DHHS
MONTGOMERY COUNTY
Department of Health and Human Services

Chronic Diseases in Montgomery County, MD 2010-2023




Montgomery County, Maryland
Department of Health and Human Services
Public Health Services
Health Planning and Epidemiology

Health Planning and
Epidemiology

Chronic Diseases in Montgomery County, MD 2010-2023

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Chronic Diseases in Montgomery County, MD 2010-2023

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Health Officer's Message

Dear Montgomery County Residents and Partners,

I am pleased to share the Montgomery County Chronic Disease Report, which provides a detailed look at the burden of chronic conditions such as heart disease, cancer, diabetes, and respiratory illnesses in our community.

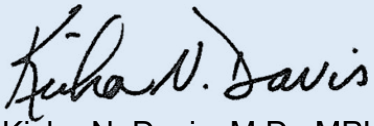
While Montgomery County continues to perform better than state and national averages on many health indicators, this report highlights persistent disparities across racial, ethnic, and age groups. Non-Hispanic Black residents, for example, experience higher rates of mortality and emergency room visits for several chronic diseases. Late-stage cancer diagnoses are also more common in certain communities, underscoring the need for earlier detection and improved access to care.

As our population becomes more diverse and older, we are seeing a shift from communicable to chronic diseases, which increases healthcare demands and costs. Social determinants such as poverty and insurance coverage continue to influence health outcomes and access to services.

This report is a vital tool for identifying where the greatest needs exist so we can better target our resources and interventions. The Department of Health and Human Services (DHHS) remains committed to working with community partners, healthcare providers, and residents to prevent and manage chronic diseases through education, screening, care coordination, and outreach.

Together, we can build a healthier, more equitable Montgomery County.

Sincerely,



Kisha N. Davis, M.D., MPH, FAAFP

County Health Officer

Montgomery County Department of Health and Human Services

Chief of Public Health Services' Message

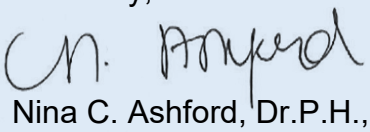
Dear Montgomery County Residents,

The health of our community is one of our greatest strengths. Chronic diseases such as heart disease, diabetes, and cancer affect many families across the County. They are also conditions we can prevent, manage, and overcome when we work together. This report was developed to shine a light on the impact of chronic disease in Montgomery County, highlight where inequities persist, and share strategies to improve health and well-being for all.

As Chief of Public Health Services, I want to thank our community partners, health providers, and residents who contribute to this important work every day. Progress is only possible when we join forces; across neighborhoods, organizations, and systems, to ensure that everyone has the opportunity to live a long, healthy, and fulfilling life.

I look forward to building a healthier future for Montgomery County, together.

Sincerely,



Nina C. Ashford, Dr.P.H., MPH

Chief, Public Health Services

Montgomery County Department of Health and Human Services

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EXECUTIVE SUMMARY

Chronic diseases such as heart disease, cancer, and diabetes are the leading causes of mortality and disability in the U.S. and Montgomery County. An aging population, combined with the transition from communicable diseases to chronic disease, leads to high healthcare utilization and costs. Montgomery County performs far better than state and national averages on most health indicators, including chronic diseases, however great variations exist among population subgroups and communities within the County. Though each chronic disease is unique, they share several similarities in some risk factors and mechanisms underlying their development. It is critical to highlight various areas of disease burdens within the County to better target efforts and resources to plan, design, and implement intervention programs. The major findings of chronic disease topics examined in this report are summarized below.

Demographic and Social Determinants

(1) The County's population is becoming more diverse over time. In 2023, 39.4% County residents are Non-Hispanic White, 18.9% are Non-Hispanic Black, 15% are Asian/Pacific Islander, and 21.1% are Hispanic. The County has higher Asian/Pacific Islander and Hispanic populations than that of Maryland (6.6% Asian/PI and 12.6% Hispanic, respectively). Between 2019 and 2023, Non-Hispanic White residents decreased by 3.6% and Hispanics increased by 1.0% in the County, though Non-Hispanic Black and Asian/Pacific Islanders residents fluctuated.
(2) There is an overall increasing trend of percentage of County families living in poverty; however, the County's overall poverty level (7.0%) is lower than Maryland's (9.5%) and much lower than that of the U.S. (12.5%) in 2023; the Hispanic (11.6%) and NH-Black (9.8%) groups had the highest poverty levels.
(3) There is an overall decreasing trend of the percentage of individuals without health insurance; the County's overall percentage of individuals without health insurance (7.0%) is lower than the U.S. (7.9%) but higher than Maryland (6.3%) in 2023.

Heart Disease

(1) The County has consistently lower mortality (99.9/100k in 2023) and ER visit rates (1,121/100k in 2023) due to heart disease than Maryland (149.7/100k and 2,017.4/100k, respectively). There is a decreasing trend over time after the COVID-19 pandemic.
(2) NH-Black group has both the highest mortality (148.1/100k) and ER visit rates (1,913/100k) for heart disease than other race/ethnicity groups during 2021-23. Men (136.6/100k) have higher disease burden than women (100.8/100k), and age 65+ group has the highest disease burden for both mortality (747/100k) and ER visits (4213.5/100k).

Cerebrovascular Disease

(1) The County has consistently lower mortality (36.3/100k in 2023) and ER visit rates (30/100k in 2023) due to cerebrovascular disease than Maryland (43.4/100k and 59.2/100k, respectively), however there is an increasing trend over time.
(2) NH-Black group has both the highest mortality (38.4/100k) and ER visit rates (40.3/100k) for cerebrovascular disease than other race/ethnicity groups during 2021-23. Women (33.8/100k) have higher mortality rates than men (27.1/100k), but men (32.8/100k) have higher ER visit rates than women (26.4/100k). Age 65+ group has the highest disease burden for both mortality (216.6/100k) and ER visits (128.3/100k).

Chronic Lower Respiratory Disease

(1) The County has consistently lower mortality (11.6/100k in 2023) and ER visit rates (555/100k in 2023) due to chronic lower respiratory disease than Maryland (24.1/100k and 956.3/100k, respectively). There is a decreasing trend over time.
(2) While NH-White group has the highest mortality (15.9/100k), NH-Black group has the highest ER visit rate (825.5/100k) for chronic lower respiratory disease than other race/ethnicity groups during 2021-23. Men (11.9/100k) and women (12.2/100k) have similar disease burden. While age 65+ group has the highest mortality (84.3/100k), age less than 5 group has the highest ER visit rates (767.7/100k).

Cancers

(1) Lung and bronchus, colon and rectum, prostate (male)/breast (female), melanoma of the skin, and oral cavity and pharynx are the top 5 cancer sites during 2018-2022.
(2) The County has consistently lower incidence (23.9/100k in 2020) and mortality (17/100k in 2020) for lung and bronchus cancer than Maryland (44/100k and 29/100k, respectively). Both incidence and mortality have a decreasing trend during 2013-20. While NH-Black group has the highest disease burden than other race/ethnicity groups (19.4/100k), NH-Asian group has the highest percent late-staged diagnosis (48.4%).
(3) The County has consistently lower incidence (24.1/100k in 2020) and mortality (9/100k in 2020) for colorectal cancer than Maryland (31.7/100k and 12.5/100k, respectively). NH-Black group has the highest disease burden than other race/ethnicity groups (13/100k) and the highest percent late-staged diagnosis (24.6%).
(4) The County has comparable incidence (129.3/100k in 2020) and mortality (18/100k in 2020) for female breast cancer than Maryland (129/100k and 21.5/100k, respectively). NH-Black group has the highest disease burden than other race/ethnicity groups (22.5/100k) and the highest percent late-staged diagnosis (7.8%).
(5) The County has consistently lower incidence (117.1/100k in 2020) and mortality (14/100k in 2020) for prostate cancer than Maryland (125.2/100k and 19.9/100k, respectively). While NH-Black group has the highest disease burden than other race/ethnicity groups (30.4/100k), Hispanic group has the highest percent late-staged diagnosis (8.6%).

Diabetes Mellitus

(1) The County has consistently lower mortality (14.2/100k in 2023) and ER visit rates (303/100k in 2023) due to diabetes than Maryland (23/100k and 655.1/100k, respectively). While the ER visit rate is decreasing, there is an increasing trend for mortality over time.
(2) NH-Black group has both the highest mortality (24.3/100k) and ER visit rates (579.8/100k) for diabetes than other race/ethnicity groups during 2021-23. Men (17/100k) have higher mortality than women (10.9/100k) but comparable rates for ER visits (307.4/100k and 283.9/100k, respectively). Age 65+ group has the highest disease burden for both mortality (77.4/100k) and ER visits (690.2/100k).

DHHS Programs

DHHS Community and Population Health programs work closely with partners, providers, and communities to provide education, screening, care management/coordination, and services to County residents to prevent and reduce chronic diseases and improve population health in the County.

INTRODUCTION

Montgomery County is the most populous county in Maryland with a population estimate of over 1.06 million in 2020 from the U.S. Census. In 2023, Montgomery County was ranked by the American Community Survey as the 3rd richest in Maryland, with a median household income of $125,371[1]. It also has the highest percentage (34.4%) of residents over 25 years of age who hold post-graduate degrees. Montgomery County has a very diverse population and is becoming more diverse over time. In 2023, there were 39.4% Non-Hispanic White, 18.9% Non-Hispanic Black, 15.0% Asian/Pacific Islander, and 21.1% Hispanic or Latino based on the U.S. Census. Of the County's population, 34.6% are born outside the U.S.

Montgomery County continues to be one of the healthiest counties in Maryland and in the U.S., according to the 2025 County Health Rankings[2]. Montgomery County residents have better outcomes for population health and well-being compared to the average county in Maryland and in the U.S, with having lower rates of premature death, higher life expectancy, and lower rates of smoking, obesity, and physical inactivity. However, ongoing efforts are needed to improve access to health care, health inequities, and unhealthy behaviors. This report provides an overview of chronic diseases in Montgomery County, compared to Maryland and the U.S. for 2010-2023. It also includes information describing programs within DHHS that provide chronic disease management services to County residents, including types of services provided, and data on clients served. Most of these programs are in Public Health Services.

This report is organized into three major sections: (1) the chronic diseases by year, race/ethnicity, and age where appropriate; (2) DHHS program services and clients, and (3) the appendices. Here are the features of this report:

- A section on prevention is included to illustrate the importance of prevention at different levels to reduce disease burden.
- Comparison of disease rates by sex, race/ethnicity, age (where appropriate), and geographic areas are included to illustrate the disparities of risks associated with disease burden.
- Trends in disease burden over time are examined by health topic, to illustrate the possible lifestyle changes and effectiveness of prevention and intervention programs.
- Comparisons of disease rates between sub-county areas (i.e., Census Tract, Zip Codes, etc.) and the County overall through Geographic Information System (GIS) mapping are available to identify potential risks of diseases associated with different lifestyles and possible environmental/occupational exposures.
- Comparison of disease rates between the County, Maryland and U.S. are made where appropriate.
- Information from the 2011-2023 Maryland Behavioral Risk Factor Surveillance System (BRFSS) is included to provide information on both risky and health-prompting behaviors, as well as prevalence estimates of certain health conditions.
- Information from the Healthy People 2030 is included to provide a benchmark for progress made and areas for ongoing efforts.
- Technical notes are included in the appendices to provide information on methodological issues.
- Sources of additional information are included in the appendices.

Montgomery County Department of Health and Human Services, Montgomery County, Maryland

The Montgomery County Department of Health and Human Services (DHHS) is an integrated local health department that is responsible for public health and human services that address the needs of our community's most vulnerable children, adults and seniors. DHHS has more than 130 programs and delivers services to more than 20 locations. DHHS's core services protect the community's health, protect the health and safety of at-risk children and vulnerable adults, and address basic human needs, including food, shelter, and clothing. The five main service areas of DHHS include Aging and Disability Services, Behavioral Health and Crisis Services, Children, Youth and Family Services, Public Health Services, and Special Needs Housing. Additionally, the Office of Community Affairs provides direct services through several programs. DHHS has more than 1,700 employees and provides services to more than 120,000 clients annually (1 in every 8 residents).

DHHS Public Health Services – Health Planning and Epidemiology

DHHS Public Health Services includes the following program areas: Community and Population Health, Communicable Diseases and Epidemiology, Maternal and Infant Health, Health Planning and Epidemiology, Licensure and Regulatory Services, and School Health Services.

The Health Planning and Epidemiology is the expert in planning and analytic epidemiology within DHHS and is responsible for the community health needs assessment, program evaluations, disease surveillance and outbreak investigations, health statistics and data management, epidemiology and biostatistics, ongoing development and maintenance of a population data warehouse, and special research projects in collaboration with internal and external partners and academic institutions.

PREVENTION

The goal of prevention is to reduce the associated morbidity and mortality. Many chronic diseases are caused by modifiable risk factors such as tobacco use, lack of nutrition, physical inactivity, and excessive alcohol use[3]. Making lifestyle changes and receiving recommended health screenings can help prevent health conditions and improve quality of life for people with chronic diseases. Prevention strategies to address, treat, and manage chronic diseases are categorized into three intervention levels:

Primary prevention – is to limit the occurrence of health conditions by controlling exposure to risk factors or increasing an individual's resistance to them (e.g., through healthy diet). The first step is to identify the relevant exposures and to assess their impact on the risk of developing disease in the population. Making lifestyle changes for modifiable risk factors are primary prevention steps for many chronic diseases. These modifiable risk factors include tobacco use, poor nutrition, lack of physical activity, and excessive alcohol consumption.

Tobacco use is a main contributor to chronic diseases such as cardiovascular diseases, several cancers, chronic lower respiratory diseases, and diabetes. Cigarette smoking is the principal cause of lung cancer and chronic obstructive pulmonary disease. Quitting smoking, and never starting to smoke, is crucial for lowering risk of these chronic conditions and preventing premature death[3].

Poor nutrition and lack of physical activity increase the risk of developing chronic conditions and diseases, including obesity, hypertension, cardiovascular diseases, diabetes, and some cancers. These risk factors may also worsen conditions for those already diagnosed with chronic diseases, which may lead to disability and premature death. Having a balanced diet, such as one with fruits, vegetables, whole grains, lean protein, low-fat dairy products, and limited added sugars lowers the risk of many chronic diseases[3]. A healthy diet along with regular physical activity, such as walking, jogging, swimming, weightlifting, and staying active through daily activities, reduce the risk of obesity and prevent and delay chronic conditions[3].

Excessive alcohol consumption, including binge drinking, heavy drinking, underage drinking, or drinking while pregnant, can lead to developing severe health conditions. Over time, excessive alcohol use increases the risk of cardiovascular disease, hypertension, and several cancers, such as oral, colorectal, liver, and breast cancer. Avoiding or lowering alcohol intake can reduce these risks[3].

These healthy behaviors and lifestyle changes are critical primary prevention strategies that can prevent many chronic diseases from ever occurring. For those with chronic diseases, quitting smoking, maintaining a healthy diet and exercise, and limiting alcohol intake can help manage and alleviate the burden of chronic conditions.

This report includes County-specific information from the 2011-2023 Maryland Behavioral Risk Factor Surveillance System (BRFSS) whenever possible and appropriate. The Maryland Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing telephone-based chronic disease surveillance program designed to collect data on the behaviors and conditions that place Maryland adults at risk for chronic diseases, injuries, and preventable infectious diseases. Maryland BRFSS also collects information on health care access and health disparities. The typical sample size is approximately 15,000 non-institutionalized Maryland residents aged 18 and older per year.

This icon indicates data from the Maryland Behavioral Risk Factor Surveillance System (BRFSS) survey.

Secondary prevention – refers to the detection of diseases at an early stage, when intervention is more effective than at the time of usual diagnosis and treatment. Early detection and intervention can reduce or eliminate the complications related to the condition, including death. Screening represents an important component of secondary prevention. For example, mammograms help detect and treat breast cancer early. While breast cancer screenings cannot prevent breast cancer, it is the best method for detecting the disease early.

Tertiary prevention – aims to reduce a disease's effects, prevent further complications, and maximize quality of life for individuals affected by the condition. Once the disease is established, prevention efforts focus on rehabilitation programs, support groups, and disease management to provide the best long-term treatment available. For example, rehabilitation programs for individuals who've had a stroke can help them regain lost functions and skills. Interventions including physical therapy, occupational therapy, speech therapy, medication management, and regular monitoring are crucial for controlling the disease and preventing recurrent strokes.

Setting Prevention Goals and Objectives

It is important to set up long-term objectives for achieving these goals through various prevention and health promotion activities. Comparing results with Healthy People 2030, a program of national health-promotion and disease-prevention goals set by the US Department of Health and Human Services, provides information on progress made and ongoing efforts. Objectives from Healthy People 2030 are included in this report whenever possible and appropriate.

This icon indicates goals of Healthy People 2030 from the United States Department of Health and Human Services, Office of Disease Prevention and Health Promotion.

This icon indicates goals and objectives of Healthy Montgomery 2030 Core Indicators.

SUMMARY OF CHRONIC DISEASES

Mortality

Table 1. Leading Causes of Death by Year, Montgomery County, 2021-2023

	2021		2022		2023		2021-2023	
	%	Rank	%	Rank	%	Rank	%	Rank
Heart Disease*	27.1	1	22.1	1	20.8	2	23.4	1
Cancer*	19.4	2	20.3	2	21.2	1	20.3	2
COVID-19	8.0	3	5.2	4	2.3	7	5.2	4
Cerebrovascular Disease*	5.2	4	5.9	3	7.8	3	6.3	3
Accidents	4.4	5	4.6	5	5.4	4	4.8	5
Diabetes Mellitus*	2.7	6	2.5	6	2.9	5	2.7	6
Chronic Lower Respiratory Disease*	2.5	7	2.4	8	2.5	6	2.4	7
Alzheimer's Disease	2.2	8	2.8	7	2.2	8	2.4	8
Septicemia	1.8	9	1.8	9	2.0	9	1.9	9
Influenza & Pneumonia	1.4	10	1.4	10	1.6	10	1.5	10
Nephritis	1.3	11	1.4	11	1.4	11	1.3	11
All Other Causes	23.9		29.7		29.9		27.8	

*Indicates chronic diseases

Five of the 11 leading causes of death in Montgomery County are chronic diseases: heart disease, cancer, cerebrovascular disease, diabetes, and chronic lower respiratory disease.

Figure 1. Heart Disease Deaths by Sex, Montgomery County, 2021-2023

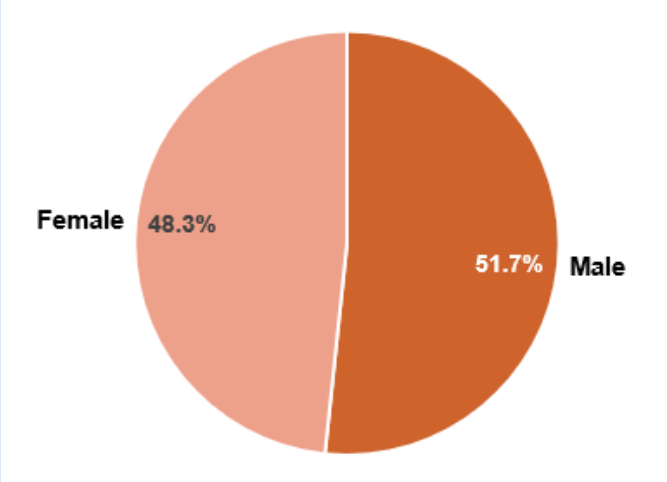


Figure 2. Heart Disease Deaths by Race/Ethnicity, Montgomery County, 2021-23

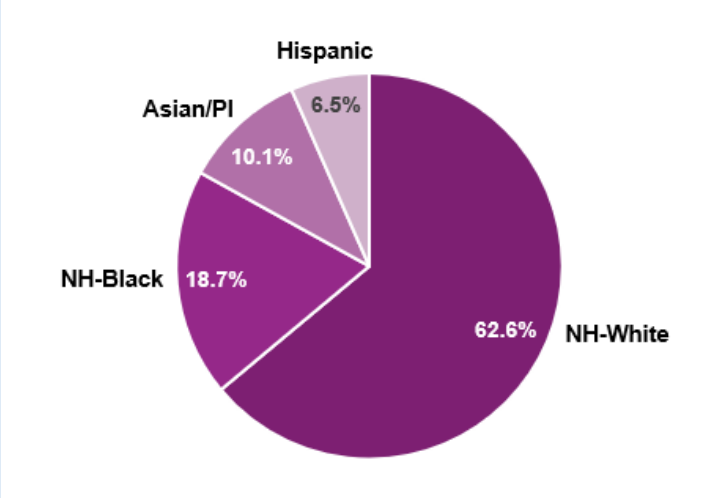
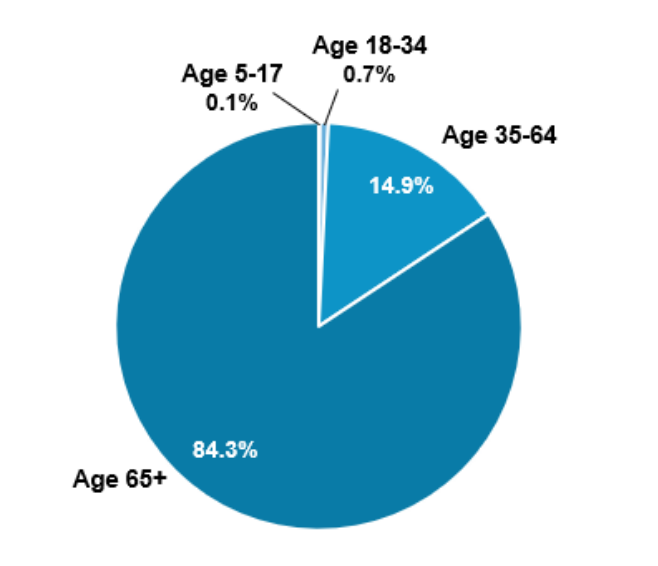


Figure 3. Heart Disease Deaths by Age, Montgomery County, 2021-2023*



*Percentages less than 0.05% are not displayed.

Figure 4. Cancer Deaths by Sex, Montgomery County, 2021-2023

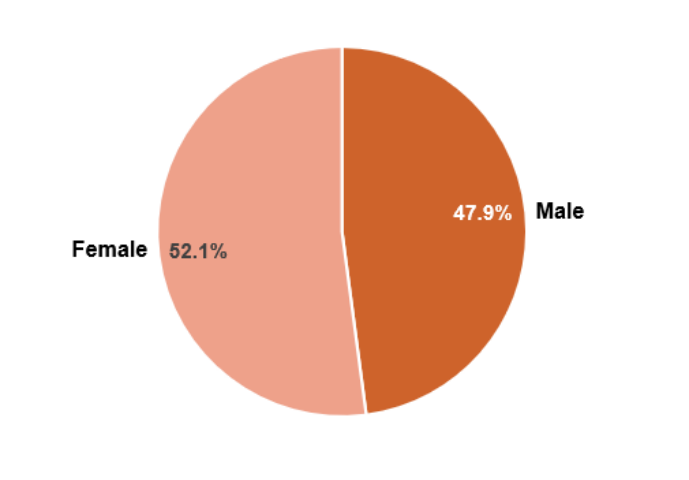


Figure 5. Cancer Deaths by Race/Ethnicity, Montgomery County, 2021-2023

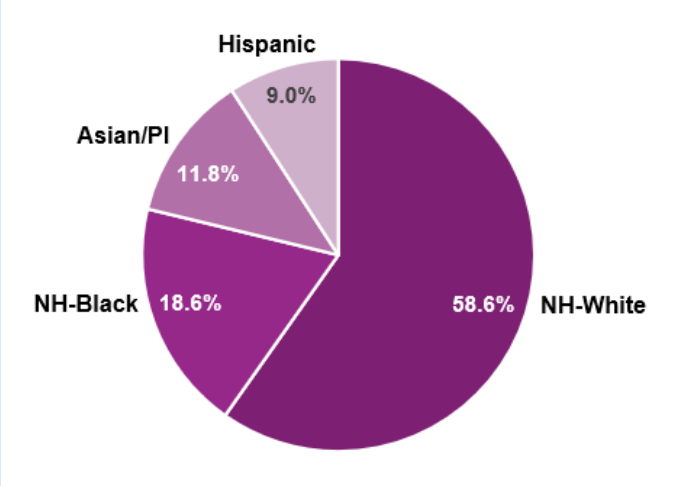
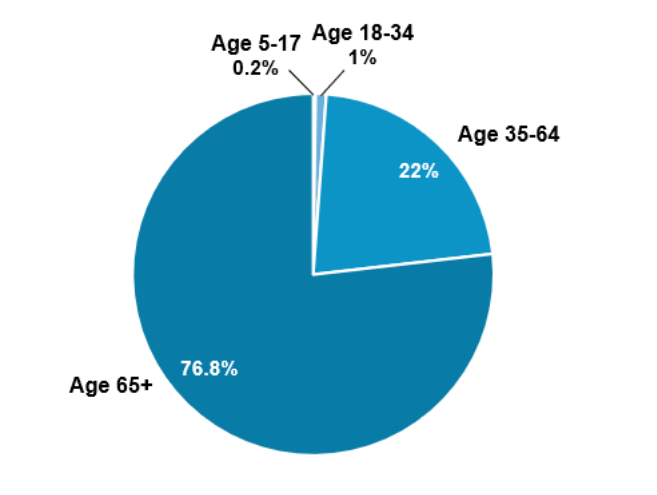


Figure 6. Cancer Deaths by Age, Montgomery County, 2021-2023*



*Percentages less than 0.05% are not displayed.

Figure 7. Cerebrovascular Disease Deaths by Sex, Montgomery County, 2021-2023

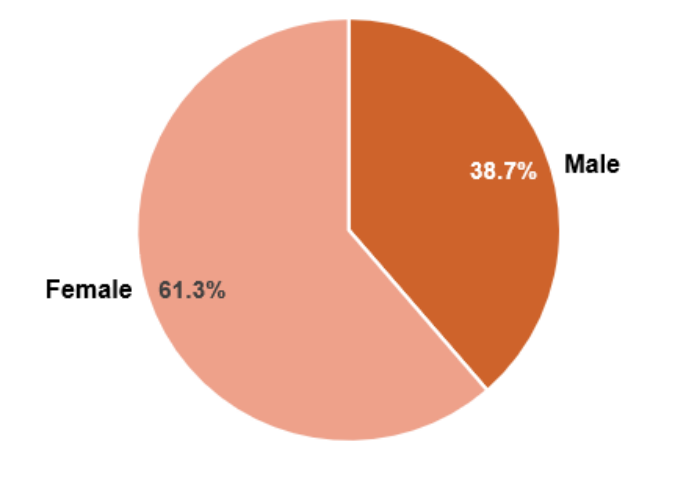


Figure 8. Cerebrovascular Disease Deaths by Race/Ethnicity, Montgomery County, 2021-2023

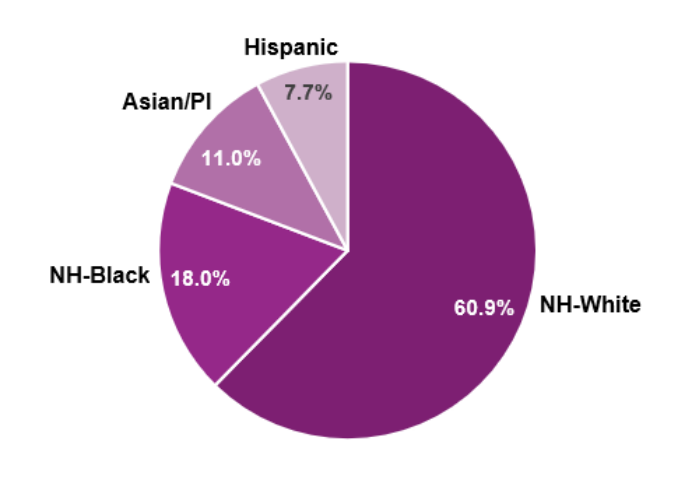
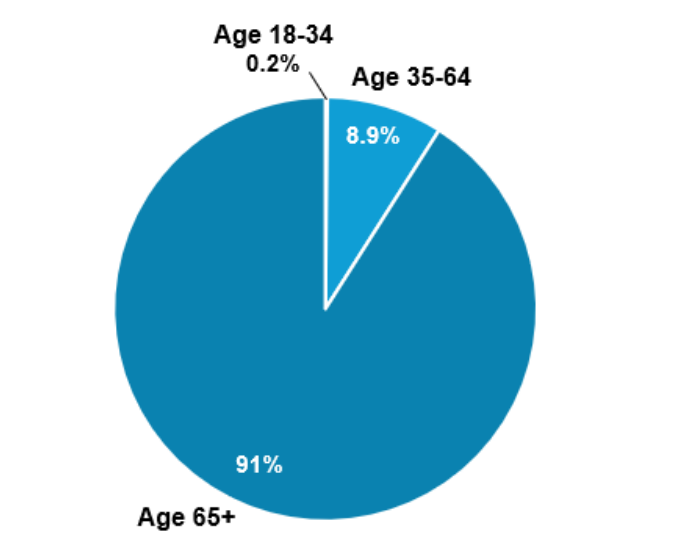


Figure 9. Cerebrovascular Disease Deaths by Age, Montgomery County, 2021-2023*



*Percentages less than 0.05% are not displayed.

Figure 10. Diabetes Deaths by Sex, Montgomery County, 2021-2023

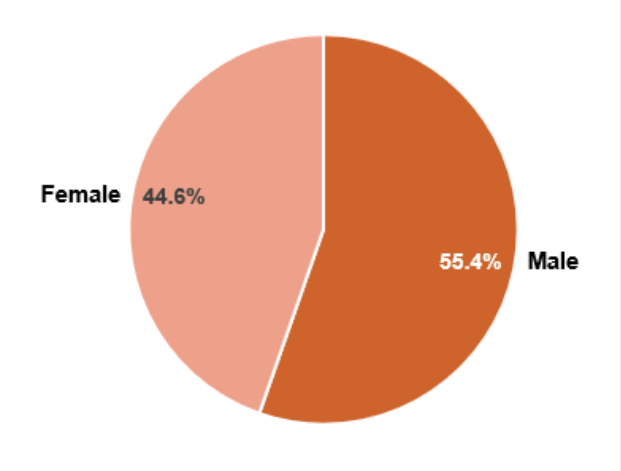


Figure 11. Diabetes Deaths by Race/Ethnicity, Montgomery County, 2021-2023

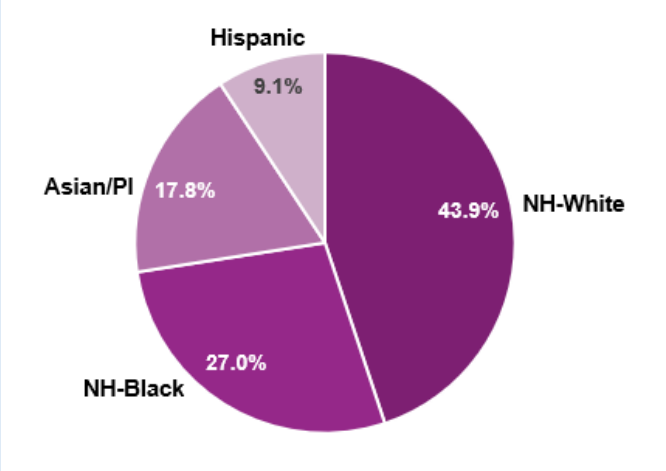
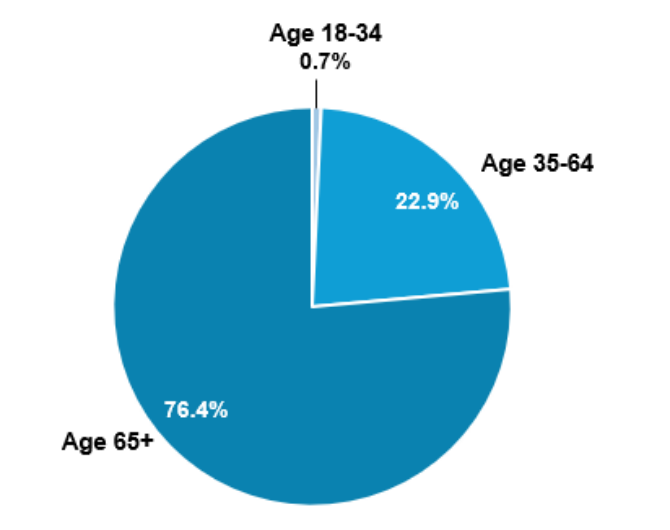


Figure 12. Diabetes Deaths by Age, Montgomery County, 2021-2023*



*Percentages less than 0.05% are not displayed.

Figure 13. CLRD Deaths by Sex, Montgomery County, 2021-2023

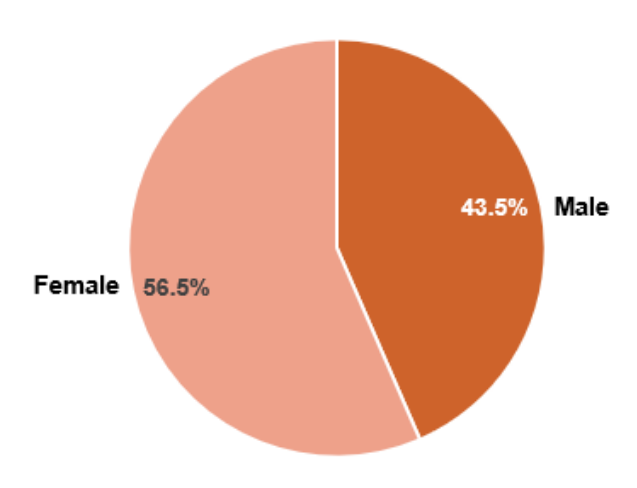


Figure 14. CLRD Deaths by Race/Ethnicity, Montgomery County, 2021-2023

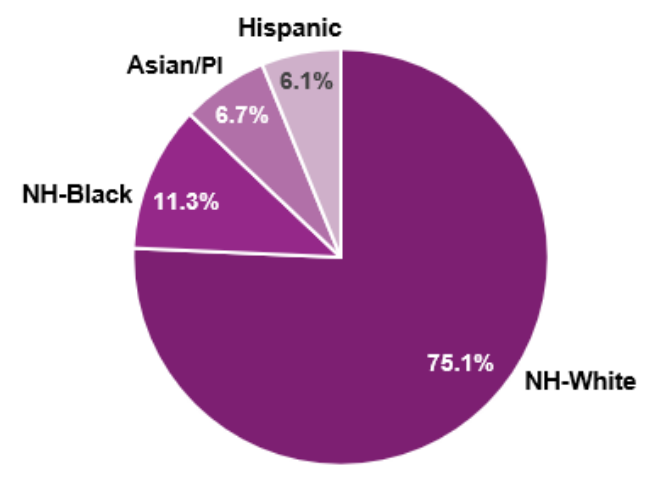
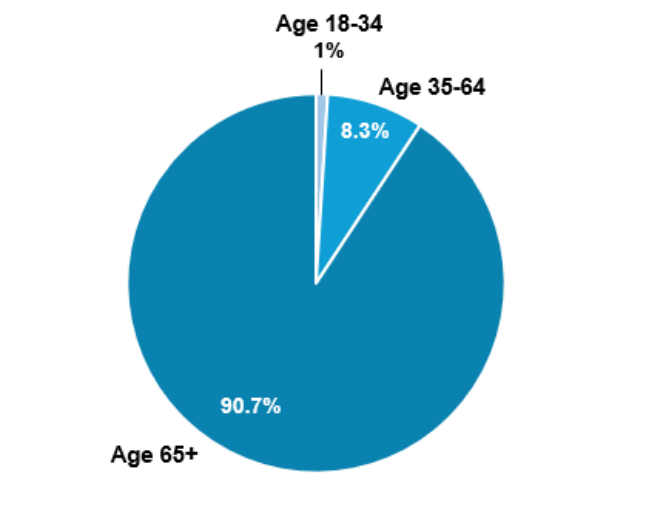


Figure 15. CLRD Deaths by Age, Montgomery County, 2021-2023*



*Percentages less than 0.05% are not displayed.

Hospitalization

Table 2. Leading Causes of Hospitalization by Year, Montgomery County, 2021-2023

	2021		2022		2023		2021-2023	
	%	Rank	%	Rank	%	Rank	%	Rank
Heart Disease*	13.1	1	12.7	1	13.1	1	13.0	1
Injuries	10.7	2	10.6	2	11.9	2	11.1	2
Mental Health	8.3	3	7.1	3	6.9	3	7.4	3
COVID-19	4.6	4	4.6	4	2.2	7	3.7	5
Cancer*	4.3	5	4.1	5	4.3	4	4.2	4
Diabetes Mellitus*	3.4	6	3.5	6	4.0	5	3.7	6
Cerebrovascular Disease*	3.2	7	3.1	7	3.4	6	3.2	7
Chronic Lower Respiratory Disease*	1.1	8	1.5	8	1.5	8	1.4	8
Substance Use Disorder	1.0	9	1.0	9	1.3	9	1.1	9
Suicide	0.5	10	0.4	10	0.4	10	0.4	10
All Other Causes	49.7		51.3		51.0		50.7	

*Indicates chronic diseases

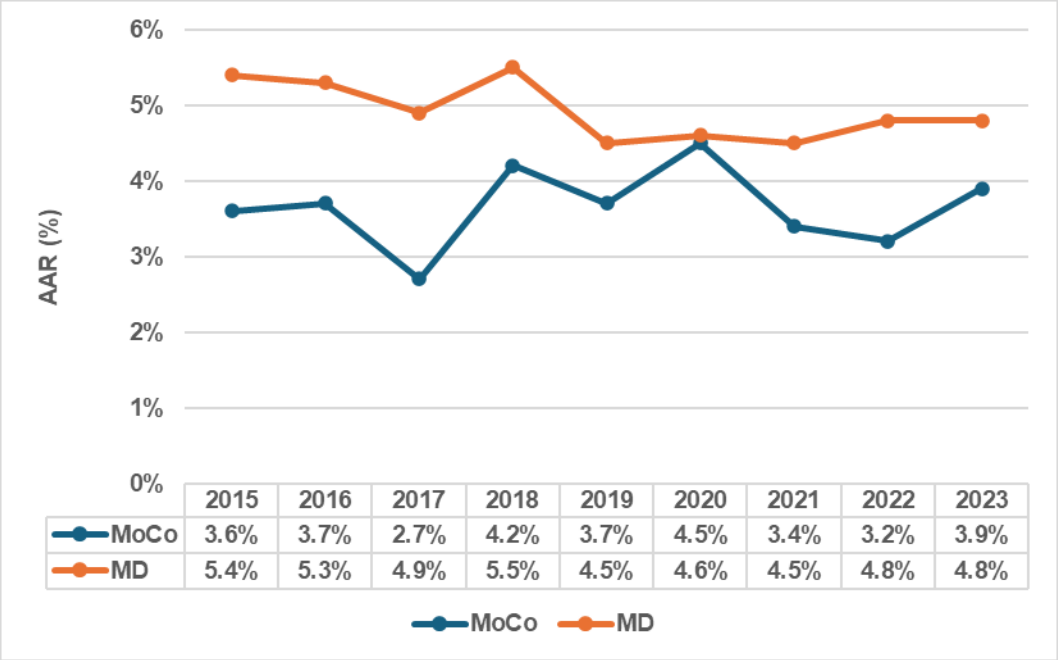
ER Visits

Table 3. Leading Causes of ER Visits by Year, Montgomery County, 2021-2023

	2021		2022		2023		2021-2023	
	%	Rank	%	Rank	%	Rank	%	Rank
Injuries	18.4	1	17.6	1	17.4	1	17.8	1
Heart Disease*	9.8	2	9.6	2	9.6	2	9.7	2
Mental Health	6.3	3	5.4	3	5.6	3	5.8	3
COVID-19	3.2	4	4.5	4	2.1	6	3.2	5
Chronic Lower Respiratory Disease*	2.8	5	3.2	5	3.8	4	3.3	4
Substance Use Disorder	2.4	6	1.6	7	1.7	7	1.9	7
Diabetes Mellitus*	2.2	7	2.2	6	2.4	5	2.3	6
Cerebrovascular Disease*	0.3	8	0.2	8	0.3	8	0.2	8
Suicide	0.1	9	0.1	9	0.1	9	0.1	9
All Other Causes	54.6		55.6		57.0		55.7	

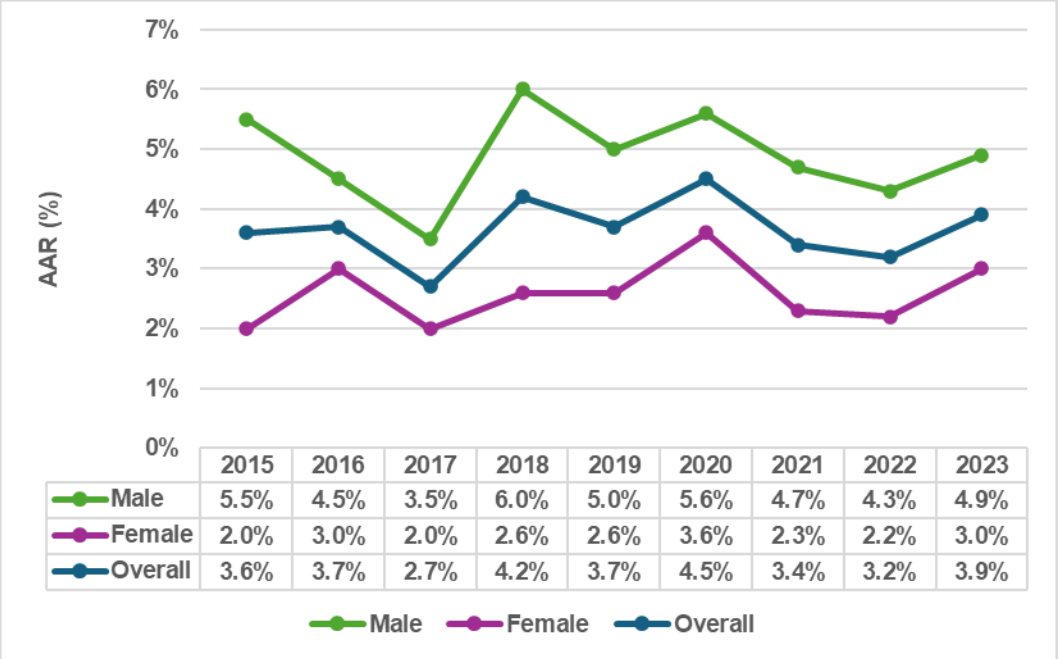
*Indicates chronic diseases

Figure 16. Heart Disease Prevalence by Year, Montgomery County and Maryland, 2015-2023



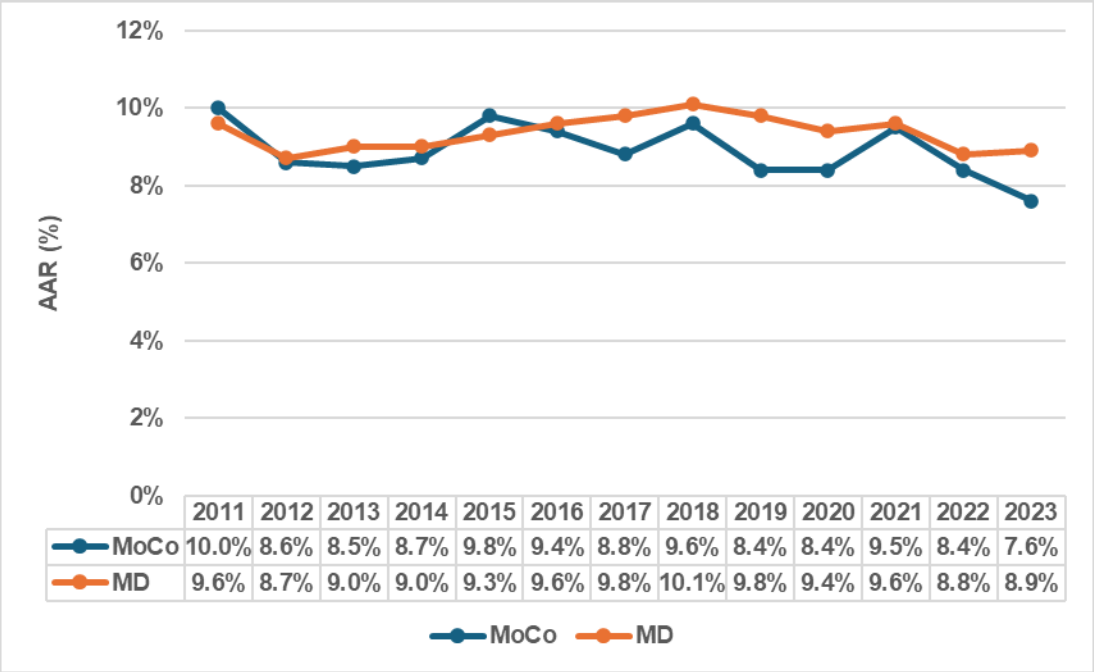
	2015	2016	2017	2018	2019	2020	2021	2022	2023
MoCo	3.6%	3.7%	2.7%	4.2%	3.7%	4.5%	3.4%	3.2%	3.9%
MD	5.4%	5.3%	4.9%	5.5%	4.5%	4.6%	4.5%	4.8%	4.8%

Figure 17. Heart Disease Prevalence by Sex, Montgomery County, 2015-2023



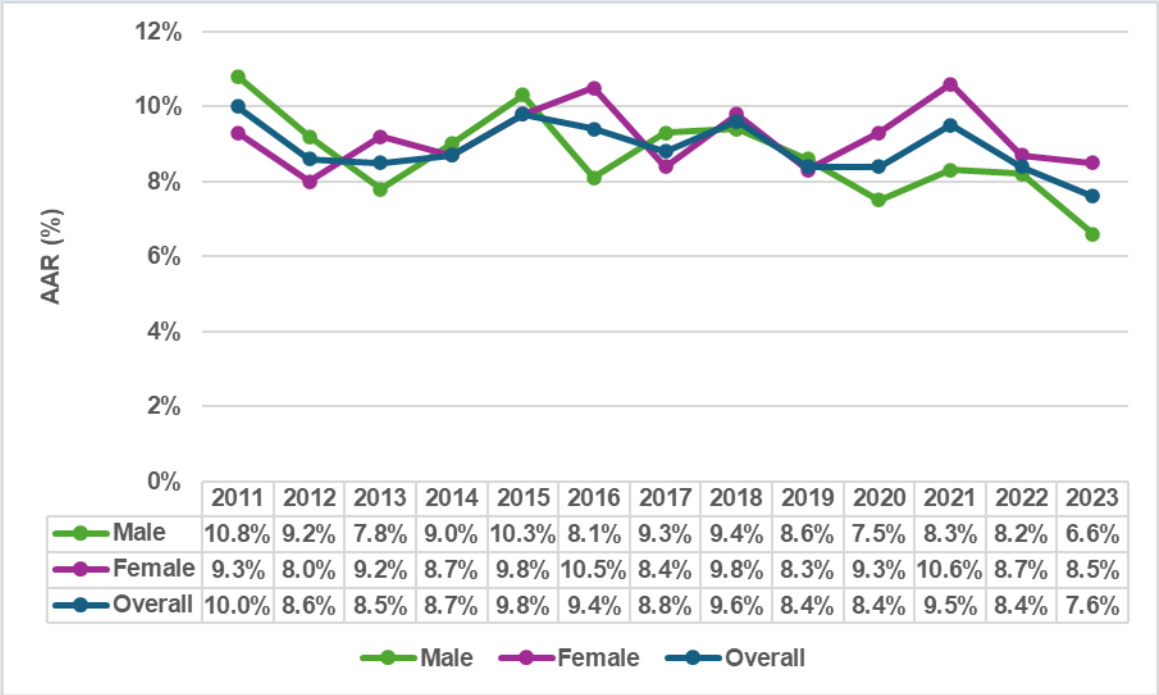
	2015	2016	2017	2018	2019	2020	2021	2022	2023
Male	5.5%	4.5%	3.5%	6.0%	5.0%	5.6%	4.7%	4.3%	4.9%
Female	2.0%	3.0%	2.0%	2.6%	2.6%	3.6%	2.3%	2.2%	3.0%
Overall	3.6%	3.7%	2.7%	4.2%	3.7%	4.5%	3.4%	3.2%	3.9%

Figure 18. Cancer Prevalence by Year, Montgomery County and Maryland, 2011-2023



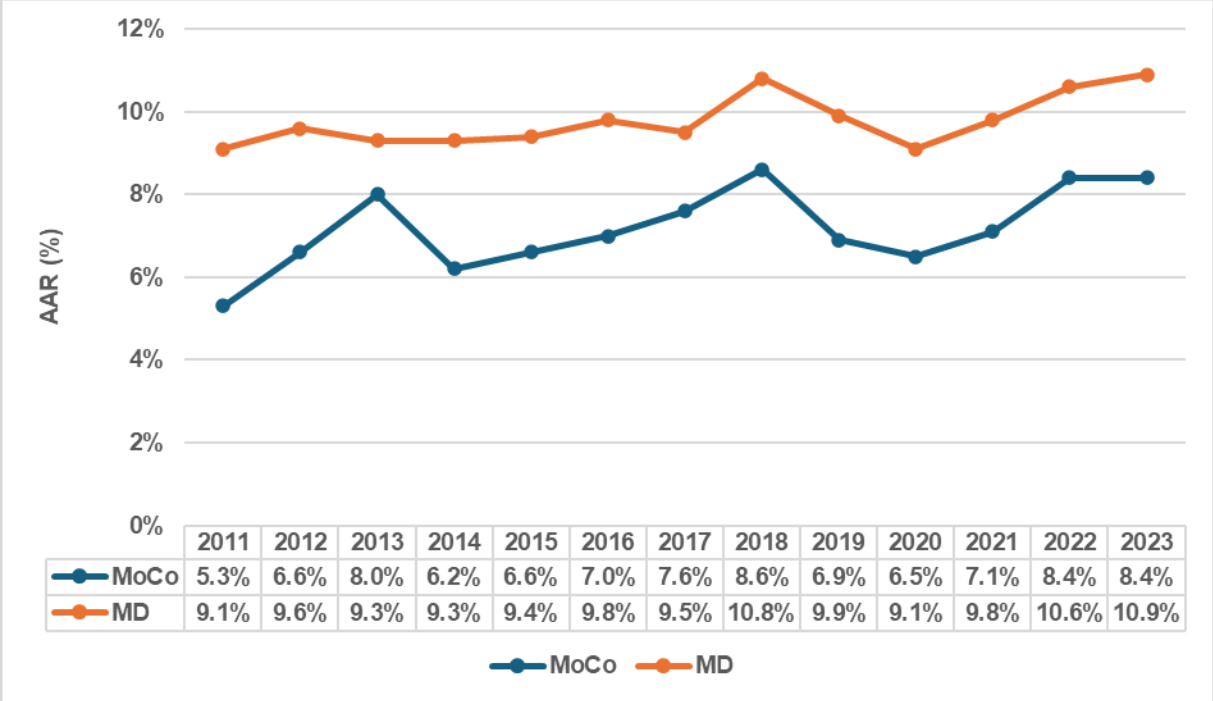
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MoCo	10.0%	8.6%	8.5%	8.7%	9.8%	9.4%	8.8%	9.6%	8.4%	8.4%	9.5%	8.4%	7.6%
MD	9.6%	8.7%	9.0%	9.0%	9.3%	9.6%	9.8%	10.1%	9.8%	9.4%	9.6%	8.8%	8.9%

Figure 19. Cancer Prevalence by Sex, Montgomery County, 2011-2023



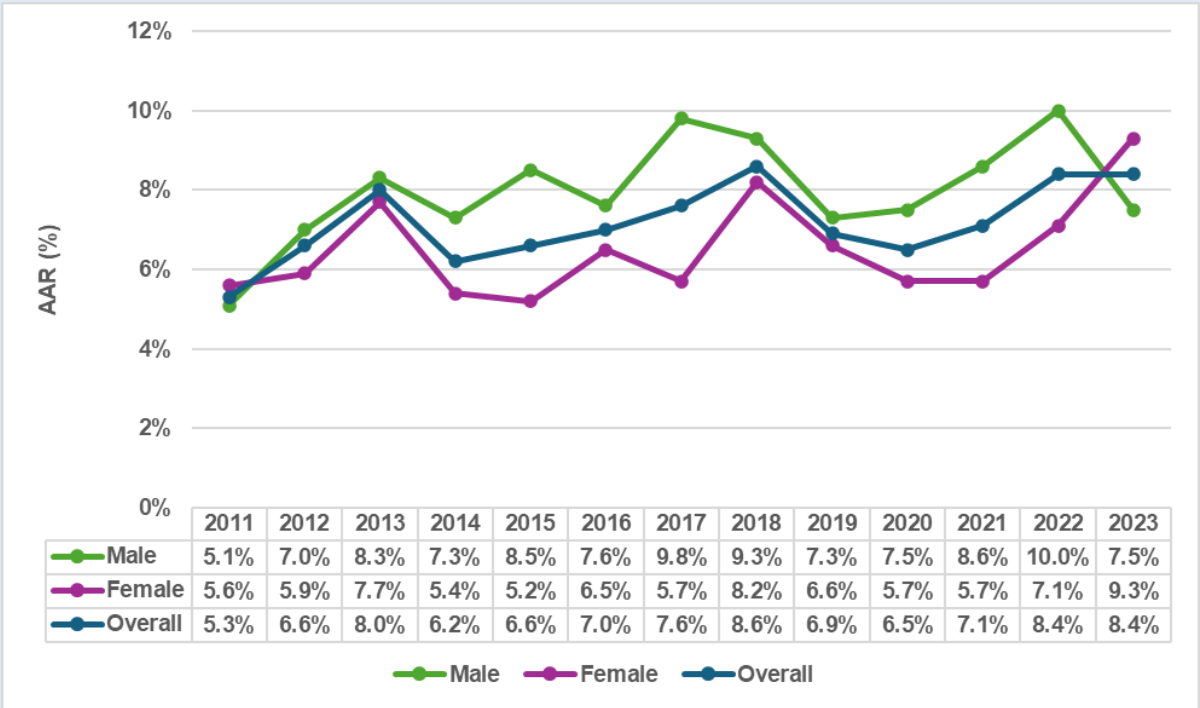
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Male	10.8%	9.2%	7.8%	9.0%	10.3%	8.1%	9.3%	9.4%	8.6%	7.5%	8.3%	8.2%	6.6%
Female	9.3%	8.0%	9.2%	8.7%	9.8%	10.5%	8.4%	9.8%	8.3%	9.3%	10.6%	8.7%	8.5%
Overall	10.0%	8.6%	8.5%	8.7%	9.8%	9.4%	8.8%	9.6%	8.4%	8.4%	9.5%	8.4%	7.6%

Figure 20. Diabetes Prevalence by Year, Montgomery County and Maryland, 2011-2023



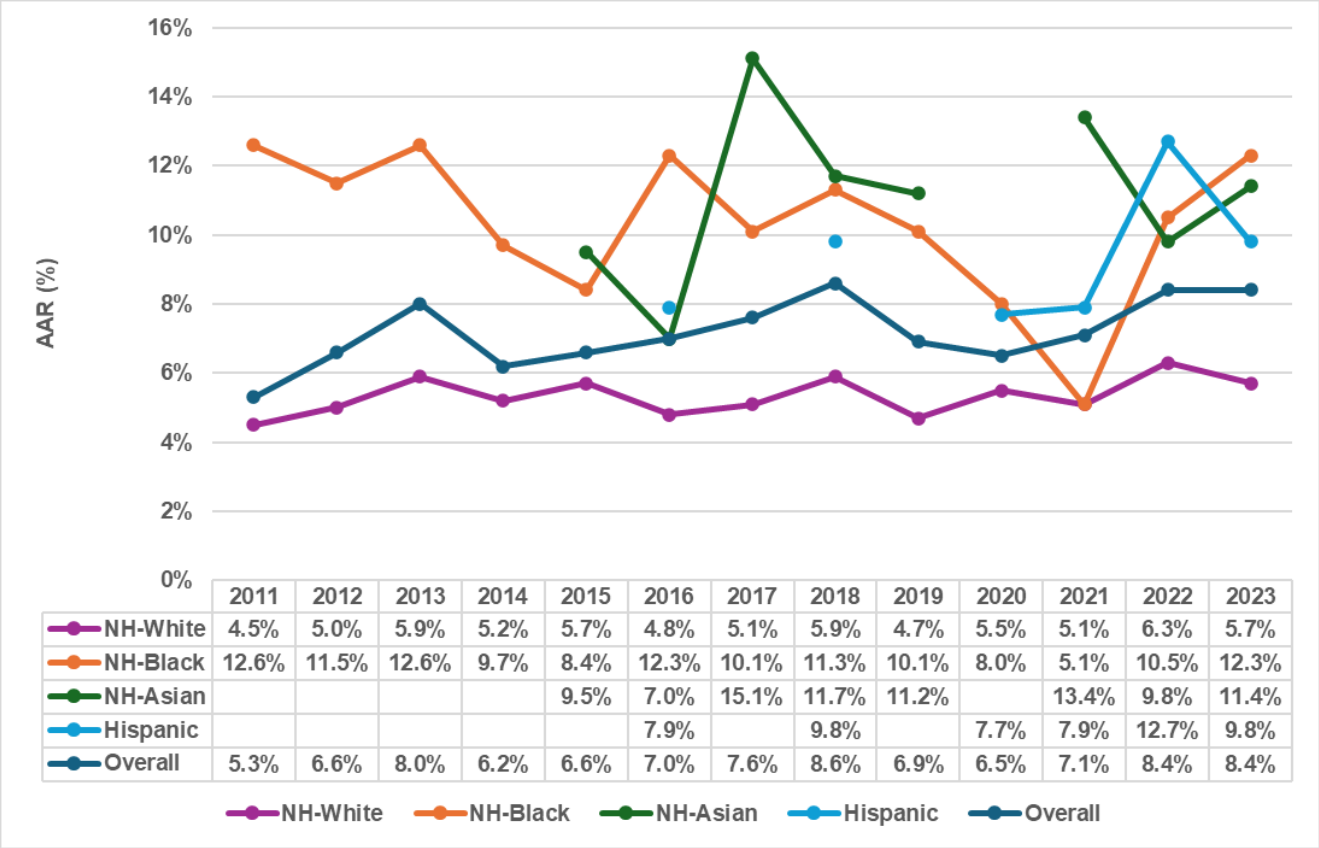
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MoCo	5.3%	6.6%	8.0%	6.2%	6.6%	7.0%	7.6%	8.6%	6.9%	6.5%	7.1%	8.4%	8.4%
MD	9.1%	9.6%	9.3%	9.3%	9.4%	9.8%	9.5%	10.8%	9.9%	9.1%	9.8%	10.6%	10.9%

Figure 21. Diabetes Prevalence by Sex, Montgomery County, 2011-2023



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Male	5.1%	7.0%	8.3%	7.3%	8.5%	7.6%	9.8%	9.3%	7.3%	7.5%	8.6%	10.0%	7.5%
Female	5.6%	5.9%	7.7%	5.4%	5.2%	6.5%	5.7%	8.2%	6.6%	5.7%	5.7%	7.1%	9.3%
Overall	5.3%	6.6%	8.0%	6.2%	6.6%	7.0%	7.6%	8.6%	6.9%	6.5%	7.1%	8.4%	8.4%

Figure 22. Diabetes Prevalence by Race/Ethnicity, Montgomery County, 2011-2023

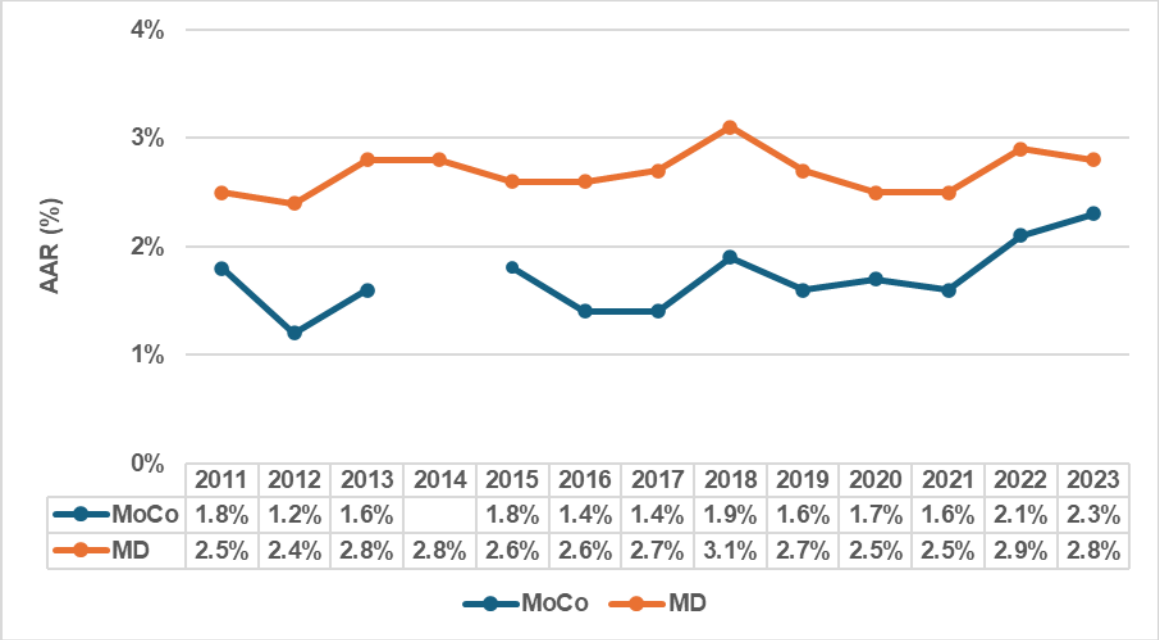


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NH-White	4.5%	5.0%	5.9%	5.2%	5.7%	4.8%	5.1%	5.9%	4.7%	5.5%	5.1%	6.3%	5.7%
NH-Black	12.6%	11.5%	12.6%	9.7%	8.4%	12.3%	10.1%	11.3%	10.1%	8.0%	5.1%	10.5%	12.3%
NH-Asian					9.5%	7.0%	15.1%	11.7%	11.2%		13.4%	9.8%	11.4%
Hispanic						7.9%		9.8%		7.7%	7.9%	12.7%	9.8%
Overall	5.3%	6.6%	8.0%	6.2%	6.6%	7.0%	7.6%	8.6%	6.9%	6.5%	7.1%	8.4%	8.4%

*NH-Asian demographic data not reportable for the following years: 2011, 2012, 2013, 2014, 2020

**Hispanic demographic data not reportable for the following years: 2011, 2012, 2013, 2014, 2015, 2017, 2019

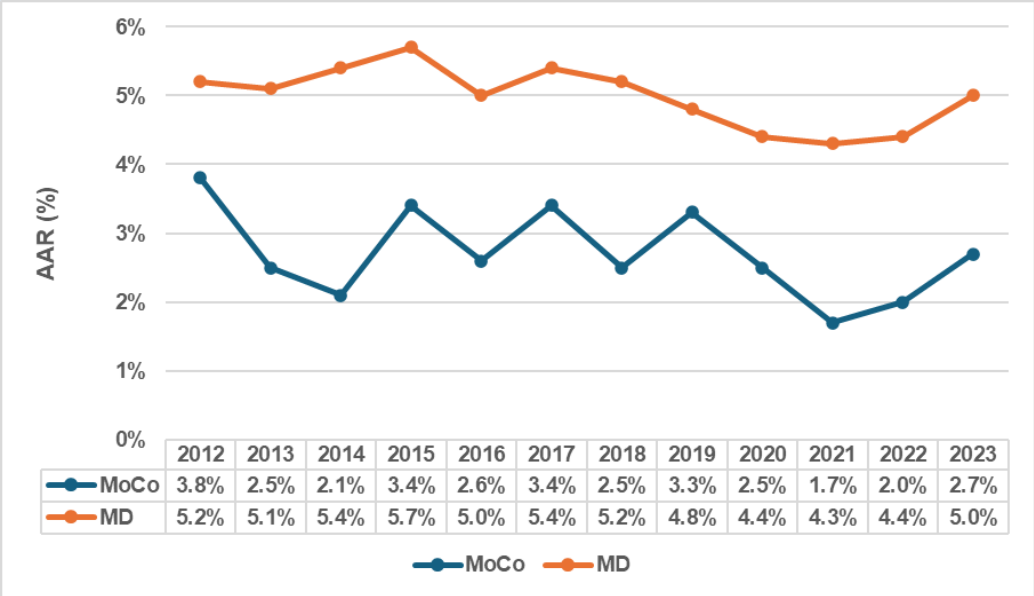
Figure 23. Stroke Prevalence by Year, Montgomery County and Maryland, 2011-2023



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MoCo	1.8%	1.2%	1.6%		1.8%	1.4%	1.4%	1.9%	1.6%	1.7%	1.6%	2.1%	2.3%
MD	2.5%	2.4%	2.8%	2.8%	2.6%	2.6%	2.7%	3.1%	2.7%	2.5%	2.5%	2.9%	2.8%

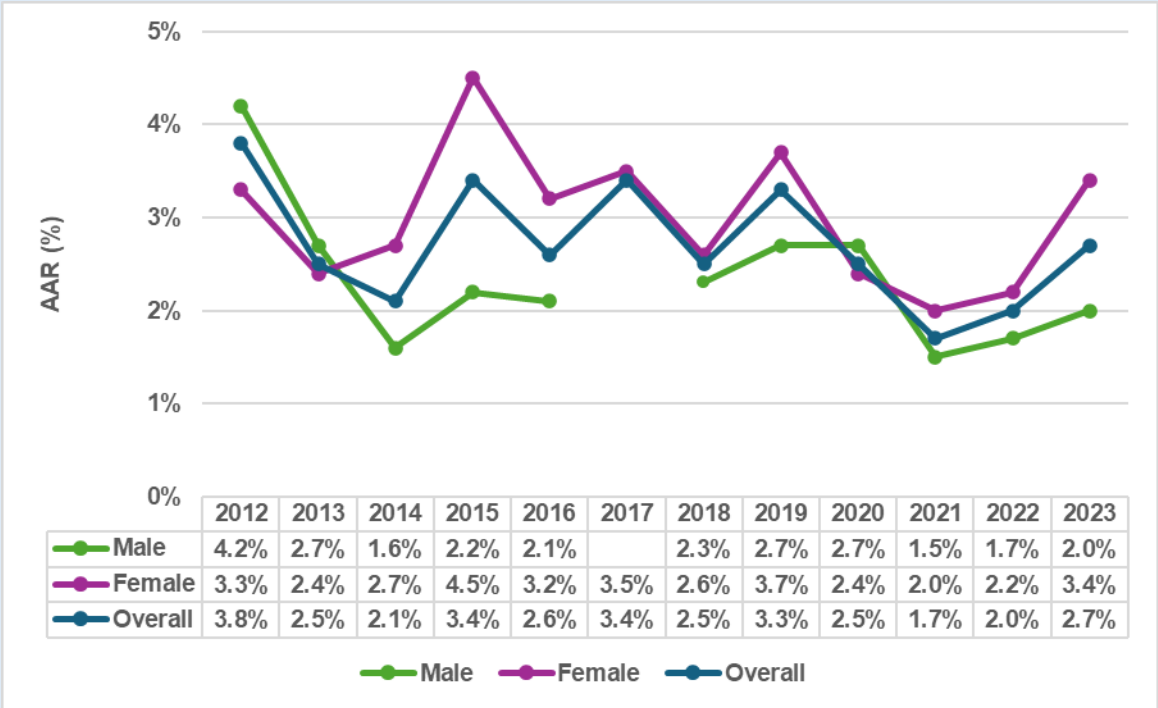
*Montgomery County data not reportable for 2014

Figure 24. COPD Prevalence by Year, Montgomery County and Maryland, 2012-2023



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MoCo	3.8%	2.5%	2.1%	3.4%	2.6%	3.4%	2.5%	3.3%	2.5%	1.7%	2.0%	2.7%
MD	5.2%	5.1%	5.4%	5.7%	5.0%	5.4%	5.2%	4.8%	4.4%	4.3%	4.4%	5.0%

Figure 25. COPD Prevalence by Sex, Montgomery County, 2012-2023



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Male	4.2%	2.7%	1.6%	2.2%	2.1%		2.3%	2.7%	2.7%	1.5%	1.7%	2.0%
Female	3.3%	2.4%	2.7%	4.5%	3.2%	3.5%	2.6%	3.7%	2.4%	2.0%	2.2%	3.4%
Overall	3.8%	2.5%	2.1%	3.4%	2.6%	3.4%	2.5%	3.3%	2.5%	1.7%	2.0%	2.7%

*Male demographic data not reportable for 2017

DEMOGRAPHICS, SOCIAL DETERMINANTS, AND HEALTHCARE ACCESS

Understanding Montgomery County's population size and characteristics is essential to addressing the health needs of county residents. Factors such as population growth, density, geographic distribution, age, race, ethnicity, and migration patterns can affect the healthcare resources needed, the cost of care, and the health conditions of different population groups. Risks associated with developing various diseases and health conditions differ among population groups and change over time.

Socioeconomic status (SES) is a key determinant of health that describes a person's position in society based on their education level, income, and occupation[4]. SES is well established as a fundamental cause of disease and health disparities, influencing health outcomes over time[5].

Previous studies have shown SES to be well-correlated with cardiovascular disease, diabetes, life expectancy, obesity, and mental health[6]. For example, among those with diabetes, lower SES is associated with factors that contribute to poor health outcomes, such as limited access to preventive care, poor metabolic control, and psychological distress[7]. SES underlies environmental exposure, health behaviors, and access to health care, and is associated with many health problems and conditions.

Social determinants of health, the conditions in which people are born, grow, live, work, and age, affect a wide range of health outcomes and disparities[8,9]. Food deserts, or neighborhoods with limited access to affordable and healthy foods, increase exposure to unhealthy food environments. People living in such areas are at a higher risk of developing diabetes, cardiovascular disease, obesity, and additional chronic conditions over time due to poor nutrition. Addressing social determinants of health is crucial for managing and improving long-term health outcomes for all people.

Demographics

- In 2023, the County's population was over 1.05 million (Table 4).
- The sex distribution in the County is consistent over time and is similar to that of Maryland and the U.S. (Table 4).
- The County's population is aging over time; the age distribution of the County is similar to that of Maryland and the U.S. (Table 4).
- The County's population is getting more diverse over time; between 2022-2023, the NH-Black and Hispanic populations have increased while the NH-White and NH-Asian/PI population is decreasing. The county has a higher NH-Asian/PI and Hispanic population than that of Maryland and the U.S. (Table 4).

Table 4. Percent Population Estimates by Selected Characteristics, Montgomery County, Maryland, and U.S., 2019-2023

		2019	2020	2021	2022	2023		
		MoCo	MoCo	MoCo	MoCo	MoCo	MD	US
Total						1,058,474	6,180,253	334,914,896
Sex	Male	48.3	48.4	48.8	48.8	48.7	48.5	49.5
	Female	51.7	51.6	51.2	51.2	51.3	51.5	50.5
Age Group	< 5	6.2	6	5.7	5.7	5.6	5.6	5.5
	5-17	16.9	16.9	16.9	16.8	17	16.4	16.2
	18-34	20.3	20.1	20.1	19.8	19.4	21.3	22.6
	35-64	40.6	40.4	40.6	40.4	40.3	39.6	38
	65+	16.1	16.5	16.6	17.2	17.7	17.3	17.7
Race/Ethnicity	NH-White	44.2	43.7	42	40.1	39.4	47.6	57.1
	NH-Black	19.4	19.6	19	18.5	18.9	29.2	11.8
	NH-Asian/PI	16.1	16.4	15.8	15.4	15	6.6	6.1
	Hispanic	20.1	20	20.1	20.3	21.1	12.6	19.4

Source: American Community Survey, US Census.

Social Determinants

Families Below Poverty Level

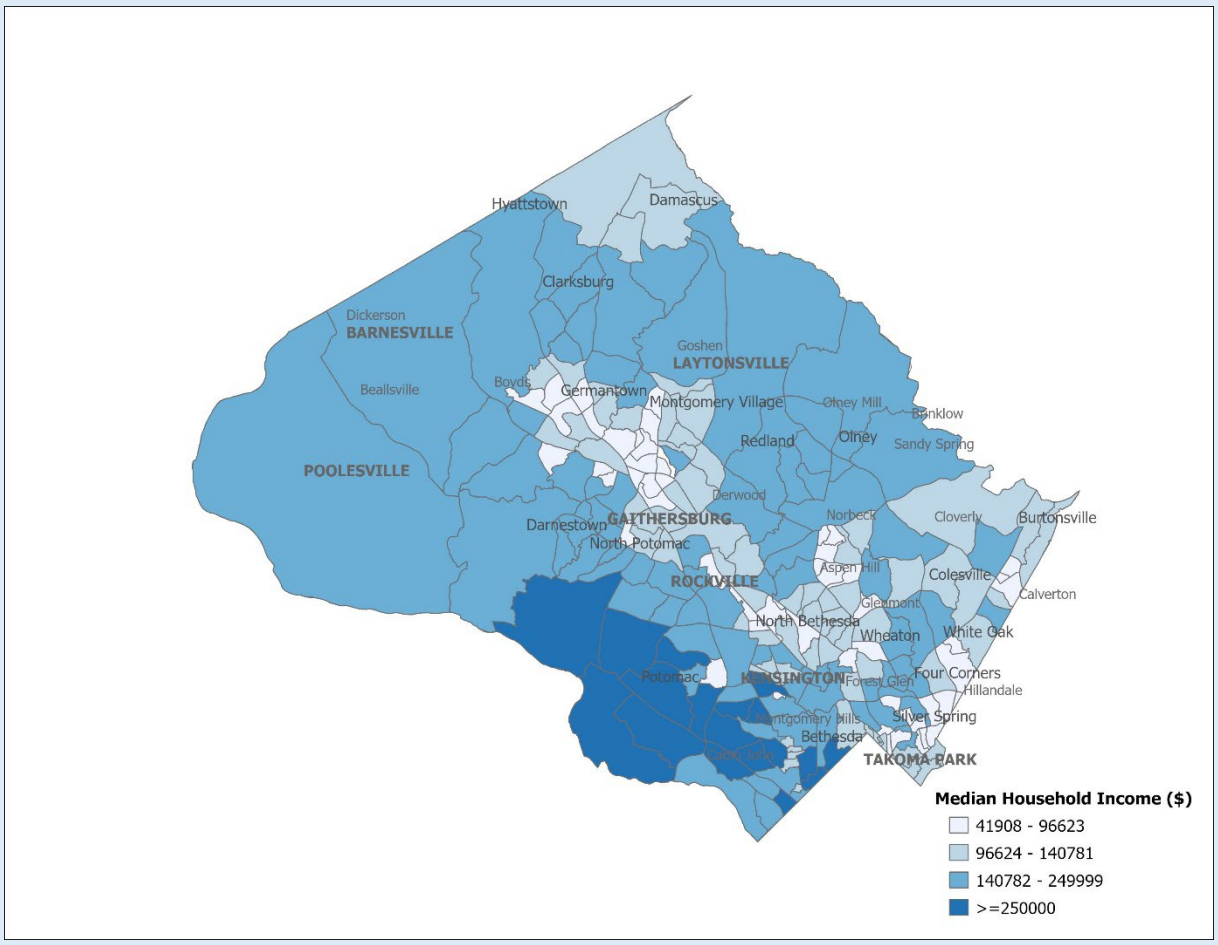
- There is a decreasing trend of percent of families below the poverty level (7% as of 2023) in the County over time (Table 5).
- Hispanic (11.6%) and NH-Black (9.8%) groups have a higher percent of families below the poverty level than NH-White (4.2%) and Asian/PI (4.8%) (Table 5).
- The overall percent families below poverty level in the County (7% as of 2023) is lower than that in Maryland (9.5% as of 2023) and much lower than the U.S. (12.5% as of 2023) (Table 5).

Table 5. Percent Families Below Poverty Level by Race/Ethnicity, Montgomery County, Maryland, and U.S., 2019-2023

	2019	2020	2021	2022	2023		
	MoCo	MoCo	MoCo	MoCo	MoCo	MD	US
All	7.4	6.6	8.6	7.9	7	9.5	12.5
NH-White	3.3	3.5	4.6	3.7	4.2	6.6	9.4
NH-Black	13.6	10.4	12.8	14.3	9.8	13.5	20.8
Asian/PI	5.9	5.9	7.6	7.9	4.8	6.8	9.9
Hispanic	11.5	10	14	11.2	11.6	12.5	16.6

Source: American Community Survey, US Census.

Map 1. Median Household Income by Census Tract, Montgomery County, 2023



Unemployment

- While the County's overall unemployment rate in the County is slightly increasing over time (3.9% as of 2023), this is much lower than the County's unemployment rate in 2021 (6.1%) (Table 6).
- The unemployment rate in the County is lower than that of the Maryland (4%) and the U.S. (4.3%) rate (Table 6).
- Among race/ethnicity groups, NH-Black (5.2%) and Hispanic (5.1%) groups have higher rates of unemployment than other population subgroups (Table 6).

Table 6. Unemployment Rate by Race/Ethnicity, Montgomery County, Maryland, and U.S., 2019-2023

	2019	2020	2021	2022	2023		
	MoCo	MoCo	MoCo	MoCo	MoCo	MD	US
All	3.1	4.6	6.1	3.7	3.9	4	4.3
NH-White	3.1	3.2	4.2	2.5	3.1	2.8	3.4
NH-Black	7.4	7.6	10	5.9	5.2	6	7.2
Asian/PI	3.5	4	5.1	3.9	2.3	2.2	3.5
Hispanic	5.3	5.5	7.2	4.4	5.1	4.2	5.2

Source: American Community Survey, US Census.

Education

- The overall percentage of individuals with a college education or higher in the County has increased over time and is consistent across all race/ethnicity groups (Table 7).
- The percent of individuals with a college education or higher in the County is much higher than that in Maryland and the U.S. and is consistent across all race/ethnicity groups (Table 7).
- Among race/ethnicity groups, NH-White and Asian/PI groups have higher percentages of college education or higher than other population subgroups (Table 7).

Table 7. Percent Individuals with College Degree or Higher by Race/Ethnicity, Montgomery County, Maryland, and U.S., 2019-2023

	2019	2020	2021	2022	2023		
	MoCo	MoCo	MoCo	MoCo	MoCo	MD	US
All	57.2	59.2	60.9	60.9	61	43.8	35.7
NH-White	72.5	72.8	76.4	75.7	75.7	49.4	39.5
NH-Black	44.8	45.3	47.1	47.2	48.3	34.5	25.4
Asian/PI	68.5	68.5	67.2	69.8	69.6	66.2	57.4
Hispanic	24.6	26.8	28	28.3	30.4	25.5	20.4

Source: American Community Survey, US Census.

Food Insecurity

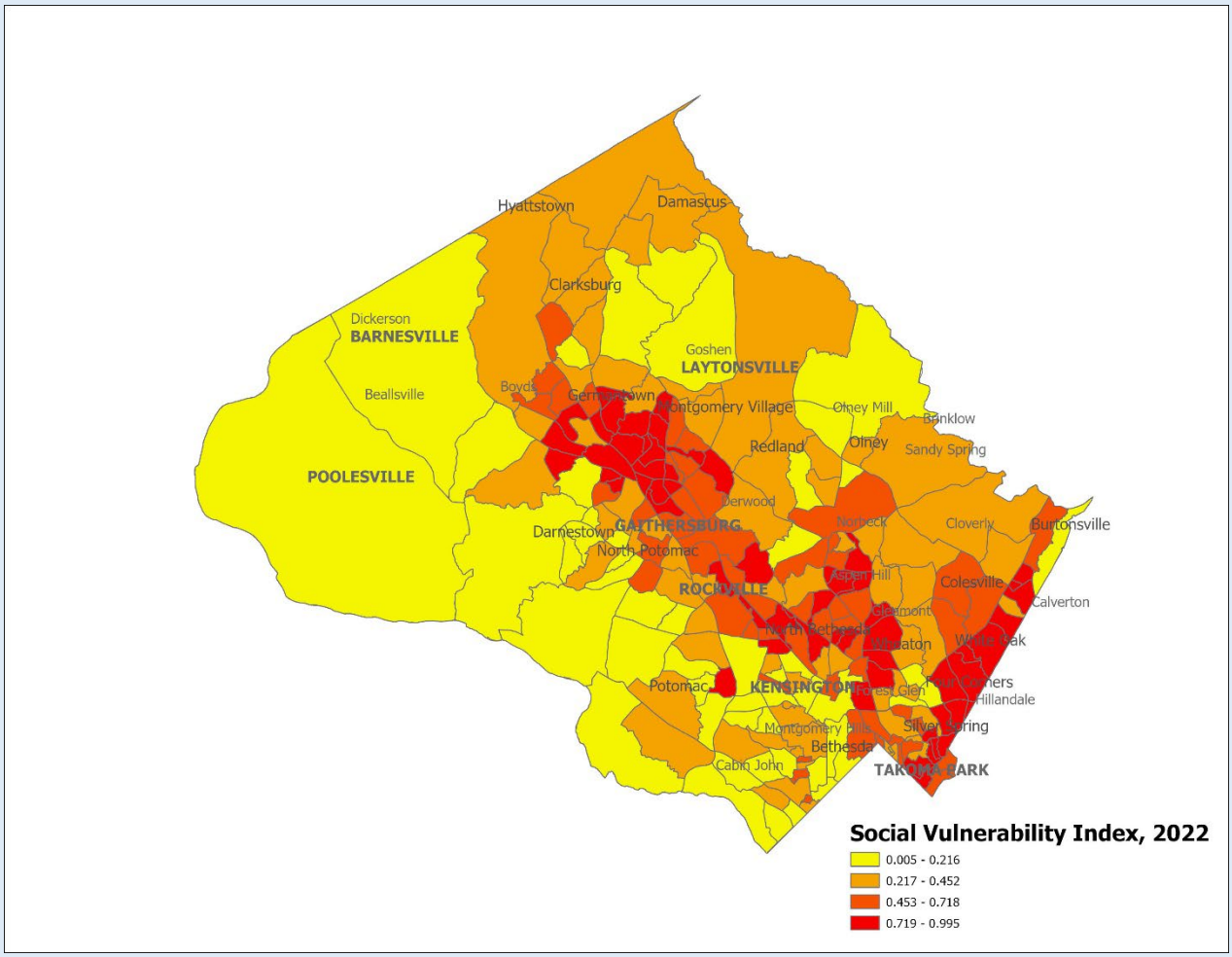
- The overall percentage of food insecurity in the County increased until 2022, then decreased in 2023 (Table 8).
- The percentage of individuals with food insecurity in the County is lower than that of Maryland and the U.S. (Table 8).

Table 8. Percent Food Insecurity, Montgomery County, Maryland, and U.S., 2019-2023

	2019	2020	2021	2022	2023
MoCo	6	6	8	9	8
MD	11	11	11	11	9
US*	13	13	12	11	12

Source: County Health Ranking https://www.countyhealthrankings.org/

Map 2. Social Vulnerability Index by Census Tract, Montgomery County, 2022



The social vulnerability index (SVI) describes areas where communities are most socially vulnerable to disasters. The SVI uses Census data to determine the social vulnerability of every county and tract based on 15 social factors, including poverty, lack of vehicle access, and crowded housing.

Healthcare Access

Health Insurance

- The overall percentage of individuals without health insurance in the County decreased until 2021, increased in 2022, then decreased again. This is different from Maryland, which saw an increase in individuals without health insurance through 2023. In the U.S., the percentage of individuals without health insurance decreased through 2023 (Table 9).
- The percentage of individuals without health insurance in the County is higher than Maryland but lower than the U.S. (Table 9).
- Montgomery Cares program covers roughly 1.6% of uninsured residents.

Table 9. Percent Individuals without Health Insurance, Montgomery County, Maryland, and U.S., 2019-2023

	2019	2020	2021	2022	2023
MoCo	7.5%	6.8%	6.4%	7.4%	7.0%
MD	6.1%	5.9%	6.1%	6.1%	6.3%
US	8.8%	8.7%	8.6%	8.0%	7.9%

Source: American Community Survey, US Census.

8.1% (95% CI: 6.5-9.7) of adults age 18+ do not have health insurance in Montgomery County, as compared to 7.7% (95% CI: 7.0-8.5) in Maryland.

Target: 7.6% individuals without health insurance
Current Status: Target met per 2023 ACS data

Population/PCP Ratio

- The overall Population/PCP (primary care physician) ratio in the County is consistently lower than Maryland (Table 10).
- Population/PCP ratio fluctuates in the County, similar to Maryland, and there is an increasing trend in the U.S. (Table 10).

Table 10. Population/PCP Ratio, Montgomery County Maryland, and U.S., 2019-2023

	2019	2020	2021	2022	2023
MoCo	740	740	720	720	720
MD	1140	1140	1130	1120	1130
US*	225.2	236.4	245.1	259.2	271.1

* 90th percentile

Source: County Health Ranking https://www.countyhealthrankings.org/; America's Health Ranking https://www.americashealthrankings.org/

85.4% (95% CI: 83.3-87.6) of adults age 18+ have one or more personal doctor/health care provider in Montgomery County, as compared to 87.8% (95% CI: 86.9-88.7) in Maryland. The County has not yet met this Healthy People 2030 national target.

76.8% (95% CI: 73.9-79.7) of adults age 18+ visited a doctor for a routine checkup within the past year in Montgomery County, as compared to 79.6% (95% CI: 78.5 -80.6) in Maryland.

9.9% (95% CI: 7.9-11.9) of adults age 18+ are unable to see a doctor within the past year due to cost in Montgomery County, as compared to 10.4% (95% CI: 9.6-11.3) in Maryland. The County has not yet met this Healthy People 2030 national target.

Target: 95.1% of people have a usual primary care provider
Target: 5.9% of people are unable to obtain medical care due to cost

CHRONIC DISEASES IN MONTGOMERY COUNTY

Overview of Chronic Diseases

Chronic diseases are long-term health conditions that last one year or more and require ongoing medical attention and treatment. They are the leading causes of death worldwide. These include cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes. According to the World Health Organization, chronic diseases caused 75% of non-pandemic related deaths globally, killing at least 43 million people in 2021[10]. Chronic diseases are a major cause of morbidity and mortality worldwide, disproportionately affecting people in low- and middle-income countries.

Chronic diseases are a significant public health challenge globally and nationally. According to the Centers for Disease Control and Prevention, approximately 6 in 10 adults in the United States live with at least one chronic disease, and 4 in 10 adults have two or more chronic conditions[11]. Heart disease and cancer are two of the leading causes of death and disability in the U.S.[11,12]. Chronic diseases are similarly among the leading causes of death in Maryland. According to the Maryland Behavioral Risk Factor Surveillance System, 51.6% of all people in Maryland reported having at least one chronic health condition in 2020[13]. Chronic diseases have a significant burden not just on individual health, but on the U.S. health care system overall. In 2022, approximately 90% of the $4.5 trillion spent on health care was to manage and treat chronic and mental health conditions[14].

Risk of developing chronic diseases is due to a combination of lifestyle factors and social determinants of health. Many chronic diseases are caused by modifiable risk factors and behaviors, such as tobacco use, unhealthy diet, physical inactivity, and excessive alcohol use[11]. Disparities in social determinants of health, such as unsafe environments, food insecurity, unaffordable housing, and limited access to health care, influence these behaviors and as a result, can increase chronic disease risk.

Chronic diseases are still largely preventable and manageable through early detection, interventions, and lifestyle changes. Remaining tobacco-free, maintaining a healthy diet, achieving recommended physical activity levels, limiting alcohol use, and receiving appropriate health screenings can help alleviate, delay, and prevent chronic diseases and conditions[15]. Addressing the current standing of chronic diseases in our population is critical for improving health outcomes, alleviating economic burden, and overall improving quality of life and well-being for all people.

Cardiovascular Disease

Cardiovascular disease is the leading cause of death worldwide. Cardiovascular disease includes all conditions affecting the heart and blood vessels, such as heart disease, heart attack, and stroke. According to the World Health Organization, approximately 17.9 million people died from cardiovascular disease in 2019 (about 32% of all deaths in the world), and 85% of these deaths were due to heart attack and stroke[16]. Heart disease is the leading cause of death and disability in the United States[17]. In 2022, approximately 941,652 people in the U.S. died from cardiovascular disease-related conditions[18]. Cardiovascular disease burden is similarly high in Maryland as heart disease and stroke are the first and third leading causes of death for residents respectively[19].

Key risk factors of cardiovascular disease include tobacco use, physical inactivity, poor nutrition, and excessive alcohol use. These behaviors can lead to high blood pressure, high cholesterol, obesity, and diabetes – conditions that increase cardiovascular disease risk. While these risk factors are preventable, the burden of cardiovascular disease continues to worsen in the U.S. The American Health Association projects over 184 million adults (over 61% of adults) will have some form of cardiovascular disease by 2050[20]. Prevalence of high blood pressure, diabetes, and obesity are also projected to increase[20]. As the U.S. population continues to become older and more diverse, cardiovascular disease-related outcomes are expected to worsen those who are Native American, Black, Hispanic, or multiracial. Prevention efforts are critical to reduce the burden of cardiovascular disease and disability across the country.

5.7% (95% CI: 4.2-7.1) adults aged 18+ have been told they have cardiovascular disease in Montgomery County, as compared to 6.8% (95% CI: 6.2-7.3) in Maryland.

35.3% (95% CI: 31.9-38.6) adults age 18+ are overweight in Montgomery County, as compared to 34.4% (95% CI: 33.0-35.7) in Maryland.

26.1% (95% CI: 22.8-29.4) adults age 18+ are obese in Montgomery County, as compared to 33.8% (95% CI: 32.4-35.1) in Maryland. The County has met this Healthy People 2030 national target.

3.6% (95% CI: 2.4-4.7) adults age 18+ are current smokers in Montgomery County, as compared to 9.1% (95% CI: 8.3-9.9) in Maryland. The County has met this Healthy People 2030 national target.

67.9% (95% CI: 64.5-71.4) adults aged 18+ have daily fruit consumption in Montgomery County, as compared to 62.5% (95% CI: 61.1-63.8) in Maryland.

83.0% (95% CI: 80.3-85.7) adults age 18+ have daily vegetable consumption in Montgomery County, as compared to 80.4% (95% CI: 79.3-81.6) in Maryland.

19.1% (95% CI: 16.4-21.8) adults age 18+ have no leisure time physical activity in Montgomery County, as compared to 22.0% (95% CI: 20.9-23.1) in Maryland. The County has met this Healthy People 2030 national target.

29.9% (95% CI: 27.0-32.8) adults aged 18+ have been told they have hypertension in Montgomery County, as compared to 33.1% (95% CI: 32.0-34.2) in Maryland. The County has met this Healthy People 2030 national target.

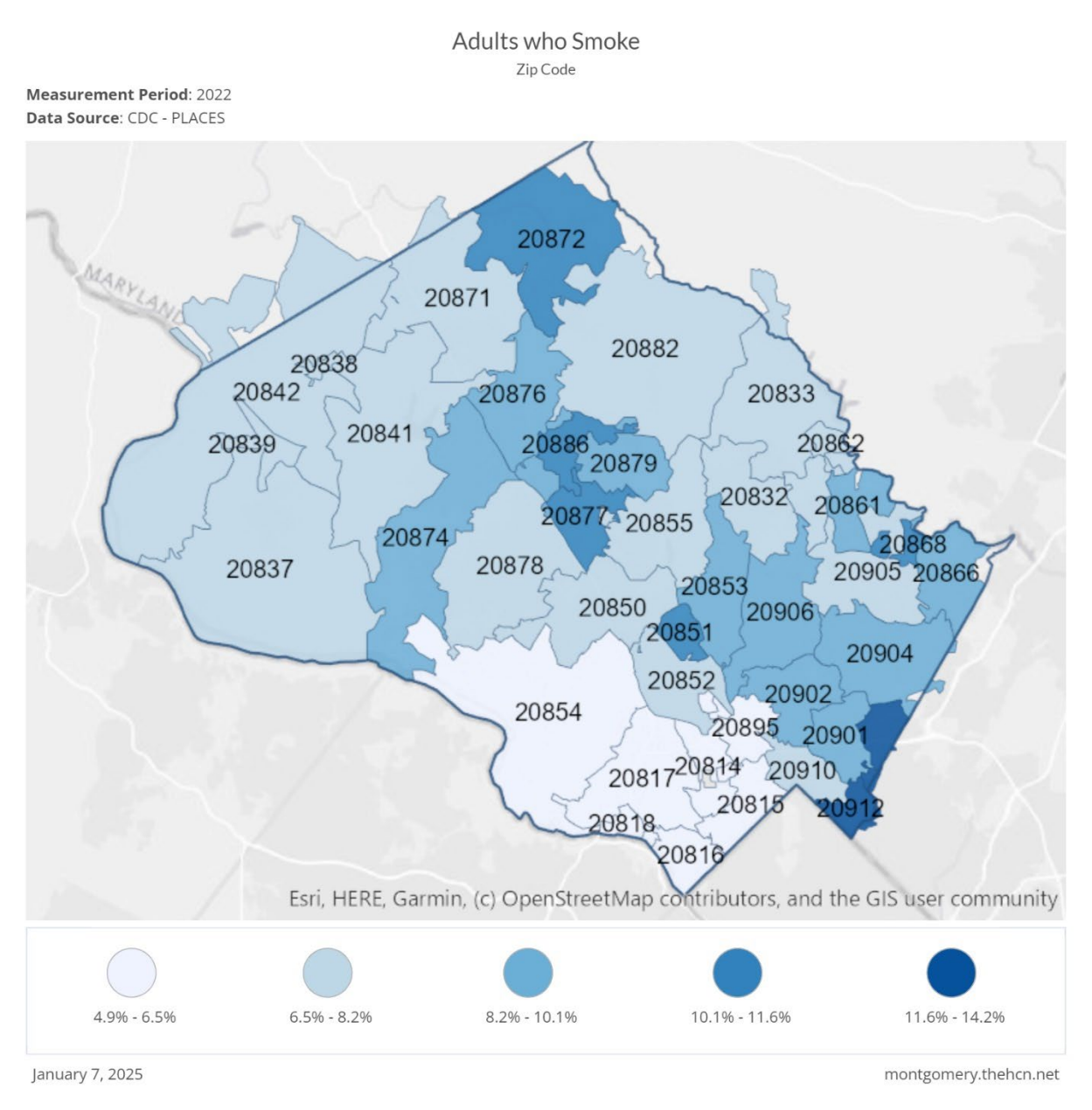
39.2% (95% CI: 35.8-42.6) adults aged 18+ have been told they have high cholesterol in Montgomery County, as compared to 35.4% (95% CI: 34.2-36.7) in Maryland.

Goal: 56.4% of adults aged 18+ are overweight or obese
Current Status: Goal met per BRFSS data

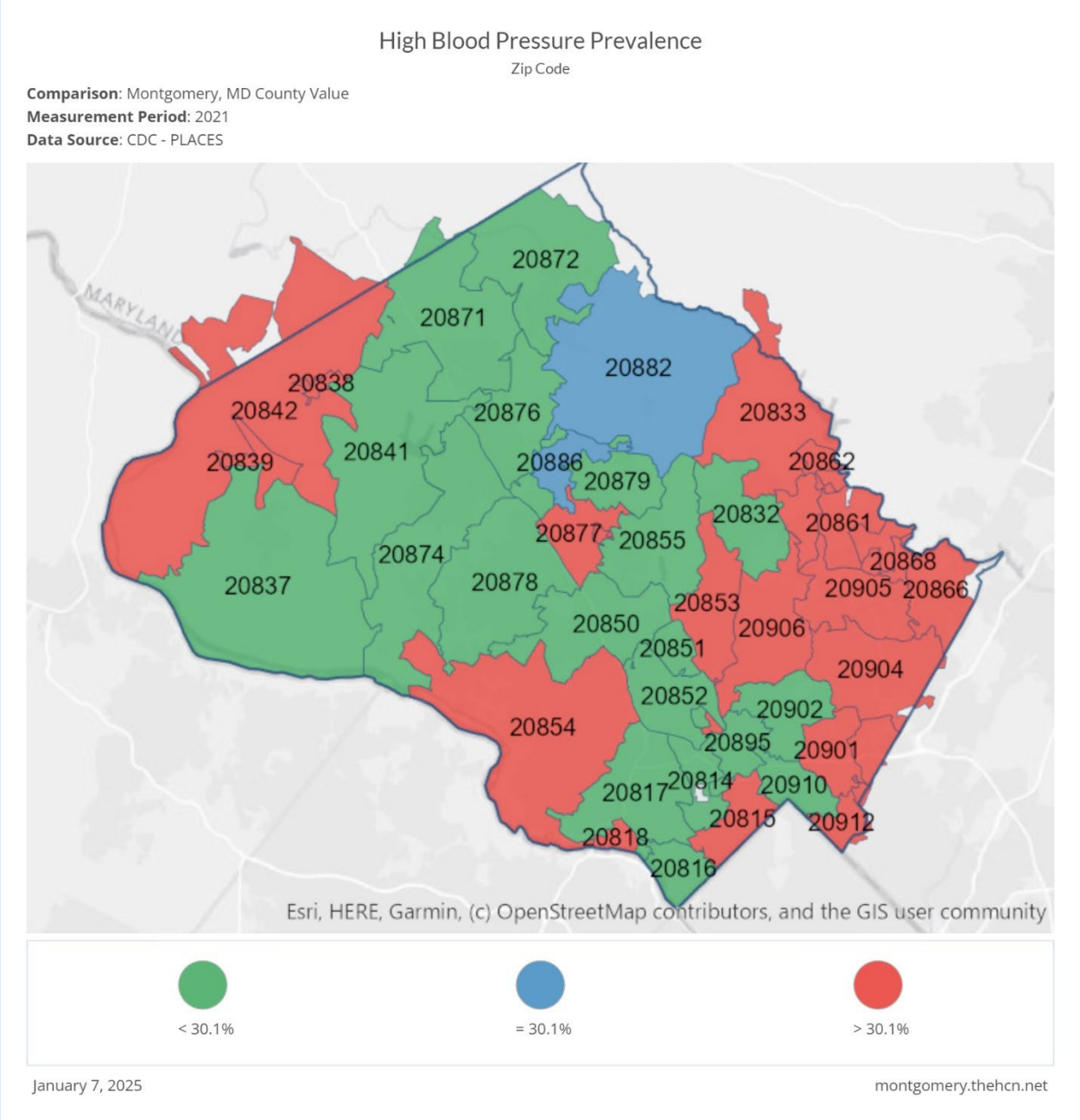
Goal: 22.7% of adults 18+ have high blood pressure
Current Status: Goal not yet met per BRFSS data

Target: 36.0% of adults are obese
Target: 6.1% of adults are current cigarette smokers
Target: 21.8% of adults have no leisure-time physical activity
Target: 41.9% of adults have hypertension

Map 3. Adults Who Smoke by Zip Code, Montgomery County, 2022



Map 4. Prevalence of High Blood Pressure by Zip Code, Montgomery County, 2021



Heart Disease

Heart disease is the leading cause of death in the U.S. and in Maryland. In 2022, approximately 702,880 people, or 1 in 5 people, died from heart disease in the U.S.[21]. Heart disease refers to conditions that affect blood flow to the heart. Common types of heart disease include coronary artery disease, arrhythmia, congenital heart defects, heart failure, and heart valve disease. Coronary artery disease is the most common type of heart disease, causing 371,506 deaths in 2022[21]. This condition can lead to a heart attack, chest pain, or stroke.

This section includes heart disease data and information for Montgomery County:

- Heart disease mortality increased in Montgomery County during the COVID-19 pandemic. Heart disease mortality in the County was consistently lower than that of Maryland and the U.S. (Figure 26).
- Among the population subgroups, NH-Blacks and NH-Whites had higher heart disease mortality than Asians/PI and Hispanics. Males had higher heart disease mortality than females (Figure 27).
- Residents aged 65 and older had the highest heart disease mortality (Figure 28).

Figure 26. Heart Disease Age-Adjusted Mortality Rates, Montgomery County, Maryland, and U.S., 2014-2023

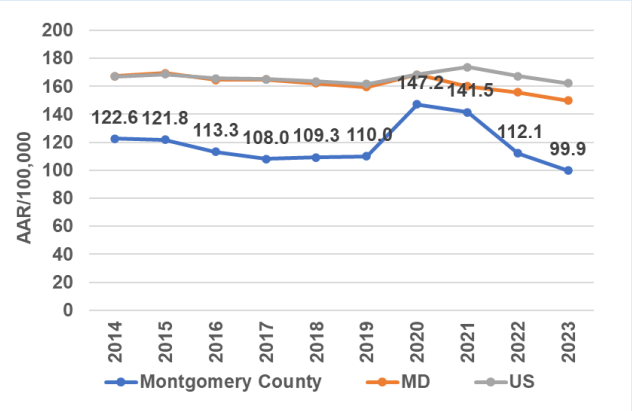
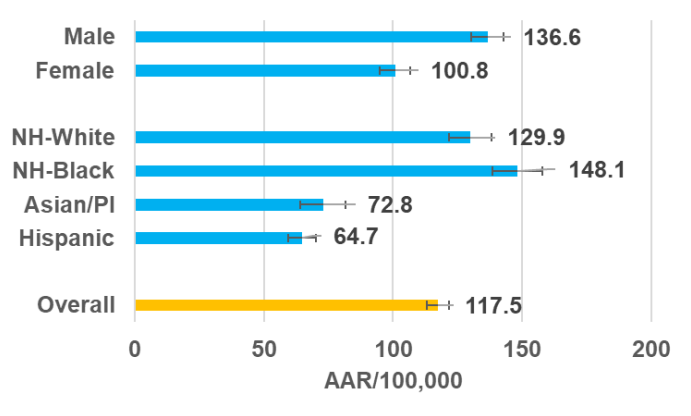


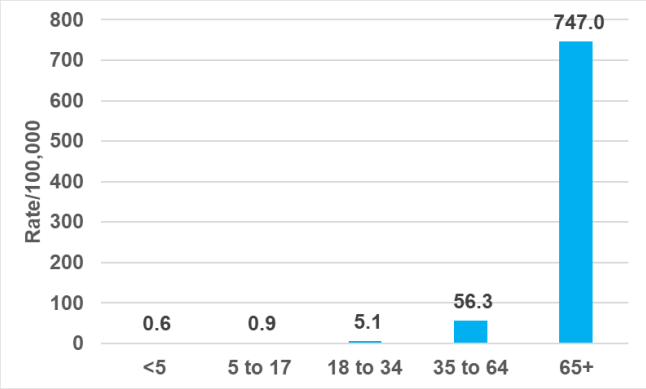
Figure 27. Heart Disease Age-Adjusted Mortality Rates by Sex and Race/Ethnicity, Montgomery County, 2021-2023



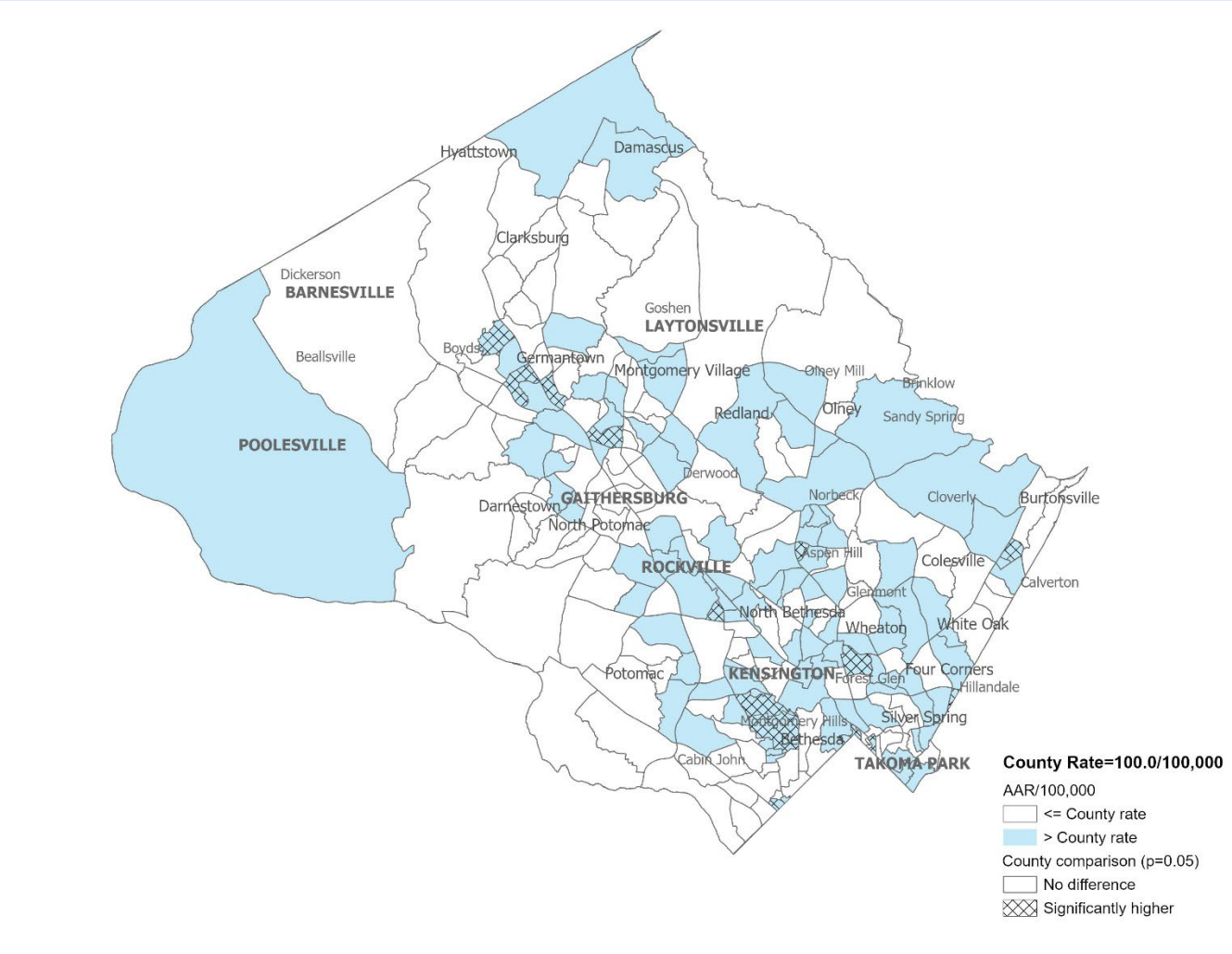
Heart Disease Mortality Age-Adjusted Rate Goal: 102.6/100,000
Current Status: Goal met per 2023 County data

Target: 71.1 coronary heart disease deaths per 100,000 population
Current Status: Target not yet met per 2023 County data

Figure 28. Heart Disease Mortality Rates by Age, Montgomery County, 2021-2023



Map 5. Heart Disease Age-Adjusted Mortality Rates by Census Tract, Montgomery County, 2021-2023



- Heart disease ER visit rates in Montgomery County decreased in 2022, then increased in 2023. Rates in the County were consistently lower than those in Maryland (Figure 29).
- Among the population subgroups, NH-Blacks had the highest rates, followed by Hispanics, NH-Whites, and Asians/PI. Males had higher rates compared to females. (Figure 30).
- Heart disease ER visit rates increase by age. People aged 65 and older had the highest rates (Figure 31).

Figure 29. Heart Disease Related ER Visit Rates, Montgomery County and Maryland, 2013-2023

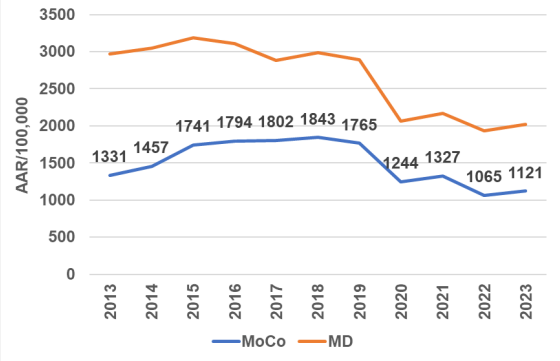
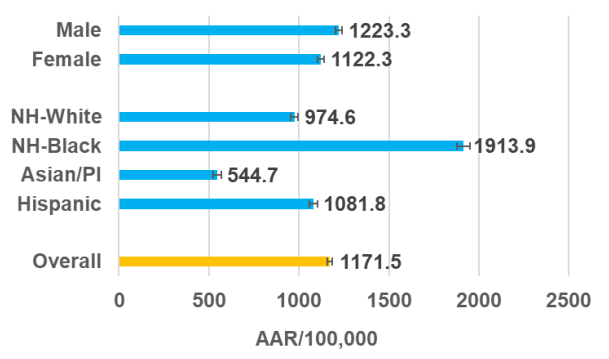
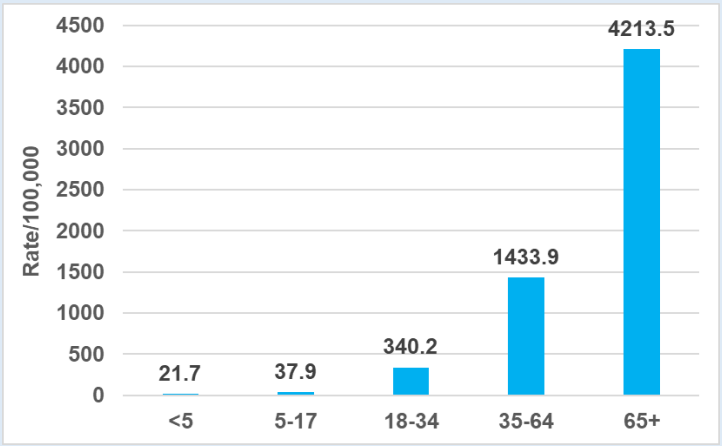


Figure 30. Heart Disease Related ER Visit Age-Adjusted Rates by Sex and Race/Ethnicity, Montgomery County, 2021-2023

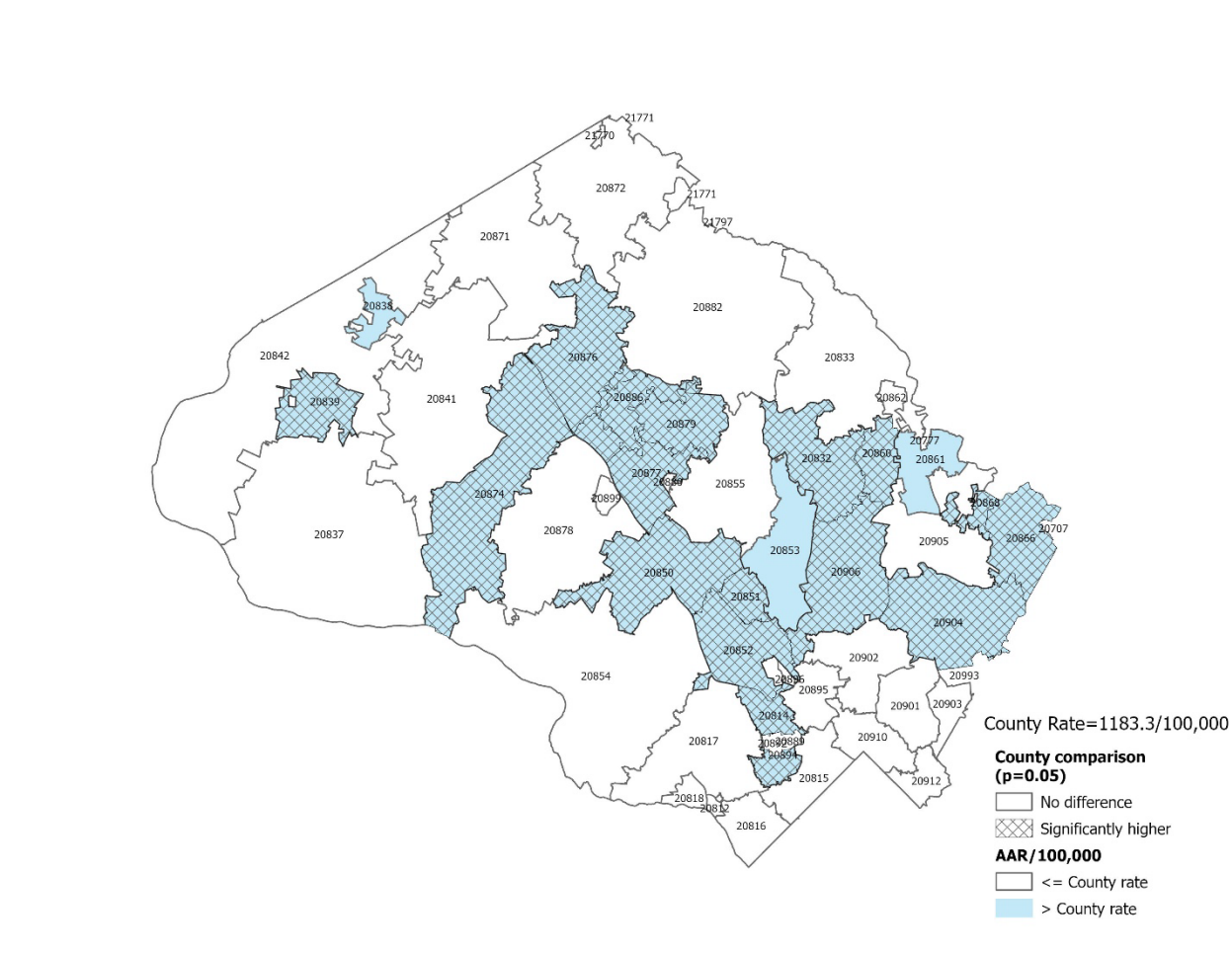


Heart Disease ER Visit Age-Adjusted Rate Goal: 1289.9/100,000
Current Status: Goal met per 2023 County data

Figure 31. Heart Disease Related ER Visit Rates by Age, Montgomery County, 2021-2023



Map 6. Heart Disease Related ER Visit Age-Adjusted Rates by Zip Code, Montgomery County, 2021-2023



MARYLAND BRFSS Behavioral Risk Factor Surveillance System

3.9% (95% CI: 2.7-5.0) adults age 18+ ever told they have heart disease in Montgomery County, as compared to 4.8% (95% CI 4.3-5.2) in Maryland.

1.9% (95% CI: 1.3-2.4) adults aged 18+ ever told have had a heart attack in Montgomery County, as compared to 2.9% (95% CI: 2.5-3.2) in Maryland.

2.8% (95% CI: 1.7-3.9) adults aged 18+ ever told have angina or coronary heart disease in Montgomery County, as compared to 3.1% (95% CI: 2.7-3.4) in Maryland.

Cerebrovascular Disease (Including Stroke)

Cerebrovascular disease, conditions that affect blood flow to the brain, is a leading cause of death in the U.S. and in Maryland. In 2023, cerebrovascular disease caused approximately 162,639 deaths in the U.S.[22]. Stroke is the most common type of cerebrovascular disease. There are two types of strokes, ischemic and hemorrhagic stroke. An ischemic stroke occurs when blood clots block blood vessels to the brain. A hemorrhagic stroke occurs when a blood vessel in the brain ruptures, causing bleeding inside the brain. Stroke is a leading cause of long-term disability, reducing mobility in individuals aged 65 and older [23].

This section includes cerebrovascular disease data and information for Montgomery County:

- Montgomery County had an increasing trend of cerebrovascular disease mortality since 2020. Cerebrovascular disease mortality in the County was consistently lower than that of Maryland and the U.S. (Figure 32).
- Among the population subgroups, NH-Blacks had the highest cerebrovascular mortality. Females had higher cerebrovascular disease mortality compared to males (Figure 33).
- Residents aged 65 and older had the highest cerebrovascular disease mortality (Figure 34).

Figure 32. Cerebrovascular Disease Age-Adjusted Mortality Rates, Montgomery County, Maryland, and U.S., 2014-2023

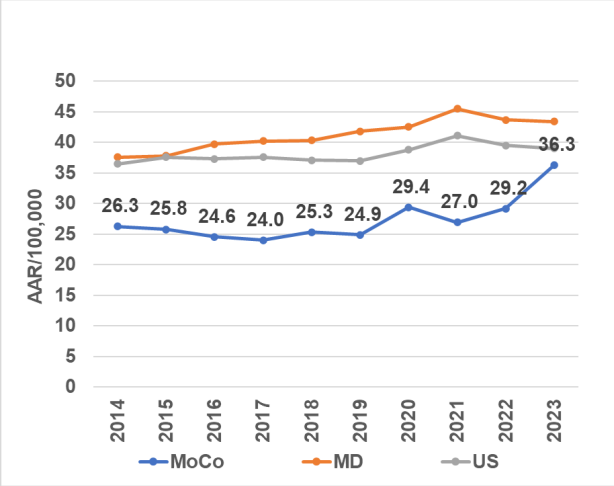
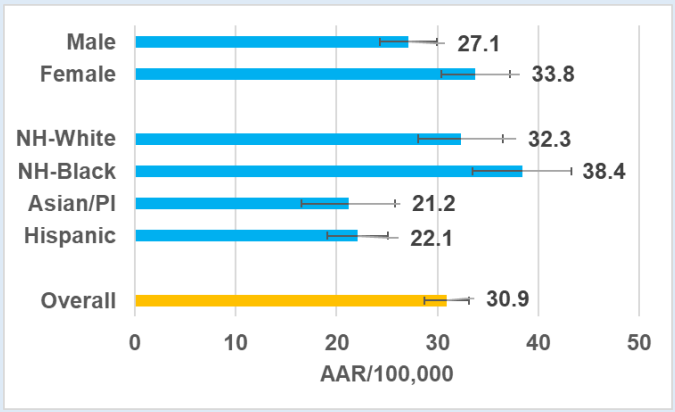
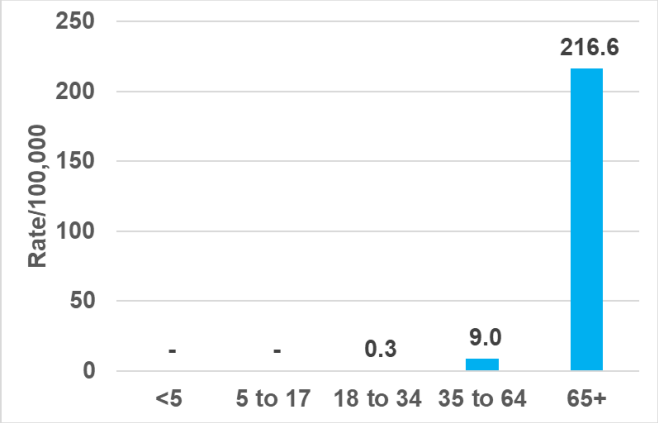


Figure 33. Cerebrovascular Disease Age-Adjusted Mortality Rates by Sex and Race/Ethnicity, Montgomery County, 2021-2023

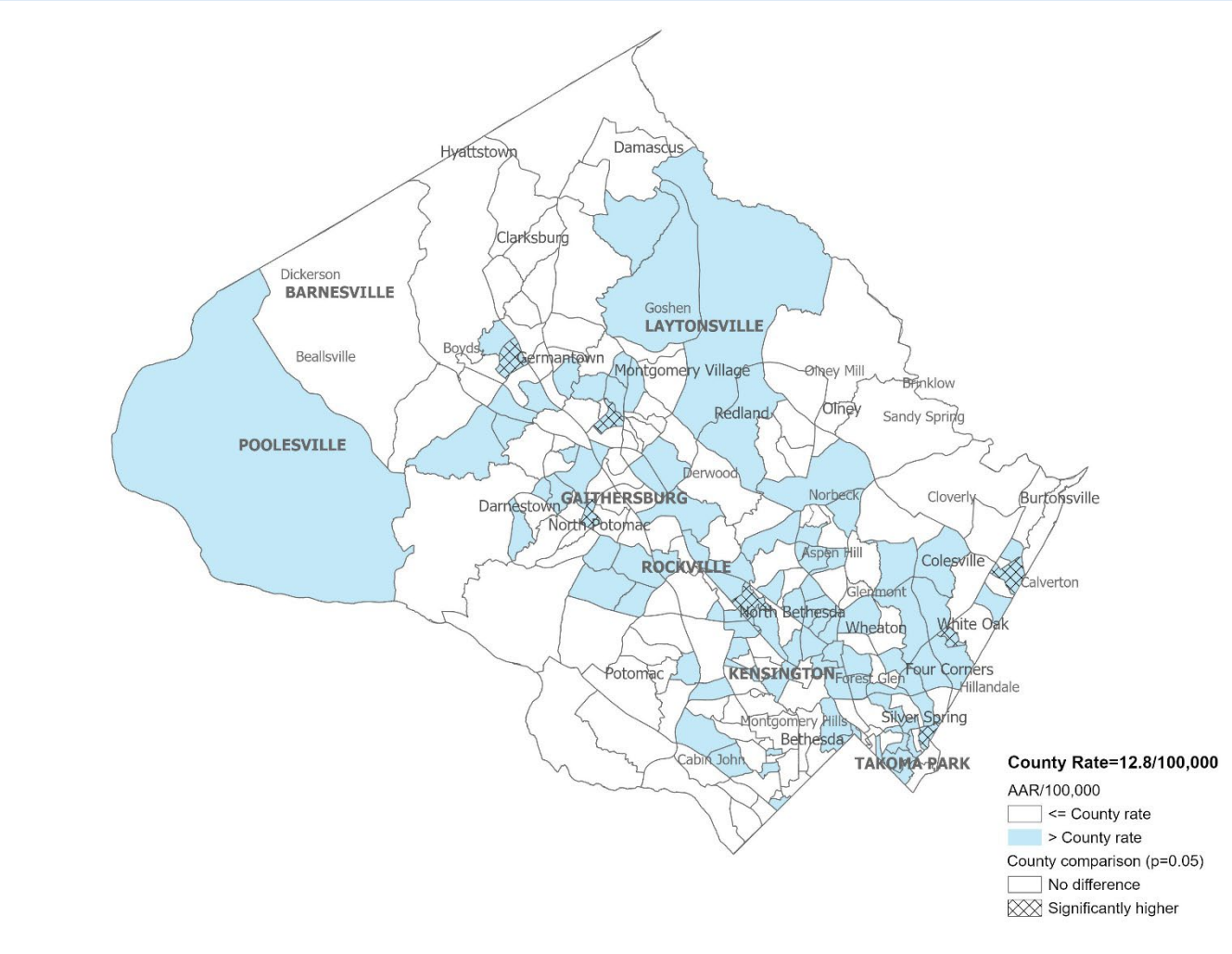


Target: 33.4 stroke deaths per 100,000 population
Current Status: Target not yet met per 2023 County data

Figure 34. Cerebrovascular Disease Mortality Rates by Age, Montgomery County, 2021-2023



Map 7. Cerebrovascular Disease Age-Adjusted Mortality Rates by Census Tract, Montgomery County, 2021-2023



- Cerebrovascular disease ER visit rates in Montgomery County increased overall through 2023, similar to those in Maryland. Rates in the County were consistently lower than those in Maryland (Figure 35).
- Among the population subgroups, NH-Black had the highest rates, followed by NH-White, Hispanic, and Asian/PI. Males had higher rates compared to females (Figure 36).
- Cerebrovascular disease ER visits rates increase by age. People aged 65 and older had the highest rates (Figure 37).

Figure 35. Cerebrovascular Disease Related ER Visit Age-Adjusted Rates, Montgomery County and Maryland, 2013-2023

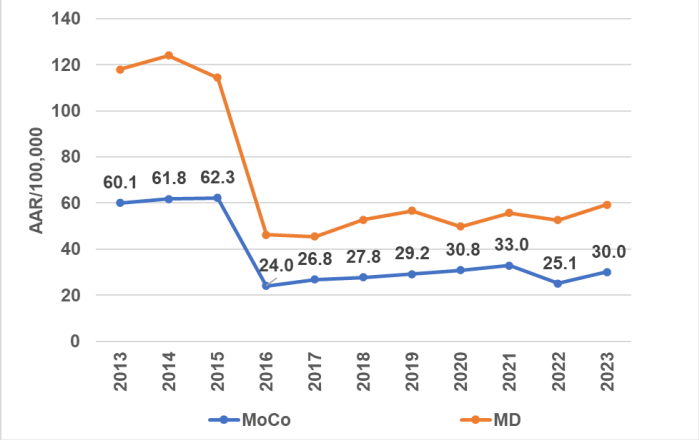


Figure 36. Cerebrovascular Disease Related ER Visit Age-Adjusted Rates by Sex and Race/Ethnicity, Montgomery County, 2021-2023

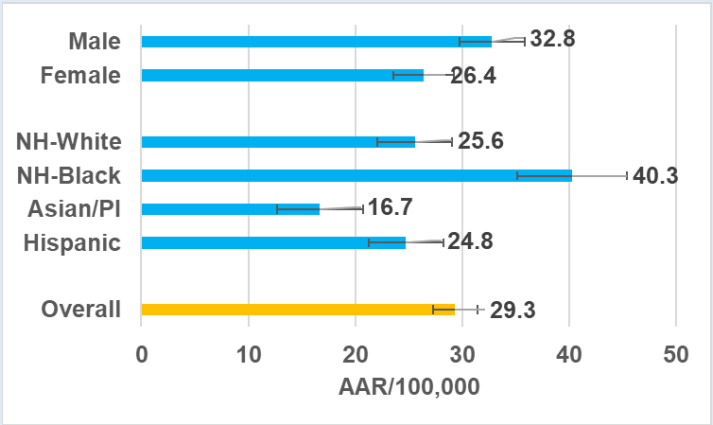
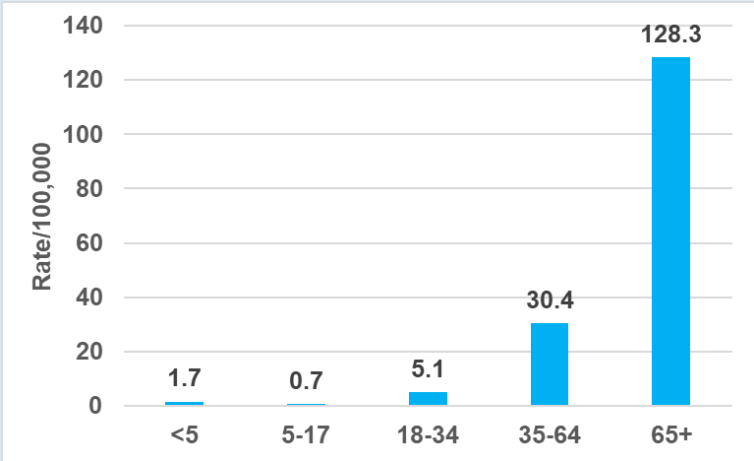
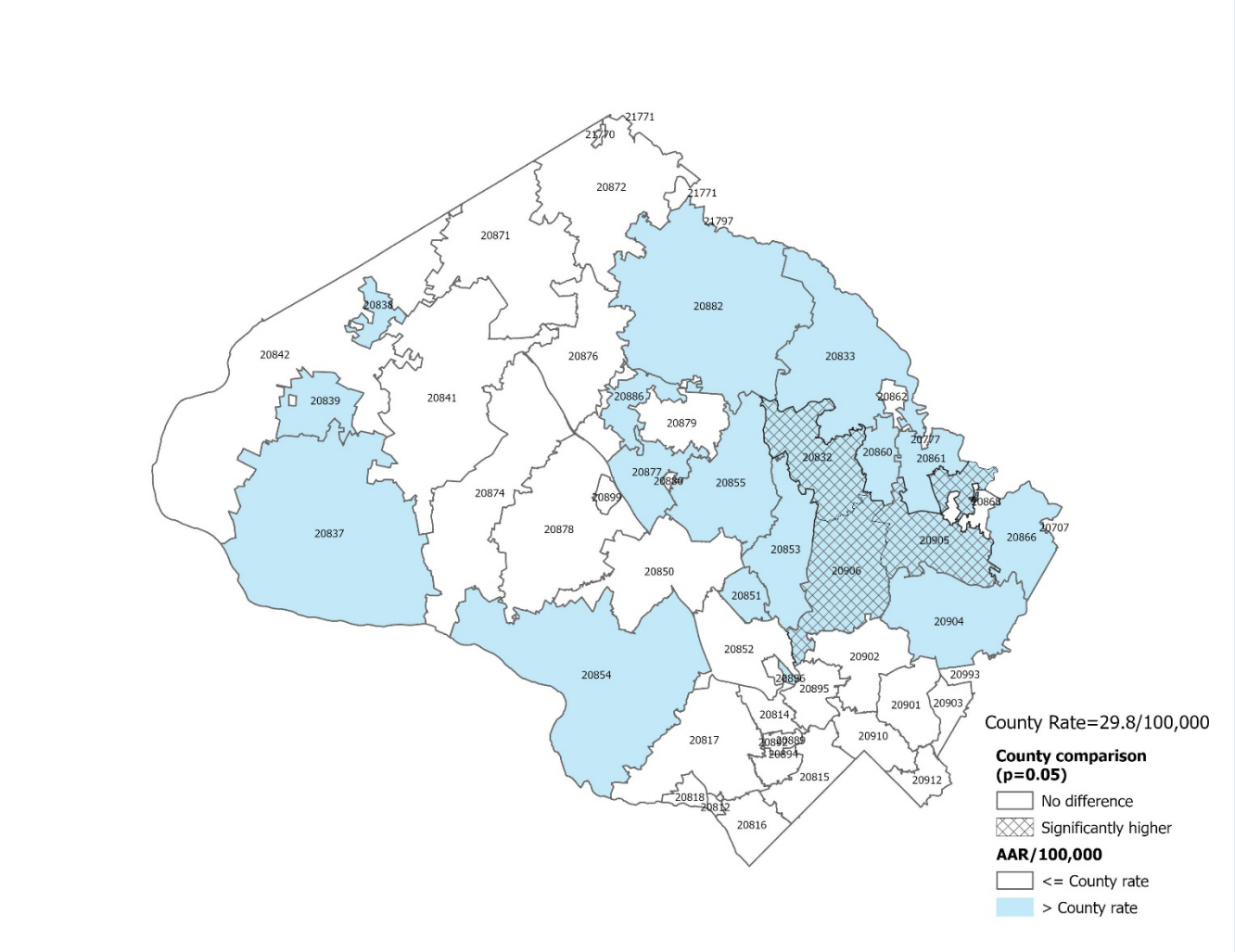


Figure 37. Cerebrovascular Disease Related ER Visit Rates by Age, Montgomery County, 2021-2023



Map 8. Cerebrovascular Disease Related ER Visit Age-Adjusted Rates by Zip Code, Montgomery County, 2021-2023



2.3% (95% CI: 1.3-3.2) adults age 18+ ever told have stroke in Montgomery County, as compared to 2.8% (95% CI: 2.4-3.2) in Maryland.

Chronic Lower Respiratory Disease (Including COPD)

Chronic lower respiratory disease, conditions affecting the lungs and airways, is a major cause of disability and the fifth leading cause of death in the United States[24]. According to the CDC, chronic lower respiratory diseases caused approximately 145,357 deaths in 2023. Chronic lower respiratory diseases include chronic obstructive pulmonary disease (COPD), asthma, chronic bronchitis, and emphysema. About 16 million people in the U.S. have COPD, with many cases undiagnosed[25]. In 2023, 3.8% of adults aged 18 and older were diagnosed with COPD, with women having a higher prevalence (4.1%) than men (3.4%)[26]. Older adults are also more likely to be diagnosed with COPD. There is a similar chronic lower respiratory disease burden in Maryland. In Maryland, chronic lower respiratory diseases were the sixth leading causes of death in 2022[27]. In 2023, about 5.6% of adults reported being told that they had COPD, emphysema, or chronic bronchitis[28].

Tobacco smoking is the main risk factor for chronic lower respiratory disease, accounting for 80% of COPD-related deaths[29]. Other risk factors include air pollution, occupational chemicals and dusts, and history of lower respiratory infections during childhood. Chronic lower respiratory diseases have a significant economic burden in the U.S., with COPD incurring approximately $24 billion annually in medical costs among adults aged 45 and older[26]. The best method for preventing COPD is to never start smoking, or to quit smoking for current smokers. Avoiding secondhand smoke from burning tobacco products and other air pollutants can also decrease risk of developing COPD. These lifestyle changes, along with medication, respiratory disease vaccinations, and oxygen therapy, can help manage chronic lower respiratory diseases and improve quality of life.

This section includes chronic lower respiratory disease data and information for Montgomery County:

- Montgomery County had a decreasing trend of chronic lower respiratory disease mortality since 2014 but had an increase in 2018, following the same trends as Maryland and the U.S. Chronic lower respiratory disease mortality in the County was consistently lower than that of Maryland and the U.S. (Figure 38).
- Among the population subgroups, NH-Whites and NH-Blacks had higher chronic lower respiratory disease mortality than Hispanics and Asians/PI. Females had higher mortality rates compared to males (Figure 39).
- Residents aged 65 and older had the highest chronic lower respiratory disease mortality (Figure 40).

Figure 38. Chronic Lower Respiratory Disease Age-Adjusted Mortality Rates, Montgomery County, Maryland, and U.S., 2014-2023

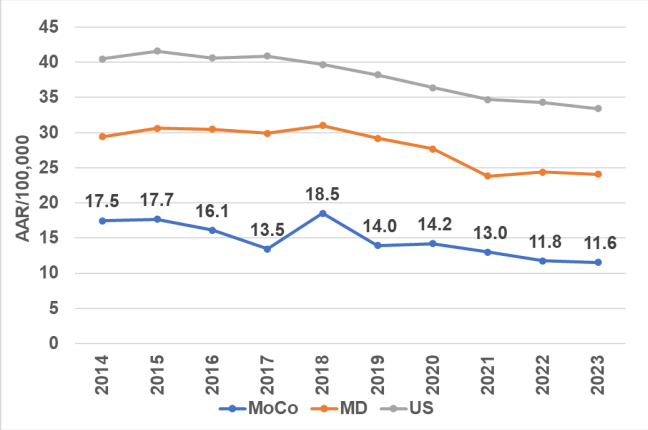


Figure 39. Chronic Lower Respiratory Disease Age-Adjusted Mortality Rates by Sex and Race/Ethnicity, Montgomery County, 2021-2023

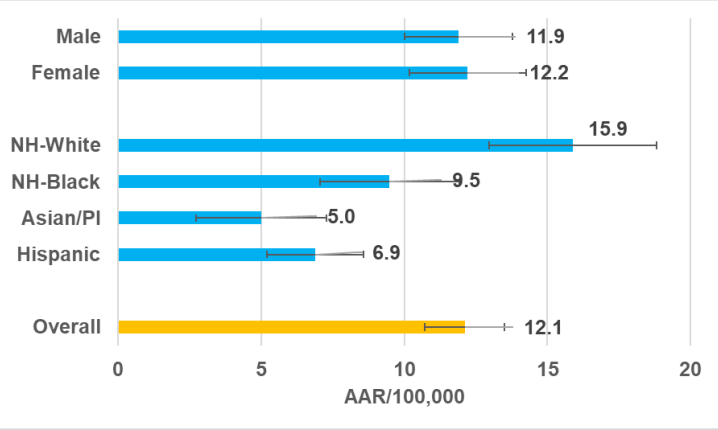
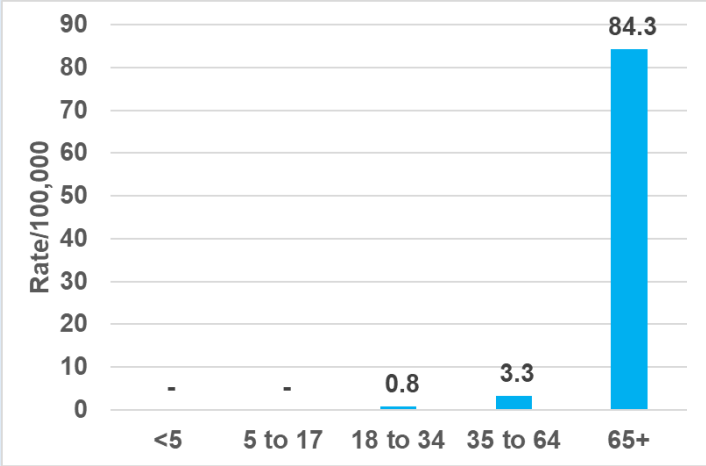


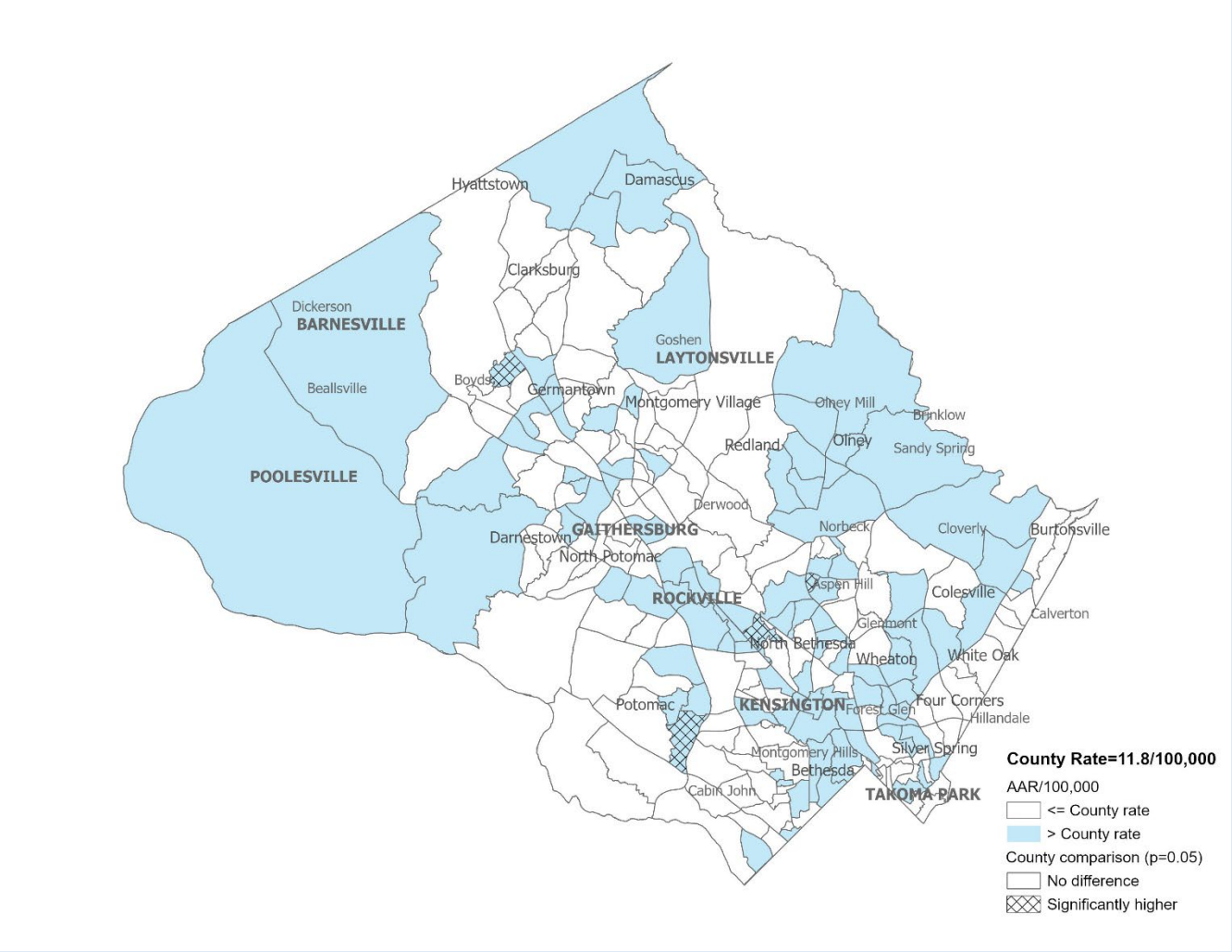
Figure 40. Chronic Lower Respiratory Disease Mortality Rates by Age, Montgomery County, 2021-2023



Chronic Lower Respiratory Disease Mortality Age-Adjusted Rate Goal: 9.1/100,000
Current Status: Goal not yet met per 2023 County data

Target: 107.2 deaths per 100,000 adults aged 45+ population for COPD

Map 9. Chronic Lower Respiratory Disease Age-Adjusted Mortality Rates by Census Tract, Montgomery County, 2021-2023



- Chronic lower respiratory disease ER visit rates in the County decreased up until 2022, then increased in 2023. The rates in the County are consistently lower than Maryland (Figure 41).
- Among the population subgroups, NH-Black had the highest rates, followed by Hispanics, NH-Whites, and Asian/PI. Females had higher rates than males (Figure 42).
- Children under the age of 5 had the highest rates, followed by those aged 5-17 (Figure 43).

Figure 41. Chronic Lower Respiratory Disease Related ER Visit Age-Adjusted Rates, Montgomery County and Maryland, 2013-2023

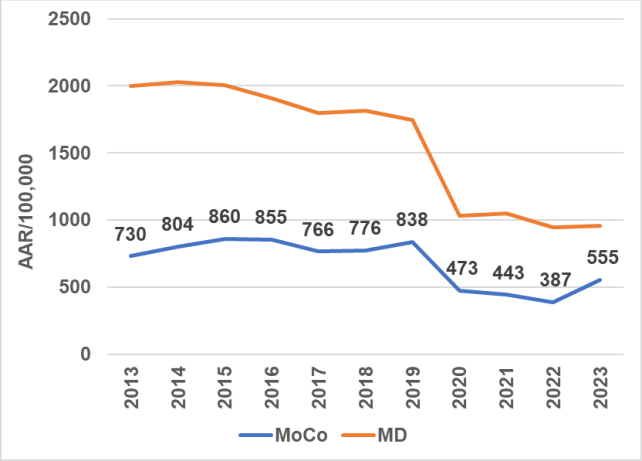
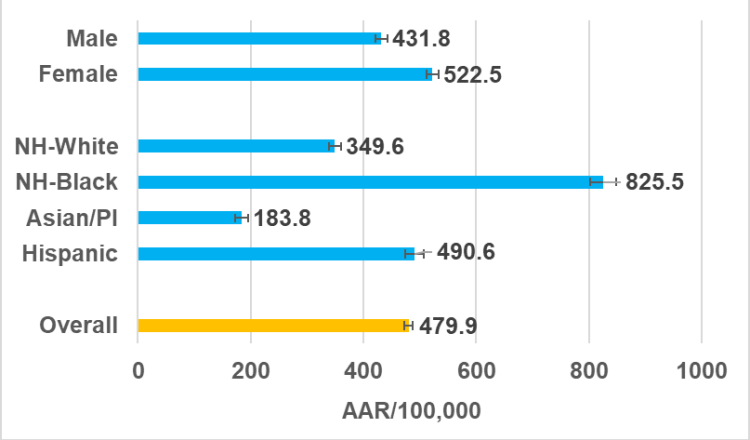
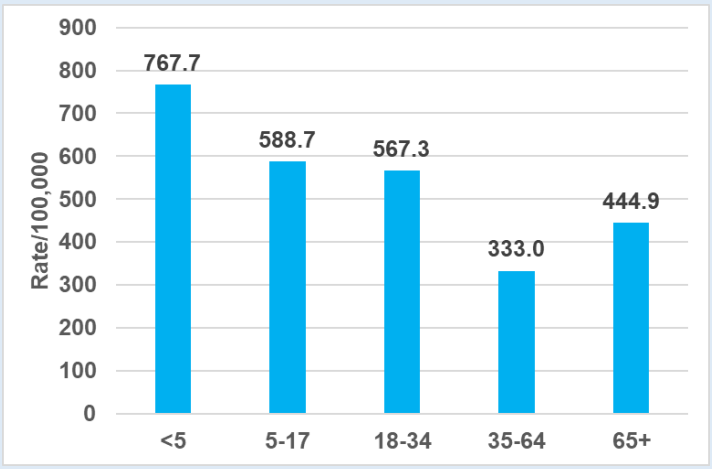


Figure 42. Chronic Lower Respiratory Disease ER Visit Age-Adjusted Rates by Sex and Race/Ethnicity, Montgomery County, 2021-2023

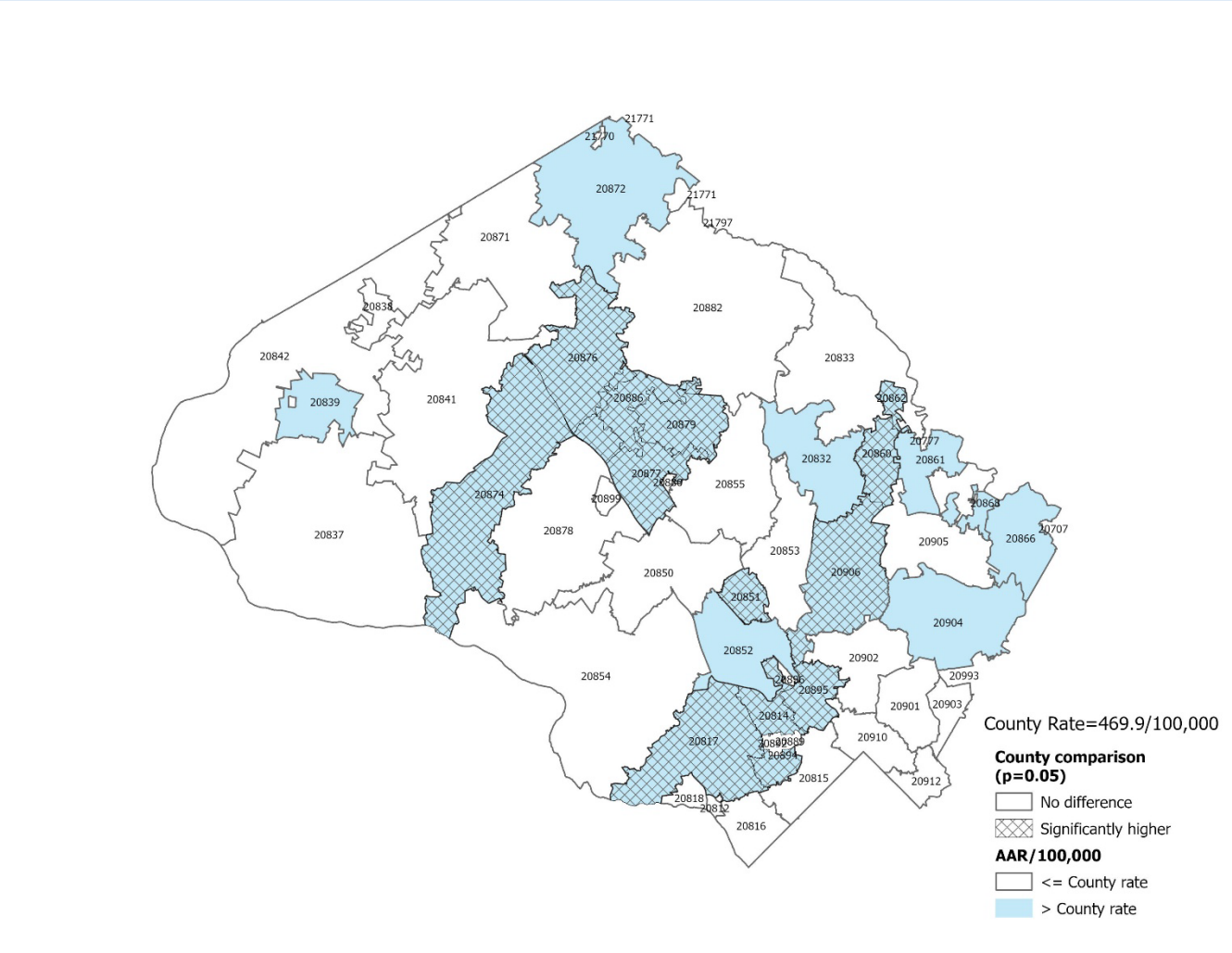


Chronic Lower Respiratory Disease ER Visit Age-Adjusted Rate Goal: 430.4/100,000
Current Status: Goal not yet met per 2023 County data

Figure 43. Chronic Lower Respiratory Disease Related ER Visit Rates by Age, Montgomery County, 2021-2023



Map 10. Chronic Lower Respiratory Disease Related ER Visit Age-Adjusted Rates by Zip Code, Montgomery County, 2021-2023



2.7% (95% CI: 1.8-3.7) adults aged 18+ ever told have COPD in Montgomery County, as compared to 5.0% (95% CI: 4.5-5.6) in Maryland.

Target: 64.0 ED visits per 10,000 adults aged 45+ population for COPD

Cancer

Cancer, a group of diseases in which the body's cells grow uncontrollably and spread to other parts of the body, is the second leading cause of death worldwide. According to the World Health Organization, approximately 10 million people, or 1 in 6 people, died due to cancer in 2020[30].The burden of cancer is continuing to worsen globally. Projections estimate that by 2050, the number of new cancer cases per year will increase to 33 million and the number of cancer-related deaths will increase to 18.2 million[31].

In the United States, cancer is a major public health concern and the second leading cause of death in the country, causing 613,352 deaths in 2023[12]. In 2025, projections estimate approximately 2,041,910 new cases of cancer will be diagnosed and 618,120 cancer-related deaths will occur in the U.S[31]. The most common cancers diagnosed in the U.S. are breast cancer (319,750 new cases expected in 2025), followed by prostate cancer and lung cancer[32]. Cancer is also the second leading cause of death in Maryland, after heart disease. In 2020, about 30,818 new cases of cancer were diagnosed, and about 10,799 people died from cancer in Maryland[33].

Cancer mortality declined overall in the U.S. through 2022, due to decreased smoking rates, earlier detection, and improved treatment options. However, significant disparities persist in cancer mortality. Research by the American Cancer Society shows that Black and Native American populations continue to be at an increased risk of developing and dying from cancer, having two to three times the cancer death rate as White populations for many cancers[34]. In Maryland, Black residents had higher mortality rates for all cancer sites compared to White residents in 2016-2020[33]. While cancer incidence overall has declined in men, cancer incidence has continued to increase among women. Cancer risk has also increased in younger adults compared to older adults.

Risk factors for cancer include tobacco use, alcohol consumption, poor nutrition, lack of physical activity, and air pollution. Some cancers can be prevented through lifestyle changes (e.g., quitting smoking, maintaining a healthy diet, and regular physical activity) and early detection, allowing for cases to be treated earlier. Continued prevention efforts and expanding access to high-quality care are needed to continue lowering cancer incidence and mortality for all people, especially for those disproportionally impacted by cancer.

This section includes data and information on the following types of cancer:

- All Cancer Sites
- Lung and Bronchus Cancer
- Colorectal Cancer
- Breast Cancer
- Prostate Cancer
- Melanoma
- Oral Cancer
- Cervical Cancer

All Cancer Sites

- The overall cancer incidence rate in Montgomery County fluctuated over time. The rates for the County were consistently lower than in Maryland and the U.S. (Figure 44).
- Similar to incidence, overall cancer mortality in the County fluctated over time and was consistently lower than in Maryland and the U.S. (Figure 45).
- Males had higher overall cancer incidence and mortality than females. NH-Whites had a higher cancer incidence compared to NH-Blacks (Figure 46), while NH-Blacks had a higher cancer mortality than NH-Whites (Figure 47). The differences in both incidence and mortality rates were not statistically significant.

Figure 44. Cancer Age-Adjusted Incidence Rates, All Sites, Montgomery County, Maryland, and U.S., 2013-2020

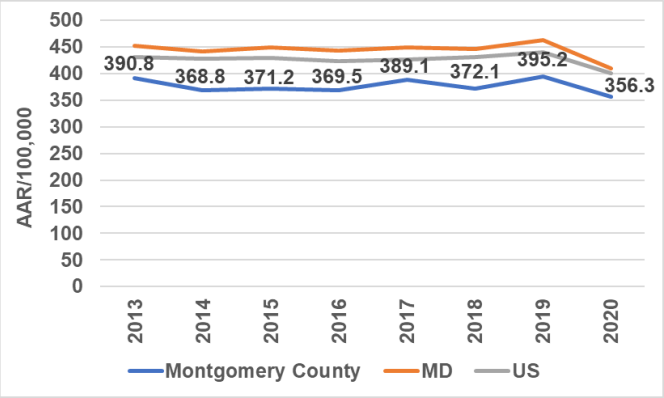


Figure 45. Cancer Age-Adjusted Mortality Rates, All Sites, Montgomery County, Maryland, and U.S., 2013-2020

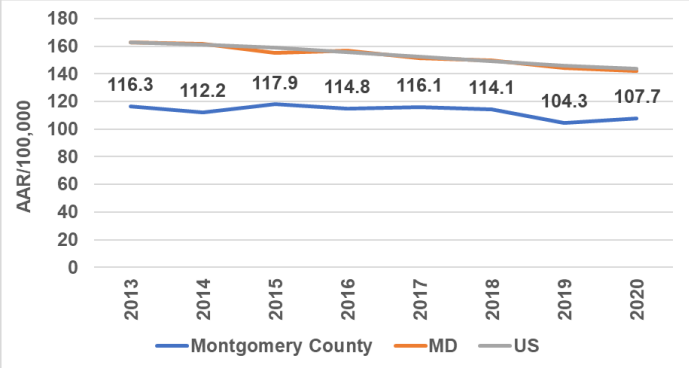


Figure 46. Cancer Age-Adjusted Incidence Rates by Sex and Race, All Sites, Montgomery County, 2018-2022

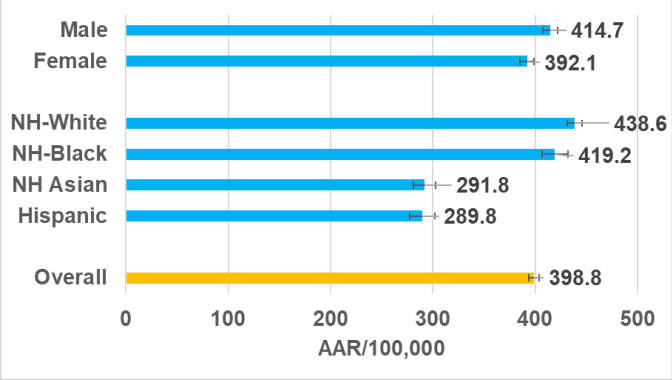
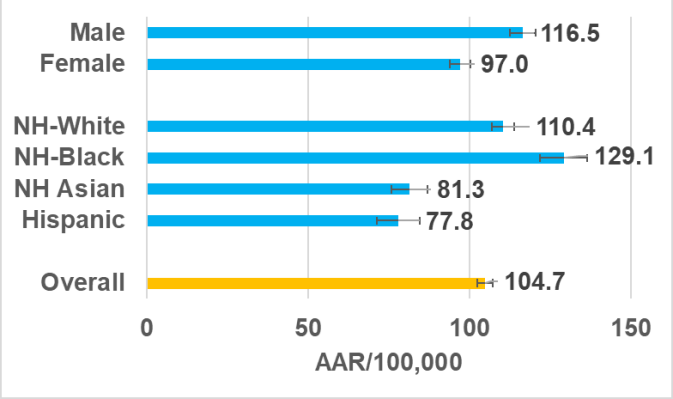
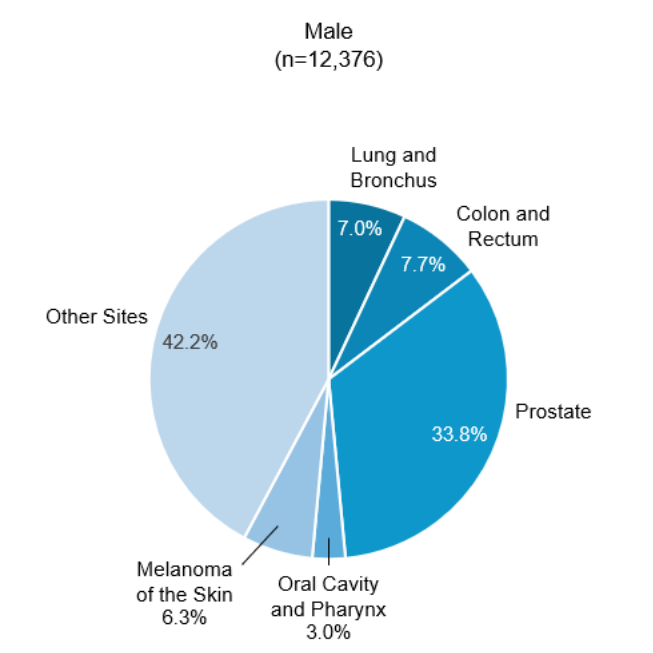


Figure 47. Cancer Age-Adjusted Mortality Rates by Sex and Race, All Sites, Montgomery County, 2019-2023



Target: 122.7 cancer deaths per 100,000 population
Current Status: Target met per 2023 County data

Figure 48. Distribution of Cancer Incidence by Site and Sex, Montgomery County, 2018-2022



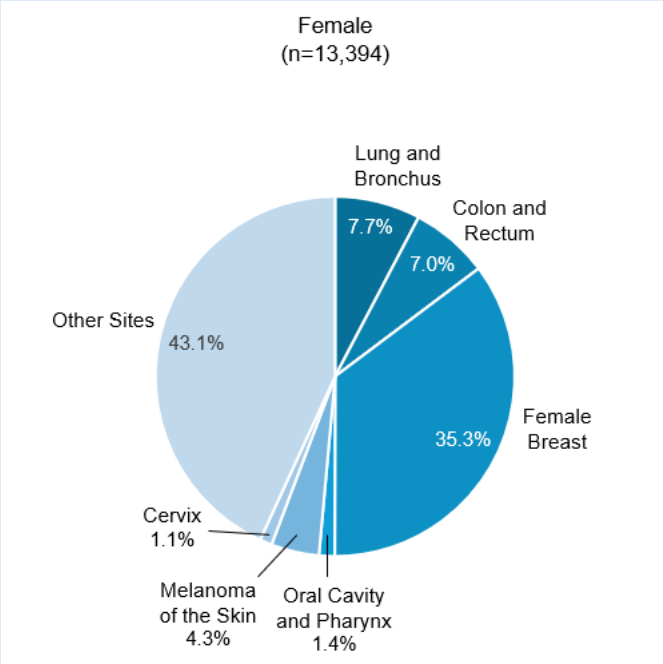
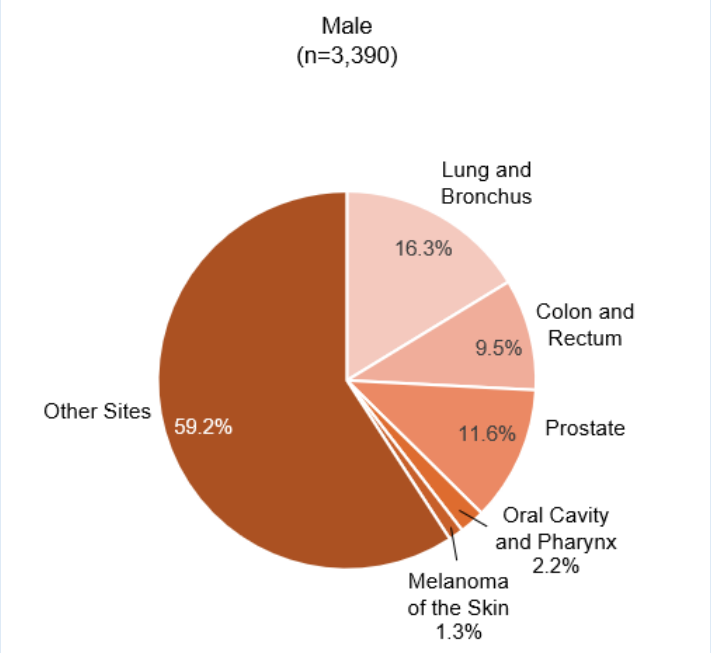
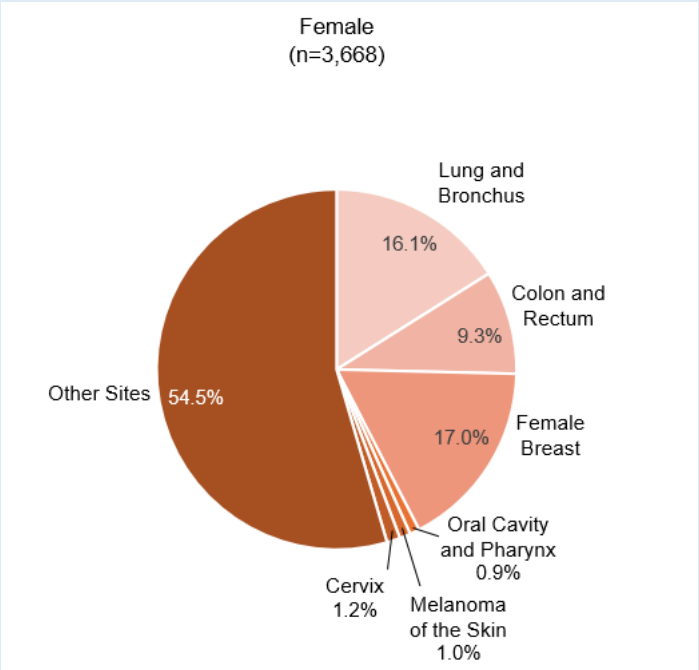


Figure 49. Distribution of Cancer Mortality by Site and Sex, Montgomery County, 2019-2023





Lung and Bronchus Cancer

Lung and bronchus cancer is the leading cause of cancer-related death in the U.S, killing approximately 131,584 people in 2023[35]. Cigarette smoking is the primary risk factor of lung cancer, accounting for 80-90% of lung cancer deaths[36]. Additional risk factors include environmental and occupational exposures, secondhand smoke, family history of lung cancer, and air pollution. Screening for lung cancer is recommended for adults at high risk of developing disease due to smoking history and age.

- The overall incidence rate of lung and bronchus cancer in the County followed decreasing trends in Maryland and the U.S. through 2020. The rate for the County is consistently lower than that of Maryland and the U.S. (Figure 50).
- Similar to incidence, lung and bronchus cancer mortality in the County decreased and was consistently lower than in Maryland and the U.S. (Figure 51).
- Males had higher incidence and mortality compared to females (Figure 52 & Figure 53).
- Among the population subgroups, NH-Whites had a higher cancer incidence compared to NH-Blacks (Figure 52), while NH-Blacks had a higher cancer mortality than NH-Whites (Figure 53). The differences in both incidence and mortality rates were not statistically significant.

Figure 50. Cancer Age-Adjusted Incidence Rates, Lung and Bronchus, Montgomery County, Maryland, and U.S., 2013-2020

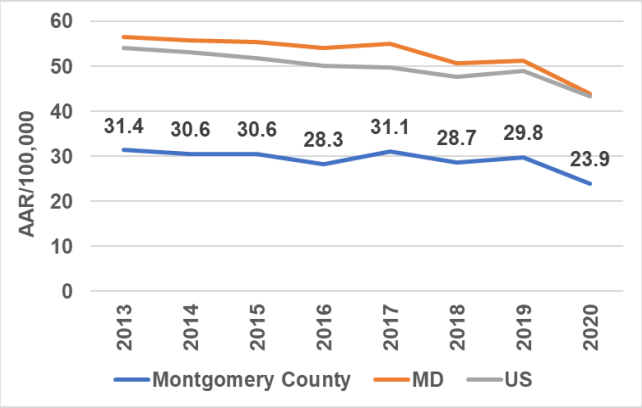
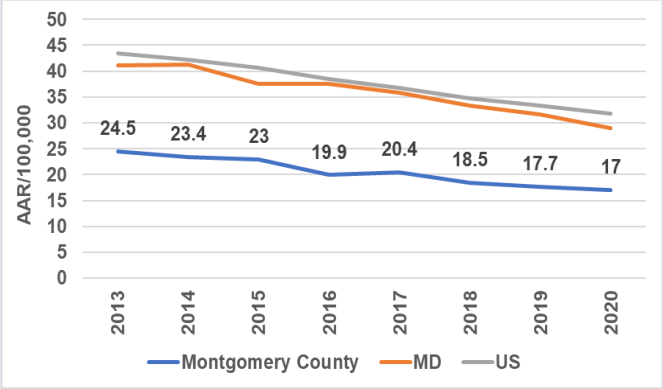


Figure 51. Cancer Age-Adjusted Mortality Rates, Lung and Bronchus, Montgomery County, Maryland, and U.S., 2013-2020



Target: 25.1 lung cancer deaths per 100,000 population
Current Status: Target met per 2023 County data

Figure 52. Cancer Age-Adjusted Incidence Rates by Sex and Race, Lung and Bronchus, Montgomery County, 2018-2022

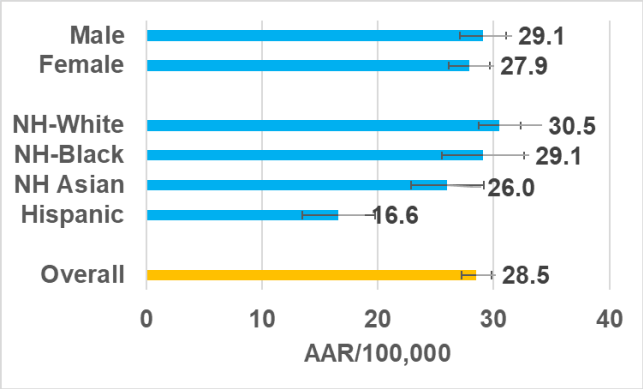
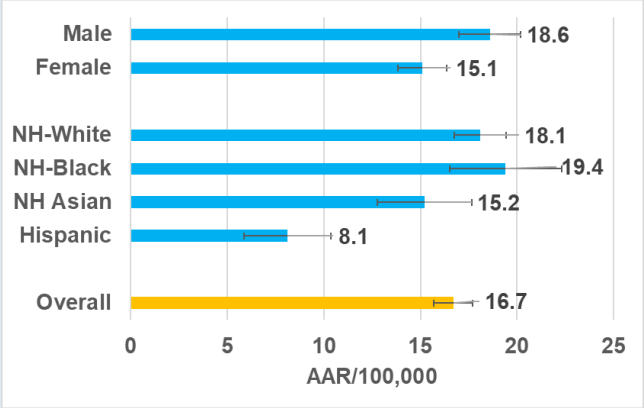


Figure 53. Cancer Age-Adjusted Mortality Rates by Sex and Race, Lung and Bronchus, Montgomery County, 2019-2023



Stage Distribution

- From 2018 to 2022, about 42.3% of lung and bronchus cancer cases in Montgomery County were diagnosed at a distant stage (the cancer spread to distant parts of the body, such as distant organs, tissues, or lymph nodes). About 27.7% were diagnosed at a localized stage (the cancer had not spread outside the lungs), and 19.5% were found at at a regional stage (the cancer had spread to adjacent organs or tissues) (Figure 54).
- Late-stage lung and bronchus cancer diagnoses fluctated from 2018-2022, and were the highest in 2022 (Figure 55).
- NH-Asians had the highest diagnosis of late-stage lung and bronchus cancer cases, followed by NH-Blacks, Hispanics, and NH-Whites population subgroups (Figure 56).

Figure 54. Lung and Bronchus Cancer: Stage at Diagnosis, Montgomery County, 2018-2022

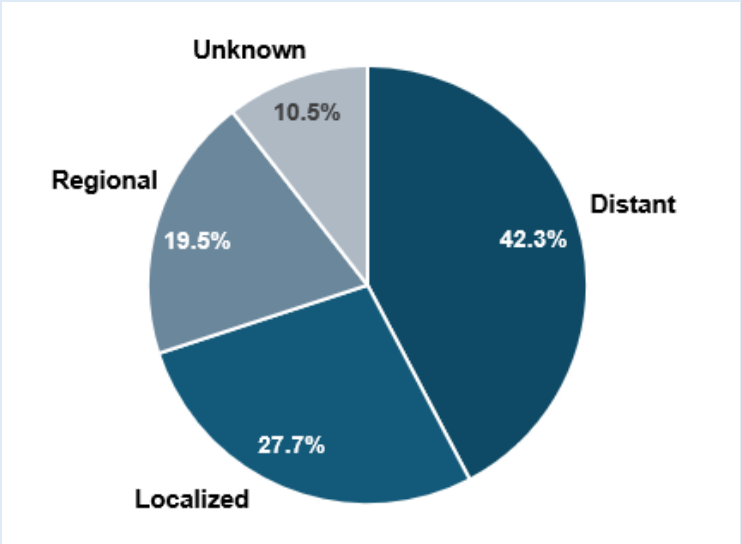


Figure 55. Lung and Bronchus Cancer: Late-Stage Diagnosis* by Year, Montgomery County, 2018-2022

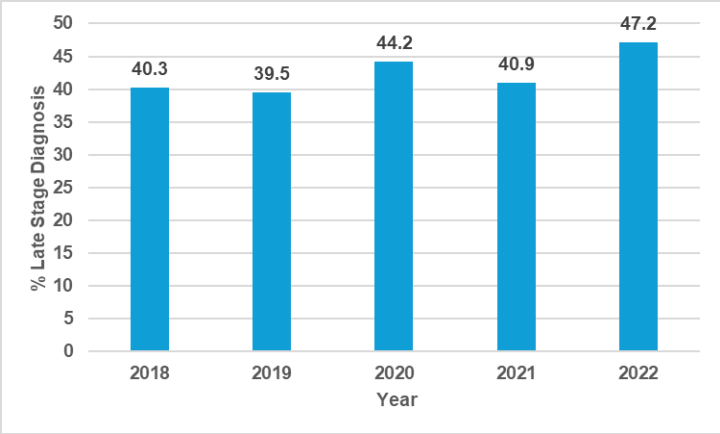
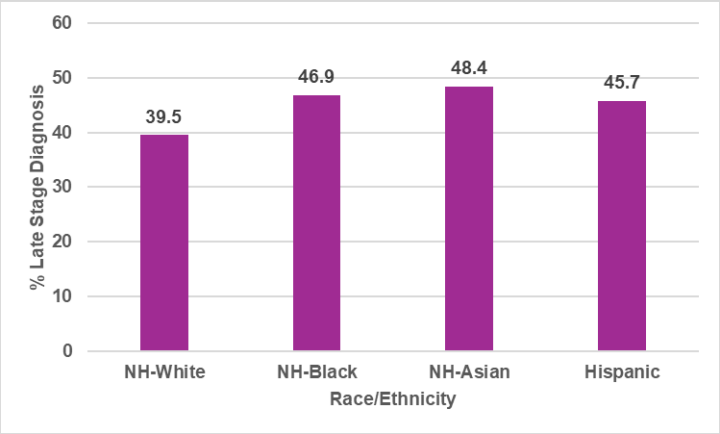
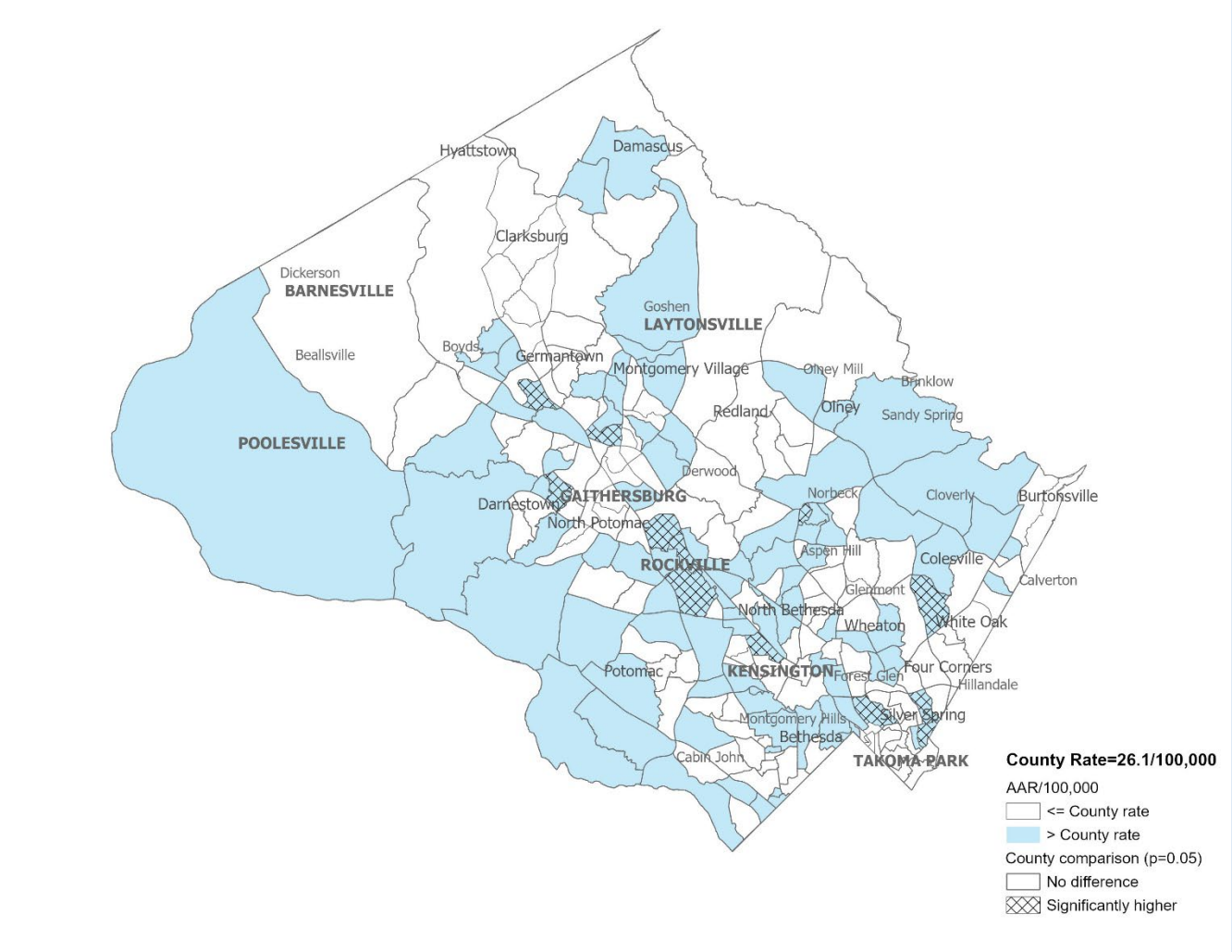


Figure 56. Lung and Bronchus Cancer: Late-Stage Diagnosis* by Race/Ethnicity, Montgomery County, 2018-2022



*Late-stage diagnosis of cancer, or distant stage cancer, is defined as cancer that has spread beyond adjacent organs or tissues, to distant parts of the body.

Map 11. Cancer Age-Adjusted Mortality Rates by Census Tract, Lung and Bronchus, Montgomery County, 2015-2023



MARYLAND BRFSS Behavioral Risk Factor Surveillance System

3.6% (95% CI: 2.4-4.7) adults age 18+ are current smokers in Montgomery County, as compared to 9.1% (95% CI: 8.3-9.9) in Maryland. The County has met this Healthy People 2030 national target (6.1%).

13.6% (95% CI: 7.7-19.5) adults age 18+ had a CAT or CT scan to check for lung cancer in Montgomery County, as compared to 14.7% (95% CI: 12.6-16.8) in Maryland.

Healthy People 2030

Target: 7.5% of adults age 55-80 years receive a lung cancer screening

Colon and Rectum Cancer

Colorectal cancer, cancer of the colon or rectum, is the fourth leading cause of cancer-related deaths in the United States[37]. Screening is the most effective method for reducing colorectal cancer risk. The U.S. Preventive Service Task Forces recommends that adults aged 45 to 75 be screened for colorectal cancer[38]. However, testing may need to begin earlier or be more frequent for those at an increased risk of getting colorectal cancer. This includes having inflammatory bowel disease, family history of colorectal cancer, genetic syndromes like familial adenomatous polyposis, or hereditary non-polyposis colorectal cancer (Lynch syndrome).

- The overall incidence rate of colon and rectum cancer in the County fluctuated between 2013 and 2018, then decreased in 2019. The rate for the County was consistently lower than in Maryland and the U.S. (Figure 57).
- Mortality from colon and rectum cancer in the County increased until 2018, then decreased through 2020. The mortality rate for the County was consistently lower than in Maryland and the U.S. (Figure 58).
- Males had higher incidence and mortality than females, though not statistically significant (Figure 59 & Figure 60).
- Among the population subgroups, NH-Blacks had higher incidence and mortality than NH-Whites, though the difference in incidence was not statistically significant (Figure 59 & Figure 60).

Figure 57. Cancer Age-Adjusted Incidence Rates, Colon and Rectum, Montgomery County, Maryland, and U.S., 2013-2020

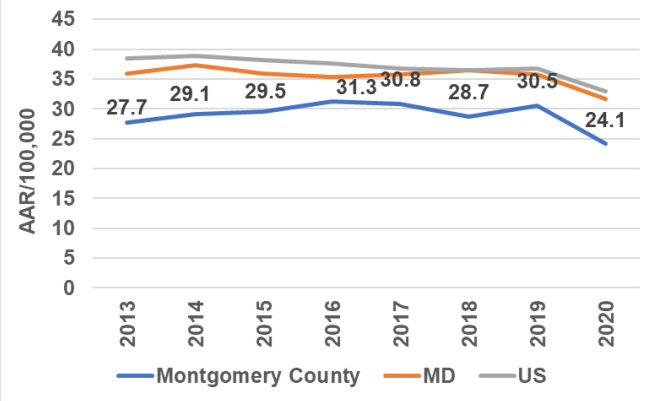
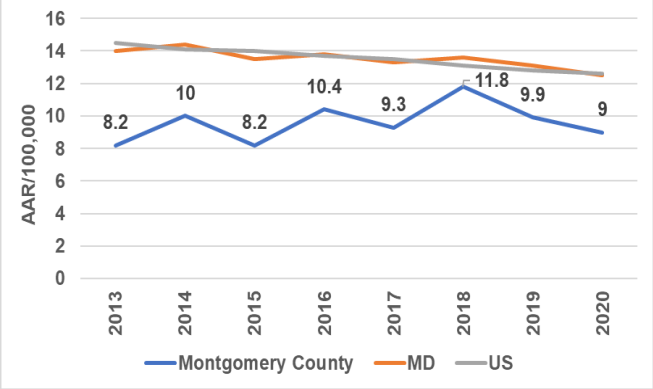


Figure 58. Cancer Age-Adjusted Mortality Rates, Colon and Rectum, Montgomery County, Maryland, and U.S., 2013-2020



Target: 8.9 colorectal cancer deaths per 100,000 population
Current Status: Target not yet met per 2023 County data

Figure 59. Cancer Age-Adjusted Incidence Rates by Sex and Race, Colon and Rectum, Montgomery County, 2018-2022

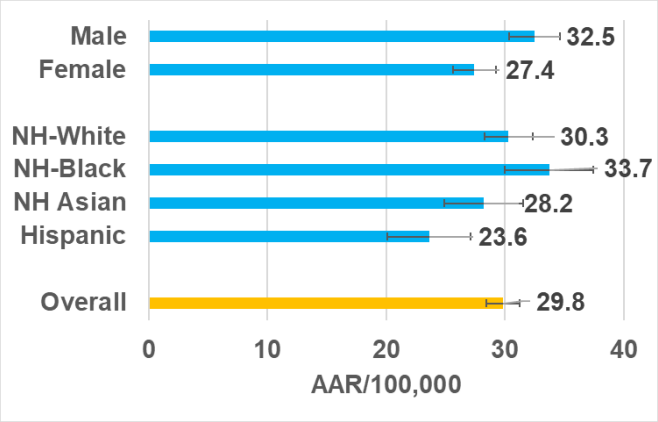
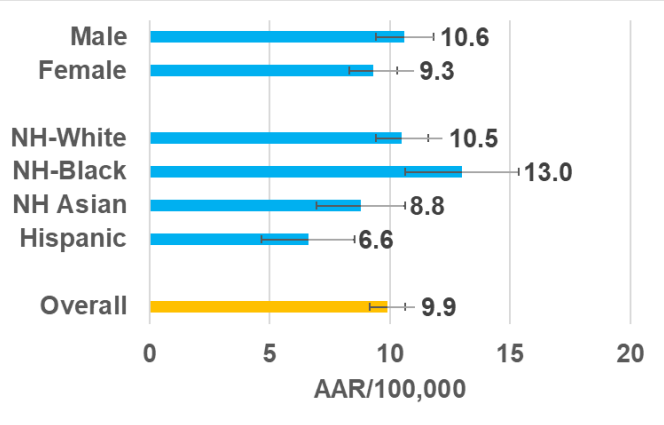


Figure 60. Cancer Age-Adjusted Mortality Rates by Sex and Race, Colon and Rectum, Montgomery County, 2019-2023



Stage Distribution

- From 2018 to 2022, about 35.5% of colon and rectum cancer cases in Montgomery County were diagnosed at a regional stage. About 34.5% were diagnosed at a localized stage, and 19.3% were found at at a distant stage (Figure 61).
- Late-stage colon and rectum cancer diagnoses fluctated from 2018-2022, and were the highest in 2022 (Figure 62).
- Among the population subgroups, NH-Blacks had the highest diagnosis of late-stage colon and rectum cancer cases, followed by NH-Whites, NH-Asians, and Hispanics (Figure 63).

Figure 61. Colon and Rectum Cancer: Stage at Diagnosis, Montgomery County, 2018-2022

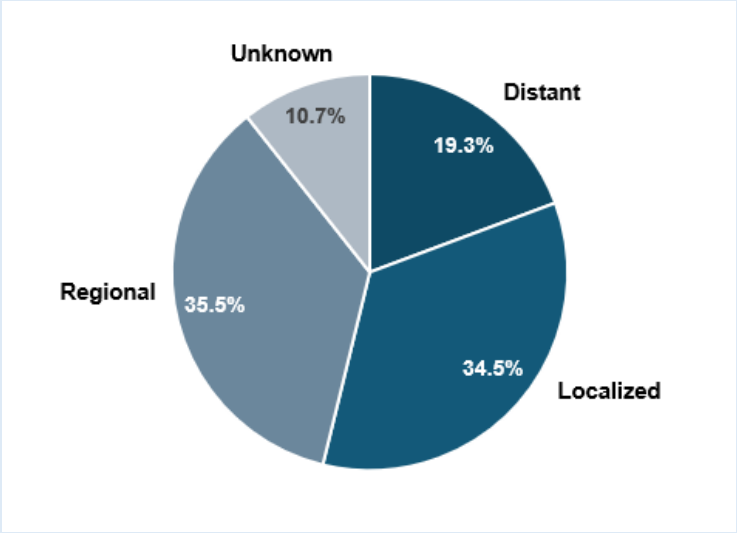


Figure 62. Colon and Rectum Cancer: Late-Stage Diagnosis* by Year, Montgomery County, 2018-2022

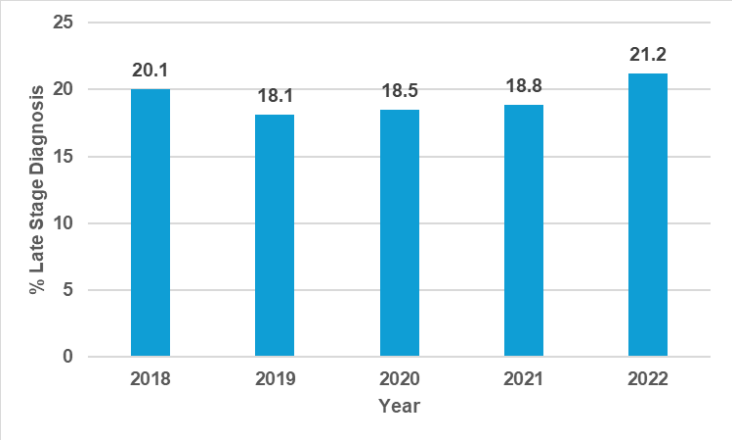
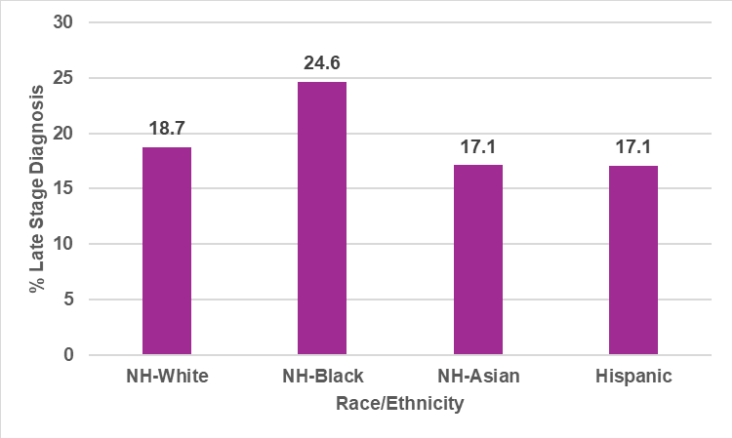
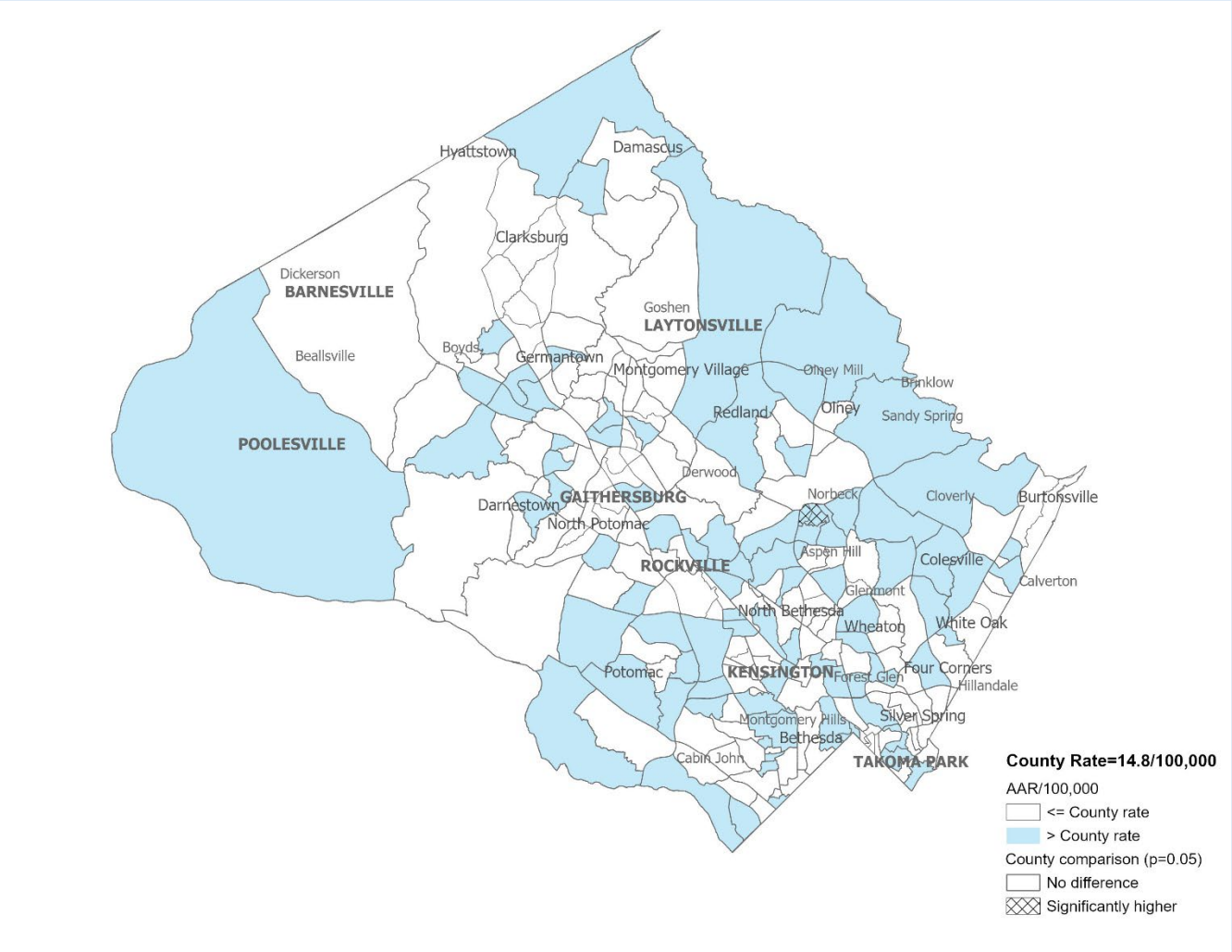


Figure 63. Colon and Rectum Cancer: Late-Stage Diagnosis* by Race/Ethnicity, Montgomery County, 2018-2022

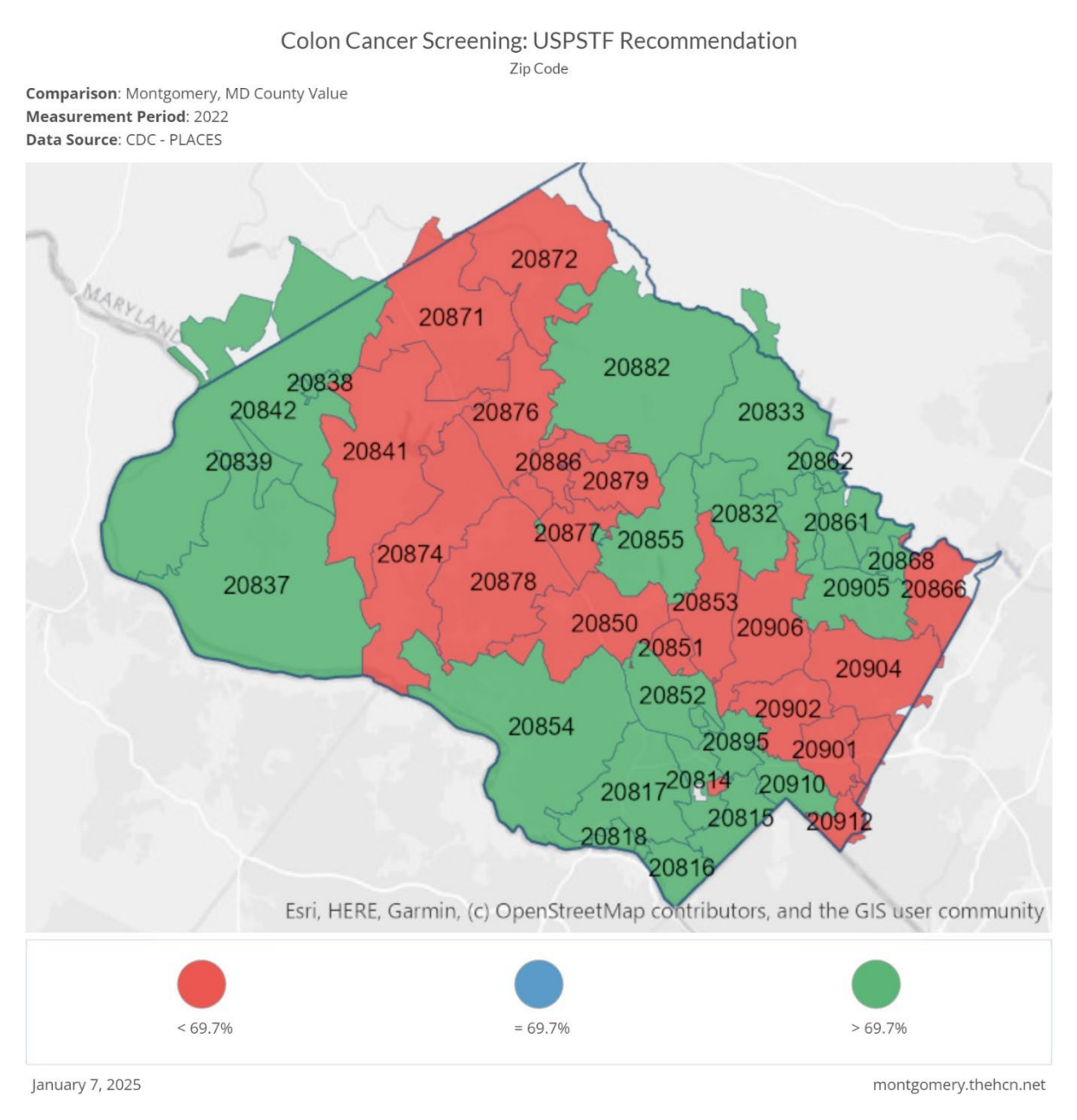


*Late-stage diagnosis of cancer, or distant stage cancer, is defined as cancer that has spread beyond adjacent organs or tissues, to distant parts of the body.

Map 12. Cancer Age-Adjusted Mortality Rates by Census Tract, Colon and Rectum, Montgomery County, 2015-2023



Map 13. Colon Cancer Screening: USPSTF Recommendation, Montgomery County, 2022



MARYLAND BRFSS Behavioral Risk Factor Surveillance System

75.2% (95% CI: 71.3-79.1) adults age 45-75 fully met the U.S. Preventive Services Task Force recommendation to have at least one of the recommended colorectal cancer tests within the recommended time interval in Montgomery County, as compared to 71.8% (95% CI: 70.2-73.3) in Maryland. The County has met this Healthy People 2030 national target.

Healthy People 2030

Target: 72.8% of adults age 45-75 received a colorectal cancer screening

Female Breast Cancer

Breast cancer, cancer that begins in the breast tissue, is the second most common cancer among women in the U.S., after some types of skin cancer. According to the American Cancer Society, the average risk of a woman developing breast cancer in her life is about 13%, or a 1 in 8 chance[39]. It is the second leading cause of cancer death among women in the U.S., after lung cancer. Approximately 279,731 new cases of breast cancer were reported in females in the U.S. in 2022, and 42,213 females in the U.S. died from breast cancer in 2023[40].

Breast cancer risk is due to a combination of modifiable and non-modifiable risk factors. Main risk factors are being a woman and increasing age. Additional non-modifiable risk factors include family history of breast or ovarian cancer, genetic mutations, dense breast tissue, reproductive history (early start of menstrual periods or late menopause), and previous treatment with radiation therapy[41]. Modifiable risk factors include physical activity, being overweight or obese, alcohol consumption, some forms of hormone replacement therapy, and reproductive history (age at first childbirth, not breastfeeding, or never having a full-term pregnancy)[40]. Some women may still develop breast cancer even without having any known risk factors.

Breast cancer mortality rates have decreased overall in the U.S. due to advancements in treatment options and improved screening techniques. However, significant racial disparities persist in breast cancer outcomes. Black women have the highest death rate from breast cancer, despite having similar or lower incidence rates compared to White women. Breast cancer is also often diagnosed at later, more aggressive stages in Black women than in White women. These disparities highlight the need for targeted efforts and strategies to promote breast cancer prevention, reduce mortality, and improve health outcomes overall for Black women.

- The incidence rate of female breast cancer in the County decreased until 2016, increased in through 2019, then decreased again in 2020. The rates for the County and Maryland were consistently higher than the U.S. in 2019-2020 (Figure 64).
- The mortality rate in the County decreased in 2017-2019, then increased in 2020. The County rate has been lower than in Maryland and the U.S. from 2018 (Figure 65).
- Among the population subgroups, NH-Whites had a higher incidence compared to NH-Blacks (Figure 66), while NH-Blacks had higher mortality than NH-Whites (Figure 67). The differences in both incidence and mortality rates were not statistically significant.

Figure 64. Cancer Age-Adjusted Incidence Rates, Female Breast, Montgomery County, Maryland, and U.S., 2013-2020

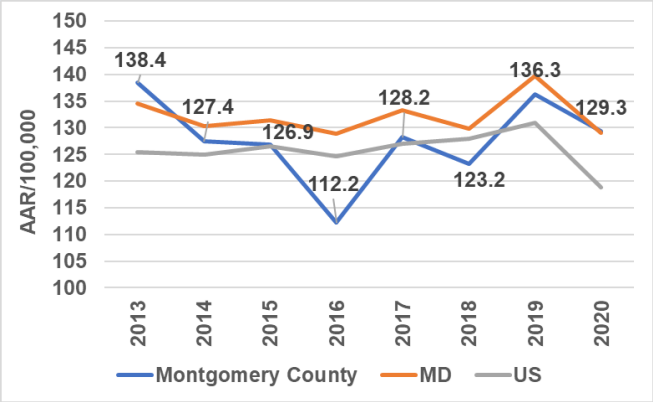


Figure 65. Cancer Age-Adjusted Mortality Rates, Female Breast, Montgomery County, Maryland, and U.S., 2013-2020

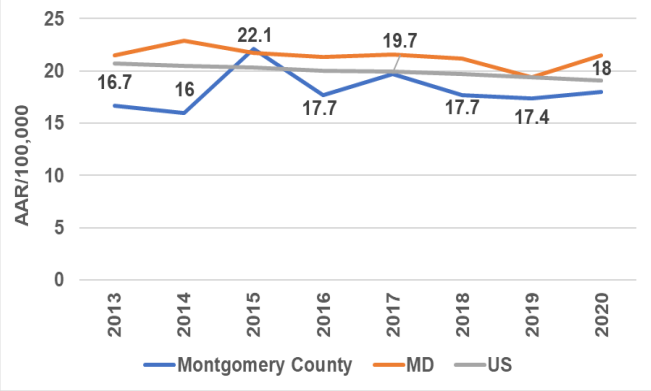


Figure 66. Cancer Age-Adjusted Incidence Rates by Race, Female Breast, Montgomery County, 2018-2022

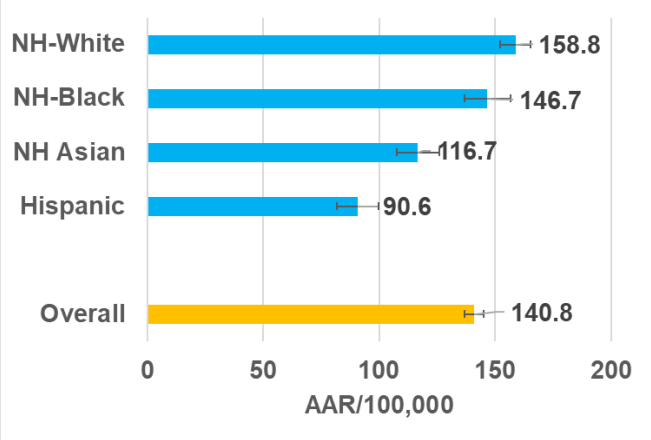
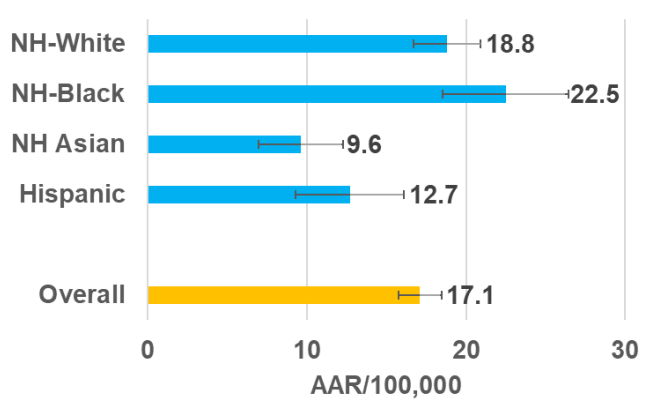


Figure 67. Cancer Age-Adjusted Mortality Rates by Race, Female Breast, Montgomery County, 2019-2023



Target: 15.3 breast cancer deaths per 100,000 females
Current Status: Target not yet met per 2023 County data

Stage Distribution

- From 2018 to 2022, about 2 in 3 (66.2%) female breast cancer cases in Montgomery County were diagnosed at a localized stage. More than one-fourth of female breast cancers (26%) were diagnosed at a regional stage, and 4.7% were found at at a distant stage (Figure 68).
- Late-stage female breast cancer diagnoses were the highest in 2020 and have decreased through 2022 (Figure 69).
- NH-Black women had the highest diagnosis of late-stage breast cancer cases, compared to Hispanic, NH-White, and NH-Asian population subgroups (Figure 70).

Figure 68. Female Breast Cancer: Stage at Diagnosis, Montgomery County, 2018-2022

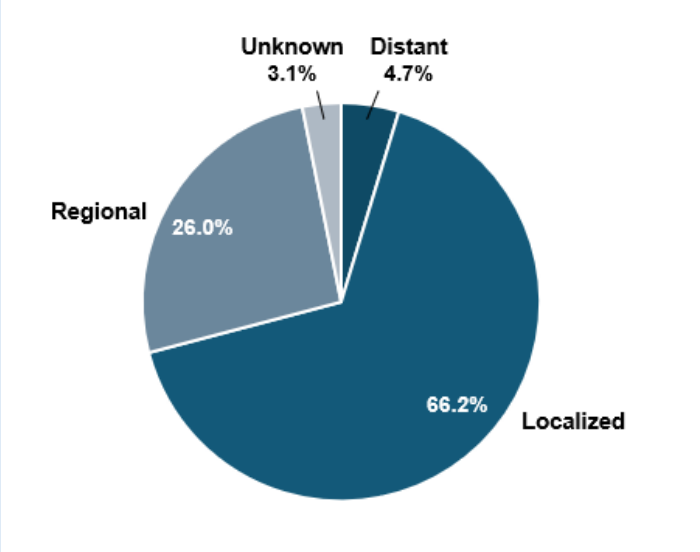


Figure 69. Female Breast Cancer: Late-Stage Diagnosis* by Year, Montgomery County, 2018-2022

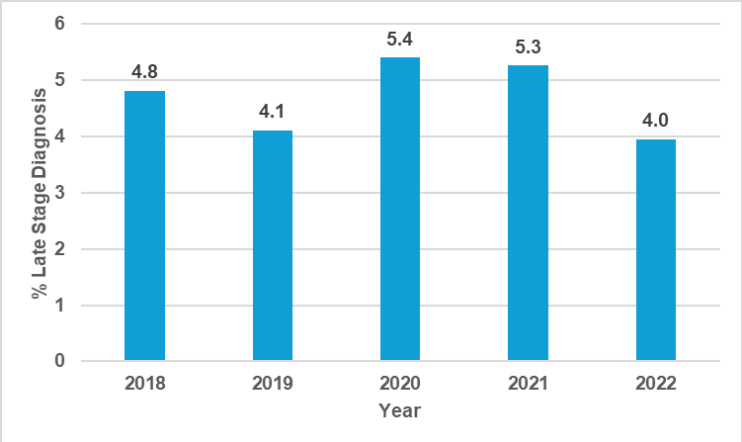
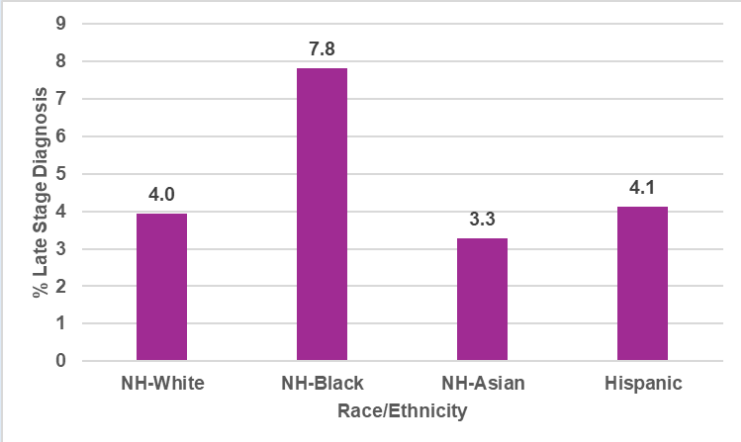
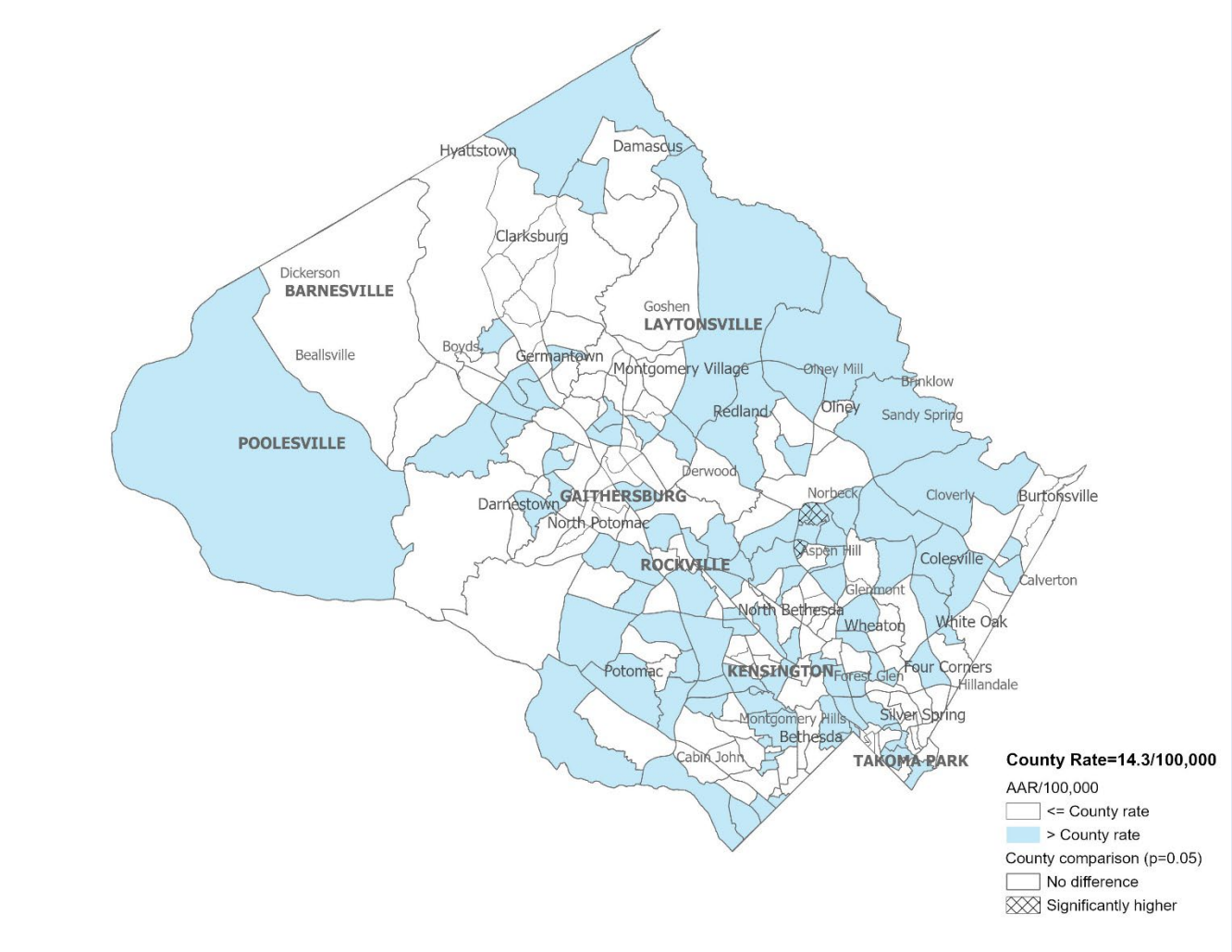


Figure 70. Female Breast Cancer: Late-Stage Diagnosis* by Race/Ethnicity, Montgomery County, 2018-2022



*Late-stage diagnosis of cancer, or distant stage cancer, is defined as cancer that has spread beyond adjacent organs or tissues, to distant parts of the body.

Map 14. Cancer Age-Adjusted Mortality Rates by Census Tract, Female Breast, Montgomery County, 2015-2023



85.2% (95% CI: 80.8-89.5) adults aged 50 and older had a mammogram in the last two years in Montgomery County, as compared to 83.2% (95% CI: 81.4-84.9) in Maryland. The County has met this Healthy People 2030 national target.

Target: 80.3% of females age 50-74 receive a breast cancer screening

Prostate Cancer

Prostate cancer, cancer that develops in the prostate gland of the male reproductive system, is the second most common cancer among men in the U.S., after skin cancer. It is the second leading cause of cancer death in men, after lung cancer. Approximately 255,395 new cases of prostate cancer were reported in the U.S. in 2022, and 33,881 males in the U.S. died from prostate cancer in 2023[42]. All men are at risk of prostate cancer. Increased age, family history of prostate cancer, and race (African American men are at high risk) are non-modifiable factors that increase prostate cancer risk. Black men experience higher rates of incidence and mortality compared to White men, highlighting significant racial disparities in prostate cancer outcomes. While not preventive, screenings for prostate cancer by a prostate specific antigen (PSA) test may detect prostate changes early. It is important for men, especially those at higher risk, to discuss screening recommendations with their healthcare providers.

- The overall incidence rate of prostate cancer in the County increased until 2017, then decreased. The County rate was consistently lower than Maryland but higher than the U.S. (Figure 71).
- The mortality rate in the County fluctuated. The County rate was consistently lower than that of Maryland and the U.S. (Figure 72).
- Among the population subgroups, NH-Blacks had statistically significant higher rates than NH-Whites for both incidence and mortality (Figure 73 & Figure 74).

Figure 71. Cancer Age-Adjusted Incidence Rates, Prostate, Montgomery County, Maryland, and U.S., 2013-2020

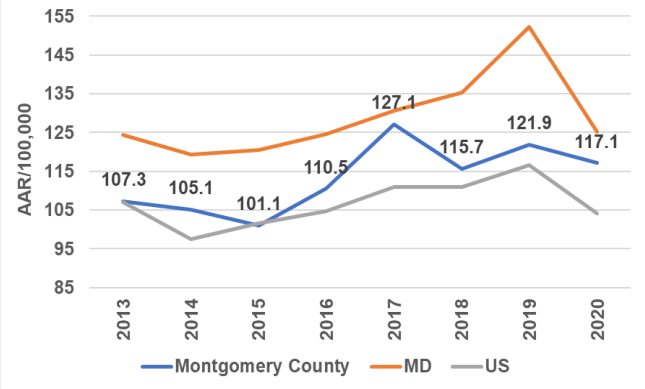
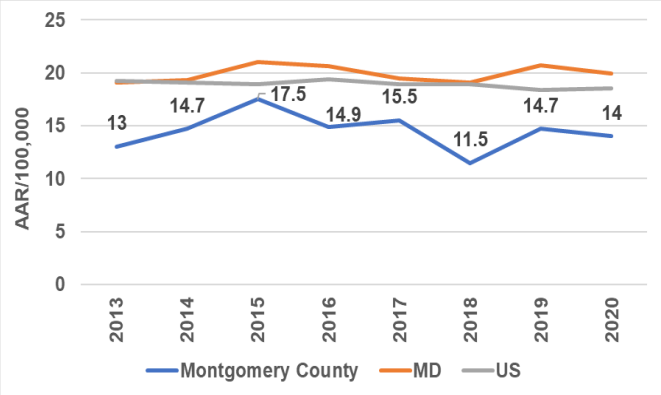


Figure 72. Cancer Age-Adjusted Mortality Rates, Prostate, Montgomery County, Maryland, and U.S., 2013-2020



Target: 16.9 prostate cancer deaths per 100,000 males
Current Status: Target met per 2023 County data

Figure 73. Cancer Age-Adjusted Incidence Rates by Race, Prostate, Montgomery County, 2018-2022

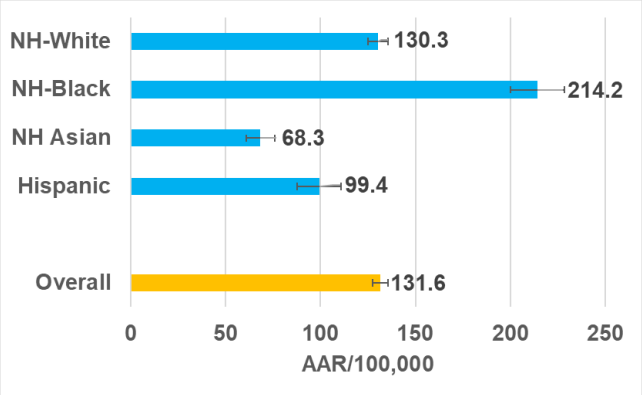
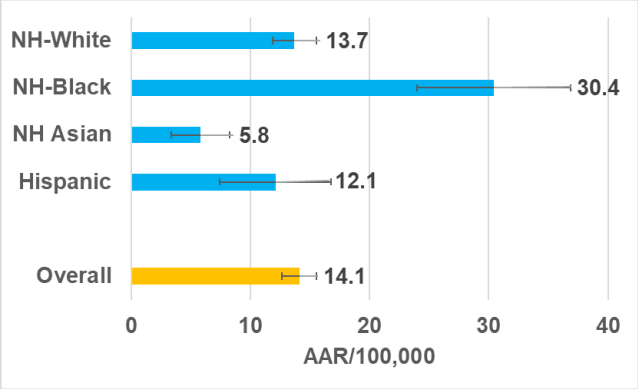


Figure 74. Cancer Age-Adjusted Mortality Rates by Race, Prostate, Montgomery County, 2019-2023



Stage Distribution

- From 2018 to 2022, about 74.2% of prostate cancer cases in Montgomery County were diagnosed at a localized stage. About 12.6% of prostate cancers were diagnosed at a regional stage, and 7.1% were found at a distant stage (Figure 75).
- Late-stage prostate cancer diagnoses were the highest in 2022, an increase from previous years (Figure 76).
- Hispanics had the highest diagnosis of late-stage prostate cancer cases, compared to NH-Black, NH-White, and NH-Asian population subgroups (Figure 77).

Figure 75. Prostate Cancer: Stage at Diagnosis, Montgomery County, 2018-2022

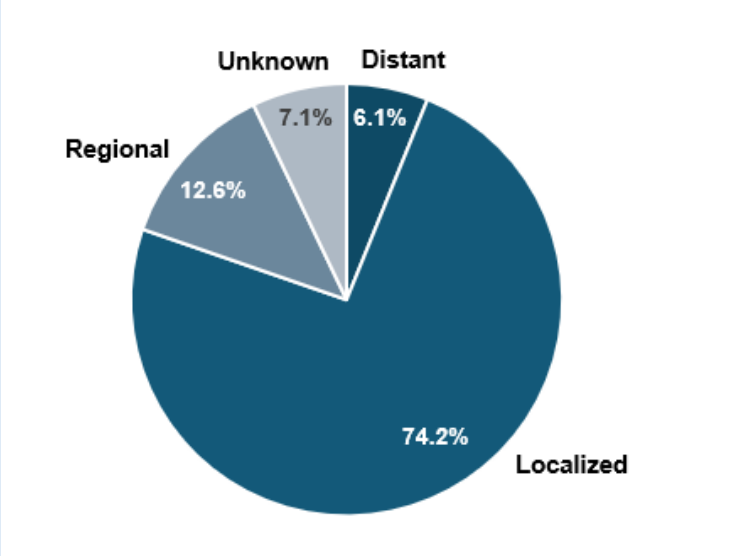


Figure 76. Prostate Cancer: Late-Stage Diagnosis* by Year, Montgomery County, 2018-2022

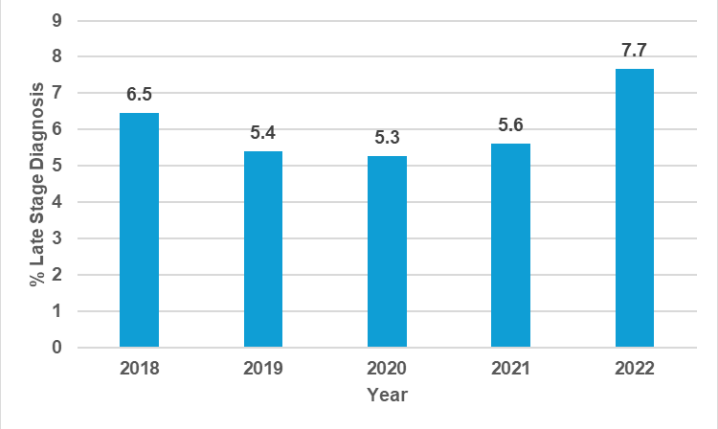
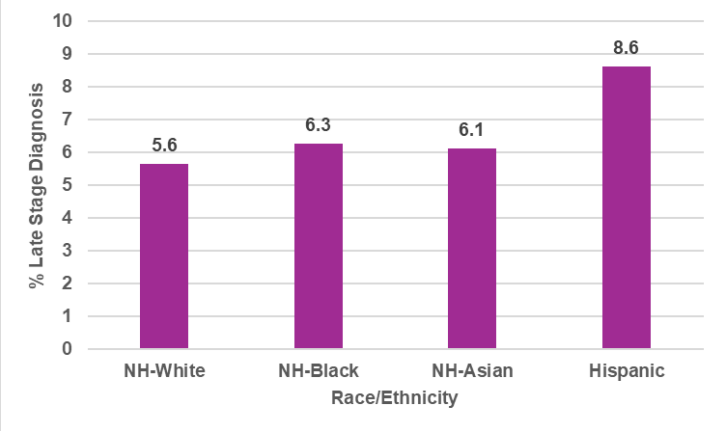
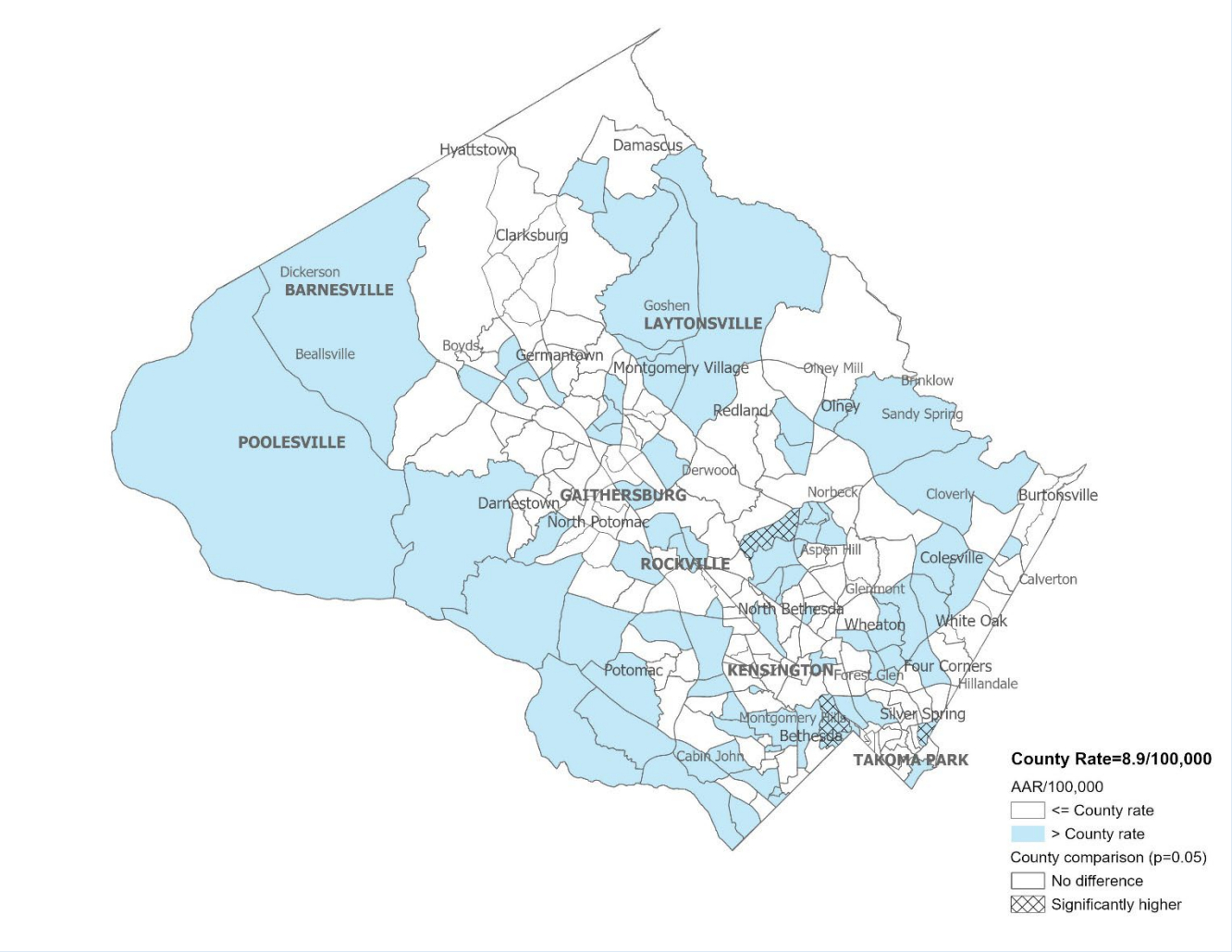


Figure 77. Prostate Cancer: Late-Stage Diagnosis* by Race/Ethnicity, Montgomery County, 2018-2022



*Late-stage diagnosis of cancer, or distant stage cancer, is defined as cancer that has spread beyond adjacent organs or tissues, to distant parts of the body.

Map 15. Cancer Age-Adjusted Mortality Rates by Census Tract, Prostate, Montgomery County, 2015-2023



Melanoma of the Skin

Skin cancer is the most common cancer in the U.S. Although it accounts for about 1% of skin cancers, melanoma causes most skin-cancer-related deaths[43]. In the U.S., approximately 97,059 new cases of melanoma skin cancer were reported in 2022, and 8,350 people died from melanoma skin cancer in 2023[44]. The main risk factor of melanoma skin cancer is exposure to ultraviolet (UV) rays. Additional risk factors include family or personal history of melanoma, history of severe sunburns, lighter skin color, older age, and certain types of moles. Reducing UV exposure from the sun, tanning beds and sunlamps, and reporting unusual moles or changes in skin are critical for prevention and early detection.

- Incidence of melanoma skin cancer in Montgomery County decreased between 2013 and 2018, increased in 2019, then decreased again in 2020. The rate for the County was consistently lower than Maryland and the U.S. until 2018. In 2019, the incidence rate in the County was higher than the U.S., then lowered again in 2020 (Figure 78).
- The mortality rate decreased in Maryland and the U.S., though it fluctuated. County data is unavailable for 2014-2017 and 2019-2020 (Figure 79).
- Females had higher rates than males for both incidence and mortality (Figure 80 & Figure 81).

Figure 78. Cancer Age-Adjusted Incidence Rates, Melanoma of Skin, Montgomery County, Maryland, and U.S., 2013-2020

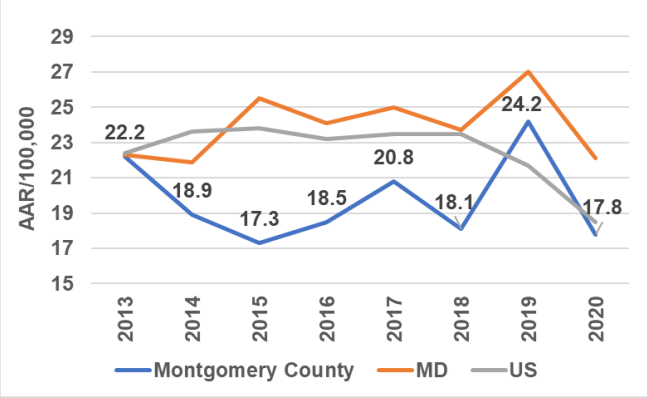


Figure 79. Cancer Age-Adjusted Mortality Rates, Melanoma of Skin, Montgomery County, Maryland, and U.S., 2013-2020

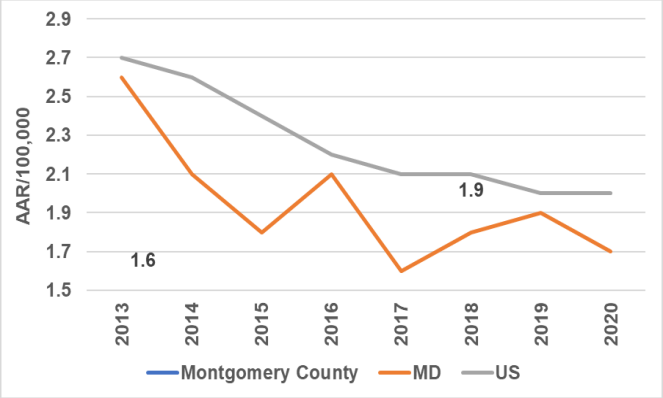


Figure 80. Cancer Age-Adjusted Incidence Rates by Sex, Melanoma of Skin, Montgomery County, 2018-2022

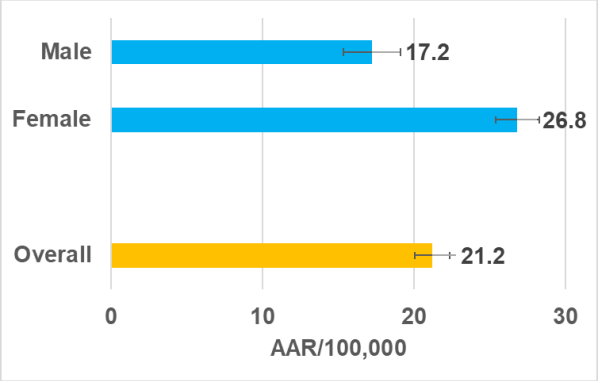
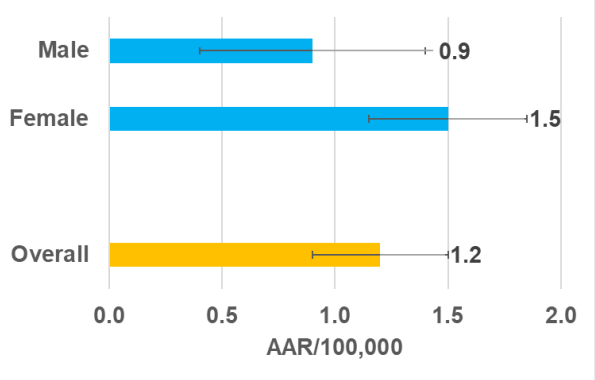


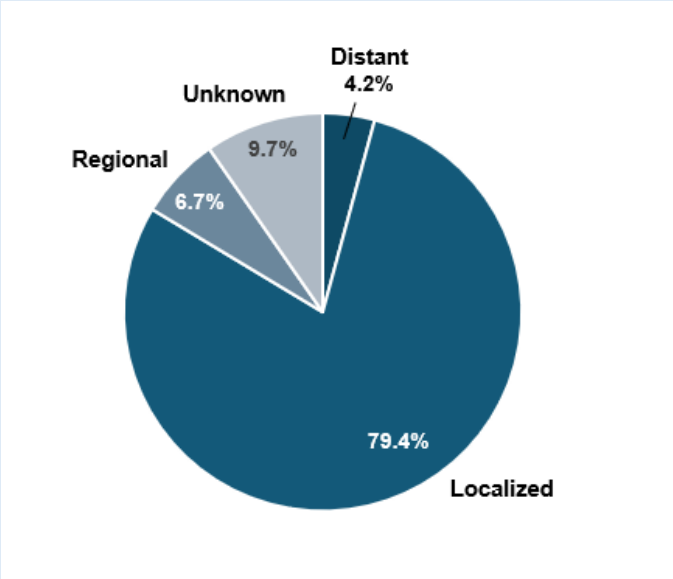
Figure 81. Cancer Age-Adjusted Mortality Rates by Sex, Melanoma of Skin, Montgomery County, 2019-2023



Stage Distribution

- From 2018 to 2022, about 79.4% of melanoma skin cancer cases in Montgomery County were diagnosed at a localized stage. About 6.7% of melanoma skin cancer cases were diagnosed at a regional stage, and 4.2% were found at a distant stage (Figure 82).

Figure 82. Melanoma Skin Cancer: Stage at Diagnosis, Montgomery County, 2018-2022



3.3% (95% CI: 2.6-3.9) adults age 18+ ever told they have skin cancer in Montgomery County, as compared to 3.9% (95% CI: 3.6-4.3) in Maryland.

Oral Cancer

Oral cancers, cancers of the oral cavity and pharynx, develop in any area of the mouth, such as the tongue, lips, cheeks, gums, floor of the mouth, and the back of the throat. In the U.S., approximately 51,127 new cases of oral cancer were reported in 2022, and 11,784 people died from oral cancer in 2023[44]. Common risk factors for oral cancer include tobacco use and alcohol consumption. Human papillomavirus (HPV) infection has also been linked to oral cancers. Quitting tobacco use and limiting alcohol intake are key lifestyle changes that can help prevent oral cancer. HPV vaccination can prevent HPV-related oral cancers. Regular dental visits and oral exams are key for early detection.

- Incidence of oral cancer in Montgomery County was lower than Maryland and the U.S. for 2018-2022 (Table 11). Similarly, oral cancer mortality was lower in the County than in Maryland and the U.S. for 2019-2023 (Table 11).
- Males had higher rates than females for both incidence and mortality (Table 11).
- NH-Whites had higher incidence rates than NH-Asian, NH-Black, and Hispanic population subgroups (Table 11).

Table 11. Oral Cancer: Age-Adjusted Incidence and Mortality Rates, Montgomery County, Maryland, and U.S.

		Age-Adjusted Incidence Rate/100,000, 2018-2022			Age-Adjusted Mortality Rate/100,000, 2019-2023		
		MoCo	MD	U.S.	MoCo	MD	U.S.
Total		8.4	10.9	12	1.6	2.5	3
Sex	Male	12.1	16.6	18	2.5	4.1	4
	Female	5.3	6	7	0.81	1.2	1
Race/Ethnicity	NH-White	10.3	13.4	14	1.6	2.7	3
	NH-Black	6	7.6	8		2.3	3
	NH-Asian	6.8	7.6	8	2.1	1.9	2
	Hispanic	4.9	4.2	7		1.1	2

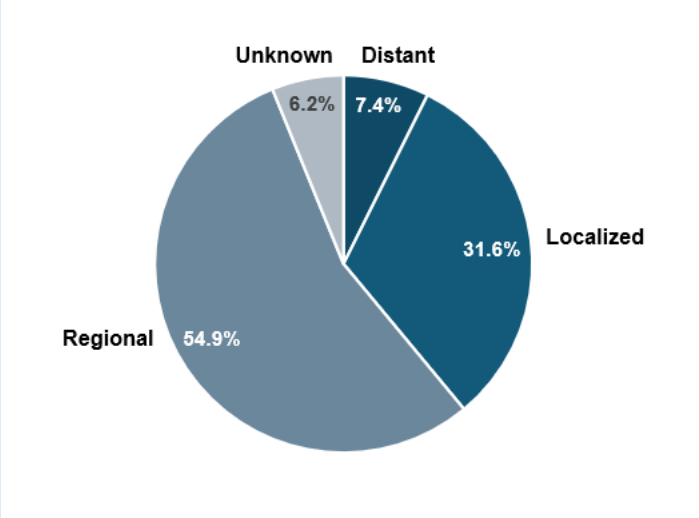
*Montgomery County mortality data not available for demographics: NH-Black, Hispanic

Source: U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute https://www.cdc.gov/cancer/dataviz

Stage Distribution

- From 2018 to 2022, about 54.9% of oral cancer cases in Montgomery County were diagnosed at a regional stage. About 31.6% of oral cancer cases were diagnosed at a localized stage, and 7.4% were found at a distant stage (Figure 83).

Figure 83. Oral Cancer: Stage at Diagnosis, Montgomery County, 2018-2022



Target: 34.2% of oral and pharyngeal cancers detected at the earliest stage (Stage 1 localized)
Current Status: Target not yet met per 2018-2022 County data

Cervical Cancer

Cervical cancer is cancer that develops in the cervix, the lower part of the uterus. Any woman with a cervix is at risk for cervical cancer, with most cases often occurring in women over the age of 30. Most cases of cervical cancer are caused by long-lasting infection with certain types of HPV. In the U.S., approximately 12,960 new cases of cervical cancer were reported in 2022, and 4,162 women died from cervical cancer in 2023[44]. Incidence and mortality rates have declined due to regular screenings tests (the HPV test and Pap test) and the HPV vaccine, allowing for early detection and intervention. However, despite the advances in screening methods, racial disparities persist as Black, Hispanic, and low-income women experience higher incidence and mortality rates of cervical cancer compared to White women. Improving access to healthcare, vaccination rates, cervical cancer education are crucial for continuing to lower rates of cervical cancer cases and related deaths for women in the U.S.

- Incidence of cervical cancer in Montgomery County was lower than Maryland and the U.S. for 2018-2022 (Table 12). Similarly, cervical cancer mortality was lower in the County than in Maryland and the U.S. for 2019-2023 (Table 12).
- Hispanic and NH-Black population subgroups had higher incidence rates than NH-Asian and NH-White population subgroups (Table 12).

Table 12. Cervical Cancer: Age-Adjusted Incidence and Mortality Rates, Montgomery County, Maryland, and U.S.

		Age-Adjusted Incidence Rate/100,000, 2018-2022			Age-Adjusted Mortality Rate/100,000, 2019-2023		
		MoCo	MD	U.S.	MoCo	MD	U.S.
Total		4.7	6.1	8	1.3	1.9	2
Race/Ethnicity	NH-White	3.1	5.6	7	1	1.6	2
	NH-Black	6.3	6.5	8		2.5	3
	NH-Asian	4.7	4.4	6		-1	2
	Hispanic	6.7	8.4	10		2.4	2

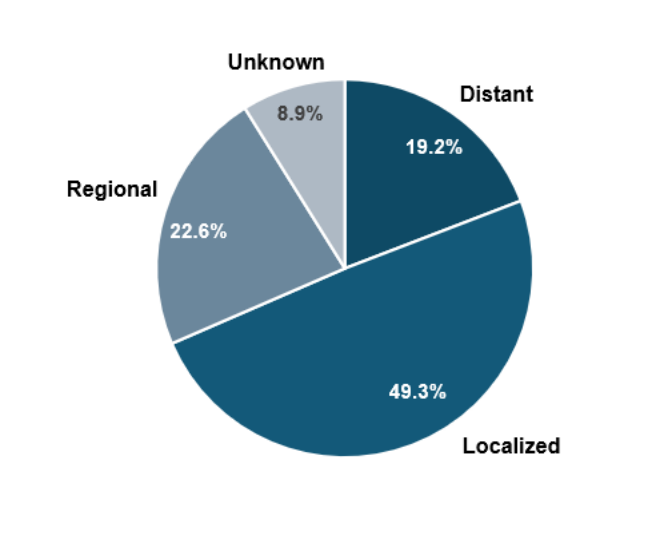
*Montgomery County data not available for demographics: NH-Black, NH-Asian, Hispanic

Source: U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute https://www.cdc.gov/cancer/dataviz

Stage Distribution

- From 2018 to 2022, about nearly half (49.3%) of cervical cancer cases in Montgomery County were diagnosed at a localized stage. About 22.6% of cervical cancer cases were diagnosed at a regional stage, and 19.2% were found at a distant stage (Figure 84).

Figure 84. Cervical Cancer: Stage at Diagnosis, Montgomery County, 2018-2022



56.3% (95% CI: 51.4-61.1) adults age 18+ have had cervical cancer screening in Montgomery County, as compared to 59.2% (95% CI: 57.3-61.2) in Maryland. The County has not met this Healthy People 2030 national target yet.

96.6% (95% CI: 95.0-98.2) adults age 18+ most recent cervical cancer screening was a Pap Test in Montgomery County, as compared to 96.2% (95% CI: 95.5-96.9) in Maryland.

61.6% (95% CI: 55.4-67.8) adults age 18+ most recent cervical cancer screening was an H.P.V Test in Montgomery County, as compared to 60.3% (95% CI: 57.8-62.8) in Maryland.

Target: 79.2% of females age 21-65 receive a cervical cancer screening

Diabetes Mellitus

Diabetes mellitus is a serious, costly, and increasingly common chronic disease. According to the World Health Organization, about 830 million people worldwide have diabetes[45]. Diabetes affects how the body uses blood glucose. This condition occurs when the body does not produce enough insulin or cannot use insulin as well as it should. Over time, this leads to damage to the heart, blood vessels, eyes, kidneys, and nerves. There are three main types of diabetes. Type 2 diabetes is the most common form, which usually develops in adults. This occurs when the body becomes resistant to insulin or does not produce enough of it. Type 1 diabetes, which usually develops in childhood or young adulthood, occurs when the body attacks insulin-producing cells in the pancreas. Gestational diabetes occurs during pregnancy and typically goes away after childbirth, but it increases the risk of developing type 2 diabetes later in life.

Diabetes continues to be a major public health issue in the U.S, affecting about 38.1 million people aged 18 and older (14.7% of the U.S. population) in 2021[46]. In 2018, diabetes was the sixth leading cause of death in Maryland and the fifth leading cause of death for Black residents of the state[47]. In 2023, diabetes was the fifth leading cause of death in Montgomery County.

About 1 in 3 adults in the U.S. has prediabetes[48]. People with this condition have blood sugar levels that are higher than normal, but not high enough to have type 2 diabetes. Prediabetes increases the risk of developing type 2 diabetes, heart disease, and stroke. Type 2 diabetes and prediabetes can be prevented with lifestyle changes, such as increasing physical activity, having a balanced diet, maintaining a healthy weight, and managing stress.

The Maryland Department of Health released the Maryland Diabetes Action Plan with action steps for organizations and partners to implement to prevent and manage diabetes in Maryland[47]. The action steps are categorized using a system change model approach, working upstream to people at a healthy weight, then progressing as risk increases with those who are overweight and obese, followed by those who are prediabetic or with history of gestational diabetes, and include actions to improve outcomes in those identified with diabetes and diabetes complications.

In Fiscal Year 2020, Montgomery County DHHS received a two-year grant award from the Maryland Community Health Resources Commission to implement the Predict – Link – Control T2D project that aims to decrease type 2 diabetes-related emergency department use with a target reduction of 10% and establish a Chronic Disease Coalition. The Local Health Improvement Coalition (LHIC) staff will also use the funds to complete the Decision-making Education for Choices in Diabetes Everyday (DECIDE) Facilitator training. In addition, LHIC staff received technical assistance from the University of Maryland School of Public Health.

- Diabetes mortality rates in Montgomery County decreased up to 2018, fluctuated 2019-2022, and increased through 2023. Diabetes mortality in the County is consistently lower than that of Maryland and the U.S. (Figure 85).
- NH-Blacks had the highest diabetes mortality when compared with other population subgroups. Males had higher mortality than females (Figure 86).
- Residents aged 65 and older had the highest diabetes mortality, followed by those aged 35-64 (Figure 87).

Figure 85. Diabetes Age-Adjusted Mortality Rates, Montgomery County, Maryland, and U.S., 2014-2023

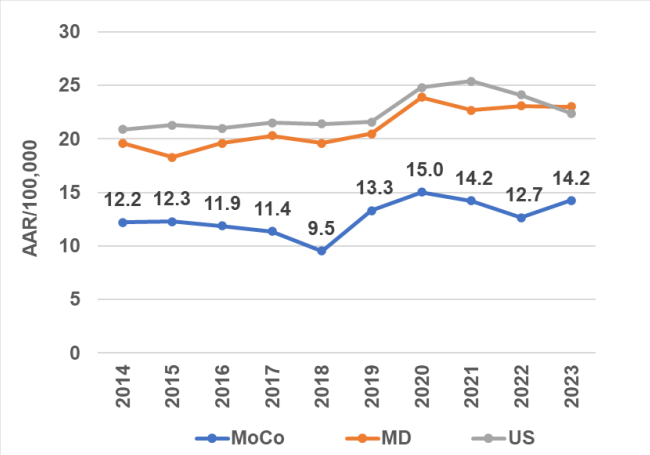
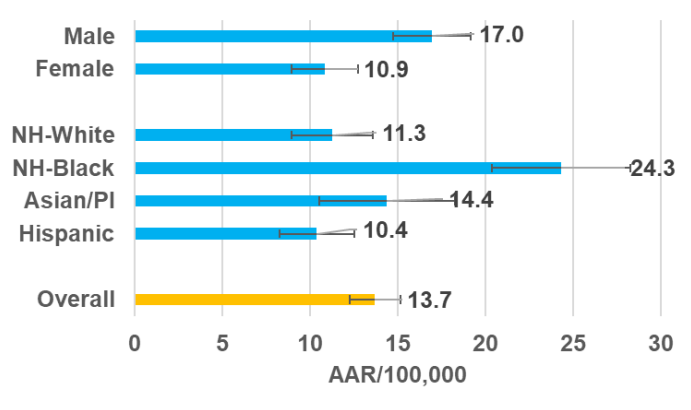
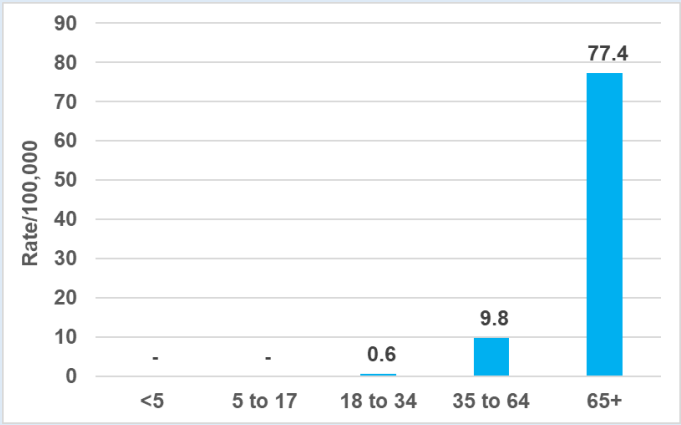


Figure 86. Diabetes Age-Adjusted Mortality Rates by Sex and Race/Ethnicity, Montgomery County, 2021-2023

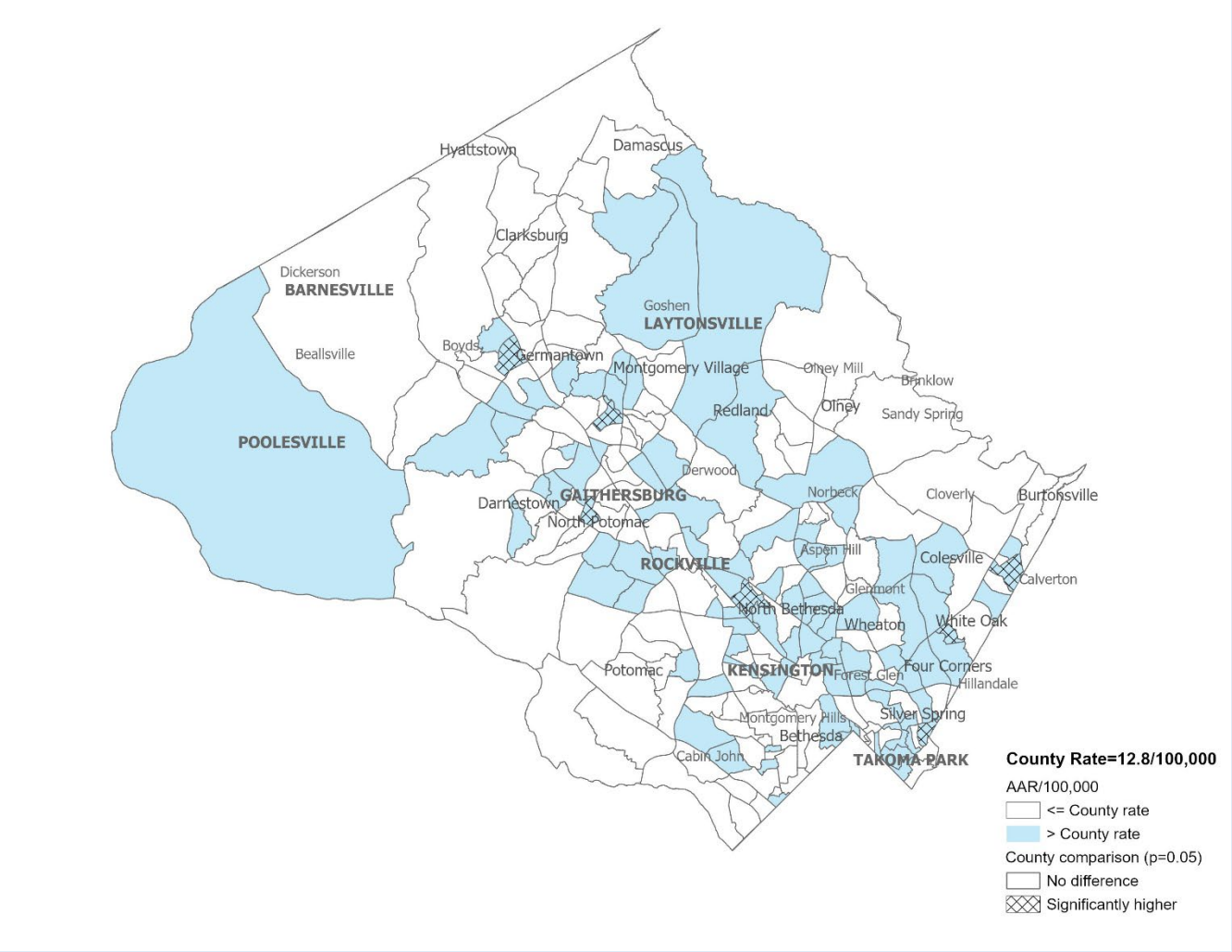


Diabetes Mortality Age-Adjusted Rate Goal: 13.8/100,000
Current Status: Goal not yet met per 2023 County data

Figure 87. Diabetes Mortality Rates by Age, Montgomery County, 2021-2023



Map 16. Diabetes Age-Adjusted Mortality Rates by Census Tract, Montgomery County, 2021-2023



- Diabetes ER visit rates increased over time until 2019 when they began to decrease, similar to those in Maryland. The rates in the County were consistently lower than Maryland (Figure 88).
- Among population subgroups, NH-Blacks had the highest diabetes ER visit rates, followed by Hispanics, NH-Whites, and Asian/PI. Males had a higher rate compared to females (Figure 89).
- Diabetes ER visits rates increased with age. People aged 65 and older had the highest rates (Figure 90).

Figure 88. Diabetes Related ER Visit Age-Adjusted Rates, Montgomery County and Maryland, 2013-2023

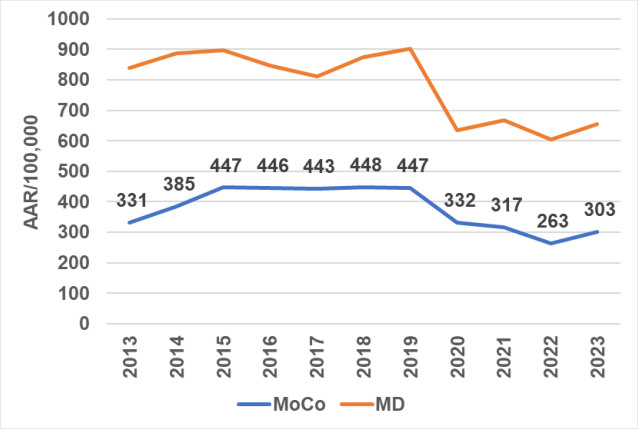
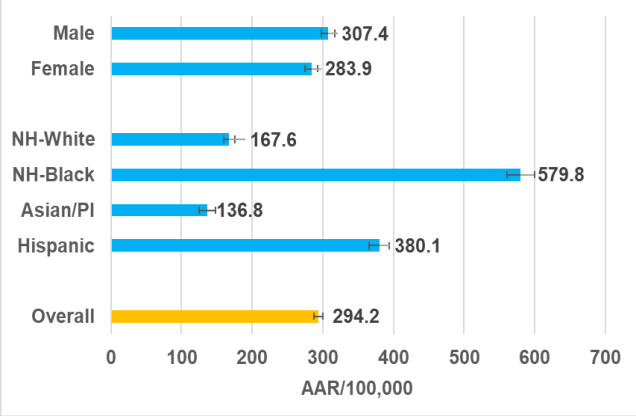
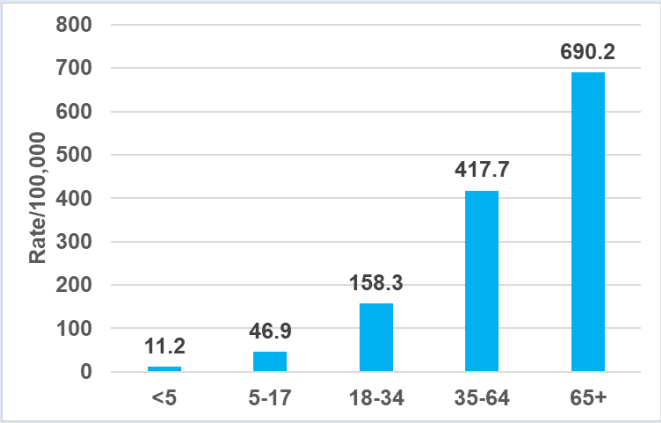


Figure 89. Diabetes Related ER Visit Age-Adjusted Rates by Sex and Race/Ethnicity, Montgomery County, 2021-2023

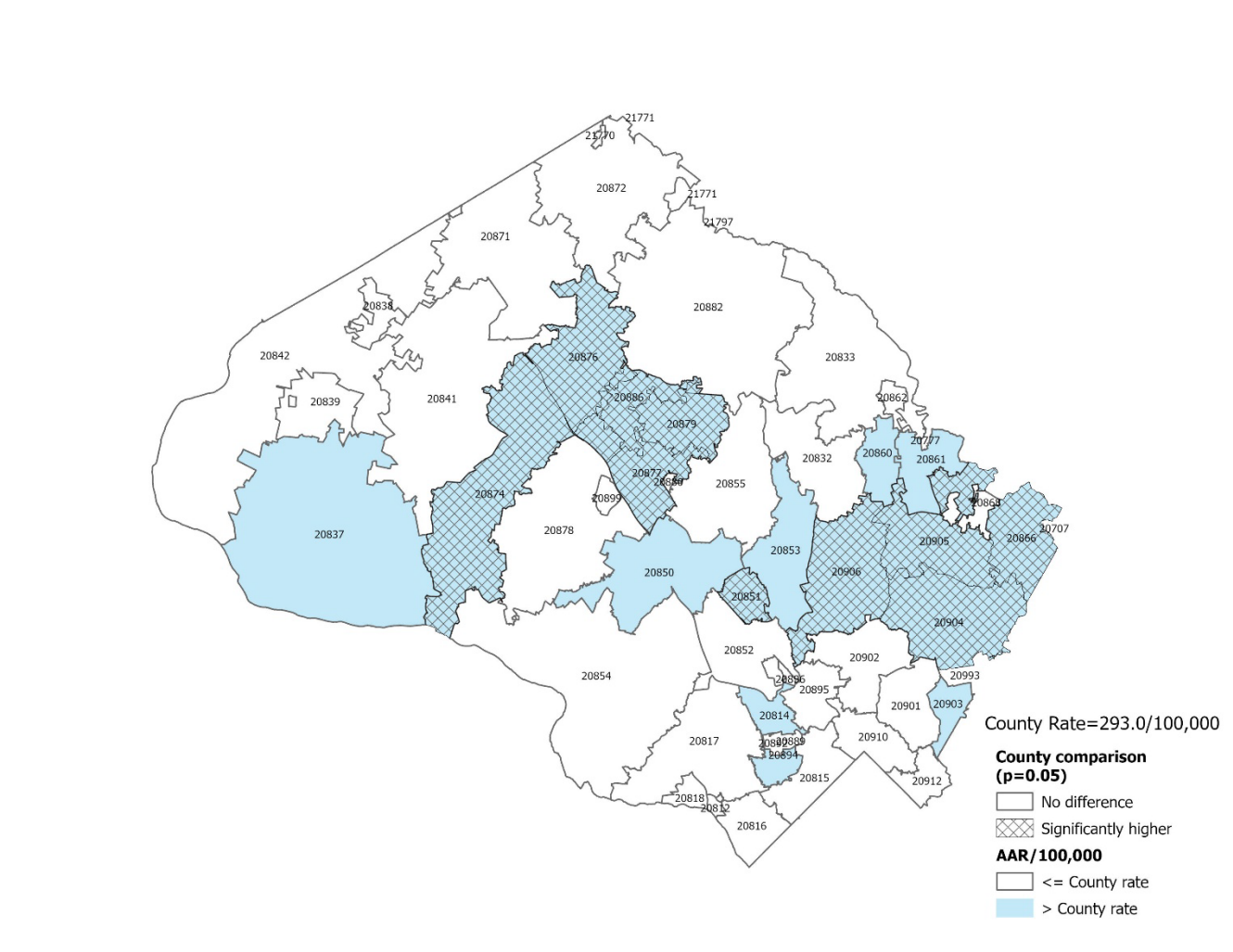


Diabetes ER Visit Age-Adjusted Rate Goal: 255.5/100,000
Current Status: Goal not met per 2023 data

Figure 90. Diabetes Related ER Visit Rates by Age, Montgomery County, 2021-2023

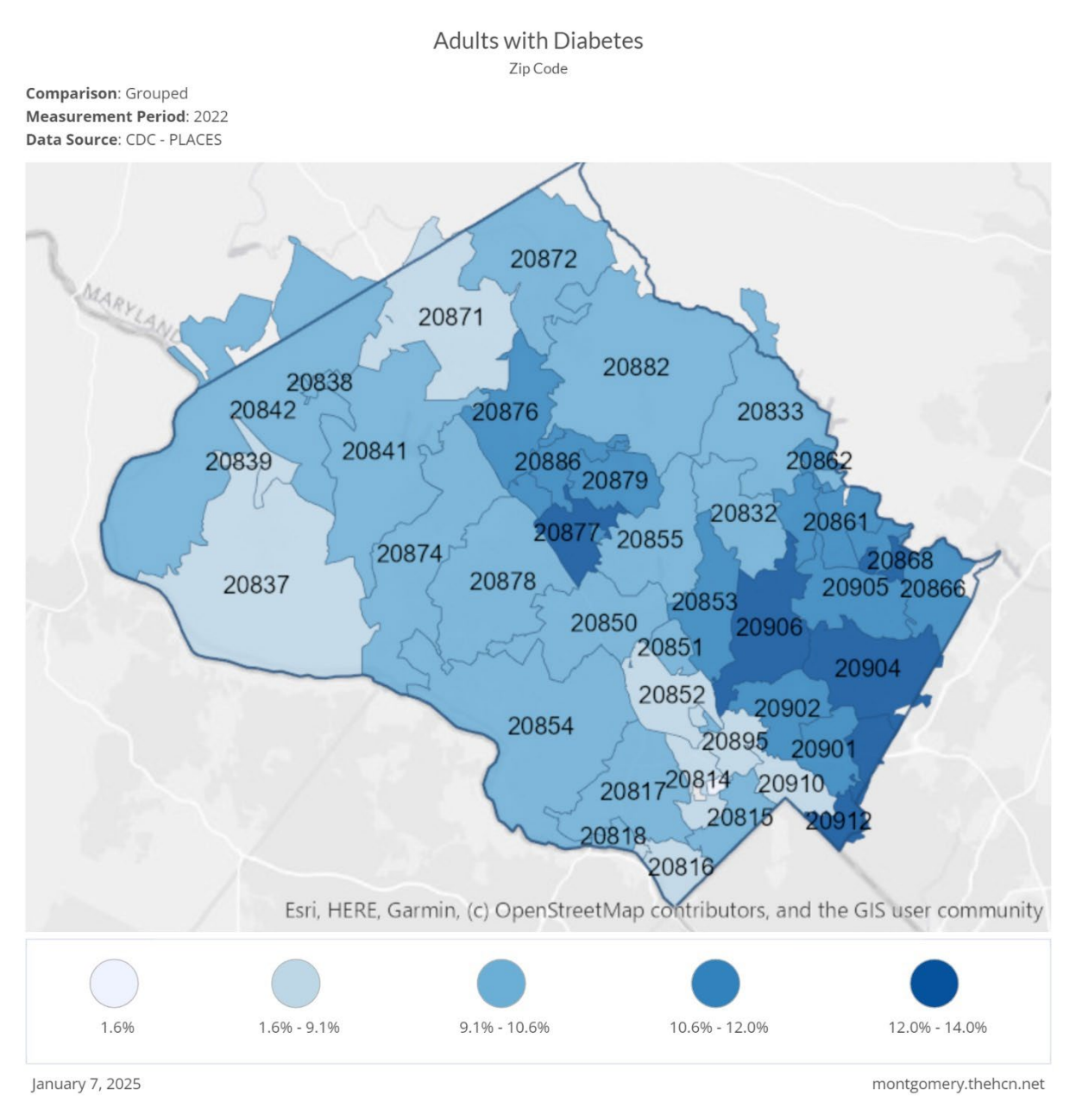


Map 17. Diabetes Related ER Visit Age-Adjusted Rates by Zip Code, Montgomery County, 2021-2023



8.4% (95% CI: 6.6-10.1) adults aged 18+ ever told have diabetes in Montgomery County, as compared to 10.9% (95% CI: 10.2-11.7) in Maryland.

Map 18. Prevalence of Adults with Diabetes by Zip Code, Montgomery County, 2022



DHHS CHRONIC DISEASE PROGRAMS & SERVICES

Colorectal Cancer Screening Program (CCSP)

Program Overview

The Colorectal Cancer Screening Program offers colorectal cancer screenings, including colonoscopies and follow-up care, to eligible Montgomery County residents at no cost. The program ensures care coordination and connects patients to further diagnostic and treatment services if needed. Additionally, it provides health education to raise cancer awareness and emphasizes the importance of regular screenings. This program is funded by grants from the Maryland Department of Health (MDH). The MDH's Cancer Prevention, Education, Screening, and Treatment Program (CPEST) administers these grants to local health departments and academic centers, aiming to reduce cancer mortality and disparities across Maryland.

Performance

In Fiscal Year 2025, Montgomery County's Colorectal Cancer Screening program continued its partnerships with the African American Health Program, Asian American Health Program, and Latino Health Initiative in distributing linguistically and culturally diverse materials for their minority health initiatives. Sustained collaborations with Holy Cross Hospital and Johns Hopkins Suburban Hospital for referrals resulted in successfully meeting 89% of the program's target for colorectal cancer screening. The new joint effort with Montgomery County's Mobile Health Clinic program increased opportunities for referrals as well as the dissemination of brochures and educational materials.

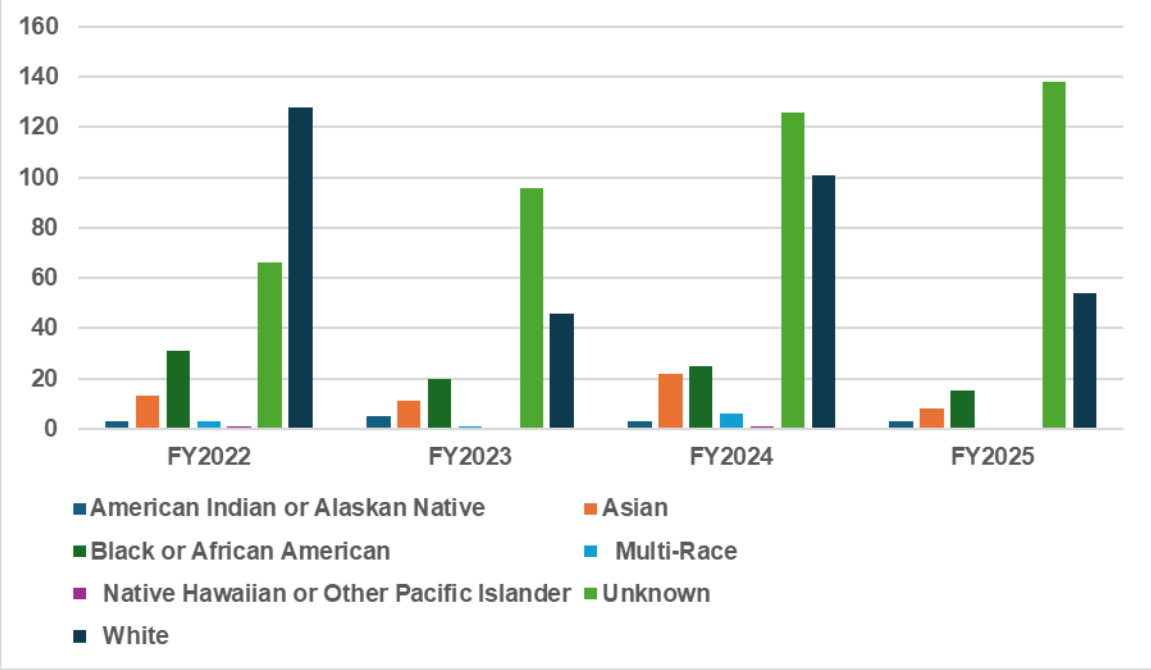
Table 13. Montgomery County CCSP Colorectal Cancer Screenings, FY 2022-FY 2025

Montgomery County Colorectal Cancer Screenings*	FY 2022	FY 2023	FY 2024	FY 2025
Total Screened	154	223	225	204
Cancer Diagnosed	1	6	4	3
Screened Minority	105	219	222	200
Male	24	82	88	67
Female	83	141	137	137

*Screenings include Fecal Occult Blood Test (FOBT), Sigmoidoscopy, and Colonoscopy

Figure 91. Montgomery County CCSP Colorectal Cancer Screenings by Gender, FY 2022-FY 2025

Figure 92. Montgomery County CCSP Colorectal Cancer Screenings by Race, FY2022-FY2025



Trends

- **Females** consistently had higher screening numbers than males across all years.
- **Hispanic/Latino** individuals consistently represented the majority of screenings, peaking at **235** in FY 2024 before decreasing to **191** in FY 2025.

Key Observations

- There was a general **increase in screenings** from FY 2022 to FY 2024, followed by a **decline in FY 2025** across most demographics.
- The **Unknown** categories for both race and ethnicity grew or remained present, suggesting a need for improved data collection.
- **Hispanic/Latino** and **female** populations were the most consistently screened groups.

Use of Evidence

The reduction in overall cancer screenings in FY 2025 is attributed to a decrease in outreach. To address this trend, the Program will prioritize the following objectives:

- Increase colorectal cancer screening rates among county residents, particularly those in underserved and high-risk populations through enhanced public awareness and knowledge about the importance of early detection through targeted outreach and education
    - Launch online media campaign to include videos and links to applicable resources
- Introduction of Cologuard screening service: Based on the Centers for Disease Control and Prevention (CDC) data, Cologuard was a significant factor in the increase in colon cancer screening rates from 2015 to 2021 among Americans ages 50-75, resulting in a rise from 63% to 72%, respectively. Similarly, this new non-invasive option will allow for expanded access to screening for county residents.
- Strengthen and expand partnerships with healthcare systems, community-based organizations, government agencies, and other stakeholders to improve service delivery and coordination for new and prior enrollees
    - Deepen collaborations with current and expand new provider participation

To maximize impact and efficiently utilize available resources, the Program will leverage existing strategic partnerships with Federally Qualified Health Centers, hospital-based initiatives, and nonprofit organizations. These collaborations will enhance outreach, education, and client recruitment efforts. Additionally, the Program will collaborate interdepartmentally with the Minority Health Initiative Programs – including the African American Health Program, Latino Health Initiative, and Asian American Health Program – to identify and engage eligible individuals in cancer prevention and screening services.

Mobile Health Clinic Program

Project Overview

Access to healthcare services is a fundamental right, yet many communities, particularly those in rural or underserved areas, face significant barriers to accessing quality healthcare. Factors such as geographic isolation, transportation limitations, socioeconomic status, and healthcare infrastructure disparities contribute to these challenges. COVID-19 highlighted the need for greater capacity to provide health and human services directly in hard-to-reach and vulnerable communities throughout the County. In response to these barriers, the Montgomery County Department of Health and Human Services established the Mobile Health Clinic (MHC) to extend healthcare services directly to those in need.

The mission of the MHC is to reduce health disparities by delivering essential medical, dental, behavioral health, and social services to underserved and hard-to-reach communities. Funded in FY22 and launched in December 2023, the MHC extends the County's public health infrastructure by offering integrated care directly in neighborhoods with limited access to traditional services.

The MHC increases access to care by providing physical exams, immunizations, chronic disease management, oral health services, and behavioral health support. Services are tailored to community needs and include health education, social service referrals, and assistance with food, housing, and insurance navigation. The MHC enhances emergency response capabilities and is available for community health events, prioritizing areas with the greatest health disparities.

Follow-up care is a vital component of the MHC's patient-centered model. After a patient receives treatment, screening, or a diagnosis, the MHC provides structured follow-up services as needed to ensure continuity of care, link people to a primary-care medical home, behavioral health home, or dental home to promote positive health outcomes. This includes scheduling appointments with community providers, conducting follow-up calls or telehealth to monitor health status, and offering personalized patient education to monitor recovery and identify any complications early.

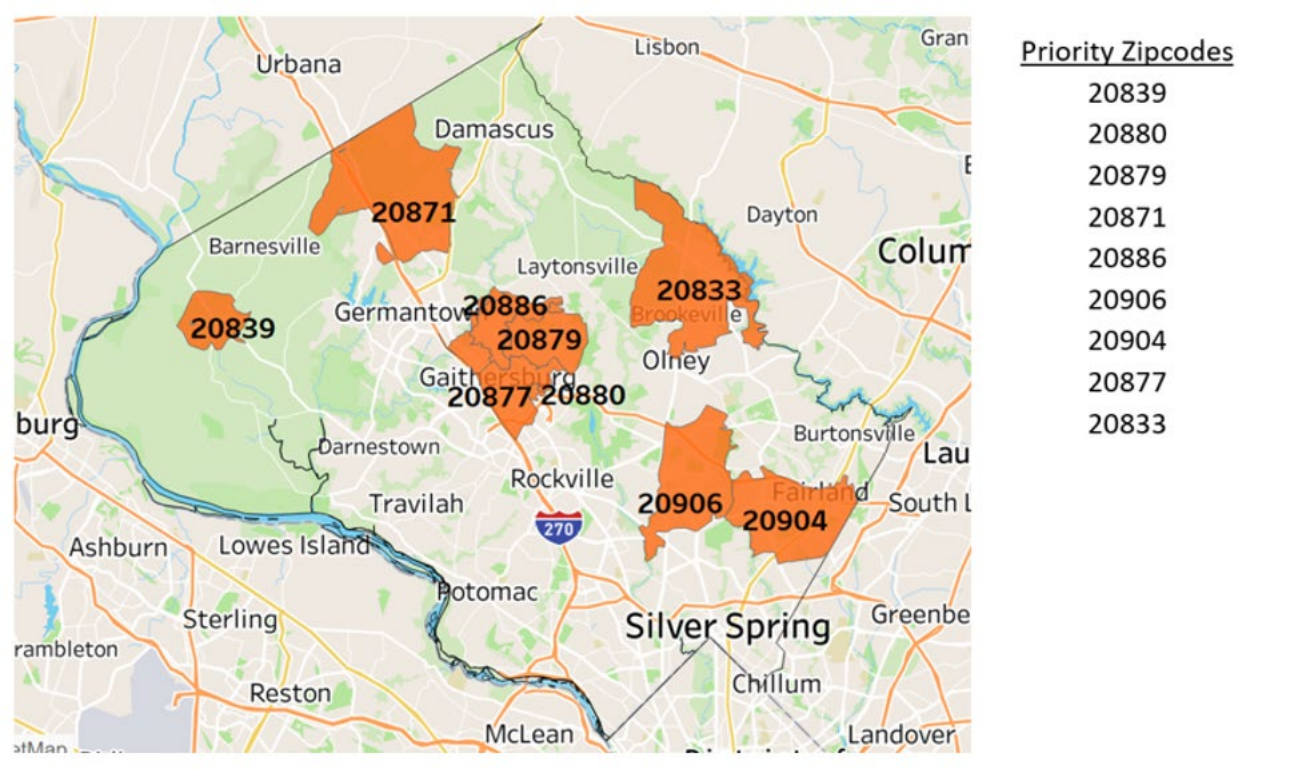
Whether it's managing a chronic condition, addressing a recent diagnosis, or monitoring treatment outcomes, follow-up care may include physical, dental or behavioral health exams, blood work, or imaging, depending on the patient's needs. By providing these services directly in the community, the MHC helps ensure that patients not only receive timely care but also stay connected to the health system, especially those who may otherwise face barriers to follow-up due to transportation, cost, or access challenges.

The MHC prioritizes services for low-income families, immigrant communities, and residents of rural areas. Monthly clinics are co-located at the six County DHHS Service Consolidation Hubs—trusted community sites where families already access food and essential services. The MHC also partners with WUMCO Help, Inc. in the Agricultural Reserve to deliver care to rural populations. Services are available to all County residents, with equity considerations embedded at the core of the program. The MHC expands the County's capacity to proactively address disparities in health care access and

outcomes by using data to strategically reach underserved, hard-to-reach populations and communities experiencing poor health outcomes.

Targeting is informed by a robust evidence base developed by the County's epidemiology team, which identified ZIP codes with the highest disease burden using Healthy Montgomery indicators (Figure 93). These include rates of diabetes-related emergency room visits, behavioral health emergency room visits, and the percentage of low birthweight infants. Data was also analyzed by primary care service area using findings from the County's Health Equity Report.

Figure 93. Priority Zip Codes for Mobile Health Clinics, Montgomery County



To reduce language barriers, the team includes four bilingual staff and provides translated forms and materials in the top County languages. Additional language support is arranged as needed to ensure culturally responsive care.

The MHC team includes a Nurse Practitioner, Community Health Nurse, Licensed-Clinical Social Workers-Clinical (including a bilingual therapist), three Community Health Workers, and a Driver/Clerk. The dental team: Dental Hygienist, and Dental Assistant—provides cleanings, fluoride treatments, fillings, and referrals. One Community Health Worker also serves as a Medical Assistant/Phlebotomist for point-of-care testing and lab work. This collaborative model ensures holistic, high-quality care.

The DHHS MHC is a transformative initiative that brings preventive, patient-centered care directly to the communities that need it most. Through strategic partnerships, language access, and a data-informed focus on equity, the MHC strengthens Montgomery County's efforts to eliminate health disparities and improve health outcomes for all residents.

Performance

As of July 2024, the following Mobile Health Clinic services and screenings have been performed:

- Over 600 blood pressure screenings
- Over 550 body mass index measurements
- Over 450 vision exams
- Almost 200 dental exams
- Almost 100 mental health screenings
- Over 50 HIV screenings

Table 14. Summary of Mobile Health Clinic Services and Screenings Provided

Type	January 2024 - June 2024	July 2024 - April 2025	May 2025 - June 2025 (with MHC Vehicle)	Total
Blood Pressure	583	721	74	1378
Body Mass Index	490	442	-	932
Vision	444	396	-	840
Dental	173	390	99	662
Mental Health	87	88	49	224
HIV	34	122	5	161
Urinary Tract Infection	-	-	5	5
Pregnancy Test	-	-	2	2
Blood Glucose A1c	-	-	52	52
Medical Consultations	-	-	53	53
Patient Encounters	748	1031	213	1992

Promoting Equitable Outcomes (January 2024 – June 2025)

- Nearly 70% of encounters were with individuals who identified as Hispanic or Latino
- 52% of encounters were with individuals who identified as women
- 76% of encounters were with individuals who identify as Spanish speaking
- 42% of individuals seen reported needing medical care and 34% reported needing dental care

Table 15. Received Follow-Up Care for Medical and Behavioral Health

January 2024 - June 2024	July 2024 – June 2025
58 patients	110 patients

Table 16. Urgent* Dental Cases Identified Through Screening

May 2024 - June 2024	July 2024 – June 2025
26 cases	129 cases

*Urgent defined as having pain, abscesses or possible dental infection

Table 17. Linkage to Care for Community Clinics

Community Clinics	Number of Patients Referred
MCC	2
Kaseman	20
C4YH	1
Mercy	4
Holy Cross	1

Local Health Disparities Grant – Diabetes and Dental Pilot Program

Purpose

The Montgomery County Department of Health and Human Services division of Public Health Services executed a pilot program with the National Initiative to Address COVID-19 Health Disparities Among Populations at High-Risk and Underserved, including Racial and Ethnic Minority Populations and Rural Communities in Maryland Local Health Department Health Disparities Grant.

The pilot program deployed one Dental Hygienist and one Community Health Worker within one local county safety net dental offices to address the impact of COVID-19 related racial and ethnic disparities on chronic disease prevention and disease management, including diabetes and its comorbidities, hypertension, heart disease, and associated social determinants of health (SDoH). The goal was to help to reduce the demand on the health care system and address the association between oral health and diabetes by conducting culturally appropriate outreach and prevention education, coordinating care, improving patient communication and compliance, and linking dental patients to the appropriate medical service and social service providers.

Program Overview

The DHHS community and population health management team developed a comprehensive preventative screening and self-management plan and piloted it at one of our safety net dental clinics. Adult dental clinic patients were offered the following screenings while in office at their dental appointment, blood glucose, Hemoglobin A1c, blood pressure, weight. Based on the patient's Hemoglobin A1c results, patients were given the option to enroll in our program, which includes three months with follow-up care, case management, patient navigation services and/or linkage to the proper services within the community. Upon completion of the initial screenings conducted by the Dental Hygienist, patients were asked if they would like to be referred to CHW. The CHW provided their knowledge and skills through personalized education, support, and guidance to help the patient improve their overall health and build self-management skills for unmanaged Type 2 diabetes or pre-diabetes.

The CHW also assisted patients with addressing social determinants of health needs and concerns and helped them connect to county services for food security programs, chronic disease management programs, specialty medical care and providers.

Results

During FY 25, (November 2024- June 2025) 81 dental patients were screened by the dental hygienist.

Table 18. Percentage of Patients Screened by Race/Ethnicity

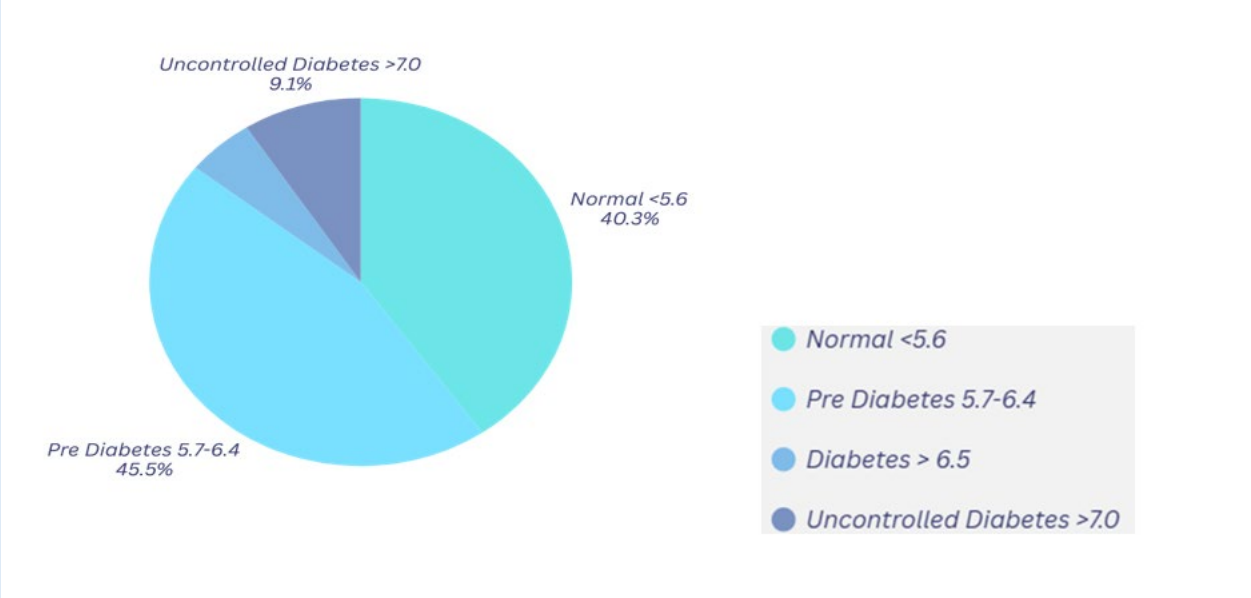
Race/Ethnicity	% Patients Screened
Hispanic or Latino	88%
Black or African American	12%

Table 19. Percentage of Patients Screened by Gender

Gender	% Patients Screened
Female	65%
Male	35%

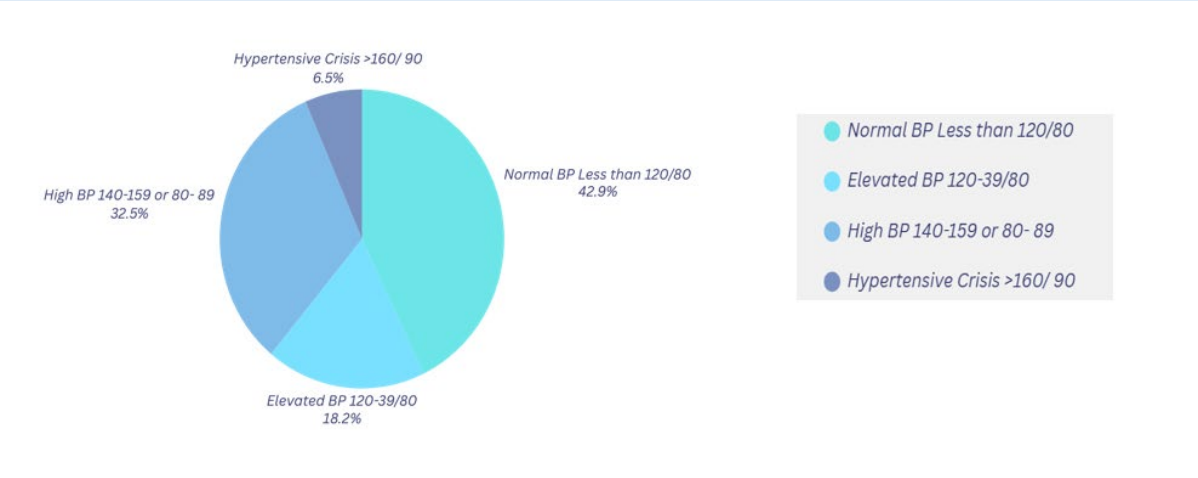
A total of 80 dental patients were screened for the Hemoglobin A1c. The average A1c was 6.08%. Thirty-one patients fell with the normal A1c category range <5.7%; Thirty-five patients were pre-diabetes 5.7-6.4; four patients were in diabetes 6.5-7%; and nine were within the uncontrolled range >7.0%.

Figure 94. Hemoglobin A1c Screening Results



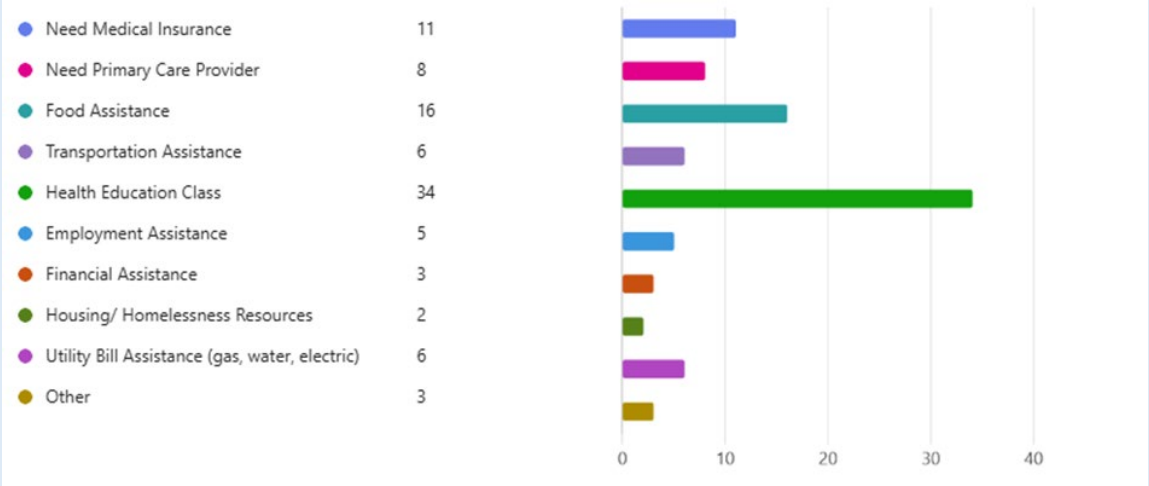
A total of 76 patients received a blood pressure screening. Thirty-three patients fell within the normal blood pressure range, less than 120/80; fourteen patients were in the elevated range 120-39/80; Twenty-five patients in the high blood pressure range 140-159 or 80-89; and five patients were in the hypertensive crisis range > 160/90.

Figure 95. High Blood Pressure Screening Results



At the initial screening, patients were asked if they needed assistance with social determinants of health. Below shows the identified SDoH needs based on the patients' responses. Health education was the highest identified need, followed by food assistance (second), and medical insurance (third).

Figure 96. SDoH Patient Screening Results



Follow-Up Results

Based on the patient's A1c results, patients were offered to be connected to the CHW for assistance for three months with one-on-one diabetes self-management and goal setting. The CHW also assisted patients with any SDoH needs. Forty-four patients that qualified were referred to the CHW. Of the 44 patients that were referred to the CHW, fifteen patients were connected to community resources. Six patients refused and/or did not want to be contacted further, and twenty-three patients were lost to follow up throughout the three-month period.

FY25 Diabetes Self-Management Program

The Montgomery County Diabetes Self-Management Workshop (DSMP) is a six-week workshop held once a week and covers both the physical aspects of managing diabetes as well as the emotional aspect. It is designed to improve individual's Hemoglobin A1C levels, which is a blood test that measures the average blood sugar level during a given time frame. The workshop also aims to help individuals reduce complications associated with diabetes and has demonstrated proven health benefits and complements the diabetic medical management services people receive from their providers. Participants are provided with the resources to enhance their ability to maintain active and fulfilling lifestyles, improve problem-solving and decision-making skills, as well as address the challenges of living with diabetes. Workshop topics include improving food choices, increasing physical activity, and practicing coping skills to maintain nutrition and a healthy weight. In FY25 the County hosted four workshops. Workshops were held in September 2024, January, March, and May 2025.

In total, there were 49 participants who registered for the workshop with 33 participants who remained active and completed the workshops. The following FY26 data has been collected during FY25:

Table 20. DSMP Workshop Participant Information

Registered Women	37
Registered Men	12
Age Range of Registered Participants	39-65
Completed Informed Consents	49
Completed Participant Information Survey's Completed	49
End of Program Survey's Completed	25
Completed SDOH Forms	27
Outcome Evaluation Survey	28

Additionally, participants were provided with Diabetes educational resources and give-a-ways that included diabetes education and self-management workbook, healthy recipes book, food storage bins for fruits and vegetables, reusable tote bags, and healthy kitchen resources. Participants who completed SDoH forms were referred to county agencies for additional assistance for food security, transportation, mental health resources, and housing resources. Upon program completion, 85% of

clients reported improved health outcomes. The program will continue to look for ways to improve Diabetes health outcomes targeting Diabetes as the Chronic Disease related to Tobacco use.

CONCLUSION

Overall, Montgomery County had lower average burden on chronic conditions when compared to Maryland and the U.S., however great disparities exist among population subgroups by race/ethnicity and communities. Montgomery County has the most diverse population in Maryland and is becoming more diverse over time, this would further implicate the disparities among population subgroups as they carry various lifestyles and risk factors associated with chronic conditions. The healthcare utilization and costs associated with chronic conditions are expected to be impacted exponentially as populations continue to age. It is therefore critical to monitor and evaluate population health and services provided by DHHS programs on an ongoing basis to anticipate ongoing and future challenges. Efforts and resources should be targeted and allocated to address the findings of this report. Major findings of disparities of chronic conditions among population subgroups identified in this report are summarized as below.

Sex

Men have higher rates of heart disease mortality, cerebrovascular disease ER visits, cancer mortality of all sites, lung and bronchus cancer mortality, oral cancer incidence and mortality, and diabetes mortality and ER visits than women.

Women have higher rates of cerebrovascular mortality, CLRD ER visits, melanoma of skin incidence and mortality than men.

Age

Older people are more impacted by chronic conditions as is expected. Age 65+ group has highest disease burden on heart disease mortality and ER visits, cerebrovascular disease mortality and ER visits, CLRD mortality, and diabetes mortality and ER visits among other groups. Age less than 5 years old has the highest CLRD ER visit rates among other groups.

Race/Ethnicity

NH-Blacks have the highest rates of heart disease mortality and ER visits, cerebrovascular disease mortality and ER visits, CLRD ER visits, cancer mortality of all sites, lung and bronchus, colorectal, female breast, and prostate, diabetes mortality and ER visits, and highest percentage of late-staged female breast cancer diagnosis as compared to other groups.

Hispanics have the highest percentages of families below federal poverty level, late-staged prostate cancer diagnosis, and cervical cancer incidence as compared to other groups.

NH-Whites have the highest rates of CLRD mortality, cancers incidence of all sites, lung and bronchus, female breast, and oral cancer among all other groups.

Geographic Variations

Geographic variations of chronic conditions are presented by census tract and zip code, based on information available in the respective data.

The risks and disease burden of chronic conditions vary by sex, age, race/ethnicity, and geography. Information presented in this report can be used to target intervention efforts for population subgroups at high risk of chronic conditions, to evaluate services provided by DHHS programs, and to better plan and allocate resources. An important use of surveillance data is to monitor trends following the initiation of prevention programs to evaluate their effectiveness.

This report is strengthened by the use of data from multiple sources that provide a more comprehensive picture of disease burden and population health than would a single source, as well as by examining the disease burden in the County by population subgroups, circumstances in which people are born, grown up, live and age, and services provided by DHHS programs for better allocating resources and targeting intervention. Ongoing efforts are being made to further enhance data variety and quality for population health surveillance. Consumer and provider education are critical components of disease prevention and health promotion. This can be accomplished through the dissemination of population health statistics and prevention information at professional meetings and conferences. Pamphlets and brochures with information on disease prevention and health promotion can be provided to patients and clients at providers' offices. This information can also be made available through traditional and online media.

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APPENDIX A: TERMS AND DEFINITIONS

Term	Definition
Age-adjustment	A statistical technique used to compare rates among populations with different age distributions, by weighting the age-specific rates in each population to one standard population.
Cancer Stage at Diagnosis	Cancer stage is the extent to which the cancer has spread from the organ of origin at the time of diagnosis. The stage information used in this report is based on the SEER Summary Stage Guidelines: 1. *In situ*: The cancerous cells have not invaded the tissue basement membrane and there is no stromal invasion. In situ cancers are not considered malignant (with the exception of bladder cancers) and are not included in incidence rate calculations. 2. Local: The tumor is confined to the organ of origin. 3. Regional: The tumor has spread to adjacent organs or tissue. Regional lymph nodes may also be involved. 4. Distant: The tumor has spread beyond the adjacent organs or tissues. Distant lymph nodes, organs, and/or tissues may also be involved. 5. Unstaged: The stage of disease at diagnosis was unable to be classified (often due to insufficient information) or was not reported to the cancer registry.
Incidence	The number of new cases of a disease during a defined time period, usually one year. An incidence rate is the number of new cases for a given period divided by the population at risk per 100,000 population.
International Classification of Diseases (ICD)	The ICD is the international standard diagnostic classification for all general epidemiological, health management, and clinical use. It is used to classify diseases and other health problems recorded on many types of health and vital records, including death certificates and health records.
International Classification of Diseases for Oncology (ICD-O)	The ICD-O is the classification system used by tumor or cancer registries to code the site and the histology of the cancer, usually from a pathology report.
Mortality	The number of deaths during a defined time period, usually one year. A mortality rate is the number of deaths for a given period divided by the population at risk per 100,000 population

Source: Maryland Department of Health. 2023 Cigarette Restitution Fund (CRF) Cancer Report. https://health.maryland.gov/phpa/cancer/Pages/surv_data-reports.aspx

Maryland Department of Health Vital Statistics Administration. Maryland Vital Statistics Annual Report 2023. https://health.maryland.gov/vsa/Pages/reports.aspx

APPENDIX B: CODES FOR HEALTH CONDITIONS

	Hospitalization and ER Visit	Incidence	Mortality
	ICD-10	**ICD-O-3**	**ICD-10**
All Cancer Sites	C00-C97	C00.0-C80.9	C00-C97, D09.0
Lung and Bronchus Cancer		C34.0-C34.9	C34
Colon and Rectum Cancer		C18.0-C20.9, C26.0	C18-C20, C26.0
Female Breast Cancer		C50.0-C50.9 (female only)	C50 (female only)
Prostate Cancer		C61.9	C61
Oral Cavity and Pharynx Cancer		C00.0-C14.8	C00-C14
Melanoma of the Skin Cancer		C44.0-C44.9	C43
Cervical Cancer		C53.0-C53.9	C53
Cerebrovascular Disease	I60-I69		I60-I69
Chronic Lower Respiratory Disease	J40-J47		J40-J47
Diabetes	E10-E13		E10-E13
Heart Disease	I00-I51		I00-I51

APPENDIX C: TECHNICAL NOTES

1. **Data Sources**
   The Office of Planning and Epidemiology uses various data sources to compile information on disease burden and population health, including vital records, inpatient and outpatient hospitalization, disease registry, surveys, area health resources file, and Census. Data on deaths are provided by Vital Statistics Administration of Maryland Department of Health. Hospitalization data including inpatient and outpatient visits are provided by the Maryland Health Services Cost Review Commission. Behavioral Risk Factor Surveillance System (BRFSS) data are provided by the Center for Chronic Disease Prevention and Control of the Maryland Department of Health. Data on population estimates are derived from the American Community Survey (ACS) of U.S. Census Bureau.

   In addition, Office of Planning and Epidemiology uses other data sources such as program data collected in electronic medical records and electronic integrated case management system to conduct surveillance and program evaluation. These datasets are used to produce statistical information for health care professionals, researchers, and policy makers as part of surveillance activities.

2. **Data Quality and Confidentiality**
   Data quality is assessed on a routine basis, in terms of completeness, timeliness and accuracy, and is documented to help interpret results from analyzing these population datasets. All data collected and housed by the Office of Planning and Epidemiology complies with the state and federal privacy and confidentiality regulations. Data or data analysis may be requested through the Office of Planning and Epidemiology.

3. **Disparities on Race and Ethnicity**
   The Office of Planning and Epidemiology follows the recommendation of the National Center for Health Statistics of classifying health conditions according to the self-reported race/ethnicity of the individual. Information on race/ethnicity recorded in each data source is used to illustrate disease burdens for population subgroups. There are variations of data quality on race/ethnicity recorded in each population dataset, in terms of completeness and accuracy, thus interpretations of results are to take this into consideration. Though this information can be used to address important topic such as health equity, race/ethnicity is a self-reported item and is subject to the usual limitations of this type of information.

4. **Rate**
   The rates provided in this report are estimations of the proportion of population with specific health conditions. This rate is usually expressed as per 1000 population and is calculated by the formula:

$$\text{Rate} = \frac{\text{Number of Persons with Specific Conditions}}{\text{Total Population at Risk}} * 1{,}000$$

5. **Graphs**
   Graphs have varying scales depending on the range of the data displayed. Therefore, cautions should be exercised when comparing such graphs.

6. **Standard Errors**
   The standard errors (S.E.) of the rates were calculated using the following formula:

$$S.E. = \sqrt{\frac{w_j^2 n_j}{p_j^2}}$$

where,
- w_j = fraction of the standard population in age category
- n_j = number of cases in that age category
- p = person-years denominator

7. **Confidence Intervals (CI)**
   The confidence interval is a method of assessing the magnitude and stability of a rate or ratio. The 95% CI represents a range of values that has a 95% probability of including the true rate or ratio. Observed rates are subject to statistical variation. Thus, even if the underlying risk of specific health condition is identical in two subpopulations, the observed rates for the subpopulations may differ because of random variation. The confidence interval describes the precision of the observed rate as an estimate of the underlying risk of having a specific health condition, with a wider interval indicating less certainty about this estimate. The width of the interval reflects the size of the subpopulation and the number of cases with specific health conditions. Smaller subpopulations with fewer health conditions lead to wider confidence intervals. The 95% confidence intervals used in the report are based on the Poisson distribution.

   The standard error can be used to calculate the confidence interval. If the interval produced for one rate does not overlap the interval for another, the probability that the rates are statistically different is 95% or higher.
   (This test can be inaccurate for rates based on fewer than 10 events.) The formula used is:

$$R \pm z\,(SE)$$

where,
- R=age-adjusted rate of one population
- z = 1.96 for 95% confidence limits
- SE= standard error as calculated above

APPENDIX D: SOURCES OF ADDITIONAL INFORMATION

For more information on disease burden, risk factors, prevention, programs and efforts to address chronic diseases in the county, state, and national level, please refer to the following resources:

- Montgomery County Department of Health and Human Services
  http://www.montgomerycountymd.gov/hhs/
- Healthy Montgomery
  https://www.montgomerycountymd.gov/healthymontgomery/
- Maryland Department of Health
  https://health.maryland.gov/pages/index.aspx
- Maryland Health Services Cost Review Commission (HSCRC)
  http://www.hscrc.state.md.us/Pages/default.aspx
- American Community Survey (ACS), U.S. Census Bureau
  https://www.census.gov/programs-surveys/acs/
- America's Health Rankings
  https://www.americashealthrankings.org
- National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention
  https://www.cdc.gov/nchs/index.htm
- United States Cancer Statistics, Centers for Disease Control and Prevention
  https://www.cdc.gov/cancer/dataviz
- Behavioral Risk Factor Surveillance System (BRFSS), Centers for Disease Control and Prevention
  https://www.cdc.gov/brfss/index.html
- Healthy People 2030. U.S. Department of Health and Human Services
  https://health.gov/healthypeople
- County Health Rankings and Roadmaps. A Robert Wood Johnson Foundation Program
  http://www.countyhealthrankings.org/
- Health Resources and Services Administration (HRSA)
  https://www.hrsa.gov/
- Substance Abuse and Mental Health Services Administration (SAMHSA)
  https://www.samhsa.gov/

HEALTH PLANNING AND EPIDEMIOLOGY PUBLICATIONS

- Health in Montgomery County 2008-2016: A Surveillance Report on Population Health https://www.montgomerycountymd.gov/HHS/Resources/Files/Reports/PopHealthReportFINAL.pdf

- Health in Montgomery County 2010-2019: A Surveillance Report on Population Health https://www.montgomerycountymd.gov/healthymontgomery/Resources/Files/Reports/Health-in-Montgomery-County-2010-19%20Final.pdf

- Health in Montgomery County 2013-2022: A Surveillance Report on Population Health https://www.montgomerycountymd.gov/HHS/Resources/Files/Health%20in%20Montgomery%20County%202013-22_Final.pdf

- Uninsured Population in Montgomery County, MD, 2017-2022: Health Status and Healthcare Access among Montgomery Cares Participants https://www.montgomerycountymd.gov/HHS/Resources/Files/pdfs/Report%20on%20Uninsured%20Population.pdf

- Health Survey in Montgomery County, MD, 2022: A Survey on Health Status and Behaviors https://www.montgomerycountymd.gov/healthymontgomery/Resources/Files/Reports/Health%20Survey%20Report_Final.pdf

- Health Equity in Montgomery County, MD: Healthy Montgomery Core Indicators 2010-2018 https://www.montgomerycountymd.gov/HHS/Resources/Files/Reports/Health%20Equity%20Report_HM%20Core%20Measures%202010-2018.pdf

- Health Equity in Montgomery County, MD: Healthy Montgomery Core Indicators 2013-2021 https://www.montgomerycountymd.gov/HHS/Resources/Files/Reports/Health%20Equity%20Report_HM%20Core%20Measures%202013-2021.pdf

- The Zip Code Ranking Project 2016-2018: Evaluation of Health Factors and Health Outcomes in Montgomery County, MD https://www.montgomerycountymd.gov/healthymontgomery/Resources/Files/HM-Resources/Publications/Zipcode%20Ranking%20Final%20Results.pdf

- The Zip Code Ranking Project 2018-2020: Evaluation of Health Factors and Health Outcomes in Montgomery County, MD https://www.montgomerycountymd.gov/HHS/Resources/Files/Reports/Zipcode%20Ranking%202018-2020.pdf

- Report on Infectious Disease, 2013-2017 https://www.montgomerycountymd.gov/healthymontgomery/Resources/Files/HM-Resources/Publications/Infectious%20Disease%20Report_10-15-18_FINAL.pdf

- COVID-19 Surveillance Report in Montgomery County, MD 2020-2022

https://www.montgomerycountymd.gov/HHS/Resources/Files/Reports/COVID-19%20Surveillance%20Report%202020%20-%202022_Final%20v2.pdf

- Maternal and Infant Health in Montgomery County, Maryland 2008-2017
  https://www.montgomerycountymd.gov/HHS/Resources/Files/MaternalInfantHealthReport.pdf

- Maternal and Infant Health in Montgomery County, Maryland 2012-2021
  https://www.montgomerycountymd.gov/HHS/Resources/Files/MIH%20Report_2012-2021.pdf

- Healthy Montgomery 2023 Goals and Objectives
  https://www.montgomerycountymd.gov/HHS/Resources/Files/Reports/HM2023%20Goal%20Setting.pdf

- Healthy Montgomery 2030 Goals and Objectives
  https://www.montgomerycountymd.gov/HHS/Resources/Files/Reports/Healthy%20Montgomery%202030%20Goal%20Setting.pdf

- Hospital Community Benefit Service Areas Report on Healthy Montgomery Core Measures, 2009-2017
  https://www.montgomerycountymd.gov/healthymontgomery/Resources/Files/Reports/Hospital-CBSA-Report-2009-17_Final.pdf