco	4.1%
20693, Welcome	0%
20695, White Plains	0.8%

Mean time to work:

The mean travel time to work in Charles County is 43.9 minutes. This is longer than the state average of 32.7 minutes. Those in 20645, Issue, and 20693, Welcome, have the longest mean travel times to work. Those living in La Plata and Pomfret experience the smallest mean travel times to work. La Plata is the county seat of the county and runs along the main U.S. 301 corridor where the majority of commerce is located in the county.

2013-2017 Transportation	Mean Travel Time to Work (in minutes)
20601, Waldorf	41.8
20602, Waldorf	44.7
20603, Waldorf	45.9
20607, Accokeek	41.2
20611, Bel Alton	38.1
20612, Benedict	Number of cases are too small to compute
20613, Brandywine	44.7
20616, Bryans Road	46.7
20617, Bryantown	48.1
20622, Charlotte Hall	45.2
20625, Cobb Island	47.3
20632, Faulkner	41.1
20637, Hughesville	45.2
20640, Indian Head	44.0
20645, Issue	55.6
20646, La Plata	37.8
20658, Marbury	41.3
20659, Mechanicsville	41.1
20662, Nanjemoy	45.5
20664, Newburg	45.1
20675, Pomfret	35.9
20677, Port Tobacco	42.8
20693, Welcome	51.2
20695, White Plains	48.4

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 a number of 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.

The highest rates of unemployment in Charles County were in the ZIP codes 20617, Bryantown, at 8.3% and 20658, Marbury, at 12.7%. Marbury is a rural ZIP code in the western region of the county. Bryantown is located in the southeastern region of the county. The lowest unemployment rates were in the ZIP codes of 20612, Benedict (0%) and 20611, Bel Alton (1.8%). Both are small ZIP codes. With small sample sizes in large community surveys, they may be misrepresented. Caution should be taken before making any conclusions or assumptions on the data.

	1
2013-2017 Unemployment	Unemployment Rate
20601, Waldorf	3.7%
20602, Waldorf	5.8%
20603, Waldorf	3.4%
20607, Accokeek	5.7%
20611, Bel Alton	1.8%
20612, Benedict	0%
20613, Brandywine	5.4%
20616, Bryans Road	2.4%
20617, Bryantown	8.3%
20622, Charlotte Hall	3.0%
20625, Cobb Island	3.2
20632, Faulkner	7.6%
20637, Hughesville	4.1%
20640, Indian Head	7.1%
20645, Issue	5.8%
20646, La Plata	4.5%
20658, Marbury	12.7%
20659, Mechanicsville	2.7%
20662, Nanjemoy	8.4%
20664, Newburg	2.4%
20675, Pomfret	8.0%
20677, Port Tobacco	4.3%
20693, Welcome	3.1%
20695, White Plains	5.0%

Social Determinants of Health References:

 Social Determinants of Health ZIP code level data on Employment, Education, Income, Transportation, Computer Access, Disability, Health Insurance, Poverty, Housing, Language. 2013-2017 average and 2017 American Community Survey. United States Census Bureau. American FactFinder. Available at www.census.gov.

Qualitative Data Pertaining to Social Determinants of Health:

On the long survey, 53.7% of the respondents felt that transportation is a problem in Charles County. 23.7% felt that transportation is a serious problem.

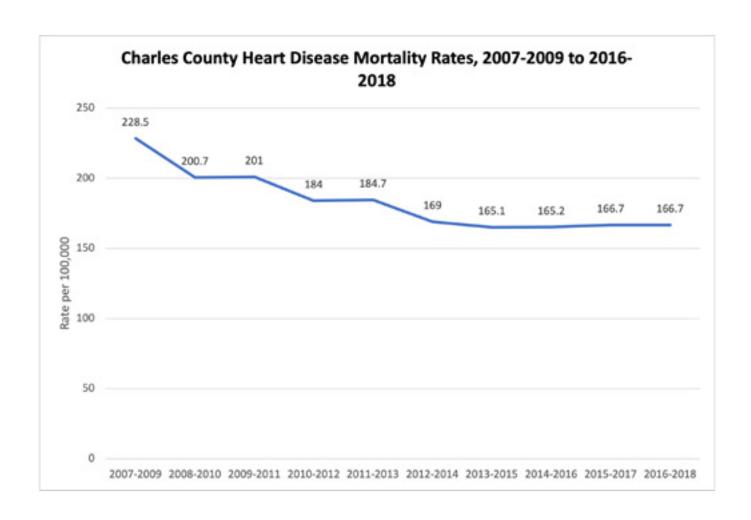
The Burden of Heart Disease, Stroke, and Their Risk Factors:

Heart Disease:

Mortality:

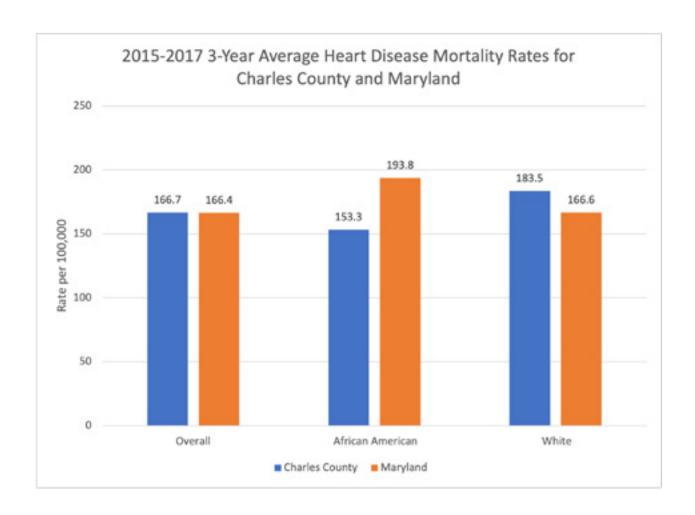
Heart disease is the second leading cause of death in Charles County. In 2018, a total of 332 Charles County residents died from major cardiovascular diseases and 256 of those deaths were from heart disease (77%). This constitutes a 2018 Charles County crude heart disease death rate of 158.5 per 100,000. Deaths due to heart disease made up 22.2% of the total Charles County deaths in 2018.

The 2016-2018 (three-year average) Charles County age-adjusted heart disease death rate was 166.7 per 100,000. This was the highest rate for any cause of death in Charles County. The Charles County heart disease death rate is slightly below the Maryland state average rate of 163.8 per 100,000. However, this difference is not statistically significant. The Charles County heart disease mortality is the 7th lowest among the Maryland jurisdictions. The 2016-2018 Charles County heart disease mortality rate is a small increase from the 2014-2016 Charles County heart disease mortality rate of 166.7 per 100,000.



Racial disparities exist on a county level for heart disease mortality. Charles County Whites have a higher heart disease mortality rate than Charles County African Americans (183.5 vs. 153.3). 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 153.3 per 100,000 was well below the Maryland African American rate of 193.8 per 100,000. The heart disease mortality rate for Charles County Whites of 183.5 per 100,000 was, however, above the Maryland White rate of 166.6 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. 2019 BRFSS data is available with age-adjusted and weighted responses for the Charles County population.

Heart Attack Prevalence:

2019 Charles County BRFSS participants were asked if they have ever had a heart attack. Once weighted, it is estimated that 4.2% of Charles County residents have ever suffered a heart attack. This is above the 3.1% reported for Maryland.

Ever had a heart attack:	weighted percentage
Charles County	4.2%
Maryland	3.1%

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, 3.9% of Charles County residents reported having angina or coronary heart disease. This is above the 2.6% reported for Maryland.

Ever have angina or coronary heart disease:	weighted percentage
Charles County	3.9%
Maryland	2.6%

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), 5.4% of Charles County reported having heart disease. This is above the 4.5% reported for Maryland.

Ever have heart disease:	weighted percentage
Charles County	5.4%
Maryland	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), 7.5% of Charles County reported having cardiovascular disease. This is above the 6.4% reported for Maryland.

Ever have cardiovascular disease:	weighted percentage	
Charles County	7.5%	
Maryland	6.4%	

Stroke:

Mortality:

Stroke, or cerebrovascular disease, is the 6th leading cause of death in Charles County. In 2018, a total of 45 Charles County residents died from a stroke. This constitutes a 2018 Charles County crude stroke death rate of 27.9 per 100,000. Deaths due to stroke made up 3.9% of the total Charles County deaths in 2016.

The 2016-2018 (three-year average) Charles County age-adjusted stroke death rate was 31.2 per 100,000. This was the 5th highest rate among causes of death in Charles County. The Charles County stroke death rate is below the Maryland state average rate of 40.1 per 100,000.

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 2018, there were a total of 12 deaths 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. 2019 BRFSS age-adjusted and weighted estimates were used for this analysis.

2019 Charles County BRFSS participants were asked if they have ever had a stroke. It is estimated that 3.1% of Charles County residents have ever suffered a stroke. This is higher than the 2.8% reported for Maryland for the same time period. The Charles County stroke prevalence of 3.1% is down from 4.6% reported in 2014.

Ever had a stroke:	weighted percentage
Charles County	3.1%
Maryland	2.8%

Hypertension or High Blood Pressure:

Mortality:

Hypertension, or high blood pressure, is the 10th leading cause of death in Charles County. In 2018, a total of 16 Charles County residents died from essential hypertension or hypertensive renal disease. Hypertension deaths make up 1.3% of the total deaths in Charles County (2016).

Prevalence:

Maryland 2019 BRFSS data was used to determine Charles County's hypertension prevalence estimates. All percentage estimates are weighted to reflect the county population.

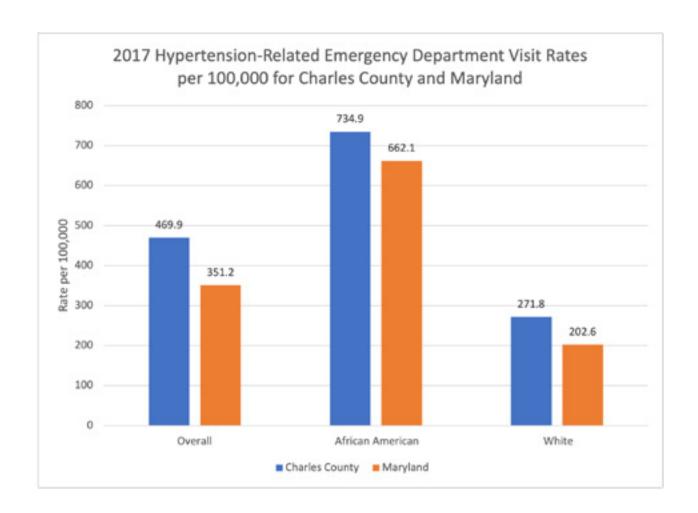
The 2019 BRFSS asked participants if they have ever been told by a health professional that they have high blood pressure. 36.1% of Charles County residents reported that they have been told by a health professional that they have high blood pressure. This is higher than the Maryland percentage of 32.2%.

Among those who reported that they have hypertension, 65.3% reported that they are currently taking medication to control their high blood pressure. This percentage is higher than the Maryland state average percentage of 61.7%.

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.

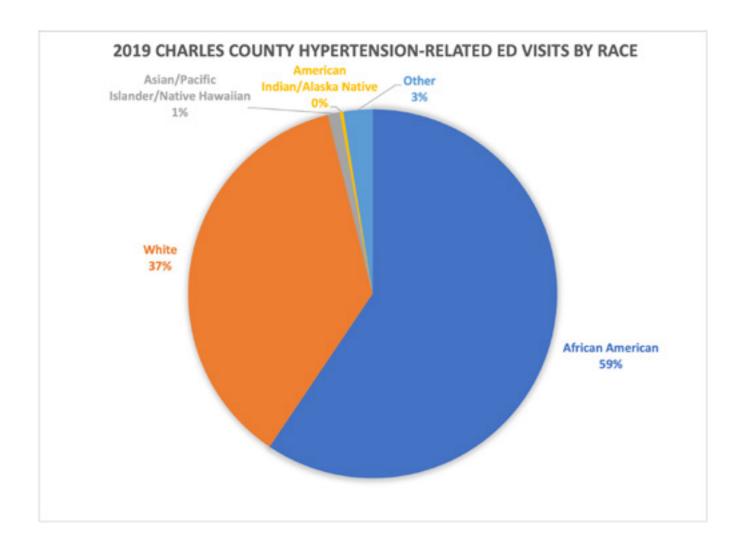
There are racial disparities in the hypertension ED visit rate in Charles County. Charles County African Americans had a hypertension ED visit rate of 734.9 per 100,000 compared to 271.8 per 100,000 for Charles County Whites.



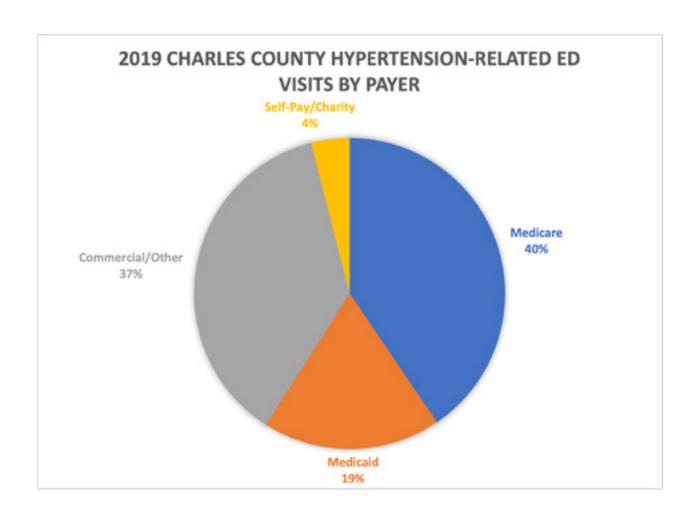
The Chesapeake Regional Information Sharing for our Patients (CRISP), is the health information exchange for the state of Maryland. CRISP Reporting Services provides public health dashboards with queries for emergency department and inpatient stays by demographics for many health conditions, including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

In 2019, there were 8,924 emergency department (ED) visits for Charles County residents related to hypertension. 77% of those ED visits were at the University of Maryland Charles Regional Medical Center. The next highest facility was MedStar Southern Maryland Hospital with 7% of the ED visits. In Charles County, females have more hypertension-related ED visits than males (5,078 vs. 3,846).

Charles County African Americans are disproportionately affected by hypertension-related ED visits and make up 59% of the total hypertension-related ED visits for Charles County residents.



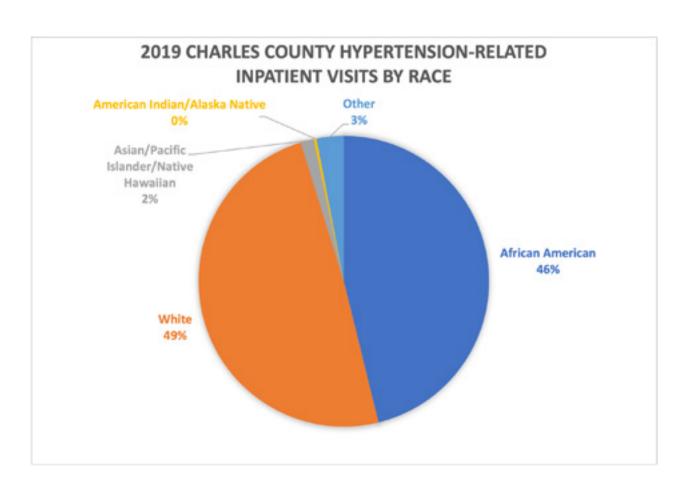
When examining my payer source, the largest payer is Medicare followed by Commercial/Other insurance.

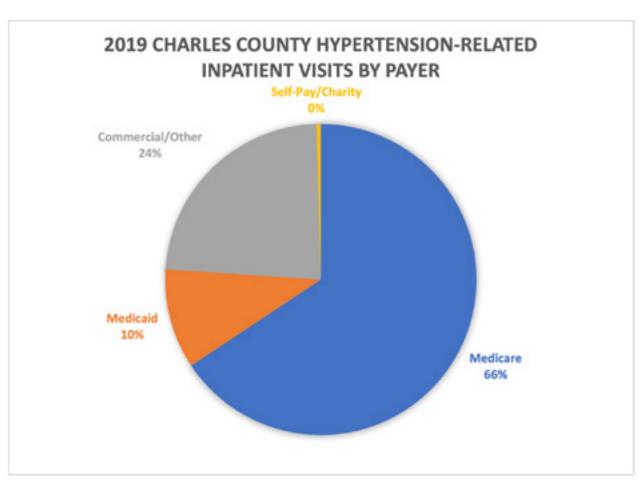


The age group with the largest number of hypertension-related ED visits is the 55-59-year-old age group who had 1,192 visits in 2019. They are followed closely by those aged 60-64 years and those aged 50-54 years.

2019 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	62
25-29 years	172
30-34 years	273
35-39 years	448
40-44 years	575
45-49 years	782
50-54 years	1055
55-59 years	1192
60-64 years	1091
65-69 years	819
70-74 years	777
75-79 years	707
80-84 years	498
85+ years	524

The same data source can be used to examine hypertension-related Inpatient visits for Charles County for 2019. Females have more hypertension-related inpatients visits than males (2,599 vs. 2,397). Charles County Whites and African Americans make up the majority of the hypertension-related inpatient visits. Medicare is the largest payer source for hypertension-related patient stays (66%). The age group with the most inpatient visits are those aged 75-79 years.





2019 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	62
25-29 years	172
30-34 years	273
35-39 years	448
40-44 years	575
45-49 years	782
50-54 years	1055
55-59 years	1192
60-64 years	1091
65-69 years	819
70-74 years	777
75-79 years	707
80-84 years	498
85+ years	524

Heart Disease/Stroke/Hypertension References:

- 1. 2018 Charles County Heart Disease, Stroke, and Hypertension Mortality Rates, Overall and by gender and race. 2018 Maryland Vital Statistics Report. Maryland Department of Health. Available at: https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/REV_2018annual.pdf.
- 2. 2019 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. 2019 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.
- 5. 2019 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. Over half of the participants (53.7%) viewed high blood pressure as a health problem in the county. Approximately one-quarter of the participants (26.0%) listed high blood pressure as a "serious problem." On the same listing, heart disease was listed as a health problem by 47.2% of the survey participants. One-fifth of the participants (20.3%) felt that heart disease was a serious problem in the county. Stroke was listed as a health problem by 45.5% of the respondents. 16.6% viewed stroke as a "serious problem."

Long survey participants were asked if they have seen improvements in the county on any of 13 listed health topics. 19.9% reported that they have seen improvements in the county regarding heart disease, 15.5% reported that they have seen improvements in the county regarding high blood pressure, and 10.6% 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 8.8% reported that they always eat five or more servings of fruits and vegetables each day; 14.6% always get an hour of physical activity each day; 58.6% take a vitamin each day, and 7.3% never feel stressed out.

Short survey participants were asked what the biggest health problems are in Charles County. High blood pressure/stroke was the 5th most commonly answered health topics on the short survey with 312 listed it as the one of the biggest health problems (41.3%). 263 people felt that heart disease was one of the biggest health problems in Charles County (34.8%).

Short survey respondents recognized community resources to address heart disease, stroke, and high blood pressure. 16.2% reported that the county had some or many resources for heart disease. 14.7% reported that the county had some or many resources to address stroke. 15.1% felt that the county had some or many resources for high blood pressure.

Heart disease was cited by 7.8% of key informant interviews as the health condition most affecting Charles County.

Charles County Cancer Incidence and Mortality: A state and jurisdictional comparison

Introduction:

2018 Maryland Vital Statistics Report:

Cancer is the leading cause of death in Charles County. In 2018, a total of 288 deaths occurred in Charles County from cancer (2018 Maryland Vital Statistics Report).

The 2018 Charles County all-cancer site crude death rate was 178.3 per 100,000 population. This rate is lower than the Maryland state average cancer death rate of 181.0 per 100,000. This rate is an increase from the 2016 Charles County all-cancer site crude death rate of 160.4 per 100,000.

The age-adjusted 2016-2018 Charles County all-cancer mortality rate was 165.4 per 100,000. This was above the Maryland state average rate of 152.6 per 100,000. The Charles County 2016-2018 rate is an increase from the 2014-2016 Charles County all cause cancer mortality rate of 158.3 reported in the last needs assessment report. Three-year periods are often combined to increase sample size and therefore increase the validity of the mortality rates.

The greatest number of cancer deaths were from cancer of the lung, trachea, or bronchus (50) and other sites (97). Lung, trachea, and bronchus cancer accounted for nearly one-fifth of all 2018 cancer deaths (17.4%). This cancer site was followed by other cancer sites, breast, and colon/rectum/anus.

Charles County Deaths by Cancer Site:	Number of Deaths
Stomach	2
Colon/Rectum/Anus	24
Pancreas	22
Trachea, Lung, Bronchus	50
Breast	29
Cervix, Uteri, Ovary	21
Prostate	15
Urinary Tract	14
Non-Hodgkin's Lymphoma	8
Leukemia	6
Other	97

2019 Maryland DHMH Cigarette Restitution Fund Program's Cancer Reports:

Cancer incidence and mortality data for the time period 2012-2016 and for 2016 only are presented below. Data was extracted from the Cigarette Restitution Fund Program's 2019 Cancer 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 jurisdictions of Calvert and St. Mary's counties.

All Cancer Sites Incidence:

2016 Results:

For the year 2016, Charles County had a total of 756 new cases of cancer overall; this corresponds to a 2016 all site incidence rate of 451.5 per 100,000 population. Charles County had the 8th lowest all cancer site incidence rate among the 24 Maryland jurisdictions. This rate is higher than the Maryland average rate, the U.S. national rate, the Calvert County rate, and the St. Mary's County rate.

When stratified by gender, Charles County males have generally higher cancer incidence rates than Charles County females. The 2016 all cancer site incidence rate for Charles County males was 524.9 versus 401.3 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 490.5 compared to the black all site rate of 397.6 and the other race all site rate of 325.6.

When compared with the Maryland state average rate for all cancer site incidences, Charles County males have a higher rate than Maryland males. Charles County females have a lower rate than Maryland females. Charles County African Americans have a lower incidence rate to the rate for Maryland African American males. Charles County Whites have a higher rate than Maryland Whites.

Number of New Cancer Cases for 2016: All Cancer Sites Combined

	Total	Male	Female	White	Black	Other
Maryland	31079	15307	15765	21021	8307	1295
Charles County	756	387	369	454	266	26
Calvert County	467	242	225	397	65	<6
St. Mary's County	463	231	232	377	75	7

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

2016 All Cancer Site Incidence Rates (per 100,000 population)

	Total	Male	Female	White	Black	Other
Maryland	443.6	481.6	419.1	453.0	430.4	286.1
Charles County	451.5	524.9	401.3	490.5	397.6	325.6
Calvert County	429.8	471.4	399.7	434.5	436.7	**
St. Mary's County	378.8	382.7	376.0	370.2	456.8	**

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

All site cancer incidences rates were also examined for the Hispanic population in Maryland. A total of 1,025 Hispanic Marylanders were diagnosed with cancer in 2016; this corresponds to an all-site incidence rate of 292.2 per 100,000 population. For the Southern Maryland region, there were 31 new cancer cases in the Hispanic population with an all-site incidence rate of 304.2 per 100,000. There were 18 cases from Charles County with an all-site incidence rate of 385.2.

2012-2016 Combined Results:

The 12-16 Charles County all site incidence rate was 438.5 per 100,000. This rate is less than the Maryland state average rate of 443.9 and similar to the U.S. average rate of 435.1. The Charles County rate is lower than the Calvert County rate of 455.0 but higher than the St. Mary's County rate of 418.7. 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 2012-2016. The all-site incidence rate for the white population was 467.1 which was higher than the black all site incidence rate of 403.0. The Other Race all site incidence rate was much lower at 239.9 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.

Cancer still continues to disproportionately affect the male population. From 2012-2016, the Charles County all site incidence rate for males was 510.9 compared to 385.0 for females. Charles County males have a higher all site incidence rate compared to males in Calvert County, St. Mary's County, and Maryland. The Charles County female all cause incidence rate was the 3rd lowest for that category among the 24 Maryland jurisdictions; the Charles County male all cause incidence rate is the 13th lowest in the state.

2012-2016 All Cancer Site Incidence Rates (per 100,000 population)

	Total	Male	Female	White	Black	Other
Maryland	443.9	483.1	418.4	453.6	437.8	260.4
Charles County	438.5	510.9	385.0	467.1	403.0	239.9
Calvert County	455.0	490.3	429.8	460.2	454.4	172.1
St. Mary's County	418.7	438.2	402.2	421.0	410.1	216.7

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

All Cancer Sites Mortality:

2016 Results:

In 2016, there were 252 deaths in Charles County attributed to cancer. This constitutes a mortality rate of 158.0 per 100,000. Charles County had the 10th lowest all sites mortality rate among the Maryland jurisdictions for 2016. This rate is slightly higher than the Maryland state average rate of 156.5 but lower than the St. Mary's county rate (160.8) and the Calvert County rate (176.9).

On a county level, Charles County African Americans experienced slightly higher all site mortality rates than Charles County Whites (156.8 for Whites and 171.3 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.

All site mortality rates by gender mirror the same trends as the incidence rates. Males experienced greater all site mortality rates than females. This was true for Charles County, Maryland, Calvert, and St. Mary's County. In Charles County, the 2016 all site mortality rate for males was 189.3 compared to 140.0 for females in the county.

Number of Deaths in 2016: All Cancer Site Combined

	Total	Male	Female	White	Black	Other
Maryland	10911	5472	5439	7392	3174	345
Charles County	252	126	126	145	s	<10
Calvert County	184	99	85	158	25	<10
St. Mary's County	186	102	84	151	s	<10

<10= Case counts were suppressed to prevent disclosure of data in other cells.

Number of Deaths in 2016: All Cancer Site Combined

	Total	Male	Female	White	Black	Other
Maryland	156.5	183.2	138.4	154.7	176.2	83.0
Charles County	158.0	189.3	140.0	156.8	171.3	**
Calvert County	176.9	221.3	149.8	180.1	179.0	**
St. Mary's County	160.8	186.5	138.1	157.0	195.0	**

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

s = Death counts are suppressed to prevent disclosure of data in other cell(s)

2012-2016 Results:

For the time period 2012-2016, the Charles County all cancer site mortality rate was 167.2 per 100,000. Charles County had the highest rate among the three Southern Maryland jurisdictions. Charles County's rate is the 13th 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 (161.0 per 100,000).

The 2012-2016 White all cancer sites mortality rate is higher than the Charles Black rate (170.7 vs. 165.9). The Charles County White all site mortality rate was higher than the Maryland White state average rate (170.7 vs. 158.6). The Charles County African American all site mortality rate was below than the state average rate for African Americans (165.9 vs. 179.4). The Charles County Other Race all site mortality rate was higher than the Maryland Other Race state average rate (106.3 vs. 85.8).

From 2012-2016, males were more likely to die from cancer than females. Charles County males had an all-site mortality rate of 199.3 versus 145.7 for Charles County females. The Charles County rates for males and females were slightly higher than Maryland state average rates.

2012-2016 All Cancer Site Mortality Rates (per 100,000 population)

	Total	Male	Female	White	Black	Other
Maryland	160.3	190.0	140.1	158.6	179.4	85.8
Charles	167.2	199.3	145.7	170.7	165.9	106.3
County						
Calvert	166.3	196.8	146.2	165.2	190.6	**
County						
St. Mary's	176.8	213.2	145.6	177.5	188.5	**
County						

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

Lung/Bronchus Cancer Incidence:

2016 Results:

The 2016 Charles County lung cancer incidence rate was 40.7 per 100,000 population. This is the 5th lowest lung cancer incidence rate in the state of Maryland. The Charles County rate is below the Maryland state average rate of 54.0 per 100,000.

A comparison of county rates by race found that rates for Whites exceeded the rates of African Americans (48.4 vs. 33.3). If you compare White lung cancer incidence rates, Charles County has a lower rate than the Maryland state average rate (48.4 vs. 57.0). Charles County African Americans had a lower rate than the Maryland state average rate (33.3 vs. 50.4).

The incidence of lung cancer was also higher among men than women (58.3 vs. 26.8 in Charles County). Charles County men have a lower rate (58.3) than the Maryland state average rate of 59.9 for men.

Number of New Cases 2016: Lung Cancer

	Total	Male	Female	White	Black	Other
Maryland	3803	1858	1945	2728	941	120
Charles County	69	44	25	48	S	<6
Calvert County	60	23	37	54	6	0
St. Mary's County	78	34	44	65	13	0

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

2016 Lung Cancer Incidence Rates

	Total	Male	Female	White	Black	Other
Maryland	54.0	59.9	49.6	57.0	50.4	28.7
Charles County	40.7	58.3	26.8	48.4	33.3	**
Calvert County	56.4	48.9	65.3	60.7	**	0
St. Mary's County	68.6	60.6	75.0	68.8	**	0

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

2012-2016 Results:

Between 2012-2016, the Charles County lung cancer incidence rate was 50.9 per 100,000 population. This rate is lower than the Maryland state average rate (55.6). This rate is lower than the rates for the other Southern Maryland jurisdictions. It is also lower than the United States average rate of 53.4 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 (38.0 vs. 60.0). The African American lung cancer incidence rate is lower than the Maryland state average rate (53.8). It is lower than the Calvert County rate and the St. Mary's County rate. The Charles County white lung cancer incidence rate is higher than the Maryland state average rate (60.0 vs. 58.4) and is lower than the rates in the other Southern Maryland jurisdictions.

The rate of lung cancer incidence in Charles County was much higher for men than women (66.5 vs. 39.1). 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 (69.3); the highest female lung cancer incidence rate in the Southern Maryland region was Calvert County and St. Mary's County (both at 60.2).

2012-2016 Lung Cancer Incidence Rates

	Total	Male	Female	White	Black	Other
Maryland	55.6	62.8	50.4	58.4	53.8	26.0
Charles County	50.9	66.5	39.1	60.0	38.0	**
Calvert County	60.3	60.3	60.2	62.6	50.0	**
St. Mary's County	64.6	69.3	60.2	67.3	56.5	**

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

Lung/Bronchus Cancer Mortality:

2016 Results:

In 2016, the lung cancer mortality rate in Charles County was 34.6 per 100,000, which is lower than the Maryland state average rate of 37.5 per 100,000. The Charles County 2016 lung cancer mortality rate was lower than the Calvert County rate of 44.8 and lower than the St. Mary's County rate of 45.9.

For all jurisdictions analyzed, the lung cancer mortality rate for men was greater than the rate for women. In Charles County, men were 1.7 times more likely to die from lung cancer in 2016 than women.

2016 lung cancer mortality rate for Blacks in Charles County was slightly higher than the mortality rate for Charles County Whites (39.0 vs. 35.9).

Number of Lung Cancer Deaths, 2016

	Total	Male	Female	White	Black	Other
Maryland	2639	1375	1264	1889	684	66
Charles County	54	30	24	33	s	<10
Calvert County	46	26	20	39	<10	<10
St. Mary's County	54	27	27	40	s	<10

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

Lung Cancer Mortality Rates, 2016

	Total	Male	Female	White	Black	Other
Maryland	37.5	45.3	31.8	39.3	37.7	16.4
Charles County	34.6	46.1	27.4	35.9	39.0	**
Calvert County	44.8	53.9	36.2	44.8	**	**
St. Mary's County	45.9	48.4	43.3	41.6	**	**

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

2012-2016 Results:

The Charles County 2012-2016 lung cancer mortality rate was 39.8 per 100,000. This rate is similar to the Maryland state average rate of 40.1. The Charles County rate is lower than the other two Southern Maryland counties: 44.4 in Calvert and 50.0 in St. Mary's. The Charles County lung cancer mortality rate also falls 10% below and 10% above the United State national rate of 41.9 per 100,000.

The Charles County lung cancer mortality rates are higher for men than women. Charles County men were 1.9 times more likely to die from lung cancer from 2012-2016 than Charles County women. Charles County's rate for men was higher than the state average rate (54.3 vs. 48.3).

When comparing rates by race, Whites in Charles County had a greater rate of lung cancer mortality than African Americans (45.8 vs. 32.6). The lung cancer mortality rate among Charles County whites was higher than the Maryland state average rate, and the lung cancer mortality rate among Charles County African Americans was lower than the Maryland state average rate.

Lung Cancer Mortality Rates, 2012-2016

	Total	Male	Female	White	Black	Other
Maryland	40.1	48.3	34.2	41.6	40.5	17.8
Charles County	39.8	54.3	28.9	45.8	32.6	**
Calvert County	44.4	46.1	42.3	45.2	44.0	**
St. Mary's County	50.0	62.3	39.0	49.6	58.6	**

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

Colon and Rectal Incidence:

2016 Results:

For 2016, Charles County had a colon and rectal cancer incidence rate of 39.6 per 100,000. This rate is higher than the Maryland state average rate of 35.4 per 100,000.

The colon and rectal cancer incidence rates for Charles County males is higher than Charles County females for 2016 (50.9 vs. 33.1). The Charles County male colon and rectal cancer incidence rate for 2016 was 50.9 per 100,000, which is higher than the Maryland state average rate for males at 38.4. The Charles County female colon and rectal cancer rate is 33.1, similar to the Maryland state rate of 32.9.

The 2016 Charles County White colon and rectal cancer incidence rate was higher than the Charles County African American rate (43.9 vs. 37.4). The Charles County White colon and rectal cancer incidence rate was higher than the Maryland state rate as well as the rates of the other Southern Maryland counties. The 2016 Charles County African Americans colon and rectal cancer incidence rate was higher than the Maryland African American colon and rectal cancer incidence rate.

Number of New Colon and Rectal Cancer Cases, 2016

	Total	Male	Female	White	Black	Other
Maryland	2450	1205	1243	1621	679	112
Charles County	64	34	30	41	21	<6
Calvert County	41	25	16	34	7	0
St. Mary's County	31	15	16	23	6	<6

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

2016 Colon and Rectal Cancer Incidence Rates

	Total	Male	Female	White	Black	Other
Maryland	35.4	38.4	32.9	35.2	36.3	24.7
Charles County	39.6	50.9	33.1	43.9	37.4	**
Calvert County	37.0	45.9	28.7	36.5	**	0
St. Mary's County	24.4	**	24.9	22.4	**	**

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

Colon and Rectal Cancer Mortality:

2016 Results:

The Charles County colon and rectal cancer mortality rate for 2016 was 14.3 per 100,000. This is slightly above the Maryland state average rate of 13.8. Rates for Calvert and St. Mary's are not available due to small case counts.

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

Number of Colon and Rectal Cancer Deaths, 2016

	Total	Male	Female	White	Black	Other
Maryland	949	488	461	619	301	29
Charles County	24	s	<10	12	s	<10
Calvert County	15	<10	<10	14	<10	<10
St. Mary's County	17	S	<10	14	<10	<10

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

2016 Colon and Rectal Cancer Mortality Rates

	Total	Male	Female	White	Black	Other
Maryland	13.8	16.2	11.8	13.1	16.4	6.9
Charles County	14.3	**	**	**	**	**
Calvert County	••	**	••	••	**	**
St. Mary's County	**	**	**	**	**	**

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

2012-2016 Results:

The 2012-2016 Charles County colon and rectal cancer mortality rate of 16.4 per 100,000 is higher than the Maryland state average rate of 14.1 and the other Southern Maryland counties (14.0 for Calvert and 13.4 for St. Mary's County).

Charles County males were more likely to die from colon and rectal cancer than Charles County females (17.3 vs. 15.1). This trend was also seen for Maryland and the other Southern Maryland counties.

2012-2016 Charles County colon and rectal cancer mortality rates for African Americans were higher than the rates for Charles County Whites (19.4 vs. 14.5).

2012-2016 Colon and Rectal Cancer Mortality Rates

	Total	Male	Female	White	Black	Other
Maryland	14.1	16.9	11.9	13.2	17.9	7.4
Charles County	16.4	17.3	15.1	14.5	19.4	**
Calvert County	14.0	16.2	12.3	14.5	**	**
St. Mary's County	13.4	18.3	8.9	13.2	**	**

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

Breast Cancer Incidence:

2016 Results:

The 2016 Charles County breast cancer incidence rate was 122.2, which was lower than the Maryland state average rate of 128.9 per 100,000. The Charles County rate was higher than the St. Mary's County (106.2) and Calvert County, which had a rate of 106.7 per 100,000.

The Charles County White breast cancer incidence rate was 125.1 per 100,000, which was lower than the Maryland state White average rate of 127.4. The Charles County Black breast cancer incidence rate was 120.8 per 100,000, which was lower than the Maryland state average rate of 131.8. The Charles County White breast cancer incidence rate was higher than the Charles County Black rate (125.1 vs. 120.8).

Number of New Breast Cancer Cases, 2016

	Total	White	Black	Other
Maryland	4818	3053	1453	237
Charles	111	57	48	<6
County				
Calvert	61	48	10	<6
County				
St. Mary's	67	56	11	0
County				

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

2016 Breast Cancer Incidence Rates

	Total	White	Black	Other
Maryland	128.9	127.4	131.8	92.9
Charles County	122.2	125.1	120.8	**
Calvert County	106.7	98.3	**	**
St. Mary's County	106.2	108.7	**	**

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

2012-2016 Results:

From 2012-2016, Charles County had a breast cancer incidence rate of 123.1. This rate was lower than the Maryland state average rate of 130.1 and the Calvert County rate of 137.7 and higher than the St. Mary's County rate of 110.4. It is 10% below to 10% above the US rate of 126.0 per 100,000.

The Charles County White breast cancer incidence rate was 130.7, which was less than the Maryland White state average rate (131.1). The Charles County Black breast cancer incidence rate was below to the Maryland state average rate for Blacks (117.4 vs. 130.6).

Charles County African Americans had a lower incidence of breast cancer (117.4) than Charles County White women (130.7) from 2012-2016.

2012-2016 Breast Cancer Incidence Rates

	Total	White	Black	Other
Maryland	130.1	131.1	130.6	85.7
Charles County	123.1	130.7	117.4	75.1
Calvert County	137.7	141.4	132.2	**
St. Mary's County	110.4	112.7	108.4	**

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

Breast Cancer Mortality:

2016 Results:

The 2016 Charles County breast cancer mortality rate was 31.7 per 100,000. This rate was higher than Maryland state average rate of 21.3 per 100,000. This was the highest rate among the Maryland jurisdictions with a calculated rate.

Breast cancer mortality rates could not be calculated by race or gender for 2016 due to small case counts.

Number of Breast Cancer Deaths, 2016

	Total	White	Black	Other
Maryland	829	498	302	29
Charles County	29	16	s	<10
Calvert County	14	13	<10	<10
St. Mary's County	16	13	<10	<10

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

2012-2016 Breast Cancer Incidence Rates

	Total	White	Black	Other
Maryland	21.3	19.0	27.8	12.0
Charles County	31.7	**	**	**
Calvert County	**	**	**	**
St. Mary's County	**	**	**	**

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

2012-2016 Results:

From 2012-2016, Charles County experienced a breast cancer mortality rate of 25.6 per 100,000. The 2012-2016 Charles County rate is higher than the Maryland state average rate of 22.2 for the same time period, though the difference is not statistically significant. The Charles County rate is higher than the rate for St. Mary's County (25.3) and lower than for Calvert County (26.3). The Charles County breast cancer mortality rate is 10-25% above the United States breast cancer mortality rate of 20.6 per 100,000.

The 12-16 Charles County African American breast cancer mortality rate was 28.2, which was higher than the rate for Charles County Caucasians of 23.5 per 100,000. Rates by race could not be calculated for the other Southern Maryland counties due to small case counts.

2012-2016 Breast Cancer Mortality Rates

	Total	White	Black	Other
Maryland	22.2	20.7	27.5	10.1
Charles County	25.6	23.5	28.2	**
Calvert County	26.3	25.9	**	**
St. Mary's County	25.3	25.3	**	**

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

Prostate Cancer Incidence:

2016 Results:

The 2016 Charles County prostate cancer incidence rate was 161.8 per 100,000. This rate is higher than the Maryland state average rate of 124.6. The Charles County incidence rate is higher than the rates in the other Southern Maryland counties (113.8 in Calvert and 90.1 in St. Mary's counties).

Disparities are seen for African Americans in terms of prostate cancer incidence. The 2016 Charles County African American prostate cancer incidence rate was 179.8, which was higher than the rate for Charles County Caucasians of 142.3 per 100,000. This disparity is also seen on the state level where Maryland African Americans had a rate of 181.8 and Maryland Whites had a rate of 105.8 per 100,000.

Number of New Prostate Cancer Cases, 2016

	Total	White	Black	Other
Maryland	4259	2480	1573	138
Charles County	130	67	56	<6
Calvert County	64	49	15	0
St. Mary's	55	41	12	<6
County				

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

2016 Prostate Cancer Incidence Rates

	Total	White	Black	Other
Maryland	124.6	105.8	181.8	65.5
Charles County	161.8	142.3	179.8	**
Calvert County	113.8	103.8	207.0	0
St. Mary's County	90.1	80.4	**	**

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

2012-2016 Results:

The Charles County prostate cancer incidence rate for 2012-2016 was 143.1 per 100,000 population. This rate is higher than the Maryland state average rate of 120.3. Charles County had the highest 2012-2016 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 (109.3 for Calvert and 85.9 for St. Mary's). The Charles County rate is more than 25% above the United States rate of 106.8 per 100,000.

Disparities are again visible for African Americans. The 2012-2016 Charles County African American prostate cancer incidence rate was 194.3, which was significantly higher than the rate for Charles County Caucasians of 115.5 per 100,000. This disparity is also seen on the state level

where Maryland African Americans had a rate of 180.4 and Maryland Whites had a rate of 102.3. The same disparities were also seen for Calvert and St. Mary's counties.

The 2012-2016 Charles County African American prostate cancer incidence rate was higher than the Maryland state average rate and the other Southern Maryland counties. It is the eighth highest rate among the Maryland jurisdictions.

2012-2016 Prostate Cancer Incidence Rates

	Total	White	Black	Other
Maryland	120.3	102.3	180.4	55.4
Charles County	143.1	115.5	194.3	**
Calvert County	109.3	100.2	176.3	**
St. Mary's County	85.9	76.1	144.9	**

^{**} Rates are not calculated for case counts less than 15

Prostate Cancer Mortality:

2016 Results:

For 2016, case counts for Charles, St. Mary's, and Calvert counties were too small to calculate prostate cancer mortality rates. The number of case counts is presented in the table below.

Number of Prostate Cancer Deaths, 2016

	Total	White	Black	Other
Maryland	558	315	s	<10
Charles County	12	<10	<10	<10
Calvert County	12	<10	<10	<10
St. Mary's County	<10	<10	<10	<10

2012-2016 Results:

The 2012-2016 Charles County prostate cancer mortality rate was 21.7 per 100,000. This rate is above the Maryland state average rate of 20.1. The Charles County rate is lower than the Calvert County rate of 28.4 and higher than the St. Mary's County rate of 20.6. The county prostate cancer mortality rate is 10-25% above the United States rate of 19.2 per 100,000.

Disparities are seen for the African American population. Charles County African Americans have a higher prostate cancer mortality rate of 34.9 compared to 17.9 for Charles County Whites.

2012-2016 Prostate Cancer Mortality Rates

2	Total	White	Black	Other
Maryland	20.1	16.5	36.7	5.9
Charles County	21.7	17.9	34.9	**
Calvert County	28.4	24.5	**	**
St. Mary's County	20.6	19.5	**	**

^{**} 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 2012-2016 incidence data will be presented. Case counts for 2016 alone were few, and rate calculations could not be performed.

Oral Cancer Incidence:

The Charles County oral cancer incidence rate for 2012-2016 was 12.0 This rate is greater than the Maryland state average rate of 10.8. The Charles County oral cancer incidence rate is between 10% below and 10% above the United States rate of 11.3 per 100,000.

Charles County Whites had a higher oral cancer incidence rate than Charles County Blacks (14.4 vs. 7.0).

Males are disproportionately affected by oral cancer compared to women. The 12-16 Charles County oral cancer incidence rate for males was 19.2, which is significantly higher than the oral cancer incidence rate for women (5.7).

2012-2016 Oral Cancer Incidence Rates

	Total	Male	Female	White	Black	Other
Maryland	10.8	16.4	6.0	12.1	8.1	6.7
Charles County	12.0	19.2	5.7	14.4	7.0	**
Calvert County	13.9	21.1	7.1	13.5	**	0
St. Mary's County	15.6	21.9	9.5	15.8	**	•••

^{**} 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 2012-2016 mortality data will be presented. Charles County case counts for 2016 alone were few, and rate calculations could not be performed.

Oral Cancer Mortality:

For 2012-2016, the Charles County oral cancer mortality rate was 3.0 per 100,000. This is higher than the Maryland state average rate of 2.4 per 100,000. The Charles County oral cancer mortality for 2012-2016 was 10-25% above the U.S. average rate of 2.5 per 100,000.

Even for a combined time period of 2012-2016, deaths due to oral cancer are few, and rate calculations by race and gender were not possible.

2012-2016 Oral Cancer Mortality Ra	tes
------------------------------------	-----

	Total	Male	Female	White	Black	Other
Maryland	2.4	3.7	1.4	2.4	2.8	1.3
Charles County	3.0	**	**	**	**	**
Calvert County	**	**	**	**	**	**
St. Mary's County	**	**	**	**	**	**

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

Melanoma of the Skin Incidence:

2012-2016 Results:

For 2012-2016, the Charles County melanoma cancer incidence rate 21.5 was per 100,000. This rate was less than the Maryland state average rate of 23.0 per 100,000, and it was less than the rates in the other Southern Maryland counties (Calvert 30.4 and St. Mary's 29.6). The Charles County rate was between 10% below and 10% above the United States rate of 23.2 per 100,000.

The incidence rate for melanoma cancer is higher for Charles County males than females (32.4 vs. 13.4). This rate difference is also seen on the state level for men and women (30.7 vs. 17.4).

A comparison of incidence rates by race can't be done due to small case counts for minorities. However, it should be noted that Charles County Whites had a higher melanoma cancer incidence rate (35.2) than Maryland Whites (33.6). On a state level, Maryland Whites were disproportionately affected by melanoma cancer incidence compared to Maryland African Americans (33.6 vs. 1.0).

2012-2016 Melanoma Incidence Rates

	Total	Male	Female	White	Black	Other
Maryland	23.0	30.7	17.4	33.6	1.0	1.5
Charles County	21.5	32.4	13.4	35.2	**	0
Calvert County	30.4	36.6	26.0	35.7	**	0
St. Mary's County	29.6	36.4	23.3	34.1	**	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 2012-2016 melanoma of the skin cancer mortality rate was 2.2 per 100,000. The rates were much higher for males than females (3.6 vs. 1.3), and the rates were much higher for Whites than Blacks (3.1 vs. 0.4).

2012-2016 Melanoma	of the Skin	Mortality Rate
--------------------	-------------	-----------------------

	Total	Male	Female	White	Black	Other
Maryland	2.2	3.6	1.3	3.1	0.4	**
Charles County	**	**	**	**	**	**
Calvert County	**	**	**	**	**	**
St. Mary's County	**	**	**	**	**	**

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

Cervical Cancer Incidence:

The 2012-2016 Charles County cervical cancer incidence rate was 5.4 per 100,000, which is below the Maryland state average rate of 6.3. Rates could not be calculated for Calvert County due to a small case count. St. Mary's County had a rate of 6.3. The Charles County had a cervical cancer incidence rate that was greater than 25% below the United States rate of 7.4 per 100,000.

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

2012-2016 Cervical Cancer Incidence Rates

	Total	White	Black	Other
Maryland	6.3	6.0	6.9	4.9
Charles County	5.4	**	**	**
Calvert County	**	**	**	0
St. Mary's County	6.3	**	**	**

^{**} 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 2012-2016 cervical cancer mortality rate was 1.9 per 100,000. The rate was double for Maryland African Americans compared to Maryland Whites (2.8 vs. 1.6).

2010-2014 Cervical Cancer Mortality Rates

	Total	White	Black	Other
Maryland	1.9	1.6	2.8	**
Charles County	**	**	**	**
Calvert County	**	**	**	**
St. Mary's County	**	**	**	**

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

Cancer References:

- 1. 2018 Charles County and Maryland Cancer Mortality Statistics. 2018 Maryland Vital Statistics Report. Maryland Department of Health. Available at: https://health.maryland.gov/vsa/ Documents/Reports%20and%20Data/Annual%20Reports/REV_2018annual.pdf.
- 2. 2012-2016 and 2016 Charles County and Maryland Cancer Mortality Rates by Site.
 2019 Maryland DHMH Cigarette Restitution Fund Program's Cancer Reports. Maryland Department of Health. Available at: https://phpa.health.maryland.gov/cancer/SiteAssets/Pages/surv_data-reports/2019%20CRF%20Cancer%20Report.pdf.

Qualitative Data Relating to Cancer:

On the long survey, Cancer had the 15th highest percentage of people reporting it as a serious health problem. 48.7% felt that it was a health problem in Charles County on any level, and 23% reported it as a "serious problem."

Of the long survey participants, 23.6% 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 regards to health behaviors and risk factors that could increase or decrease county residents' chances of developing cancer, 9.6% smoke cigarettes or cigars, 18.4% are exposed to secondhand smoke at home, 8.8% eat five or more servings of fruit and vegetables each day, 10% always perform cancer self-exams, 20.5% report always using sunscreen, and 14.6% participate in physical activity each day.

Over one-third of short survey participants (34%) felt that cancer is a big health problem in Charles County. 16.6% of respondents believe that there are some or many resources available in Charles County for cancer.

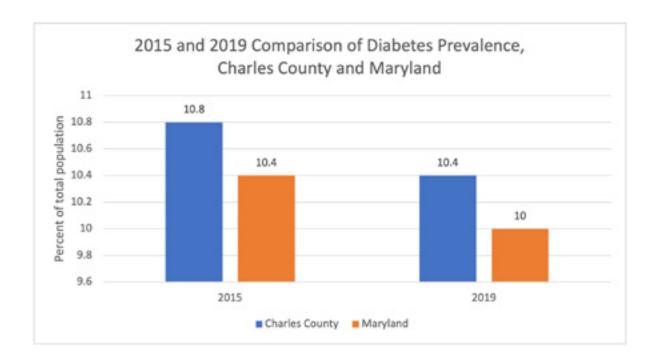
In the focus group, there was a discussion about the potential for an increase in late-stage cancer diagnoses due to delays in preventative screenings during the pandemic. Participants stressed the need for local providers and health agencies to educate the public on the need to continue age-appropriate cancer screenings.

Diabetes Mellitus:

Diabetes Prevalence:

The 2019 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 10.4%, similar to the state diabetes prevalence of 10.0%. The county diabetes prevalence has decreased by 0.4% from the 10.8% reported in the 2019 community health needs assessment report. This is a positive trend after seeing diabetes prevalence estimates rise slightly each year for several years.



Diabetes Mellitus Death Rates

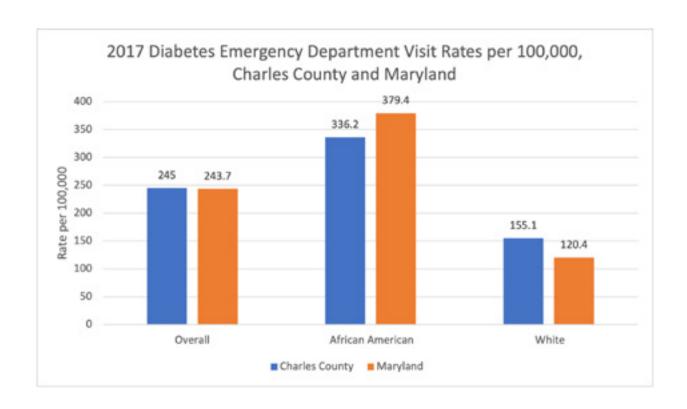
According to the 2018 Maryland Vital Statistics Report, there were 47 deaths in Charles County attributed to diabetes mellitus in 2018. When comparing the 2018 crude diabetes death rates per 100,000 population, the Charles County rate of 29.1 per 100,000 was greater than the state rate of 23.5 per 100,000 though the difference was not significant. The newest county diabetes death rate is an increase from the rate of 23.5 reported in 2018 community health needs assessment report.

Number of Diabetes Deaths and Crude Diabetes Death Rates, Charles County vs. Maryland, 2018		
Jurisdiction	Number of Deaths	Death Rate per 100,000
Charles County	47	29.1
Maryland	1421	23.5

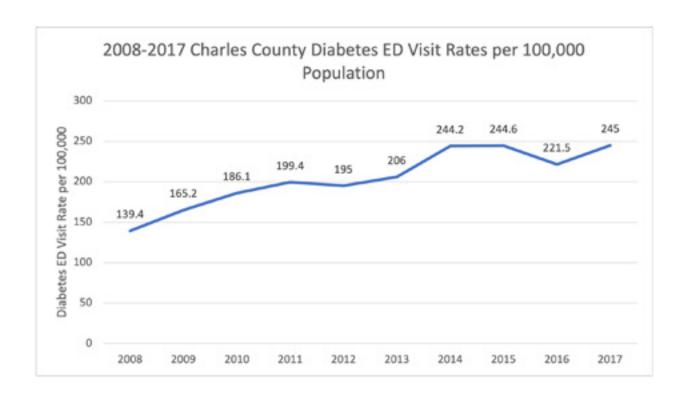
The age-adjusted death rate for diabetes mellitus for 2016-2018 in Charles County was 26.3 (per 100,000 populations). It was higher than the state diabetes death rate of 19.8 per 100,000, though the difference is not statistically significant. The 2016-2018 Charles County diabetes mortality rate is an increase from the 2014-2016 rate of 24.5 reported in the 2018 community health needs assessment report.

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.



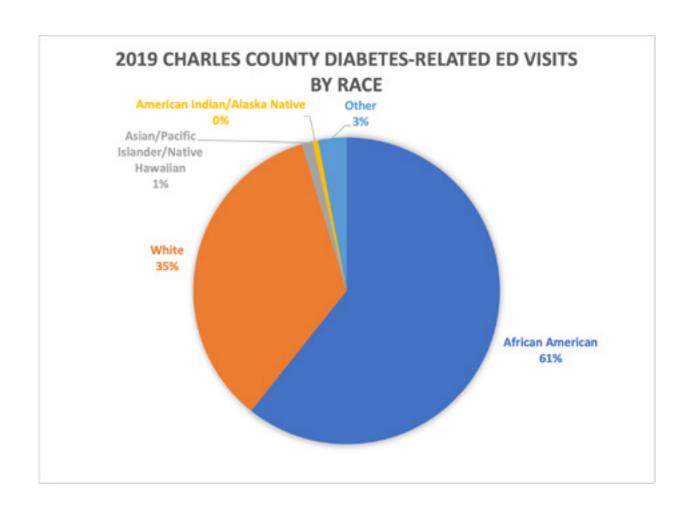
Looking at trends over the past seven years, the Charles County diabetes ED visit rate has increased from 139.4 in 2008 to 244.2 in 2014.



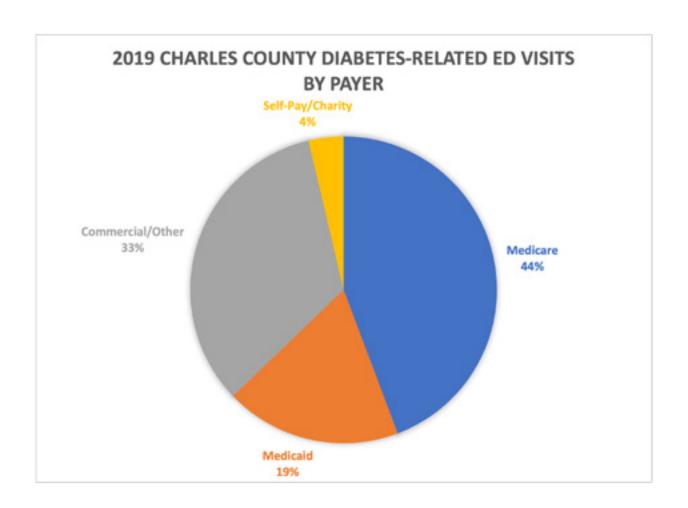
The Chesapeake Regional Information Sharing for our Patients (CRISP) is the health information exchange for the state of Maryland. CRISP Reporting Services provides public health dashboards with queries for emergency department and inpatient stays by demographics for many health conditions including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

In 2019, there were 4,148 emergency department (ED) visits for Charles County residents related to diabetes and 80.5% of those ED visits were at the University of Maryland Charles Regional Medical Center. The next highest facility was MedStar Southern Maryland Hospital with 6% of the ED visits. In Charles County, females have more diabetes-related ED visits than males (2,293 vs. 1,855).

Charles County African Americans are disproportionately affected by diabetes-related ED visits and make up 61% of the total diabetes-related ED visits for Charles County residents.



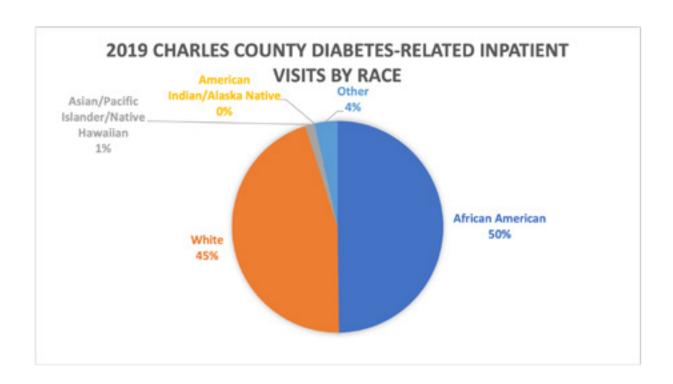
When examining my payer source, the largest payer is Medicare followed by Commercial/Other insurance.

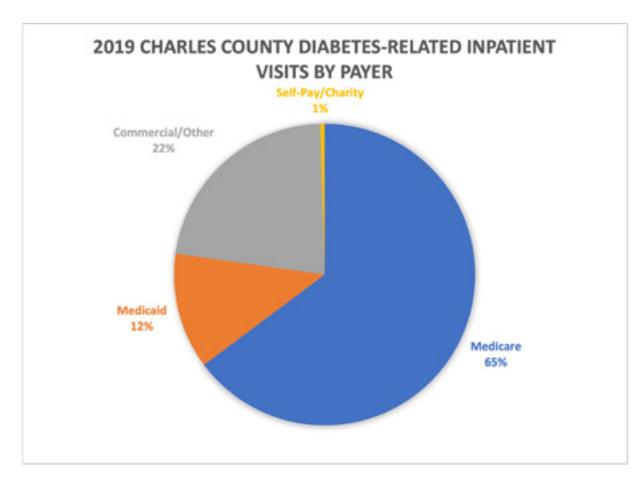


The age group with the largest number of diabetes-related ED visits is the 60-64-year-old age group who had 562 visits in 2019. They are followed closely by those aged 55-59 years.

2019 Charles County Diabetes-Related ED Visits by Age Group	Count
0-4 years	<11
5-9 years	12
10-14 years	<11
15-17 years	13
18-24 years	57
25-29 years	89
30-34 years	76
35-39 years	189
40-44 years	220
45-49 years	369
50-54 years	478
55-59 years	538
60-64 years	562
65-69 years	440
70-74 years	405
75-79 years	330
80-84 years	171
85+ years	186

The same data source can be used to examine diabetes-related Inpatient visits for Charles County for 2019. Females have more diabetes-related inpatients visits than males (1,312 vs. 1,275). Charles County Whites and African Americans make up the majority of the diabetes-related inpatient visits (95%). Medicare is the largest payer source for diabetes-related patient stays (64%). The age group with the most inpatient visits are those aged 70-74 years.





2019 Charles County Diabetes-Related Inpatient Visits by Age Group	Count
0-17 years	<11
18-24 years	23
25-29 years	29
30-34 years	23
35-39 years	47
40-44 years	59
45-49 years	141
50-54 years	209
55-59 years	259
60-64 years	320
65-69 years	310
70-74 years	351
75-79 years	342
80-84 years	227
85+ years	246

Pre-Diabetes:

The 2018 Maryland Behavioral Risk Factor Surveillance System asked respondents if they have ever been diagnosed with pre-diabetes or borderline diabetes. 13% of Charles County adults and 12.5% of Maryland adults reported that they have been diagnosed with pre-diabetes.

Diabetes Care:

In 2017, 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.

- 30.3% of Charles County adults with diabetes and 47% of Maryland adults with diabetes ever took a class or course to manage diabetes themselves
- 30.4% of Charles County adults with diabetes and 51.8% of Maryland adults with diabetes reported frequent food checks
- 35.2% of Charles County adults with diabetes and 65.7% of Maryland adults with diabetes reported frequent blood glucose checks
- 15.3% of Charles County adults with diabetes and 39.0% of Maryland adults with diabetes use insulin

Diabetes References:

- 1. 2019 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. 2018 and 2016-2018 Charles County Diabetes mellitus mortality counts and rates. 2018 Maryland Vital Statistics Report. Maryland Department of Health. Available at: https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/REV 2018annual.pdf.
- 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. 2019 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. 2017 Charles County 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:

Of the long survey participants, 54.5% felt that diabetes was a health problem in Charles County. Approximately one-quarter (24.5%) felt that diabetes is a "serious problem" in Charles County; 24.2% 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 8.8% always eat five or more servings of fruits and vegetables each day, 7.7% always or most of time eat fast food at least once a week, 58.6% always take a vitamin, and 14.6% participate in physical activity each day.

Of the short survey participants, 47.7% felt that Diabetes is the greatest health problem in Charles County. This was the second highest ranking health condition. Additionally, 17.9%

of the respondents felt that there are "many" or "some" services available in Charles County to address diabetes.

Of the key informant interview participants, 7.8% felt that diabetes is the greatest health issue facing Charles County. This was the third highest ranking health condition.

Adult Diabetes:

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

The county has focused on diabetes since the last needs assessment and has put more programs and services in place. The newly established Diabetes Education Center at the University of Maryland Charles Regional Medical Center was seen as a strength and asset to the community. Educational resources such as the Diabetes Prevention Program and diabetes support groups were also seen as strengths of the community.

Charles County Asthma Prevalence:

Adult Asthma Prevalence:

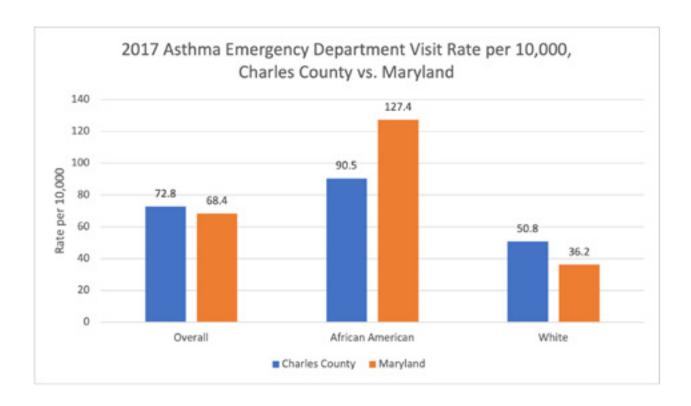
Asthma is an emerging health problem in the United States and in Maryland. The problems associated with asthma have been felt at the local level as well. In 2019, approximately 14.9% of adults in Maryland and 12.9% of adults in Charles County have ever been diagnosed with asthma (2019 Maryland BRFSS). An estimated 9.2% of Maryland adults and 7.1% of Charles County adults reported that they currently have asthma (2019 Maryland BRFSS).

Asthma Emergency Department and Hospitalization Rates:

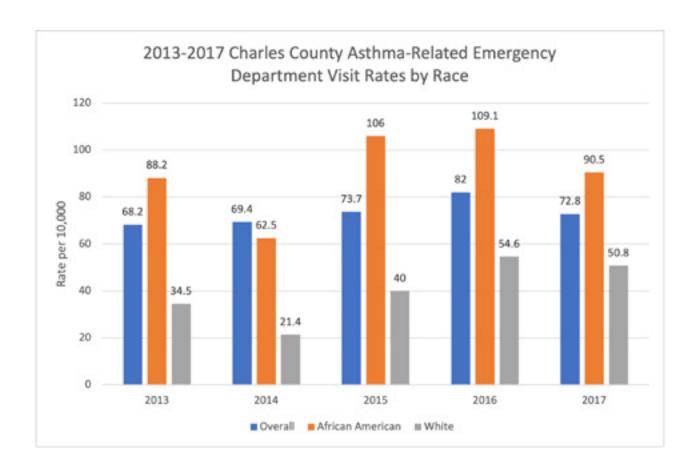
This indicator shows the rate of emergency department (ED) visits due to asthma per 10,000 population in 2017. Asthma is a chronic health condition which causes very serious breathing problems. When properly controlled through close outpatient medical supervision, individuals and families can manage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



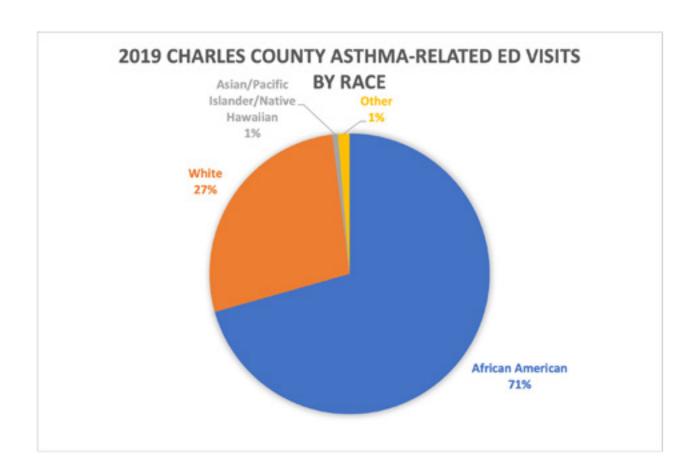
Charles County has seen a lot of fluctuation in the asthma-related ED visit rates from 2013-2017. The 2013 Charles County asthma ED visit rate was 68.2 versus 73.7 in 2017. The Charles County African American population have seen an increase from 88.2 in 2013 to 90.5 in 2017. Charles County Whites have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



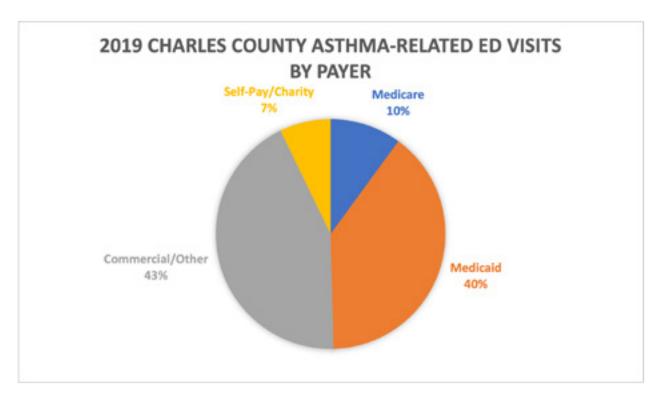
The Chesapeake Regional Information Sharing for our Patients (CRISP), is the health information exchange for the state of Maryland. CRISP Reporting Services provides public health dashboards with queries for emergency department and inpatient stays by demographics for many health conditions including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

In 2019, there were 1,743 emergency department (ED) visits for Charles County residents related to asthma. 69.4% 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 (1115 vs. 628).

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.



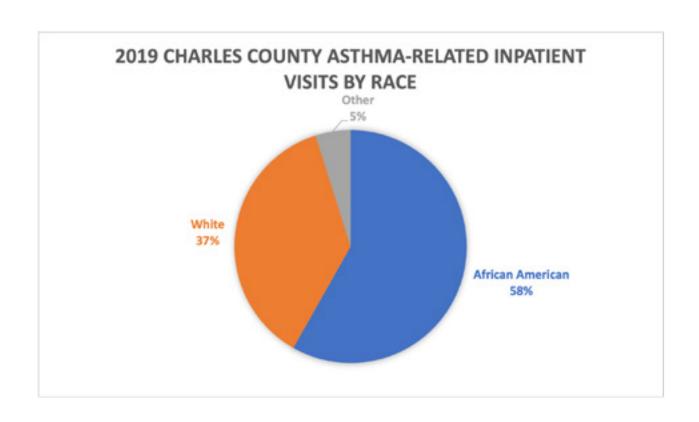
When examining my payer source, the largest payer is Commercial/Other insurance followed by Medicaid. When examining my payer source, the largest payer is Commercial/Other insurance followed by Medicaid.

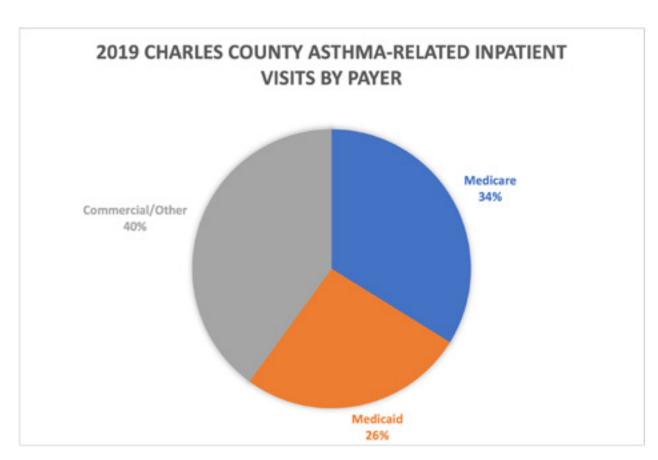


The age group with the largest number of asthma-related ED visits is the 18-24-year-old age group who had 216 visits in 2019. They are followed closely by those aged 30-34 years.

2019 Charles County Asthma-Related ED Visits by Age Group	Count
0-4 years	93
5-9 years	147
10-14 years	119
15-17 years	76
18-24 years	216
25-29 years	144
30-34 years	172
35-39 years	126
40-44 years	124
45-49 years	115
50-54 years	117
55-59 years	119
60-64 years	70
65-69 years	34
70-74 years	22
75-79 years	27
80-84 years	13
85+ years	<11

The same data source can be used to examine asthma-related Inpatient visits for Charles County for 2019. There were 677 asthma-related inpatient visits in 2019. Females have more asthma-related inpatients visits than males (486 vs. 191). Charles County Whites and African Americans make up the majority of the asthma-related inpatient visits (95%). Commercial or Other insurance is the largest payer source for asthma-related patient stays (39%). The age group with the most inpatient visits are those aged 60-64 years.





2019 Charles County Asthma-Related Inpatient Visits by Age Group	Count
0-17 years	33
18-24 years	62
25-29 years	61
30-34 years	53
35-39 years	54
40-44 years	36
45-49 years	49
50-54 years	58
55-59 years	36
60-64 years	47
65-69 years	65
70-74 years	43
75-79 years	35
80-84 years	19
85+ years	26

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.

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 2019 Maryland Behavioral Risk Factor Surveillance System provides estimates on the prevalence of Chronic Obstructive Pulmonary Disease (COPD) in the community. The 2019 Charles County COPD prevalence was 5.1%. This is comparable to the 2019 Maryland state average COPD prevalence of 4.9%.

Asthma References:

- 2019 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. 2014 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/b5i6-2gym.
- 3. 2019 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/query/builder/yrbs/MS_AsthmaYN/Crude.html.
- 5. 2019 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:

Long survey and key informant interview 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 18.4% 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. 16.8% of short survey respondents felt that the county has "many" or "some" services in regards to asthma.

On the long survey, 42.2% of respondents felt that asthma was a problem on some level in Charles County. 10.7% thought that asthma is a serious problem in Charles County. 9.3% reported that they have seen improvements in Charles County in regards to asthma.

Charles County Obesity and Overweight Data:

2019 Charles County adult obesity and overweight prevalence:

The 2019 Maryland BRFSS data estimates that over two-thirds of Charles County adults are either overweight or obese (71.9%). This percentage is a decrease from the 76.9% reported in the previous needs assessment report. Obesity prevalence was determined by weighting Charles County BRFSS BMI responses to reflect the county population. The 2019 results found that 43.5% of Charles County adults are obese; and 28.4% are overweight. The Charles County obesity prevalence is higher than the Maryland state average obesity prevalence (43.5% vs. 32.2%). The Charles County overweight prevalence is lower than the Maryland state average overweight prevalence (28.4% vs. 34.4%).

BMI Status: Charles County	Healthy Weight	Overweight or Obese	Overweight	Obese
2019	28.2%	71.9%	28.4%	43.5%
Previous CHNA	23.1%	76.9%	44.9%	32.0%

Childhood Obesity:

High School Students aged 15-18 years:

Childhood obesity statistics on a state and county level are limited. The 2018 Maryland Youth Risk Behavior Survey (YRBS) found that Charles County high school students have a 14.6% obesity prevalence and a 16.3% overweight prevalence. In Charles County, high school females were more likely to be overweight than high school males; however, high school males were more likely to be obese than high school females. The prevalence of overweight was highest in the 11th grade. The prevalence of obesity was highest in 10th and 12th grades. Hispanic high school students had a higher prevalence of overweight than any other racial or ethnic group. High school students of multiple races had a higher prevalence of obesity than any other racial or ethnic group.

Overweight Prevalence in	Total High School Population (%)	Male (%)	Female (%)
CC High School Students: 2018 YRBS		12 W	
Total	16.3%	13.7%	19.1%
Age			
15 and younger	15.6	14.3	17.0
16-17	17.6	13.9	21.6
18 and older		-	-
Grade			
9th	16.3	15.3	17.5
10th	15.0	13.5	16.7
11th	17.8	13.4	22.4
12th	16.0	12.6	19.7
Race/Ethnicity			
Black	17.4	14.7	20.2
Hispanic	18.8	17.7	20.3
White	14.0	11.6	17.1
All Other Races	10.4		
Multiple Races	17.4		23.2

⁻⁻ Percentages are not calculated due to less than 100 students in a subgroup.

Obesity Prevalence in	Total High School Population (%)	Male (%)	Female (%)
CC High School Students: 2018 YRBS			
Total	14.6	15.8	13.3
Age			
15 and younger	14.6	16.0	13.0
16-17	14.2	15.5	12.7
18 and older	-		
Grade	10000		
9th	14.2	16.3	11.8
10th	15.4	16.7	14.0
11th	12.5	14.1	10.8
12th	15.4	14.7	16.3
Race/Ethnicity			
Black	14.3	14.5	14.2
Hispanic	16.2	16.4	16.0
White	13.7	14.9	12.1
All Other Races	9.5		
Multiple Races	18.2		7.6

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

- 26.7% consider themselves slightly or very overweight
- 22.0% did not eat fruit in the past week
- 10.7% did not eat vegetables in the past week
- 12.0% drank soda one or more times a day
- 34.5% were physically active for at least 60 minutes five times a week
- 23.4% watched television for three or more hours per day
- 45.2% played video games or played on computer three or more hours per day

These same questions were also asked of Charles County middle school students on the 2018 YRBS.

- 23.3% describe themselves as slightly or very overweight
- 43.3% are trying to lose weight
- 9.6% did not eat breakfast each day
- 47.3% were physically active at least 60 minutes five times a week
- 17.5% did not participate in physical activity at least one day a week
- 29.9% watched television for three or more hours per day
- 52.1% played video games or played computer for three or more hours a day

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 2016 average obesity rate for Maryland children 2-4 years was 15.6%. This is the 9th highest obesity rate in the United States. However, the 2016 obesity rate of 15.6% is a drop from 16.5% reported in 2014.

The National Survey of Children's Health (NSCH) provides data on youth aged 10-17. The 2018-19 average obesity rate for Maryland children 10-17 years was 17.6%. This is the 10th highest obesity rate in the United States. This percentage is an increase from the 2017-18 report where the obesity rate for Maryland children aged 10-17 was 14.5%.

Determinants of Health:

Physical Activity:

Sedentary lifestyle increases 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, 2019 Maryland BRFSS data found that 77.4% of Charles County residents report leisure time physical activity. This is slightly higher than the Maryland state average percentage of 76.6%.

Leisure Time Physical Activity 2019 BRFSS	Yes, leisure time physical activity	No leisure time physical activity
Charles County	77.4%	22.6%
Maryland	76.6%	23.4%

Daily Fruit and Vegetable Consumption, 2019 BRFSS	Percent who consume at least 1 fruit per day	Percent who consume at least 1 vegetable per day
Charles County	58.1%	83.5%
Maryland	62.8%	78.7%

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 zero 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:

2017 BRFSS collected data on various community support indictors. These indicators may have an effect on health behaviors within a community. When asked if there are sidewalks in their neighborhood, 51.2% reported having sidewalks. Sidewalks in a community promote safe physical activity such as walking or running.

The 2017 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: 76.2% of Charles County residents reported no shoulders or lanes being marked for bicycling and14.2% reported some being marked.

57.3% of Charles County residents described the lighting in their neighborhood as "poor" or "very poor" for walking at night, and 30.9% of those residents described the street lighting in their neighborhood as "very poor."

Walking at night, 2017 BRFSS	Percent
Very Good	
Good	32.9%
Poor	26.4%
Very Poor	30.9%

Percent
38.0%
19.7%
12.7%
22.7%

When asked how often Charles County residents felt safe in their neighborhood, 66.7% said they felt safe all the time; 29.7% reported feeling safe most of the time, and 3.4% felt safe some of the time.

Obesity and Overweight References:

- 1. 2019 Charles County and Maryland Overweight and Obesity Estimates. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at https://ibis.health.maryland.gov/.
- 2. 2018-2019 13-18 year old Charles County and Maryland overweight/obesity Estimates. 2018-2019 Maryland Youth Risk Behavior Survey. Maryland CRF Program. Maryland Department of Health. Available at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2018.aspx.

- 3. 2016 2-4 year old and 2018-19 10-17 year old Maryland Obesity Estimates. The State of Obesity Report. The Robert Wood Johnson Foundation. Available at: https://stateofchildhoodobesity.org/.
- 4. 2019 Charles County Obesity Health Complication and Risk Factor Data. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at https://ibis.health.maryland.gov/.
- 5. 2020 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. 2020 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. Healthy People 2030. U.S. Department of Health and Human Services. Available at: health.gov/healthypeople.
- 8. 2017 Charles County Community Support Estimates. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at https://ibis.health.maryland.gov/.

Qualitative Data Relating to Obesity:

Overweight/obesity was seen as one of the biggest and most serious health issues in Charles County on the long survey. The majority of the long survey participants viewed overweight/obesity as a problem on some level (73.3%). It was also seen as a serious health problem by 36.9% of long survey participants (second most common response).

Of the long survey respondents, 8.7% felt that improvements have been made in the county towards combating obesity.

Risk factors reported by long survey participants increasing the rate of obesity include:

- 1. Only 8.8% always eat five or more servings of fruits and vegetables every day. 34.0% reported that they eat five or more servings of fruits and vegetables most of the time.
- 2. 1.9% always eat fast food at least once a week.
- 3. 6.3% eat fast food at least once a week most of the time.
- 4. Only 14.6% always participate in physical activity each day. 65.1% reported that they participate in daily physical activity sometimes or most of the time.

On the short survey, overweight and obesity were seen as the biggest health problems in Charles County. Nearly half of the respondents (50.3%) felt that overweight and obesity are big health issues in Charles County. When asked if services were available in Charles County to address obesity and overweight, 42.3% of participants who answered reported that many or some services were available in the county to address the issue.

When asked what they perceive to be the biggest health problem in Charles County,

12.5% of focus group participants chose obesity. Obesity increases the likelihood of developing other chronic health conditions such as diabetes, arthritis, heart disease, cancer, asthma, injury, hypertension, and stroke. Discussions on obesity focused on unhealthy eating habits amongst community members and the financial decision making that goes into choosing healthy food over fast food and other unhealthy food options.

Focus group participants noted barriers in accessing grocery stores in many communities within Charles County. Limited access to large grocery stores may force community members to choose unhealthy food options like non-perishable items or fast food. Transportation was seen as another barrier, which can lead to individuals choosing food options based on convenience. Community members who do not have transportation to larger grocery stores may be limited to dollar stores or other unhealthy food options.

Discussions on the connection between mental health and healthy decision making showed concern for unhealthy habits that could affect one's weight and nutritional status. Respondents noted that mental health and isolation has the ability to control one's actions, which can lead to carb loading and substance and alcohol use. This was noted to be a concern related to the current pandemic, which may cause individuals to feel isolated.

Childhood obesity and overweight were of the biggest issues to emerge from the focus group discussion.

Improvements in educational programs that address chronic conditions were mentioned in the discussion and seen as a strength in the community. It was mentioned that community members have access to chronic disease self-management classes and mobile integrated health care, which can help those individuals living with obesity or overweight.

Chronic disease prevention resources and programs have expanded in Charles County compared to past years. Activities and community programs including Living Well Southern Maryland and Walk Charles County promote chronic disease prevention and healthy lifestyles for adults and children.

The Senior Nutrition Program in Charles County is another program aimed at focusing on nutrition for community seniors. They provide nutritional services to Charles County residents over the age of 60. Their programs include congregate meals at senior centers, meals on wheels, nutrition education and counseling, and referrals for other programs including food pantries and private-pay programs.¹

Although chronic disease management programs have been added to the community, chronic disease management was one of the biggest health issues to emerge from the focus group discussion.

1. "Charles County, MD." Nutrition Programs, <u>www.charlescountymd.gov/services/aging-and-senior-services/nutrition-services</u>.

Health of the Aging Population:

Life Expectancy:

The 2016-2018 average life expectancy at birth for a Charles County resident was 78.5 years. The life expectancy is similar for Charles County Whites at 78.3 years and Charles County African Americans at 79.2 years.

Alzheimer's disease:

Mortality:

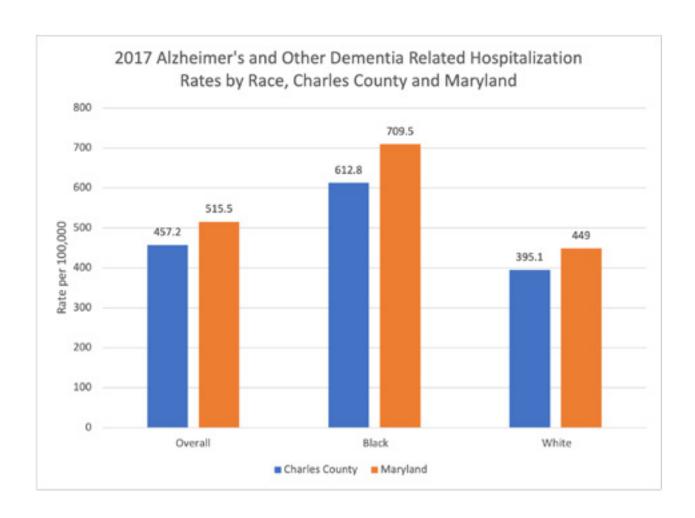
Alzheimer's is the sixth-leading cause of death nationally and the only cause of death among the top 10 in the United States that cannot be prevented cured or even slowed. In the United States, 1 in 3 seniors will die with Alzheimer's or another form of dementia. In 2018, there were 23 deaths in Charles County and 1,126 deaths in Maryland attributed to Alzheimer's disease.

The 2018 crude Alzheimer's disease mortality rate for Charles County was 14.2 per 100,000. This rate was slightly below the Maryland state average rate of 18.6 per 100,000.

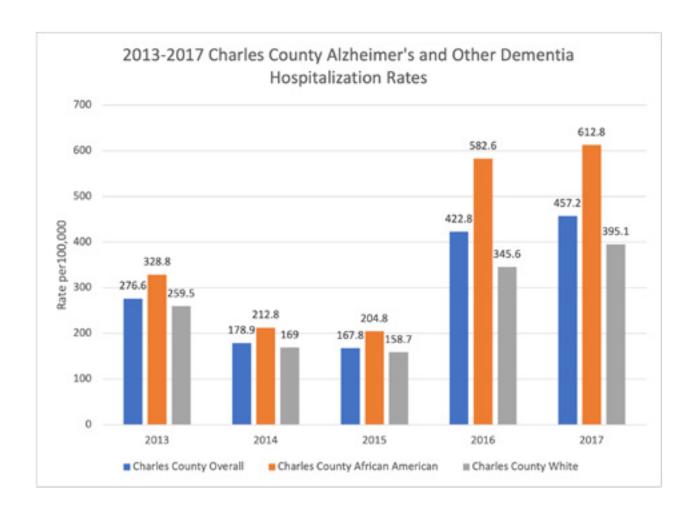
The 2016-2018 average age-adjusted Alzheimer's disease mortality rate for Southern Maryland was 18.7 per 100,000. This three-year average rate is more reliable than the 2018 only rate. The 2016-2018 Southern Maryland average rate was higher than the Maryland state average rate of 16.8 per 100,000. A county level rate could not be calculated due to small case counts.

Hospitalizations for Alzheimer's disease and 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 2013 to 2017, increases can be seen in the last two 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:

It is estimated that 21.7% of Marylanders and 24.4% of Charles County residents are currently living with arthritis (2019 Maryland BRFSS). The 2019 BRFSS contained a module with additional questions surrounding arthritis. Of Charles County residents with arthritis, 23% reported that arthritis or joint symptoms have affected whether they can work, the type of work they do, or the amount of work they do; and 90.4% of Charles County residents with arthritis also reported that they have had joint pain in the past month. On a scale of 1-10 with 10 being the most severe pain, most respondents said their pain was between 1-3 out of 10.

Among Charles County residents who reported having arthritis, the majority are not hindered by their arthritis. Nearly 61.9% reported that they can do most things or everything and 38.1% reported having limited activities due to joint symptoms.

Disability and Health Impairment:

The 2019 Charles County BRFSS data estimates that approximately 22.4% of Charles County residents reported having poor physical or mental health that kept them from their usual activities at least one day in the last month.

The 2019 BRFSS included a module with seven questions regarding disabilities and health impairment. 25.6% of Charles County residents reported at least one disability, compared to 22.4% for Maryland. The Charles County and Maryland breakdown for vision, cognitive, mobility, self-care, independent living, and hearing are listed in the table below.

2019 BRFSS Disability and Health Impairment, Charles County and Maryland	Charles County	Maryland
Reported at least one disability	25.6%	22.4%
Vision Disability	**	3.8%
Cognitive Disability	12.3%	9.9%
Mobility Disability	10.0%	10.3%
Self-care Disability	2.2%	2.7%
ndependent Living Disability	2.4%	5.8%
Hearing Disability	3.7%	4.1%

^{**} Case count was too small for a percent to be calculated and presented.

Chronic Lower Respiratory Disease Mortality:

In 2018, there was a total of 53 deaths in Charles County and 2235 deaths in Maryland attributed to Chronic Lower Respiratory Disease. The 2016-2018 Charles County Chronic Lower Respiratory Disease (COPD) mortality rate was 32.4 per 100,000. This is higher than the Maryland state average rate of 30.5 and lower than the Southern Maryland regional rate of 35.5 per 100,000.

Aging Data References:

- 1. 2018 Charles County Life Expectancy and Alzheimer's disease mortality. 2018 Maryland Vital Statistics Report. Maryland Department of Health. Available at: https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/REV 2018annual.pdf.
- 2. United States Alzheimer's Disease Facts And Figures. National Alzheimer's Association. Available at: www.alz.org.
- 3. 2013-2017 and 2017 Charles County Alzheimer's disease and other dementia hospitalization 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. 2019 Arthritis Prevalence, Severity, and Management. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at: https://ibis.health.maryland.gov/.
- 5. 2019 Disability and Health Impairment Statistics. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at: https://ibis.health.maryland.gov/.
- 6. 2018 Charles County Chronic Lower Respiratory Disease Mortality Rates. 2018 Maryland Vital Statistics Report. Maryland Department of Health. Available at: https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/REV_2018annual.pdf.

Qualitative Data Pertaining to the Aging:

The focus group participants held a discussion about the challenges of telehealth for seniors and those in the aging population. Virtual telehealth appointments only work if individuals have access to reliable internet and the equipment to connect. There is a large portion of seniors who do not want to set up the virtual meetings for telehealth. Participants proposed a hybrid system where residents have access to health education classes in person or virtual. The group also acknowledged that technology has many positive aspects including the potential to show needed health services and screenings as well as benchmarks for health.

On the long survey, participants were asked to rank the seriousness of each health condition in Charles County. Of the respondents, 13.5% felt that disability services are a serious problem in Charles County, and 42.4% felt that disability services are a problem on any level: serious, moderate, or slight.

Injury-Related Morbidity and Mortality Data Analysis

Injury-related Mortality:

There are various deaths recorded in the Maryland Vital Statistics Report related to accidental and intentional injuries. Accidents were the third leading cause of death in Charles County and the number one cause of death in individuals under the age of 24 years. In 2018, there were 50 deaths in Charles County and 2,320 deaths in Maryland due to accidents. Nineteen of the Charles County accident deaths were due to motor vehicle accidents. There were also 31 deaths due to other accidents, 18 deaths due to intentional self-harm or suicide, and 15 homicides.

The 2018 Charles County crude accident death rate was 31.0 per 100,000. This is slightly below the Maryland state rate of 38.4 per 100,000.

The 2016-2018 age-adjusted Charles County accident death rate was 38.8 per 100,000 compared to 36.0 for the state of Maryland. There is no significant difference in the county and state rates.

Injury-related Morbidity:

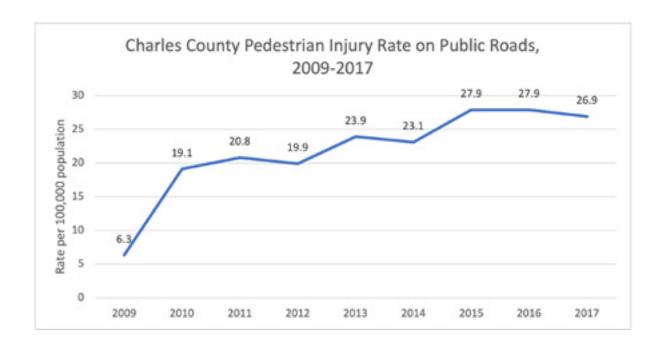
Child maltreatment:

The 2017 Charles County rate of children who were maltreated per 1,000 population under the age of 18 years was 5.7. This is below the Maryland state average rate of 7.1 per 1,000 population under the age of 18 years.

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 2017 Charles County pedestrian injury rate on public roads was 26.9 per 100,000. This is significantly lower than the Maryland state average rate of 53.5 per 100,000.



Seat Belt Use:

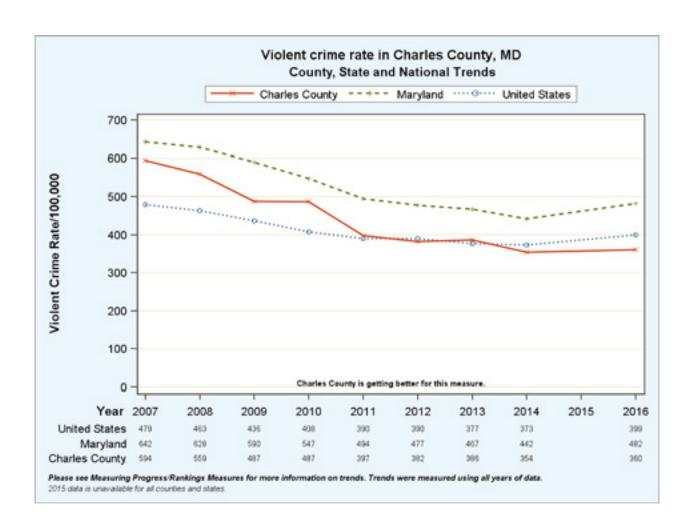
According to the 2018 Maryland Behavioral Risk Factor Surveillance System (BRFSS), approximately 93.8% of Charles County residents report that they are always compliant with seat belt use. This is slightly above the Maryland state percentage of 90.1%.

Fall prevalence:

According to the 2018 Maryland BRFSS, 20.2% of Charles County residents and 22.2% of Maryland residents over the age of 45 years have fallen sometime in the past year; 6.2% of Charles County residents reported that their fall resulted in an injury, compared to 8.7% for Maryland.

Violent Crime:

The 2014-2016 Charles County violent crime offenses per 100,000 was 357. The Charles County violent crime rate is below the Maryland average rate of 459 per 100,000.



Injury Death Rate:

The 2014-2018 rate of deaths due to injury per 100,000 in Charles County was 65 per 100,000. There was a total of 517 injury-related deaths in Charles County from 2014-2018. The Charles County injury death rate was lower than the Maryland state average rate of 76 per 100,000.

Number of Injury-related Deaths by Race/Ethnicity, 2014-2018:	Count	
White	93	
African American	47	
Hispanic	40	

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, 4.23 million 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 three 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. 2018 Charles County Injury/Motor Vehicle Accident Mortality Data. 2018 Maryland Vital Statistics Report. Maryland Department of Health. Available at: https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/REV_2018annual.pdf
- 2. 2017 Child maltreatment data. Maryland Department of Human Resources. Accessed through the Maryland State Health Improvement Process website. Available at: https://pophealth.health.maryland.gov/Pages/SHIP-Lite-Home.aspx.
- 3. 2009-2017 Pedestrian Injury Rate on public roads. Maryland State Highway Administration. Accessed through the Maryland State Health Improvement Process website. Available at: https://pophealth.health.maryland.gov/Pages/SHIP-Lite-Home.aspx.
- 6. 2018 Seat Belt Use Percentages for Charles County and Maryland. 2018 Maryland Behavioral Risk Factor Surveillance System. Available at: https://ibis.health.maryland.gov/.
- 7. 2018 Fall Prevalence and Severity Data for Charles County and Maryland. 2018 Maryland Behavioral Risk Factor Surveillance System. Available at: https://ibis.health.maryland.gov/.

- 8. 2014-2016 Violent Crime Offenses Rates. Uniform Crime Reporting Program. Accessed through the Robert Wood Johnson Foundation's County Health Rankings. Available at: https://www.countyhealthrankings.org/app/maryland/2020/rankings/charles/county/outcomes/overall/snapshot.
- 9. 2014-2018 Injury related death rates per 100,000. Compressed Mortality File. Accessed through the Robert Wood Johnson Foundation's County Health Rankings. Available at: https://www.countyhealthrankings.org/app/maryland/2020/rankings/charles/county/outcomes/overall/snapshot.
- 10. 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/ohpetup/Pages/EIPResourceGuide.aspx.

Qualitative Data Relating to Traffic Safety and Injury:

On the long health survey, participants were asked the severity of several health issues in Charles County. The community perceives crime as the problem in Charles County. Crime had the highest percentage reporting it as a combined slight, moderate, and serious problem (68.4%). Crime also had the fourth 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. Traffic safety had the fourth highest number of people who reported it as a problem on any 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
Injuries	3.7	39.9	7.7
Highway Safety/Traffic Accidents	4.6	60.8	23.5
Child Abuse and Neglect	4.6	43.5	15.3
Domestic Violence	4.1	49.9	19.3
Traumatic brain injury	5.7	28.3	5.7
Crime	4.6	68.4	26.9

Survey participants reported improvements in traffic safety in Charles County (16.2%). This was the ninth highest percentage among the health conditions. Injuries reported the lowest percentage of people reporting any improvements (5.6%).

Health Issues where improvements have been seen	Response Percent
Traffic Accidents	16.2
Injuries	5.6

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

- 90.4% always wear a seat belt
- 58.6% always follow road safety rules
- 15.2% always wear a helmet when riding a bike
- 13.4% always wear a helmet when riding an ATV, scooter, or motorcycle
- 14.6% 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. 6% felt that injuries were the biggest health problem in Charles County. This was the lowest among the health conditions listed. 17.7% of the short survey participants chose Traffic Safety as the biggest health problem in Charles County. This was the second lowest percentage among the health conditions listed.

Charles County Communicable Disease and Environmental Health Data:

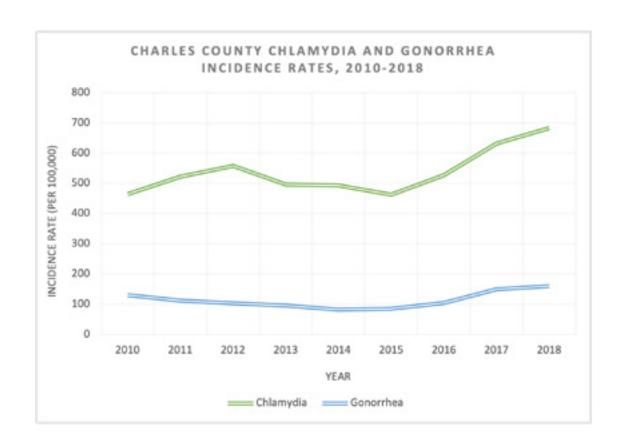
The table below shows the incidence for the 12 most commonly reported communicable diseases in Charles County in 2018. Chlamydia had the highest incidence rate in Charles County for 2018. The top two communicable diseases with the highest incident counts in 2018 in Charles County were both sexually transmitted diseases.

Selected Notifiable Conditions Reported in Charles County, 2018	Case Counts	Incidence Rates per 100,000 population
Chlamydia	1,103	683.0
Gonorrhea	258	159.7
Animal Bites	235	145.5
Invasive Strep Group B	20	12.4
Legionellosis	19	11.8
Mycobacteriosis, Other than TB & Leprosy	17	10.5
Salmonellosis- Other than Typhoid Fever	17	10.5
Syphilis- Primary and Secondary	14	8.7
Invasive Strep pneumoniae	11	6.8
Campylobacteriosis	10	6.2
Lyme Disease	8	5.0
Invasive H. influenzae	7	4.3

Chlamydia and Gonorrhea incidence rates have had steady increases over the past four years in Charles County. Chlamydia incidence rates are consistently higher than Gonorrhea incidence rates over the past nine years, however, both have seen increases in recent years. The 2018 incidence rate for Chlamydia in Charles County was 683.0 per 100,000, compared to the 2015 incident rate of 462.3 per 100,000. The 2018 Gonorrhea incident rate in Charles County was 159.7 per 100,000, compared to the 2015 rate of 84.5 per 100,000.

Primary and Secondary Syphilis had an increase in incidence rates in 2018 as well. The 2018 incidence rate was 8.7 per 100,000. This is compared to the 2015 incidence rate of 5.8 per 100,000.

Increases in sexually transmitted disease cases are not only affecting Charles County, but the entire United States. In 2018, there was a 19% increase in Chlamydia cases in the U.S. since 2014. In 2018, Gonorrhea had a 63% increase in cases since 2014, and Primary and Secondary Syphilis had a 71% increase in cases since 2014 (CDC).



Rabies:

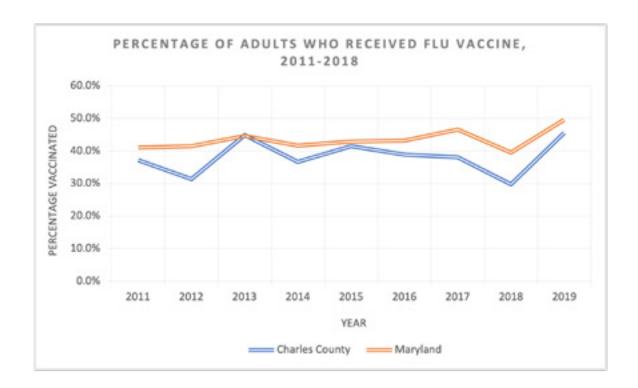
No human rabies cases were reported in Charles County from 2010-2020. Charles County has seen a decline in animal rabies cases from 12 in 2010 to 6 in 2020. With such small case counts, it is not uncommon to see fluctuation in counts from year to year. Raccoons and bats are commonly reported animal rabies cases. Case counts from 2010 to 2020 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
Total Animal Rabies Cases	12	14	14	9	11	5	7	8	6	7	6
Bat Rabies Cases	1	0	7	1	1	0	1	3	0	1	1
Raccoon Rabies Cases	7	6	6	3	5	1	1	3	4	4	3
Skunk Rabies Cases	1	1	1	0	3	1	3	0	2	0	0

Vaccinations:

Influenza/Flu

In 2019, 45.6% of Charles County adults received the flu vaccine. This is an increase from the 2018 percentage of 29.8%; however, this percentage is still below the Maryland state average percentage of 49.6%. Charles County Whites had a higher rate of flu vaccination coverage than Charles County African Americans (50.6% vs. 27.9%).

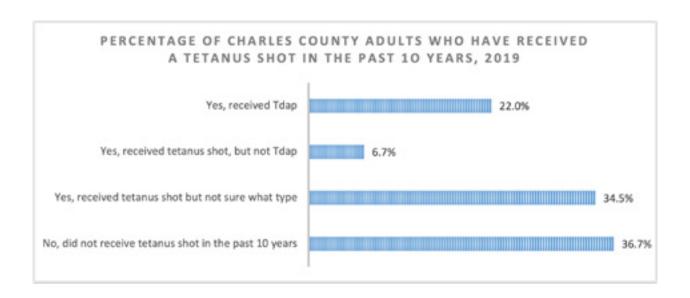


Pneumonia

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 10 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 10 years. This data is also broken down into whether individuals received Tdap specifically.



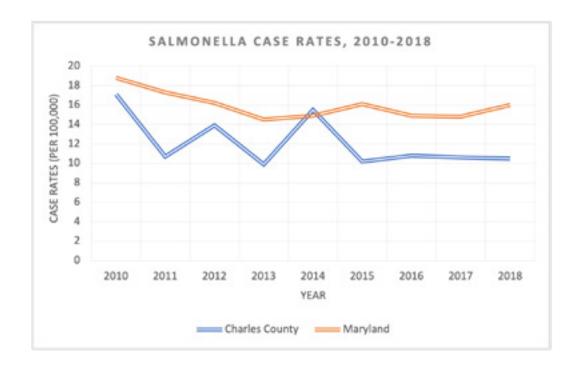
The Maryland state average percent of adults who received a tetanus shot in the past 10 years was 72.7% in 2019 while 27.2% of Maryland adults reported not receiving a tetanus shot in the past 10 years.

Childhood Recommended Vaccines

In 2017, the Maryland state average percent of children (19-35 months) who received recommended vaccines was 75.2%.

Salmonella:

The 2018 Charles County case rate for Salmonella was 10.5 per 100,000. This is slightly lower than the 2017 rate of 10.6 per 100,000. The Charles County case rate does fall below the Maryland state average case rate of 16.0 per 100,000 for 2018. The Charles County case rate for Salmonella has continued to show a downward trend since 2010 with spikes in 2012 and 2014. Case rates from 2015-2018 have been steady.



Coronavirus Disease 2019 (COVID-19):

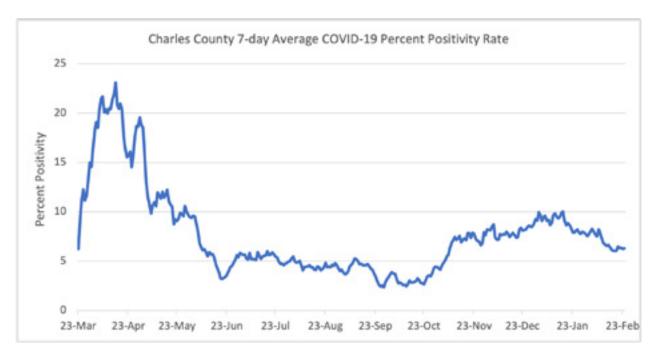
COVID-19 is the new coronavirus disease that has been the most prominent infectious disease in the United States and the world from late 2019 until the present. First identified in 2019, COVID-19 is transmitted person-to-person and can cause individuals infected to experience respiratory illness.

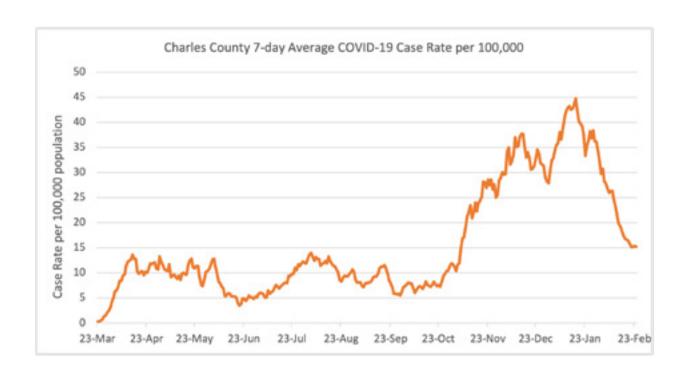
In Charles County, COVID-19 cases did not begin to emerge until mid-March 2020. Once the first cases were identified in the county, there were large spikes in both the percent positivity and case rates. The highest percent positivity recorded for Charles County was in the beginning of the event where it reached 23.08%. The increase in percent positivity and case rate during the beginning of the pandemic in Charles County can be accredited to the nursing home outbreaks the county experienced during that time.

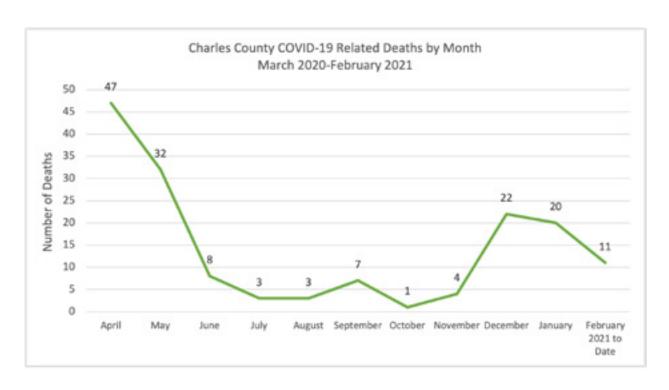
COVID-19 deaths in Charles County were not recorded until April 2020, due to death count being a lagging statistic, however, April would record the largest number of deaths for Charles County for the entire event to date.

After the first initial outbreaks and rise in case rate and percent positivity, Charles County experienced a decline in both measures around late spring and early summer, although these declines did not last long. Cases began to rise again around July and August 2020. By October 2020, COVID-19 cases were on the rise again, and would eventually record the highest case rates for Charles County for the entire event. Throughout the end of 2020 and beginning of 2021, COVID-19 cases continued to rise, which lead to an increase in both case rate and percent positivity. The highest case rate for Charles County was recorded in January 2021 when it reached 44.71 per 100,000. The increase in COVID-19 cases during the winter months of 2020 and beginning of 2021 may be related to the holidays and travel during that time of year.

After the initial peak in deaths, Charles County experienced a drastic decline in COVID-19 deaths until September 2020 when the death count rose again, due to the increase in cases during July and August. December 2020 and January 2021 recorded another increase in deaths due to COVID-19.







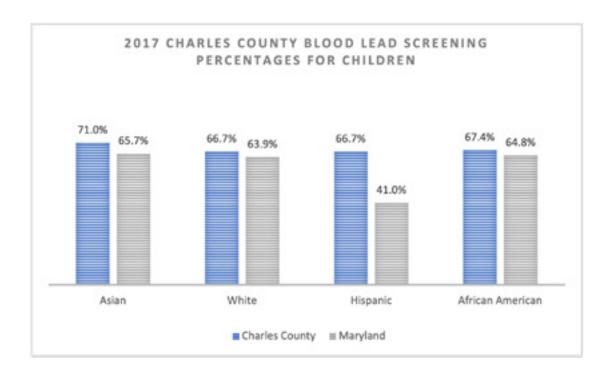
Environmental Health:

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%).

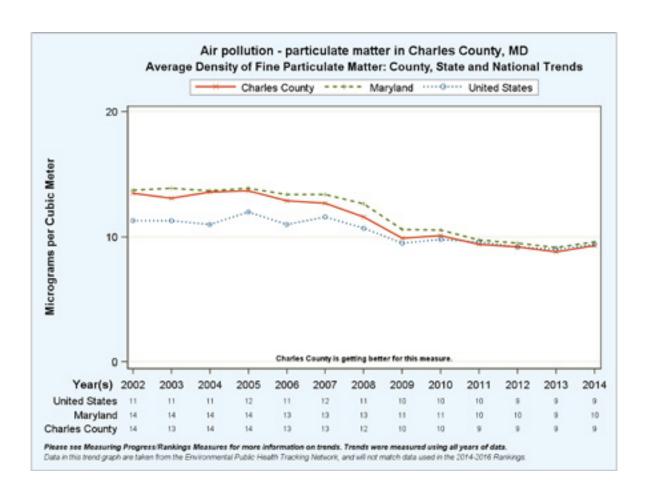
The Charles County blood lead screening percentage has increased from 61.6% of Medicaid children in 2016 to 65.7% in 2017.



In 2017, among those screened for blood lead, 0.1% of Charles County children had a blood lead levels greater than 10 mg/dL. This is lower than the Maryland state percentage of 0.3%.

Air pollution: Particulate matter

The 2014 average daily density of fine particulate matter in micrograms per cubic meter in Charles County was 9.3. The county measure has seen a very slight increase from 2012 where the average daily density was 9.2. Trends from 2010 show a decrease in particulate matter for both Charles County and the state of Maryland.



Qualitative Data Relating to Communicable Disease:

Of the long survey participants, 73.03% believed Infectious Disease (i.e. COVID-19) was a problem on some level in Charles County, and 30.43% of participants believed Infectious Disease was a serious problem in Charles County.

Protective factors that can reduce transmission of infectious diseases:

- 1. 85.90% of participants report always washing their hands after using the bathroom or before making food
- 2. 66.67% of participants report always receiving a flu shot every year

Risk factors that can increase transmission of infectious diseases:

1. 37.04% 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, 141 participants reported some services are available and 65 reported no services are available.

5.88% of key informant survey participants believed infectious disease was the biggest health issue affecting Charles County.

COVID-19 concerns were a common theme on the key informant survey. Many participants were concerned about the impact of COVID-19 on other major health issues in the community. Concerns about the impact of COVID-19 on mental health, chronic disease, and access to care were all mentioned. COVID-19 was also seen as a health barrier in the Charles County by some participants.

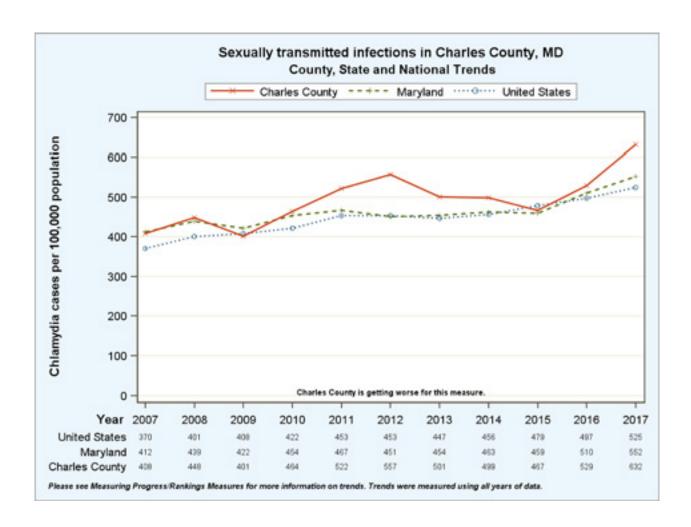
Communicable Disease and Environmental Health References:

- 1. 2010-2019 Charles County Reportable Communicable Disease Data. Infectious Disease Bureau. Maryland Department of Health. Available at: https://phpa.health.maryland.gov/Pages/infectious_disease.aspx.
- 2. 2010-2020 Charles County and Maryland Rabies Data. Infectious Disease Bureau. Maryland Department of Health. Available at: http://phpa.dhmh.maryland.gov/Pages/infectious_disease. aspx.
- 3. 2017 Charles County and Maryland Influenza 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
- 4. SHIP Children (19-35 Months Old) Who Receive Recommended Vaccines 2008-2017. 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 2009-2017 elevated blood lead Percentages in Medicaid enrolled children (Under Healthy Communities). 2016 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. 2014 Air pollution data for Charles County and Maryland. Robert Wood Johnson Foundation's County Health Rankings. Available at: countyhealthrankings.org.
- 7. Sexually Transmitted Disease Surveillance 2018. Centers for Disease Control and Prevention. Available at: https://www.cdc.gov/std/stats18/default.htm

HIV/AIDS and STI's:

Sexually Transmitted Infections:

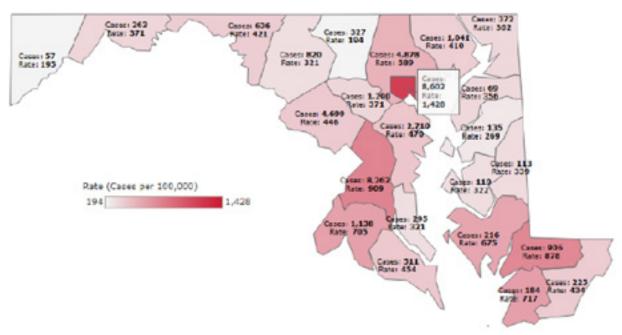
The incidence of sexually transmitted infections in Charles County continues to increase each year. According to the Robert Wood Johnson Foundation County Health Rankings, the 2017 Charles County chlamydia incidence rate per 100,000 was 631.8 per 100,000 compared to 552.1 for Maryland and 525 for the United States.



Chlamydia:

The STI incidence rates for chlamydia, gonorrhea, and syphilis have all seen increases on the national, state, and local level. The 2019 Charles County chlamydia incidence rate was 704.6, which is higher than the 2019 Maryland Chlamydia incidence rate of 625.2 per 100,000. The 2019 Charles County chlamydia incidence rate is an increase from the 2016 rate of 527.1 reported in the last needs assessment report.

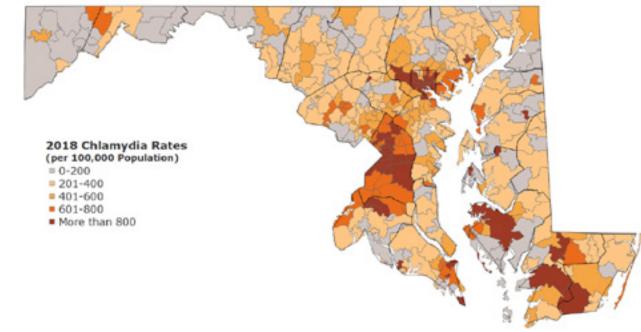
Chlamydia - Reported Cases and Rates by Jurisdiction, Maryland, 2019



Source: Maryland Department of Health. 2016 Epidemiology and Disease Control Programs.

Examining chlamydia rates by ZIP code, the highest rates are in the northern parts of county in the ZIP codes of Waldorf, Bryans Road, and Indian Head. This is the region where the majority of the county population resides.

Chlamydia in Maryland Incidence Rates by ZIP Code, 2018

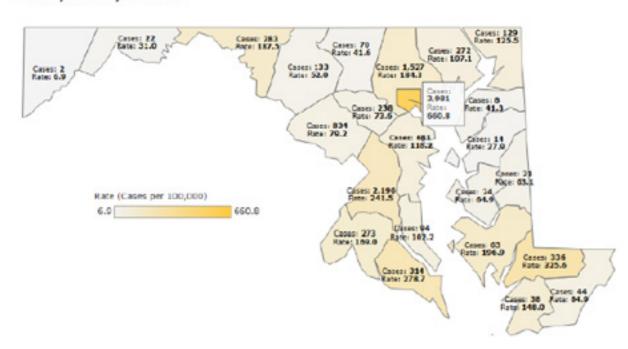


Source: Maryland Department of Health. 2018 Epidemiology and Disease Control Programs.

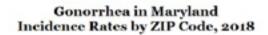
Gonorrhea:

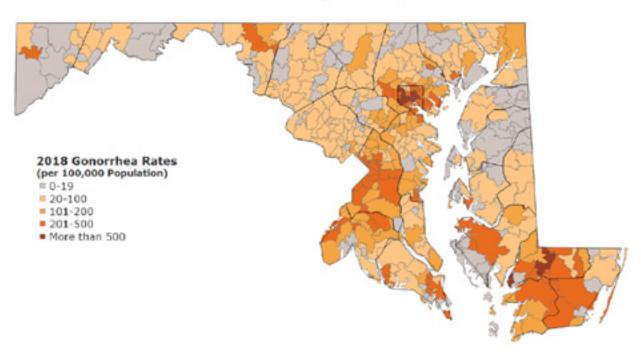
The 2019 Charles County gonorrhea incidence rate was 169.0, which was slightly below the 2019 Maryland gonorrhea incidence rate of 191.9 per 100,000. The 2019 Charles County gonorrhea incidence rate is an increase from the 2016 county rate of 104.0 reported in the last needs assessment report.

Gonorrhea - Reported Cases and Rates by Jurisdiction, Maryland, 2019



Like Chlamydia, the greatest rates of gonorrhea in Charles County are located in the northern part of the county. This is the region where the majority of the county population resides.



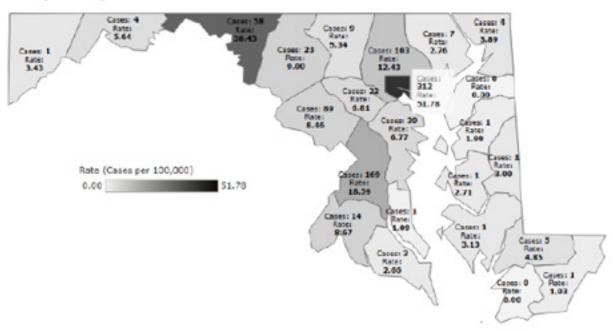


Source: Maryland Department of Health. 2018 Epidemiology and Disease Control Programs.

Syphilis:

The 2019 Charles County primary and secondary syphilis incidence rate was 8.7; the 2019 Maryland state syphilis incidence rate was higher at 14.4 per 100,000. The Charles County 2019 syphilis incidence rate is an increase from the 2013 rate of 3.8 reported in the last needs assessment report. Caution should be taken when making comparisons since case counts for syphilis are small and can cause large increases in the case rates.

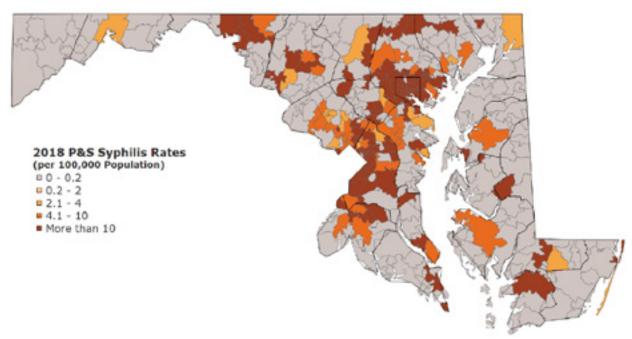
Primary and Secondary Syphilis - Reported Cases and Rates by Jurisdiction, Maryland, 2019



Source: Maryland Department of Health. 2016 Epidemiology and Disease Control Programs.

Like chlamydia, the greatest rates of syphilis in Charles County are located in the northern part of the county. This is the region where most of the county population resides.

Primary and Secondary Syphilis in Maryland Incidence Rates by ZIP Code, 2018



Source: Maryland Department of Health. 2018 Epidemiology and Disease Control Programs.

HIV Incidence:

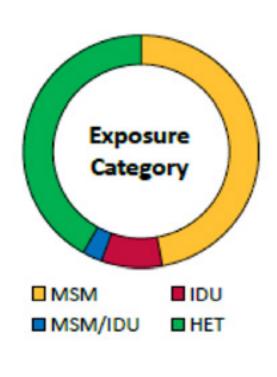
This indicator shows the rate of adult/adolescent cases (age 13+) diagnosed with HIV (per 100,000 population). HIV is a significant and preventable public health problem. An estimated 16% of people with HIV in Maryland are undiagnosed. We have the knowledge and tools needed to slow the spread of HIV infection and improve the health of people living with HIV.

The 2017 Charles County HIV Incidence rate was 18.1 per 100,000. This is below the Maryland state average rate of 20.4 per 100,000. The Charles County HIV Incidence rate is the sixth highest among the Maryland jurisdictions.

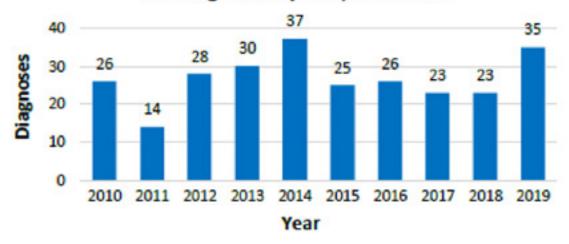
The Charles County HIV incidence rate has decreased each year from 31.7 in 2014 to 18.1 in 2017.

In 2019, there were 35 adult/adolescent (age 13+) HIV cases diagnosed in Charles County. Of the 616 living adult/adolescent cases in Charles County at the end of 2019, 67.2% were male, 29.4% were among adults aged 50-59 years old, and 21.3% were among adults aged 40-49 years old. Non-Hispanic (NH) Blacks made up the majority (78.1%) 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) (46.8%), followed by heterosexual exposure (HET) (41.5%), and injection drug use (IDU) (8.3%).

Age on December 31, 2019		
13-19	4	0.6%
20-29	81	13.1%
30-39	138	22.4%
40-49	131	21.3%
50-59	181	29.4%
60+	81	13.1%
Sex at Birth		
Male	414	67.2%
Female	202	32.8%
Race/Ethnicity		
Hispanic	24	3.9%
NH-Black	481	78.1%
NH-White	82	13.3%
NH-Other	29	4.7%
Exposure Category		
MSM	288	46.8%
IDU	51	8.3%
MSM/IDU	17	2.7%
HET	256	41.5%
Perinatal Transmission	2	0.3%



HIV Diagnoses by Year, 2010-2019



HIV/AIDS/STI References:

- 1. 2007-2017 Chlamydia Rates for Charles County, Maryland, and United States. Robert Wood Johnson Foundation County Health Rankings. Available at: https://www.countyhealthrankings. org/app/maryland/2020/measure/factors/45/map.
- 2. 2019 Charles County and Maryland Chlamydia, Gonorrhea, and Syphilis Rates. Sexually Transmitted Infections 2019 Annual Report. Maryland Department of Health. Infectious Disease Bureau. Available at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/CSTIPDocuments/Reports/STI%202019%20Annual%20Report%20Maryland.pdf.
- 3. 2017 HIV Incidence Rates by Race for Charles County and Maryland. Maryland Department of Health. Accessed through the Maryland State Health Improvement Process website. Available at: https://pophealth.health.maryland.gov/Pages/SHIP-Lite-Home.aspx.
- 4. 2019 Charles County and Maryland HIV/AIDS Diagnoses and Living Cases. Maryland Department of Health. Infectious Disease and Environmental Health Administration. Charles County HIV Fact Sheet 2019. Available at: https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/statistics.aspx.

Qualitative Data Relating to Sexually Transmitted Infections and HIV/AIDS:

One-quarter of the long survey participants reported that HIV/AIDS (24.6%) and sexually transmitted diseases (27.5%) are a problem in Charles County on some level. Only 4.3% felt that HIV/AIDS is a "serious problem, while 5.5% 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
HIV/AIDS	6.2%	24.6%	4.3%
Sexually transmitted diseases	5.3%	27.5%	5.5%

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

- 33.9% always practice safe sex;
- 73.8% never use illegal drugs.

Tobacco Statistics

Adult current tobacco use by product (any tobacco, cigarettes, cigars, smokeless, ESDs) 2012-2018

The Maryland Behavior Risk Factor Surveillance System is used to provide estimates for Maryland and Charles County on smoking status. In 2018, approximately 18.4% of Charles County residents reported use of any tobacco product. This is similar to the Maryland percentage of 18.2% of Maryland residents who use any tobacco product. Charles County has seen a decrease in tobacco product usage from 20.5% in 2012 to 18.4% in 2018. This same trend was seen on a state level.

Use of cigarettes in Charles County has decreased significantly from 19.3% in 2012 to 12.4% in 2018. The 2018 cigarette percentage for Charles County is similar to the Maryland percentage of 12.5%. 2018 data is not available on a county level for cigar and smokeless tobacco usage. However, use of both substances has remained stable over the last six years.

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%). 2018 data was not available on a county level due to an insufficient sample size.

Maryland

Estimated Prevalence (%) Confidence Interval (CI) Estimated Number (N)	2012+	2014	2016	2018
	% CI N	% CI N	% CI N	% CI N
Any Tobacco	19.4	19.5	17.9	18.2
(Any tobacco includes cigarettes, cigars, smokeless	(18.2-20.7)	(18.1-20.9)	(17.0-18.8)	(17.3-19.2)
tobacco, and other tobacco products, and ESDs)	856,080	907,879	842,991	865,325
Cigarettes	16.2	14.6	13.7	12.5
	(15.0-17.4)	(13.4-15.9)	(12.9-14.5)	(11.7-13.4)
	708.885	655,824	608.816	569.871
Cigars	4.4	4.5	3.7	4.6
	(3.6-5.2)	(3.6-5.4)	(3.2-4.2)	(4.0-5.2)
	169.763	192.448	154,865	199,575
Smokeless Tobacco	2.0	1.7	1.6	2.0
	(1.5-2.4)	(1.3-2.2)	(1.3-1.9)	(1.7-2.4)
	86,729	76,683	70,410	93,401
ESDs	No BRFSS	3.2	3.2	4.3
	Data	(2.5-3.8)	(2.8-3.7)	(3.7-4.9)
	Collected	135.090	141.529	185.728

Charles County

Estimated Prevalence (%) Confidence Interval (CI) Estimated Number (N)	2012*	2014	2016	2018
	% CIN	% CI N	% CIN	% CI N
Any Tobacco	20.5	19.4	18.2	18.4
(Any tobacco includes cigarettes, cigars, smokeless	(13.5-27.4)	(13.1-25.7)	(14.1-22.2)	(13.2-23.5)
tobacco, and other tobacco products, and ESDs)	27,840	22.966	21,877	22,841
Cigarettes	19.3	12.2	13.1	12.4
	(12.3-26.3)	(7.2-17.1)	(9.8-16.5)	(8.6-16.2)
	26,018	13,972	15,086	14,953
Cigars	BRFSS Data Not Available	Not Available	Not Available	Not Available
Smokeless Tobacco	BRFSS Data Not Available	Not Available	Not Available	Not Available
ESDs	No BRFSS Data Collected	Not Available	4.0 (1.7-6.3) 4.485	Not Available

3. Adult current tobacco use by gender and race/ethnicity (White, AA/Black, Asian, Hispanic/Latino, American Indian/Alaskan Native) 2012-2018

When examining current tobacco use by gender, males are more likely to report use than females. For Charles County, 21.2% of men and 15.8% of women reported current tobacco use in 2018. The percentage of Charles County men reporting current tobacco use decreased from 2012 to 2018 while the percentage of females reporting current tobacco use increased from 2012 to 2018. On a state level, current tobacco usage for both males and females decreased from 2012 to 2018.

When analyzing rates by race and ethnicity, current tobacco use percentages are only available for Whites, African Americans 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 African Americans than Whites or All Minorities Combined (20.1% vs. 18.5% and 18.5%). The same was true on a state level. The rate of current tobacco use has fluctuated yearly for Whites, African Americans, and All Minorities Combined.

Maryland

Estimated Prevalence (%)	2012+	2014	2016	2018
Confidence Interval (CI) Estimated Number (N)	% CIN	% CIN	% CIN	% CIN
Female	16.1	15.0	13.6	13.9
	(14.6-17.7)	(13.4-16.6)	(12.5-14.6)	(12.8-15.0)
	383,016	363.735	333,588	345.157
Male	23.5	24.5	22.6	22.9
	(21.5-25.6)	(22.2-26.8)	(21.1-24.1)	(21.3-24.5)
	507,209	544.144	509,403	519.099
White	21.1	20.5	19.6	18.9
	(19.6-22.6)	(18.8-22.3)	(18.4-20.8)	(17.7-20.1)
	529,761	513,724	484,462	467,068
African American/Black	20.2	22.4	18.0	20.2
	(17.5-22.8)	(19.2-25.5)	(16.1-19.8)	(18.2-22.3)
	260.115	291,496	238,933	275.274
Asian	Not Available	Not Available	5.8 (3.4-8.2) 17.381	10.3 (6.4-14.2) 31.327
Hispanic/Latino	15.8	12.9	13.6	12.7
	(10.0-21.5)	(8.0-17.8)	(10.4-16.9)	(9.3-16.0)
	58.461	49,841	57,237	55,505
American Indian/Alaskan Native	Not Available	26.4 (11.9-41.0) 4,990	42.6 (30.6-54.5) 9,263	21.4 (12.1-30.6) 2,852
**Minority Combined (Race & Female)	17.8	17.7	15.6	16.9
	(16.3-19.2)	(16.0-19.3)	(14.6-16.6)	(15.8-18.1)
	590.081	600.629	541.501	595,771

CURRENT TOBACCO USE — Gender and Race Estimated Prevalence (%)	.,	2000000	200000000000000000000000000000000000000	2.000
Confidence Interval (CI)	2012*	2014	2016	2018
Estimated Number (N)	% CIN	% CI N	% CIN	% CIN
Female	9.6	13.3	12.7	15.8
220200	(5.1-14.2)	(6.3-20.4)	(8.2-17.3)	(9.9-21.6)
	6.687	8.336	8.071	10.359
Male	31.5	26.0	24.2	21.2
	(19.5-43.5)	(15.6-36.5)	(17.2-31.1)	(12.6-29.8)
	21.446	14.629	13.806	12.482
White	23.1	20.8	24.7	18.5
	(14.1-32.0)	(14.2-27.4)	(18.5-30.9)	(11.0-26.0)
	17,618	11.781	12,852	9,507
African American/Black	Not Available	Not Available	13.8 (7.8-19.9) 7.006	20.1 (11.4-28.8) 11.297
Asian	Not	Not	Not	Not
	Available	Available	Available	Available
Hispanic/Latino	Not	Not	Not	Not
	Available	Available	Available	Available
American Indian/Alaskan Native	BRFSS Data	BRFSS Data	BRFSS Data	BRFSS Data
	Not	Not	Not	Not
	Available	Available	Available	Available
**Minority Combined (Race & Female)	15.2	17.1	14.7	18.5
	(7.9-22.5)	(9.6-24.6)	(10.4-18.9)	(12.7-24.3)
	14,964	15,743	13,724	18,191

4. Adult current tobacco use by education level (No HS diploma, HS diploma/GED, Some College, 4-Yr. College Degree)

2012-2018

As the level of education increases, the rate of tobacco use decreases. Those without a high school diploma are more likely to report tobacco use than those with a high school diploma or some college. This is true for both Maryland and Charles County. The tobacco use rate among those with a high school diploma/GED is higher in Charles County than Maryland (28.4% vs. 23.1%). It was lower among those with college degree (CC 8.9% vs. MD 9.8%); however, Charles County has seen some decreases in the rate of tobacco use among people with no high school diploma. Charles County has seen fluctuation in the rate of tobacco use among individuals with a high school diploma/GED and some college.

Maryland

		2012	2014	2016	2018
Education					
	No High School	31.7 (26.5-36.8) 174,072	33.4 (27.2-39.6) 183,917	28.3 (24.1-32.4) 149,219	28.4 (24.1-32.6) 143,879
Higi	h School or GED	25.1 (22.4-27.7) 300,996	25.5 (22.5-28.5) 313,681	23.9 (22.0-25.8) 294,537	24.6 (22.5-26.6) 301,876
	Some College	21.9 (19.4-24.5) 277,274	19.6 (17.1-22.2) 256,374	19.2 (17.4-21.0) 254,639	20.3 (18.4-22.3) 269,755
	College Grad	9.2 (7.9-10.4) 137,121	9.9 (8.4-11.3) 151,638	9.0 (8.0-9.9) 144,147	8.9 (7.9-9.9) 148,573

	2012	2014	2016	2018
Education				
No High School	BRFSS Data	BRFSS Data	BRFSS Data	BRFSS Data
	Not	Not	Not	Not
	Available	Available	Available	Available
High School or GED	23.6	21.1	29.8	23.1
	(11.1-36.2)	(9.7-32.5)	(20.9-38.8)	(14.7-31.5)
	11,935	8,917	10,921	10,394
Some College	BRFSS Data	15.4	13.6	13.6
	Not	(8.1-22.6)	(7.8-19.4)	(5.7-21.6)
	Available	5,712	6,168	5,560
College Grad	BRFSS Data	BRFSS Data	10.9	9.8
	Not	Not	(5.9-16.0)	(4.8-14.8)
	Available	Available	3,382	2,891

5. Adult current tobacco use by annual household income (<\$15K, up to \$25K, up to \$50K, up to \$75K, >\$75K) 2012-2018

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 (14.4% vs. 32.6%). Charles County has seen decreases in tobacco use among those who earn more than \$50,000 a year. However, the percentage of people who currently use tobacco has increased among those making less than \$50,000 per year.

Maryland

CURRENT TOBACCO USE — Income and Educ	ation			
Estimated Prevalence (%) Confidence Interval (CI) Estimated Number (N)	2012*	2014	2016	2018
	% CI N	% CI N	% CI N	% CI N
Income		8		
< \$15k	36.7	34.8	35.5	29.4
	(30.2-43.3)	(27.2-42.4)	(30.5-40.5)	(24.4-34.4)
	113,594	94.091	100.177	78.821
\$15k- < \$25k	24.8	23.2	24.1	23.6
	(20.7-29.0)	(18.8-27.5)	(20.9-27.4)	(20.4-26.9)
	139.763	135.538	118.233	113.890
\$25k- < \$50k	23.8	23.5	20.6	22.3
	(20.6-27.0)	(19.8-27.3)	(18.2-23.0)	(19.5-25.1)
	202,585	181,569	150,415	155,928
\$50k- < \$75k	17.2	22.8	17.9	19.0
	(14.1-20.2)	(18.4-27.2)	(15.3-20.5)	(16.3-21.8)
	107,755	127,907	102,460	110,372
\$75k +	14.1	14.0	13.6	14.2
	(12.5-15.8)	(12.3-15.8)	(12.3-14.9)	(12.8-15.6)
	223,886	236,187	236,119	257,634

CURRENT TOBACCO USE — Income and Educ	ation			
Estimated Prevalence (%) Confidence Interval (CI) Estimated Number (N)	2012*	2014	2016	2018
	% CI N	% CI N	% CI N	% CI N
Income			8	
< \$50k	26.5	29.0	24.5	32.6
	(14.8-38.3)	(12.5-45.6)	(14.5-34.5)	(18.7-46.6)
	12,665	9,123	6,392	8.296
> \$50k	19.1	17.6	16.4	14.4
	(9.1-29.0)	(11.1-24.1)	(11.6-21.2)	(9.0-19.8)
	14,418	12.665	11,902	11.910

6. Middle School Tobacco Use by product (any tobacco, cigarettes, cigars, smokeless, ESDs) 2013-2018

Of Charles County middle school students, 10.8% reported use of any tobacco product in 2018. There has been a lot of fluctuation each year in the percentage reporting current use of a tobacco product; however, the 2018 percentage is an increase from the 2016 percentage (10.8% vs. 9.1%). The 2018 Charles County middle school tobacco use percentage is above the Maryland state average percentage (10.8% vs. 9.0%). Cigarette usage (3.1% to 1.7%) and cigar usage (3.0% to 2.5%) have decreased among Charles County middle school students. The percentage of Charles County middle school students reporting smokeless tobacco use has increased from 1.5% to 3.3% and is now greater than the Maryland percentage of 2.2%. Charles County saw a decline in middle school students reporting use of electronic smoking devices (ESD's) from 9.3% in 2014 to 6.3% in 2018. The 2018 Charles County ESD percentage of 6.3% is still greater than the Maryland percentage of 5.9%.

Maryland

CURRENT TOBACCO USE				
Estimated Prevalence (%) Confidence Interval (CI) Estimated Number (N)	2013†	2014	2016	2018
	% CI N	% CI N	% CI N	% CI N
Middle School Students				
Any Tobacco	5.6	11.1	7.6	9.0
(Any tobacco includes cigarettes, cigars,	(5.2-6.1)	(10.1-12.0)	(6.9-8.2)	(8.3-9.6)
smokeless tobacco, and ESDs)	9,431	18,883	13,145	15,926
Cigarettes	3.9	2.5	1.3	1.1
	(3.5-4.3)	(2.2-2.9)	(1.1-1.6)	(0.9-1.3)
	6,717	4,431	2.513	2.158
Cigars	4.2	3.6	2.5	1.8
	(3.8-4.6)	(3.2-4.1)	(2.2-2.9)	(1.6-2.1)
	7,245	6,416	4,743	3,482
Smokeless Tobacco	3.0	1.9	1.9	2.2
	(2.6-3.5)	(1.6-2.2)	(1.6-2.2)	(1.9-2.5)
	5,323	3,349	3,545	4,068
ESDs	No ESD	7.6	4.7	5.9
	Data	(6.9-8.3)	(4.3-5.2)	(5.5-6.4)
	Collected	13,318	8,396	10,799

Charles County

CURRENT TOBACCO USE				
Estimated Prevalence (%) Confidence Interval (CI) Estimated Number (N)	2013 [†]	2014	2016	2018
	% CI N	% CI N	% CI N	% CI N
Middle School Students				
Any Tobacco	4.2	12.7	9.1	10.8
(Any tobacco includes cigarettes, cigars,	(2.9-5.6)	(9.7-15.6)	(6.7-11.5)	(7.8-13.7)
smokeless tobacco, and ESDs)	227	680	471	583
Cigarettes	3.1	2.8	1.6	1.7
	(2.1-4.6)	(1.8-4.2)	(0.7-2.5)	(0.7-2.7)
	171	154	92	103
Cigars	3.0	3.2	2.7	2.5
	(2.1-4.4)	(2.2-4.7)	(1.6-3.7)	(1.5-3.5)
	167	181	153	146
Smokeless Tobacco	1.5	2.4	2.6	3.3
	(0.9-2.4)	(1.1-5.1)	(1.4-3.8)	(2.0-4.6)
	83	137	151	187
ESDs	No ESD	9.3	5.7	6.3
	Data	(7.3-11.3)	(3.9-7.5)	(4.3-8.2)
	Collected	508	303	350

7. Middle school current tobacco use by gender and race/ethnicity (White, AA/Black, Asian, Hispanic/Latino, American Indian/Alaskan Native) 2013-2018

Charles County male middle school students were more likely to report tobacco use than Charles County female middle school students (11.9% vs. 9.1%). The percentages of middle school males and females using tobacco in Charles County have increased since 2013. The percentages for both females and males in Charles County are higher than those reported for Maryland overall (Males 11.9% vs. 9.2% and Females 9.1% vs. 8.4%).

On a county level, data is only available for White, African American, and Hispanic middle school students in Charles County. The highest rate of current tobacco use is in the Hispanic/Latino population at 15.8%. Currently, the Charles County African American middle school student tobacco use percentage is higher than the Charles County White middle school student tobacco use percentage (11.0% vs. 7.8%). The Charles County African American percentage and the Charles County Hispanic percentage are above the state percentages for those populations. The Charles County White percentage is below the state percentage (7.8% vs. 8.2%).

Maryland

CURRENT TOBACCO USE — Gender and Race/Ethnicity							
Estimated Prevalence (%) Confidence Interval (CI) Estimated Number (N)	2013*	2014	2016	2018			
	% CI N	% CI N	% CI N	% CI N			
Middle School Students							
Middle School Female	4.7	9.5	7.0	8.4			
	(4.2-5.3)	(8.5-10.5)	(6.3-7.7)	(7.7-9.2)			
	3,869	8,001	6,013	7,361			
Middle School Male	6.5	12.2	7.8	9.2			
	(5.9-7.1)	(11.1-13.4)	(7.0-8.5)	(8.4-10.0)			
	5,424	10,526	6,772	8,179			
White	4.2	8.5	5.3	8.2			
	(3.6-4.8)	(7.4-9.6)	(4.5-6.2)	(7.3-9.1)			
	2,941	5,737	3,589	5,334			
African American/Black	6.6	14.1	8.0	8.9			
	(5.8-7.4)	(12.6-15.6)	(7.1-8.8)	(7.7-10.0)			
	3,537	7,396	4,321	4,827			
Asian	2.8	4.3	3.2	4.4			
	(1.2-4.5)	(2.6-6.1)	(1.8-4.6)	(3.0-5.8)			
	262	405	295	485			
Hispanic/Latino	8.5	13.8	12.3	11.1			
	(7.0-10.1)	(12.0-15.6)	(10.4-14.2)	(10.1-12.2)			
	1.529	2,908	2,858	2.958			
American Indian/Alaskan Native	10.7	16.6	13.4	12.9			
	(7.4-14.0)	(12.7-20.6)	(9.0-17.8)	(9.1-16.6)			
	203	371	260	254			

CURRENT TOBACCO USE — Gender and Ra	ce/Ethnicity	y		
Estimated Prevalence (%) Confidence Interval (CI) Estimated Number (N)	2013*	2014	2016	2018
	% CI N	% CI N	% CI N	% CI N
Middle School Students				
Middle School Female	3.8	10.8	8.5	9.1
	(2.3-6.1)	(7.7-13.9)	(5.2-11.7)	(6.0-12.2)
	99	278	209	246
Middle School Male	4.5	13.9	9.8	11.9
	(3.2-6.4)	(10.5-17.3)	(6.8-12.8)	(8.1-15.7)
	123	384	263	317
White	2.0	11.5	7.8	7.8
	(0.5-3.5)	(8.4-14.6)	(3.6-11.9)	(3.9-11.7)
	31	173	101	102
African American/Black	4.6	11.8	8.8	11.0
	(2.8-6.3)	(8.5-15.2)	(5.9-11.6)	(6.9-15.0)
	128	322	231	315
Asian	YRBS Data	YRBS Data	YRBS Data	YRBS Data
	Not	Not	Not	Not
	Available	Available	Available	Available
Hispanic/Latino	YRBS Data	15.0	YRBS Data	15.8
	Not	(8.3-21.8)	Not	(8.3-23.3)
	Available	44	Available	57
American Indian/Alaskan Native	YRBS Data	YRBS Data	YRBS Data	YRBS Data
	Not	Not	Not	Not
	Available	Available	Available	Available

8. High school tobacco use by product (any tobacco, cigarettes, cigars, smokeless, ESDs) 2013-2018

23.3% of Charles County high school students reported using any type of tobacco product in 2018. This is an increase from the percentages reported in both 2013 and 2014 (17.6% and 31.8%). Charles County high school students have reported less use of cigarettes and cigars from 2013 to 2018. 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 23.3% in 2018 is lower than the state percentage of 27.4%.

The reported use of ESD's among Charles County high school students decreased from 23.1% in 2014 to 17.7% in 2018. 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 23.0%.

	Maryland			
	2013	2014	2016	2018
High School Students				
Any Tobacco	16.9	27.6	21.6	27.4
(Any tobacco includes cigarettes, cigars,	(16.3-17.5)	(26.9-28.4)	(20.7-22.4)	(26.2-28.6)
smokeless tobacco, and ESDs)	38,966	64,516	50,001	65,038
Cigarettes	11.9	8.7	8.2	5.0
	(11.4-12.4)	(8.2-9.1)	(7.8-8.6)	(4.5-5.4)
	27,877	20,677	20,653	12,557
Cigars	12.5	10.3	9.0	6.0
	(11.9-13.0)	(9.9-10.8)	(8.5-9.5)	(5.5-6.5)
	30,820	25,460	22,136	15,135
Smokeless Tobacco	7.4	5.8	6.2	4.6
	(7.0-7.8)	(5.4-6.1)	(5.8-6.6)	(4.1-5.1)
	18,438	13,769	15,225	11,524
ESDs	No ESD	20.0	13.3	23.0
	Data	(19.4-20.5)	(12.7-13.9)	(21.9-24.1)
	Collected	47,542	30,026	53,920

Charles County

	2013	2014	2016	2018
High School Students				
Any Tobacco	17.6	31.8	23.6	23.3
(Any tobacco includes cigarettes, cigars,	(15.9-19.5)	(29.5-34.2)	(21.4-25.9)	(21.1-25.5)
smokeless tobacco, and ESDs)	1,439	2,540	1,809	1,791
Cigarettes	12.7	9.2	8.6	5.0
	(11.1-14.4)	(8.0-10.7)	(7.3-9.9)	(4.0-6.0)
	1,056	744	720	412
Cigars	13.6	10.5	9.2	6.0
	(12.1-15.2)	(9.2-12.0)	(7.8-10.6)	(4.9-7.1)
	1,190	886	748	494
Smokeless Tobacco	6.9	6.7	7.4	5.4
	(5.8-8.3)	(5.5-8.1)	(6.2-8.7)	(4.3-6.6)
	613	543	606	449
ESDs	No ESD	23.1	15.2	17.7
	Data	(21.3-24.8)	(13.4-17.0)	(15.8-19.6)
	Collected	1.883	1.115	1.329

9. High school current tobacco use by gender and race/ethnicity (White, AA/Black, Asian, Hispanic/Latino, American Indian/Alaskan Native) 2013-2018

Charles County high school males are more likely to report use of tobacco products than females (25.8% vs. 18.9%). Tobacco use percentage for Charles County high school males and females remain slightly lower than the Maryland state average percentages (Males 25.8% vs. 27.9% and Females 18.9% vs. 26.0%). 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 (34.1% and 31.3%) that are well above the percentage for Charles County African Americans (14.9%) and Charles County Asians (13.3%). Charles County tobacco use percentage for Whites has seen decreases from 2013 to 2018. Charles County African Americans and Hispanic/Latinos have seen decreases in tobacco use from 2013 to 2016.

Maryland

	2013	2014	2016	2018
High School Students				
High School Female	13.6	25.0	18.5	26.0
	(12.9-14.3)	(24.1-25.9)	(17.6-19.4)	(24.6-27.3)
	15,651	28,707	20,793	29,886
High School Male	19.7	29.6	23.5	27.9
	(18.9-20.5)	(28.7-30.5)	(22.6-24.5)	(26.5-29.3)
	22,471	34,558	27,486	33,309
White	19.0	29.0	22.8	35.3
	(18.2-19.8)	(28.1-29.9)	(21.8-23.9)	(33.6-36.9)
	19.256	28.344	21,350	32,281
African American/Black	14.1	24.5	18.2	19.2
	(13.2-14.9)	(23.2-25.8)	(16.9-19.4)	(17.4-21.1)
	10.742	18.478	13.798	14.239
Asian	6.8	12.2	8.8	14.3
	(5.1-8.5)	(10.2-14.1)	(7.0-10.5)	(11.4-17.3)
	869	1.597	1.115	2.127
Hispanic/Latino	18.9	31.4	23.9	25.7
	(17.5-20.2)	(29.8-33.0)	(22.3-25.6)	(23.2-28.2)
	4.328	8.898	7.038	9.292
American Indian/Alaskan Native	27.5	43.1	36.3	28.2
	(23.0-31.9)	(38.4-47.8)	(31.4-41.3)	(21.6-34.8)
	353	689	496	374

	2013	2014	2016	2018
High School Students				
High School Female	14.0	29.4	20.6	18.9
	(11.9-16.3)	(27.0-31.8)	(17.8-23.3)	(16.0-21.7)
	553	1,149	745	685
High School Male	20.8	33.2	25.8	25.8
	(18.4-23.3)	(29.7-36.8)	(22.8-28.7)	(22.5-29.1)
	865	1,324	1,018	1,017
White	22.2	35.8	28.5	34.1
	(18.8-25.6)	(32.1-39.5)	(24.6-32.4)	(29.3-38.8)
	607	884	631	675
African American/Black	12.8	27.9	19.3	14.9
	(10.7-15.0)	(24.9-30.9)	(16.7-21.9)	(12.6-17.2)
	538	1,158	787	614
Asian	YRBS Data	YRBS Data	YRBS Data	13.3
	Not	Not	Not	(6.4-20.2)
	Available	Available	Available	27
Hispanic/Latino	30.1	35.2	29.5	31.3
	(23.6-36.7)	(28.4-42.0)	(23.4-35.7)	(25.3-37.3
	108	135	121	161
American Indian/Alaskan Native	YRBS Data Not Available	YRBS Data Not Available	YRBS Data Not Available	Not Available

10. Adults receiving treatment for mental health conditions in state programs who smoke cigarettes as of April 2019

Approximately one-third of Charles County adults receiving treatment for mental health conditions in state programs report that they smoke cigarettes (29.9%). The percentage in Charles County is slightly below the state percentage of 35.0%.

Over two-thirds of Charles County adults receiving treatment for a substance use disorder in a state program report that they smoke cigarettes (68.9%). This is similar to the Maryland state average percentage of 69.8% for this population.

GARETTE SMOKING AMONG THO SE DISORDER SERVICES (CURRENT	AS OF 4/2	019)	AL HEALTH A	IND/OR SU	BSTANC
aryland Outcomes Measurement Sys Prevalence (%)	2014	2015	2016	2017	2018
Number (N)	% N	% N	% N	% N	% N
Mental Health Services	36.6	38.1	39.8	37.6	29.9
	(450)	(542)	(584)	(608)	(450)
Substance Use Disorder Services	Not	69.1	67.1	71.1	68.9
	Available	(366)	(410)	(588)	(498)
Both	Not	65.0	69.2	68.8	62.5
	Available	(104)	(119)	(150)	(95)

11. Youth (14-17) receiving treatment for mental health conditions in state programs who smoke cigarettes as of April 2019

In 2019, 3.2% of Charles County youth 14-17 years receiving treatment for mental health conditions in state programs reported that they smoke cigarettes. This is below the state percentage of 4.3%. The Charles County percentage decreased since 2015.

As of April 2019, 20.8% of Charles County aged 14-17 years who are receiving treatment for substance use disorders reported that they smoke cigarettes. Cigarette smoking among this group has been decreasing from 2015-2019. The county percentage is lower than the Maryland state average percentage of 25.6%.

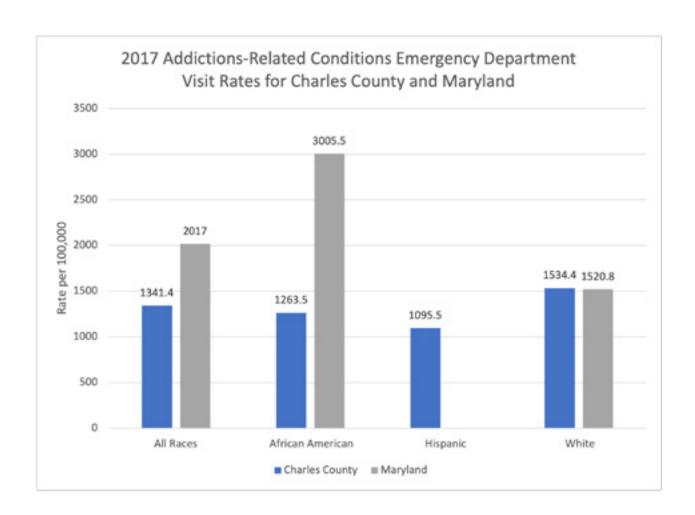
CIGARETTE SMOKING AMONG YOUTH (14-17) RECEIVING MENTAL HEALTH AND/OR SUBSTANCE USE DISORDER SERVICES (CURRENT AS OF 4/2019) Maryland Outcomes Measurement System Datamart (OMS)							
Prevalence (%)	2015	2016	2017	2018			
Number (N)	% N	% N	% N	% N			
Mental Health Services	5.6	5.9	5.2	3.2			
	(15)	(16)	(14)	(9)			
Substance Use Disorder Services	26.7	21.9	25.0	20.8			
	(8)	(7)	(6)	(5)			
Both	41.7	33.3	33.3	33.3			
	(5)	(4)	(3)	(3)			

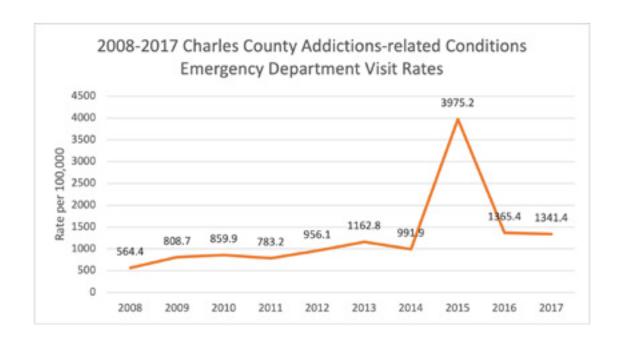
Charles County Substance Use Disorder Data:

Substance Use Disorder Hospitalization and Emergency Department Visit Rates:

This indicator shows the rate of emergency department visits related to substance abuse disorders* (per 100,000 population). Substance abuse problems can place a heavy burden on the healthcare system, particularly when people in crisis utilize emergency departments instead of other sources of care when available. Diagnoses include alcohol-related disorders and drug-related disorders. 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 per 100,000. The county rate is highest among Non-Hispanic Whites with an ED visit rate of 1,534.4 compared to 1263.5 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 or presented.

The Charles County addictions-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.





Maryland State Epidemiological Outcomes Workgroup Data on Alcohol and Drug-related Hospitalizations:

The Maryland Statewide Epidemiological Outcomes Workgroup (SEOW) analyzed the 2016, 2017, and 2018 Maryland Health Services and Cost Review Commission (HSCRC) data for residents of Maryland. Among Charles County residents:

- On average, 54% of all alcohol- and drug-related hospitalizations involved a drug other than alcohol only.
- On average, 26% of all alcohol- and drug-related hospitalizations involved opioids.
- Alcohol and opioids were the most common substances involved in alcohol-and drug-related hospitalizations.
- 831 drug-related poisonings involved hospitalizations.

Between 2016 and 2018, the total number of inpatient and outpatient events decreased in the state of Maryland by 270,685 (4.7%). The number of events in Charles County also decreased by 5,889 (6.0%). (Figure 1)

The number of alcohol- and/or drug-related events increased in the state of Maryland during the same time by 6,197 (2.3%). Charles County saw a decrease in alcohol- and/or drug-related events by 532 (15%). By the year 2018, alcohol- and/or drug-related events accounted for 4.9% of all inpatient and outpatient events across the state of Maryland and 3.3% in Charles County. (Figures 2 and 3)

All Inpatient and Outpatient Events



Figure 1.

Alcohol- and/or Drug- Related Events

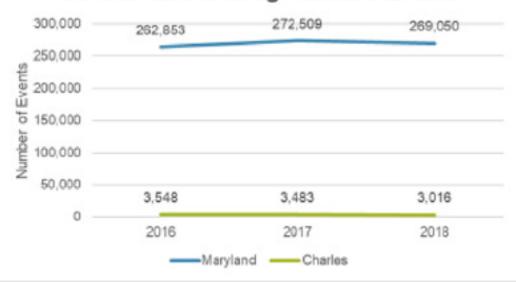
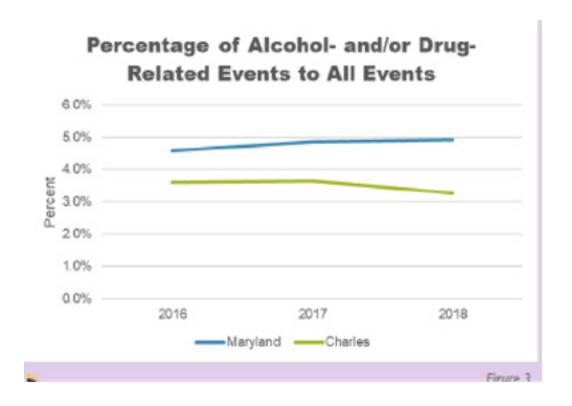
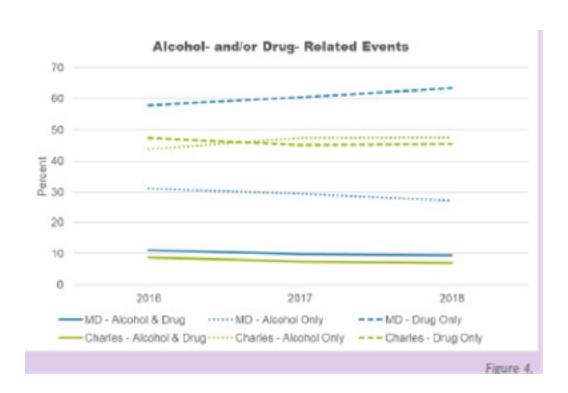
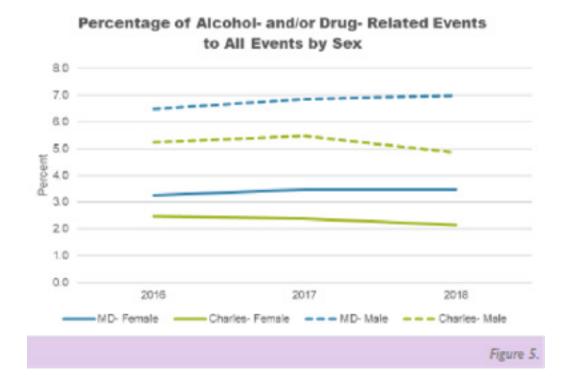


Figure 2.

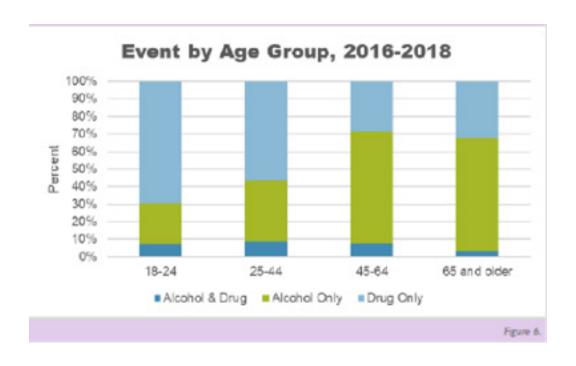


Approximately 1.2% of the total events involved Charles County residents, where 46% of events involved only drugs, 46% involved only alcohol, and 8% involved both drugs and alcohol. (Figure 4)



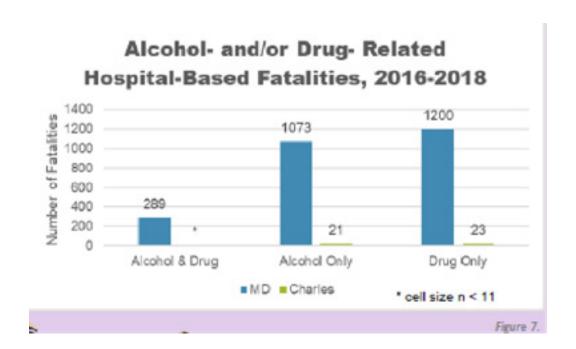


Between 2016 and 2018, Charles County residents differed in their patterns of alcohol- and/or drug-related events based on age. Events involving alcohol were more common among older residents. For example, among residents aged 45 to 64 years, 63% of alcohol and/or drug events involved alcohol only. Events involving only drugs were more common among residents aged 25 to 44 years; 56% of alcohol and/or drug events among this age group involved only drugs (Figure 6).



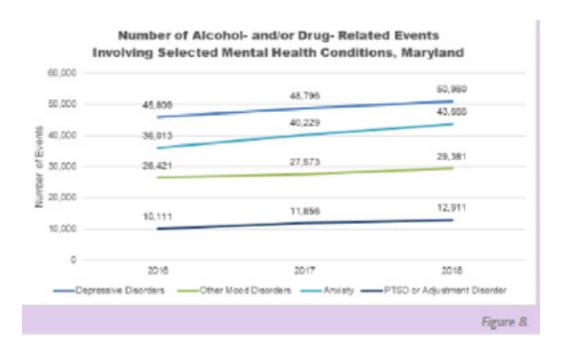
Between 2016 and 2018, more than 40 Charles County residents lost their lives during hospitalizations involving alcohol and/or drugs, accounting for approximately 1.8% of these fatalities statewide (Figure 7).

Among Charles County residents, events involving only drugs accounted for a larger proportion of alcohol- and/or drug-related fatalities compared to statewide (50% vs 46.8%, respectively). Additionally, Charles County residents experienced more alcohol-only related fatalities than the state as a whole (45.7% vs. 41.9%, respectively).



Between 2016 and 2018, the number of alcohol- and/or drug-related events that involved depressive mood disorders, as defined by ICD-10-CM diagnostic codes, were consistently greater than anxiety, adjustment, and other mood disorders. Diagnoses of comorbid depressive disorders were observed in 18.1% of alcohol- and/or drug- related events statewide and in 12.7% of such events in Charles County. In Charles County, anxiety diagnoses were observed in 11% of alcohol- and/or drug-related events, less than the statewide

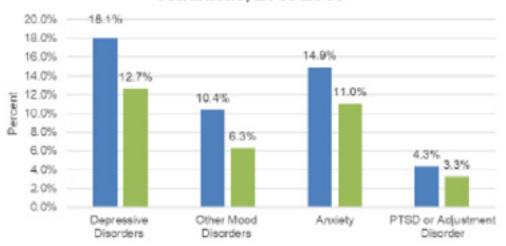
percentage for anxiety diagnoses among alcohol- and/or drug-related events during the same interval (Figure 10).



Number of Alcohol- and/or Drug- Related Events Involving Selected Mental Health Conditions, Charles County



Percentage of Alcohol- and/or Drug- Related Events Involving Selected Mental Health Conditions, 2016-2018



Charles County Drug-Induced Death Data:

From 2010-2019, Charles County saw 229 deaths due to alcohol or drug intoxication. Of those deaths, 188 were opiate-related. That represents 82% of the drug intoxication deaths for the county.

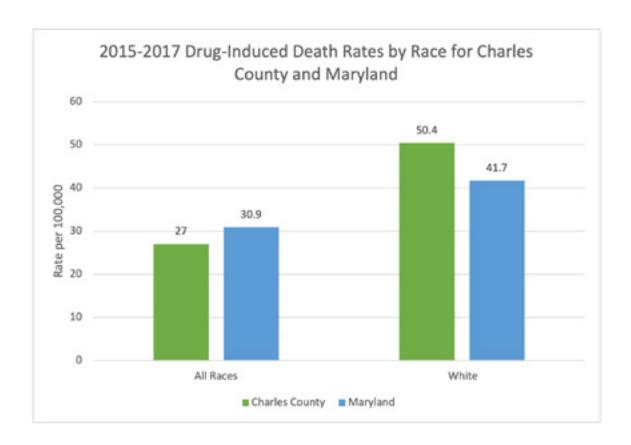
There was a large jump in intoxication deaths from 22 in 2015 to 45 in 2016. The number of drug- and alcohol-related intoxication deaths has declined since 2016 and was 31 in 2019. A large number of those deaths were due to heroin and fentanyl. Heroin deaths went from eight in 2015 to 22 in 2016. Heroin deaths have since declined to 12 in 2019. Fentanyl went from four deaths in 2015 to 24 deaths in 2019.

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
13	11	13	9	21	22	45	37	27	31
6	6	5	5	10	8	22	16	11	12
4	5	7	5	9	8	10	11	8	7
2	1	1	0	0	2	4	10	13	12
4	3	2	4	5	4	12	9	3	10
0	1	1	3	1	4	17	26	14	24
	13 6 4 2 4	13 11 6 6 4 5 2 1 4 3	13 11 13 6 6 5 4 5 7 2 1 1 4 3 2	13 11 13 9 6 6 5 5 4 5 7 5 2 1 1 0 4 3 2 4	13 11 13 9 21 6 6 5 5 10 4 5 7 5 9 2 1 1 0 0 4 3 2 4 5	13 11 13 9 21 22 6 6 5 5 10 8 4 5 7 5 9 8 2 1 1 0 0 2 4 3 2 4 5 4	13 11 13 9 21 22 45 6 6 5 5 10 8 22 4 5 7 5 9 8 10 2 1 1 0 0 2 4 4 3 2 4 5 4 12	13 11 13 9 21 22 45 37 6 6 5 5 10 8 22 16 4 5 7 5 9 8 10 11 2 1 1 0 0 2 4 10 4 3 2 4 5 4 12 9	13 11 13 9 21 22 45 37 27 6 6 5 5 10 8 22 16 11 4 5 7 5 9 8 10 11 8 2 1 1 0 0 2 4 10 13 4 3 2 4 5 4 12 9 3

The 2015-2017 average Charles County age-adjusted drug-induced death rate was 27.0 per 100,000 population. This rate is less than the Maryland state average rate of 30.9 per 100,000 population. The 2015-2017 Charles County White drug-induced death rate was 50.4 per 100,000 and was higher than the Maryland state average rate of 41.7 per 100,000. Rates for other races were not calculated on a county level due to small case counts.

The Charles County drug-induced death has increased greatly since the previous needs assessment. The 2014-2016 Charles County drug-induced death rate was 21.4 per 100,000

and has now risen to 27 for 2015-2017. The Charles County White drug-induced death rate also rose from 39.0 in 2014-2016 to 50.4 in 2015-2017.



Maryland Youth Risk Behavior Survey:

Charles County middle and high schools students participated in the 2018-2019 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 weighted to reflect the county's school aged population.

Charles County middle and high school students were asked if they have ever tried substances one or more times in their life. The most commonly used substances for both middle and high school students were alcohol (21.4% middle and 56.4% high school) and marijuana (8.4% middle and 31.6% high school).

Alcohol was the most commonly reported substance for high school students (56.4%).

Marijuana is the second most commonly reported substance for high school students (31.6%). The lifetime usage percent increased for students in the 12th grade (43.0%) and those who are of multiple races (38.8%).

Substance Lifetime Usage Rates,	High School Percent	Middle School
2018-2019 Charles County YRBS	Reporting	Percent Reporting
Alcohol	56.4	21.4
Marijuana	31.6	8.4
Synthetic marijuana	7.3	NA
Cocaine	6.6	3.7
Heroin	6.4	NA
Methamphetamine	5.8	NA
Ecstasy	7.2	NA
Prescription drugs without a prescription	16.5	9.2
Injectable illegal drugs	5.2	NA

NA: Not applicable. The question was not asked on the middle school survey.

In addition, Charles County high school students were asked if they have been sold or given illegal drugs on school property in the last year: 22.2% reported that they have been sold or given illegal drugs on school property in the last year. This percentage was highest among Hispanics (32.2%) and 11th graders (24.7%).

One out of four Charles County high school students report using alcohol in the past 30 days (24.1%). Charles County high school students were also asked a question regarding binge drinking. They were asked if they have had five or more drinks of alcohol in a row within a couple of hours on one or more of the past 30 days. 11.8% reported binge drinking in the past 30 days. Finally, 19% of high school students reported using marijuana in the past 30 days.

2018-2019 Charles County High School YRBS 30-day usage rates	Percentage Reporting
Alcohol	20.7
Marijuana	18.0
Binge Drinking	9.8

Maryland Behavioral Risk Factor Surveillance System Data:

Alcohol Use Data:

55.7% of Charles County adults reported that they have consumed alcohol in the past 30 days. This is slightly above the Maryland state percentage of 53.6%.

For 2019, 14.1% of Charles County adults reported binge drinking in the last month. Binge drinking was defined as males having more than five drinks and females having more than four drinks on one occasion. Charles County binge drinking rates were similar to the Maryland rates for this time period.

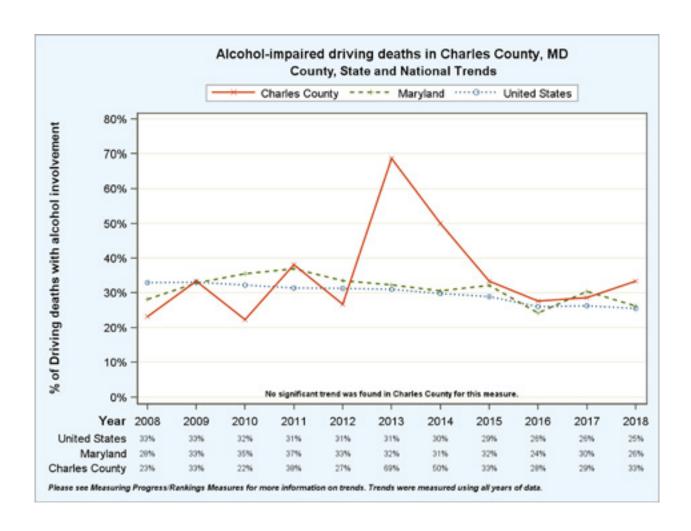
2019 Binge Drinking (Males having more than five drinks and females having more than four drinks in one occasion in the last month), Charles County and Maryland

Yes	No	
14.1%	85.9%	
14.8%	85.2%	
	14.1%	14.1% 85.9%

5.4% of Maryland BRFSS respondents reported that they are chronic drinkers. Chronic drinking was defined as males having two or more drinks and females having one or more drinks every day. A Charles County percentage could not be calculated due to the small sample size.

Driving deaths that were alcohol involved:

According to the County Health Rankings, 33% of driving deaths in Charles County from 2014-2018 were alcohol involved. This is greater than the Maryland average percentage of 29% for the same time period.



Substance Use Disorder References:

- 1. 2008-2017 Charles County and Maryland Addictions-Related Emergency Department Visit Rates and Drug-Induced Deaths 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-Visits-For-Addictions-Re/n4s3-z5pf/data.
- 2. 2016-2018 Charles County and Maryland Alcohol and Drug Related Hospitalizations. 2019 Maryland Epidemiological Profiles on Alcohol and Drug Related Hospitalizations: Jurisdiction Profiles. Maryland Health Services Cost Review Commission. Accessed through the Maryland Statewide Epidemiologic Outcomes Workgroup. Available at: https://www.pharmacy.umaryland.com/ edu/media/SOP/wwwpharmacyumarylandedu/programs/seow/PDF2019/maryland-hscrc-jurisdiction-profiles_2019.pdf.
- 3. 2010-2019 Charles County and Maryland Drug Intoxication Deaths by Related Substance. Drug and Alcohol Intoxication Deaths in Maryland 2019 Report. Maryland Vital Statistics Administration. Available at: https://health.maryland.gov/vsa/Documents/Overdose/REV_Annual_2019_Drug_Intox_Report.pdf.
- 4. 2018-2019 Charles County Middle and High School Substance Use Lifetime and 30-Day Usage Estimates. 2018-2019 Maryland Youth Risk Behavior Survey. Available at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2018.aspx#Charles.

- 5. 2019 Charles County and Maryland Adult Binge and Chronic Drinking Estimates and Past 30-day consumption. Maryland Behavioral Risk Factor Surveillance System. Available at: https://ibis.health.maryland.gov/query/selection/brfss/BRFSSSelection.html.
- 6. Alcohol driving death percentages for Charles County and Maryland. Robert Wood Johnson Foundation's County Health Rankings. Available at: https://www.countyhealthrankings.org/app/maryland/2020/measure/factors/134/map.

Qualitative Data Relating to Substance Use and Tobacco:

On the long survey, drug use was seen as the most serious health problem in Charles County. 35% of respondents felt that Drug Use was a serious problem in Charles County, and 58.3% of long survey respondents felt that drug use is a problem on some level in the county.

Of the long survey respondents, 25.3% felt that alcohol use is a serious problem in Charles County. This was the tenth most serious health problem reported on the long survey. Additionally, 55.6% of the long survey respondents felt that alcohol use is a problem on some level. Alcohol use was the second most commonly cited health issue seen as a moderate problem.

Tobacco use was cited as a serious health problem by 24.6% of the long survey respondents. 54.2% of long survey respondents felt that tobacco use is a problem on some level in Charles County.

When asked if they have seen improvements among many health issues, tobacco use was the fifth most common answer, with 23% reporting they have seen improvements. 17.4% respondents reported seeing improvements in terms of substance use disorders in Charles County.

When looking at behavioral risk factors applicable to substance use disorders and tobacco use:

- No respondents reported that they always or most of the time drink three or more alcoholic beverages per day and 0.2% reported that they sometimes drink three or more alcoholic beverages per day.
- 2.5% reported that they drink five or more drinks in one sitting always or most of the time. 15.7% reported that sometimes or rarely they drink five or more drinks in one sitting.
- 9.6% reported that they currently smoke cigarettes to some degree. This is a decrease from the 12% reported in the last needs assessment. 3.4% reported that they always smoke cigarettes.
- 0.4% of the respondents reported using smokeless tobacco.
- 2.5% have used e-cigarettes.
- 18.4% reported that they are exposed to secondhand smoke at home or work to some degree.
- 0.2% misuse prescription drugs on some level whether it is always, most of the time, sometimes, or rarely.
- 0.2% reported that they have used illegal drugs.
- 5.9% reported use of marijuana

On the short survey, 46.4% of total short survey respondents felt that drug and alcohol use was the biggest health problem in Charles County. This was the third most commonly reported health

issue on the short surveys. 30.6% of the short survey respondents felt that smoking and tobacco use was the biggest health problem in Charles County. This was the eight most commonly cited health problem on the short surveys.

Behavioral health and substance use disorders were discussed heavily at the focus group. It can be hard on families when someone is in need of intensive inpatient treatment for a substance use disorder and must leave the county for care. They are separated from their families and their support system. It can be difficult for the families to see them due to lack of transportation. Participants also talked about the waiting lists to get into substance use treatment services in the county. People can change their mindset in the weeks it takes to get into treatment.

One of the biggest themes to emerge out of discussions surrounding substance use disorders is the impact on the entire family. It is not an illness that affects just the person. The effects from drug use spread to the entire family. It is a crisis for all family members not just the one addicted. They can be separated while they are in inpatient treatment. They can be affected financially due to the inability to hold down a job or because the person addicted must steal from family to pay for their drugs.

Focus group participants did feel that some improvements have been made in the county to address substance use disorders. The emergency department now has a peer recovery specialist. The health department has also increased the number of peer recovery specialists in the community. Peer recovery specialists have been found to be very effective in assisting and supporting individuals with a substance use disorder in finding and staying in treatment.

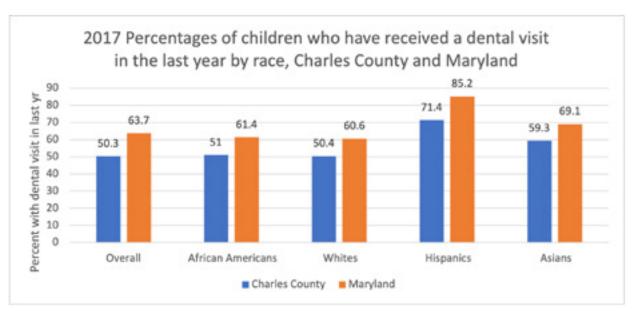
Approximately 45.1% of the key informant interview participants felt that behavioral health (mental health and substance use) was the health condition most affecting Charles County.

When asked what they perceive to be the greatest health issue facing Charles County, behavioral health was the third most popular response among participants. Participants whose responses fell into this health issue category included concerns about poor lifestyles habits and risky behaviors among community members. Particular examples of poor lifestyle choices that participants provided included, smoking, unhealthy eating habits, unsafe driving, and substance use.

Charles County Oral Health Statistics:

Routine Dental Health for Children:

In 2017, only 50.3% of Charles County children aged 0-20 years enrolled in Medicaid had a dental visit in the past year. This is the lowest reported percentage in the state of Maryland. It is much lower than the Maryland state average percentage of 63.7%. Rates were highest among Charles County Hispanics at 71.4% and lowest among Charles County Whites at 50.4%.



Source: 2017 Maryland State Health Improvement Process

Routine Dental Care for Adults:

The 2018 Maryland Behavioral Risk Factor Surveillance System asked two 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:

Oral Cancer Incidence:

The Charles County oral cancer incidence rate for 2012-2016 was 12.0 This rate is greater than the Maryland state average rate of 10.8. The Charles County oral cancer incidence rate is between 10% below and 10% above the United States rate of 11.3 per 100,000.

Charles County Whites had a higher oral cancer incidence rate than Charles County Blacks (14.4 vs. 7.0).

Males are disproportionately affected by oral cancer compared to women. The 2012-2016 Charles County oral cancer incidence rate for males was 19.2, which is significantly higher than the oral cancer incidence rate for women (5.7).

2012-2016 Oral Cancer Incidence Rates

	Total	Male	Female	White	Black	Other
Maryland	10.8	16.4	6.0	12.1	8.1	6.7
Charles County	12.0	19.2	5.7	14.4	7.0	**
Calvert County	13.9	21.1	7.1	13.5	**	0
St. Mary's County	15.6	21.9	9.5	15.8	**	**

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

Oral Cancer Mortality:

For 2012-2016, the Charles County oral cancer mortality rate was 3.0 per 100,000. This is higher than the Maryland state average rate of 2.4 per 100,000. The Charles County oral cancer mortality for 2012-2016 was 10-25% above the U.S. average rate of 2.5 per 100,000.

Even for a combined time period of 2012-2016, deaths due to oral cancer are few, and rate calculations by race and gender were not possible.

2012-2016 Oral Cancer Mortality Rates

	Total	Male	Female	White	Black	Other
Maryland	2.4	3.7	1.4	2.4	2.8	1.3
Charles County	3.0	**	**	**	**	**
Calvert County	**	**	**	**	**	**
St. Mary's County	**	**	**	**	**	**

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

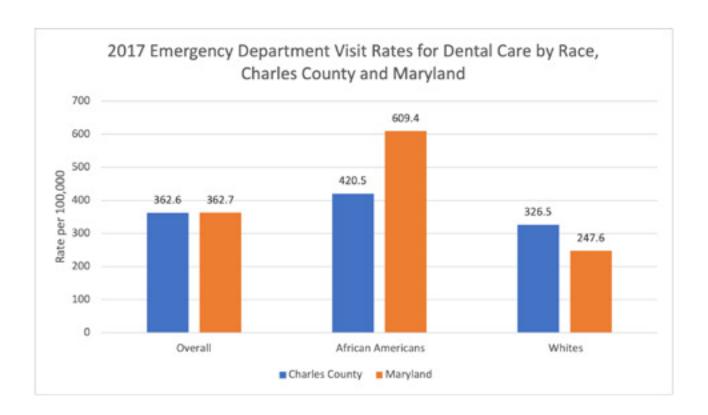
Source: Maryland Department of Health: 2019 CRF Program's Cancer Report

2019 Maryland Oral Health Legislative Report:

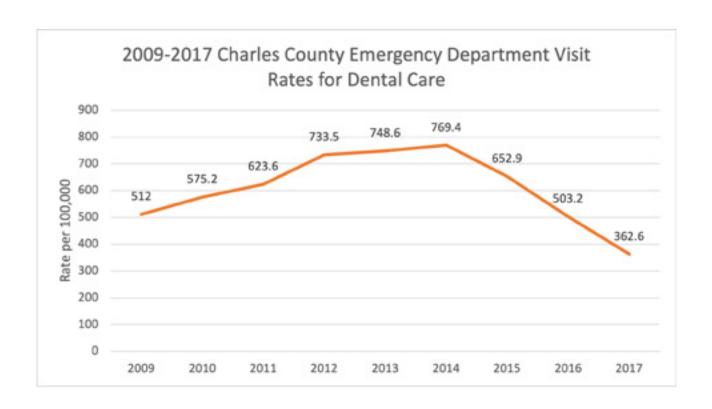
The number of dentists in Southern Maryland participating in medical assistance has increased over the last five years. Southern Maryland increased from 29 dentists in 2009 to 96 dentists in 2018 who are enrolled in the Maryland Healthy Smiles Dental Program (medical assistance and MD Healthy Smiles Program). Of those dentists, 66 billed one or more services in calendar year 2018; 51 of the billing dentists billed more than \$10,000 in 2018.

2017 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 than 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).

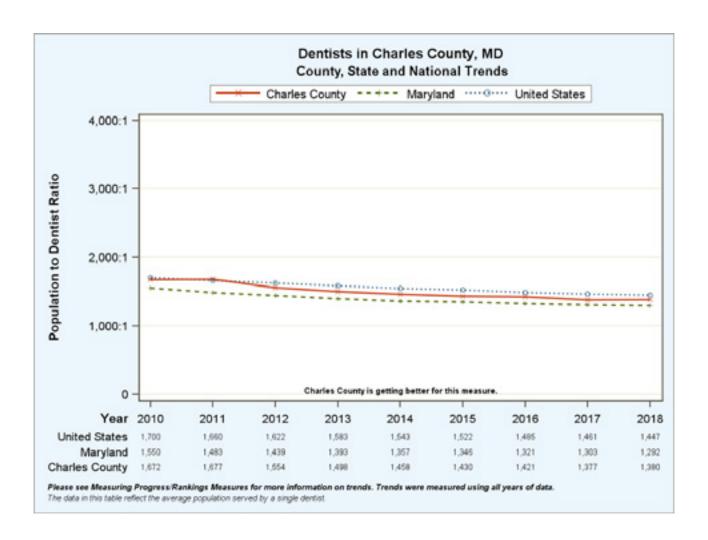


The Charles County ED visit rate for dental care increased every year from 512 per 100,000 in 2009 to 769.4 in 2014. Since then, Charles County has seen a decline in ED visit rates for dental care.



Rate of population to dentist:

The 2018 dentist ratio in Charles County was 1,380:1. This is greater than the Maryland population to dentist ratio of 1,292:1 but less than the national ratio of 1,447:1. The Charles County dentist ratio has been decreasing each year. This is a good indicator that there are more dentists who can share the burden of patients in the county.



Dental Health References:

- 2017 Charles County Percentages of Children with Dental Visit in past year. Medicaid data 2017 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.
- 2. 2018 Charles County Dental health data. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at: https://ibis.health.maryland.gov.
- 3. 2012-2016 Charles County Oral Cancer Incidence and Mortality Rates. 2019 Maryland Cigarette Restitution Fund Program's Cancer Reports. Maryland Department of Health. Available at: https://phpa.health.maryland.gov/cancer/SiteAssets/Pages/surv_data-reports/2019%20 CRF%20Cancer%20Report.pdf.
- 4. Charles County Medicaid dental provider data. 2019 Maryland Annual Oral Health Legislative Report. Available at: https://www.mdac.us/file_download/inline/1c5ce2c3-1794-4960-8360-9e205142e0ac.

- 5. 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.
- 6. 2010-2018 Charles County dentist to population ratio. Area Health Resource File. Robert Wood Johnson Foundation's County Health Rankings. Available at: https://www.countyhealthrankings.org/app/maryland/2020/measure/factors/88/map.

Qualitative Data Related to Dental Health:

Of the long survey participants, 78.6% reported that they have dental insurance, 37.4% receive routine care from their dentist, and 22.2% reported that they travel outside of Charles County for their dental appointments.

Of the long survey participants, 49.7% reported that dental health is a problem on some level in Charles County, and 17.3% felt that it was a "serious problem" in the county.

19.3% of the short survey participants felt that dental health is one of the biggest health problems in Charles County. When asked if services are available to address the issue, 20.7% felt that many or some services are available in the county for dental health.

Focus group participants mentioned the fact that it is hard to find dentists who accept medical assistance since it is not mandated that they accept that form of insurance. Therefore, people must travel outside of the county to find providers who will accept medical assistance, particularly for specialty procedures.

Charles County Mental Health Statistics:

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.

Charles County data has been extracted for questions pertaining to mental health, quality of life, emotional and social support, and depression. Charles County BRFSS data is available for 2018 and 2019. When 2019 BRFSS was not available, the 2018 BRFSS database was queried for Charles County level data. For example, in the 2018 BRFSS, a module was added that asked a series of questions regarding adverse childhood experiences.

Has a doctor ever told you that you had a depressive disorder (including depression, major depression, dysthymia, or minor depression)?

For 2018, approximately 14.9% of Charles County BRFSS respondents reported that they have been diagnosed with depression.

Depressive disorders 2019	Yes	No
Charles County	14.9%	85.1%
Maryland	16.3%	83.7%

Number of mental health days not good

The 2019 Charles County BRFSS results found that approximately one-third of county residents (36.7%) had experienced days in the past month where their mental health status was not good.

Mental health days not good 2015	1-2 days	3-7 days	8-29 days	30 days	None
Charles County	8.2%	11.3%	12.4%	4.9%	69.5%
Maryland	9.7%	13.1%	11.5%	5.1%	60.5%

How many days did poor physical or mental health problems keep you from your activities?

The 2019 Charles County BRFSS results found that approximately 22.4% had at least one day in the past month where physical or mental health problems kept them from their activities.

Question 5: Mental/physical health keep you from usual activities 2015	1-2 days	3-7 days	8-29 days	30 days	None
Charles County	4.6%	10.0%	5.1%	2.7%	77.6%
Maryland	6.9%	8.2%	6.3%	3.3%	75.3%

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 2018 BRFSS, approximately 65.5% of Charles County report having at least one ACE. This is higher than the Maryland state average percentage of 63.1%. Charles County also had a higher percentage than Maryland of people who reported an ACE score of four or more (16.6% vs. 14.5%).

2018 BRFSS: ACE Score	Charles County	Maryland	
Zero	34.5%	36.9%	
One	18.8%	24.5%	
Two	21.1%	14.5%	
Three	9.0%	9.6%	
Four or more	16.6%	14.5%	

The 2018 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 (35.6%), Household Substance Abuse (26.0%), and Emotional Abuse (42.9%).

2018 BRFSS ACE Prevalence	Charles County	Maryland	
Household Substance Abuse	26.0%	25.4%	
Sexual Abuse	14.5%	12.2%	
Household Mental Illness	11.2%	16.3%	
Incarcerated Household Member	15.5%	8.6%	
Parental Separation or Divorce	35.6%	30.6%	
Intimate Partner Violence	18.6%	15.5%	
Emotional Abuse	42.9%	35.0%	
Physical Abuse	9.4%	14.9%	

Suicide:

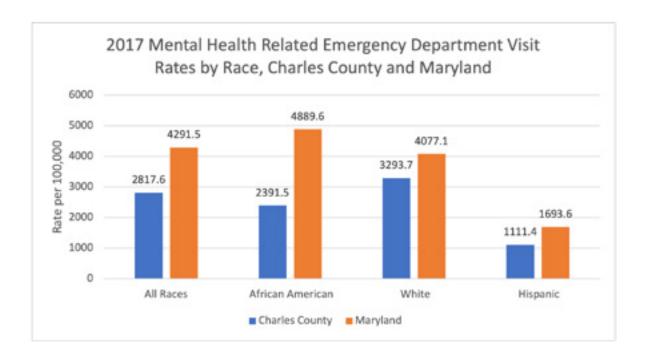
In 2016, there were a total of 18 suicides in Charles County and 652 suicides in the state of Maryland. The 2016-2018 average Maryland Suicide rate was 9.8 per 100,000. The 2016-2018 Southern Maryland suicide rate was 10.9 per 100,000. A Charles County level suicide rate could not be calculated due to small case counts. Rates less than 25 are unreliable.

Emergency Department Visit Rates for Mental Health Conditions:

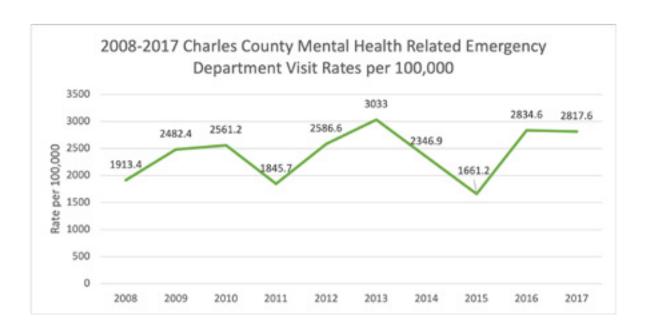
This indicator shows the 2017 rate of emergency department visits related to mental health disorders (per 100,000 population). Mental health problems can place a heavy burden on the

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 fourth lowest rate in the state of Maryland. When examining rates by race, Charles County Whites had a higher ED visit rate for mental health than Charles County African Americans or Hispanics (3,293.7 vs. 2,391.5 and 1,111.4). All Charles County rates are well below the state average rates.



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.



Health Professional Shortage Areas (HPSA) for Mental Health Services in Charles County, Maryland

As of October 28, 2017, 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.

Geographic Areas must:

- Be a rational area for the delivery of mental health services
- Meet one of the following conditions:
 - A population-to-core-mental-health-professional ratio greater than or equal to 6,000:1 and a population-to-psychiatrist ratio greater than or equal to 20,000:1 or
 - A population-to-core professional ratio greater than or equal to 9,000:1 or
 - A population-to-psychiatrist ratio greater than or equal to 30,000:1
- Have unusually high needs for mental health services, and
 - A population-to-core-mental-health-professional ratio greater than or equal to 4,500:1 and a population-to-psychiatrist ratio greater than or equal to 15,000:1, or
 - A population-to-core-professional ratio greater than or equal to 6,000:1, or
 - A population-to-psychiatrist ratio greater than or equal to 20,000:1
- Mental health professionals in contiguous areas are over-utilized, excessively distant or inaccessible to residents of the area under consideration.

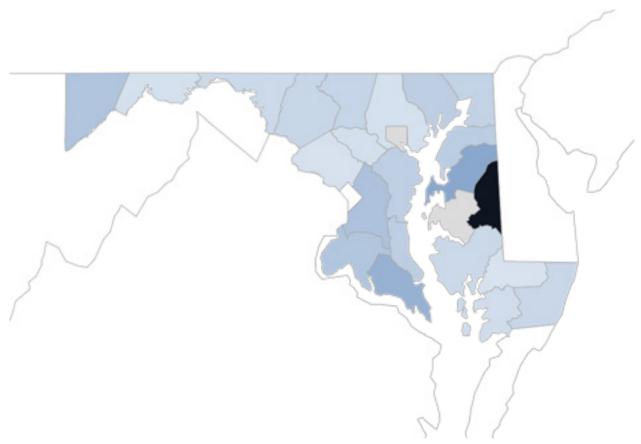
The Charles County HPSA score for mental health is nine. There is a shortage of 4.01 FTE mental health providers. The National Health Services Corps uses a scaling system from 1-26 to determine

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 U.S. 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 640:1. This is well above the Maryland state average ratio of 390:1. The Charles County ratio is the sixth worst ratio in the state of Maryland.



Source: 2019 National Provider Identification Registry data from the 2020 Robert Wood Johnson Foundation's County Health Rankings

2018-2019 Maryland Youth Risk Behavior Survey:

The 2018-2019 Maryland Youth Tobacco and Risk Behavior Survey (YRBS) asked Charles County middle school students and high school students questions regarding risk behaviors and perceptions of harm. Questions regarding suicide and mental health were included in the survey. Charles County results are presented below.

Suicide:

20.5% of Charles County high school students and 23.6% of Charles County middle school students have considered attempting suicide, compared to 18.0% for Maryland high school students and 22.9% for Maryland middle school students. For both middle and high school students, females were more likely to report that they have considered suicide than males

(high school: 23.8% vs. 16.8%).

Beyond considering suicide, 18.8% of Charles County high school students and 14.6% of Charles County middle school students reported that during the past 12 months they have made a plan about how they would attempt suicide.

9.9% of Charles County middle school students and 8.8% of Maryland middle school students reported that they had attempted suicide ever.

Bullying:

On bullying, 17.7% of Charles County high school students and 35.7% 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 (18.7% vs. 16.1%). Younger students under 15 years of age (20.1%), Hispanics (28.4%), and 9th grade students (22.6%) had higher rates of bullying than older students in the other grades in high school.

An additional question asked students if they have been electronically bullied in the past 12 months. 14.0% of Charles County high school students and 16.8% of Charles County middle school students reported that they have been electronically bullied in the past 12 months. For high school students, females were more likely to report being electronically bullied than males (14.1% vs. 13.5%). Younger students under 15 years of age (15.5%), Hispanics (22.3%), and 9th grade students (16.6%) had higher rates of electronic bullying than older students in the other grades in high school.

Feeling of Hopelessness:

Emotionally, 36.3% of Charles County middle school students and 32.0% of Charles County high school students felt so 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. More females reported feeling sad and hopeless than males (39.4% vs. 24.8%).

Talking:

• 75.5% felt comfortable seeking help from one or more adults besides their parents if they had a question affecting their life.

Mental Health References:

- 1. 2019 Charles County and Maryland Depression Prevalence Estimates and 2018 Charles County and Maryland Adverse Childhood Experiences Prevalence, Mental Health data. 2018 and 2019 Maryland Behavioral Risk Factor Surveillance System. Available at: https://ibis.health.maryland.gov/query/selection/brfss/BRFSSSelection.html.
- 2. 2016-2018 Charles County and Maryland Suicide Counts and Rates. 2018 Maryland Vital Statistics Report. Maryland Department of Health. Available at: https://health.maryland.gov/vsa/Documents/Reports%20and%20Data/Annual%20Reports/REV_2018annual.pdf.
- 3. 2008-2017 Charles County and Maryland Emergency Department Visit Rates for Mental Health Conditions. 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. Charles County Health Professional Shortage Area Designation for Mental Health. US Department of Health and Human Services: Health Resources and Services Administration. October 28, 2017. Health Professional Shortage Area Update. Available at: https://data.hrsa.gov/tools/shortage-area/hpsa-find.
- 5. 2019 Charles County Population to mental health provider ratio. Robert Wood Johnson Foundation's County Health Rankings. Available at: https://www.countyhealthrankings.org/app/maryland/2020/measure/factors/62/map.
- 6. 2018-2019 Charles County and Maryland Youth Data on suicide, bullying, and mental health status. 2018-2019 Maryland Youth Risk Behavior Survey. Maryland Department of Health. Available at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2018.aspx#Charles.

Qualitative Data Relating to Mental Health:

Long Survey Results related to Mental Health:

Of the long survey respondents, 2.9% reported that they travel outside of Charles County to receive behavioral health services.

Respondents were also asked a series of risk and protective factor questions. One question asked respondents if they feel stressed or overwhelmed: 6.2% reported that they always feel stressed out or overwhelmed, and 82.5% reported that they are stressed always, most of the time, sometimes, or rarely. The greatest group of respondents (41.7%) reported that they feel stressed out or overwhelmed sometimes.

Of the long survey respondents, 26.4% felt that mental health is a serious health issue in Charles County, and 54.5% felt that mental health is a health problem on some level (serious, moderate, and slight). This is a decrease from the 75% reported in the last needs assessment.

16.2% of the long survey respondents felt that improvements have been made in Charles County to address mental health services and access.

Short Survey Results related to Mental Health:

44% of the short survey respondents reported Mental Health as one of the biggest health problems in Charles County. This is an increase from the 34% reported in the last needs assessment report.

24.2% of the short survey participants felt that many or some services are available in the county to address mental health. 7% reported that there were no services available in Charles County for mental health. The most common answer was that "some" services are available.

Focus Groups:

Mental health and access to behavioral health services were major discussion topics at the focus group. Focus group participants saw mental health as a serious health issue in Charles County. The difficulty in finding mental health services for individuals, particularly children, with private or military insurance was highlighted. The increase in mental health conditions and the exacerbation of symptoms during the COVID-19 pandemic was a major topic of discussion. Isolation, fear, and uncertainty has led to depression and anxiety in all age groups and demographics.

Key Informant Interviews:

Approximately 45.1% of the key informant interview participants felt that behavioral health (mental health and substance use) was the health condition most affecting Charles County.

When asked what they perceive to be the greatest health conditions affecting Charles County, mental health was the second most common response among participants. Responses from participants related to mental health included stress, anxiety, substance use, lack of mental health resources, and access to mental health services. Access to mental health services for children was seen as a current health issue in Charles County, and the impact COVID-19 may have on the mental health of children and adults in the community.

Barriers or gaps in services related to mental health were other popular responses among participants. Many participants reported that the county lacks mental health providers. Child mental health services was also a concern among participants, reporting there is a shortage of child psychiatrists. The cost of mental health services was perceived as a barrier in the county as well.

Access to Care:

Access to Routine Exams:

From 2019, 78.7% 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+ years
Charles County	78.7%	12.9%	8.4%

2019 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: 8.6% 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 11.4%.

Charles County BRFSS respondents were asked if they have one or more people that they think of as their personal doctor or health care provider. The majority of those surveyed (77.3%) reported that they do have a personal doctor or health care provider. This was below the Maryland percentage of 83.3%.

Health Status:

2019 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 (88.6%). A small portion considers their health to be fair to poor (11.4%).

There was an increase from the last needs assessment in the percentage reporting that they are in fair or poor Health (9.4% to 11.4%).

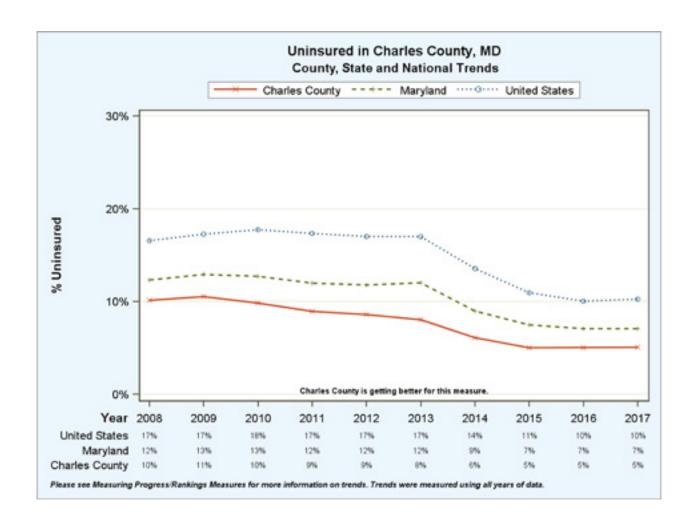
Health Status:	Good, Very Good, or Excellent	Fair or Poor
Charles County	88.6%	11.4%
Maryland	84.5%	15.5%

Health Insurance:

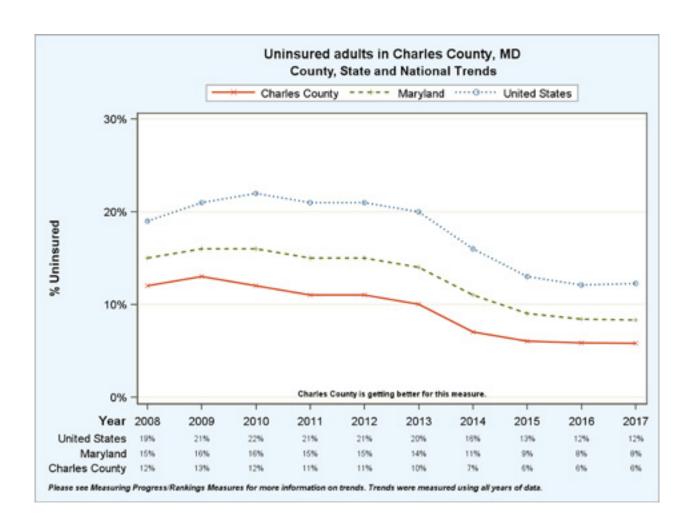
The 2019 Charles County BRFSS estimates that 7.2% of county residents do not have health insurance coverage of any kind. This is lower than the 10.4% estimated for the state of Maryland.

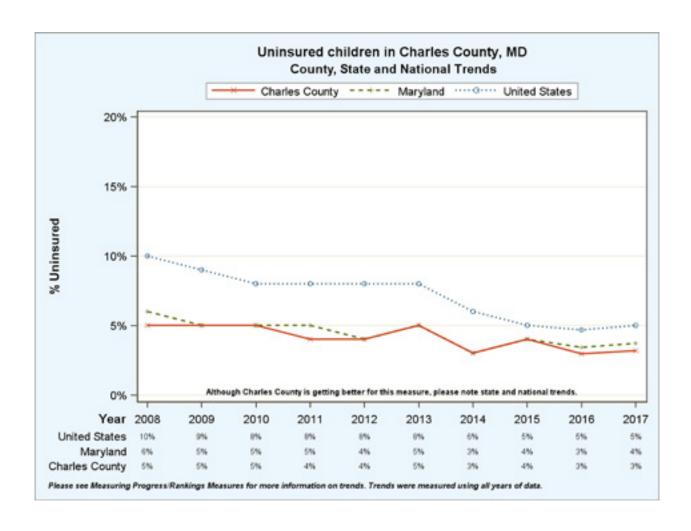
Health Insurance Coverage:	No	Yes
Charles County	7.2%	92.8%
Maryland	10.4%	89.6%

The 2017 Charles County health uninsured estimate as determined by the US Census Bureau's Current Population Survey is 5%. The data were accessed through the Robert Wood Johnson Foundation's County Health Rankings. This is identical to the 2015 Charles County health uninsured rate of 5% that was reported in the previous needs assessment report. The 2015 Charles County estimate is below the Maryland state health uninsured estimate of 7% for 2017. The Charles County estimate has remained consistent for the last 3 years.



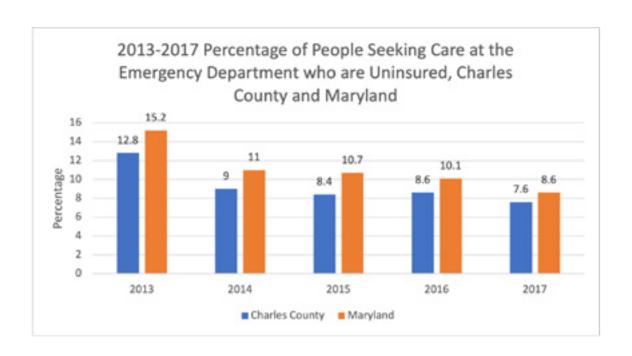
The percent of the population who are uninsured is also broken down by adults and children: 6% of Charles County adults are uninsured, compared to 8% for Maryland, and 3% of Charles County children are uninsured, compared to 4% for Maryland.





Uninsured Emergency Department (ED) visits:

The Maryland State Health Improvement Process measure for the percent of persons without health insurance is based on outpatient claims data provided by the Maryland Health Services Cost Review Commission. The percent of emergency department visits that were uninsured in Charles County was 7.6% for 2017. This is below the Maryland state average percentage of 8.6%. From 2013-2017, Charles County saw decreases in the percentage of people seeking care in ED who were uninsured.



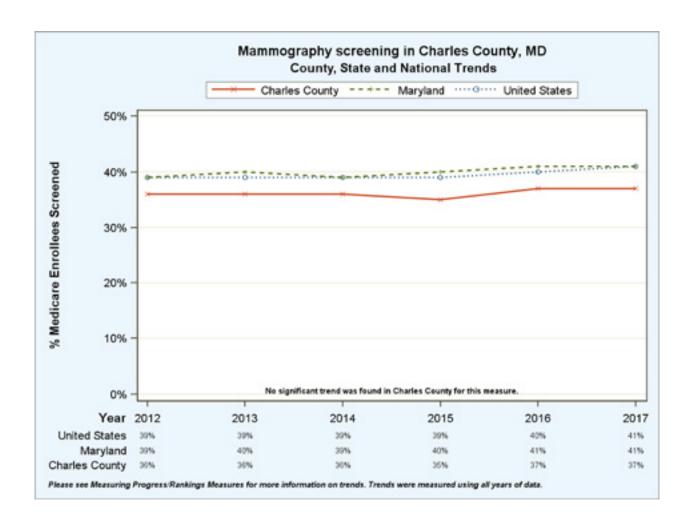
Medicaid Enrollment Rates:

For the past decade, Charles County has seen an increase in the number of persons both eligible for and enrolled in Medicaid. The biggest increases are seen from 2013 to 2014 when Medicaid was expanded in the state of Maryland.

Charles County Medicaid Enrollment and Eligibility	Medicaid Enrollment	Medicaid Eligible	
June 2020	29903	34292	
June 2019	27964	32686	
June 2018	27046	32224	
June 2017	26826	31572	
June 2016	24542	29724	
June 2015	22536	28780	
June 2014	23844	28962	
June 2013	17083	23108	
June 2012	15655	21354	
June 2011	14874	19679	

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 mammogram health screenings for women aged 65-74 currently enrolled in Medicare. 37% of Charles County women aged 65-74 years enrolled in Medicare received a mammography screening in 2017. The county percentage is lower than the Maryland state percentage of 41%. The Charles County rate of mammography screening has remained fairly consistent from 2012-2017.



Health Professional Shortage Areas/ Medically Underserved Populations and Areas:

Health Professional Shortage Areas (HPSA):

There is one federally designated health professional shortage area in Charles County for dental health. The dental health HPSA is for Greater Baden Medical Services in Brandywine and La Plata. This HPSA was updated on September 3, 2019. 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, the greater the priority.

There is a federally designated mental health professional shortage area for the entire county. This was last updated on October 28, 2017. Charles County received a score of 9 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 Brandywine and La Plata. The Greater Baden HPSA score is 23 for mental health.

There is a federally designated primary care professional shortage area for Southern Charles County. This was last updated on October 28, 2017. They report that there is one full-time equivalent primary care professional providing ambulatory patient care in the designated area. The Southern Charles County census tracts of 8511, 8512, 8513.01, and 8513.02 are included in the designated HPSA area. Charles County received a score of 13 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, 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 six 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 on documented unusual local conditions and barriers to accessing personal health services.

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.

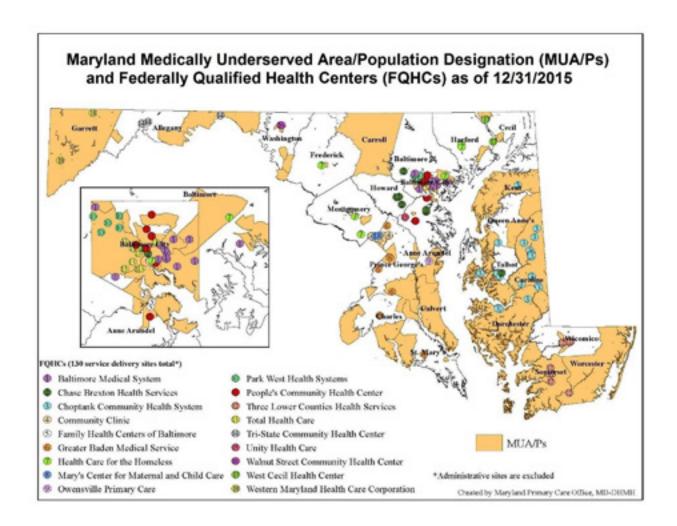
In addition to the MUP, there are five medically underserved areas (MUA) in Charles County. Medically Underserved Areas may be a whole county or a group of contiguous counties, groups of county or civil divisions or a group of urban census tracts in which residents have a shortage of personal health services. Those areas include:

- Medically Underserved Area (MUA): Score 51.97
- District 4, Allens Fresh
- District 5, Thompkinsville
- District 9, Hughesville
- Medically Underserved Area: Score 61.25
- 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.

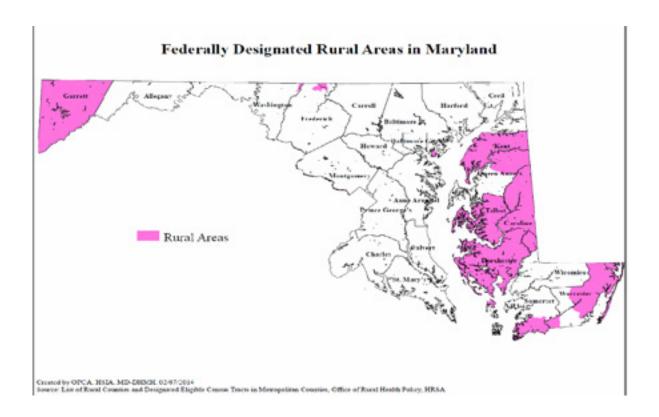
The IMU involves four variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over. The value of each of these variables for the service area is converted 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 51.97. The Marbury/Nanjemoy areas received an IMU score of 61.25, which is close to the 62 cut off for MUA designation.



Rural Health Designation:

Charles County no longer holds a federal designation as a rural area. All Southern Maryland counties have lost their rural designation.



Availability of Health Services:

Maryland Primary Care Needs Assessment 2016:

The 2016 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. These data identified the following:

- Causes of preventable PQIs;
- Key barriers to access to health care:
- Areas that lack access to preventive and primary care services and demonstrates the highest need for intervention due to social determinants; and
- Areas that experience a shortage of primary care, mental health, and dental providers.

A quartile ranking was used to order the PQI and SHIP indicator results by Maryland jurisdiction. The information in this matrix was compiled from data from the Maryland Vital Statistics Administration, the State Health Improvement Process. The matrix focused on 54 indicators and ranked those indicators at the jurisdictional level. The jurisdictions were ranked for each indicator using an ordinal/quartile based ranking system. Based on these summations, the jurisdictions were given an overall ordinal ranking. Charles County was ranked 16th out of 24 jurisdictions and was placed in the third quartile.

Jurisdictions	Indicator Score			
Montgomery	293			
Howard	339			
Queen Anne's	366	Top Quartile		
Carroll	403	(Best)		
Frederick	405			
Harford	469			
Calvert	527			
Garrett	532			
Anne Arundel	554	Cocond Owentile		
Worcester	596	Second Quartile		
Talbot	598			
Cecil	633			
Prince George's	640			
Saint Mary's	647			
Caroline	651	Third Overtile		
Charles	689	Third Quartile		
Somerset	690			
Baltimore County	699			
Kent	716			
Washington	724			
Allegany	767	Bottom		
Wicomico	811	Quartile (Worst)		
Dorchester	864	(WOIST)		
Baltimore City	1,011			

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 health care workforce on the state and jurisdictional level. Phase 2 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 health care 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 count; 2. Equations that relate a person's characteristics to his or her demand for health care services by care delivery setting; and 3. Staffing patterns that convert demand for health care 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.

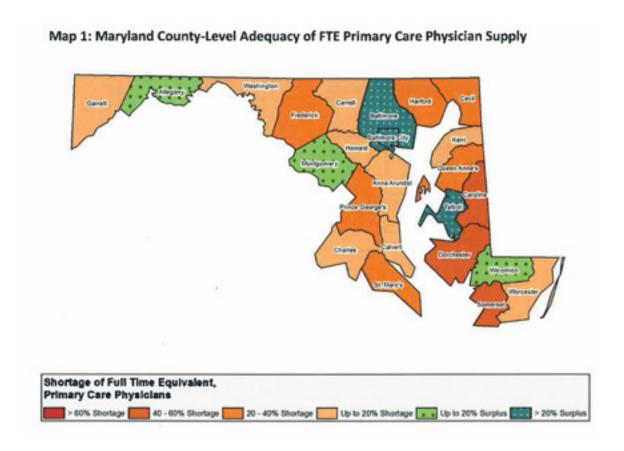


Exhibit 3: Adequacy of Supply for Primary Care Physicians by County, 2012

	Total FTEs			FTEs/10,000 Population	
County	FTE Demand	FTE Supply	Supply - Demand	FTE Demand	FTE Supply
Allegany	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

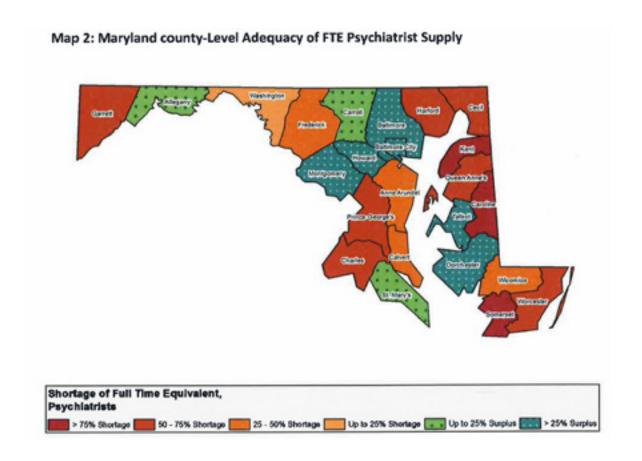
		ssional isclors	Social	Social Workers		ologists	Physician Assistants	
County	FTEs	FTE/ 10,000	FTEs	FTE/ 10,000	FTEs	FTE/ 10,000	FTEs	FTE/ 10,000
Allegany	267	36.1	222	29.9	27	3.6	27	3.6
Anne Arundel	684	12.4	833	15.1	144	2.6	162	2.9
Baltimore City	2,132	34.3	4,030	64.9	405	6.5	570	9.2
Baltimore County	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

		Total FTE	FTEs/10,000 Population			
County	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	



2018 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 2018 State Physician Workforce Data Report state that there are 23,323 active physicians and 7,022 primary care physicians practicing in Maryland.

Maryland Physician Workforce Profile

State Population		5,042,718	Total Female Physicians:	9,560			
Population s age	21	,643,404	Total MD or DO Students:	1,967			
Total Active Phys		23,323	Total Residents:	2,919			
Primary Care Ph		7,022					
or additional data, in	reluding maps	and tables, please	e see the 2019 State Physician Workforce Data R	eport online at www.aamc.e	mg/workforce MD	MD Rank	State Medi
	Active Phys	icians per 100,000	Population, 2018		386.0	2	257.6
	Total Active Patient Care Physicians per 100,000 Population, 2018					4	227.2
	Active Prima	ary Care Physician	s per 100,000 Population, 2018		116.2	6	90.8
Discolution	Active Patie	nt Care Primary Co	are Physicians per 100,000 Population, 2018		97.6	9	82.5
Physician Supply	Active General Surgeons per 100,000 Population, 2018		9.6	11	7.7		
Supply	Active Patie	nt Care General S	urgeons per 100,000 Population, 2018		7.5	15	6.9
	Percentage	of Active Physician	ns Who Are Female, 2018		41.0%	4	33.8%
	Percentage	of Active Physician	ns Who Are International Medical Graduates (IMG	s), 2018	26.8%	9	19.1%
	Percentage	of Active Physician	ns Who Are Age 60 or Older, 2018		34.1%	11	30.3%
Indergraduate	MD and DO	Student Enrollmer	nt per 100,000 Population, AY 2018-2019		32.6	26	32.7
Medical	Student Enr	ollment at Public N	fD and DO Schools per 100,000 Population, AY 2	018-2019	22.8	17	21.2
Education	Percentage	Change in Student	Enrollment at MD and DO Schools, 2008-2018		2.9%	43	24.6%
(UME)	Percentage	of MD Students M	atriculating In-State, AY 2018-2019		27.1%	42	65.6%
	Total Reside	ents/Fellows in AC	GME Programs per 100,000 Population as of Deci	ember 31, 2018	48.3	12	28.1
Graduate Total Residents/i		ents/Fellows in Primary Care ACGME Programs per 100,000 Population as of Dec. 31, 2018		14.9	15	10.6	
Education	Percentage	of Residents in AC	CGME Programs Who Are IMGs as of December 3	1, 2018	23.2%	17	20.5%
(GME)	Datis of Decidents and Fallows (CMF) to Madical Chadests (UMF), AV 2017 2010		6	1.5	10	1.0	
	Percent Cha	ange in Residents :	and Fellows in ACGME-Accredited Programs, 200	8-2018	2.6%	50	17.6%

Percentage of Physicians Retained in State from UME and GME Combined, 2018

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

Percentage of Physicians Retained in State from Public UME, 2018

Percentage of Physicians Retained in State from Undergraduate Medical Education (UME), 2018

Percentage of Physicians Retained in State from Graduate Medical Education (GME), 2018

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).

Source: 2019 State Physician Workforce Data Report

Retention

The specialties with the highest people to physician ratios were interventional cardiology and sports medicine. Females make up 41.0% of all specialists. Additionally, 34.1% of specialists in Maryland are 60 years of age and older.

38.5%

44.1%

44.9%

69.0%

21.9%

24.4%

37.4%

52.7%

40

43

42

Maryland Physician Workforce Profile

	Total Active		Female		Age 60 or Older	
Specially	Physicians	People Per Physician	Number	Percent	Number	Percent
Specalities	23,323	259	9,560	41.0	7,932	
Allergy & Immunology	207	29,192	89	43.0	100	
Anatomic/Cinical Pathology	379	15944	154	40.6	201	
Anesthesiology	1,009	5989	348	34.3	342	
Cardiovascular Disease	555	10,888	96	17.3	265	
Child & Adolescent Psychiatry**	326	5041	202	62.2	102	
Critical Care Medicine	360	16,420	112	30.5	50	
Dematology	308	19519	162	52.6	101	
Emergency Medicine	915	6604	322	35.2	198	
Endocrinology, Diabetes & Metabolism	265	21,203	164	57.5	92	
Family Medicine/General Practice	1,014	3,744	863	53.5	535	
Gastroenteningy	376	16071	92	24.5	155	
General Surgery	578	10,455	138	23.5	209	
Geratric Medicine***	169		87	51.5	40	
Hematology & Oncology	521	11,508	189	38.3	181	
Infectious Disease	481	12563	193	40.1	152	
Internal Medicine	3,533	1,710	1,408	39.9	1,269	
Internal Medicine Pedatrics	114	53,006	78	61.4		
Interventional Cardiology	56	107,906			-	
Neonatal-Pernatal Medicine	134	45,005	94	70.1	47	
Nechrology	275	21,974	101	36.7	83	
Neurological Surgery	126	47958	13	10.3	42	
Nembogy	445	13,549	139	31.2	200	
Neuroradology	92	65.682	25	27.2	-	
Obstetrics & Gynecology	1,072	5637	705	65.8	338	
Conthalmology	559	10520	191	33.6	209	
Ortropedic Surgery	416	14.526	30	7.2	173	
Ctclaryngology	241	25,074	50	24.1	71	
Pain Medicine & Pain Management	138	43.788	31	22.5	13	
Pelarics"	1,569	1047	1,026	65.6	573	
Physical Mericine & Fehabiltaton	248	24,366	93	37.8	69	
Platic Surgery	181	33,385	35	19.3	68	
Preventive Nedicine	450	14,774	175	42.8	213	
Psychiatry	1,128	5357	489	43.4	577	
Pulmonary Cisease	123	49 128	16	13.0	97	
Radiation Oncology	129	46.543	49	38.0	31	
Radiology & Diagnostic Radiology	623	9,599	222	35.7	266	
Rheumatology	221	27.343	109	49.3	72	
Sports Medicine	50	120.854	14	28.0	-	
Theracic Supery	97	62,296	- 1		41	
Uningy	239	25,283	27	11.3	81	
Vancular & Interventional Radiclogy	71	85 100	13	18.3		
Vascular Sugery	109	55438	20	18.3	28	

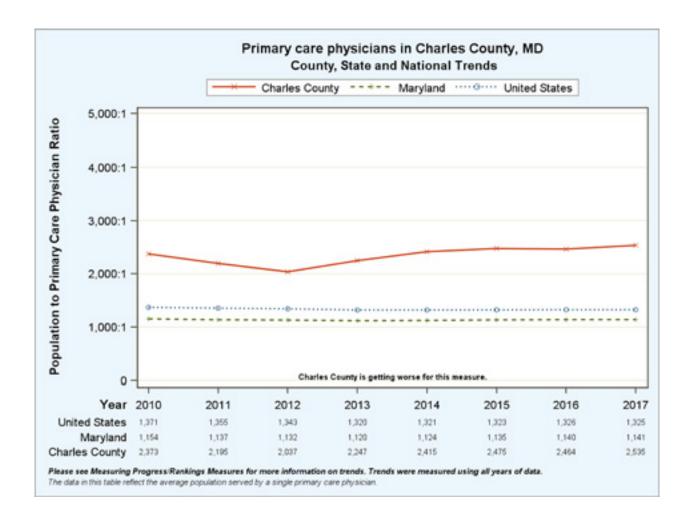
Primary Care Physicians and Mental Health Provider Ratios:

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 2017 primary care physician ratios for all United States counties. For 2017, the Charles County primary care physician ratio was 2,535:1. 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 2017 Charles County PCP ratio is more

^{*} Counts for specialties with fewer than 10 physicians are not shown.

[&]quot;Only those 21 years or younger are included in People Per Physician

than twice as high as the Maryland state ratio of 1,141:1. The Charles County PCP ratio has gotten worse since the last needs assessment report when the ratio was 2,475:1.

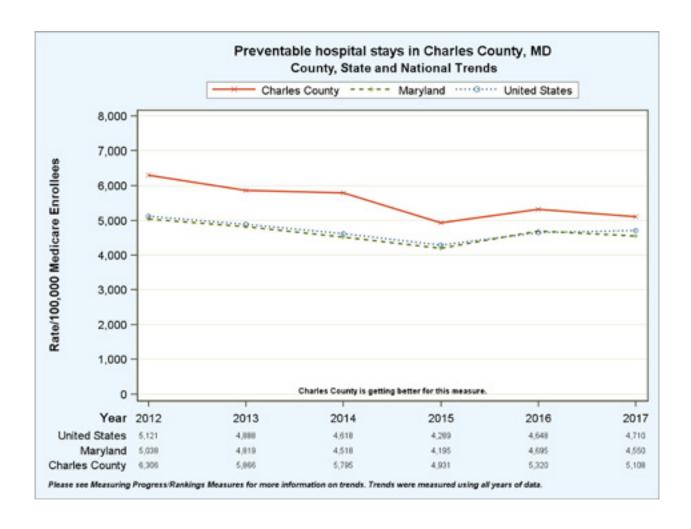


The 2017 ratio of population to primary care providers other than physicians for Charles County was 1,335:1. This was higher than the Maryland other primary care provider ratio of 937:1.

Thre 2017 ratio of population to mental health providers for Charles County was 640:1. This was higher than the Maryland mental health provider ratio of 390:1.

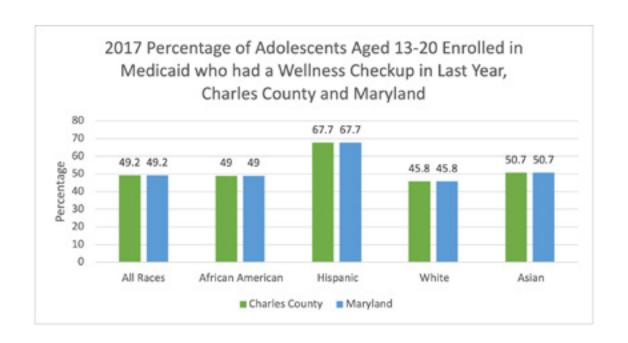
Preventive Hospital Stays:

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 2017 Charles County preventive hospital stay rate was 5,108 per 100,000 Medicare enrollees and is higher than the Maryland state average rate of 4,550 per 100,000 Medicare enrollees. Some decreases have been seen for Charles County since 2008; however, the Charles County rate has consistently been above the state and national rates. The 2017 Charles County preventable hospital stay rate is an increase from the 2015 rate of 4,931 per 100,000 Medicare enrollees reported in the last needs assessment.

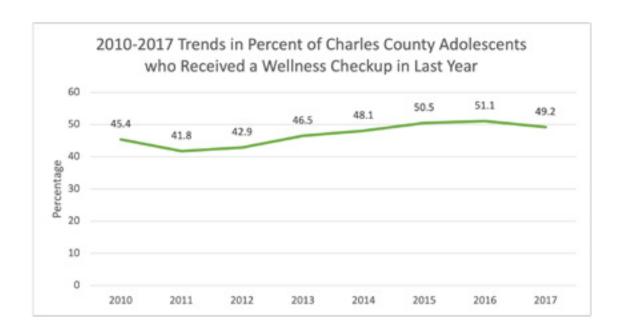


Adolescent Wellness Checkups:

In 2017, 49.2% of Charles County adolescents aged 13-20 years enrolled in Medicaid had a wellness checkup. This is below the Maryland state average percentage of 54.6% of adolescents with a wellness checkup. The percentage of wellness checkups is highest for Charles County Hispanics (67.7%) and lowest among Charles County Whites (45.8%). The same racial disparities are seen on a state level.



The percentage of Charles Count adolescents receiving a wellness checkup has remained fairly steady with some increases over the past decade.



Access to Care References:

- 1. 2019 Charles County and Maryland Access to Care, health insurance, and health status estimates. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health. Available at: https://ibis.health.maryland.gov/query/selection/brfss/BRFSSSelection.html.
- 2. 2017 Charles County Health Uninsurance Rates. US Census Bureau Small Area Health Insurance Estimates. Accessed through the Robert Wood Johnson Foundation's County Health Rankings.

- Available at: https://www.countyhealthrankings.org/app/maryland/2020/rankings/charles/county/outcomes/overall/snapshot.
- 3. 2017 Charles County and Maryland Estimates of Uninsured among ED Visits. 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. 2010-2020 Maryland Medicaid Enrollment and Eligibility Counts. Maryland Medicaid eHealth Statistics. Maryland Department of Health. Prepared by the Hilltop Institute. Available at: https://md-medicaid.org/index.htm.
- 5. 2017 Charles County Mammography Screening. Robert Wood Johnson Foundation. County Health Rankings. Data extracted from the US Department of Health and Human Services: Center for Medicaid and Medicare Services. Available at: https://www.countyhealthrankings.org/app/maryland/2020/rankings/charles/county/outcomes/overall/snapshot.
- 6. Primary Care, Mental Health and Dental Health Professional Shortage Area and Medically Underserved Areas/Populations Designations. United States Department of Health and Human Services' Health Resources and Services Administration. Available at: https://data.hrsa.gov/tools/shortage-area/hpsa-find and the Maryland Office of Primary Care Access. Maryland Department of Health.
- 7. Maryland Rural Health Designations. Office of Primary Care Access. Maryland Department of Health. Data extracted from the. US Health Resources and Services Administration:

 Office of Rural Health Policy. Available at: https://pophealth.health.maryland.gov/Documents/Primary%20care/2016%20Maryland%20Needs%20Assessment.pdf.
- 8. 2016 Maryland Primary Care Needs Assessment. Office of Primary Care Access. Maryland Department of Health. Available at: https://pophealth.health.maryland.gov/ Documents/Primary%20care/2016%20Maryland%20Needs%20Assessment.pdf.
- 9. 2014 Maryland Health Care Workforce Studies. Maryland Health Care Commission. January 2014 Report. Available at: mhcc.maryland.gov.
- 10. 2016 Maryland Physician Workforce Profile. 2017 State Physician Workforce Data Report. Association of American Medical Colleges. Available at: https://www.aamc.org/data/workforce/reports/484392/2017-state-physician-workforce-data-report.html.
- 11. 2017 Charles County Primary Care Physician, Primary Care Provider, and Mental Health Provider Ratios. Robert Wood Johnson Foundation. County Health Rankings. Data extracted from the HRSA Area Health Resource File and American Medical Association. Available at: https://www.countyhealthrankings.org/app/maryland/2020/rankings/charles/county/outcomes/overall/snapshot.
- 12. 2017 Preventive Hospital Stay Rates. Robert Wood Johnson Foundation. County Health Rankings. Data extracted from the US Department of Health and Human Services: Center for Medicaid and Medicare Services. Available at: https://www.countyhealthrankings.org/app/maryland/2020/rankings/charles/county/outcomes/overall/snapshot.
- 13. 2017 Charles County and Maryland estimates of adolescents enrolled in Medicaid with a wellness checkup. Maryland Medicaid data accessed through the Maryland State Health Improvement Process website. Available at: https://pophealth.health.maryland.gov/Pages/SHIP-Lite-Home.aspx.

Qualitative Data Relating to Access to Care:

Long Survey Responses:

38.7% of long survey participants reported that access to health care is a health problem in Charles County on some level; 12.1% felt that access to health care is a "serious problem" in the county.

40.5% of the long survey participants reported that affordable health care is a health problem in Charles County on some level; 18.9% felt that access to affordable health care is a "serious problem" in Charles County.

39.1% of the long survey participants reported that health insurance is a health problem in Charles County on some level; 16.3% 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 half of the respondents to this question (44.7%) have seen improvements to increase access to health care within the county, while15.5% reported improvements in access to needed medications.

Most of the long survey participants reported having a routine doctor's visit in the last 12 months (88.2%). This percentage is up from the 2018 survey where 84.8% of participants reported having a routine doctor's visit in the last 12 months. Only 0.2% reported that they have never had a routine doctor's visit.

Most of the survey participants received their routine health care by a primary care physician or in a provider office (96.2%). In addition to routine medical care, 37.4% went to a dentist, 35.1% went to an eye doctor, and 21.4% went to an OB/GYN.

There was also a large population who reported that they get their routine care at an urgent care center (13.0%). However, this percentage is down from the 2018 survey where 15.6% of survey participants reported receiving their routine care at an urgent care center.

4.2% of survey participants reported they received their routine care at a hospital emergency department. This percentage is up from the 2018 survey where 2.4% of survey participants reported receiving their routine care at a hospital emergency department.

It is believed that the routine care by the listed specialists (dentist, eye doctor) was underreported. Participants were asked to check all locations that applied; however, it is theorized that they did not read all the responses and checked only primary care physician/provider office even if they also routinely see the dentist.

The majority of the survey participants were able to see the doctor when needed (75.3%). Just under 2% of survey participants reported that they were seldom or never 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 (29.3%) or that it was too expensive and they could not afford it (3.5%). These reasons for not seeing a doctor are similar to the 2018 survey responses.

When asked if they receive medical care outside of Charles County, 22.0% of participants responded that they never received care outside the county. This is an increase from the 2018 survey where 15.9% of participants responded that they never receive care outside Charles County. Over half of the participants (52.3%) claimed that they sometimes receive medical care outside Charles County. This percentage is up over 2% from the 2018 survey.

Participants were asked what medical services they received outside of Charles County. They were asked to check all services that were applicable. The most common medical services that people receive outside of Charles County are specialist doctor appointments (61.4%), dental appointments (22.2%), primary care doctor appointments (19.0%), and surgeries (19.0%).

The percentage of participants who receive medical services from a specialist provider increased from 58.6% to 61.4% from 2018 to 2020. Dental appointments received outside of Charles County also increased from 2018 to 2020, from 18.5% to 22.2%. The percentage of participants who receive primary care doctor care outside the county decreased from 24.4% in 2018 to 19.0% in 2020.

Participants were also asked why they chose to receive those medical services outside of Charles County. The most common responses among participants were that the quality is better elsewhere (37.1%) and services are not available in Charles County (23.6%). 27.6% of participants indicated that this question was not applicable to them.

Primary Care doctors/providers and the internet are highly used methods for receiving health information among survey participants. This particular question stresses the importance of educating local health care providers and emphasizes the need for accurate medical information on the internet and for employee wellness programming.

Short Survey Responses:

25% 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 (ninth highest).

The most commonly cited barriers to needed health care was lack of health insurance (35.4%) and care is too expensive/can't afford it (47.4%). Under "Other," several people explained that there is a shortage of county providers accepting Medicaid, current providers are not accepting new patients, quality of providers is better elsewhere, fear of COVID-19 keeps people from seeking care, lack of dental health coverage, lack of awareness of available services, no Veterans Affairs clinic nearby, long wait times to see providers, people cannot take the time off work for health care services, stigma surrounding mental health treatment, fear from past, negative experiences, provider stereotyping and stigmatizing patients with certain health conditions, lack of providers in the western region of the county, and alternative treatments like acupuncture and massage are not covered by insurance providers.

	Response Percent
145	19.2%
108	14.3%
169	22.4%
268	35.4%
150	19.9%
113	15.0%
358	47.4%
122	16.2%
	108 169 268 150 113 358

24.2% of short survey respondents felt that there are many or some resources available for access to care for children adults, 19.4% felt that there are many or some resources available for access to care in rural Charles County, and 17.9% felt that there are many or some resources available to address access to needed prescriptions.

Focus Groups:

Many of the topics discussed at each and every focus group boiled down to issues of access to care. The most discussed topic at the community focus groups was the lack of health care providers within the county. There is a lack of primary care providers and specialists. Those in the county are overwhelmed, are not accepting patients, are not accepting medical assistance patients, are not spending time educating their patients on their health conditions, and are not dealing with all of their problems. Mental health providers were specifically cited as a concern for Charles County.

The focus group mentioned the overuse of the hospital emergency department (ED). The participants talked about the culture surrounding using the emergency department for routine care. It is the place they are comfortable. They know that they do not have to wait, and they will not be turned away. There is a need to teach these individuals about using the appropriate form of health care at the appropriate time.

People also do not know where to find the health services that they need. Many health organizations within the county do not know about all of the other services available within the county. The focus group participants suggested a one-time stop shop for all health programs in the county, like 211.

Health literacy was a topic of discussion at the county focus group. Individuals may be given a health diagnosis by their primary care providers, but they do not receive sufficient education on the health condition and how they need to self-monitor and manage their disease. People diagnosed with pre-diabetes may not know how to cook for themselves. Additionally, individuals are signing up for health insurance through the health benefits exchange. Some are auto-assigned to specific plans such as MedStar or Kaiser that require you to use one of their facilities for care. They have a card, but they do not know how to use it. They do not understand their benefits and what providers are within their network. Case coordination, community health workers, and patient navigators within the primary care setting and in the community are critical to assist county residents on what services are available and how to access needed health services. They are also critical in health education and outreach.

Key informant interviews:

Almost half of focus group participants felt that there are not adequate resources to address access to health care in Charles County.

Of participants who chose "Othe,r" few felt indifferent and believe resources improved, but gaps still exist.

Access to care was a health issue that participants perceived as affecting the local community. Issues related to access to care that were reported include lack of specialty services and local providers, limited resources, limited access due to COVID-19, access to preventative care, and access to care for low-income individuals.

Barriers or gaps in services related to access to care in the county were the most popular responses among participants. Barriers and gaps reported by participants included access to providers, specifically specialists, access to mental health care, lack of transportation, long wait times, access for children, and the lack of health resources in the community. Many participants also reported barriers for low-income individuals and minorities in the county. Reported barriers for these population groups include transportation, health care costs, geographic location of services, and lack of knowledge about health care resources in the community.

Access to care was a key change that many focus group participants reported they would like to see in the community to improve health. This includes access to care for low-income individuals, access to mental health services, an increase in specialty providers in the county, access to health services in rural areas, pediatric health care, and an overall increase in health care providers in Charles County.

Conclusions:

Data from the Fiscal Year 2021 Charles County Community Health Needs Assessment Report was examined against the baseline Fiscal Year 2018 needs assessment data. The previous needs assessment data was used to develop the eight 2019-2021 Charles County Health Improvement Plan objectives. An update on the status of the Charles County health priority objectives is discussed below.

Health topics where the Charles County Health Improvement Plan Goals were met: There were three objectives within the Charles County Health Improvement Plan that reached the anticipated goals. This means that 38% of the health improvement plan objectives (3/8) reached the goals in the three-year time period.

Physician Recruitment and Retention:

Increase the number of Charles County physicians by five providers.

Update: The University of Maryland Charles Regional Medical Center has recruited and retained new physicians each year with two providers in FY19, one provider in FY20, and three providers in FY21. This exceeded the goal of 5 providers set after the 2018 community health needs assessment.

Unnecessary Hospital Utilization:

Reduce the Charles County preventable hospital stay rate from 55 per 1,000 Medicare enrollees to 52.3 per 1,000 Medicare enrollees. Source: County Health Rankings

Update: In the 2019 County Health Rankings Report, the Charles County preventable hospital stay rate was 51 per 1,000 Medicare enrollees. This was below the goal of 52.3 per 1,000 Medicare enrollees. (2019 Dartmouth Atlas of Health Care from the 2019 RWJ County Health Rankings)

Mental Health:

Reduce the Charles County mental health emergency department visit rate from 2,346.9 per 100,000 to 2,323.4 per 100,000. Source: 2014 Maryland HSCRC data from SHIP website

Update: The 2017 Charles County mental health emergency department visit rate was 2,817.6 per 100,000 population. This rate is above the goal of 2,323.4 per 100,000 population. (2017 HSCRC data from the SHIP website)

Substance Use Disorders:

Reduce the Charles County addictions-related emergency department visit rate from 991.9 per 100,000 to 982 per 100,000. Source: 2014 Maryland HSCRC data from SHIP website

Update: The 2017 Charles County addictions-related emergency department visit rate was 1,341.4 per 100,000 (2017 HSCRC data from the SHIP website). This is above the goal of 982 per 100,000.

Obesity:

Maintain the percentage of Charles County adults who are at a healthy weight at 23.1%. Source: 2015 Maryland BRFSS

Update: The percentage of Charles County adults who are at a healthy weight increased from 23.1% in 2015 to 28.2% in 2019 (2019 BRFSS).

Decrease the percentage of Charles County 15-18 year older who are obese from 13.6% to 12.6%. Source: 2016 Maryland YRBS

Update: There was a small increase in the percentage of Charles County high school students who were obese. The percentage went from 13.6% in 2016 to 14.6% in 2018-2019 (2018-2019 YRBS).

Diabetes:

Reduce the Charles County diabetes emergency department visit rate from 244.2 per 100,000 to 241.8 per 100,000. Source: 2014 Maryland HSCRC data from SHIP website

Update: The 2017 Charles County diabetes emergency department visit rate was 245.0 per 100,000 (2017 HSCRC). This is similar to the rate of 244.2 per 100,000 that was previously reported.

Major Cardiovascular Disease:

Reduce the Charles County hypertension emergency department visit rate from 347.7 per 100,000 to 344.3 per 100,000. Source: 2014 Maryland HSCRC data from SHIP website

Update: The 2017 Charles County hypertension emergency department visit rate was 469.9 per 100,000 (2017 HSCRC). This was an increase from the previously reported rate of 347.7 per 100,000.



Charles County Health Improvement Plan

Long-Term Objectives FY 2022-2024



Fiscal Years 2022-2024 Charles County Health Improvement Plan

Overview of the Charles County Health Needs Assessment Process:

From July 2020 to February 2021, the University of Maryland Charles Regional Medical Center 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 five-method plan was developed which included five 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; a focus group with community stakeholders; key informant interviews of community leaders and stakeholder; and a quantitative data analysis of secondary, published data. Data collection occurred between July 2020 and December 2020.

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 feel invested in its outcome.

Due to the COVID-19 pandemic and the limitations on in person gatherings, only one small focus group was conducted in December 2020. This focus group targeted individuals working in health care and community roles focusing on access to care as well as chronic disease prevention and management. A total of eight people participated in this focus group.

The biggest issues to emerge from the focus groups included:

- Mental health resources and services
- Substance use disorders
- Transportation
- Chronic disease management
- Obesity/overweight
- COVID-19

561 Charles County residents completed the 27-question online survey that was created using Survey Monkey. The link to the survey was available on the University of Maryland Charles Regional Medical Center website and the Charles County Department of Health website. The first section of the survey asked participants about their perception of health and health services within the county. The second section asked them about their health behaviors, in order to determine their risk for the development of certain health conditions.

Most of the respondents were from Charles County (90.6%). The second largest percentage is from St. Mary's County (4.1%). Only 1.7% reported living outside of Southern Maryland



(Charles, Calvert, St Mary's, or Prince George's). Approximately 68.5% of the respondents were between the ages of 45-74 years. The highest percentage was in the 65-74-year age group (27.1%). The overwhelming majority of the respondents were female (77.4%). Minorities made up 26% of the total survey population. African Americans comprised 22.5% of the respondents. Approximately 3% of the survey respondents self-identified as Hispanic.

The survey participants were a highly educated group with 83.7% reporting having had any amount of college education. Just over half of the group had completed an undergraduate degree or higher (47.4%). Most of the participants were employed and working full-time. Individuals with a household income less than \$60,000 made up one-fifth of the 2020 survey (20.2%).

Nearly all of the survey participants (98.6%) reported having health insurance. The majority of the participants also reported having dental insurance (78.6%) though this percentage is smaller than those reporting health insurance. Many of the respondents also had vision insurance (64.3%). Only 1.1% of the survey population reported having no type of insurance.

The biggest health problems that surfaced from the online survey included: crime, overweight/obesity, infectious disease, drug/alcohol use, and affordable housing.

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.

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. 88.2% have had a routine doctor's visit in the past 12 months. 96.2% receive their routine health care in a primary care physician or provider's office.

75.3% were 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 (29.3%) or that it was too expensive, and they could not afford it (3.5%).

78% travel outside of Charles County for medical care at some point. Only 5.8% 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 (61.4%), dental appointments (22.2%), primary care doctor appointments (19.0%), and surgeries (19.0%). The most common responses among participants were that the quality is better elsewhere (37.1%) and services are not available in Charles County (23.6%).

A short five question survey was distributed throughout the county regarding perceptions of health within the county. A total of 755 short surveys were completed. Ongoing survey collection was conducted at the Charles County Department of Health; the University of Maryland Charles Regional Medical Center's Diabetes Education Center, Wound Healing Center, and Outpatient Rehabilitation. Short surveys were collected during blood drives at



the University of Maryland Charles Regional Medical Center (CRMC) and the La Plata American Legion. CRMC also coordinated with the Charles County Public schools to survey individuals at the meal distribution sites. The meal distribution sites included Indian Head Elementary (Indian Head), JC Parks Elementary (Indian Head), Milton Somers Middle School (La Plata), and My Hope/Nanjemoy Elementary School (Nanjemoy). Particular emphasis was given to the western region of the county that is more geographically isolated. The community was also surveyed at large events such as Charles County Community Resource Day, United Way pop-up events, blood drives, the Indian Head Farmer's Market, and other community outreach events.

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

The short survey also identified factors that prevent people from receiving the health care that they need. The most commonly cited barriers to needed health care was lack of health insurance (35.4%) and care is too expensive/can't afford it (47.4%). Under "Other," several people explained that there is a shortage of county providers accepting Medicaid, current providers are not accepting new patients, quality of providers is better elsewhere, fear of COVID-19 keeps people from seeking care, lack of dental health coverage, lack of awareness of available services, no Veterans Affairs clinic nearby, long wait times to see providers, people cannot take the time off work for health care services, stigma surrounding mental health treatment, fear from past, negative experiences, provider stereotyping and stigmatizing patients with certain health conditions, lack of providers in the western region of the county, and alternative treatments like acupuncture and massage are not covered by insurance providers.

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.

Access to care in the rural Charles County received the greatest number of "Many services available" responses, followed by mental health and obesity. Mental health received the greatest number of responses for "some services available" followed by infectious disease, access to food and nutritious meals, dental health, and drug and alcohol use. High blood pressure received the greatest number of responses in the "No services available" category.

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, obesity, arthritis, dementia/Alzheimer's disease, communicable disease, environmental health, sexually transmitted diseases, HIV/AIDS, mental health, dental health, substance use, disabilities, and tobacco use.

The current assessment findings are an update from the Fiscal Year 2018 community health needs assessment report and health improvement plan. 38% 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 County Providers increased
- Percentage of Adults at a healthy weight increased

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

- Mental Health Emergency Department Visit Rate increased
- Addictions-related Emergency Department Visit Rate increased
- Diabetes Emergency Department Visit Rate stayed the same
- Childhood obesity percentage increased
- Hypertension Emergency Department Visit Rate increased

The data from this community health needs assessment has been 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.



Charles County Health Prioritization Process:

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 was developed to help guide future endeavors to improve the health of Charles County.

The Steering Committee of the Partnerships for a Healthier Charles County has chosen to 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.

A list of health problems was identified using the health data section of the community health needs assessment report. Then, using a scale of 0 to 10, each health problem was rated on the following criteria: size of the health problem, magnitude of the health problem, and effectiveness

The Hanlon Method: Sample Criteria Rating						
Rating	Size of Health Problem (% of population w/health problem)	Seriousness of Health Problem	Effectiveness of Interventions			
9 or 10	>25% (STDs)	Very serious (e.g. HIV/AIDS)	80% - 100% effective (e.g. vaccination program)			
7 or 8	10% - 24.9%	Relatively Serious	60% - 80% effective			
5 or 6	1% - 9.9%	Serious	40% - 60% effective			
3 or 4	.1%9%	Moderately Serious	20% - 40% effective			
1 or 2	.01%09%	Relatively Not Serious	5% - 20% effective			
0	<.01% (Meningococcal Meningitis)	Not Serious (teen acne)	<5% effective (access to care)			

The size of the problem was based on the baseline data collected on the county population through the community health needs assessment. If more than one data measure was available for a particular health topic, an average of the percentages was calculated to determine the size of the problem. Prevalence data was used whenever available; however, mortality data was used as a proxy measure when reliable prevalence sources are not available.

The seriousness of the problem was determined by asking a series of questions regarding the status of the health problem in the community. A score was determined based on the number of questions with an answer of "yes."



The seriousness of the problem questions included:

- Does it require immediate attention?
- Is there a public demand?
- What is the economic impact?
- What is the impact on quality of life?
- Is there a high hospitalization rate?
- Is the disparity between the county rate and state and national rates?
- Do racial/age/gender/ethnic disparities exist?

The effectiveness of the interventions was determined using the Centers for Disease Control and Prevention's (CDC) Guide to Community Preventive Services. The guide gives examples of evidence-based strategies that have been implemented to address each health problems. Systematic reviews are conducted on all available interventions, and they rank the evidence-based strategies as: recommended, not recommended, or insufficient evidence. The basis of the rankings is presented below.

Recommended:

The systematic review of available studies provides strong or sufficient evidence that the intervention is effective.

The categories of "strong" and "sufficient" evidence reflect the Task Force's degree of confidence that an intervention has beneficial effects. They do not directly relate to the expected magnitude of benefits. The categorization is based on several factors, such as study design, number of studies, and consistency of the effect across studies.

Recommended Against:

The systematic review of available studies provides strong or sufficient evidence that the intervention is harmful or not effective.

Insufficient Evidence:

The available studies do not provide sufficient evidence to determine if the intervention is, or is not, effective. This does NOT mean that the intervention does not work. It means that additional research is needed to determine whether or not the intervention is effective.

Task Force findings may include a rationale statement that explains why they made a recommendation or arrived at other conclusions.



To determine the effectiveness of interventions, the percentage of available interventions that received a recommended score from the CDC's Guide to Community Preventive Services was calculated. Information was available in the guide for all health problems on the list.

Based on the three criteria rankings assigned to each health problem in Step 1 of the Hanlon Method, the priority scores were calculated using the following formula:

$$D = [A + (2 \times B)] \times C$$

Where: D= Priority Score

A= Size of the health problem ranking

B= Seriousness of the health problem ranking

C= Effectiveness of the intervention ranking

*Note: Seriousness of health problem was multiplied by two because according to the Hanlon technique, it is weighted as being twice as important as size of the health problem.

Based on the priority scores calculated in Step 2 of the Hanlon Method, ranks were assigned to each health problem with the highest priority score receiving the rank of 1, the next high priority score receiving a rank of 2, and so on. The table below represents the results of the Hanlon Method ranking and priority scoring.

Health Problem:	Size (A)	Seriousness (B)	Effectiveness of	Priority Score	Rank
			Intervention (C)	(A+2B)C	
Heart Disease	10	7	10	240	5
Diabetes	7	10	9	243	3
Asthma/Lung Diseases	8	7	7	154	9
Cancer	9	7	6	138	11
Mental Health	7	10	9	243	3
Tobacco Use/Smoking	8	6	5	100	14
Infectious Disease/COVID-19	7	9	10	250	2
Environmental health	7	4	7	105	13
Injuries	5	6	7	119	12
Hypertension/Stroke	10	10	10	300	1
Obesity/Overweight	10	10	7	210	7
Dental health	6	6	5	90	16
Access to Care	9	8	7	175	8
Infant Mortality	4	5	10	140	10
STI/HIV/AIDS	5	4	7	91	15
Substance Use Disorders	10	10	8	240	5



Based on the priority score from the Hanlon Method, the health priorities chosen include:

- 1. Disease Prevention and Management
 - Major Cardiovascular Disease (Heart Disease, Hypertension, and Stroke)
 - Obesity and Overweight
 - Diabetes Prevalence
 - Infectious Diseases
- 2. Behavioral Health
 - Substance Use Disorders
 - Mental Health
- 3. Access to Care
 - Provider Recruitment and Retention, Emphasis on Mental Health and Primary Care
 - Unnecessary Hospital and Emergency Department Utilization
 - Social Determinants of Health (Transportation, Health Literacy)



Charles County Health Improvement Plan Long Term Objectives FY2022-2024:

Priority One: Chronic Disease Prevention and Management

Obesity:

- 1. Increase the percentage of Charles County adults who are at a healthy weight from 28.2% to 29.6% (5% increase). Source: Maryland Behavioral Risk Factor Surveillance System
- 2. Maintain the percentage of Charles County high school students who are obese at 14.6% (combat yearly increases). Source: Maryland Youth Risk Behavior Survey

Diabetes:

1. Reduce the Charles County diabetes emergency department visit rate from 245 per 100,000 to the Maryland rate of 232.75 per 100,000 (5% reduction). Source: Maryland HSCRC data from SHIP website

Major Cardiovascular Disease:

1. Reduce the Charles County hypertension emergency department visit rate from 469.9 per 100,000 to 446.4 per 100,000 (5% reduction) Source: Maryland HSCRC data from SHIP website

Infectious Diseases:

1. Increase the percentage of Charles County residents who receive a flu vaccination from 45.6% to the Maryland percentage of 49.6%. Source: County Health Rankings

Priority Two: Access to Care

Physician Recruitment and Retention:

1. Establish three medical practices within Charles County that will provide health care to the underserved population, with particular emphasis on mental health/psychiatry and primary care.

Unnecessary Hospital and Emergency Department Utilization:

2. Reduce the Charles County preventable hospital stay rate from 5108 per 100,000 Medicare enrollees to 4852.6 (5% reduction) per 100,000 Medicare enrollees. Source: County Health Rankings

Social Determinants of Health

3. 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). Source: Maryland Behavioral Risk Factor Surveillance System



Priority Three: Behavioral Health

Mental Health:

1. Reduce the Charles County mental health emergency department visit rate from 2817.6 per 100,000 to 2676.7 per 100,000 (5% reduction). Source: Maryland HSCRC data from SHIP website

Substance Use Disorders:

1. Reduce the Charles County drug-induced death rate from 27 per 100,000 to 25 per 100,000. Source: County Health Rankings



Fiscal Years 2022-2024 Access to Care, LHIC

and Enhance county capacity to provide recruit and retain health care providers and practices.						
Establish 3 medical practices withir	n Charles County th	at will provide health care to the unde	rserved population,			
with particular emphasis on menta	particular emphasis on mental health/psychiatry and primary care.					
Measures	Key Partners	Timeline	Comments			
How long since you visited a doctor for a routine check-up (BRFSS) Charles County Population to Primary Care Provider Ratio Source: County Health Rankings Number of PCP & Mental Health practices started in Charles County Number of county practices educated on resources Number of materials disseminated Number of MDPCP practices in Charles County	UM CRMC UMCRMG CCDoH Kaiser NDG Marketing	In summer 2021 UM CRMG to launch new practices for PCP in Bryansroad and Mental Health services for pediatrics and adults in Charles County Ongoing monitoring of retiring PCP physicians in Charles County to offer succession planning Spring, 2021 meet with Johns Hopkins and Medstar as the larger practices in the county to offer resources and improve communication Launched in Jan. 2021, now we are building on the branding in other advertisement for practices and specialty areas				
`	Measures How long since you visited a doctor for a routine check-up (BRFSS) Charles County Population to Primary Care Provider Ratio Source: County Health Rankings Number of PCP & Mental Health practices started in Charles County Number of county practices educated on resources Number of materials disseminated Number of MDPCP practices	Measures Key Partners How long since you visited a doctor for a routine check-up (BRFSS) Charles County Population to Primary Care Provider Ratio Source: County Health Rankings Number of PCP & Mental Health practices started in Charles County Number of county practices educated on resources Number of materials disseminated Number of MDPCP practices	How long since you visited a doctor for a routine check-up (BRFSS) UM CRMG Bryansroad and Mental Health services for pediatrics and adults in Charles County Frimary Care Provider Ratio Source: County Health Rankings Number of PCP & Mental Health practices started in Charles County Number of county Number of county practices educated on resources UM CRMG UM CRMG UM CRMG In summer 2021 UM CRMG to launch new practices for PCP in Bryansroad and Mental Health services for pediatrics and adults in Charles County Nopologing monitoring of retiring PCP physicians in Charles County to offer succession planning Spring, 2021 meet with Johns Hopkins and Medstar as the larger practices in the county to offer resources and improve communication Number of materials disseminated Launched in Jan. 2021, now we are building on the branding in other advertisement for practices and			

Strategy:	•		Community by continuing an awarenes e, emergency department, and 911.	s campaign surrounding			
Long Term or Outcome Objective:	Reduce the Charles County preventable hospital stay rate from 5108 per 100,000 Medicare enrollees to 4852.6 (5% reduction) per 100,000 Medicare enrollees. Source: County Health Rankings						
Activity/Key Action Steps	Measure	Key Partners	Timeline	Comments			
1. Attend community events and programs to provide information on available county health services. 2. Engage community stakeholders in the bimonthly Access to Care Coalition meetings to share and gather information on services available. 3. Partner with the CDPMT to help manage conditions of HTN and DM in the community and prevent unnecessary ED utilization for these conditions. 4. UMMS 2.0 Risk Ranking tool implementation by the UM CRMC staff to help guide interventions.	Number of flyers developed Number of flyers disseminated Number of events attended Number of new members recruited Number of meetings held Date new risk ranking tool implemented	CCDoH UM CRMC UMMS Greater Baden (FHQC) Health Partners DSS Lifestyles Post-Acute Partners Right Time Johns Hopkins Medstar	Post COVID closures, when opportunity allows, attend at least 3-4 community events through each year of 22-24 ACC meetings set to restart in June 2021 and will be held bimonthly moving forward via WebEx or in person at a later date Attend CDPMT meetings monthly as available (Mary or other designated team member) Continue planning discussions with the UMMS Data Scientists and implement the new tool prior to fall 2021				



ounty residents	ease the social determinants	s of health and barriers to he	ealthcare access for			
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). Source: Maryland Behavioral Risk Factor Surveillance System						
	Key Partners	Timeline	Comments			
f trainings developed f presentations given f people trained on eracy f community health	UM CRMC CCDoH CSM DSS Office on Aging	Attend at least one FLINT and one UM CRMC Volunteer Chaplain meetings in 2022 to present on Advanced Directives and other ways to partner with the faith-based leaders				
d, or planned	Health Literacy Council Charles County Literacy Council United Way Charles County Public Schools	Hire a second CHW at UM CRMC in summer 2021 and work towards fully integrating the CHW as part of our transition team to help our high-risk population				
f partners involved If new collaborations If new programs If people served Ited all payer readmission In RRIP	UM CRMC CCDoH Lyft Health VanGo United Way NRC Health MIH CC Emergency Services DSS AAA Transport Services Tri-County Council	The MIH team will continue to offer telemedicine services throughout FY 22-24 Grow the use of Supportive Care for patients with chronic disease to be seen at home by an NP from Hospice of the Chesapeake Implemented NRC calls in Jan. 5, 2021 and looking to grow this program in the capture rate of patients by continuation on marketing efforts Lyft will be continued as part of the HSCRC Diabetes Grant and Population Health budget starting in July 2021 Abbott Nutrition project				
		DSS AAA Transport Services	DSS AAA Transport Services Tri-County Council Lyft will be continued as part of the HSCRC Diabetes Grant and Population Health budget starting in July 2021			



Fiscal Years 2022-2024, Chronic Disease Prevention & Management, LHIC Action Plan

Strategy for Adult Obesity	Create a community of wellness through comm	unity engagement and e	vidence-based progra	amming for adults			
Long Term or Outcome Objective:	Increase the percentage of Charles County adults who are at a healthy weight from 28.2% to 29.6% (5% increase). Source: Maryland Behavioral Risk Factor Surveillance System						
Activity/Key Action Steps	Measures	Key Partners	Timeline	Comments			
Support movement in Charles County through organized physical activity	Number of social media posts # of views Number of organized walks held Number of participants	Charles County Department of Health (CCDOH), Office on Aging, Charles County Parks and Recreation	FY22-FY24				
Offer Stanford University's Chronic Disease Self-Management (CDSMP), Diabetes Self-Management (DSMP), and Hypertension classes.	Number of evidence-based programs offered Number of participants enrolled and completing CDSMP programs Number of participants enrolled and completing hypertension classes Number of Participants enrolled in DSMP programs	CCDOH, University of Maryland Charles Regional Medical Center (UMCRMC), Office on Aging	FY22-FY24				
Offer the CDC's Diabetes Prevention Program (DPP) in the county	Number of Participants enrolled in DPP programs Number of participants losing 5-7% of their initial body weight	CCDOH and UMCRMC	FY22-FY24				
Conduct a community health webinar series	Number of webinars offered Number of participants	UM CRMC	monthly	Reach out to CRMC if interested in presenting			
Participate in outreach events	Number of outreach events attended Number of educational materials disseminated	CCDOH, UM CRMC, YRCP	FY22-FY24 Charles County Fair held in September every year and Community Resource Day is held in October every year.				



Strategy: Childhood Obesity	Create a community of wellness through community engagement for children and their families Maintain the percentage of Charles County high school students who are obese at 14.6% (combat yearly increases). Source: Maryland Youth Risk Behavior Survey						
Long Term or Outcome Objective:							
Activity/Key Action Steps	Measure	Key Partners	Timeline	Comments			
Educate children and their families on the importance of physical activity and good nutrition	Number of social media posts Number of views	CCDOH, Charles County Parks and Recreation	FY22-FY24				
Screen children for obesity and sugar-sweetened beverage consumption	Number of children screened Number of patients, at no risk (< 1 SSB / month) screened for SSB consumption Number of patients, at low risk (1 – 4 SSB / month) screened for SSB consumption Number of patients, at moderate risk (2 – 6 SSB / week) screened for SSB consumption Number of patients, at high risk: 1+ SSB / day), screened for SSB consumption Number of patients and their families education on obesity (weight loss, decreasing sugar-sweetened beverages, movement)	CCDOH, Health Partners	FY22-FY23				



Strategy: Diabetes	Increase capacity of Charles County diabetes and prediabetes self-management programs.				
Long Term or Outcome Objective:	Reduce the Charles County diabetes emergency department visit rate from 245 per 100,000 to the Maryland rate of 232.75 per 100,000 (5% reduction). Source: Maryland HSCRC data from SHIP website				
Activity/Key Action Steps	Measure	Key Partners	Timeline	Comments	
Link health care-based efforts with community prevention activities.	Number of physician referrals to DSMP and DSMES classes	UMCRMC, CCDOH, Health Partners	FY22-FY24		
Promotion of the University of Maryland Charles Regional Medical Center's efforts to provide diabetes education.	Number of new patients receiving diabetes education Number of DSMT workshops held for under or uninsured patients Number of diabetes support group meetings held Number of participants for all	UMCRMC and CCDOH	FY22-FY24		
Patients will be referred through CRISP and providers will receive feedback	Number of referrals received through CRISP	UNCRMC and CCDOH	FY22-FY24		
Provide diabetes starter kits (glucometer, 30-day supply of testing supplies, and educational material)	Number of kits distributed	UMCRMC	Begin 1/1/22		
Participate in outreach events	Number of outreach events attended	CCDOH, UM CRMC, YRCP	FY22-FY24		

Strategy: Major Cardiovascular Disease	Increase evidence-based chronic disease self-management by hospitals and primary care providers			
Long Term or Outcome Objective:	Reduce the Charles County hypertension emergency department visit rate from 469.9 per 100,000 to 446.4 per 100,000 (5% reduction) Source: Maryland HSCRC data from SHIP website			
Activity/Key Action Steps	Measure	Key Partners	Timeline	Comments
Increase the capacity of primary care providers to implement screening, prevention and treatment measures for chronic conditions in adults through QI methods	Number of participating physician practices Percent of patients with their hypertension under control Percent of patients with their diabetes under control	CCDOH, Health Partners, UMCRMG	FY22-FY24	
Participate in outreach events	Number of outreach events attended Number of educational materials disseminated	ССDOH, UM CRMC, YRCP	FY22-FY24	



Strategy: Infectious Disease	Increase outreach to minority and vulnerable populations on the importance of receiving a flu vaccination.				
Long Term or Outcome Objective:	Increase the percentage of Charles County residents who receive a flu vaccination from 45.6% to the Maryland percentage of 49.6%. Source: County Health Rankings				
Activity/Key Action Steps	Measure	Key Partners	Timeline	Comments	
Attend outreach events to promote importance of flu vaccine.	Number of events Number of educational materials Number of flu clinics held Number of Charles County residents vaccinated	Chronic Disease Prevention and Management Team Members	FY22-FY24		
Organize pop-up flu vaccination clinics in the community.	Number of pop-up vaccination clinics Number of individuals vaccinated	UM CRMC	FY22-FY24		



Fiscal Years 2022-2024 Behavioral Health Team, LHIC Action Plan

Strategy: Community Education and Outreach:	Engage and educate all segments of the community on behavioral health to promote resources, to reduce stigma, and to increase awareness.				
Long Term or Outcome Objective:	Reduce the Charles County mental health emergency department visit rate from 2817.6 per 100,000 to 2676.7 per 100,000 (5% reduction).				
Activity/Key Action Steps	Measures	Key Partners	Timeline	Comments	
Expand the Mental Health First Aid training in the Charles County Public Schools and in the general community.	Number of Mental Health First Aid Trainings Conducted Number of people educated on Mental Health First Aid	Charles County Public Schools Local Behavioral Health Authority	July 1, 2021-June 30, 2024		
	Number of agencies represented at trainings	Charles County Department of Health			
Promote and create behavioral health campaigns in Charles County to increase knowledge and reduce stigma.	Number of media campaigns initiated Number of community events where the campaigns were promoted Number of county residents who were educated on the campaigns Number of UMMS Community Conversations Number of UMMS Webinars on Mental Health and Behavioral Health promoted	Charles County Department of Health University of Maryland Charles Regional Medical Center All Behavioral Health Team members	July 1, 2021-June 30, 2024		
Expand Crisis Intervention Training	to the community Number of partners recruited Number of people trained Number of crisis intervention teams established	Charles County Department of Health Local Behavioral Health Authority Charles County Sheriff's Office La Plata Police Department Southern Maryland Criminal Justice Academy	July 1, 2021-June 30, 2024		



Strategy:	Increase county capacity to provide services and treatment for opioid use and overdose.				
Long Term or Outcome Objective:	Reduce the Charles County drug-induced death rate from 27 per 100,000 to 25 per 100,000.				
Activity/Key Action Steps	Measure	Key Partners	Timeline	Comments	
Train county agencies and community members on Naloxone distribution and	Number of trainings held Number of individuals trained	Charles County Department of Health	July 1, 2021- June 30, 2024		
educate on replacing Narcan	Number of agencies trained on	Local Behavioral Health Authority			
kits after expiration.	Naloxone administration	University of Maryland Charles Regional Medical Center			
	Number of law enforcement officers trained	Charles County Department of Emergency Services			
	Number of Naloxone kits distributed	Charles County Sheriff's Office			
	Number of Naloxone kids replaced	La Plata Police Department			
Educate the community on the risks and dangers of using opioids	Number of media campaigns developed and initiated	Charles County Department of Health	July 1, 2021- June 30, 2024		
and heroin.	Number of adults educated on opioid risks	Local Behavioral Health Authority			
	Number of presentations given	University of Maryland Charles Regional Medical Center			
	Number of youth educated on the dangers of opioid use	Maryland Coalition for Families			
	Number of community events held on opioids	Charles County Public Schools			
Promote and expand the Charles County Sheriff's Office Prescription Take Back Program.	Number of flyers created Number of Take Back	Charles County Department of Health	July 1, 2021- June 30, 2024		
Take back Program.	days conducted	Local Behavioral Health Authority			
	Number of flyers distributed in the community	University of Maryland Charles Regional Medical Center			
	Number of new boxes installed at CCSO locations	Charles County Sheriff's Office			
	Number of pounds of medication disposed each year				
Expand the use of Peer Recovery Specialists within the county. Pilot program to dispatch peer recovery specialist to the scene of an overdose and to begin using ODMAP as a way to respond to opioid overdoses in real time. Also expand the peer recovery specialist program to conduct outreach to mothers with substance use disorders during pregnancy.	Number of peer recovery specialists currently working in Charles County	Charles County Department of Health	July 1, 2021- June 30, 2024		
	Number of new peer recovery specialists recruited to Charles County	University of Maryland Charles Regional Medical Center			
	Number of people assisted by peer recovery specialists				
	Number of overdoses where peer recovery specialists responded				
	Number of mothers educated or assisted by peer recovery specialists.				
	Number of overdoses identified through ODMAP				



Promote the Charles County Sheriff's Office HOPE trailer to teach parents about the potential for drug and opioid use among children and adolescents.	Number of parents educated using the HOPE trailer Number of events where the HOPE trailer is in attendance	Charles County Department of Health Charles County Sheriff's Office	July 1, 2021- June 30, 2024	
Develop formalized data sharing processes between county agencies to improve responses to opioid overdoses by signing memorandum of understandings, creating a communication plan, and developing a tracking process to track and follow up on individuals who refuse EMS transport after overdose.	Number of MOU's signed Number of communication plans developed Number of tracking processes developed	Charles County Department of Health University of Maryland Charles Regional Medical Center Charles County Sheriff's Office Charles County Department of Emergency Services Charles County Opioid Intervention Team		



REGIONAL PARTNERSHIP CATALYST GRANT PROGRAM

Diabetes Treatment and Prevention (DSMT, DPP, Diabetes 101, Diabetes Support Groups, Living Well with Diabetes)

Description

- UM Charles Regional Medical Center (UM CRMC) was awarded a five-year, \$2.142 million grant by Maryland's Health Services Cost Review Commission (HSCRC) to expand the community hospital and department of health's diabetes programs in Charles County. We are presently in our 2nd year of this grant, which runs by calendar years.
- With the grant, UM CRMC expanded diabetes self-management training(DSMT) services, offers
 wrap-around resources, home visits, on-demand transportation, and medication delivery,
 diabetes support groups, diabetes 101, and provides additional support for patients to
 participate in diabetes education and prevention classes (DPP).
- Examples of new or expanded programs as a result of this grant funding:
 - Charles Regional personnel, including Nurse Navigators, Pharmacist Technicians, and other personnel provide newly diagnosed patients with diabetes care starter kits including a glucometer, 30-day supply of testing supplies and education about managing their disease.
 - Expansion of the Phase 3 program, which provides exercise for patients with diabetes, and helps offset the out of pocket costs for up to 10 participants per year in a partnership with Greater Baden Medical Center (FQHC) and Health Partners, INC. This will help provide the medically underserved (uninsured or underinsured) patients with diabetes education and prevention services.
 - Expanded partnership with senior centers in the community to provide Diabetes
 Prevention Program (DPP) training at places of worship and reach a wider population
 when marketing our diabetes support groups and programs. A total number of
 participants 74 participants started the program in January of 2022 with a graduation
 of completion on February 15, 2023.
 - Expanding our Mobile Integrated Health (MIH) services to bring assistance to patients in their homes that are struggling with managing testing with glucometers and/or medications for diabetes management due to health literacy or other social barriers.
 Sixty percent of MIH patients have diabetes. A total number of 25 new participants enrolled in FY 2022 and reported in Section II part 6 with data outcomes.

- UM CRMC's successful grant application was supported by multiple partners who will
 participate in the five-year program, including the University of Maryland Medical
 System, the Charles County Department of Health, Greater Baden Medical Services,
 Health Partners, United Way of Charles County, the Charles County Mobile Integrated
 Healthcare program, Lyft Health Concierge Services, and more
- **Diabetes 101** This new class serves the uninsured and underinsured patients with diabetes that have financial barriers preventing this from attending the DSMES program. There were a total of 12 classes held in FY 22 with a total number of participants of 50.

Data on Physician Gaps for Charles County:

2011 Maryland Health Care Workforce Study:

2011 Maryland Health Care Commission (MHCC)'s Physician Workforce Study highlighted the physician workforce in Maryland. This study looked at the HRSA Area Health Resource File for 2009 and 2010 to determine the supply of physicians in Maryland and its regions. Charles County has been included in the Southern Maryland region with Calvert and St Mary's Counties.

As illustrated by the table below, Southern Maryland has physician to population ratios significantly below the HRSA benchmark for all types of physicians.

Table 10: Maryland Supp	ly by Type of	Physician an	d Region, 2009	0/2010	
	Total	Primary Care	Medical Specialties	Surgical Specialties	All Other
Maryland physicians per 1	000, residents	excluded, w	ith all adjustm	ents	
Baltimore Metro	2.85	0.86	0.48	0.61	0.90
Eastern Shore	1.86	0.62	0.27	0.39	0.57
National Capital	2.25	0.72	0.41	0.48	0.64
Western	2.17	0.73	0.39	0.42	0.63
Southern	1.34	0.53	0.25	0.26	0.30
Total	2.44	0.77	0.42	0.52	0.74
Memo: HRSA baseline, interns excluded, with all adjustments	1.93	0.69	0.27	0.43	0.53
Percent difference from H	RSA haseline				
Baltimore Metro	48%	24%	76%	41%	70%
Eastern Shore	-4%	-10%	0%	-11%	8%
National Capital	17%	4%	49%	11%	21%
Western	12%	5%	41%	-4%	19%
Southern	-31%	-24%	-8%	-40%	-43%
Total	27%	11%	54%	19%	39%

Source: Analysis of Maryland 2009/2010 license renewal database, calculations from HRSA 2008, population counts from U.S. Bureau of the Census

The Maryland physician supply ratios were adjusted to account for variation in average patient-care hours. Even with the adjustment, Southern Maryland continued to see low physician to population ratios. Southern Maryland region had a 26% total physician deficiency versus the HRSA standard. This was the only region in Maryland to have such a significant deficiency. The Southern Maryland region also had physician supply deficiencies for primary care (19%), medical specialties (7%), surgical

specialties (34%), and all other physicians (39%). Four out of the five physician supply deficiencies are greater than 10% below the HRSA standard.

Maryland Physician Supply Versus HRSA Standard, All Adjustments									
Region	Total	Primary Care	Medical Specialties	Surgical Specialties	All Other				
Entire State	27%	11%	54%	19%	39%				
Baltimore Metro	44%	21%	69%	40%	66%				
Eastern Shore	4%	0%	8%	-2%	13%				
National Capital	18%	4%	56%	8%	23%				
Western	20%	12%	48%	3%	29%				
Southern	-26%	-19%	-7%	-34%	-39%				
Key: Gree	en = >10%.	, Yellow = -	10% to 10%,	Red = <-10%					

Note: Positive percentage indicates supply in excess of HRSA Standard, and negative percent indicates a supply deficit compared to the HRSA Standard. Southern: Charles, Calvert, and St Mary's Counties

Study implications for Southern Maryland from the 2011 Maryland Physician Workforce Study include:

Residents are likely to travel out of area for care:

Physicians in Southern Maryland provide about 67% of Medicare beneficiary's total Medicare
physician care. Residents receive 14% of physician care in Mont/PG counties and 12% in out-of-state
(probably DC)

					Phys	sician l	Loca	<u>ition</u>							
Beneficiary Residence	Balt Met	imore ro	Easte Shore		Nati Cap	onal ital	We	stern	Sou	thern	Out state		Tota	nl	% of spending in own region
Baltimore Metro	\$	2,503	\$	12	\$	56	\$	23	\$	7	\$	74	\$	2,675	94%
Eastern Shore	\$	299	\$	1,712	\$	26	\$	6	\$	2	\$	318	\$	2,362	72%
National Capital	\$	159	\$	4	\$	2,335	\$	15	\$	73	\$	595	\$	3,181	73%
Western	\$	121	\$	8	\$	101	\$	1,834	\$	3	\$	224	\$	2,290	80%
Southern	\$	182	\$	4	\$	378	\$	6	\$	1,806	\$	316	\$	2,692	67%

• Southern Maryland physicians are as likely as physicians overall to participate in Medicaid/Medicare and to accept new patients.

% of practices accepting Medicaid 80% 89% 61%	90% 85%	% of practices accepting Medicare 85% 91%	94%
89% 61%	90% 85%	91%	94%
89% 61%	90% 85%	91%	94%
61%	85%		
		700/	
80%		/9%	93%
	85%	86%	91%
86%	86%	89%	93%
75%	87%	84%	94%
nte average			
6%	1%	2%	1%
18%	4%	8%	1%
-19%	-2%	-6%	-1%
6%	-3%	2%	-3%
15%	-1%	6%	0%
0%	0%	0%	0%
	te average 6% 18% -19% 6% 15% 0%	te average 6% 1% 18% 4% -19% -2% 6% -3% 15% -1%	te average 6% 1% 2% 18% 4% 8% -19% -2% -6% 6% -3% 2% 15% -1% 6% 0% 0% 0%

Maryland Health Workforce Study Phase 2 Report, January 2014:

Availability of Health Services:

Maryland Primary Care Needs Assessment 2016:

The 2021 Maryland Department of Health's Primary Care Office Needs Assessment yielded an expansive analysis of a variety of health indicators and workforce data so that jurisdictional outcomes can be compared to set priorities for workforce programs, certain state resources, and inform future efforts. The needs assessment is based on the integration of two health data tracking methods: the federal Agency for Healthcare Research and Quality Prevention Quality Indicators (PQIs) and the State Health Improvement Process (SHIP).

- · Causes of preventable PQIs;
- Key barriers to access to health care;
- · Areas that lack access to preventive and primary care services and demonstrates the highest need for intervention due to social determinants; and
- · Areas that experience a shortage of primary care, mental health, and dental providers.

A quartile ranking was used to order the PQI and SHIP indicator results by Maryland jurisdiction. The information in this matrix was compiled from data from the Maryland Vital Statistics Administration, the State Health Improvement Process. The matrix focused on 54 indicators and ranked those indicators at the jurisdictional level. The jurisdictions were ranked for each indicator using an ordinal/quartile based ranking system. Based on these summations, the jurisdictions were given an overall ordinal ranking. Charles County was ranked 14th out of 24 jurisdictions and was placed 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	
Howard County	227	2	F1
Frederick County	279	3	First Quartile
Queen Anne's County	284	4	(Best)
Talbot County* (↑ from 11)	308	5	(Dest)
Carroll County	324	6	
Calvert County	366	7	
Anne Arundel	387	8	
Harford County* (↓ from 6)	409	9	Second
Caroline County* (↑ from 15)	424	10	Quartile
Kent County* (↑ from 19)	430	11	
Prince George's County* (↑ from 13)	432	12	
Garrett County* (↓ from 8)	438	13	
Charles County	439	14	
Worcester County* (↓ from 10)	469	15	Third
Somerset County	491	16	Quartile
Cecil County* (↓ from 12)	492	17	
Baltimore County	508	18	
Saint Mary's County* (↓ from 14)	515	19	
Washington County	536	20	Fourth
Wicomico County	566	21	Quartile
Dorchester County	587	22	(Worst)
Allegany	602	23	,
Baltimore City	718	24	

^{*}Quartile ranking changed from the 2016 Needs Assessment.

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 count; 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.

Cecil

20 - 40% Shortage

Up to 20% Shortage Up to 20% Surplus

Shortage of Full Time Equivalent, **Primary Care Physicians** > 60% Shortage

40 - 60% Shortage

Map 1: Maryland County-Level Adequacy of FTE Primary Care Physician Supply

Exhibit 3: Adequacy of Supply for Primary Care Physicians by County, 2012

		Total FTE	5	FTEs/10,000 Population		
County	FTE Demand	FTE Supply	Supply - Demand	FTE Demand	FTE Supply	
Allegany	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

		Total FTEs		FTEs/10,00	0 Children
County	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	12	(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

	Professional Counselors		Social	Social Workers		ologists	Phys Assis	
County	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	3.00	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
St. Mary s Somerset	45	4.1	79	7.2	-	0.1	4	0.3
Talbot	62	16.3	167	43.8	7	1.0	11	2.8
	273	18.3	435	29.1	18	1.8	65	4.4
Washington	193	19.1	334	33.2	20	1.2	72	7.1
Wicomico	67	12.9	106	20.6	5	0.9	11	2.1
Worcester Total	9,131	15.5	14,982	25.5	2,278	3.9	2,045	3.5

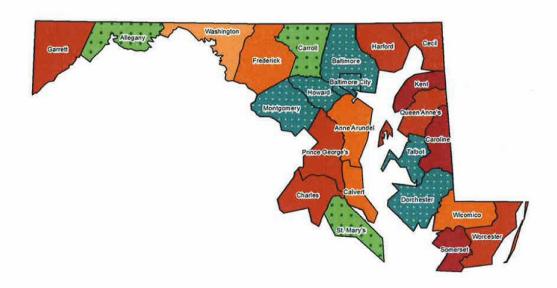
Note: These are professions for which only FTE supply analysis was possible at this time.

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

	Total FTEs FTEs/10,000 Pop				Population
County	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





2021 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 2021 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

ividi yidiid	Trysician www	JINIOICC I TOINC				
State Population: Fopulation 5 age Total Active Phys	6,045,680	Total Female Physicians:	9,984			
Population ≤ age	24 1.861.822	Total MD or DO Students:	1.939			
Total Active Phys		Total Residents:	3,031			
Primary Care Phy	sicians: 7.075					
		ase see the 2021 State Physician Workforce Data R	eport online at www.aamc.org	g/workforce		
				MD	MD Rank	State Media
	Active Physicians per 100,0	000 Population, 2020		393.5	2	272.0
	Total Active Patient Care P	hysicians per 100,000 Population, 2020		309.4	6	239.8
	Active Primary Care Physic	117.0	7	94.7		
	Active Patient Care Primary	y Care Physicians per 100,000 Population, 2020		98.0	9	84.5
hysician Supply	Active General Surgeons p	9.2	14	7.7		
	Active Patient Care Genera	l Surgeons per 100,000 Population, 2020		7.3	17	7.0
	Percentage of Active Physi	cians Who Are Female, 2020		42.0%	4	36.1%
	Percentage of Active Physi	cians Who Are International Medical Graduates (IMC	Ss), 2020	27.0%	9	19.7%
	Percentage of Active Physi	clans Who Are Age 60 or Older, 2020		35.8%	13	32.9%
	Percent of Active Physician	s Who identify as Asian, 2020		20.5%	9	13.7%
	Percent of Active Physician	s Who identify as Black or African American, 2020		12.3%	2	3.8%
	Percent of Active Physician	s Who Identify as Hispanic, Latino or of Spanish Ori	gin, 2020	3.3%	22	3.2%
	Percent of Active Physician	s Who identify as American Indian or Alaska Native	2020	0.3%	40	0.4%
	Percent of Active Physician	s Who identify as Native Hawaiian or Other Pacific I	slander, 2020	0.2%	18	0.1%
	Percent of Active Physician	s Who Identify as Other Race/Ethnicity, 2020		1.6%	19	1.4%
	Percent of Active Physician	50.6%	46	67.3%		
	MD and DO Student Enroll	ment per 100,000 Population, AY 2019-2020 & 2020	-2021	32.1	28	38.6
Indergraduate Medical	Student Enrollment at Publ	ic MD and DO Schools per 100,000 Population, AY	2019-2020 & 2020-2021	22.3	19	21.5
ducation (UME)	Percentage Change in Stur	dent Enrollment at MD and DO Schools, 2010-2020		0.1%	44	31.2%
,	Percentage of MD Students	s Matriculating in-State, AY 2020-2021		24.8%	42	67.6%
	Total Residents/Fellows in	ACGME Programs per 100,000 Population as of De	cember 31, 2019	50.1	12	32.7
	Total Residents/Fellows in	Primary Care ACGME Programs per 100,000 Popul	ation as of Dec. 31, 2019	16.4	15	12.7
aduate Medical fucation (GME)	Percentage of Residents in	ACGME Programs Who Are IMGs as of December	31, 2019	24.7%	14	19.2%
Jucation (GML)	Ratio of Residents and Fellows (GME) to Medical Students (UME). AY 2019-2020 & 2020-2021				6	1.0
	Percent Change in Residents and Fellows in ACGME-Accredited Programs, 2010-2020				48	24.4%
	Percentage of Physicians F	Retained in State from Undergraduate Medical Educa	ition (UME), 2020	21.6%	40	39.7%
Retention	Percentage of Physicians F	Retained in State from Public UME, 2020		24.1%	40	43.7%
Retention		Retained in State from Graduate Medical Education (GME), 2020	37.6%	43	45.1%
	Percentage of Physicians F	52.6%	43	69.7%		

State Rank: How the state ranks compared to the other 43. Rank of 1 goes to the state with the highest value for the category.

State Redain: The value in the middle of the 50 states, with 25 states above the median and 25 states below (sociation the District of Columbia and Paerto Rico).

Due to changes in the Census data bables, population data was only available for ages 5.24, compared to ages 5.21 in previous reports.

**Upts not shown: for states with less than 10 physicians.

**Less not shown: for states and these than 10 physicians.

NR.Less thanks are stated as the states and the states are states as the states on this NR.**Less thanks are states as the states are states are states as the states are st

Source: 2021 State Physician Workforce Data Report Population estimates as of July 1, 2019 are from the U.S. Census Bureau (Release date: December 2015).

The specialty with the highest people to physician ratio 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

	Total Active	People Per	Ferr		Age 60 or Older	
Specialty	Physicians	Physician	Number	Percent	Number	Percent
All Specialities	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	54.5
Anesthesiology	974	6,207	342	35.1	374	38.4
Cardiovascular Disease	561	10,777	105	18.8	310	55.2
Child & Adolescent Psychiatry**	334	5,574	213	64.0	102	30.9
Clinical Cardiac Electrophisiology	54	111,957				
Critical Care Medicine	410	14,746	126	30.8	57	13.9
Dermatology	307	19,693	166	54.1	106	34.9
Emergency Medicine	939	6,438	346	36.8	199	21.2
Endocrinology, Diabetes & Metabolism	301	20,085	177	58.8	103	342
Family Medicine/General Practice	1,627	3,716	899	55.3	569	35.0
Castroenterology	391	15,462	104	26.6	167	42.7
Ceneral Surgery	555	10,893	135	24.3	226	40.7
Certatric 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	57,57B	25	23.8	12	11.4
Obstetrics & Cynecology	1.073	5.634	723	67.4	349	32.9
Ophthalmology	577	10,47B	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 Critica Care Medicine	64	94,464	44	68.8		
Pediatric Hematology & Oncology	135	44,783	72	53.3	3.4	25.2
Pedatrics**	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	33,21B	37	20.3	77	42.3
Preventive Medicine	395	15,306	174	44.1	219	55.
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	1	307
Sports Medicine Orthopedic Surgery	64	94.464	10	-ac.1	11	17.2
Thoracic Surgary	100	60.457			46	46.0
Urology	240	25,190	26	10.8	84	35.0
Vascular & Interventional Radiology	76	79,54B	13	17.1	54	331
Vascular Surgery	114	79,548 53.032	23	20.2	29	25.4

Vascular Surgery

Source: AVM Physician Marketile (December 31, 2003). Population entiresion as of July 1, 2019 are from the U.S. Census Bussius (Release date: December 2016)

"Counts and proceedings for or specialism with fewer from 10 physicians are not shown

"Conty those 24 years or gounger are included in People Per Physician

"Cirty those 26 years or other are included in People Per Physician

Maryland Physician Workforce Profile

320	State Population: Population ≤ age 24 Total Active Physicians: Primary Care Physicians:	6,045,680	Total Female Physicians:	9,984	
12	Population ≤ age 24	1,861,822	Total MD or DO Students:	1,939	
13	Total Active Physicians:	23,791	Total Residents:	3,031	
2	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

		Number	Percent
	Maryland	8,309	37%
	District of Columbia	2,978	13%
	New York	2,072	9%
	Pennsylvania	1,742	8%
State Where GME Was Completed	Massachusetts	797	4%
•	California	639	3%
for All Active Physicians in State	Virginia	561	3%
	Texas	509	2%
	Ohio	507	2%
	Illinois	452	2%
	All other states	3,793	17%
	Maryland	8,309	38%
	California	1,331	6%
	Florida	1,111	5%
	Pennsylvania	983	4%
Practice Location of Physicians	Virginia	974	4%
	New York	824	4%
Who Completed GME in State	Texas	774	4%
·	District of Columbia	624	3%
	North Carolina	576	3%
	Massachusetts	523	2%
	All other states	6,040	27%

Notes:

GME = Graduate Medical Education

"All other states" includes physicians who completed GME in Canada.

Due to changes in the Census data tables, population data was only available for ages ≤ 24, compared to ages ≤ 21 in previous reports.

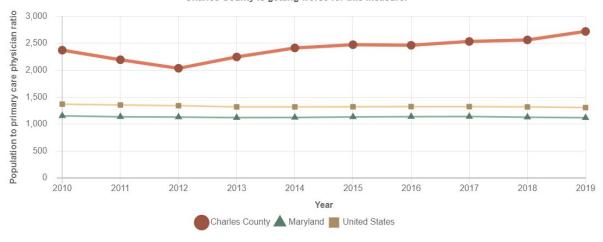
Source: AMA Physician Masterfile (December 31, 2020). Population estimates as of July 1, 2019 are from the U.S. Census Bureau (Release date: December 2019).

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 2017 primary care physician ratios for all United States counties. For 2019, the Charles County primary care physician ratio was 2720:1. 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 2019 Charles County PCP ratio is more than twice as high as the Maryland state ratio of 1120:1.

Primary care physicians in Charles County, MD County, state and national trends

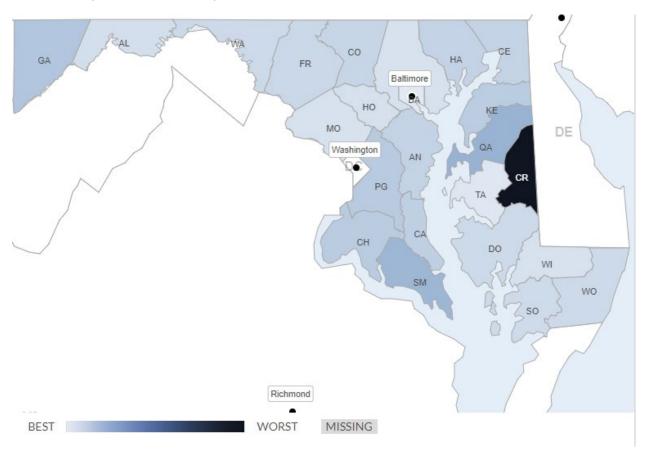




The data in this table reflect the average population served by a single primary care physician.

The 2019 ratio of population to primary care providers other than physicians for Charles County was 1130:1. This was higher than the Maryland other primary care provider ratio of 820:1.

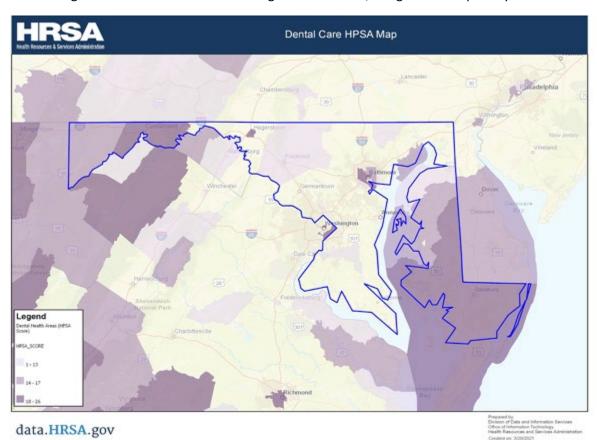
The 2019 ratio of population to mental health providers for Charles County was 540:1. This was higher than the Maryland mental health provider ratio of 330:1.



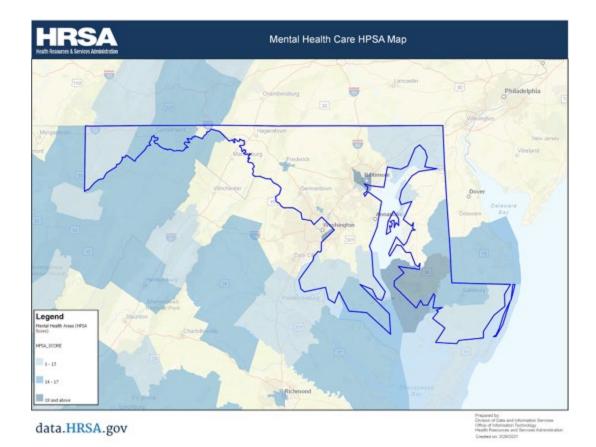
Health Professional Shortage Areas/ Medically Underserved Populations and Areas:

Health Professional Shortage Areas (HPSA):

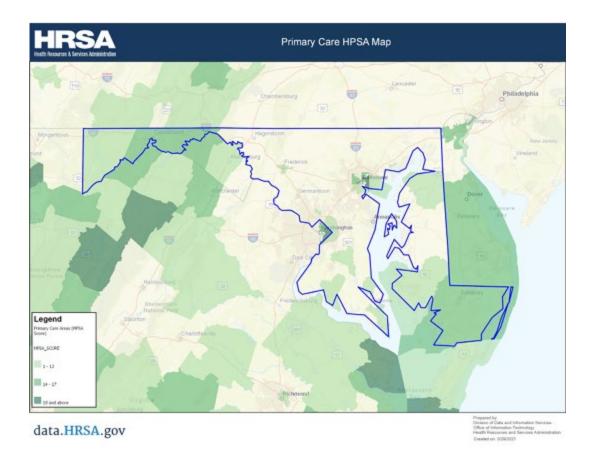
There is 1 federally designated health professional shortage area in Charles County for dental health. The dental health HPSA is for Greater Baden Medical Services in Brandywine and La Plata. This HPSA was updated on September 3, 2019. The HPSA score is 26, the highest score you can get for dental health. 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 October 28, 2017. Charles County received a score of 9 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 Brandywine and La Plata. The Greater Baden HPSA score is 23 for mental health.



There is a federally designated primary care professional shortage area for Southern Charles County. This was last updated on October 28, 2017. They report that there is one full-time equivalent primary care professional providing ambulatory patient care in the designated area. The Southern Charles County census tracts of 8511, 8512, 8513.01, and 8513.02 are included in the designated HPSA area. Charles County received a score of 13 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.

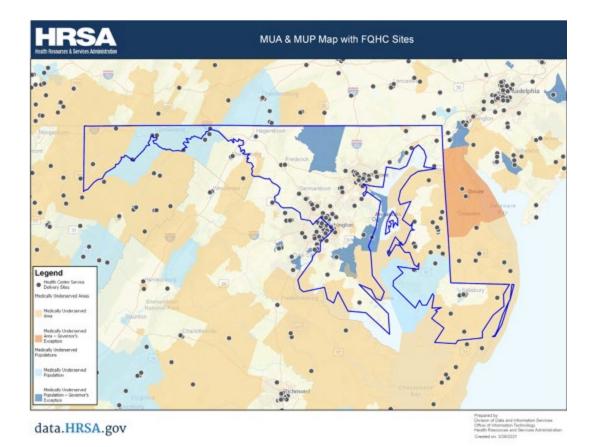


Medically Underserved Populations and Areas:

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 populations/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 on documented unusual local conditions and barriers to accessing personal health services.



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 51.97
- ☐ District 4, Allens Fresh
- ☐ District 5, Thompkinsville
- ☐ District 9, Hughesville
- ☐ Medically Underserved Area: Score 61.25
- ☐ 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 51.97. The Marbury/Nanjemoy areas received an IMU score of 61.25, which is close to the 62 cut off for MUA designation.

UNIVERSITY of MARYLAND	PAGE: 1 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance		

KEY WORDS: Financial Assistance

OBJECTIVE/BACKGROUND:

The University of Maryland Medical System ("UMMS") is committed to providing financial assistance to persons who have health care needs and are uninsured, underinsured, ineligible for a government program, or otherwise unable to pay, for emergent and medically necessary care based on their individual financial situation.

APPLICABILITY:

PROGRAM ELIGIBILITY

Consistent with their mission to deliver compassionate and high quality healthcare services and to advocate for those who do not have the means to pay for medically necessary care, UMMC, MTC, UMROI, UMSJMC, UMBWMC, UMSMCC, UMSMCD, UMSMCE, UMCRMC, UCHS, and UM Capital hospitals strive to ensure that the financial capacity of people who need health care services does not prevent them from seeking or receiving care.

Specific exclusions to coverage under the Financial Assistance Program:

The Financial Assistance Program generally applies to all emergency and other medically necessary care provided by each UMMS hospital; however, the Financial Assistance Program does not apply to any of the following:

- 1. Services provided by healthcare providers not affiliated with UMMS hospitals (e.g., durable medical equipment, home health services).
- 2. Patients whose insurance program or policy denies coverage for services by their insurance company (e.g., HMO, PPO, or Workers Compensation), are not eligible for the Financial Assistance Program.
 - a. Generally, the Financial Assistance Program is not available to cover services that are denied by a patient's insurance company; however, exceptions may be made on a case by case basis considering medical and programmatic implications.

UNIVERSITY of MARYLAND	PAGE: 2 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance		

- 3. Cosmetic or other non-medically necessary services.
- 4. Patient convenience items.
- 5. Patient meals and lodging.
- 6. Physician charges related to the date of service are excluded from this UMMS financial assistance policy. Patients who wish to pursue financial assistance for physician-related bills must contact the physician directly.
 - a. A list of providers, other than the UMMS hospital itself, delivering medically necessary care in each UMMS hospital that specifies which such as providers are not covered by this policy (as well as certain such providers that are covered) may be obtained on the website of each UMMS Entity.

Patients may be ineligible for Financial Assistance for the following reasons:

- 1. Have insurance coverage through an HMO, PPO, Workers Compensation, Medicaid, or other insurance programs that deny access to the Medical Center due to insurance plan restrictions/limits.
- 2. Refusal to be screened for other assistance programs prior to submitting an application to the Financial Clearance Program.
- 3. Refusal to divulge information pertaining to a pending legal liability claim.
- 4. Foreign-nationals traveling to the United States seeking elective, non-emergent medical care.

Patients who become ineligible for the program will be required to pay any open balances and may be submitted to a bad debt service if the balance remains unpaid in the agreed upon time periods.

Unless they meet Presumptive Financial Assistance Eligibility criteria, patients shall be required to submit a complete Financial Assistance Application (with all required information and documentation) and determined to be eligible for financial assistance in order to obtain financial assistance. Patients who indicate they are unemployed and have no insurance coverage shall be required to submit a Financial Assistance Application before receiving non-emergency medical care unless they meet Presumptive Financial Assistance Eligibility criteria. If the patient qualifies for COBRA coverage, patient's financial ability to pay COBRA insurance premiums shall be reviewed by the Financial Counselor/Coordinator and recommendations shall be made to Senior Leadership. Individuals with the financial capacity to purchase health insurance shall be encouraged to do so, as a means of assuring access to health care services and for their overall personal health.

UNIVERSITY of MARYLAND	PAGE: 3 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance	·	

Those with income up to 200% of Maryland State Department of Health and Mental Hygiene Medical Assistance Planning Administration Income Eligibility Limits for a Reduced Cost of Care ("MD DHMH") are eligible for free care. Those between 200% to 300% of MD DHMH are eligible for discounts on a sliding scale, as set forth in Attachment A.

Presumptive Financial Assistance

Patients may also be considered for Presumptive Financial Assistance Eligibility. There are instances when a patient may appear eligible for financial assistance, but there is no financial assistance form on file. There is adequate information provided by the patient or through other sources, which provide sufficient evidence to provide the patient with financial assistance. In the event there is no evidence to support a patient's eligibility for financial assistance, UMMS reserves the right to use outside agencies or information in determining estimated income amounts for the basis of determining financial assistance eligibility and potential reduced care rates. Once determined, due to the inherent nature of presumptive circumstances, the only financial assistance that can be granted is a 100% write-off of the account balance. Presumptive Financial Assistance Eligibility shall only cover the patient's specific date of service. Presumptive eligibility may be determined on the basis of individual life circumstances that may include:

- a. Active Medical Assistance pharmacy coverage
- b. Specified Low Income Medicare (SLMB) coverage
- c. Primary Adult Care (PAC) coverage
- d. Homelessness
- e. Medical Assistance and Medicaid Managed Care patients for services provided in the ER beyond the coverage of these programs
- f. Medical Assistance spend down amounts
- g. Eligibility for other state or local assistance programs
- h. Patient is deceased with no known estate
- i. Patients that are determined to meet eligibility criteria established under former State Only Medical Assistance Program
- j. Non-US Citizens deemed non-compliant
- k. Non-Eligible Medical Assistance services for Medical Assistance eligible patients
- 1. Unidentified patients (Doe accounts that we have exhausted all efforts to locate and/or ID)

UNIVERSITY of MARYLAND	PAGE: 4 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance		

m. Bankruptcy, by law, as mandated by the federal courts

n. St. Clare Outreach Program eligible patients

o. UMSJMC Maternity Program eligible patients

p. UMSJMC Hernia Program eligible patients

Specific services or criteria that are ineligible for Presumptive Financial Assistance include:

a. Uninsured patients seen in the Emergency Department under Emergency Petition will not be considered under the presumptive financial assistance program until the Maryland Medicaid Psych program has been billed.

POLICY:

This policy was approved by the UMMS Executive Compliance Committee (ECC) Board on October 19, 2020. This policy applies to the following hospital facilities of the University of Maryland Medical System ("UMMS hospitals"):

- University of Maryland Medical Center (UMMC)
- University of Maryland Medical Center Midtown Campus (MTC)
- University of Maryland Rehabilitation & Orthopaedic Institute (UMROI)
- University of Maryland St. Joseph Medical Center (UMSJMC)
- University of Maryland Baltimore Washington Medical Center (UMBWMC)
- University of Maryland Shore Medical Center at Chestertown (UMSMCC)
- University of Maryland Shore Medical Center at Dorchester (UMSMCD)
- University of Maryland Shore Medical Center at Easton (UMSME)
- University of Maryland Charles Regional Medical Center (UMCRMC)
- University of Maryland Upper Chesapeake Health (UCHS)
- University of Maryland Capital Region Health (UM Capital)

UNIVERSITY of MARYLAND	PAGE: 5 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance		

It is the policy of the UMMS hospitals to provide Financial Assistance based on indigence or high medical expenses for patients who meet specified financial criteria and request such assistance. The purpose of the following policy statement is to describe how applications for Financial Assistance should be made, the criteria for eligibility, and the steps for processing applications.

UMMS will post notices of financial assistance availability in each UMMS hospital's emergency room (if any) and admissions areas, as well as the Billing Office. Notice of availability will also be sent to the patient with patient bills. Signage in key patient access areas will be made available. A Patient Billing and Financial Assistance Information Sheet will be provided before discharge, and it (along with this policy and the Financial Assistance Application) will be available to all patients upon request and without charge, both by mail and in the emergency room (if any) and admissions areas. This policy, the Patient Billing and Financial Assistance Information Sheet, and the Financial Assistance Application will also be conspicuously posted on the UMMS website (www.umms.org).

Financial Assistance may be extended when a review of a patient's individual financial circumstances has been conducted and documented. This should include a review of the patient's existing medical expenses and obligations (including any accounts having gone to bad debt except those accounts that have gone to lawsuit and a judgment has been obtained) and any projected medical expenses. Financial Assistance Applications may be offered to patients whose accounts are with a collection agency.

UMMS retains the right in its sole discretion to determine a patient's ability to pay. All patients presenting for emergency services will be treated regardless of their ability to pay. For emergent/urgent services, applications to the Financial Clearance Program will be completed, received, and evaluated retrospectively and will not delay patients from receiving care.

This policy was adopted for University of Maryland St. Joseph Medical Center (UMSJMC) effective June 1, 2013.

This policy was adopted for University of Maryland Medical Center Midtown Campus (MTC) effective September 22, 2014.

This policy was adopted for University of Maryland Baltimore Washington Medical Center (UMBWMC) effective July 1, 2016.

This policy was adopted for University of Maryland Shore Medical Center at Chestertown (UMSMCC) effective September 1, 2017.

UNIVERSITY of MARYLAND	PAGE: 6 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance		

This policy was adopted for University of Maryland Shore Medical Center at Dorchester (UMSMCD) effective September 1, 2017.

This policy was adopted for University of Maryland Shore Medical Center at Easton (UMSMCE) effective September 1, 2017.

This policy was adopted for University of Maryland Charles Regional Medical Center (UMCRMC) effective December 2, 2018.

This policy was adopted for University of Maryland Upper Chesapeake Health (UCHS) effective July 1, 2019

This policy was adopted for University of Maryland Capital Region Health (UM Capital) effective September 18, 2019

PROCEDURE:

- 1. There are designated persons who will be responsible for taking Financial Assistance applications. These staff can be Financial Counselors, Patient Financial Receivable Coordinators, Customer Service Representatives, etc.
- 2. When possible effort will be made to provide financial clearance prior to date of service. Where possible, designated staff will consult via phone or meet with patients who request Financial Assistance to determine if they meet preliminary criteria for assistance.
 - a. Staff will complete an eligibility check with the Medicaid program for Self Pay patients to verify whether the patient has current coverage.
 - b. Preliminary data will be entered into a third party data exchange system to determine probably eligibility. To facilitate this process each applicant must provide information about family size and income. To help applicants complete the process, we will provide an application that will let them know what paperwork is required for a final determination of eligibility.
 - c. Applications initiated by the patient will be tracked, worked and eligibility determined within the third party data and workflow tool. A letter of final determination will be submitted to each patient that has formally requested financial

UNIVERSITY of MARYLAND	PAGE: 7 OF 14	POLICY NO: CBO - 01
University of Maryland Medical System	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance		

assistance. Determination of Probable Eligibility will be provided within two business days following a patient's request for charity care services, application for medical assistance, or both.

- d. If a patient submits a Financial Assistance Application without the information or documentation required for a final determination of eligibility, a written request for the missing information or documentation will be sent to the patient. This written request will also contain the contact information (including telephone number and physical location) of the office or department that can provide information about the Financial Assistance Program and assistance with the application process.
- e. The patient will have thirty (30) days from the date this written request is provided to submit the required information or documentation to be considered for eligibility. If no data is received within the 30 days, a letter will be sent notifying the patient that the case is now closed for lack of the required documentation. The patient may re-apply to the program and initiate a new case by submitting the missing information or documentation 30 days after the date of the written request for missing information/documentation.
- f. For any episode of care, the Financial Assistance Application process will be open up to at least 240 days after the first post-discharge patient bill for the care is sent.
- g. Individual notice regarding the hospital's Financial Assistance Policy shall be provided at the time of preadmission or admission to each person who seeks services in the hospital.
- 3. There will be one application process for UMMC, MTC, UMROI, UMSJMC, UMBWMC, UMSMCC, UMSMCD, UMSMCE, UMCRMC, UCHS, and UM Capital. The patient is required to provide a completed Financial Assistance Application orally or in writing. In addition, the following may be required:
 - a. A copy of their most recent Federal Income Tax Return (if married and filing separately, then also a copy spouse's tax return); proof of disability income (if applicable), proof of social security income (if applicable). If unemployed, reasonable proof of unemployment such as statement from the Office of Unemployment Insurance, a statement from current source of financial support, etc ...
 - b. A copy of their most recent pay stubs (if employed) or other evidence of income.
 - c. A Medical Assistance Notice of Determination (if applicable).
 - d. Copy of their Mortgage or Rent bill (if applicable), or written documentation of their current living/housing situation.

If a patient submits both a copy of their most recent Federal Income Tax Return and a copy of their most recent pay stubs (or other evidence of income), and only one of the two documents indicates eligibility for financial assistance, the most recent document will dictate eligibility. Oral submission of needed information will be accepted, where appropriate.

INIVERSITY of MARYLAND	PAGE: 8 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance		

- 4. In addition to qualifying for Financial Assistance based on income, a patient can qualify for Financial Assistance either through lack of sufficient insurance or excessive medical expenses based on the Financial Hardship criteria discussed below. Once a patient has submitted all the required information, the Financial Counselor will review and analyze the application and forward it to the Patient Financial Services Department for final determination of eligibility based on UMMS guidelines.
 - a. If the patient's application for Financial Assistance is determined to be complete and appropriate, the Financial Coordinator will recommend the patient's level of eligibility and forward for a second and final approval.
 - i. If the patient does qualify for Financial Assistance, the Financial Coordinator will notify clinical staff who may then schedule the patient for the appropriate hospital-based service.
 - ii. If the patient does not qualify for Financial Assistance, the Financial Coordinator will notify the clinical staff of the determination and the non-emergent/urgent hospital-based services will not be scheduled.
 - 1. A decision that the patient may not be scheduled for hospital-based, non-emergent/urgent services may be reconsidered by the Financial Clearance Executive Committee, upon the request of a Clinical Chair.
- 5. Once a patient is approved for Financial Assistance, Financial Assistance coverage is effective for the month of determination and a year prior to the determination. However, an UMMS hospital may decide to extend the Financial Assistance eligibility period further into the past or the future on a case-by-case basis. If additional healthcare services are provided beyond the eligibility period, patients must reapply to the program for clearance. In addition, changes to the patient's income, assets, expenses or family status are expected to be communicated to the Financial Assistance Program Department. All Extraordinary Collections Action activities, as defined below, will be terminated once the patient is approved for financial assistance and all the patient responsible balances are paid.
- 6. Account balances that have not been paid may be transferred to Bad Debt (deemed uncompensated care) and referred to an outside collection agency or to the UMMS hospital's attorney for legal and/or collection activity. Collection activities taken on behalf of the hospital by a collection agency or the hospital's attorney may include the following Extraordinary Collection Actions (ECAs):
 - a. Reporting adverse information about the individual to consumer credit reporting agencies or credit bureaus.
 - b. Commencing a civil action against the individual.

UNIVERSITY of MARYLAND	PAGE: 9 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance		

- c. Placing a lien on an individual's property. A lien will be placed by the Court on primary residences within Baltimore City. The hospital will not pursue foreclosure of a primary residence but my maintain its position as a secured creditor if a property is otherwise foreclosed upon.
- d. Attaching or seizing an individual's bank account or any other personal property.
- e. Garnishing an individual's wage.
- 7. ECAs may be taken on accounts that have not been disputed or are not on a payment arrangement. ECAs will occur no earlier than 120 days from submission of first post-discharge bill to the patient and will be preceded by a written notice 30 days prior to commencement of the ECA. This written notice will indicate that financial assistance is available for eligible individuals, identify the ECAs that the hospital (or its collection agency, attorney, or other authorized party) intends to obtain payment for the care, and state a deadline after which such ECAs may be initiated. It will also include a Patient Billing and Financial Assistance Information Sheet. In addition, the hospital will make reasonable efforts to orally communicate the availability of financial assistance to the patient and tell the patient how he or she may obtain assistance with the application process. A presumptive eligibility review will occur prior to any ECA being taken. Finally, no ECA will be initiated until approval has been obtained from the CBO Revenue Cycle. UMMS will not engage in the following ECAs:
 - a. Selling debt to another party.
 - b. Charge interest on bills incurred by patients before a court judgement is obtained
- 8. If prior to receiving a service, a patient is determined to be ineligible for financial assistance for that service, all efforts to collect co-pays, deductibles or a percentage of the expected balance for the service will be made prior to the date of service or may be scheduled for collection on the date of service.
- 9. A letter of final determination will be submitted to each patient who has formally submitted an application. The letter will notify the patient in writing of the eligibility determination (including, if applicable, the assistance for which the individual is eligible) and the basis for the determination. If the patient is determined to be eligible for assistance other than free care, the patient will also be provided with a billing statement that indicates the amount the patient owes for the care after financial assistance is applied.

UNIVERSITY of MARYLAND	PAGE: 10 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance	•	

- 10. Refund decisions are based on when the patient was determined unable to pay compared to when the patient payments were made. Refunds will be issued back to the patient for credit balances, due to patient payments, resulting from approved financial assistance on considered balance(s). Payments received for care rendered during the financial assistance eligibility window will be refunded, if the amount exceeds the patient's determined responsibility by \$5.00 or more.
- 11. If a patient is determined to be eligible for financial assistance, the hospital (and/or its collection agency or attorney) will take all reasonably available measures to reverse any ECAs taken against the patient to obtain payment for care rendered during the financial assistance eligibility window. Such reasonably available measures will include measures to vacate any judgment against the patient, lift levies or liens on the patient's property, and remove from the patient's credit report any adverse information that was reported to a consumer reporting agency or credit bureau.
- 12. Patients who have access to other medical coverage (e.g., primary and secondary insurance coverage or a required service provider, also known as a carve-out), must utilize and exhaust their network benefits before applying for the Financial Assistance Program.
- 13. The Financial Assistance Program will accept the Faculty Physicians, Inc.'s (FPI) completed financial assistance applications in determining eligibility for the UMMS Financial Assistance program. This includes accepting FPI's application requirements.
- 14. The Financial Assistance Program will accept all other UMMS hospital's completed financial assistance applications in determining eligibility for the program. This includes accepting each facility's application format.
- 15. The Financial Assistance Program does not cover Supervised Living Accommodations and meals while a patient is in the Day Program.
- 16. Where there is a compelling educational and/or humanitarian benefit, Clinical staff may request that the Financial Clearance Executive Committee consider exceptions to the Financial Assistance Program guidelines, on a case-by-case basis, for Financial Assistance approval.

UNIVERSITY of MARYLAND	PAGE: 11 OF 14	POLICY NO: CBO - 01
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):
Central Business Office	09/18/19	10/19/2020
SUBJECT: Financial Assistance		

- a. Faculty requesting Financial Clearance/Assistance on an exception basis must submit appropriate justification to the Financial Clearance Executive Committee in advance of the patient receiving services.
- b. The Chief Medical Officer will notify the attending physician and the Financial Assistance staff of the Financial Clearance Executive Committee determination.

Financial Hardship

The amount of uninsured medical costs incurred at either, UMMC, MTC, UMROI, UMSJMC, UMBWMC, UMSMCD, UMSMCE, UMCRMC, UCHS, and UM Capital will be considered in determining a patient's eligibility for the Financial Assistance Program. The following guidelines are outlined as a separate, supplemental determination of Financial Assistance, known as Financial Hardship. Financial Hardship will be offered to all patients who apply for Financial Assistance and are determined to be eligible.

Medical Financial Hardship Assistance is available for patients who otherwise do not qualify for Financial Assistance under the primary guidelines of this policy, but for whom:

1. Their medical debt incurred at UMMC, MTC, UMROI, UMSJMC, UMBWMC, UMSMCC, UMSMCD, UMSMCE, UMCRMC, UCHS, and UM Capital exceeds 25% of the Family Annual Household Income, which is creating Medical Financial Hardship.

For the patients who are eligible for both, the Reduced Cost Care under the primary Financial Assistance criteria and also under the Financial Hardship Assistance criteria, UMMC, MTC, UMROI, UMSJMC, UMBWMC, UMSMCC, UMSMCD, UMSMCE, UMCRMC, UCHS, and UM Capital will grant the reduction in charges, which is balance owed that is greater than 25% of the total annual household income.

Financial Hardship is defined as facility charges incurred at UMMC, MTC, UMROI, UMSJMC, UMBWMC, UMSMCD, UMSMCE, UMCRMC, UCHS, and UM Capital for medically necessary treatment by a family household over a twelve (12) month period that exceeds 25% of that family's annual income.

Medical Debt is defined as out of pocket expenses for the facility charges incurred at UMMC, MTC, UMROI, UMSJMC, UMSMCC, UMSMCD, UMSMCE, UMCRMC, UCHS, and/or UM Capital for medically necessary treatment.

UNIVERSITY of MARYLAND	PAGE: 12 OF 14	POLICY NO: CBO - 01				
University of Maryland Medical System	EFFECTIVE DATE:	REVISION DATE(S):				
Central Business Office	09/18/19	10/19/2020				
SUBJECT: Financial Assistance						

Once a patient is approved for Financial Hardship Assistance, coverage will be effective for the month of the first qualifying date of service and a year prior to the determination. However, an UMMS hospital may decide to extend the Financial Hardship eligibility period further into the past or the future on a case-by-case basis according to their spell of illness/episode of care. It will cover the patient and the eligible family members living in the household for the approved reduced cost and eligibility period for medically necessary care.

All other eligibility, ineligibility, and procedures for the primary Financial Assistance program criteria apply for the Financial Hardship Assistance criteria, unless otherwise stated above.

<u>Appeals</u>

- Patients whose financial assistance applications are denied have the option to appeal the decision.
- Appeals can be initiated verbally or written.
- Patients are encouraged to submit additional supporting documentation justifying why the denial should be overturned.
- Appeals are documented within the third party data and workflow tool. They are then reviewed by the next level of management above the representative who denied the original application.
- If the first level of appeal does not result in the denial being overturned, patients have the option of escalating to the next level of management for additional reconsideration.
- The escalation can progress up to the Chief Financial Officer who will render a final decision.
- A letter of final determination will be submitted to each patient who has formally submitted an appeal.

UNIVERSITY of MARYLAND	PAGE: 13 OF 14	POLICY NO: CBO - 01				
UNIVERSITY of MARYLAND MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):				
Central Business Office	09/18/19	10/19/2020				
SUBJECT: Financial Assistance						

ATTACHMENTS:

ATTACHMENT A

Sliding Scale - Reduced Cost of Care

(FPL) a	2021 Federal Poverty Limits (FPL) and Maryland Dept of Health & Mental Hygiene (DHMH) Annual Income Eligibility Limit Guidelines		UMMS 100% Charity	UMMS 90% Charity	UMMS 80% Charity	UMMS 70% Charity	UMMS 60% Charity	UMMS 50% Charity	UMMS 40% Charity	UMMS 30% Charity	UMMS 20% Charity	UMMS 10% Charity
(DHN			Equals Up to 200% of MD DHMH Annual Income limits	Equals Up to 210% of MD DHMH Annual Income limits	Equals Up to 220% of MD DHMH Annual Income limits	Equals Up to 230% of MD DHMH Annual Income limits	Equals Up to 240% of MD DHMH Annual Income limits	Equals Up to 250% of MD DHMH Annual Income limits	Equals Up to 260% of MD DHMH Annual Income limits	Equals Up to 270% of MD DHMH Annual Income limits	Equals Up to 280% of MD DHMH Annual Income limits	Equals Up to 290% of MD DHMH Annual Income limits
House- hold (HH) Size	2021 FPL Annual Income Elig Limits	2021 MD DHMH Annual Income Elig Limits		If your total annual HH income level is at or below:	If your total annual HH income level is at or below:	If your total annual HH income level is at or below:	•	If your total annual HH income level is at or below:	•	If your total annual HH income level is at or below:	If your total annual HH income level is at or below:	If your total annual HH income level is at or below:
Size	Up to	Up to	Up to Max	Up to Max	Up to Max	Up to Max	Up to Max	Up to Max	Up to Max	Up to Max	Up to Max	Up to Max
1	12,760	\$17,785	\$35,570	\$37,349	\$39,127	\$40,906	\$42,684	\$44,463	\$46,241	\$48,020	\$49,798	\$53,354
2	17,240	\$24,045	\$48,090	\$50,495	\$52,899	\$55,304	\$57,708	\$60,113	\$62,517	\$64,922	\$67,326	\$72,134
3	21,720	\$30,305	\$60,610	\$63,641	\$66,671	\$69,702	\$72,732	\$75,763	\$78,793	\$81,824	\$84,854	\$90,914
4	26,200	\$36,581	\$73,162	\$76,820	\$80,478	\$84,136	\$87,794	\$91,453	\$95,111	\$98,769	\$102,427	\$109,742
5	31,800	\$42,841	\$85,682	\$89,966	\$94,250	\$98,534	\$102,818	\$107,103	\$111,387	\$115,671	\$119,955	\$128,522
6	37,400	\$49,100	\$98,200	\$103,110	\$108,020	\$112,930	\$117,840	\$122,750	\$127,660	\$132,570	\$137,480	\$147,299

^{*}All discounts stated above shall be applied to the amount the patient is personally responsible for paying after insurance reimbursements.

Effective 7/1/21

^{*}Amounts billed to patients who qualify for Reduced-Cost of Care on a sliding scale (or for Financial Hardship Assistance) will be less than the amounts generally billed to those with insurance (AGB), which in Maryland is the charge established by the Health Services Cost Review Commission (HSCRC). UMMS determines AGB by using the amount Medicare would allow for the care (including the amount the beneficiary would be personally responsible for paying, which is the HSCRC amount; this is known as the "prospective Medicare method".

UNIVERSITY of MARYLAND	PAGE: 14 OF 14	POLICY NO: CBO - 01		
MEDICAL SYSTEM	EFFECTIVE DATE:	REVISION DATE(S):		
Central Business Office	09/18/19	10/19/2020		
SUBJECT: Financial Assistance				

POLICY OWNER:

UMMS CBO

APPROVED:

Executive Compliance Committee Approved Initial Policy: 09/18/19 Executive Compliance Committee Approved Revisions: 10/19/2020

From: Hilltop HCB Help Account

To: Levy, Mary; Hilltop HCB Help Account; optimaloutcomesmd@gmail.com

Subject: RE: Clarification Required - FY 22 UM Charles Regional Medical Center Narrative

Date: Friday, March 10, 2023 12:27:37 PM

Thank you for your response. Your understanding of the question was correct, and we've note your response.

Additionally, thank you for identifying a limitation of the current narrative summary. We'll investigate whether we can provide more flexible response options for the physician gap subsidies item in next year's survey.

From: Levy, Mary <Mary.Levy@umm.edu> Sent: Friday, March 10, 2023 11:19 AM

To: Hilltop HCB Help Account <hcbhelp@hilltop.umbc.edu>; optimaloutcomesmd@gmail.com

Subject: RE: Clarification Required - FY 22 UM Charles Regional Medical Center Narrative

Question 79 does not have any of the below listed and the "other" we had already used for gastroenterology. Is there another area that I can list the below on the narrative. If I put all the below in the "other" area the reason for are all different. I hope I am understanding your question correctly. Mary

From: Hilltop HCB Help Account < hcbhelp@hilltop.umbc.edu>

Sent: Monday, March 06, 2023 3:53 PM

To: Levy, Mary < <u>Mary.Levy@umm.edu</u>>; <u>optimaloutcomesmd@gmail.com</u>

Cc: Hilltop HCB Help Account < hcbhelp@hilltop.umbc.edu>

Subject: Clarification Required - FY 22 UM Charles Regional Medical Center Narrative

CAUTION: This message originated from a non UMMS, SOM, or FPI email system. Hover over any links before clicking and use caution opening attachments.

Thank you for submitting the FY 2022 Hospital Community Benefit Narrative report for UM Charles Regional Medical Center. In reviewing the narrative, we encountered several discrepancies between the physician subsidies in the financial and narrative reports (the two reports should align). Please clarify regarding the following entries, which were only present on the financial sheet, or for which it was unclear which subsidy indicated on the narrative survey (Question 79, pp 17-18) corresponds to the program/specialty in question:

- Adult Hospitalist
- ICU
- Breast Health
- Endoscopy Center

Please provide your clarifying answers as a response to this message.

health information about an identified patient or be otherwise protected from disclosure. State and federal law protect the confidentiality of this information. If the reader of this message is not the intended recipient; you are prohibited from using, disclosing, reproducing or distributing this information; you should immediately notify the sender by telephone or e-mail and delete this e-mail.