



2025 CHA: Caroline County

Executive Summary:

Assessing and monitoring population health is a core public health function. To meet this need and comply with IRS and public health accreditation standards, Mary Washington Healthcare (MWHC) and the Rappahannock Area Health District (RAHD) conduct a Community Health Assessment (CHA) every three years across Planning District 16 (PD16) and MWHC's broader service area. This report summarizes key findings from the most recent CHA for Caroline County, highlighting priority health needs and community strengths to guide future public health planning and interventions.

The CHA identifies priority health issues and available community resources to address them. Building on the 2022 CHA, this report draws from a range of data sources, including focus groups, surveys, state and national health data, and 2024 MWHC inpatient screening data on social determinants of health, to provide a comprehensive view of health needs in Caroline County.

Identified Community Health Strengths for Caroline County:

Recreational and Community Spaces: Access to outdoor parks and recreational spaces was identified as a strength by Caroline County residents during community conversations and focus groups. Specifically noted were the Caroline branch of the Rappahannock Area YMCA and Caroline County Parks and Recreation facilities. These spaces promote and encourage physical activity, as well as socialization and community engagement opportunities. More rural sections of the county and some neighborhoods lack sidewalks, which may limit walkability and accessibility. While there is room for improvement to ensure access for residents, the percentage of the population with access to exercise facilities has risen from 46% at the time of the 2022 CHA to 59% for the 2025 CHA.

Social Determinants of Health: Social determinants of health are the non-medical factors that significantly impact health outcomes, including income, education, employment, housing, transportation, and access to nutritious food. While Caroline has a significant portion of the population living below the Federal Poverty Level, including nearly 1 in 4 children, the rates for many other social determinants of health are more favorable than the state rates:

Indicator	Virginia	RAHD (PD16)				
		Caroline County	Fredericksburg City	King George County	Spotsylvania County	Stafford County
Households with No Motor Vehicle (%)	6.07%	5.01%	9.24%	1.78%	3.09%	1.92%
Population Below 100% FPL (%)	9.98%	11.57%	18.03%	6.93%	7.35%	5.38%
Children in Poverty (% < Age 18)	12.81%	18.23%	31.61%	8.52%	10.22%	6.42%
Cost-burdened Households (%) [Housing is 30% or more of total household income]	30.51%	24.55%	33.19%	23.85%	25.96%	23.65%
Income Inequality [GINI Index] ¹	0.4724	0.4114	0.4579	0.3861	0.4049	0.3752
Social Vulnerability Index ²	0.39	0.40	0.76	0.05	0.27	0.24
Food Insecurity ³	11.1%	9.8%	14.5%	8.6%	8.8%	7.3%

Housing: Access to affordable housing continues to arise as a priority issue throughout PD16. Caroline, however, has made notable progress in many housing-related areas. Overall, Caroline County housing is the most affordable of all PD16 localities. While the median household income for county residents is still below what is needed to afford the median home sales price, this figure has risen from \$65,103 as reported in the 2022 CHA to \$72,210 in the 2025 CHA. Additionally, home ownership rose from 79% - 81.7% in the same period. Cost-burdened households, those paying 30% or more of total household income on housing, have dropped from 28.5% to 24.55%.

Indicator ⁴	Virginia	RAHD (PD16)				
		Caroline County	Fredericksburg City	King George County	Spotsylvania County	Stafford County
Owner-occupied housing unit rate (2019-2023)	67.20%	81.70%	41.60%	76.10%	79.60%	80.80%
Severe housing problems (Percent of households with at least 1	14%	9%	20%	10%	12%	10%

¹ U.S. Census Bureau, American Community Survey, 2018-22.

² Centers for Disease Control and Prevention and the National Center for Health Statistics, CDC – GRASP, 2022.

³ Feeding America: Map the Meal Gap, 2022.

⁴ U.S. Census Bureau; Comprehensive Housing Affordability Strategy (CHAS) Data, U.S. Department of Housing and Urban Development, 2016-2020.

of 4 housing problems: overcrowding, severe housing cost burden, lack of kitchen facilities, lack of plumbing)						
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Identified Community Health Needs for Caroline County:

Chronic Disease: Much of PD16 is above the state average for many chronic conditions, and this elevated rate is particularly pronounced in Caroline County. While Caroline does fall below the state rate for cancer and high cholesterol, Caroline reports disease rates higher than state averages for all other chronic conditions examined in the CHA. Chronic kidney disease, chronic obstructive pulmonary disease, current asthma, depression, high blood pressure, obesity, stroke and Alzheimer's disease are higher in Caroline County than the other localities within PD16. Caroline County has the highest percentage population of adults 65 years of age and older of all PD16 localities, which may account for some of the elevated rates of chronic disease as older adults are more likely to experience chronic disease than younger populations.

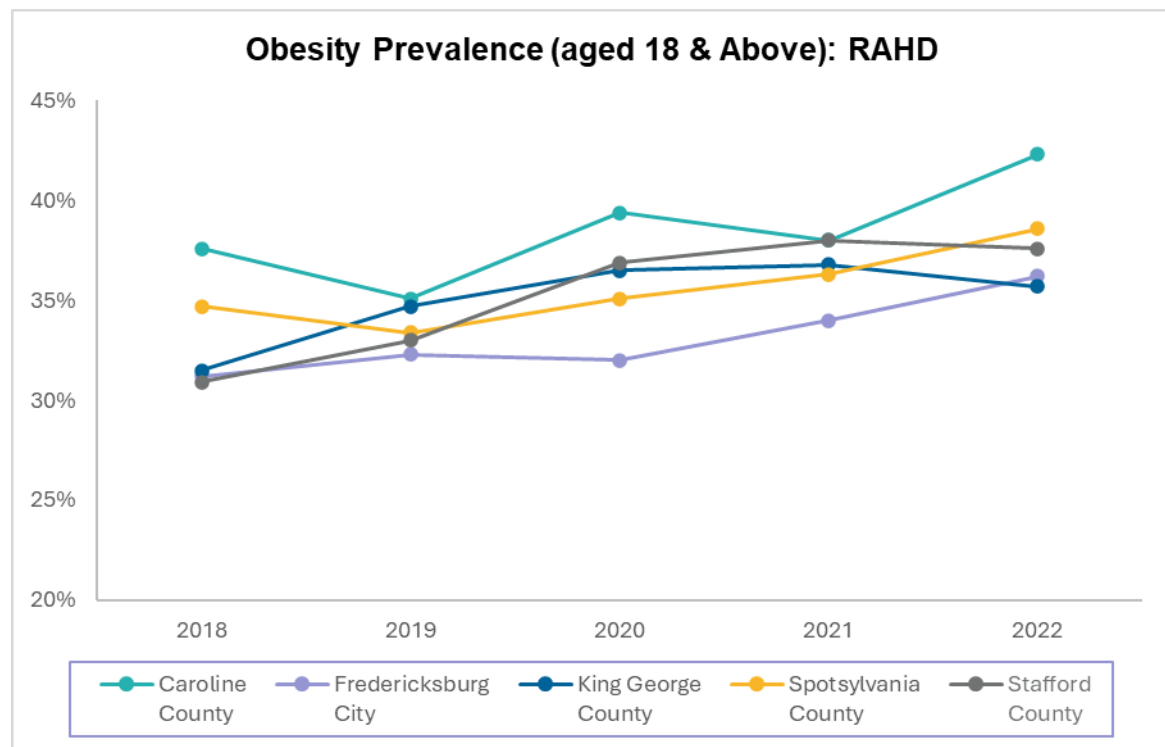
Health Outcomes ⁵	State of Virginia	RAHD (PD16)				
		Caroline County	Fredericksburg City	King George County	Spotsylvania County	Stafford County
Cancer	7.00%	6.70%	6.90%	7.30%	7.20%	7.00%
Chronic Kidney Disease	2.70%	2.90%	2.80%	2.70%	2.70%	2.60%
Chronic Obstructive Pulmonary Disease*	6.00%	7.40%	7.20%	6.30%	6.00%	4.90%
Coronary Heart Disease	5.40%	6.10%	6.10%	5.60%	5.40%	5.00%
Current Asthma	10.00%	11.00%	10.70%	10.20%	10.20%	9.90%
Depression	23.00%	24.90%	24.40%	23.30%	23.40%	21.90%
Diabetes	11.40%	12.40%	12.90%	10.90%	11.60%	11.00%
High Blood Pressure *	31.50%	33.20%	32.40%	32.20%	32.30%	31.80%
High Cholesterol	32.80%	31.90%	30.70%	31.60%	34.00%	33.20%
Obesity	35.30%	41.60%	38.20%	35.20%	38.30%	37.00%
Stroke	3.00%	3.60%	3.50%	3.00%	2.90%	2.60%
Alzheimer's Disease (65+) ⁶	11.7%	12.9%	12.0%	11.3%	11.1%	10.5%

* Chronic Obstructive Pulmonary Diseases (COPD) includes adults who reported COPD, emphysema, or chronic bronchitis.

⁵ CDC BRFSS, 2022. Accessed via the PLACES Data Portal.

⁶ Dhana et al., Alzheimer's & Dementia, 2023.

* Women who were told **high blood pressure** only during pregnancy and those who were told they had borderline hypertension were not included.



Maternal and Child Health: Caroline also shows poorer maternal and infant health outcomes than the state average. Infant mortality rates and low birthweight deliveries are particularly concerning, as these measures indicate additional health concerns and disparities for both the mother and child. Virginia's infant mortality rate per 1,000 live births was 6.20, while Caroline's rate is 8.7.

RAHD (PD16)

⁷ Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the PLACES Data Portal. 2022 .

Indicator ⁸	Virginia	Caroline County	Fredericksburg City	King George County	Spotsylvania County	Stafford County
Infant Mortality Rate (Per 1,000 Live Births)	6.20	8.70	8.00	7.20	9.30	5.40
Low Birthweight Deliveries (%)	8.50%	10.10%	11.50%	9.40%	7.90%	8.50%
Teen Pregnancy Rate (Per 1,000 Females Ages 15-19)	15.60	21.00	33.30	8.10	10.70	7.20
Preterm Births (%)	9.60%	12.50%	12.00%	10.50%	10.60%	9.80%
Late or No Prenatal Care (%)	5.10%	5.70%	3.70%	3.00%	4.60%	4.40%
Maternal Smoking (%)	3.20%	7.20%	1.90%	5.40%	3.80%	2.30%

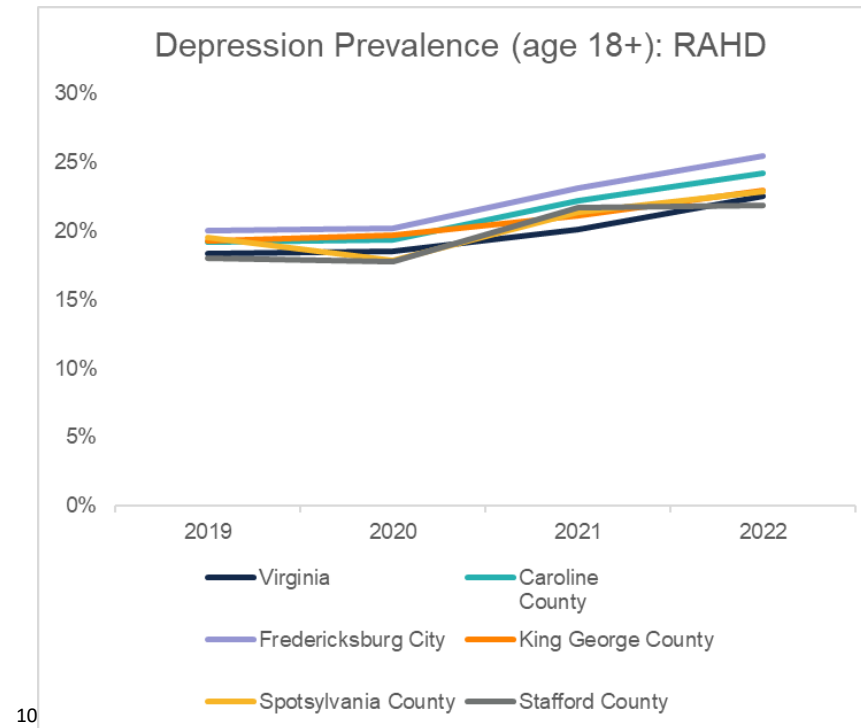
Access to care: It is common to see fewer providers in rural areas compared to urban hubs, and this is pronounced in Caroline, where the number of primary care providers, dentists and mental health providers relevant to the population are significantly higher than the state and national rates as well as the other localities in PD16.

			RAHD (PD16)				
Indicator ⁹	United States	Virginia	Caroline County	Fredericksburg City	King George County	Spotsylvania County	Stafford County
Uninsured (%)	10%	8%	9%	10%	6%	8%	6%
Primary Care Physicians (population per provider)	1,330	1,340	10,440	570	4,580	2,080	3,830
Dentists (population per provider)	1,360	1,330	3,990	490	2,140	2,220	2,820
Mental Health Providers (population per provider)	320	410	2,130	120	1,390	870	960

Mental Health: Mental Health was the number one health concern identified by residents in the community member survey, and Caroline residents were more likely to report poor mental health and frequent mental distress than Virginia and US averages. Depression rates for Caroline County residents aged 18 and older are the second highest in PD16 and have risen significantly since 2019.

⁸ Virginia Department of Health, VDH - Maternal & Child Health, 2022.

⁹ County Health Rankings & Roadmaps - Compare Counties (various sources).



MWHC Social Determinants of Health Screening Data:

In addition to the secondary data available for SDOH, MWHC screens its adult inpatients for five key social determinants of health including food insecurity, housing instability, interpersonal safety, utilities, and transportation. This initiative enhances MWHC's ability to understand and address the social factors impacting patient health, allowing for more tailored interventions. The collected data also offers valuable, real-time, insight into broader community needs, supporting more informed public health planning and resource allocation. The 2025 CHA reflected data for MWHC inpatients captured during the 2024 calendar year.

¹⁰ Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the PLACES Data Portal. 2022 .

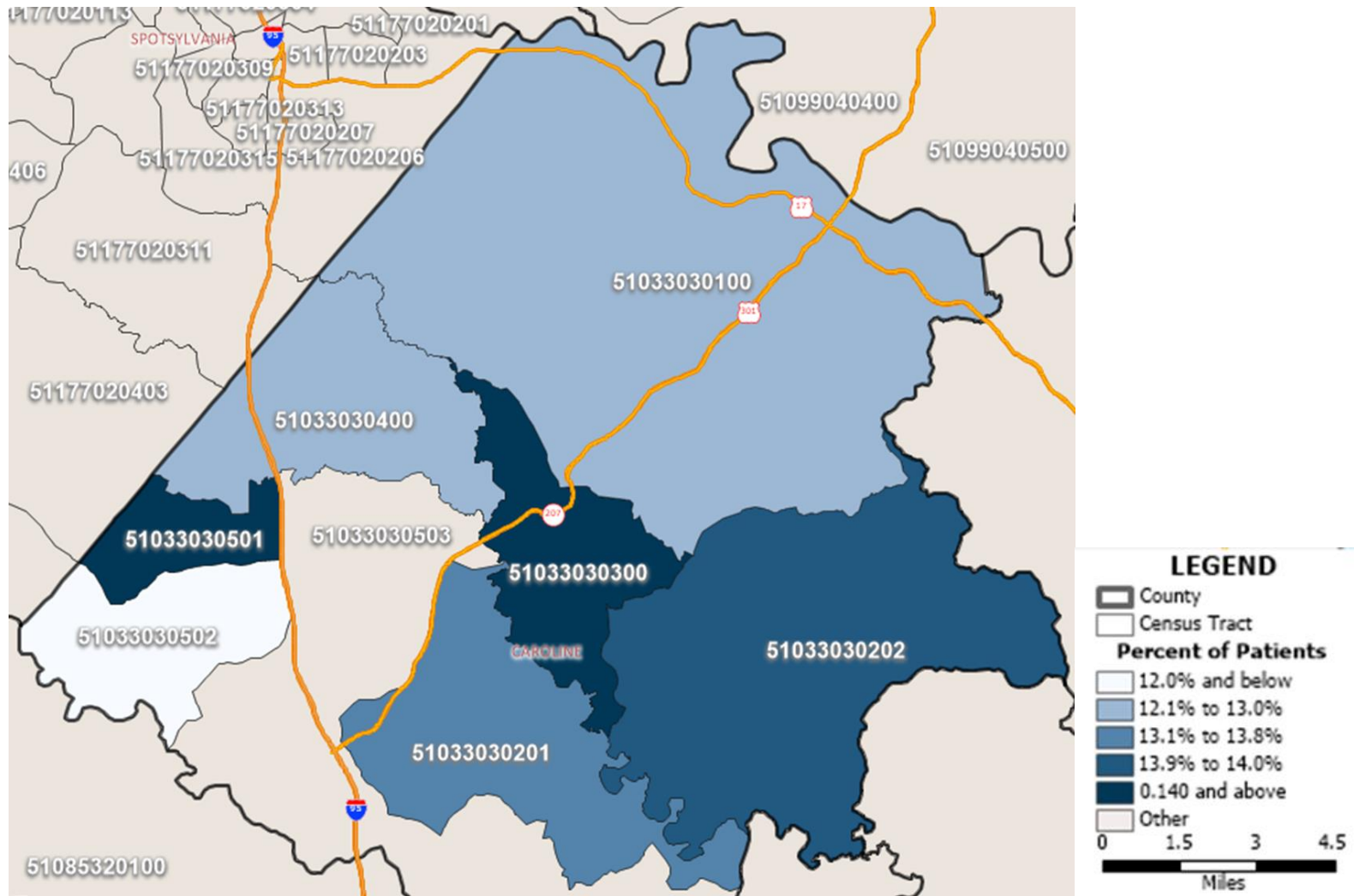
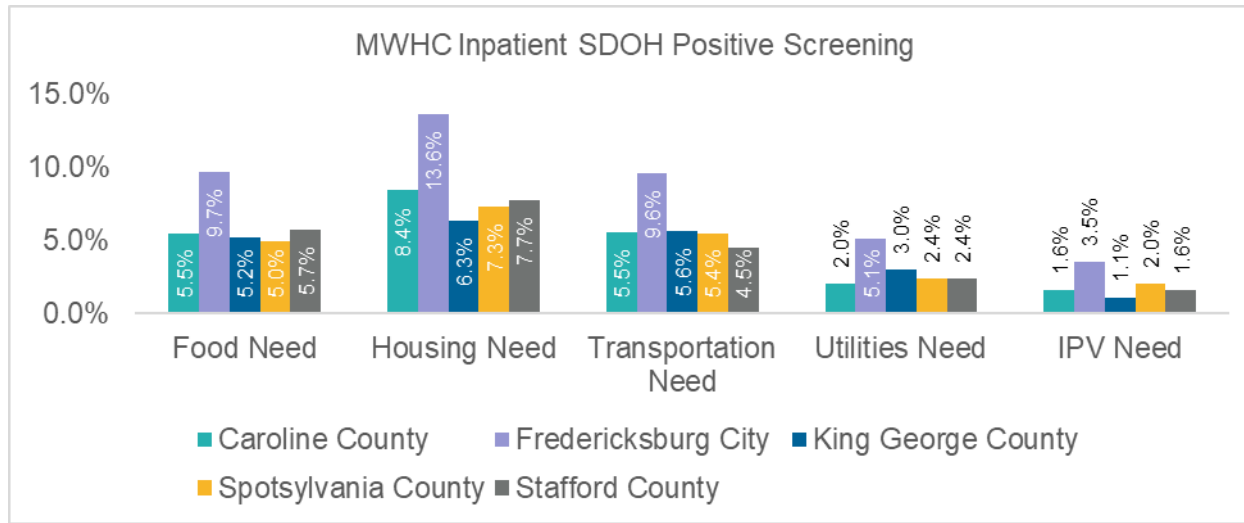


Figure1: Positive SDOH Screening Rates by Census Tract, Caroline (proportion of MWHC adult inpatients (18+) that screened positive for one or more SDOH needs)

This map provides a visual representation of SDOH needs across Caroline. The darker shades of blue indicate census tracts with higher rates of positive SDOH screenings, highlighting areas with potentially greater social and economic challenges. Based on the screening data, census tracts 300 and 501 had the highest overall rate of positive SDOH screening for one or more SDOH needs.



The screening data reveals notable variation in SDOH needs within Caroline County. Overall, 5.5% of Caroline adult inpatients screened positive for food needs as well as transportation needs. Housing was the highest need with for Caroline County in this particular screening tool at 8.4%, and utilities need and interpersonal violence needs were screened positive for 2% and 1.6% of Caroline inpatients respectively.

While many Caroline residents commute north to receive healthcare, many also commute south to Richmond. This data only includes inpatient screenings at Mary Washington Hospital and Stafford Hospital.

Conclusion and Next Steps: This document highlights both the strengths and health challenges facing Caroline County. While the community benefits from improvements in access to exercise and recreational facilities, social determinants of health measures such as income inequalities and food insecurity, and housing measures, significant issues persist, including health outcomes, maternal and child health and mental and physical health. These challenges emphasize the need for focused, collaborative solutions. This assessment serves as a foundation for strategic planning aimed at advancing health equity and enhancing the well-being of all Caroline residents as we move into the Community Health Improvement Plan (CHIP) process. Though not all issues can be addressed through the CHIP, this report is intended to deepen understanding of health across the city and help organizations, local governments, businesses, and neighborhoods align resources to meet the community's most pressing needs.