



POVERTY AMIDST PLENTY VII: *Moving Forward Together*

Seventh Edition, 2022



Poverty Amidst Plenty VII: Moving Forward Together. Seventh Edition.
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Prepared and written for the Community Foundation of Anne Arundel County by
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FORWARD

The 2022 Anne Arundel County community needs assessment, *Poverty Amidst Plenty VII*, is the result of an extended collaboration between the following partners: The Community Foundation of Anne Arundel County, Anne Arundel Medical Center, University of Maryland Baltimore Washington Medical Center, Anne Arundel County Department of Health, Anne Arundel County Mental Health Agency, and the Anne Arundel County Partnership for Children, Youth and Families. Much of the writing and research occurred during the global pandemic. It is clear from this report that we have much work to do in the aftermath of the pandemic. We must now move forward together to make Anne Arundel County the best place to live for all.

The report contains summative (quantitative) data from a variety of local, state, and national sources. Population and socio-economic statistics were compiled using data available from the 2020 United States (U.S.) Census, United States (U.S.) Census Bureau's Population Estimates Program, and the American Community Survey 1-Year and 5-Year Estimates. The latter two data sources should be considered less reliable due to the gap of 12 years since the last full census. Birth and death data files were obtained from the Maryland Department of Health and Mental Hygiene, Vital Statistics Administration. The emergency department and inpatient hospital discharge data files were obtained from the Maryland Health Services Cost Review Commission for topics like birth, mortality, and hospital utilization. Other data sources used for this report were Maryland Vital Statistics Annual Reports, Maryland Department of Health and Mental Hygiene's Annual Cancer Reports, Behavioral Risk Factor Surveillance System (BRFSS), Centers for Disease Control and Prevention's CDC WONDER Online Database, Centers for Medicare and Medicaid Services, National Vital Statistics Reports, County Health Rankings, Maryland Department of Education Report Card, and a variety of local databases. The specific data sources are listed throughout the report.

The report draws on qualitative data gathered from 14 key informants and 18 focus groups. Focus group areas included emergency department personnel, behavioral health providers, Hispanic residents, advocates, representatives of philanthropy, public and subsidized housing residents, pupil personnel workers, disabled residents, seniors, and a host of others representing a total of 168 participants. The author thanks Lisa Kovacs, Administrative Coordinator at the Anne Arundel County Partnership for Children, Youth and Families, for the hours of transcription time spent ensuring this needs assessment accurately represents the voices of our community. The data was read and reread until dominant themes emerged, which became the subtext of the report. All participants gave permission for their words to be used in the final report, although their identities are protected. The author would also like to thank Cindy O'Neill for the many hours she spent editing and refining this report. Finally, the author thanks Alexander Alty, research assistant, who created many of the graphs and charts.

About the Author

Pamela Brown, Ph.D., is currently the Executive Director of the Anne Arundel County Partnership for Children, Youth and Families. She completed her Ph.D. in Educational Leadership at Florida Atlantic University. Her dissertation focused on the importance of community partnerships in diverse neighborhoods. She was certified to conduct ethical research through the Collaborative Institutional Training Initiative at the University of Miami for over 10 years. She has been conducting community needs assessments for over 20 years.

The author takes full responsibility for the interpretations and analyses represented here. They do not necessarily represent the interpretations or the views of the Community Foundation of Anne Arundel County, the Anne Arundel County Partnership for Children, Youth and Families, or the staff, boards, officers, or donors of these organizations.

FROM YOUR COMMUNITY FOUNDATION

The Community Association of Anne Arundel County (CFAAC) strives to help make Anne Arundel County a wonderful place to live for all. We know that the love of our beautiful county is shared by many but also realize there are pockets of need throughout. Therefore, every three years, in partnership with Pamela Brown, Ph.D., and the Anne Arundel County Partnership for Children, Youth, and Families, we publish a needs assessment report that examines the gap that exists between the current state of our county and the desired state of our county. CFAAC is deeply grateful to Pam and the Partnership for their extensive work compiling, composing, and writing this report.

This needs assessment, *Poverty Amidst Plenty VII*, should be looked at as not only a report, but also as a process—a process that can help us identify and understand the challenges, inequity, and disparity that exists in our county. Only when we recognize these factors can we begin to address them. It is an important first step that we can use to improve the systemic gaps that permeate our county. We also hope that it can underline the importance of everyone's participation in critical conversations focused on transforming and strengthening our community.

By tracking the key measures of community well-being, we can identify priority needs and possibly identify root causes that contribute to those needs. Then nonprofits, community advocates, individual philanthropists, volunteers, business leaders, elected officials, policy makers, government agencies, foundations, professional advisors, and the general population can use this report to develop and prioritize strategies and implement plans. It will allow us to work together and develop a common vision for Anne Arundel County—a vision that can be the catalyst in the formula to determine real community solutions. To support these efforts, CFAAC plays an important role by building permanent philanthropic assets that are necessary to sustain our local nonprofits and the wonderful work they do.

As the largest institutional funder of nonprofit organizations in Anne Arundel County, CFAAC's mission is to connect people who care with causes that matter in our community. This report is an integral part of that mission as we all begin to understand how connected each need is and how we can help. With more than \$25 million in total assets intended for grantmaking and more than \$7 million in endowed assets intended to support our community in perpetuity, we are committed to addressing these community needs. In 2021 alone, we distributed \$3.6 million in grants to nonprofits and awarded 579 grants.

Since the last community needs assessment in 2018, some of the most pressing needs have remained constant or were exacerbated by the pandemic—from the lack of reliable and accessible transportation to the lack of affordable housing, child care, and quality health care.

It is our hope that this needs assessment can serve as a framework to prompt informed discussion about these persistent local trends and needs.

Let's use this information, to not only spark conversation, but also move ahead together to generate change.

Jim Humphrey
Chair, Board of Trustees

Mary Spencer
President & CEO

SUMMARY OF PRINCIPLE FINDINGS

POPULATION: Anne Arundel County is now the fourth largest jurisdiction in the state with a population of 588,261. The most recent census estimates on the diversity of the county illustrate a diminishing White, Caucasian population. Since 2010, the Hispanic population has grown by 48.6%, and the African American population by 25.3%. Overall, the county is becoming much more multi-cultural. The Census “Other” category (which includes race/ethnicities other than African American and Hispanic) has the highest percentage change of all categories at 81.9%.

HISPANIC POPULATION: The Hispanic population continues to grow more significantly than all races/ethnicities and is now at 9.7% (still lower than the state average of 9.8%). The county has the fourth largest Hispanic population by percentage among Maryland counties. It is worth noting that the City of Annapolis is much more diverse where Hispanic residents make up 22.8% of the population. The largest sector of the Hispanic population is from Central American countries, including a growing population from El Salvador. This is significantly different from the overall U.S. Hispanic population, which is overwhelmingly Mexican (63%).

YOUTH: There are 128,406 children under the age of 18 living in Anne Arundel County; a 0.7% increase since 2017. Of those, 27.4% (35,229) are under five years of age and 7.4% (over 9,000) live below the federal poverty level; an increase of 0.3% since 2017. In 2019, there were 6,830 births in Anne Arundel County, reduced from 6,924 in 2015. The largest decrease is in White births, which fell from 4,383 in 2015 to 3,975 in 2019. The Hispanic population is showing the greatest percentage increase of 26% between 2015 and 2019.

HEALTH: Heart disease is now the leading cause of death in Anne Arundel County causing 1,047 deaths in 2019. Not unexpectedly, Alzheimer’s disease has moved up two places since the 2018 needs assessment, most likely related to our growing senior population. Intentional self-harm (suicide) has moved into the top 10 causes of death. Adequate access to health care is still an issue for county residents; not only due to insurance coverage and the ability to pay for care but also access to providers. Anne Arundel County’s provider-patient ratios continue to be much higher than those of both Maryland and the United States. High provider/patient ratios are associated with poorer patient health outcomes.

SOCIAL DETERMINANTS OF HEALTH: The U.S. Department of Health and Human Services defines the social determinants of health as “the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” Although Anne Arundel County has a high standard of living overall, there are pockets of poverty and health access issues to be found in neighborhoods throughout Anne Arundel County. The majority of negative social and health indicators continue to polarize in the Annapolis, Glen Burnie, Meade/Severn, Brooklyn Park, and Lothian zip codes.

OVERWEIGHT AND OBESITY: Overweight and obesity continue to create health issues for county residents. Between 2017 and 2019, the percentage of overweight adults 18 years and older in Anne Arundel County rose slightly from 34.9% to 37.9%, while the state average fell. The percentage of county residents who are classified as obese also rose from 25.5% to 30.5%, still under the state average of 32.2%.

MENTAL HEALTH: The state-generated, county-level data on mental health, for the period from 2019-2021, is unreliable. However, the stakeholders in this assessment, including primary care doctors, therapists, pupil personnel workers (PPW), and a wide diversity of residents, lamented the enormous toll mental health issues are taking on our systems, our neighborhoods, and our county. Maryland numbers for the use of public mental health services by age for 2018-2021 show an increasing trend of service usage for those ages 13-45 years. The trend line is also increasing for those ages 66 years and older. The county has an overall shortage of mental health therapists, an issue exacerbated by the current labor shortages caused by COVID-19. Children’s mental health is of high concern. The percentage change in numbers of calls to the county’s crisis hotline related to children increased by 48% between 2018 and 2020.

SUBSTANCE USE: While the number of opioid related overdoses in 2020 was less than those in 2018, the trend line for overdoses continues to rise. Among all Maryland jurisdictions, Anne Arundel County had the third highest rate of intoxication deaths for the year at 251. Those figures include overdose deaths from alcohol and cocaine. The number of newborns assessed positive for substances in their systems, including methadone, rose 144% since 2014.

FOOD ACCESS: Anne Arundel County has 74,522 residents living in a food desert. There are 17 census tracts in the county that are considered food deserts in these areas: Glen Burnie, Brooklyn Park, Linthicum Heights, Eastport, Fort Meade, Jessup, and Severn. Food deserts are defined by the United States Department of Agriculture (USDA) as urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food.

GUN VIOLENCE: Gun violence continues to be a concern for the county and should be considered a public health issue. While there was a 12% decrease in the number of gun incidents county-wide in 2018, there was a 74% increase in gun incidents in 2019. Firearm deaths by census tract show that our most vulnerable neighborhoods have the highest rate of firearm deaths in the county at greater than 9.7 per 100,000 of the population. Social, economic, and racial inequities are often at the root of community violence.

TRANSPORTATION: At every focus group and key stakeholder interview, transportation was noted by participants as the number one need for county residents. Lack of transportation was noted 123 times. As of January, 2022, Anne Arundel County operates 12 fixed route lines, two Saturday shopper shuttles, countywide paratransit/elderly (55+) on-demand service, and a South County Call N' Ride. Issues relate to how routes connect to one another, service regularity, and the hours of service for residents who need to get to work. Since 2009, Anne Arundel County needs assessments have noted access to transportation as one of the top three needs. The majority of county residents (75%) drive to work alone in their cars every day; 8.8% carpool; 2% walk; and 4.5% take a bus.

HOMELESSNESS: Homelessness is a continuing issue for individuals and families in the county. In 2021, 871 single adults were reported as chronically homeless. The number of families without stable housing is harder to estimate but that number is likely to be at least 850 on any given evening. As of June, 2022, there were 1,046 homeless youth identified in the county public school system. Of those, 241 were unaccompanied, meaning they have no parent or caretaker. There are only three homeless shelters in the county and two rapid rehousing programs.

CHILD CARE: In 2021, there were 363 family child care providers and 113 child care centers for the county. Those numbers are predicted to continue dropping every year through 2026. Several participants noted that parents are choosing not to go back to work post-pandemic because they cannot afford child care. The average weekly cost of child care for children ages 0-2 years for center-based care is \$357.71, and \$246.52 for children ages 2-5 years. The average weekly cost of family based child care is \$254.17 for ages 0-2 years, and \$213.16 for ages 2-4 years. By the second year of the pandemic, 43 child care providers had closed their doors.

LABOR SHORTAGES: While there were shortages of nurses, primary care doctors, and behavioral care professionals prior to the pandemic, those shortages are now at crisis level. For medical professionals, the ongoing trauma of the pandemic has become exhausting. Twenty percent of health care workers have left their jobs since the beginning of the pandemic in 2020. There are shortages at every level of care, including food preparers and custodians. Other areas of reported shortages include child care workers, teachers and teachers' aides, and bus drivers.

THE ENVIRONMENT: There have been improvements since 2018 in each of the three indicator categories: pollution, habitat, and fisheries, according to the Chesapeake Bay Foundation's 2020 State of the Bay Report. However, despite many efforts by federal, state, and local governments, and other interested parties, the Bay still does not meet existing water quality standards because of pollution. In addition, Anne Arundel County was given an "F" by the American Lung Association in 2021 for air quality with a weighted average of 7.5 high-ozone days; a reduction from the 2018 rate of 13 days.

SOCIAL MEDIA: There are no reliable numbers that would attest to the overuse of social media by our youth. However, participants in this needs assessment pointed to how concerned our young people are with maintaining a positive online presence. Every person who commented on this issue pointed to social media as highly detrimental to youths' mental and emotional health. Young people were socially and physically isolated during the pandemic, which increased the use of social media platforms, online gaming, and general electronic communication.



CHAPTER 1 INTRODUCTION & DEMOGRAPHICS

Poverty Amidst Plenty VII was researched and developed during the second year of the COVID-19 pandemic. The lived experiences of residents, the changes to county systems, and the spotlight placed on inequities through COVID-19, are threaded through this needs assessment. While we do not yet understand the full impact of the pandemic, many residents acknowledged we will feel the impact of COVID-19 for years.

County racial/ethnic, health, and other disparities are apparent throughout the most recent data used for this needs assessment. They are often created by the social determinants of health that are historical in nature. Rather than create a special section, those disparities will be highlighted throughout *Poverty Amidst Plenty VII*.

U.S. Census data shows Anne Arundel County is now the fourth-largest jurisdiction in the state with a population of 588,261 (U.S. Census, 2020). We are the third-fastest growing county in Maryland with more than 50,000 residents added over the past 10 years, an increase of 9.4% (Anne Arundel County Economic Development Corporation, 2021). The county covers 415 square miles including 534 miles of natural shoreline. When participants in this needs assessment were asked for words to describe the county, the most common word offered was “beautiful,” although “expensive” was another favorite. For the majority of residents, the county is a wonderful place to live.

POPULATION DEMOGRAPHICS

The most recent census estimates on the diversity of the county illustrate a diminishing White, Caucasian population. Since 2010, the percentage change for the Hispanic population is 48.6%, and for the African American population is 25.3%, while the White population has a negative percentage change of -5.5%. Overall, the county is becoming much more multi-cultural. The Census “Other” category, which includes “American Indian and Alaskan Native,” “Asian,” “Native Hawaiian or other Pacific Islander,” “Some other race,” or “Two or more races,” has the highest percentage change of all categories at 81.9%. (See Figure 1.)

FIGURE 1: ANNE ARUNDEL COUNTY ETHNIC AND RACIAL COMPOSITION, 2010-2020

Anne Arundel County Ethnic and Racial Composition, 2010-2020							
	2010		2016		2020		% Change 2010-2020
	Amount	%	Amount	%	Amount	%	%
Total	537,656	100%	568,346	100%	588,261	100%	9.4%
Non-Hispanic White	389,386	72.4%	392,285	69.0%	367,893	62.5%	-5.5%
Other Races/Ethnicities:	148,270	27.6%	176,061	31.0%	220,368	37.5%	48.6%
Hispanic or Latino	32,902	6.1%	42,802	7.5%	56,796	9.7%	72.6%
Black/African American	81,819	15.2%	89,798	15.8%	102,555	17.4%	25.3%
Other*	33,549	6.2%	43,461	7.6%	61,017	10.4%	81.9%

*Includes: “American Indian and Alaskan Native,” “Asian,” “Native Hawaiian or other Pacific Islander,” “Some other race,” or “Two or more races.” Therefore, the “White” and “Black” figures are those who were counted as “White alone” or “Black alone.”

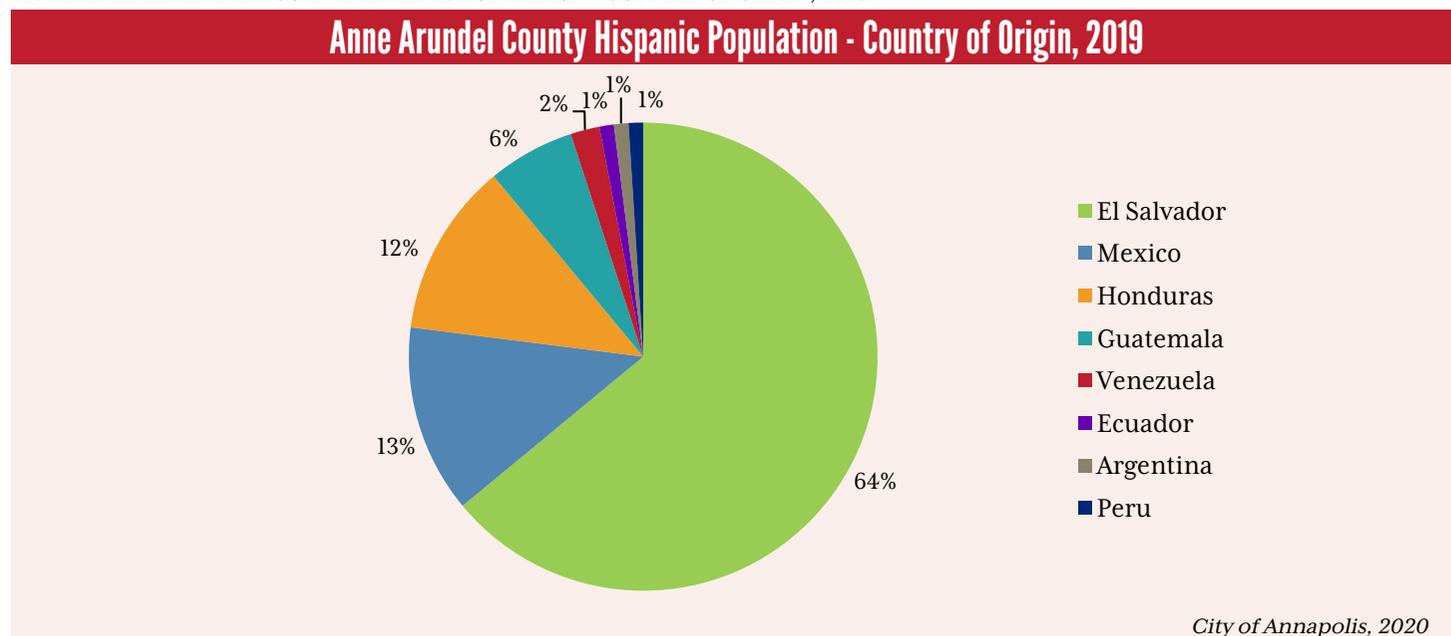
U.S. Decennial Census 2010 and 2020 Table P2, 2016 ACS 1 Year Estimates DP05



THE HISPANIC COMMUNITY

While the White Caucasian population of the county continues to diminish, the Hispanic population is growing more significantly than all races/ethnicities and is now at 9.7% (still lower than the state average of 9.8%). The county has the fourth largest Hispanic population by percentage among Maryland counties. It is worth noting that the City of Annapolis is much more diverse. As of 2019 U.S. Census estimates, the White population stands at 63.1%, African American residents make up 21.8%, and Hispanic residents make up 22.8% of the population. The largest sector of the Hispanic population is from Central American countries, including a growing population from El Salvador. This is significantly different from the overall U.S. Hispanic population, which is overwhelmingly Mexican (63%). (See Figure 2.)

FIGURE 2: ANNE ARUNDEL COUNTY HISPANIC POPULATION - COUNTRY OF ORIGIN, 2019



Traditional governmental systems, from the city and county police departments to the public schools and health systems, are struggling to adequately respond to this growing Spanish-speaking population. However, there have been some improvements. The Anne Arundel County Police Department maintains a roster of certified Spanish-speaking officers and now has 12 police officers who successfully completed a Spanish Proficiency Test. At any given time, the actual number of Spanish-speaking officers in the department ranges from 25 to 35 officers (Anne Arundel County Police Department, 2022; electronic communication).

The county public school system still has a shortage of teachers for English Language Learners, but there have been improvements since 2018. There are 147 English Language Development Teachers on staff at Anne Arundel County Public Schools (AACPS), although some of them are part-time (Anne Arundel County Public Schools, 2021). The county mental health agency reports a continuing lack of Spanish-speaking mental health counselors, although the situation has improved somewhat, and there are now three Spanish-speaking psychiatrists (Anne Arundel County Mental Health Agency, 2021).

According to a 2021 survey of the county's Hispanic residents performed by the City of Annapolis (1,450 responses), there is a range of countries of origin for our residents, with El Salvador being the most common at 64%. (See Figure 2.) According to the survey, the main areas of employment for this population are landscaping, house cleaning, construction, restaurant work, delivery, and child care services – all areas hit hard by the pandemic. Almost 50% of those surveyed had no health insurance.

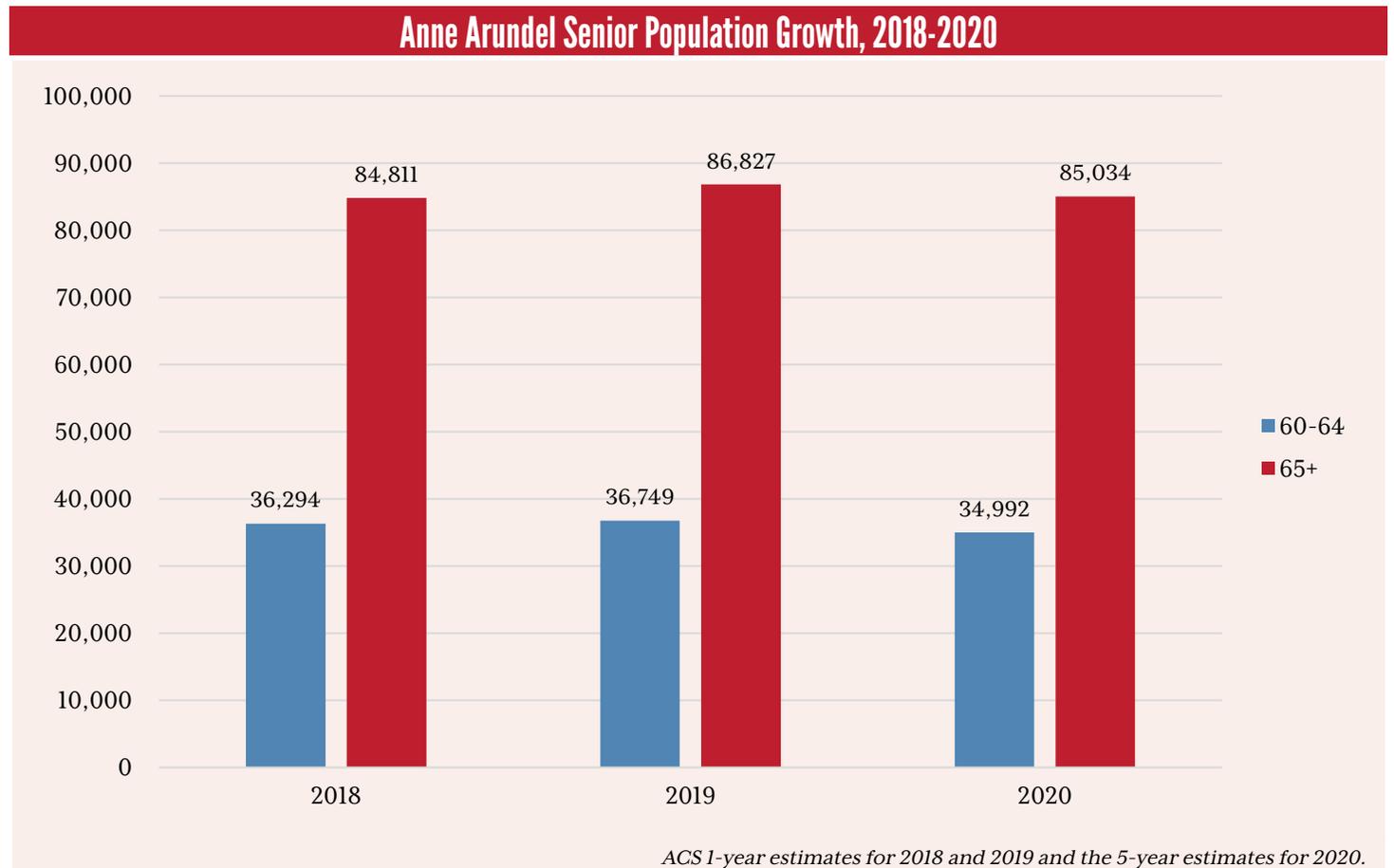
THE NATIVE AMERICAN POPULATION

The 2022 edition of *Poverty Amidst Plenty* acknowledges that Native Americans occupied Anne Arundel County land approximately 10,000 years prior to the first European settlers. The Lenape, Nanticoke, Piscataway, Conoy, Powhatan, Accohannock, Shawnee, Susquehannock, Tutelo, and Saponi tribes lived and worked on county land. These early indigenous people were highly influential to Arundel County, as it is today, in the areas of art and music, law and government, conservation, and environmental sustainability (Native Land Digital, 2021). While European colonization in the 1640s brought about their enslavement and cultural disruption, 1,175 descendants of these indigenous people still live in Anne Arundel County (U.S. Census estimates, 2019).

THE SENIOR POPULATION

The number of older Marylanders is increasing. Of the nearly 6.1 million people in Maryland in 2020, 22.62% were aged 60 or over. This percentage is expected to increase to 26.57% by the year 2040. Individuals 85 and over are the fastest growing segment of the population. In Anne Arundel County, senior population growth is highest in the over-65 age group. The number of residents aged 60-64 has decreased slightly between 2018 and 2020. According to the Maryland Department of Aging (2021), 62.8% of Maryland's older adults (60+) reside in Baltimore City and in Anne Arundel, Baltimore, Montgomery, and Prince George's counties. In 2035, these will remain the jurisdictions with the largest number of individuals over 60.

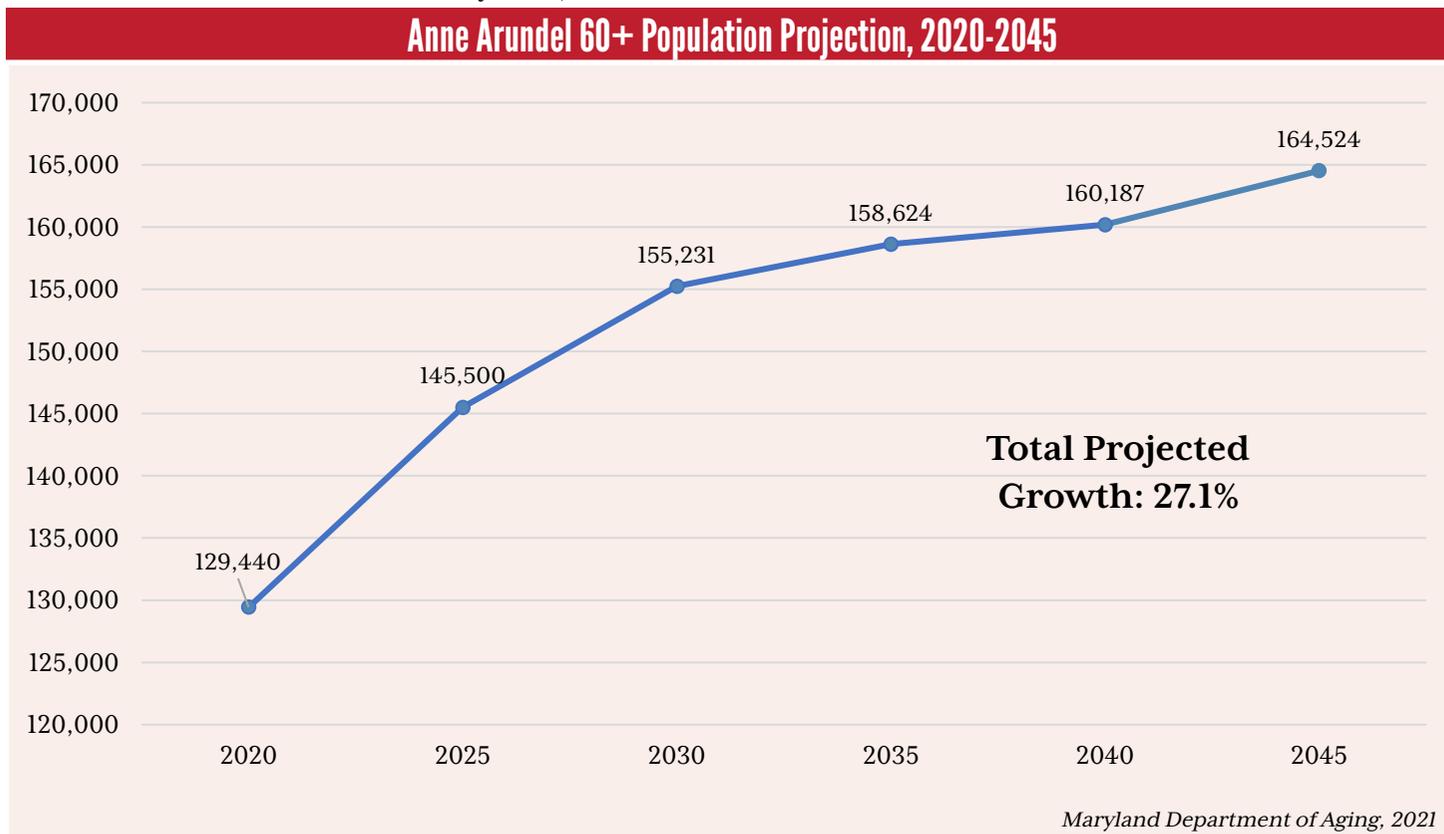
FIGURE 3: ANNE ARUNDEL SENIOR POPULATION GROWTH, 2018-2020





The Anne Arundel County 60+ population is predicted to rise more than 27% between 2020 and 2045, from 129,440 to 164,524 (Maryland Department of Aging, 2021).

FIGURE 4: ANNE ARUNDEL 60+ POPULATION PROJECTION, 2020-2045



THE DISABLED POPULATION

According to 2019 U.S. Census estimates, approximately 62,869 county residents live with one or more disabilities. Many of those residents are low-income (U.S. Census American Community Survey, 2019). Persons with developmental disabilities may have deafness/severe hearing impairment, orthopedic impairment, autism spectrum disorder, behavioral problems, blindness/severe visual impairment, cerebral palsy, epilepsy/seizure disorder, head injury, mental disorder, intellectual disability, speech/language impairment, and other neurological impairments (Maryland Department of Developmental Disabilities, 2018).

The Centers for Disease Control and Prevention (2021) estimates that Autism Spectrum Disorder (ASD) affects 1 in 44 (2.3%) 8-year-old children in the United States. Among this age cohort, boys are about four times as likely to be identified with ASD as girls. In Maryland, the estimated prevalence of ASD among children aged eight years is 1 in 49, a 6.5% increase compared to data collected in 2016, which previously estimated that 1 in 52 children are affected. On average, medical expenditures for children and adolescents with ASD were 4.1 to 6.2 times greater than those without ASD. In addition to medical costs, intensive behavioral interventions for children with ASD cost \$40,000 to \$60,000 per child per year (Maryland Department of Developmental Disabilities, 2018).

THE ENVIRONMENT

Anne Arundel County is a place of natural beauty that can be enjoyed through two state and 70 county parks linked by an extensive network of recreation and transportation trails. With 534 miles of linear coastline, the county ranks second for waterfront in the state and second in the nation when compared to other counties. The county has a wealth of waters, including the Chesapeake Bay, Magothy River, the Upper Patuxent River, the Rhode River, the Severn River, the South and West Rivers, and the Patapsco River.

The Chesapeake Bay is perhaps Anne Arundel County’s most treasured natural resource, constituting the largest estuary in the United States. Many Anne Arundel communities are within one mile of the Bay shoreline. The 2020 State of the Bay Report from the Chesapeake Bay Foundation shows that in each of the three indicator categories; pollution, habitat, and fisheries, there have been improvements since 2018. (See Figure 5.) In 2020, there are further signs that pollution-reduction efforts are working: less nitrogen and phosphorus, a smaller dead zone, and improving water clarity. However, despite many efforts by federal, state, and local governments and other interested parties, pollution in the Bay still does not meet existing water quality standards.

FIGURE 5: CHESAPEAKE BAY HEALTH INDICATORS, 2018 TO 2020 COMPARISON

Chesapeake Bay Health Indicators, 2018 to 2020 Comparison				
	Indicator	2020	Change from 2018	Grade
Pollution	Nitrogen	17	+5	F
	Phosphorus	27	+8	D
	Dissolved Oxygen	44	+2	C
	Water Clarity	17	+1	F
	Toxins	28	0	D
Habitat	Forested Buffers	56	-1	B
	Wetlands	42	0	C
	Underwater Grasses	22	-3	D-
	Resource Lands	33	0	D+
Fisheries	Rockfish	49	-17	C+
	Oysters	12	+2	F
	Blue Crabs	60	+5	B+
	Shad	7	-3	F

Chesapeake Bay Foundation 2020, State of the Bay Report

According to the Anne Arundel County Department of Public Works (2020), all of Anne Arundel County’s waterways are considered impaired because of excessive levels of major contaminants, which are largely a result of untreated stormwater runoff. Without prior treatment, all stormwater runoff ends up in nearby streams, rivers, and eventually the Chesapeake Bay. Since stormwater comes into contact with litter, gasoline, oils, brake pad dust from cars, pesticides, waste from pets, and many other toxins along its journey, stormwater is a significant source of pollution to the county waterways.



GROUNDWATER

As of August, 2021, the Anne Arundel County Department of Health identified five potential groundwater problem areas within the county due to saltwater intrusion, volatile organic compounds (VOCs), and elevated levels of nitrate, radium, arsenic, and cadmium. The five groundwater problem areas are Annapolis Neck (Saltwater Intrusion), Gambrills area (elevated nitrate levels), Northern Anne Arundel (elevated radium levels), Fort Meade/Odenton area (three groundwater contaminant plumes), and the Annapolis/Edgewater Peninsula (elevated arsenic and cadmium). In many of these areas, residents depend on private wells rather than public water for drinking water. According to participants in this needs assessment, the process for requesting public water in a neighborhood is arduous and the cost is prohibitive for low-income residents.

AIR QUALITY

Air quality is another issue for the county. Anne Arundel County was given an “F” by the American Lung Association in 2021 for a weighted average of 7.5 high ozone days, a reduction from the 2018 rate of 13 days. High ozone causes respiratory harm (e.g., worsened asthma, worsened COPD, inflammation), can cause cardiovascular harm (e.g., heart attacks, strokes, heart disease, congestive heart failure) and may cause harm to the central nervous system. Groups at risk in the county include 12,464 pediatric asthma patients, 40,950 adult asthma patients, and 31,515 adults with cardiovascular disease (American Lung Association 2021).

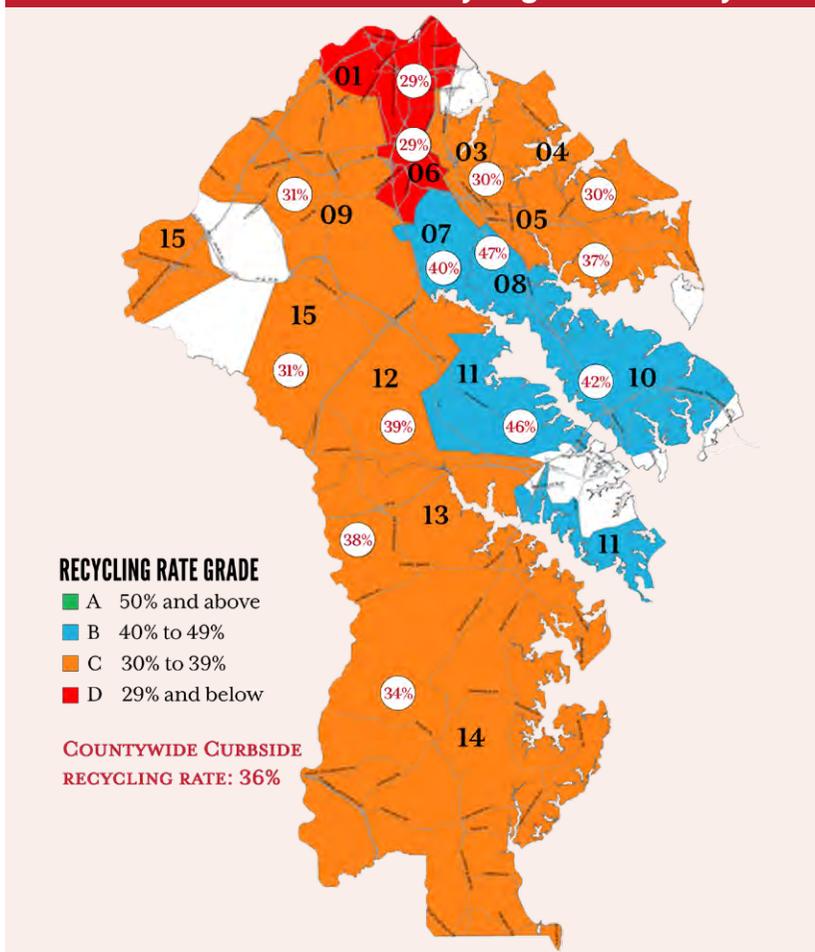
RECYCLING

Recycling is a way to protect the environment and also reduce pollution. Anne Arundel County collects recycling in two ways: at curbside and by homeowner drop-off. For curbside collections, the county is divided geographically into fifteen collection service areas.

According to the Anne Arundel County recycling program, the county’s average recycling rate is 36%, dropping from 42% in 2018. As of July 2021, no county areas received an “A” grade or 50% and above. Brooklyn Park and parts of North County have the lowest rate at 29%. (See Figure 6.)

Waste Collection Service Areas Recycling Rates as of July 2021

FIGURE 6: WASTE COLLECTION SERVICE AREAS RECYCLING RATES AS OF JULY 2021



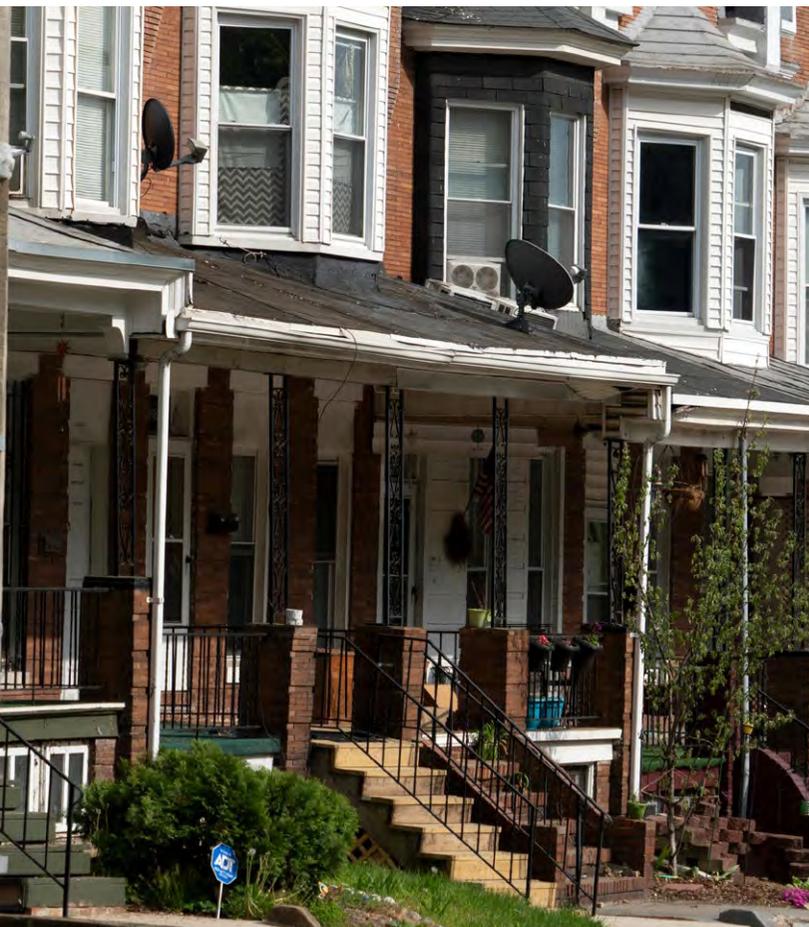
CHAPTER 1 | INTRODUCTION & DEMOGRAPHICS

SUMMARY

Poverty Amidst Plenty VII includes the opinions of residents from every economic sector and stakeholders working in public and private systems. Their thoughts and comments are threaded through this needs assessment. The majority were highly concerned about the current labor shortage across the county, from school bus drivers and hospitality workers to nurses, accountants, and child care workers. The increase in mental health issues in all age groups, but particularly children and youth, was of equal concern, with a consensus that these issues have been exacerbated by the pandemic.

The lack of regular and accessible transportation continues to create access issues for our most vulnerable residents, although the increase in access to telehealth was noted as a positive of the pandemic. Rising family homelessness related to the growing shortage of rental properties and the lack of affordable housing was another major concern among participants. The already struggling child care industry was badly damaged by the pandemic. The county lost 42 child care facilities during the pandemic and there is a shortage of workers for those child care settings that still exist.

In 2022, Anne Arundel County residents have much to be thankful for. Despite inflation and the high cost of living, many residents enjoy a higher-than-average income in a county known for its natural beauty. However, as illustrated in the following pages, health and economic disparities based on race and ethnicity can be seen in neighborhoods throughout the county. In each of those neighborhoods, the social determinants of health are rising with the numbers of residents whose incomes are below what is required for a healthy life. While our Bay and watersheds are improving, there is much work to do to ensure that our air quality improves, and that the quality of drinking water is at the same standard for all residents.





Although this report focuses on all of Anne Arundel County, it should be noted that there are four distinct quadrants in the county that differ considerably in economic and social characteristics. The Community Foundation of Anne Arundel County defines these areas as:

NORTH COUNTY

Brooklyn Park, Baltimore/Washington International (BWI) Thurgood Marshall Airport, Curtis Bay, Gibson Island, Glen Burnie, Lake Shore, Linthicum, Orchard Beach, Pasadena, and Riviera Beach

SOUTH COUNTY

Beverly Beach, Churchton, Davidsonville, Edgewater, Edgewater Beach, Friendship, Galesville, Harwood, Lothian, Mayo, Riva, Shady Side, Tracy's Landing, and West River

WEST COUNTY

Crofton, Fort George G. Meade, Gambrills, Hanover, Harmans, Laurel, Maryland City, Odenton, Russett, and Severn

CENTRAL COUNTY

Annapolis, Arnold, Cape Saint Claire, Crownsville, Eastport, Highland Beach, Millersville, The United States Naval Academy, Severna Park, and Sherwood Forest





CHAPTER 2 THE ECONOMY

Anne Arundel County’s \$51.5 billion economy is the third largest in Maryland. It is often described as healthy and diverse with high household incomes, low unemployment, and a strong housing market. The county is strategically located near Washington, D.C. and Baltimore and is home to 59,000 businesses. (Anne Arundel County Economic Development Corporation, 2022.)

INCOME

The most recent household median income estimates stand at \$100,798 (U.S. Census estimates, 2019). The gap between rich and poor continues to widen. The number of resident households with an income above \$200,000 have grown by 47% since 2016. Meanwhile, those households with an income below \$25,000 have shrunk, but not at the same rate. (See Figure 7.)

FIGURE 7: ESTIMATED ANNUAL HOUSEHOLD NUMBERS, 2016-2020

Estimated Annual Household Numbers, 2016-2020					
Totals	2016 204,829		2019 216,200		Change
Per Household	Number	%	Number	%	
Less than \$25,000	20,439	10.0%	16,127	7.4%	-21%
\$25,000 - \$34,999	10,875	5.3%	10,386	4.8%	-4%
\$35,000 - \$49,999	18,775	9.2%	14,214	6.6%	-24%
\$50,000 - \$74,999	32,573	15.9%	34,349	15.9%	5%
\$75,000 - \$99,999	29,148	14.2%	30,813	14.3%	6%
\$100,000 - \$199,999	68,734	33.6%	74,692	34.6%	9%
\$200,000 or more	24,285	11.9%	35,619	16.5%	47%

U.S. Census estimates, 2020

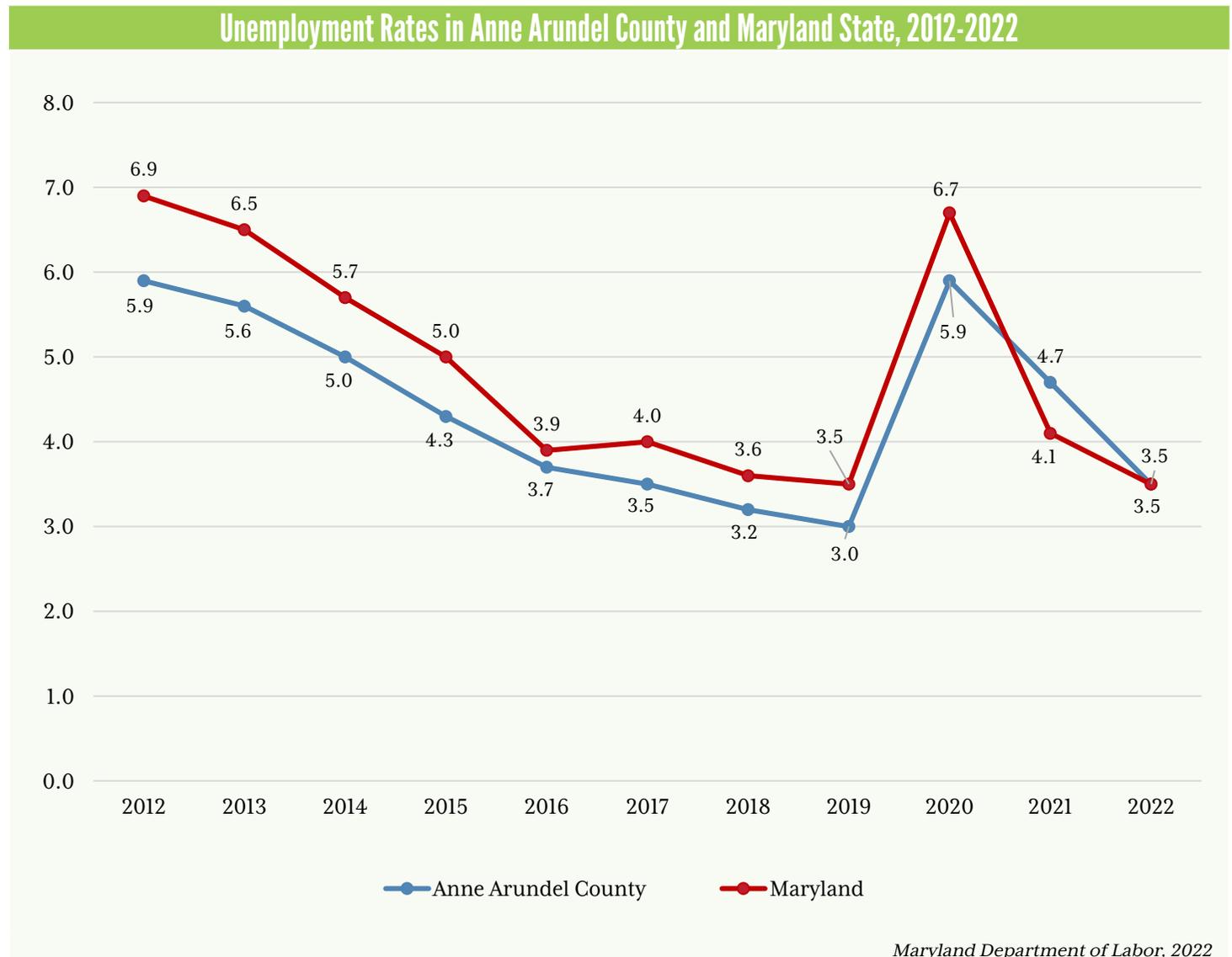




UNEMPLOYMENT

The unemployment rate pre-pandemic (2018) was 3.2%. It grew to 5.9% in 2020. In September 2021, the rate dropped again to 4.7%. By the middle of 2022, the rate was down to almost pre-pandemic levels at 3.5%. (See Figure 8, Maryland Department of Labor, 2021.)

FIGURE 8: UNEMPLOYMENT RATES IN ANNE ARUNDEL COUNTY AND MARYLAND STATE, 2012-2022



POVERTY

Poverty is defined in different ways. The official United States poverty rate is decided by the federal government. As of 2021, for a family or household of four persons living in one of the 48 contiguous states or the District of Columbia, the federal guideline is \$26,500. According to 2019 U.S. Census estimates, 5% of the overall county population, 28,044 residents, live in poverty. That percentage increases for children to 7.4%. As of 2019, the county's trend line for poverty was moving downwards for every category. (See Figure 9.)

FIGURE 9: POVERTY STATUS, ANNE ARUNDEL COUNTY, 2014-2019

Poverty Status, Anne Arundel County, 2014-2019												
	2014		2015		2016		2017		2018		2019	
	Below poverty level	Percent below poverty level	Below poverty level	Percent below poverty level	Below poverty level	Percent below poverty level	Below poverty level	Percent below poverty level	Below poverty level	Percent below poverty level	Below poverty level	Percent below poverty level
Population below poverty level	31,573	5.9%	31,573	5.9%	33,168	6.1%	32,368	5.8%	39,678	7.1%	28,044	5.0%
Age												
Under 18 years	8,846	7.1%	8,359	6.7%	8,923	7.1%	9,024	7.1%	13,887	11.0%	9,433	7.4%
18 to 64 years	8,377	6.8%	19,571	5.7%	20,126	5.8%	18,585	5.3%	21,663	6.2%	15,256	4.4%
65 years and over	3,563	5.2%	3,643	5.1%	4,119	5.6%	4,759	6.0%	4,128	5.0%	3,355	3.9%

Data.census.gov ACS 1-Year Estimate Subject Tables

Poverty percentages also change depending on zip code. The geographic nature of county poverty percentages match other data sets related to the social determinants of health (see Figure 52: Demographic, Socioeconomic, and Health Indicators by Zip Code in Anne Arundel County, 2019 on page 54). Many participants suggested we design a new system to address the county's pockets of poverty. Here is a typical comment:

"To me, we cannot get rid of poverty or even have more equity in our economic system, until we look at a different way of doing things."

Poverty continues to be concentrated in the North and South of the county. (See Figure 10.) The highest percentage of poverty is in the zip code that contains Brooklyn Park at 24.8% followed by Curtis Bay; both areas border Baltimore City. The poverty percentages in both Annapolis and Glen Burnie have increased in percentage between 2018 and 2019.



FIGURE 10: PERCENTAGE OF POVERTY BY ZIP CODE

Percentage of Poverty by Zip Code					
Zip Code	Area	Poverty Percentage			
		2016	2017	2018	2019
21225	Brooklyn Park	27.3%	24.9%	24.8%	24.8%
21226	Curtis Bay	16.6%	15.4%	12.9%	9.6%
21060	Glen Burnie (East)	7.9%	7.1%	7.1%	7.5%
21061	Glen Burnie (West)	9.2%	9.1%	8.2%	8.4%
20714	North Beach	10.6%	9.1%	5.8%	6.1%
20751	Deale	10.8%	12.0%	5.5%	5.6%
21401	Annapolis	7.9%	6.9%	7.8%	8.1%
21403	Annapolis	6.9%	7.0%	7.9%	7.4%
	Anne Arundel County	6.9%	5.8%	7.1%	5.0%

U.S. Census estimates, 2020

LIVING WAGE MODEL

Anne Arundel County has a high cost of living including high rents and high real estate costs. The Living Wage Model, developed at the Massachusetts Institute of Technology (MIT), is a tested measure of required income given geographic location. It is a market-based approach that examines specific expenditure data related to a family’s likely minimum food, child care, health insurance, housing, transportation costs, and other basic necessities. It offers a comparison between what a family in Anne Arundel County has to live on at the federal poverty level, Maryland’s minimum wage of \$11.00 an hour (2019 rate), and what a minimum living wage would realistically be. (See Figure 11.) The living wage shown is the hourly rate that an individual must earn to support their family, if they are working full-time (2,080 hours per year). The state minimum wage is the same for all individuals, regardless of how many dependents they may have. The poverty rate is typically quoted as gross annual income. It has been converted to an hourly wage for comparison purposes. For example, according to MIT’s Living Wage Calculator (2021), a single adult with one child in Anne Arundel County must make \$34.18 per hour to cover their expenses. (See Figure 11.)

FIGURE 11: LIVING WAGE CALCULATOR FOR ANNE ARUNDEL COUNTY, 2019

Living Wage Calculator for Anne Arundel County, 2019												
	1 Adult				2 Adults (1 Working)				2 Adults (Both Working)			
	0 Child- ren	1 Child	2 Child- ren	3 Child- ren	0 Child- ren	1 Child	2 Child- ren	3 Child- ren	0 Child- ren	1 Child	2 Child- ren	3 Child- ren
Living Wage	\$15.84	\$34.18	\$42.52	\$55.16	\$25.81	\$31.22	\$34.81	\$37.85	\$12.91	\$18.47	\$23.13	\$27.67
Poverty Wage	\$6.13	\$8.29	\$10.44	\$12.60	\$8.29	\$10.44	\$12.60	\$14.75	\$4.14	\$5.22	\$6.30	\$7.38
Minimum Wage	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00

MIT, 2021

ASSET LIMITED INCOME CONSTRAINED EMPLOYED FAMILIES (ALICE)

The United Way organization coined the term Asset Limited Income Constrained Employed (ALICE) for the individuals and families across the nation who, despite being employed, do not earn enough to afford the five basic household necessities: housing, child care, food, transportation, and health care. As of 2018, there were 212,687 Anne Arundel County residents (35%) who could be categorized as ALICE, or lived at or below the federal poverty level of \$26,500 for a family of four (United Way Alice Report, 2020). (See Figure 12.) Even though these residents are working, their income does not cover the cost of living in the county and they often require public assistance to survive.

FIGURE 12: ALICE FAMILIES BY COUNTY IN MARYLAND, 2018

ALICE Families by County in Maryland, 2018		
County	Total Households	% ALICE & Poverty
Allegany	27,190	55%
Anne Arundel	212,689	35%
Baltimore	313,259	40%
Baltimore City	237,204	55%
Calvert	31,726	33%
Caroline	12,081	42%
Carroll	60,371	29%
Cecil	36,930	39%
Charles	55,903	38%
Dorchester	13,264	45%
Frederick	95,903	37%
Garrett	12,073	43%

United Way, 2019

HOME OWNERSHIP

In April 2022, Anne Arundel County home prices were up 8.2% compared to last year, selling for a median price of \$449K. On average, homes in Anne Arundel County sell after eight days on the market compared to 14 days last year (Long and Foster Market Minute, 2022).

There is disparity in home ownership by race and ethnicity. (See Figure 13.) Historically, homeownership for Black people was burdened by redlining, the inability to use their G.I. Bills, and other federal discriminatory practices to inhibit homeownership for Black people (Ray & Perry, 2020).



FIGURE 13: PERCENT OWNING HOME BY RACE/ETHNICITY ANNE ARUNDEL COUNTY, 2016-2019

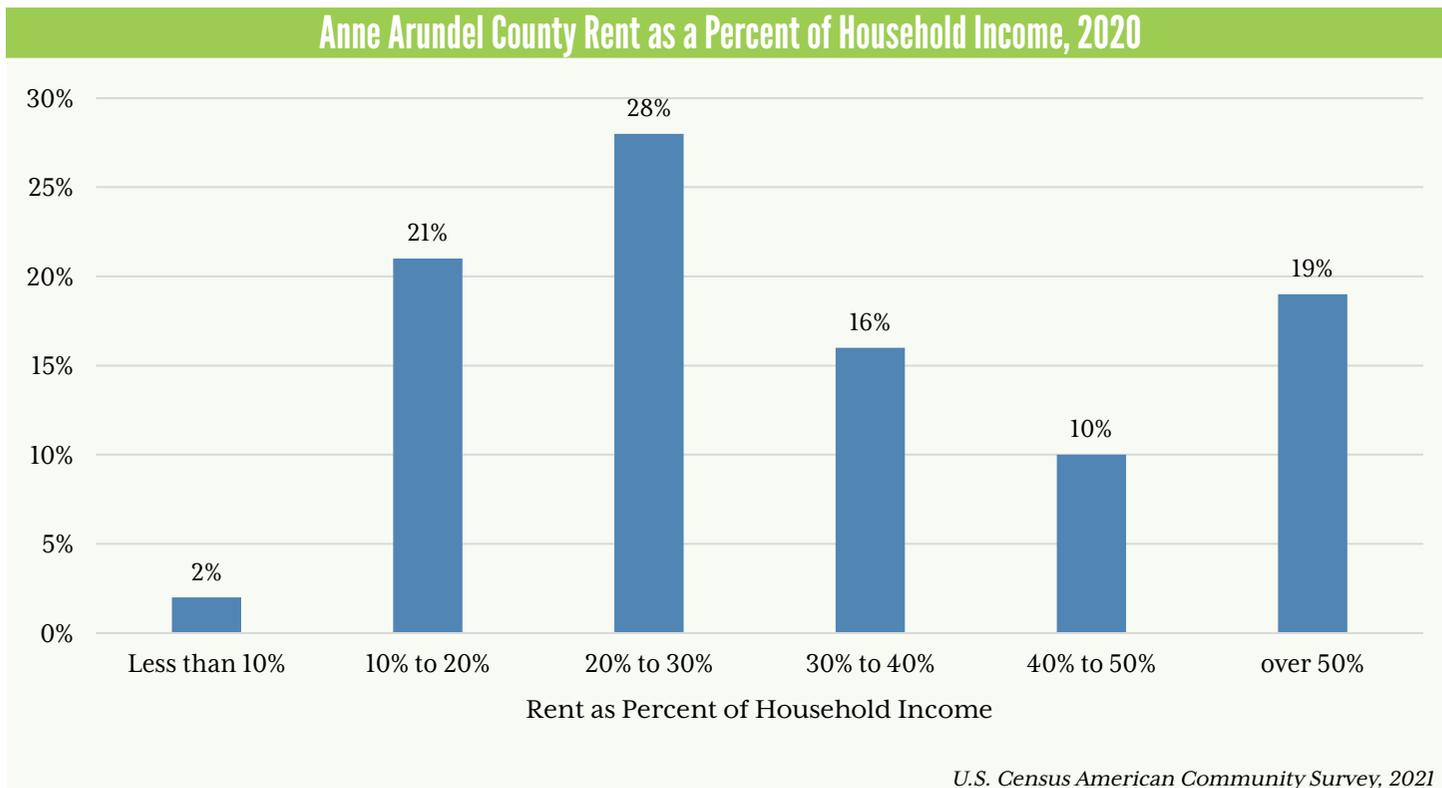
Percent Owning Home by Race/Ethnicity, Anne Arundel County, 2016-2019				
	2016	2017	2018	2019
White, Non Hispanic	80.5%	81.7%	80.4%	80.2%
Black, Non Hispanic	50.5%	55.1%	53.5%	54.8%
Hispanic	59.9%	48.6%	57.0%	49.6%
Asian, Non Hispanic	76.6%	69.5%	72.8%	68.7%

U.S. Census Bureau, American Community Survey 1-year Estimates 2017-2019

THE RENTAL MARKET

The majority of Anne Arundel County residents are homeowners (74.3%). Renters account for 25.7% which is the second smallest number in terms of renter percent of all the other counties in the surrounding region (U.S. Census, 2021). Participants in this needs assessment pointed to the expense and the limited supply of rental housing as a barrier to low-income families. Forty-five percent of county renters spend over 30% of their income on their rent, which classifies them as rent overburdened. (See Figure 14.)

FIGURE 14: ANNE ARUNDEL COUNTY RENT AS A PERCENT OF HOUSEHOLD INCOME, 2020



THE RENTAL MARKET, CONTINUED

The cost of rental housing continues to increase. In 2020, the median rent for the county was \$1,690 compared to \$1,096 for the rest of the nation. Low-income families are often choosing between what necessities they pay for to keep their family afloat. As one resident noted:

"Some families don't have enough money to continue to keep their home or afford rent. We're working with somebody right now. She's been bouncing back and forth from Delaware to Maryland in her car with family members."

FIGURE 15: MEDIAN RENT, ANNE ARUNDEL COUNTY AND U.S., 2018-2020

Median Rent, Anne Arundel County and U.S., 2018-2020			
	2018	2019	2020
Anne Arundel County	\$1,595	\$1,696	\$1,781
United States	\$1,058	\$1,097	\$1,096

U.S. Census, American Community Survey, 2018-2020, table DP04

CHILD CARE

The availability of quality child care is so important for parents who work to support their families. However, in Anne Arundel County, quality child care is difficult to obtain. It can be expensive, there are often limited openings, and an opening may not be available in areas where a family lives or works. Child care can be difficult to access in certain parts of Anne Arundel County, including in Brooklyn Park and South County. Available county child care spots are predicted to trend downwards through 2026. (Maryland Family Network, 2022.) (See Figure 16 and Figure 17.)

FIGURE 16: FAMILY CHILD CARE PROVIDERS IN ANNE ARUNDEL COUNTY, 2017-2026

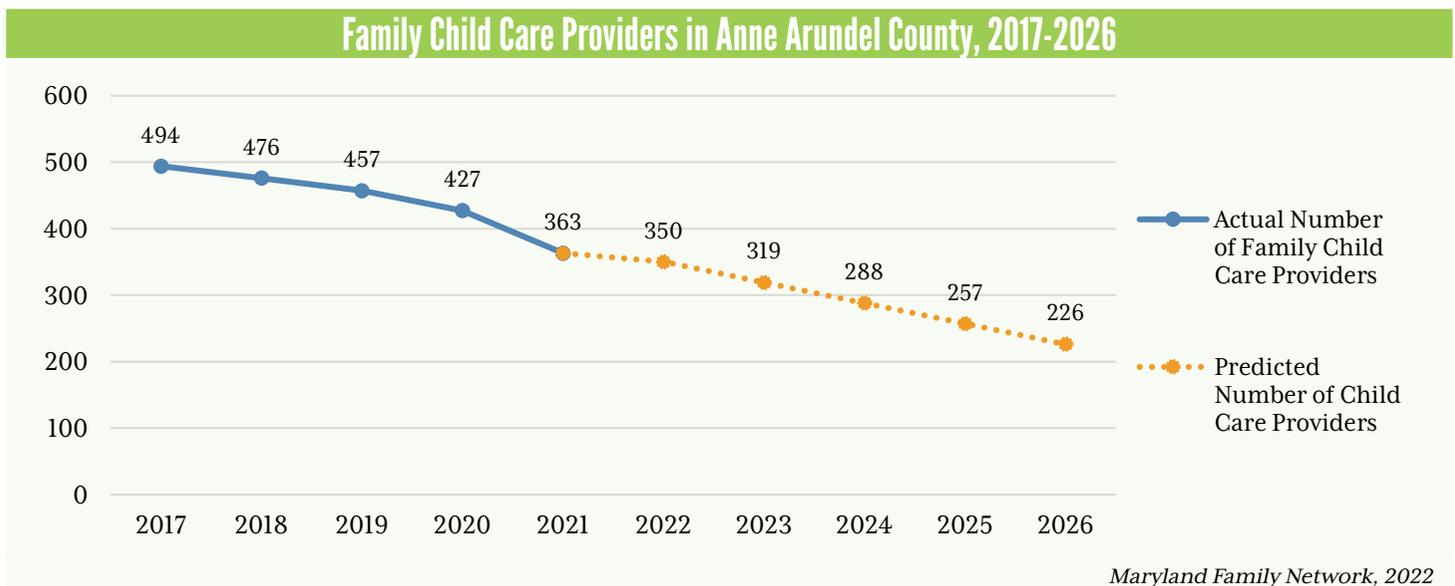
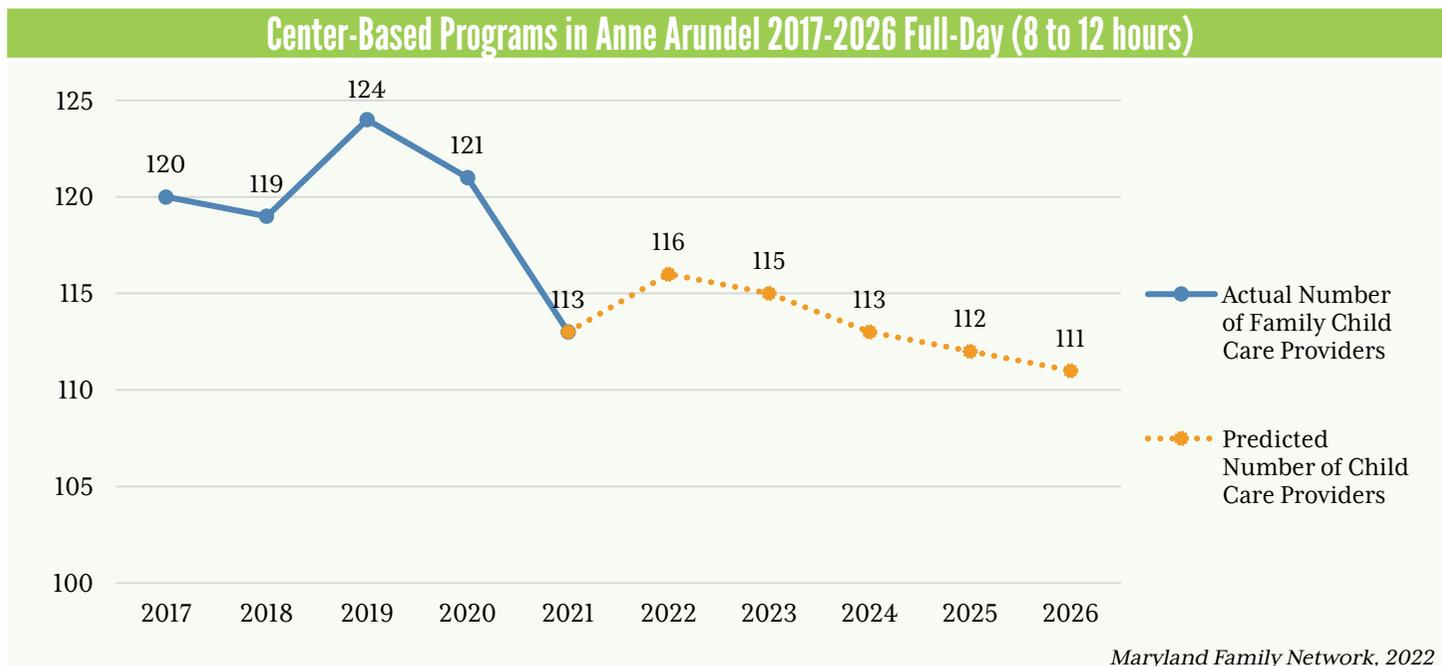




FIGURE 17: CENTER-BASED PROGRAMS IN ANNE ARUNDEL 2017-2026 FULL-DAY (8 TO 12 HOURS)



The average weekly cost of child care for children ages 0-2 years for center-based care is \$357.71 and \$246.52 for children ages 2-5 years (Maryland Family Network, 2021). The average weekly cost of family-based child care is \$254.17 for ages 0-2 years, and \$213.16 for ages 2-4 years (Maryland Family Network, 2021). Several participants noted that parents are choosing not to go back to work post-pandemic because they cannot afford child care. As one noted:

"I am one of those people who's not working because I have to take care of my children; I cannot afford child care for them."

If families have more than one young child, child care options may become more complicated if a center only has certain openings for certain age groups. One of the major reasons parents could not find child care in 2019 was the lack of openings for infants (Maryland Family Network, 2021).

FIGURE 18: ANNE ARUNDEL COUNTY AVERAGE WEEKLY COST OF FULL-TIME CHILD CARE, 2020

Anne Arundel County Average Weekly Cost of Full-Time Child Care, 2020		
	Family Child Care Programs	Child Care Centers
0-23 months	\$254.24	\$384.06
2-4 years	\$213.16	\$249.17
5 years ¹	\$192.15	\$233.17
School Age Full ²	\$173.87	\$230.60
School Age B/A ³	\$117.73	\$157.38

¹ Average cost of full time care for a 5-year-old. Defined as child being in full time child care or being in kindergarten and out-of-school child care, i.e., holidays, school closures, and summers.

² Average cost of full time care for a 6+ school age child (out-of-school child care, i.e., holidays, school closures, and summers).

³ Average cost of before and after school child care.

MFN/LOCATE: Child Care, 2021

CHILD CARE, CONTINUED

According to providers there are now significant shortages of qualified child care staff. The pay is often barely above minimum wage so employees move quickly when one child care center offers an extra dollar or two an hour. As one participant said:

"The turnover rate that we have for the child care is astonishing and that's alarming to me because, I mean, the sign of a quality program is staff that stick around. And what I see lately is that no place has staff sticking around."

HOMELESSNESS

It is almost impossible to accurately calculate the numbers of homeless residents in Anne Arundel County. Some of the data is captured in the Federal Homeless Management Information System (HMIS), but HMIS only collects data on the residents served who meet the federal definition of homelessness; those who are on the street or in a shelter. Many families who are homeless do not qualify because they are living in motels or are doubled up with other families. Family homelessness, as measured by the HMIS system, stands at 142 families in 2021, but they are ONLY the families who meet the strict federal definition of homelessness. When numbers from service providers, the Anne Arundel County Public School System and the Department of Social Services are merged, there were at least 850 homeless families in the county as of December 2021. All participants in this needs assessment agreed that the number of homeless families is growing. They are living in hotels, church basements, and their cars during good weather. The positive housing market has led to a decrease in affordable rental housing in a county where there is already a huge shortage of affordable housing. Homeless families are becoming more prevalent in our human services systems, including the emergency room, child care centers, and public schools. As one participant noted:

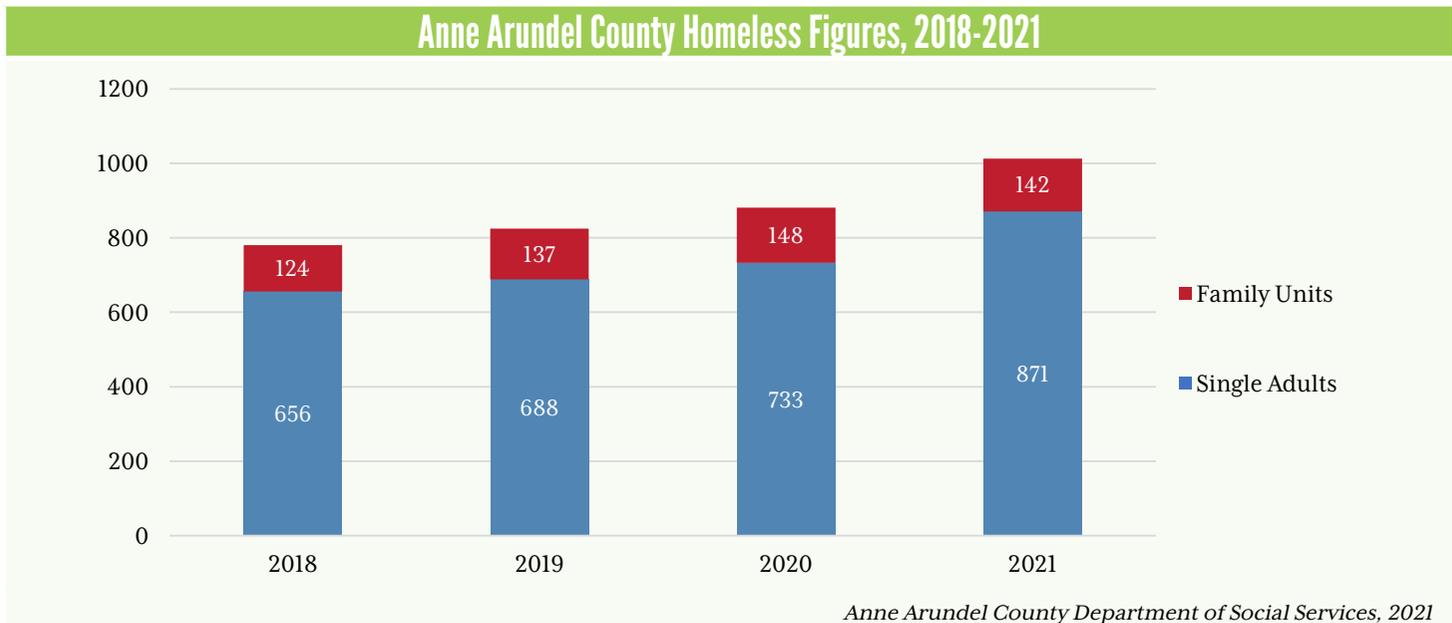
"Families in hotels cycling and not being able to get out of hotels is the root cause of a lot of families' challenges."

It is clear that sections of the children and family homeless populations have increased over the last three years. Given that county services increased during the pandemic, the actual numbers might have been even higher. Federal funds helped stave off eviction for some and provided hotel shelter for many more. (See Figure 19.)





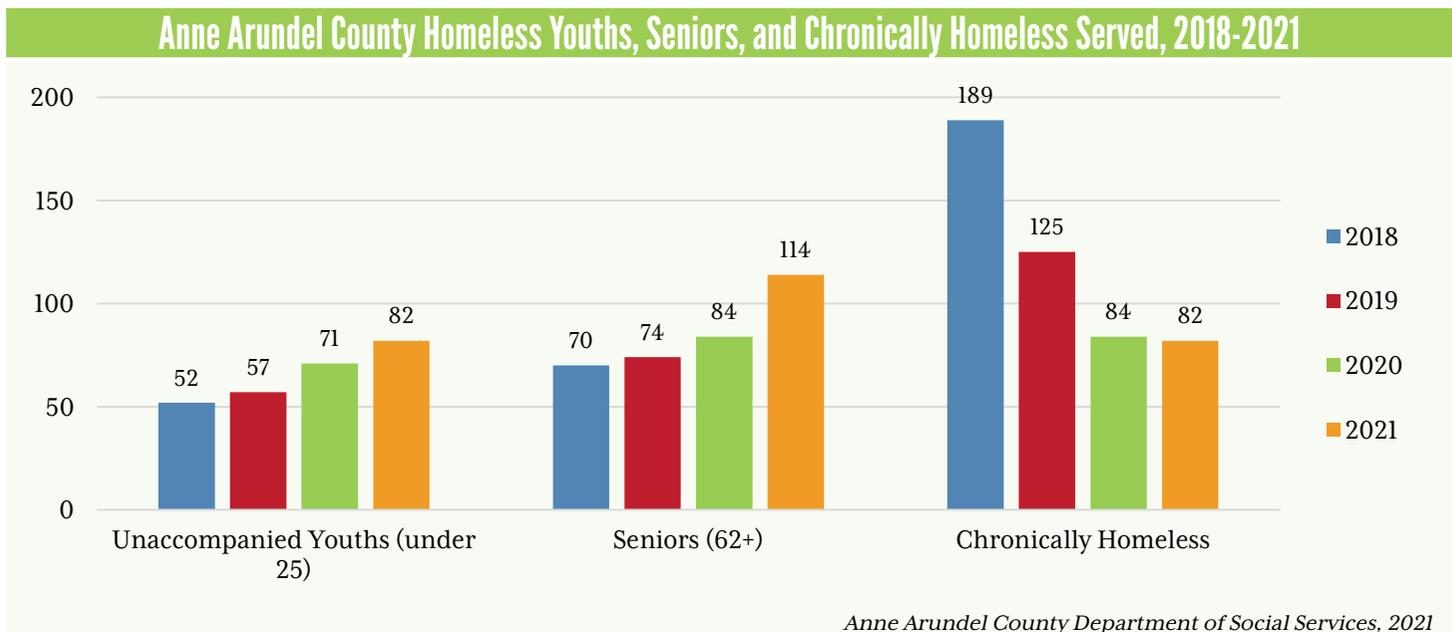
FIGURE 19: ANNE ARUNDEL COUNTY HOMELESS FIGURES, 2018-2021



Since 2018, “chronically homeless residents” is the only demographic that has decreased in the county. Noted in the chart below, seniors are a growing number of the reported homeless. The cost of living in the county and the lack of affordable housing leaves seniors without good retirement income and struggling to survive. (See Figure 20.) As one provider for seniors noted:

“They don’t have enough money to keep their home or afford rent. They need affordable housing and because of that they’re like, ‘well I’ve got a car so I might as well let my house go.’”

FIGURE 20: ANNE ARUNDEL COUNTY HOMELESS YOUTHS, SENIORS, AND CHRONICALLY HOMELESS SERVED, 2018-2021



HOMELESSNESS, CONTINUED

Health systems do not track homelessness separately from other health indicators, so there are no accurate estimates of how big an impact the homeless population creates. Anecdotal data suggests homeless residents repeatedly return for emergency and hospital services and their placement after discharge is difficult. There are only three regular shelters for the homeless in Anne Arundel County and no supported housing for those who need care after emergency room or hospital services. One participant reported that patients are often released to shelters that do not have the services for aftercare. Those residents return quickly to a hospital setting. Another health provider noted:

"What I found is really lacking in Anne Arundel County is shelter placements for our homeless population. The majority of the time we have to send our patients up to Baltimore City, which presents an issue."

Our two public housing authorities, the Housing Authority of the City of Annapolis and the Anne Arundel County Housing Commission, continue to have long waiting lists. There is also a waitlist to obtain a housing voucher. (See Figure 21.)

FIGURE 21: ANNE ARUNDEL COUNTY HOUSING CHOICE VOUCHER LIST, 2021

Anne Arundel County Housing Choice Voucher List, 2021			
	# of Families	% of Total Families	Average Days Waiting
Waiting list total	18,453		602
Extremely low-income (<=30% but <=50% AMI)	14,274	77.35%	
Very low-income (>50% but 80% AMI)	3,116	16.89%	
Low-income (>50% but 80% AMI)	617	3.34%	
Over limit for low-income (>80% AMI)	446	2.42%	
Families with Children	9,983	54.10%	
Elderly Families	664	3.60%	
Families with disabilities	4,134	22.40%	
White	3,177	17.22%	
African American	13,384	72.53%	
Amer. Indian/Alaskan Native	123	0.67%	
Asian	186	1.01%	
Native Hawaiian/Other Pacific Islander	68	0.37%	
Other	739	4.00%	
Not Assigned	776	42.00%	

Anne Arundel County Housing Commission, 2021



SUMMARY

For the majority of Anne Arundel County residents, Anne Arundel County offers economic opportunity. However, the lack of affordable housing and the cost of rental properties are causing heavy burdens for both low-income and middle-class families. According to participants in this needs assessment, the decrease in available child care slots is causing some residents to choose to stay at home rather than return to the workforce, post-pandemic. This is particularly problematic at a time of labor shortages in schools, hospitals, police and fire departments, to name just a few of the impacted industries. Those residents in the service industries often live in other counties or Baltimore City.

NEEDS & GAPS IN SERVICES

- As we continue to report in each new needs assessment, for those county residents who don't have their own car, or share a car, transportation is a major barrier to self-sufficiency. This issue is even more urgent given the current labor shortages.
- The child care system is in urgent need of help. There are fewer child care slots and a diminishing supply of employees.
- The lack of affordable housing continues to be a huge issue, not just for low-income residents but for middle-income professionals.



CHAPTER 3 CHILDREN & YOUTH

There are 128,406 children under the age of 18 living in Anne Arundel County; a 0.7% increase since 2017. Of those, 27.4% (35,229) are under five years of age, and 7.4% (over 9,000) live below the federal poverty level; an increase of 0.3% since 2017 (U.S. Census American Community Survey estimates, 2020).

SCHOOL READINESS

Kindergarten readiness encompasses the knowledge, skills, and behaviors that enable children to participate and succeed when they begin school. This sets the stage for future learning and overall success (AACPS, 2022). Children who start kindergarten ahead, stay ahead year after year. Conversely, those children unready for school become part of the opportunity gap that widens through the grade levels.

In 2015, a new kindergarten readiness tool was introduced to Anne Arundel County Public Schools (AACPS); Ready4Kindergarten (R4K). This standardized test measures readiness on a variety of domains including Language & Literacy, Mathematics, Physical Well-Being and Motor Development, Science, Social Foundations, Social Studies, and The Arts. Between 2017 and 2022, overall readiness numbers for Anne Arundel County are trending below average. (See Figure 22.) There are continuing disparities by race and ethnicity and a drop in readiness across all categories, most likely related to the learning loss caused by the pandemic. (Blad, 2022.)

FIGURE 22: ANNE ARUNDEL COUNTY KINDERGARTEN READINESS BY RACE AND ETHNICITY, 2017-2022

Anne Arundel County Kindergarten Readiness by Race and Ethnicity, 2017-2022				
Race/Ethnicity	2017-2018	2018-2019	2019-2020	2021-2022
African American	37%	40%	34%	31%
Hispanic/Latino	33%	29%	28%	19%
White	55%	57%	55%	51%
County Average	48%	48%	46%	40%
State Average	45%	47%	47%	40%

Maryland Report Card, 2022

CHILDREN'S MENTAL HEALTH

Stakeholders in this needs assessment were almost unanimous in their concern for what they perceived as growing mental health issues in children and adolescents, a concern previously voiced in the 2018 assessment. As one provider noted, “You know, we’ve always been behind with what the mental health needs are for our children.” However, in 2021, stakeholders reported an overall increase in county awareness of the need to recognize and treat mental health issues, especially those related to trauma. As one respondent said:

“The needs are more acute and greater...but I think our awareness has increased around the county, around the state, and certainly in public schools.”



State legislation to let minors as young as 12-years-old seek mental and emotional health care without their parents’ or guardians’ consent became law in Maryland on October 1, 2021. The legislation does not allow minors to refuse mental health treatment that their parents have authorized. Under the newly enacted legislation, health care providers maintain the ability to inform parents of their child’s care plan regardless of whether they give their consent. Additionally, youths under 16 can’t be prescribed psychiatric medication without parental permission. This legislation has some positive impacts as one participant noted:

“With the change in laws, youth can seek treatment for themselves, bypassing any family stigma that may have otherwise prevented them from seeking care.”

Every school in the AACPS system now has Expanded School-Based Mental Health (ESBMH) services. Students enrolled in Medicaid can receive mental health services at their school during the school day through Villa Maria, The Children’s Guild (TCG), Innovative Therapeutic Services (ITS), or Thrive Behavioral Health (Thrive). AACPS provided mental health services for 2,224 students during the 2020-21 school year, a predictable decline of 300 students from the 2019-2020 school year, given that much of the time, schools were offering virtual instruction only. Overall, ADHD (27.56%) and anxiety (27.02%) are the most frequent primary diagnoses for ESBMH students. (See Figure 23.) Third to sixth grade students were the most likely to be served (Anne Arundel County Public Schools, 2021).

FIGURE 23: ANNE ARUNDEL COUNTY PUBLIC SCHOOL STUDENTS SERVED BY PRIMARY DIAGNOSIS

Anne Arundel County Public School Students Served by Primary Diagnosis									
Provider	ADHD	Anxiety	Conduct	Developmental	Mood	Other	Trauma	Diagnosis Not Reported	Grand Total
Army	4	8		2	4	19			37
ITS	22	43	6		19	29		2	121
Thrive								219	219
TCG	177	130	23	3	143	15	150	1	642
Villa Maria	410	420	59		121	10	77	108	1,205
Grand Total	613	601	88	5	287	73	227	330	2,224

Anne Arundel County Public Schools, 2020

Half of the children served through school-based mental health services are in elementary schools, with Grade 5 having the most referrals (236 or 12.6% of the population). Most students served (80.65%) qualified for Free and Reduced Lunch (Anne Arundel County Public Schools, 2021). This should not be surprising as the school-based mental health system is based mostly on Medicaid billing rather than county dollars. According to participants, the children hardest to serve are those with no health insurance. Participants in this needs assessment were concerned about the mounting waitlist for school-based mental health and the high turnover rate of therapists. In some schools, the wait can be as long as five months. When asked about their concerns, one participant noted:

“High turnover of providers so the kids are not able to develop a good rapport with one person and then on top of that, the providers don’t seem to be equipped to take care of the more significant behavior challenges we’re seeing this year. The high turnover of providers and the waitlist are barriers.”

CHILDREN'S MENTAL HEALTH, CONTINUED

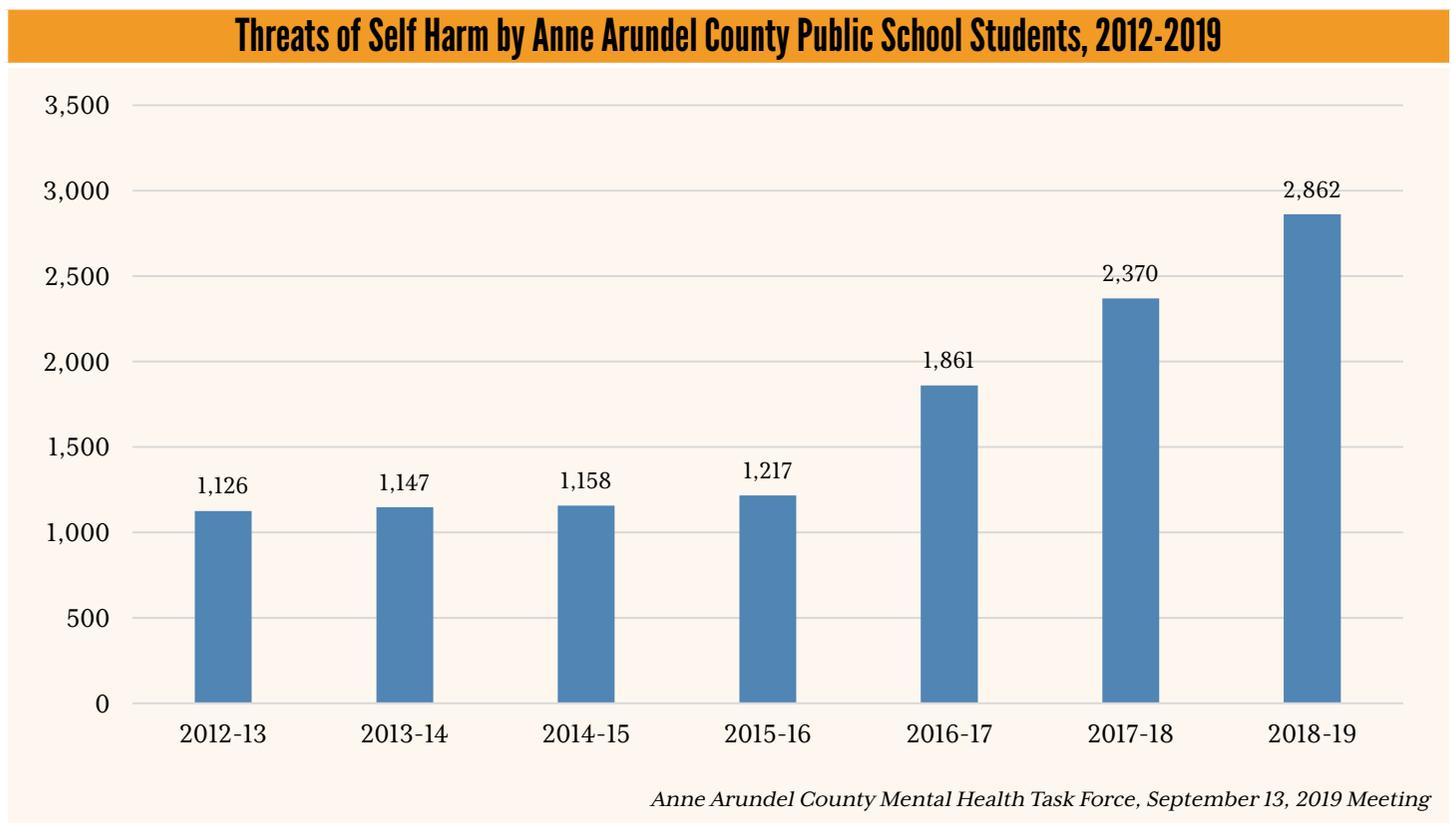
FIGURE 24: NUMBER OF CALLS TO THE ANNE ARUNDEL COUNTY CRISIS WARM LINE, FY 18 - FY 20

Children's and Adult's Warm Line Calls, FY 18 - FY 20					
	FY 18	FY 19	FY 18 - FY 19 % Change	FY 20	FY 19 - FY 20 % Change
Children's Warm line Calls	1,375	1,811	32%	2,672	48%
Adult's Warm line Calls	25,182	24,977	-1%	28,391	14%

Anne Arundel County Crisis Response System, 2022

The percentage change in numbers of calls to the county's crisis hotline is another indicator of rising mental health issues for our children. The number of calls related to children increased by 48% between 2018 and 2020. (See Figure 24.)

FIGURE 25: THREATS OF SELF HARM BY ANNE ARUNDEL COUNTY PUBLIC SCHOOL STUDENTS, 2012-2019



Threats of self-harm by county public school students have been rising since 2016 and were more than double in the 2018-19 school year. (See Figure 25.) While some participants suggested isolation during the pandemic might be a root cause for rising youth mental health issues, this data would suggest otherwise. For example, the data shows a steady increase in reports of Threats to Self-Harm in the previous four years before the pandemic.



Many participants in this needs assessment commented on the anxiety, isolation, and fear that the pandemic created in our youth. The lack of social interaction, and the intensity of virtual learning lasted for almost two years. There was general consensus that schools returned to normal too quickly, without planning for the emotional toll of the pandemic. Here is a typical comment:

"Boom, we're back to normal, and these children are kind of just thrown back in it and their anxiety's increased and our counselors and our other student services are just so overwhelmed because they can't meet those needs. I feel like we just rushed right back into it and haven't really incorporated some of those things that we learned from the pandemic."

While there is no accessible numeric data related to behavioral issues in the 0-5 age population, the majority of participants were concerned about increasing issues in child care centers, at home, and in programs like Head Start and Pre-K. Child care providers spoke about increases in "biting, hitting, and tantrums" among this group. Those issues were already increasing prior to the pandemic. As one provider noted:

"Way before the pandemic, we were already seeing an increase in behavioral issues; we've talked about that constantly."

There was a growing frustration among participants that concerns for the 0-5 age population have not been addressed. The county has very few home-visiting programs, yet child care professionals stressed their importance, especially for noting behavioral issues arising from the social determinants of health. As one early childhood professional commented:

"Home-visiting programs can address a lot of other issues going on in the home...you can address drug use, cleanliness and hygiene, health issues, and nutrition. It takes very talented people to do that, but you can work to resolve almost every issue that's going on in the home, as long as you get your foot in the door."



THE K-12 YEARS

The Anne Arundel County Public School System consists of 117 schools; 83 elementary, 20 middle, and 14 high schools. Total enrollment has grown from 81,379 in 2017 to 83,044 in 2021, an increase of over 2% since 2017. (See Figure 26.) Total enrollment is down from 2020 to 2021, likely due to the pandemic.

FIGURE 26: ANNE ARUNDEL COUNTY PUBLIC SCHOOL ENROLLMENT, 2017-2021

Anne Arundel County Public School Enrollment, 2017-2021						
	Number of Schools in County	Total Number of Students Enrolled				
		2017	2018	2019	2020	2021
Elementary School (PreK-5)	83	40,649	41,323	41,170	41,670	39,160
Middle School	20	17,884	18,233	18,745	19,427	19,581
High School	14	22,846	23,221	23,385	23,887	24,303
Total	117	81,379	82,777	83,300	84,984	83,044

Maryland Report Card, 2022

THE OPPORTUNITY GAP

The word “Opportunity” replaces “Achievement” in this needs assessment. That term will be used consistently throughout this document in recognition that denial of opportunity, not lack of effort or innate talent, is to blame for the gap in academic success between groups of students. This inequality of opportunity, related to race and income, begins with lack of prenatal care, the negative effects of low birthweight and poor nutrition, and is compounded by unsafe housing, inadequate transportation, and neighborhood violence. Many participants in this needs assessment commented on the issues outside the school system that impact achievement inside the school. Here is a typical comment from an educator:

"Access to nutritious foods, access to health care, access to safe living environments, their parents' access to jobs, and transportation...all those things contribute to a child being successful at school...and then, the community continuing to wrap their arms around students so that they can be successful in school."

Maryland uses the Maryland Comprehensive Assessment Program (MCAP) as the umbrella for all standardized state testing. The only test scores available are for 2019. The state received waivers from the U.S. Department of Education for the 2019-2020 and 2020-2021 school years, which impacts the data available. No assessments were administered in 2019-2020 and the state administered a shortened assessment for the 2020-2021 school year.

According to the most recent data (2019), while 5th Grade English Proficiency MCAP scores have seen some improvement over four years, math proficiency continues to trend downwards. There are still noticeable disparities in both areas related to race and ethnicity. (See Figure 27.)



FIGURE 27: ANNE ARUNDEL COUNTY 5TH GRADE MCAP SCORES 2015-2019

Anne Arundel County 5th Grade MCAP English Proficiency 2015-2019					
Race/Ethnicity	2015	2016	2017	2018	2019
Black/African American	29.9%	27.7%	32.3%	30.9%	31.9%
White	57.2%	59.6%	56.5%	61.3%	63.1%
Hispanic	33.7%	34.1%	29.9%	35.1%	36.7%
Overall	48.6%	50.0%	47.4%	50.1%	51.5%

Anne Arundel County 5th Grade MCAP Math Proficiency 2015-2019					
Black/African American	18.0%	21.1%	19.0%	19.6%	16.6%
White	45.8%	54.7%	47.6%	49.7%	48.5%
Hispanic	23.4%	29.0%	24.8%	24.9%	21.7%
Overall	37.5%	44.5%	38.1%	38.9%	36.6%

Maryland State Department of Education, Maryland Report Card 2021

By 8th grade, county English proficiency is increasing across all demographics although the gap in achievement by race and ethnicity is still very clear. (See Figure 28.) The trend line for math proficiency is dropping for African Americans and Hispanics but increasing for White students. The gap in achievement by race and ethnicity is increasing. (See Figure 28.)

FIGURE 28: ANNE ARUNDEL COUNTY 8TH GRADE MCAP SCORES 2015-2019

Anne Arundel County 8th Grade MCAP English Proficiency 2015-2019					
Race/Ethnicity	2015	2016	2017	2018	2019
Black/African American	29.9%	23.5%	22.4%	23.7%	28.3%
White	57.6%	48.7%	52.1%	54.0%	60.0%
Hispanic	40.8%	28.3%	31.5%	27.2%	30.6%
Overall	49.9%	41.5%	43.2%	43.6%	48.9%

Anne Arundel County 8th Grade MCAP Math Proficiency 2015-2019					
Black/African American	8.2%	5.0%	5.5%	5.0%	5.0%
White	18.8%	12.7%	18.7%	17.3%	19.0%
Hispanic	11.5%	7.0%	8.1%	7.8%	5.8%
Overall	14.5%	9.5%	13.3%	11.3%	11.9%

Maryland State Department of Education, Maryland Report Card 2021

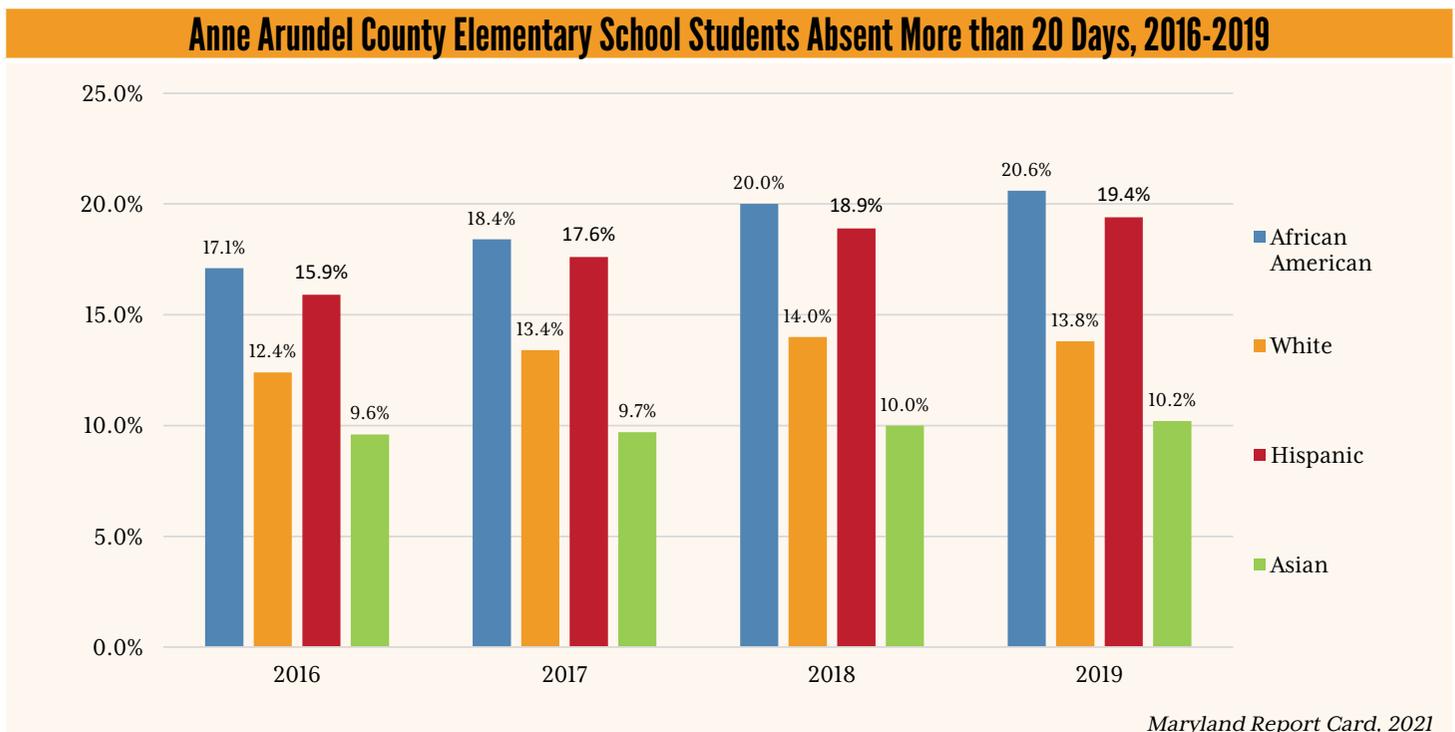
Many participants commented on the huge diversity of opportunity for county children based on income. Several also pointed out that the children in wealthy areas may also struggle based on expectations for success. As one participant noted:

"You can go from sports where Severna Park has 20 youth teams, where only 20 kids are going to make a varsity team and the rest of the kids are failures in sports because they're not going to make the high school team. Then, you have other kids worried about where they are going to get something to eat."

TRUANCY

Students are considered habitually or chronically truant if they are absent for 20 or more days during the school year. Students who miss more than 20 days of school in preschool, kindergarten, and first grade are much less likely to read at grade level by the third grade. Students who cannot read at grade level by the end of third grade are four times more likely than proficient readers to drop out of high school. The likelihood of chronic absenteeism increases as students progress into high school and often leads to poor outcomes later in life, from poverty and diminished health to involvement in the criminal justice system. (U.S. Department of Education, 2016.) According to the 2021 Maryland Report Card, in Anne Arundel County there are deep disparities in chronic absenteeism by race and ethnicity and those disparities worsened between 2017 and 2019. (See Figure 29.)

FIGURE 29: ANNE ARUNDEL COUNTY ELEMENTARY SCHOOL STUDENTS ABSENT MORE THAN 20 DAYS, 2016-2019



According to participants in this needs assessment, lack of transportation is a contributing factor. One participant stated:

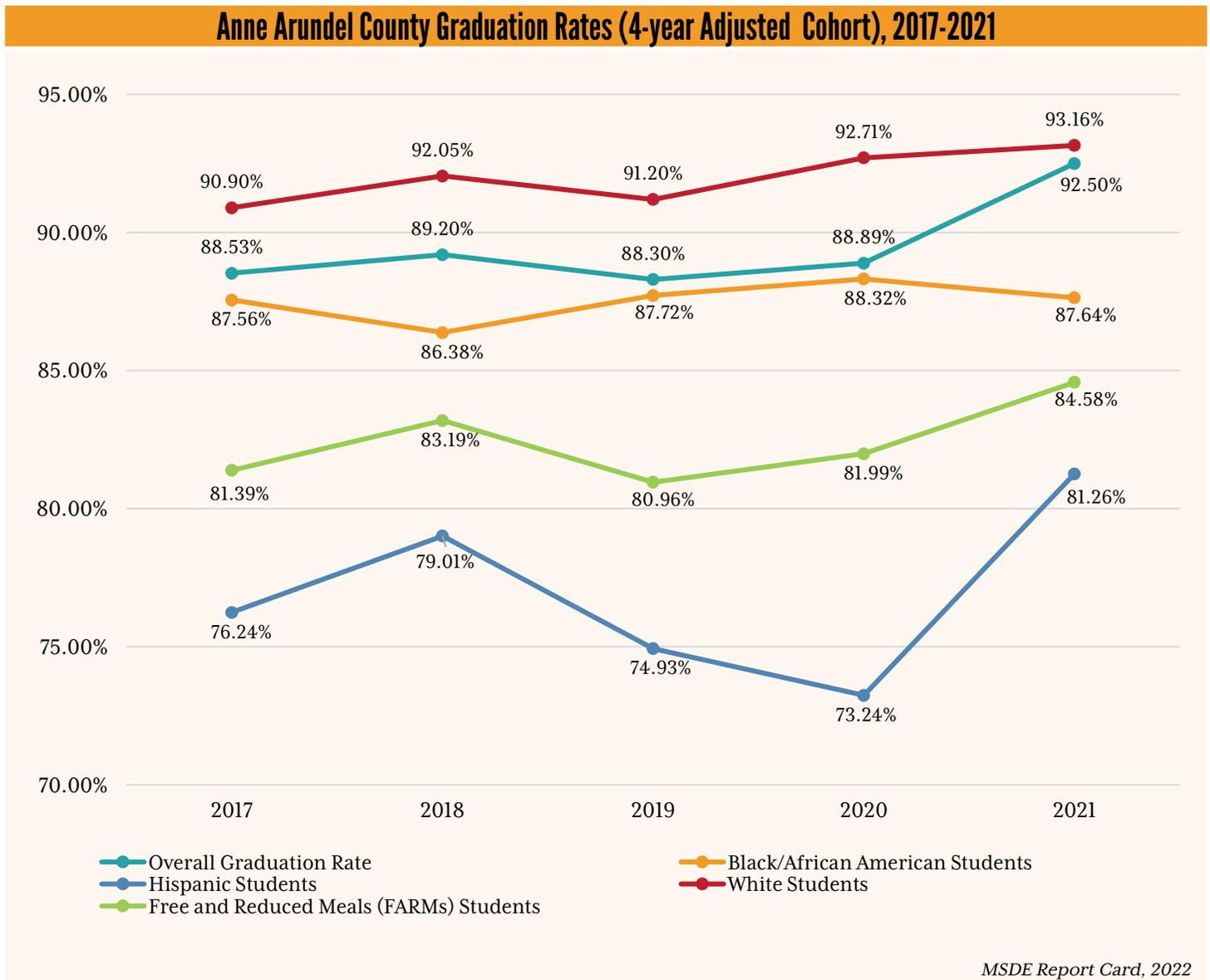
"If I have a vehicle, or I'm on a bus line or I can get my child to school then they're going to go to school. If I don't have access to those resources, then my child's going to stay home. So, we're just widening the gap because if we're not providing transportation for those families, then we're just excusing their absences and we're not helping them."



GRADUATION RATES

The on-time graduation rate is the number graduating divided by the number entering ninth grade four years earlier. High school graduation rates are one of the measures of the overall effectiveness of our school system. Anne Arundel County's overall graduation rate has increased by 3% since 2017. However, when the rates are disaggregated by race, ethnicity, and income we can clearly note the continuing opportunity gap. The percentage trend for the Hispanic population is very encouraging. However, the graduation rate for African American youth dropped between 2019 and 2021. (See Figure 30.)

FIGURE 30: ANNE ARUNDEL COUNTY GRADUATION RATES (4-YEAR ADJUSTED COHORT), 2017-2021



HISPANIC YOUTH

The numbers of Hispanic youth in the Anne Arundel County Public School System has increased from 11,147 in 2017 to 14,935 in 2021 (Maryland Report Card, 2022), a growth rate of over 33%. The students hail from several Spanish-speaking countries, although currently the majority are from El Salvador. Many are English Language Learners and some were forced to flee their own countries because of the violence there. School system officials continue to respond as quickly as possible to the growing need for English for Speakers of Other Languages (ESOL) teachers but the current labor shortage is slowing the process down.

The Hispanic community was disproportionately impacted by COVID-19, in terms of numbers of cases of the virus, and economic hardship. Some of the traditional employment industries hiring Hispanics, especially the local food industry, have been slow to recover. Participants in this needs assessment commented on the following issues impacting Hispanic youth: the numbers of Hispanic families living in one home to avoid rental costs, lack of health insurance, and lack of child care. As one participant noted:

"I am seeing that there is a lag in terms of support services and channels for the (Hispanic) community right now, post pandemic. There are a lot of people who are still not able to get jobs because many restaurants and businesses closed throughout the pandemic and that means that there's less jobs available in the market. I see that there are still a lot of issues around affordable housing, and I am frequently learning about overcrowded housing situations in our city, especially in Parole and Oxford Landing."

School-aged youth may be staying at home to look after siblings or working to support their families. Here is a typical comment:

"Our youth still want to go to school. But because of the family pressures and the reality of the levels of poverty that the family is living in, they don't have a choice."





HOMELESS YOUTH

As of June 2022, there are 1,046 homeless youth identified in the county public school system. (See Figure 31.) Of those, 241 are unaccompanied, meaning they have no parent or caretaker. There can be a variety of reasons for this dilemma. Some have been asked to leave their parental home, others have left foster care, still others have migrated from war-torn countries without their parents.

FIGURE 31: ANNE ARUNDEL COUNTY STUDENTS REGISTERED AS HOMELESS, JULY 2021 - JUNE 2022

Anne Arundel County Students Registered as Homeless, July 2021 - June 2022	
	Totals
Unaccompanied Youth	241
Pre-K/ECI	41 / 8
Elementary	417
Middle School	199
High School	377
Hotel/Motel/Shelter/Other	208
- Hotel/Motel	124
- Shelter	68
- Other	16
Doubled Up	838
Natural Disaster	13
Withdraws	79
Active Homeless	967
Total Homeless	1,046

Anne Arundel County Public Schools, 2022

The numbers of homeless youth in each cluster follow the same patterns as other social determinants of health for the county and are unevenly distributed. The numbers are higher in zip codes that are disproportionately African American and low-income. (See Figure 32: Anne Arundel County Homeless Youth by School Feeder, July 2021 – June 2022 on page 38). The North County Feeder System, which includes the Brooklyn Park zip code, has the most homeless youth at 173. (See Figure 33: Where are our homeless students located by feeder system? on page 38).

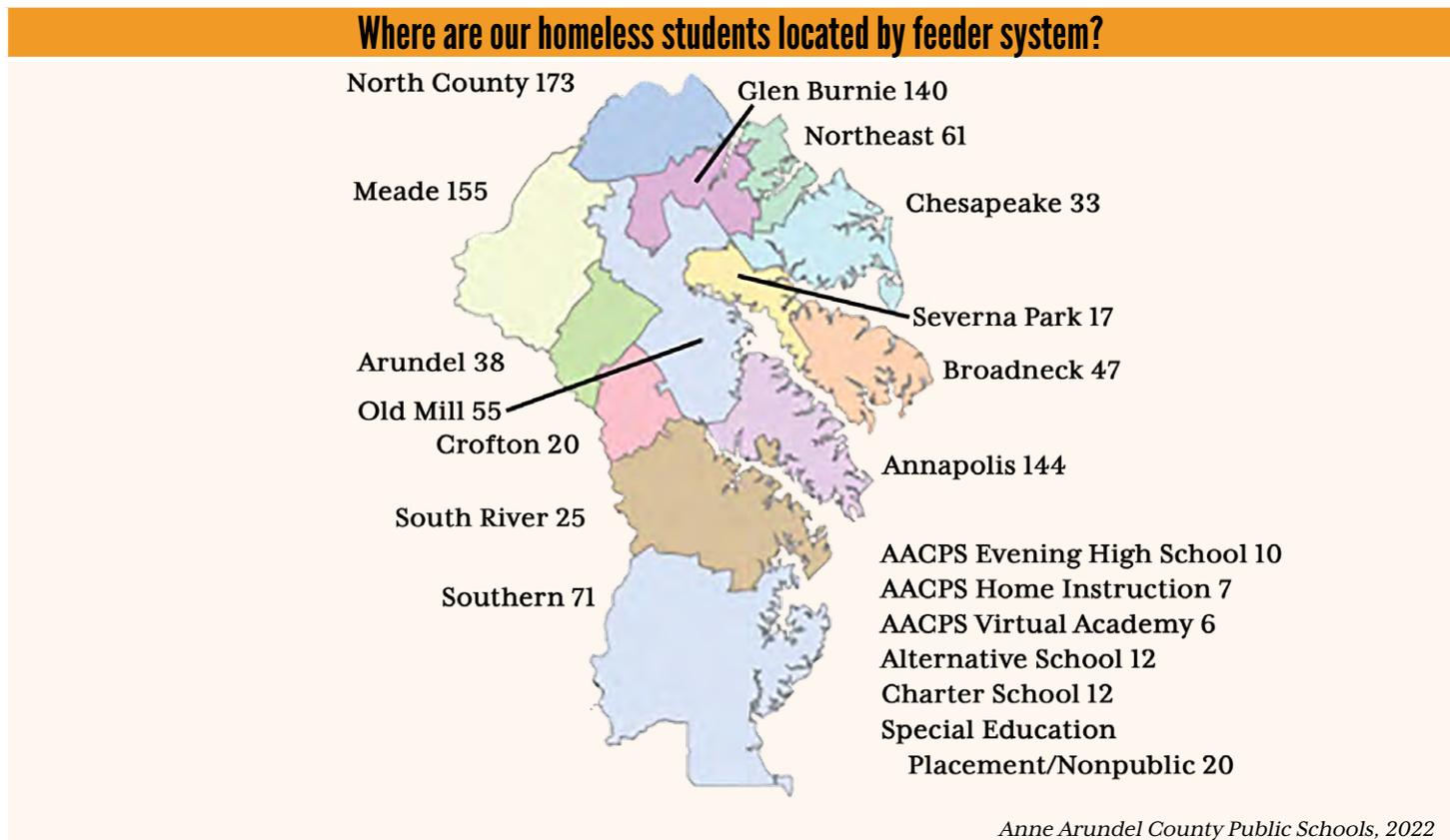
HOMELESS YOUTH, CONTINUED

FIGURE 32: ANNE ARUNDEL COUNTY HOMELESS YOUTH BY SCHOOL FEEDER, JULY 2021 – JUNE 2022

Anne Arundel County Homeless Youth by School Feeder, July 2021 – June 2022			
Homeless Youth by School Feeder	Totals	Homeless Youth by School Feeder	Totals
AACPS Evening High School	10	Glen Burnie	140
AACPS Home Instruction	7	Meade	155
AACPS Virtual Academy	6	North County	173
Alternative	12	Northeast	61
Annapolis	144	Old Mill	55
Arundel	38	Severna Park	17
Broadneck	47	South River	25
Charter	12	Southern	71
Chesapeake	33	Special Education Placement/Non-Public	20
Crofton	20		

Anne Arundel County Public Schools, 2022

FIGURE 33: WHERE ARE OUR HOMELESS STUDENTS LOCATED BY FEEDER SYSTEM?





According to the U.S. Department of Human Services (DHS) the number of unaccompanied immigrant children released to the State of Maryland has increased from 1,794 in 2014 to almost double that amount, 3,801, between October 2020 and July 2021. In 2019 (the last time numbers are available for our county), Anne Arundel County received 259 youth. Those figures are expected to grow, on an annual basis, over the next five years.

YOUTH UNEMPLOYMENT

Youth unemployment figures are always higher than that for adults for a number of reasons. The overall unemployment rate for youth ages 16-24 is 10%. When youth employment figures are disaggregated, the African American rate of unemployment is 13.6% as opposed to the White rate of 8.9%. (See Figure 34.)

FIGURE 34: EMPLOYMENT STATUS OF THE CIVILIAN NON-INSTITUTIONAL POPULATION 16 TO 24 YEARS OF AGE BY SEX, RACE, AND HISPANIC OR LATINO ETHNICITY, JULY 2018-2021

Employment status of the civilian non-institutional population 16 to 24 years of age by sex, race, and Hispanic or Latino ethnicity, July 2018-2021				
Employment Status by Race and Ethnicity	Jul-18	Jul-19	Jul-20	Jul-21
Total				
Population	37,997	37,729	37,472	37,250
Employed	20,897	21,196	17,507	20,268
Unemployed	2,119	2,115	3,973	2,254
Unemployment Rate	9.2%	9.1%	18.5%	10.0%
White				
Population	27,866	27,658	27,474	27,333
Employed	16,174	16,295	13,595	15,635
Unemployed	1,335	1,421	2,727	1,533
Unemployment Rate	7.6%	8.0%	16.7%	8.9%
Black or African American				
Population	5,668	5,561	5,494	5,452
Employed	2,675	2,771	2,151	2,594
Unemployed	528	472	733	410
Unemployment Rate	16.5%	14.6%	25.4%	13.6%
Hispanic or Latino Ethnicity				
Population	8,687	8,750	8,810	8,880
Employed	4,492	4,485	3,752	4,456
Unemployed	543	574	1,037	588
Unemployment Rate	10.8%	11.3%	21.7%	11.7%

U.S. Bureau of Labor Statistics, 2022

CHAPTER 3 | CHILDREN & YOUTH

SOCIAL MEDIA

There are no reliable numbers that would attest to the overuse of social media by our youth, but participants in this needs assessment discussed how concerned our young people are with maintaining a positive online presence. Every person who commented on this issue pointed to social media as highly detrimental to youth mental and emotional health. Youth were socially and physically isolated during the pandemic, which increased the use of social media platforms, online gaming, and general electronic communication. Here is a typical comment:

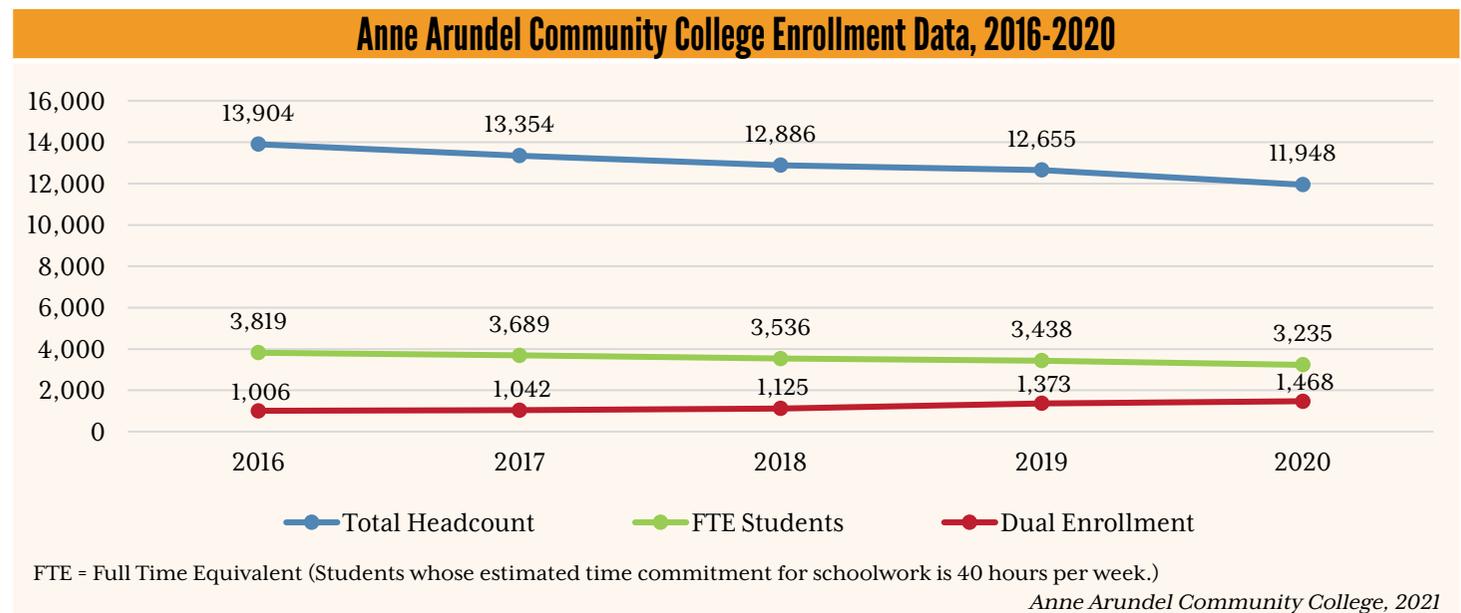
"I talked to a counselor recently who said social media should be banned for kids, like alcohol and cigarettes, because they see the effects on kids and the link to the high teen suicide rate."

CAREER & WORK OPPORTUNITIES

There are three colleges of higher education within county boundaries. Anne Arundel Community College is a two-year institution with three campuses and had an enrollment of 13,904 in 2016 dropping to 11,948 in 2020. St. Johns College of Liberal Arts in Annapolis had an enrollment of 486 in 2016 dropping to 383 students in 2020. The County is also home to the United States Naval Academy, a four-year institution with an enrollment of 4,511 in 2016, which increased very slightly to 4,594 in 2020. (See Figure 35.) The community college, like many other such institutions in the country, has seen a decline in overall enrollment as of 2020. This trend is likely to continue given the economic issues related to the pandemic, the lack of transportation in the county, and the current supply of vacant jobs. As one participant noted:

"You know, there is enough employment that people don't have to do the hard jobs for \$12 an hour. They can go to Amazon, make \$16 an hour and have a flexible schedule and music in their van and manage their own lives."

FIGURE 35: ANNE ARUNDEL COMMUNITY COLLEGE ENROLLMENT DATA, 2016-2020





SUMMARY

Concerns about the emotional and mental health of our children and youth were growing prior to the pandemic. Participants in this needs assessment were concerned that youth who are returning to educational settings have been traumatized from managing almost two years of social isolation. Trauma-informed mental health services should be considered a necessity, especially given the increase in youth suicide.

The successful development of youth in our county begins during early childhood. The ages of birth to five years may be the most important in terms of future social, emotional, and academic development. It is in these years that gaps in achievement related to income, race, ethnicity, and special needs begin. The geography and color of the social determinants of health in our county are clearly outlined by the maps and zip code data in this needs assessment. These areas should be targeted for increased resources and services to help increase equity of opportunity for our youth.

NEEDS & GAPS IN SERVICES

- The need for behavioral supports for young children continues to grow and was noted in the 2018 needs assessment. Such supports should be available in all early childhood settings.
- Anxiety and depression, including increased suicidal ideation among public school students post-pandemic, requires a huge increase in mental and emotional health services inside and outside of the school system.
- Youth recreation and support centers within low-income communities was mentioned by many participants. The lack of transportation for low-income parents and their children makes this need even greater.
- Many parents, at every income level, are struggling with raising children. Some are single, low-income parents, but all parents who took part in this needs assessment were battling the impact of social media. A gap in parenting resources and programs in this county continues to be a challenge.



CHAPTER 4 HEALTH

BIRTHS

In 2019, there were 6,830 births in Anne Arundel County, down from 6,924 in 2015. The largest decrease is in White births, which fell from 4,383 in 2015, to 3,975 in 2019. The Hispanic population is showing the greatest percentage increase of 26% between 2015 and 2019. (See Figure 36.)

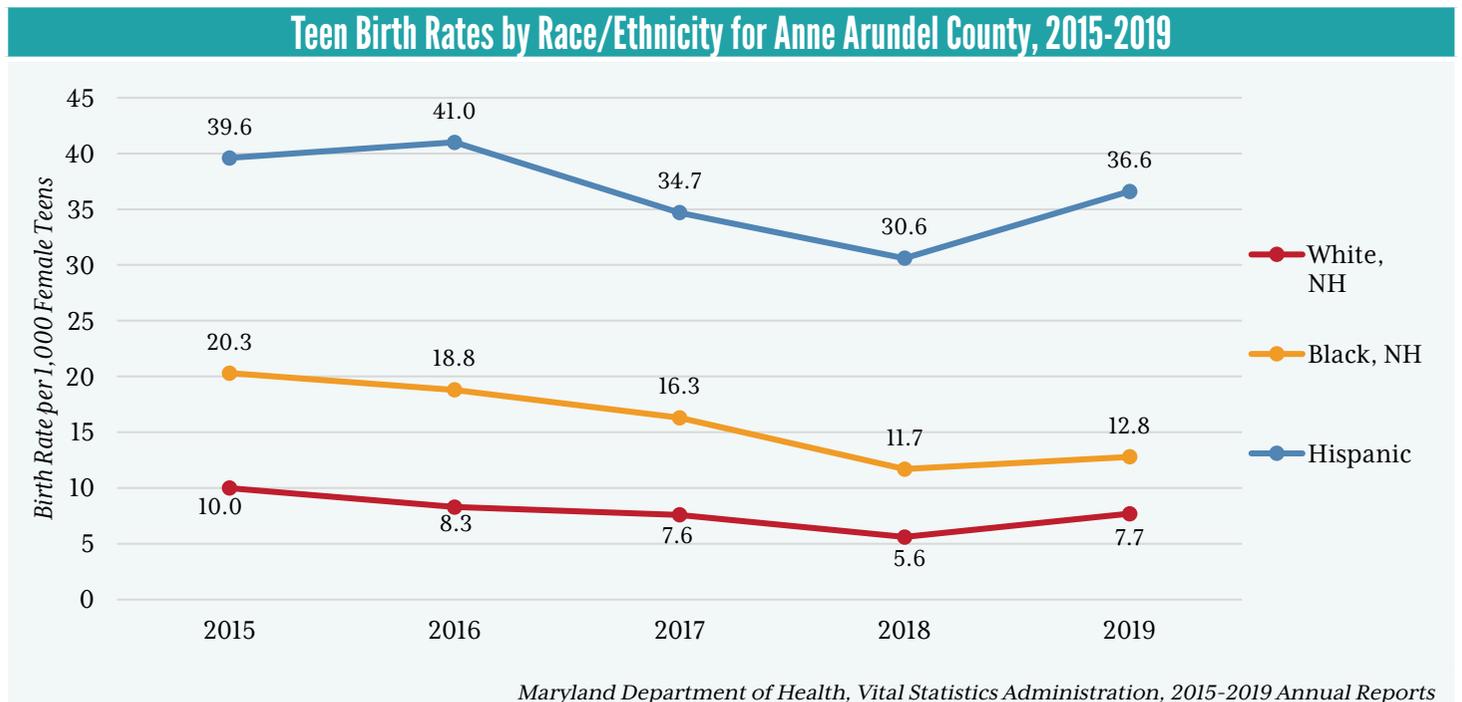
FIGURE 36: ANNE ARUNDEL COUNTY BIRTHS BY RACE AND ETHNICITY, 2015-2019

Anne Arundel County Births by Race and Ethnicity, 2015 - 2019					
	2015	2016	2017	2018	2019
Total	6,924	6,994	6,895	6,783	6,830
Non-Hispanic White	4,383	4,357	4,242	4,118	3,975
Non-Hispanic Black	1,259	1,291	1,273	1,251	1,320
Hispanic	847	896	936	1,009	1,070

Maryland Department of Health, Vital Statistics Administration Reports, 2015-2019

The trend for county teen births dropped for all races/ethnicities between 2015 and 2018. (See Figure 37.) The data for 2019 is showing an increase across the board with the highest increase occurring for the Hispanic community.

FIGURE 37: TEEN BIRTH RATES BY RACE/ETHNICITY FOR ANNE ARUNDEL COUNTY, 2015-2019



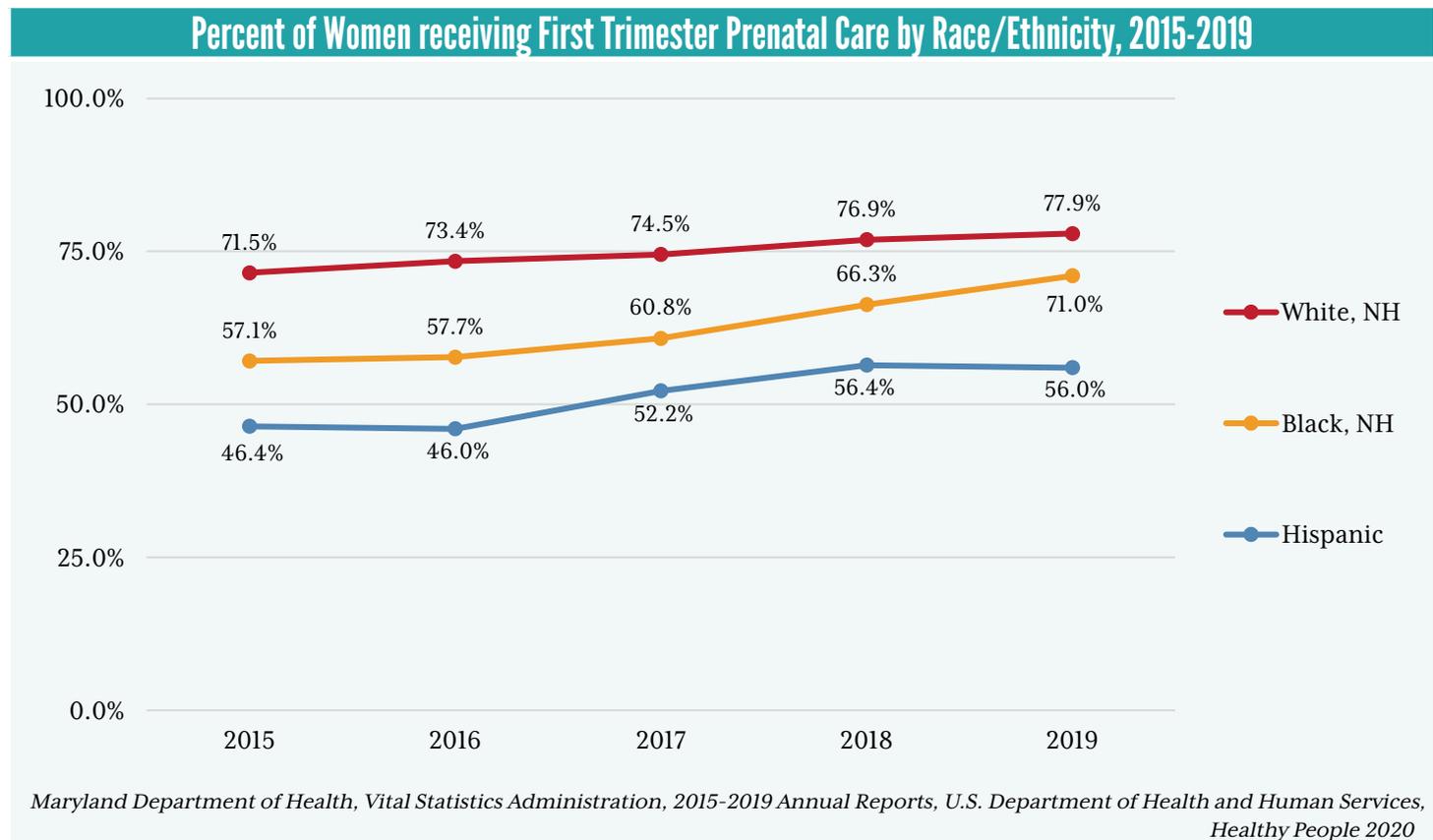


PRENATAL CARE

Childhood disparities begin before each child is born. Many factors affect pregnancy and childbirth including the mother’s pre-pregnancy health status, the mother’s age at birth, access to health care, and socioeconomic status (Anne Arundel County Department of Health, 2018). Prenatal care is essential for positive birth outcomes as well as mitigating the risk of pregnancy complications, such as hypertension and diabetes. Prenatal care also reduces the risk of complications for the child. Babies of mothers who do not get prenatal care are three times more likely to have low birth weight and five times more likely to die than those babies born to mothers who do get care. According to the Maryland Department of Health (2019), White women have the highest percentage of prenatal care (77%), followed by African American women (71%), and Hispanic women (56%). (See Figure 38.) Participants noted the lack of prenatal care for Hispanic women. As one said:

"That plays a big role within the Hispanic community. We're seeing a lot of women that decide not to have any prenatal care and then they just wait and go to the emergency room just to give birth and that increases the mortality rate."

FIGURE 38: PERCENT OF WOMEN RECEIVING FIRST TRIMESTER PRENATAL CARE BY RACE/ETHNICITY, 2015-2019



INFANT MORTALITY

Infant mortality measures deaths during the first year of life. The infant mortality rate has dropped for Anne Arundel County since 2015 from 5.1 to 4.2 deaths per 1,000 live births in 2019. The overall infant mortality rate for the county continues to be lower than the state and the nation. County numbers still show significant disparities by race and ethnicity: White babies have a rate of 2.3 per 1,000 live births, Blacks have a rate of 8.3 per 1,000 live births, and Hispanics a rate of 6.5 per 1,000 live births. (See Figure 39.)

FIGURE 39: INFANT MORTALITY RATE COMPARISON, 2015-2019

Infant Mortality Rate Comparison, 2015-2019					
	2015	2016	2017	2018	2019
Infant Mortality- All Races per 1,000 Live Births					
Anne Arundel	5.1	5.6	4.1	3.2	4.2
Maryland	6.7	6.5	6.5	6.1	5.9
United States	5.9	5.9	5.8	5.9	5.7
Infant Mortality- Non-Hispanic White per 1,000 Live Births					
Anne Arundel	3.6	5.3	2.8	3.2	2.3
Maryland	4.0	4.3	4.0	4.1	4.1
United States	4.8	4.8	4.9	4.9	4.6
Infant Mortality- Non-Hispanic Black per 1,000 Live Births					
Anne Arundel	9.5	10.1	7.9	4.0	8.3
Maryland	11.3	10.5	11.2	10.2	9.3
United States	11.7	11.8	11.4	10.8	10.8
Infant Mortality- Hispanic (Any Race) per 1,000 Live Births					
Anne Arundel	**	**	5.3	**	6.5
Maryland	5.5	5.4	4.7	3.8	5.1
United States	5.2	5.2	5.0	5.0	4.9

** Rate not calculated; fewer than 5 deaths.

Maryland Department of Health, Vital Statistics Administration, 2015-2019 Annual Reports
U.S. Department of Health and Human Services, Healthy People 2020



LOW BIRTHWEIGHT

Low birthweight is a term used to describe babies who are born weighing less than 2,500 grams (five and a half pounds). In contrast, the average newborn weighs about 8 pounds. Risk factors for low birthweight include exposure to air pollution or lead, low socioeconomic status, domestic violence, using street drugs, and abusing prescription drugs (March of Dimes, 2018). In Anne Arundel County, the percentage of low birthweight babies has stayed stable at 7.8% since 2017 and is less than the state average of 8.7%. (See Figure 40.)

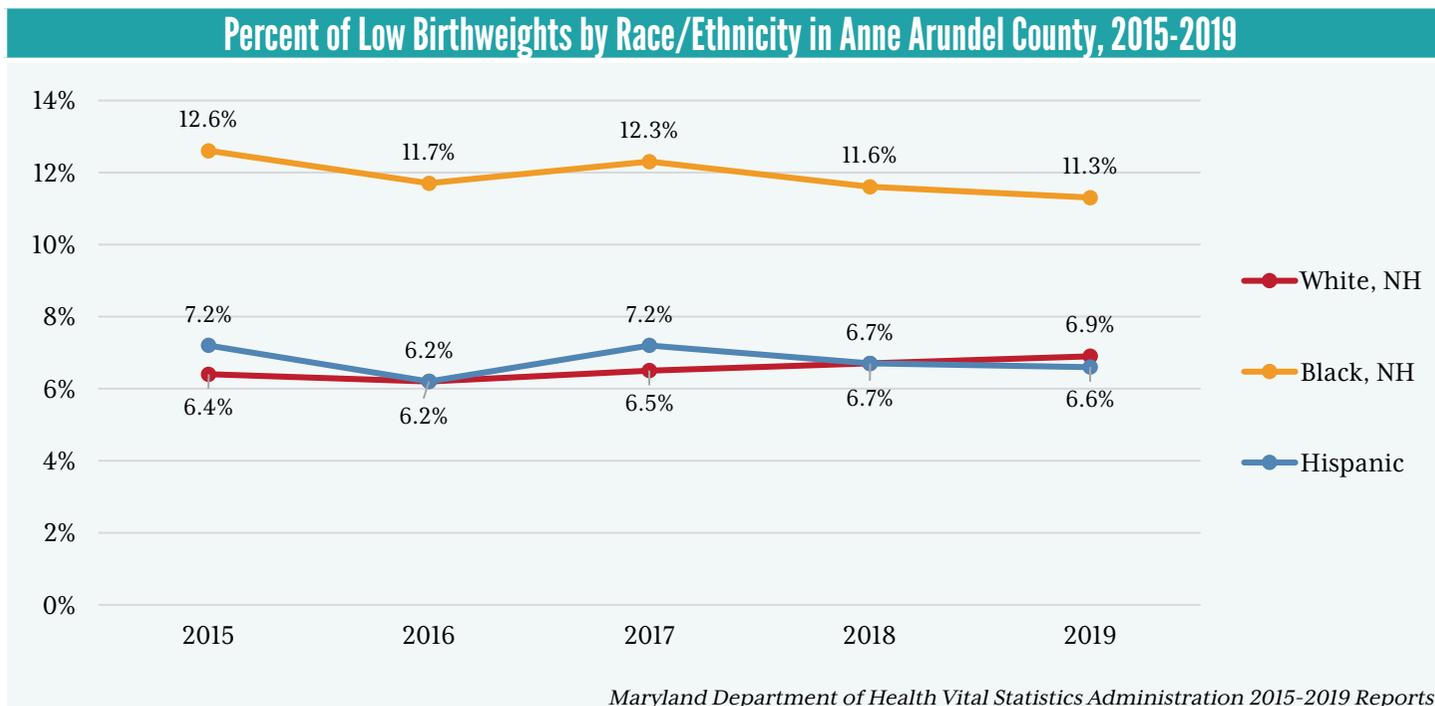
FIGURE 40: PERCENTAGE OF BABIES BORN WITH LOW BIRTHWEIGHT, 2019

Percentage of Babies Born with Low Birthweight, 2019			
Percentage of Low Birth-weight (<2500 g) Babies	Anne Arundel	Maryland	United States
2017	7.8%	8.9%	8.3%
2019	7.8%	8.7%	8.3%

Maryland Department of Health, Vital Statistics Administration, 2017 and 2019 Annual Reports

Black infants had the highest instance of low birthweights in 2019, with 11.3% of infants born underweight, while 6.6% and 6.9% of White and Hispanic infants were at a low birthweight, respectively. (See Figure 41.) Infants born below normal birthweight are at risk for health conditions later in life, including diabetes, heart disease, intellectual and developmental disabilities, high blood pressure, and obesity (March of Dimes, 2018).

FIGURE 41: PERCENT OF LOW BIRTHWEIGHTS BY RACE/ETHNICITY IN ANNE ARUNDEL COUNTY, 2015-2019

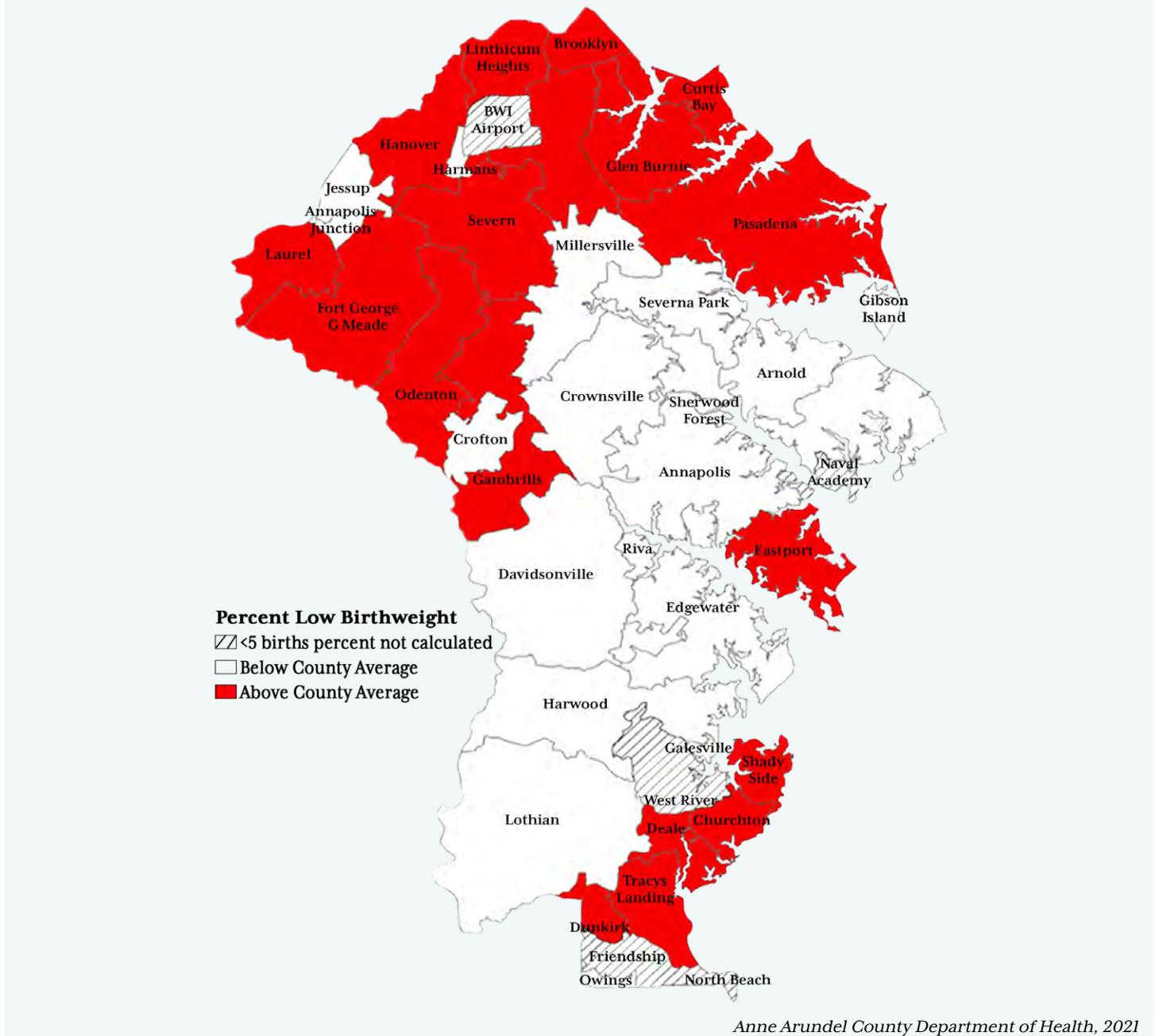


LOW BIRTHWEIGHT, CONTINUED

In Anne Arundel County, the percentages for low birthweight changes depending on zip code. As we can see from Figure 42, areas to the North, West, Annapolis, and South County have higher numbers, which we would expect given the social determinants of health are rising in those areas.

FIGURE 42: ANNE ARUNDEL COUNTY LOW BIRTHWEIGHT BY AREA, 2019

Anne Arundel County Low Birthweight by Area, 2019

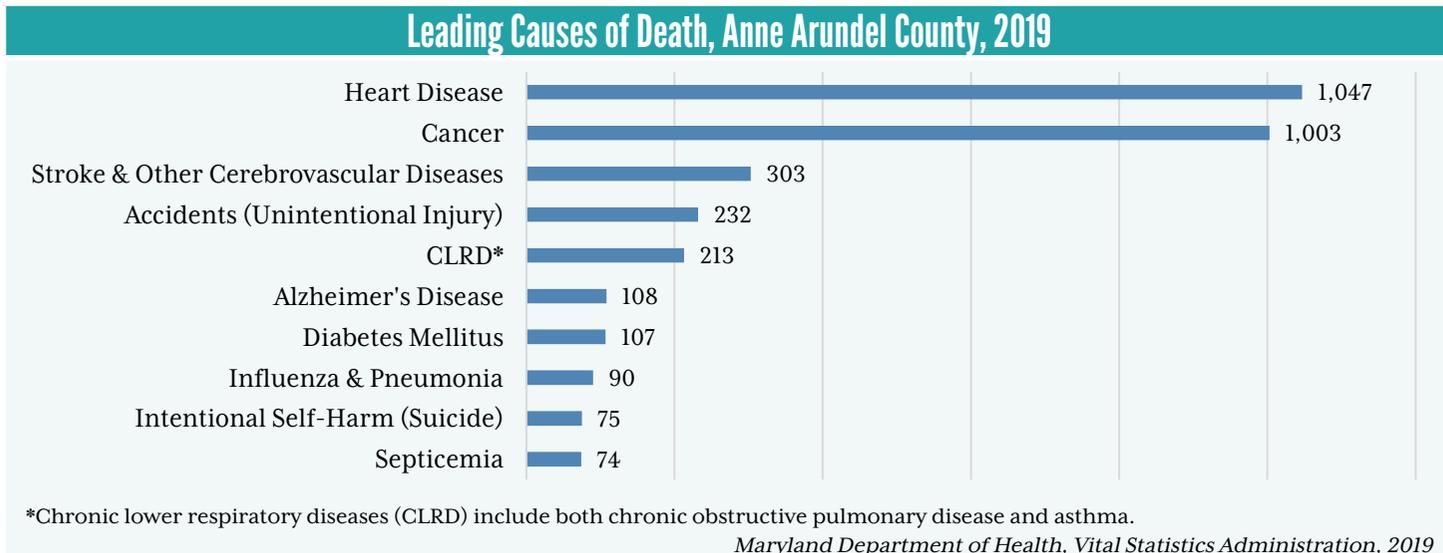




LEADING CAUSES OF DEATH

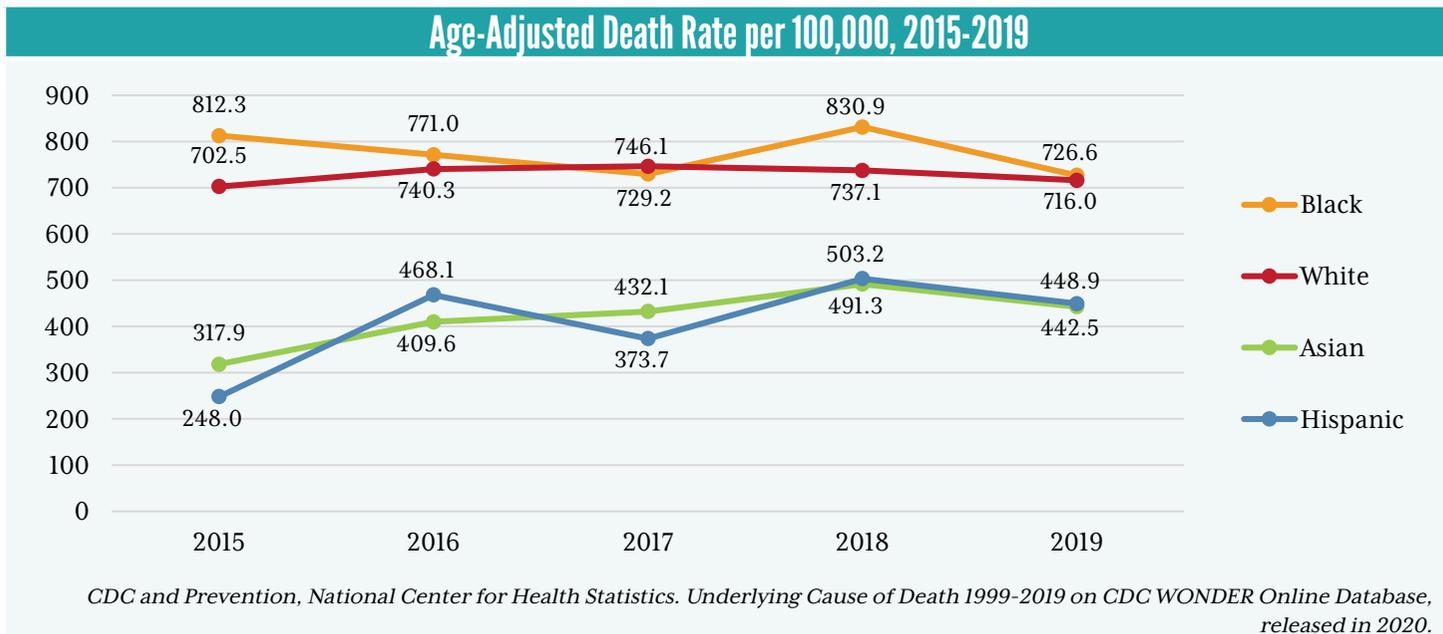
Heart disease is now the leading cause of death in Anne Arundel County causing 1,047 deaths in 2019. Not unexpectedly, Alzheimer's disease has moved up two places since the 2018 needs assessment, most likely related to our growing senior population. Intentional self-harm (suicide) has moved into the top 10 causes. (See Figure 43.)

FIGURE 43: LEADING CAUSES OF DEATH, ANNE ARUNDEL COUNTY, 2019



When the age-adjusted death rate for the county is disaggregated by race and ethnicity, African Americans are dying at a higher rate, although that trend line is decreasing as of 2019. (See Figure 44.)

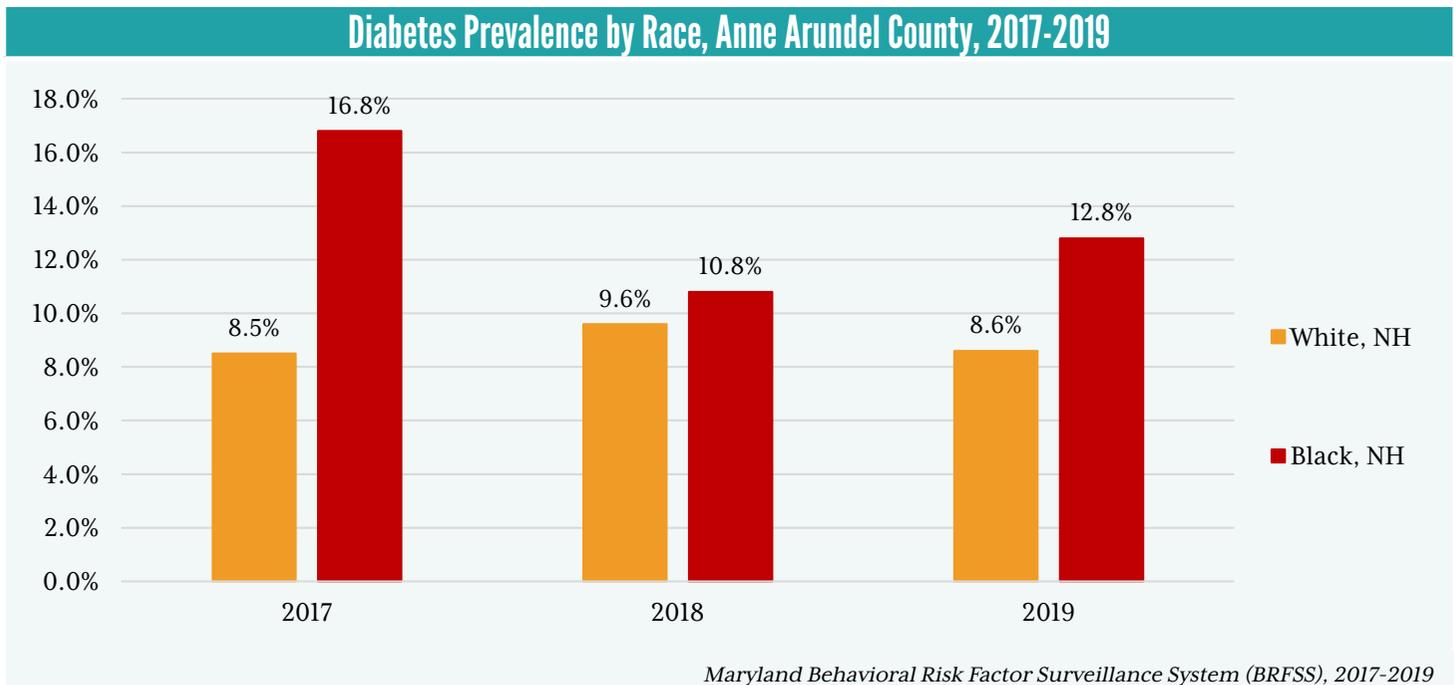
FIGURE 44: AGE-ADJUSTED DEATH RATE PER 100,000, 2015-2019



DIABETES

Diabetes Mellitus Type 2 is a chronic disease that often develops due to overweight, obesity, and lack of physical activity. Other risk factors include hypertension, low HDL cholesterol or high triglycerides, or being age 45 or older. Diabetes has a significant genetic component and occurs more often in minority groups: African American, Native American, Asian American, and Hispanic/Latino. (See Figure 45.)

FIGURE 45: DIABETES PREVALENCE BY RACE, ANNE ARUNDEL COUNTY, 2017-2019



In 2019, 10.4% of Anne Arundel County residents had Type 2 Diabetes. Residents aged 65+ had the highest percentage of diabetes (22.1%) compared to those in younger age groups. A higher proportion of males had diabetes compared to females (11.2% vs. 7.1%) and non-Hispanic Black residents had a higher proportion of diabetes compared to White residents (12.8% vs. 8.6%). (See Figure 45).

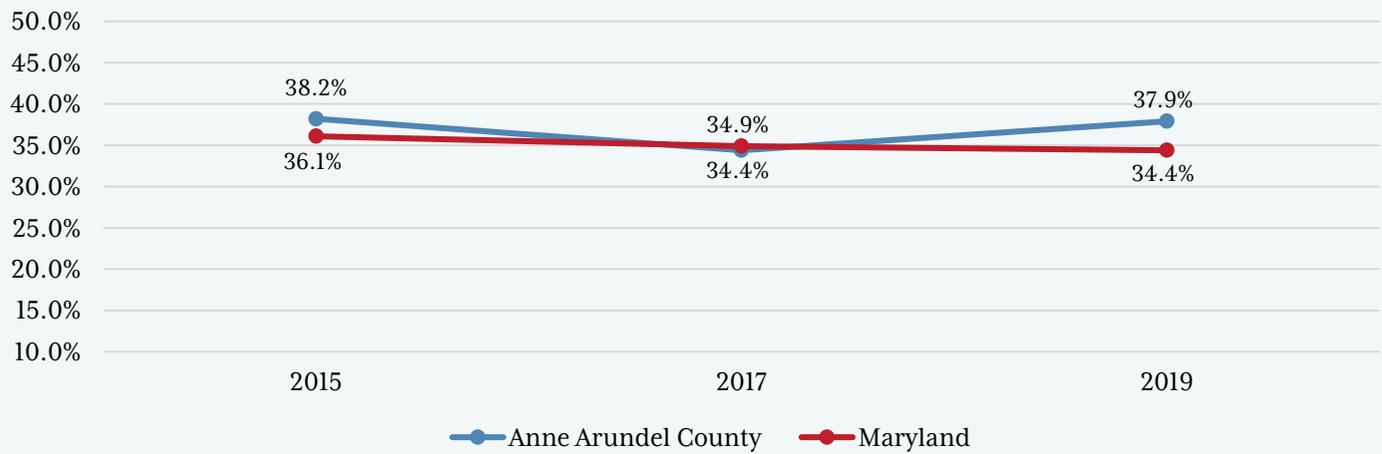
OVERWEIGHT & OBESITY

Overweight and obesity continue to create health issues for county residents. Many factors play a role in weight, including low-income, lifestyle, surrounding environment, access to healthy food, lack of recreational opportunities, stress, genetics, and certain diseases. Overweight and obesity are determined using weight and height to determine a BMI or “Body Mass Index” measure. Between 2017 and 2019, the percent of overweight adults 18 years and older (BMI of 25 to 29.9) in Anne Arundel County rose slightly from 34.9% to 37.9%, while the state average dropped. (See Figure 46.)



FIGURE 46: PERCENT OF ADULTS AGE 18 AND OVER WHO ARE OVERWEIGHT IN ANNE ARUNDEL COUNTY (BMI OF 25 TO 29.9), 2015-2019

Percent of Adults Age 18 and Over Who Are Overweight in Anne Arundel County (BMI of 25 to 29.9), 2015-2019

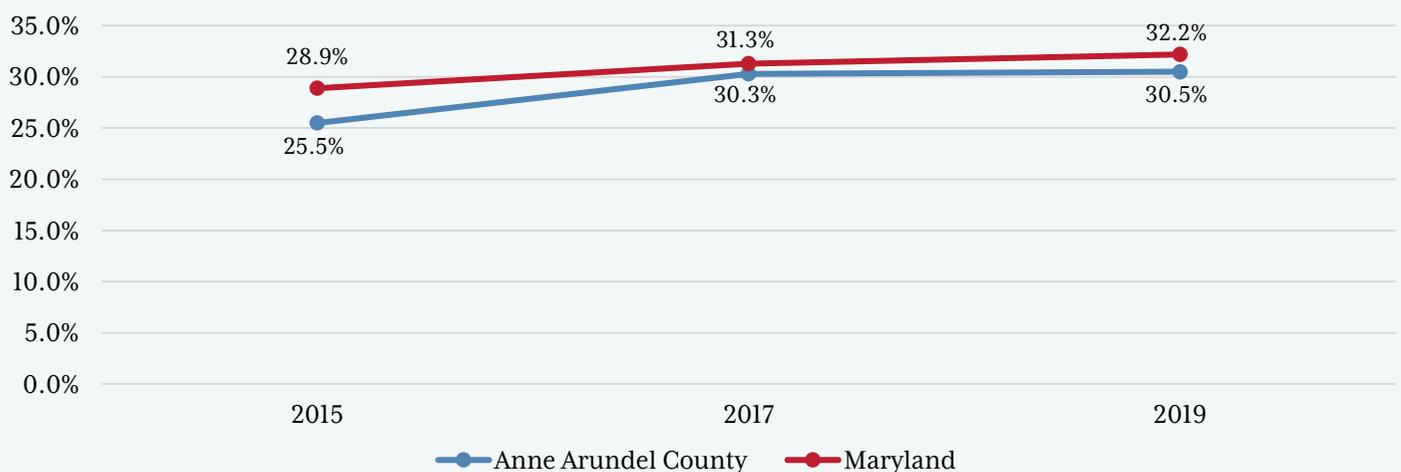


BRFSS, 2015-2019

The percent of county residents who are classified as obese (BMI of 30 and over) also rose from 25.5% in 2015 to 30.5% in 2019, still under the state average of 32.2%. (See Figure 47.) Obesity is prevalent in low-income families in the county for a variety of reasons: their neighborhoods often lack full-service grocery stores and farmers markets; lack of accessible primary care; extra expenses associated with healthy food; no transportation to get to a supermarket; greater availability of fast-food restaurants selling cheap and filling food; and fewer recreational facilities and green spaces for exercise.

FIGURE 47: PERCENT OF ADULTS AGE 18 AND OVER WHO ARE OBESE IN ANNE ARUNDEL COUNTY (BMI OF 30 AND ABOVE), 2015-2019

Percent of Adults Age 18 and Over Who Are Obese in Anne Arundel County (BMI of 30 and Above), 2015-2019



BRFSS, 2015-2019

ACCESS TO HEALTH CARE

One important measure of access to health care is the ability of people to pay for the care they need. People without health insurance are more likely to avoid preventive care such as routine check-ups and dental cleanings and delay necessary care, leading to serious illness or other health problems.

The percent of uninsured residents in Anne Arundel County has declined steadily over time and reached a low of 3.6% in 2019. (See Figure 48.) The Affordable Care Act (ACA) continues to increase county residents' access to health care. Under the ACA, persons whose income is up to 138% of the poverty level are eligible for Medicaid. The number of residents enrolled in Medicaid continues to increase. The numbers rose from 83,167 in May 2019 to 97,543 in May 2021 (Maryland Department of Health, 2021).

Persons whose income is above 138% but below 400% of the poverty level have the option to purchase health insurance through the Maryland Health Connection (the state's insurance marketplace/exchange). While this is encouraging, it still means that over 20,000 county residents remain without health insurance coverage. Additionally, high deductible insurance plans and steep copays can prevent even those with insurance from affording and accessing care. In 2019, 9.0% of Anne Arundel County adults reported being unable to see a doctor due to cost even when they needed to, which is down from 11.2% in 2018 but up from 8.3% in 2017 (Maryland Behavioral Risk Factor Surveillance System (BRFSS), 2019).

FIGURE 48: ANNE ARUNDEL COUNTY UNINSURED RESIDENTS, 2019 ESTIMATES

Anne Arundel County Uninsured Residents, 2019 Estimates		
	Percent of Residents Uninsured	Number of Residents Uninsured
White, NH	2.3%	8,665
Black, NH	5.0%	4,812
Hispanic	8.7%	3,998
Asian, NH	5.7%	1,195
Total	3.6%	20,195

U.S. Census Bureau, 2019 American Community Survey; CDC, 2019 Maryland BRFSS

There are racial and ethnic disparities in those who lack health insurance. Black residents are more than twice as likely to have no health insurance and the Hispanic population is almost three times more likely, in comparison to White residents. (See Figure 48). Several providers talked about the issues related to health insurance for the Hispanic community. As one noted:

"They don't have insurance so they don't go to prevention appointments, and then they go to the emergency room when they have a really big, big, big problem and then they have to pay a lot of money."



Adequate access to health care involves not only insurance coverage and the ability to pay for care but also access to providers. Anne Arundel County’s provider/patient ratios continue to be much higher than those of both Maryland and the United States. (See Figure 49.) High provider/patient ratios are associated with poorer patient health outcomes. Patients who wait longer to see their doctors are delaying necessary preventive care. Doctors have less time to devote to each patient and can face burnout. In 2019, 77.2% of county residents reported having a routine yearly check-up with their doctor, while almost 9% of residents reported that they were unable to see a doctor in the past year because they could not afford the cost. Additionally, 84.9% of residents reported having at least one personal doctor or a doctor they routinely see (Anne Arundel County Department of Health, 2021). Several participants commented on the lack of primary care providers and the impact on those doctors who are still offering primary care services. As one said:

"Primary care practices are kind of overwhelmed with people trying to get appointments, which leads to burned-out providers."

FIGURE 49: PRIMARY CARE PHYSICIANS AND DENTISTS IN ANNE ARUNDEL COUNTY, 2021

Primary Care Physicians and Dentists in Anne Arundel County, 2021				
	Anne Arundel County Total	Anne Arundel County Ratio	Maryland Ratio	Top US Counties
Primary Care Physicians (2018)	391	1,470:1	1,130:1	1,030:1
Dentists (2019)	403	1,440:1	1,260:1	1,210:1

County Health Rankings Report, 2021

Lack of access to health care can mean that health issues are not addressed and become chronic and/or much more difficult to treat. In low-income neighborhoods, situational depression and other mental health issues may further exacerbate the issue. As one resident noted:

"There are long-term health issues that haven't really been addressed and I don't know if it's necessarily because they haven't had insurance or they haven't had access, but other problems like mental health and addiction, have caused people to neglect their actual day-to-day health."

Access to dental care continues to be a huge issue in the county. There are only 403 dentists in the county; a ratio of 1 dentist to 1,470 residents, which is much lower than the state or the nation. (See Figure 49). Those residents fortunate enough to have dental insurance often have large copays. For those without dental insurance, there are few options. There is a dental clinic in Glen Burnie operated by Anne Arundel County Department of Health and another at the Chase Braxton Federally Qualified Health Center in Glen Burnie. Luminis Health Anne Arundel Medical Center operated a dental clinic at the Stanton Community Center in Annapolis prior to the COVID-19 pandemic but it has not re-opened.

Several participants commented on the lack of affordable dental services. As one resident noted:

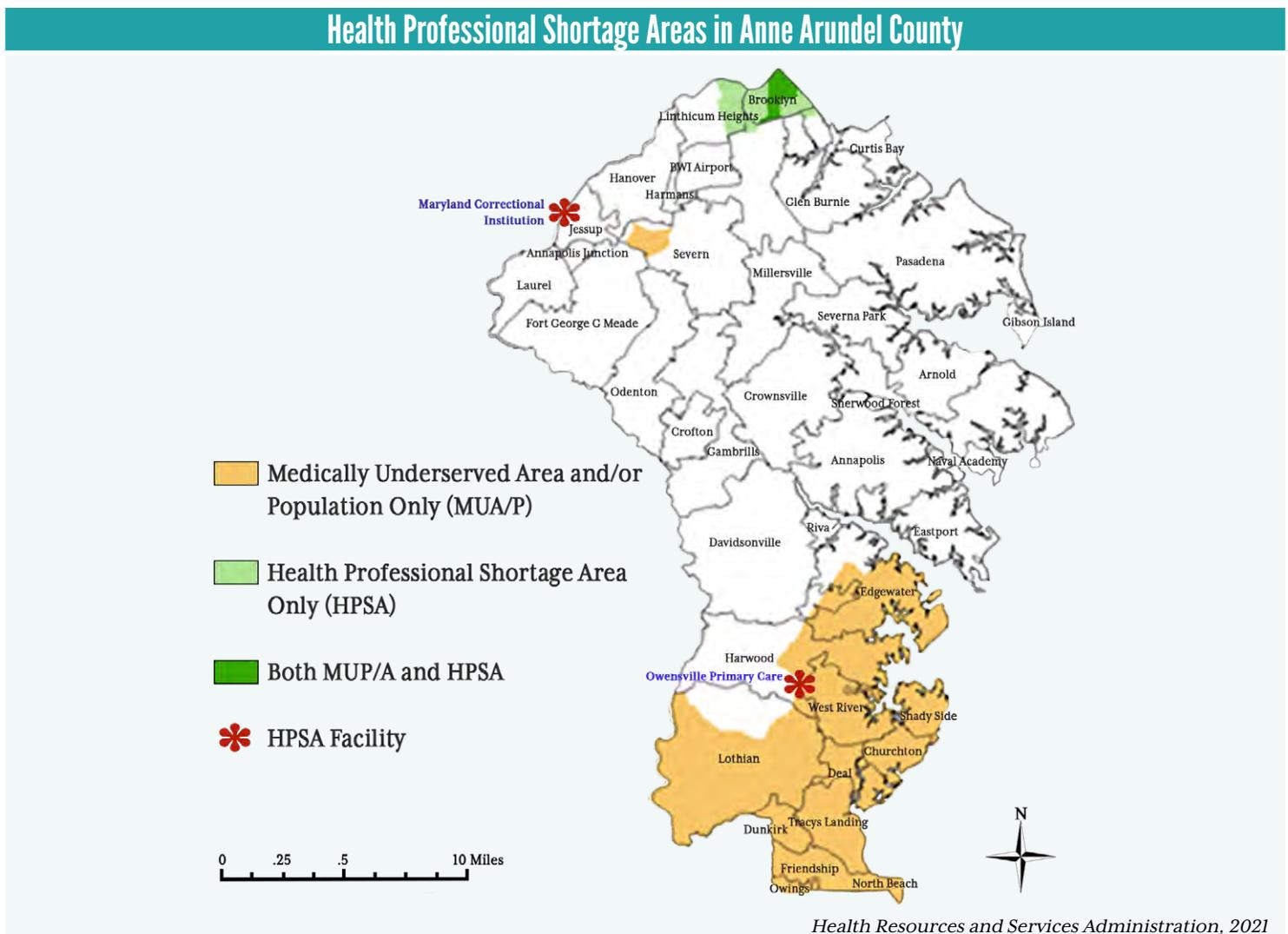
"If you have a bad mouth it messes with your heart, your kidneys, and everything...but the access to that is just null and void..."

HEALTH PROFESSIONAL SHORTAGE AREAS

Health Professional Shortage Areas (HPSAs) are designated by the Health Resources and Services Administration (HRSA) as having shortages of primary medical care, dental, or mental health providers and may be geographic or facility-based. (See Figure 50.) In Anne Arundel County, there is currently one designated Primary Care HPSA facility (Bay Community Health in South County), one Dental HPSA facility (Bay Community Health), and two Mental Health HPSA facilities (Bay Community Health and Maryland Correctional Institution, Jessup). Bay Community Health Center has recently extended health care to a location in Lothian. However, it takes time to build trust among residents. As one provider noted:

"It takes a while for people to know you're there and to trust you enough to come. I know if we opened a place tomorrow in Deale it wouldn't be swamped with people who need health care. You have to be in the culture long enough and go out and meet people."

FIGURE 50: HEALTH PROFESSIONAL SHORTAGE AREAS IN ANNE ARUNDEL COUNTY





MEDICALLY UNDERSERVED AREAS

Medically Underserved Areas (MUAs) are designated based on four variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over. (See Figure 50). There are 11 census tracts in Anne Arundel County designated as medically underserved areas or populations. Approximately 54,700 (10%) of the county’s population lives in these 11 census tracts. Brooklyn Park in North County is both an HPSA and an MUA (Health Resources and Services Administration, 2021).

IN-PATIENT HOSPITALIZATIONS

In 2019, there were 55,671 hospital stays in Anne Arundel County: a rate of 96.1 per 1,000. (See Figure 51.) The hospitalization rate increased with age from 68.5 hospitalizations per 1,000 population among those aged 0-18 years old to 227.3 hospitalizations per 1,000 population among those aged 65 years and over. (This data only includes Anne Arundel County residents admitted to hospitals in Maryland.) The rates have decreased in every category since the last needs assessment in 2018.

FIGURE 51: INPATIENT HOSPITALIZATIONS, ANNE ARUNDEL COUNTY, 2019

Inpatient Hospitalizations, Anne Arundel County, 2019		
	Number	Rate per 1,000
Total Hospitalizations	55,671	96.1
Age		
0 to 18 Years	9,332	68.5
19 to 39 Years	11,677	71.7
40 to 64 Years	14,922	77.2
65 Years and Over	19,740	227.3
Sex		
Male	23,957	83.6
Female	31,714	108.3
Race/Ethnicity		
White, NH	35,510	92.5
Black, NH	11,442	112.3
Asian, NH	1,274	58.9
Hispanic (Any Race)	3,665	75.1

Health Services Cost Review Commission 2019 Inpatient Files

The most common diagnoses for hospitalizations are for births. Those numbers are not included in Figure 51. Every diagnosis for inpatient hospitalization has seen a reduction, except for sepsis, which has risen every year since 2016. The reduction for acute or congestive heart failure is dramatic; from 729 admissions in 2016, to 60 in 2019.

THE SOCIAL DETERMINANTS OF HEALTH

The U.S. Department of Health and Human Services (2021) defines the social determinants of health (SDOH) as “the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” Although Anne Arundel County has a high standard of living overall, there are pockets of poverty and health access issues to be found in neighborhoods throughout Anne Arundel County. The majority of negative social and health indicators continue to polarize in the Annapolis, Glen Burnie, Severn, Brooklyn Park, and Lothian zip codes. (See Figure 52.)

FIGURE 52: DEMOGRAPHIC, SOCIOECONOMIC, AND HEALTH INDICATORS BY ZIP CODE IN ANNE ARUNDEL COUNTY, 2019

Demographic, Socioeconomic, and Health Indicators by Zip Code in Anne Arundel County, 2019							
Zip Code	Area	Poverty Percentage	Percentage without High School	Percentage of Households on SNAP	ED Visit Rate per 1,000	Percentage Low Birthweight Infants (2015-2019)	Minority Population
20711	Lothian	9.4%	10.6%	9.8%	333.2	7.3%	32.4%
20724	Laurel	7.3%	8.9%	3.5%	250.0	8.6%	67.6%
20765	Galesville	23.6%	11.3%	25.5%	289.9	0.0%	45.7%
20776	Harwood	13.5%	13.0%	14.2%	311.8	5.8%	29.8%
21060	Glen Burnie (East)	7.5%	12.9%	9.2%	356.2	7.7%	33.4%
21061	Glen Burnie (West)	8.4%	11.8%	11.8%	404.4	8.9%	43.0%
21122	Pasadena	6.1%	7.8%	6.5%	255.2	8.2%	16.3%
21144	Severn	6.4%	6.0%	9.0%	279.9	8.7%	55.2%
21225	Brooklyn	24.8%	20.6%	29.3%	732.4	11.1%	60.9%
21226	Curtis Bay	9.6%	15.4%	12.3%	576.8	8.3%	27.6%
21401	Annapolis	8.1%	7.3%	7.5%	344.5	7.0%	30.1%
21403	Eastport	7.4%	9.2%	7.8%	308.1	7.9%	38.1%
	Anne Arundel	5.8%	7.9%	6.7%	310.3	7.7%	31.8%

Red = Higher than County Average

U.S. Census American Community Survey 5-year estimates, 2015-2019; Maryland Health Services Cost Review Outpatient Files, 2019

Annapolis (zip code 21403) has a high proportion of public and subsidized housing. Eighty-five percent of the households living in public or subsidized housing are African American and are led by a single female with an income at or below the poverty level (Housing Authority of the City of Annapolis, 2019). Between 2016 and 2020, 8.3% of people living in Annapolis were in poverty, almost twice the county average. An estimated 18.2% of children under 18 were below the poverty level, compared with 3.5% of people 65 years old and over (U.S. Census estimates, 2020).

The area to the north of the county and sharing a boundary with Baltimore City, Brooklyn Park (zip code 21225) has the largest number of residents living in poverty in the county at 24.8% (U.S. Census estimates, 2020). This part of the county has rising rates of poor outcomes related to the social determinants of health. This area of four-square miles (15,000 residents) is a food desert. (See Figure 57: Access to Healthy Food in Anne Arundel County, 2019 on page 57.) Life expectancy is 15 years shorter for residents of Brooklyn Park than it is for those in Arnold, MD, just 15 miles down the road. (See Figure 53.) Brooklyn Park is also both a Medically Underserved and a Health Shortage Area. (See Figure 50: Health Professional Shortage Areas in Anne Arundel County on page 52.)



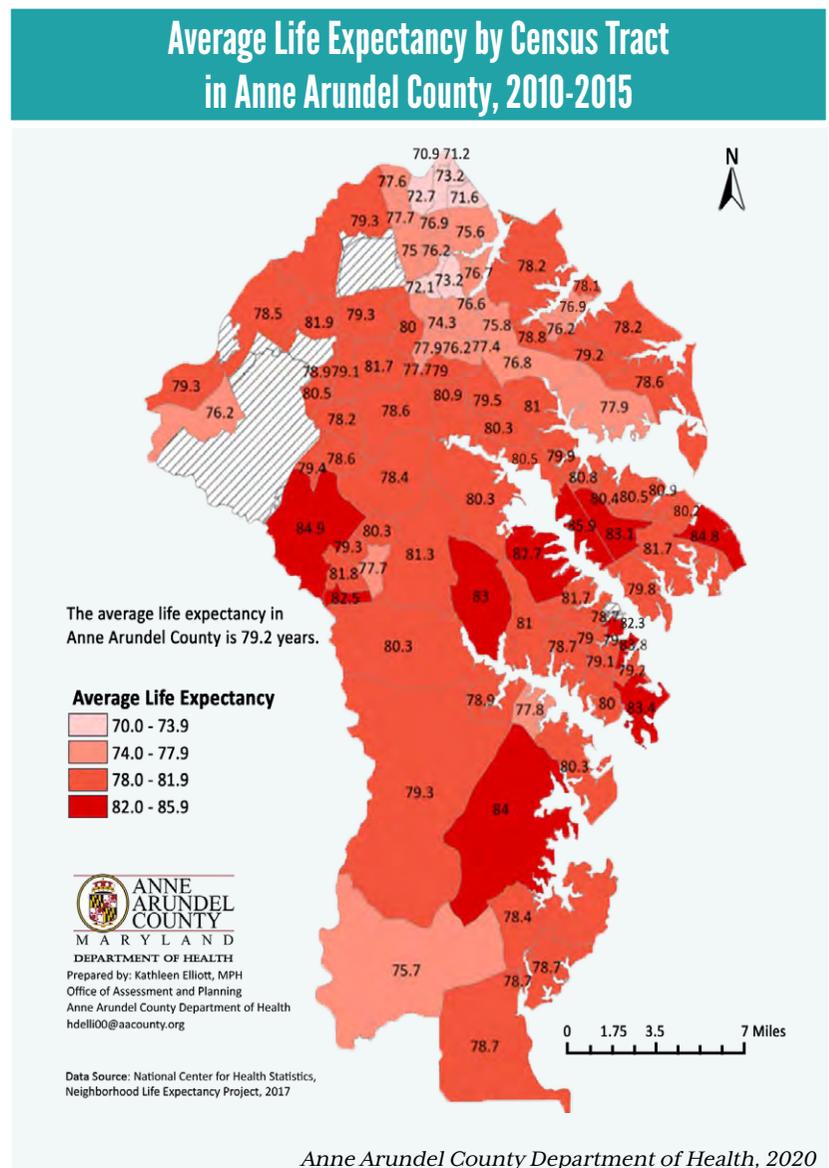
According to stakeholders, South County, the most rural area in Anne Arundel County, has pockets of low-income residents who lack access to jobs, health care, transportation, affordable housing, and internet services. The area of Lothian has several mobile home communities for low and very low-income families. Due to the short supply of industry in South County, unemployment among young people is reported as an issue and the lack of transportation and connectivity may add to the number of youth who leave South County for other areas. Health care access continues to be an issue even as health and behavioral health providers switched to telehealth during the pandemic. Bay Community Health, the Federally Qualified Health Clinic in Owensville, is inaccessible to those without transportation. They recently opened a second location in Lothian, which should increase access.

The county area that includes Odenton/Severn/Meade (zip code 21144), is home to over 35,335 people who are disproportionately African American and Hispanic compared to the county population. The 2019 census estimates the population of Black residents at 36.9% and Hispanic residents at 8.3%. The median income is around two thirds of that of the county and the number of rental units is three times higher. Over half of the population is income burdened, meaning they pay over 50% of their income in rent (Anne Arundel County Community Development Services, 2018). The zip code includes over 1,000 units of public and subsidized housing and four mobile home parks (Anne Arundel County Housing Commission, 2019). The residents of public and subsidized housing are overwhelmingly female and 88% African American. According to the most recent United Way ALICE report, the Fort Meade area population is 58% low-income and the Severn area is 35% low-income. As of 2019, the Free and Reduced Lunch data for Severn area schools includes Van Bocklen Elementary at 80.96%, Quarterfield at 37.08%, Ridgeway at 22.29%, and Severn at 29.77% (Anne Arundel County Public Schools, 2019).

LIFE EXPECTANCY

Given the above information related to the geography of the social determinants of health in Anne Arundel County, it should be predicted that life expectancy can be determined by the zip code and sometimes the census tract residents live in. As stated previously, life expectancy can be up to 15 years longer for a resident living in Arnold as opposed to someone who lives in Brooklyn Park. Participants in this assessment were quick to name violence, lack of healthy food, poorly controlled diabetes, substandard housing, and environmental issues, such as contaminated water, as the reasons for these disparities.

FIGURE 53: AVERAGE LIFE EXPECTANCY BY CENSUS TRACT IN ANNE ARUNDEL COUNTY, 2010-2015



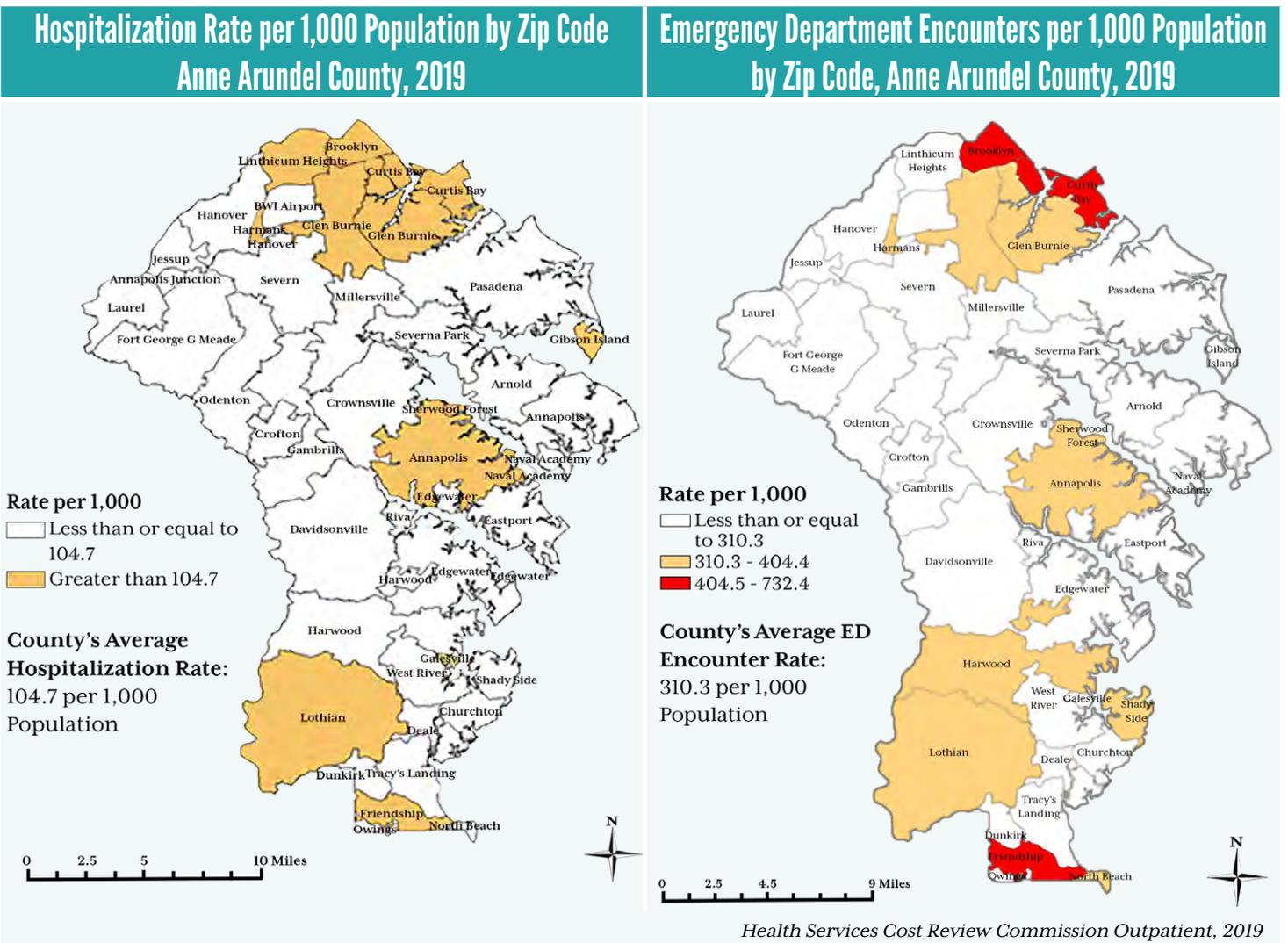
HOSPITALIZATION & ER PATTERNS RELATED TO SOCIAL DETERMINANTS

When patterns of hospitalization and emergency department visits are examined by zip code (see Figure 54 and Figure 55), they generally reflect the social determinants illustrated in Figure 52: Demographic, Socioeconomic, and Health Indicators by Zip Code in Anne Arundel County, 2019 on page 54. Zip code 21225, which contains Brooklyn Park, has the highest hospitalization and emergency department visit rate of anywhere else in the county. The only access to primary care for most is a mobile health van from Harbor Hospital in Baltimore, which visits Brooklyn Park twice weekly. The Federally Qualified Health Center located on Route 2 closed its doors six years ago. As one resident noted:

"The lack of primary care and primary care physicians, the access to the doctors that we need to be able to stay healthy...isn't there. So, people are using their emergency room as their primary care physicians."

FIGURE 54: HOSPITALIZATION RATE PER 1,000 POPULATION BY ZIP CODE, ANNE ARUNDEL COUNTY, 2019

FIGURE 55: EMERGENCY DEPARTMENT ENCOUNTERS PER 1,000 POPULATION BY ZIP CODE, ANNE ARUNDEL COUNTY, 2019



Health Services Cost Review Commission Outpatient, 2019



FOOD ACCESS

Low-income residents can also be measured by the numbers receiving what used to be called food stamps and is now the Supplemental Nutrition Assistance Program (SNAP). In 2019, 19.3% of African American households were receiving SNAP benefits, a 10% rise from 2018. The rate is over six times higher than White residents, which is most likely related to the disproportionate numbers of African Americans living in poverty or/and receiving less than a living wage. African American households are also more likely to experience food insecurity, compared with all U.S. households (Center for Budget and Policy Priorities, 2018).

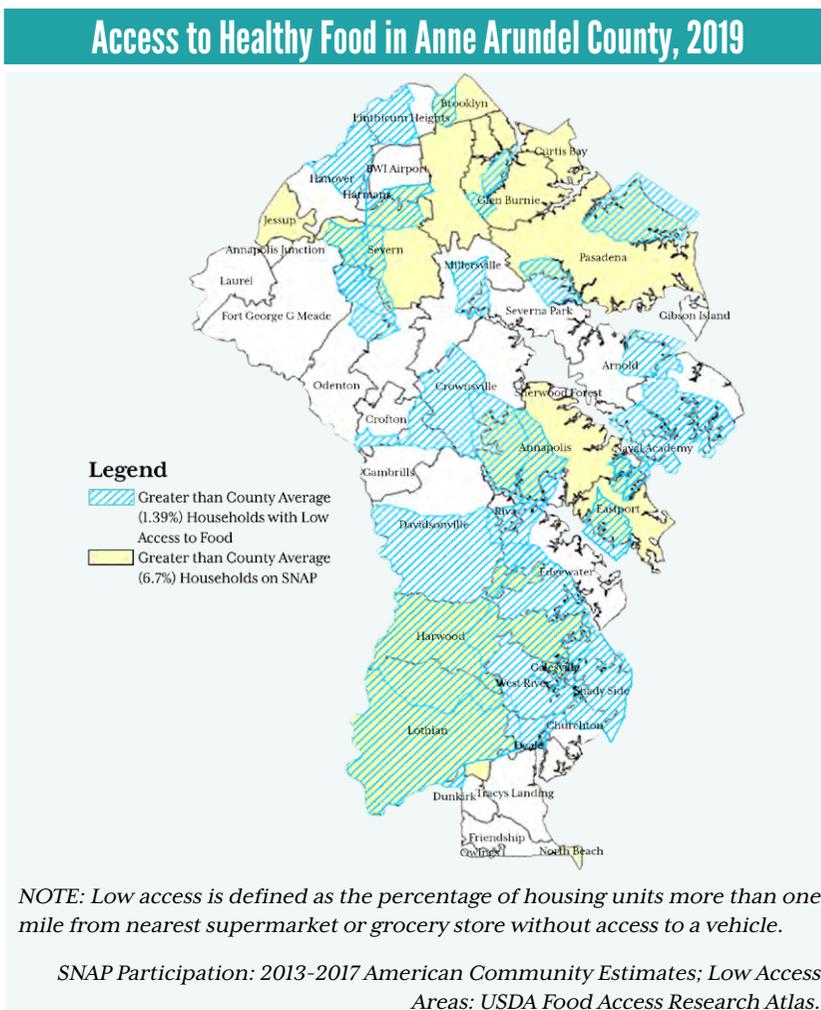
FIGURE 56: HOUSEHOLDS ON FOOD STAMPS/SNAP BENEFITS BY RACE/ETHNICITY IN ANNE ARUNDEL COUNTY, 2016-2019

Households on Food Stamps/SNAP Benefits by Race/Ethnicity in Anne Arundel County, 2016-2019				
	2016	2017	2018	2019
White, NH	4.4%	4.6%	3.4%	3.3%
Black, NH	19.3%	12.0%	9.9%	19.3%
Hispanic	18.8%	13.2%	10.6%	4.1%
Asian	8.9%	4.4%	4.8%	4.8%

U.S. Census Bureau, American Community Survey 1-year Estimates 2017-2019

Anne Arundel County has 74,522 residents living in a food desert. There are 17 census tracts in the county that are considered food deserts in Glen Burnie, Brooklyn Park, Linthicum Heights, Eastport, Fort Meade, Jessup, and Severn (Anne Arundel County Department of Health, 2019). Food deserts are defined by the United States Department of Agriculture (USDA) as urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food. Typically, these areas are low-income, where the population lacks economic resources to travel for food purchases. SNAP recipients also follow the color and geography of poverty in Anne Arundel County. Figure 57 shows that those with the least access to food and those more likely to be receiving SNAP benefits are spread unevenly in the county. They are most likely to be in the areas where other social determinants of health are rising.

FIGURE 57: ACCESS TO HEALTHY FOOD IN ANNE ARUNDEL COUNTY, 2019



FOOD ACCESS, CONTINUED

Lack of access to healthy food causes many issues for county residents. According to America’s Health Rankings (2021), food insecurity impacts health due to the mental and physical stress that it places on the body. Children are particularly susceptible. Among children, food insecurity is related to depression and anxiety, cognitive and behavioral problems, and higher risk of being hospitalized. Hungry children also are prone to fighting, hyperactivity, aggression, anxiety, mood swings, and bullying. They are more likely to have lower test scores and lower overall academic achievement than children who have access to nutritious food. As one participant noted:

"Some of my clients...are going to the food banks and only relying on food banks. They don't have much access to fresh fruits and vegetables. A lot of the canned food, cereals, and breads have been a contributor to diabetes and to high blood pressure."

The Anne Arundel County Public Schools Food and Nutrition Services offers breakfast and lunch to school children. As indicated in Figure 58, in 2018 and 2019, over nine million meals were served each year. The school system also supplies summer meals at various sites in the county.

FIGURE 58: ANNE ARUNDEL COUNTY PUBLIC SCHOOLS FOOD AND NUTRITION SERVICES: TOTAL MEALS SERVED, PRE/POST PANDEMIC

Anne Arundel County Public Schools Food and Nutrition Services: Total Meals Served, Pre/Post Pandemic				
	2017/2018	2018/2019	2020/2021	2021/2022
Total Breakfasts Served	3,717,762	3,471,076	2,222,449	990,373
Total Lunches Served	5,837,279	5,920,448	2,366,715	1,586,962
Total Dinners Served	131,001	125,210	1,896,114	34,743
Total Snacks Served	28,234	33,654	1,896,114	34,743
Total Meals Served	9,714,276	9,550,388	8,381,392	2,646,821

Anne Arundel County Public Schools, 2021

GUN VIOLENCE

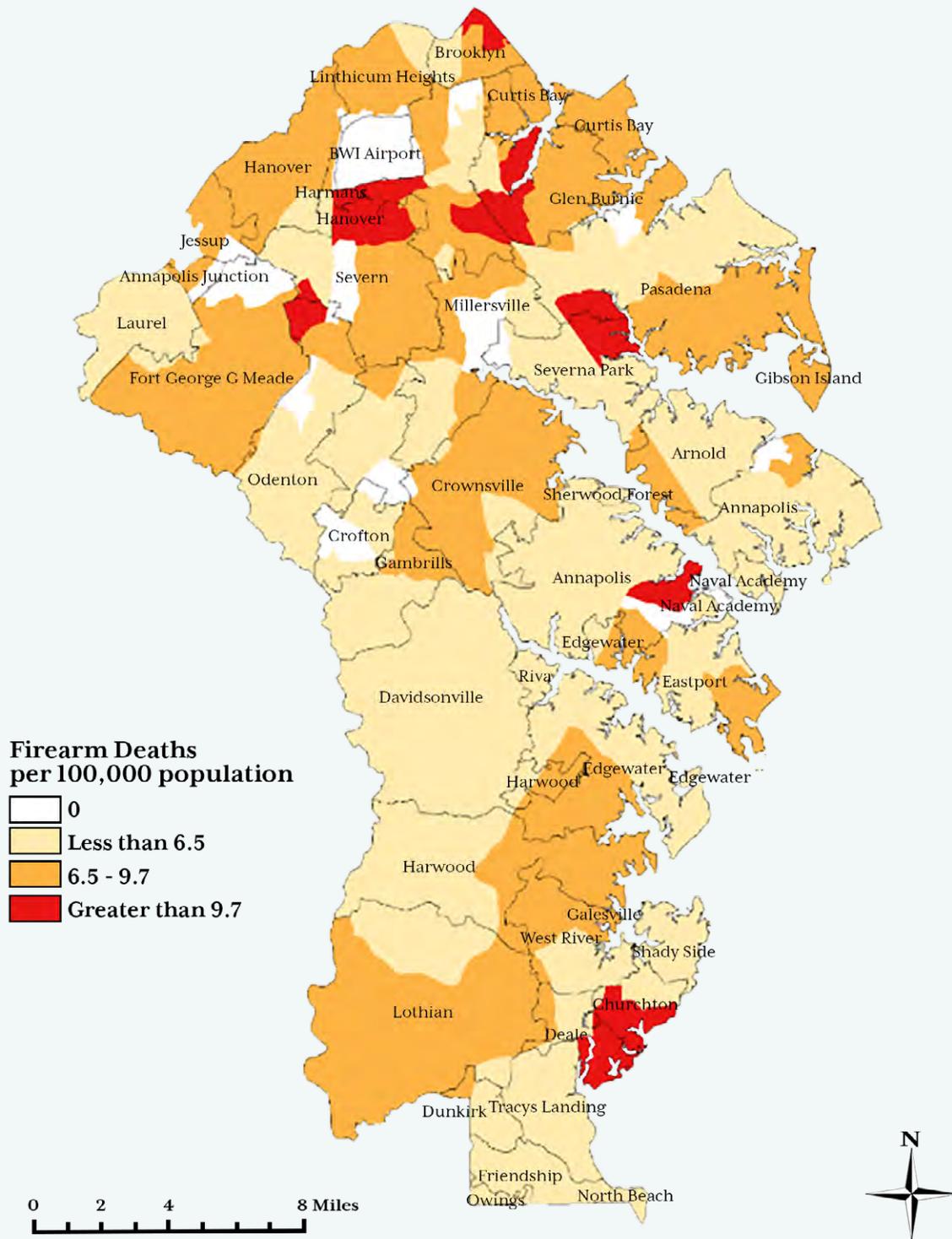
Gun violence continues to be a concern for the county and should be considered a public health issue. While there was a 12% decrease in the number of gun incidents county-wide in 2018, there was a 74% increase in gun incidents in 2019 (Anne Arundel County Police Department, 2021). Firearm deaths by census tract show that our most vulnerable neighborhoods have the highest rate of firearm deaths in the county at greater than 9.7 per 100,000 of the population. (See Figure 59, Anne Arundel Department of Health, 2021). Social and economic inequities are often at the root cause of community violence. The majority of participants in this needs assessment commented on the number of guns in the county, especially those accessible to teenagers. As one noted:

"Right and wrong doesn't even kick in until they're 25, so if you put a gun in my hand at 14 and say 'hey I can show you how to permanently get rid of this fear and that kid won't bully you no more;' I'm dangerous."



FIGURE 59: FIREARM DEATHS BY CENSUS TRACT, ANNE ARUNDEL COUNTY, 2013-2019

Firearm Deaths by Census Tract, Anne Arundel County, 2013-2019

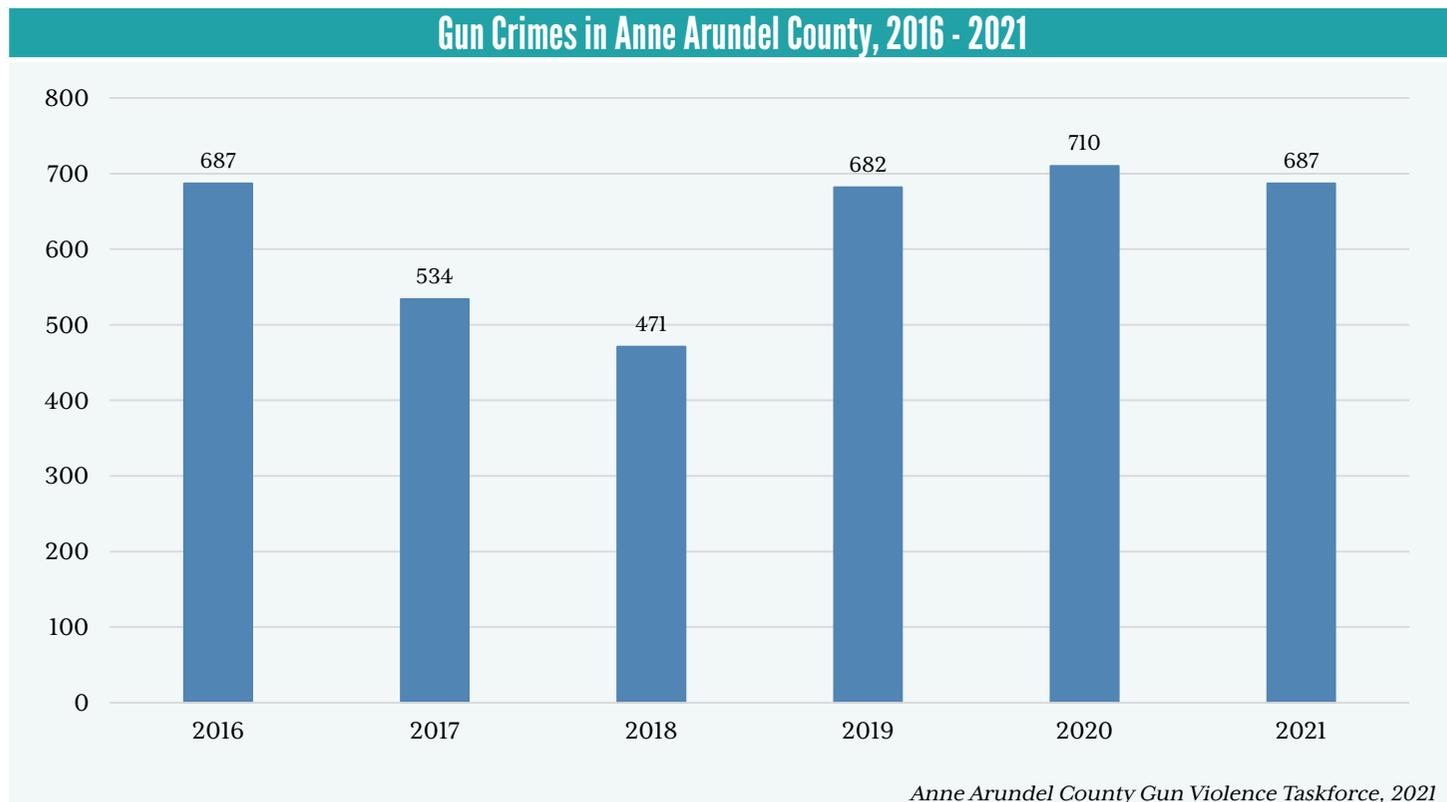


Anne Arundel County Department of Health, 2020

GUN VIOLENCE, CONTINUED

The most recent gun crime data from the Anne Arundel County Gun Violence Taskforce shows little change from 2016-2021 (see Figure 60), although there was a small spike in 2020.

FIGURE 60: GUN CRIMES IN ANNE ARUNDEL COUNTY, 2016 - 2021



Between 2016 and 2019, there were a total of 594 injuries due to firearms in Anne Arundel County. (See Figure 61.) Black males had 11 times the rate of firearm injury than White males and while White males comprised nearly one quarter of the total firearm injuries, Hispanic males had the second highest injury rate after Black males.

FIGURE 61: ANNE ARUNDEL COUNTY FIREARM INJURY BY RACE AND ETHNICITY, 2016-2019

Sex and Race/Ethnicity	Total Injuries (Percent)	Yearly rate per 100,000 Population
Black Male	349 (59%)	194.7
White Male	129 (22%)	16.5
Black Female	38 (6%)	20.3
White Female	27 (5%)	3.4
Hispanic Male	20 (3%)	23.3
Other/Hispanic Female	31 (5%)	13.3
Total	594	26.3

Anne Arundel County Gun Violence Taskforce, 2021



The trend line for inpatient hospitalizations and emergency department visits for firearm injuries in the county moved downwards between 2016 and 2019 with a total of 138 total admissions. (See Figure 62.)

FIGURE 62: INPATIENT HOSPITALIZATIONS AND EMERGENCY DEPARTMENT VISITS FOR ALL FIREARM INJURIES

Inpatient Hospitalizations and Emergency Department Visits for All Firearm Injuries				
Place of Admission	2016	2017	2018	2019
Inpatient Hospitalizations	58	77	47	62
Emergency Department Visits	94	90	90	76
Total Admissions	152	167	137	138

Anne Arundel County Department of Health, 2021

The total cost of firearm related injuries was more than \$12.3 million from 2016 to 2019. The majority of injuries were accidental discharges (53%) followed by assaults (40%). The cost to the health care system has increased every year since 2016 and stands at \$3,034,203.8 in 2019. (See Figure 63.)

FIGURE 63: TOTAL COST OF FIREARM INJURIES, ANNE ARUNDEL COUNTY, 2016-2019

Total Cost of Firearm Injuries, Anne Arundel County, 2016-2019				
Total Charges for All Patients	2016	2017	2018	2019
Inpatient Hospitalizations	\$2,376,695.49	\$3,765,813.67	\$2,661,434.28	\$2,925,442.42
Emergency Department Visits	\$131,111.09	\$246,838.84	\$103,422.48	\$108,761.45
Total Cost	\$2,507,807	\$4,012,653	\$2,764,857	\$3,034,204

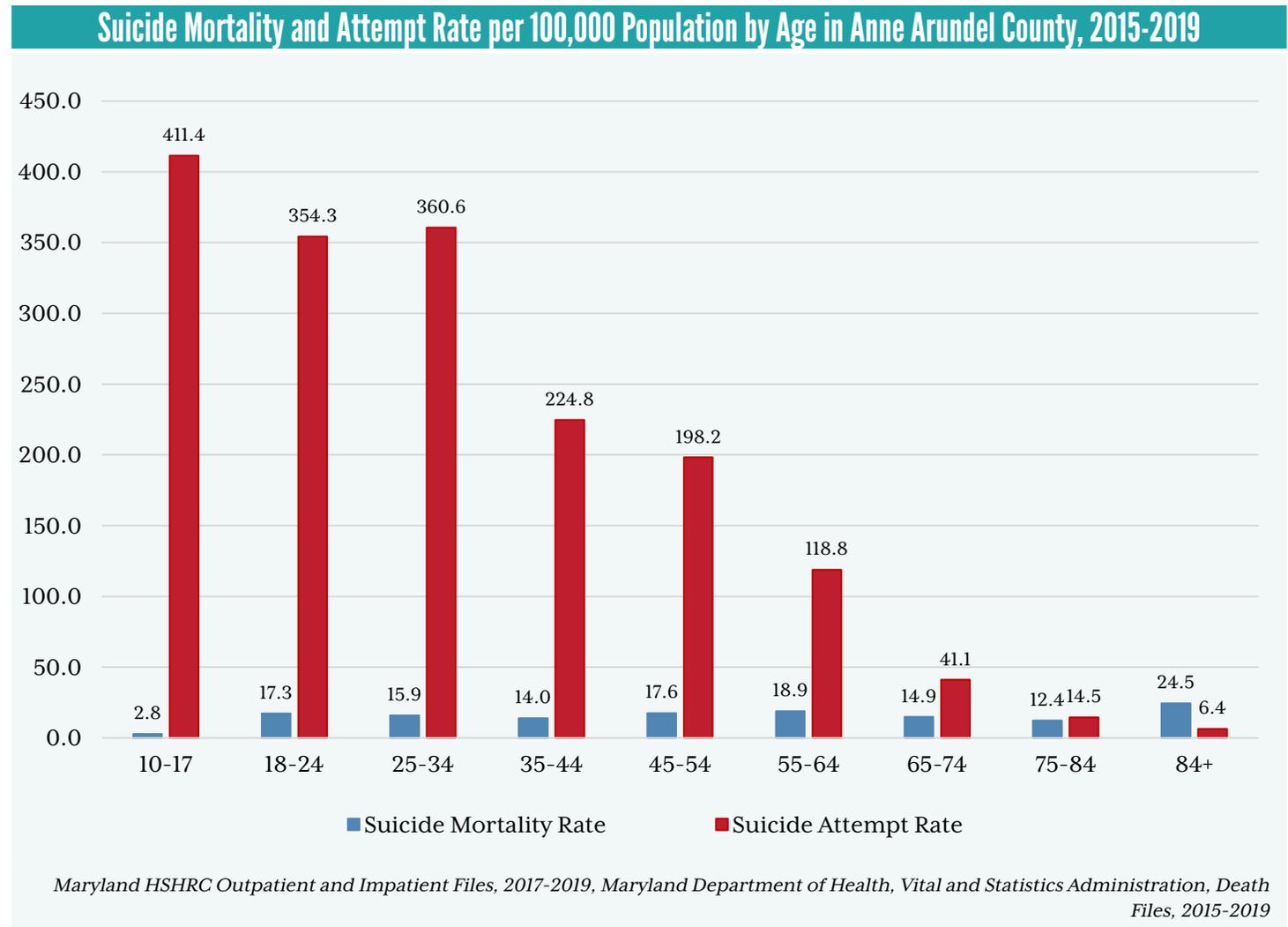
Anne Arundel County Department of Health, 2021



SUICIDE

The second year in a row with a decrease in suicides for the county was 2019. The number of completed suicides dropped from 95 in 2017 to 75 in 2019. Those under the age of 34 attempt suicide at the highest rates, while those above the age of 85 have the highest death rate. (See Figure 64.)

FIGURE 64: SUICIDE MORTALITY AND ATTEMPT RATE PER 100,000 POPULATION BY AGE IN ANNE ARUNDEL COUNTY, 2015-2019



White males make up the majority of suicide deaths in Anne Arundel County followed by Hispanic males and Black



males. (See Figure 65.) Guns are the most common means of suicide in the county. Of all suicides, gun suicides make up 40% on average (Anne Arundel County Department of Health, 2021).

FIGURE 65: ANNE ARUNDEL COUNTY SUICIDES BY SEX AND RACE, 2015-2019

Anne Arundel County Suicides by Sex and Race, 2015-2019		
Race/Sex Category	Suicides	Rate per 100,000 Population
White Male	234 (63%)	24
White Female	88 (24%)	8.9
Black Male	24 (7%)	10.7
Black Female	3 (1%)	1.3
Hispanic Male	13 (4%)	12.1
Hispanic Female	0 (0%)	-
Other	9 (2%)	4.7
Total Suicide Deaths (2015-2019)	371	13.1

Maryland HSHRC Outpatient and Inpatient Files, 2017-2019, Maryland Department of Health, Vital and Statistics Administration, Death Files, 2015-2019



TRANSPORTATION

At every focus group and key stakeholder interview, transportation was noted by participants as the number one need for county residents. Lack of transportation was noted 123 times. As of January, 2022, Anne Arundel County operates 12 fixed route lines, two Saturday shopper shuttles, countywide paratransit/elderly (55+) on-demand service, and a South County Call N' Ride. Issues relate to how routes connect to one another, service regularity, and the hours of service for residents who need to get to work. Since 2009, Anne Arundel County needs assessments have noted access to transportation as one of the top three needs. Lack of reliable transportation impacts our most vulnerable residents, including low-income families, persons with disabilities, young adults, and the elderly. Health care access is a major issue for our vulnerable populations. The limited transit offered to seniors and the disabled requires an appointment in advance. Medicaid transportation will allow only the caregiver and the child needing access to be served. This is a barrier to access for caregivers with other children in the family. Both county emergency rooms are on a limited bus route, which makes them preferred centers for those without transportation. Families miss appointments routinely for medical and behavioral health care, school parent meetings, job interviews, and court dates; the list is long. As one participant noted:

"I have so many families that don't have transportation and miss appointments not because they wanted to miss appointments...because they don't have transportation."

In our most vulnerable neighborhoods, transportation is an even bigger barrier. Many parents in neighborhoods such as Brooklyn Park may have one unreliable car or no vehicle at all. This barrier often contributes to school absences. As one participant noted:

"A lot of parents do not feel safe with their children walking to school. Parents can walk them but a lot of them have to go to work or just work odd hours; work nights. So, I think the transportation piece is probably what I'm seeing the most of as far as a barrier."





SUMMARY

Anne Arundel County has an excellent health care system. Most residents have good access to both preventative and ongoing health care. However, life-shortening issues such as obesity and diabetes continue to rise in the county and occur, disproportionately, among African American residents related to social, economic, and racial disparities in some of our neighborhoods. Those disparities help create gun violence incidents, which continue to drive up costs for hospitals and other systems within the county.

Heart disease is now the leading cause of death in the county. A majority of participants expressed the need for more formal methods of educating and informing the public about their health. The approach should be to make residents partners in their own health outcomes. Access to health care is still an issue for low-income residents who often live in areas with little transportation and few health care facilities.

NEEDS & GAPS IN SERVICES

- Targeted interventions related to the social determinants of health need to be implemented in our low-income neighborhoods. While progress is being made at the county level with initiatives such as the Severn Intergenerational Center, the reopening of the Lula G. Scott Center and the proposed Brooklyn Park Center, much more needs to be done.
- More primary care doctors. This is a nationwide shortage that has multiple impacts.
- Evidence-based programs to address gun violence, including hospital diversion programs.
- Access to dental care for all residents.
- Planning to increase access in medically underserved areas.
- More funding for programs like REACH (Residents Access to a Coalition of Health), which is specifically for residents not eligible for Medicaid, Medicare, and plans available through MD Health Connection. REACH offers low-cost health services. Currently, the REACH program has a long waiting list. It is funded through grants by the Anne Arundel County Department of Health and is reduced fee based on income.
- Access to transportation continues to be a huge issue, especially for low-income residents and seniors living in areas of North and South County.
- Increased planning and services related to the geography and color of social determinants in our county.



CHAPTER 5 BEHAVIORAL HEALTH

MENTAL HEALTH & SUBSTANCE USE

The State of Maryland changed its Administrative Services Organization for public behavioral health services on January 1, 2020. The consequent change in publicly available data has been challenging for this version of *Poverty Amidst Plenty*, especially in terms of comparison data. Nonetheless, locally available numeric data and qualitative data from stakeholders have helped to fill the gap.

While the county's numeric data on mental health for the period from 2019-2021 is unreliable, the stakeholders in this assessment; primary care doctors, therapists, pupil personnel workers, and a wide diversity of residents, lamented the enormous toll mental health issues are taking on our systems, our neighborhoods, and our county. Stress-related anxiety and depression through isolation, economic distress, and the trauma related to increasing racial tension were all mentioned as issues to be addressed. As one participant noted:

"Clearly, we need more clinicians, but we also have the situational response to circumstance, which is not necessarily mental illness, it's trauma-induced challenges."

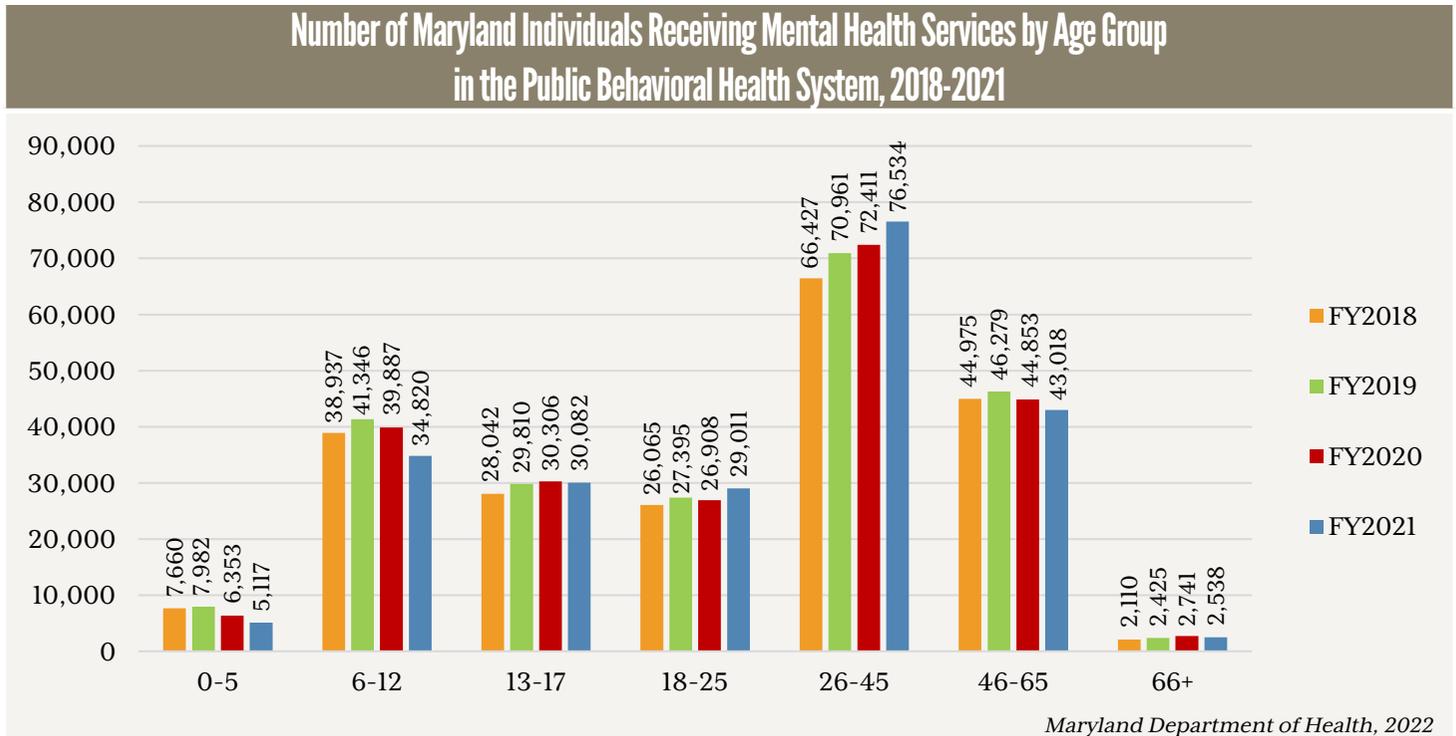
Maryland numbers for the use of public mental health services by age for 2018-2021 show an increasing trend of usage for those ages 13-45. The trend line is also increasing for those ages 66 and older. The 0-12 age population data does not show an increase in usage even though child care providers, parents, and teachers are all reporting increases in mental health issues among young children. (See Figure 66.) Several providers commented on the increase in anxiety and depression. As one noted:

"The most common issues are anxiety and depression—they are the highest volume of problems."



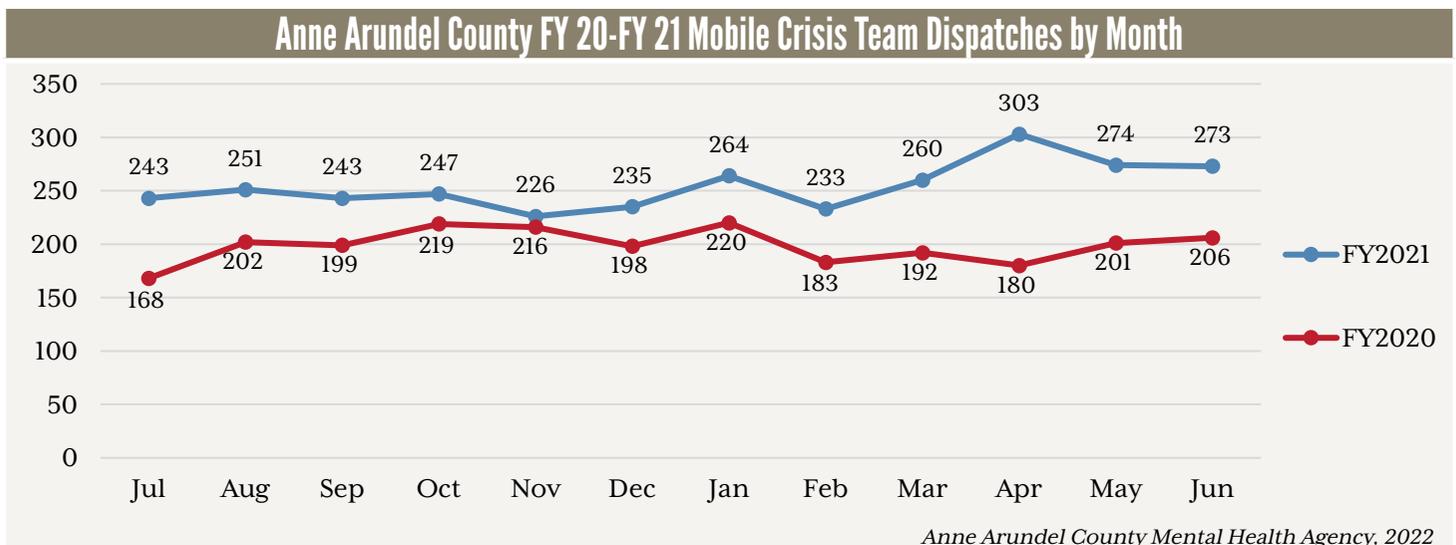


FIGURE 66: NUMBER OF MARYLAND INDIVIDUALS RECEIVING MENTAL HEALTH SERVICES BY AGE GROUP IN THE PUBLIC BEHAVIORAL HEALTH SYSTEM, 2018-2021



Anne Arundel County’s award-winning crisis system is the envy of the state and the nation. The Crisis Response System, known as the Community Warmline, is a service that provides Anne Arundel County residents in crisis with supportive assistance and linkages to resources within the community, 24 hours per day and seven days per week. Crisis Response System staff intervene with callers who are experiencing a mental health and/or substance use disorder emergency. The system also provides service to the community through Mobile Crisis Teams, Homeless Outreach Services, Urgent Care Clinics, Sexual Assault Clinics, Community Education, and Crisis Beds. Mobile crisis team dispatches over the past two years show a marked increase in calls for services, with the 2021 trend line higher overall than 2020. (See Figure 67.)

FIGURE 67: ANNE ARUNDEL COUNTY FY 20-FY 21 MOBILE CRISIS TEAM DISPATCHES BY MONTH



ACCESS & SERVICE ISSUES

The county has an overall shortage of mental health therapists, an issue exacerbated by the current labor shortages caused by COVID-19. Many participants commented on low payment rates in the county. The county has 1,180 mental health providers overall for a ratio of 490:1 to the county's population. This is a lower rate compared to the state and almost half the ratio of the top U.S. counties. (See Figure 68.) The lack of Spanish-speaking counselors and psychiatrists continues to be a huge issue, although there have been some small improvements among our mental health providers.

FIGURE 68: RATIO FOR MENTAL HEALTH PROVIDERS, 2020 ANNE ARUNDEL COUNTY

Anne Arundel County Mental Health Providers, 2020				
	Anne Arundel County Total	Anne Arundel County Ratio	Maryland Ratio	Top U.S. Counties (90th Percentile)
Mental Health Providers	1,180	490:1	360:1	270.1

County Health Rankings Report, 2021

According to participants in this needs assessment, the lack of providers is creating waiting lists throughout the county and increasing the number of referrals to emergency departments. The emergency department tends not to be a therapeutic place. Providers described the environment as crowded, noisy, and fast-moving. As one health worker noted:

"We don't have the expertise to create a therapeutic environment for those individuals in the emergency department...it is never a place for behavioral health patients to have anything therapeutic happen."

According to the most recent annual data for the Health Services Cost Review Commission, Anne Arundel County emergency departments (EDs) saw over 11,000 patients for behavioral health issues. The top three categories were mood disorders, alcohol-related disorders, and substance use disorders. (See Figure 69.)





FIGURE 69: EMERGENCY DEPARTMENT ENCOUNTERS FOR MENTAL HEALTH CONDITIONS IN ANNE ARUNDEL COUNTY, 2019

Emergency Department Encounters for Mental Health Conditions in Anne Arundel County, 2019		
Condition	Frequency	Percent
Mood Disorders	2,945	26.7%
Alcohol Related Disorders	2,501	22.7%
Substance Related Disorders	2,131	19.3%
Anxiety Disorders	1,402	12.7%
Schizophrenia and Other Psychotic Disorders	642	5.8%
Suicide and Intentional Self-Inflicted Injuries	619	5.6%
Adjustment Disorders	351	3.2%
Delirium Disorders and Amnestic and Other Cognitive Disorders	248	2.3%
Attention-Deficit Conduct and Disruptive Behavior Disorders	151	1.4%
Miscellaneous Health Disorders	23	.02%
Total	11,013	100%

Health Services Cost Review Commission Outpatient Files, 2019

Victims of domestic violence, sexual assault, and other violence are also referred to the emergency department for medical care. (See Figure 70.) These residents are usually highly traumatized and require trauma informed care in a trauma informed setting. As one provider commented:

"Many of these patients have just been victimized and traumatized. It's hard for them to be relaxed and to be able to speak with us, maybe speaking with police, and with advocacy, and care management. The best practice is to serve them in a trauma-informed care setting. And that is not in the ED."

FIGURE 70: EMERGENCY DEPARTMENT VISITS FOR SEXUAL ASSAULT AND OTHER VIOLENT INJURIES

Anne Arundel County Emergency Department Visits for Sexual Assault and Other Violent Injuries				
	2016	2017	2018	2019
Sexual Assault	25	24	41	37
All Violent Injuries	2,110	2,219	2,053	1,587

Health Services Cost Review Commission, Outpatient Files 2019

Many participants commented on the difficulties of using private insurance for mental health care. Insurers have restrictions on length of services, residential treatment, and other variables. As one provider noted:

"The deductibles, the copays, the restrictions on everything. It's difficult to navigate and people don't understand...and you've got families with multiple insurance. With what the insurance companies are doing, you could have a family of four that has two different insurance plans to work with. Navigating our system is very hard and time-consuming."

ACCESS & SERVICE ISSUES, CONTINUED

Families who fall into the category of the working poor may earn too much to qualify for Medicaid but don't have any private insurance attached to their employment. Such families have little access to behavioral health care.

Primary care doctors are filling the gap in mental health services where they can. Generally, they are prescribing medicines for patients with anxiety and depression and referring to a psychiatrist when necessary. Unfortunately, there is still a huge shortage of psychiatrists in the county, according to participants in this needs assessment. Behavioral health issues take time away from the limited supply of primary care. As one health worker noted:

"I certainly know that every primary care doctor who treats those things doesn't say, 'oh, you have to go see a psychiatrist.' That's because there aren't enough psychiatrists. Certainly, if somebody's acutely suicidal we need to get them some place but if it's just a matter of 'should I start medicine' and follow up, I think we all do that. So that access is as much a problem as the primary care access is."

The county still lacks residential care for those residents with serious mental issues who require 24-hour care. There are 274 residential rehabilitation beds in Anne Arundel County, 119 are intensive beds and 75 are general beds. As of January, 2022, there are 134 individuals on the waitlist. All of these beds are for adults. There are no residential behavioral health beds for youth in the county. Children requiring residential care are often placed in other counties and sometimes out of state. Such distances create issues for parents as they try to act as strong, ongoing supports and do not aid each child's recovery. As one provider noted:

"How can you transfer a kid out to Western Maryland and expect the family to be involved in their care and recovery? We know the family is a central component of that. But its three hours one way out to where their child is being hospitalized; you're setting yourself up for failure right from the get-go."

AWARENESS & STIGMA

There was a consensus among participants that while mental health needs have grown, awareness of those issues has grown among residents at the same pace. Residents in low-income neighborhoods expressed the same change in attitudes among African American and Hispanic residents and less avoidance related to stigma. One noted:

"Now it's more acceptable to say 'I may need mental health help. I may need to see a therapist' or 'I may need to address some of these issues.'"



VIRTUAL SERVICES

Many mental health providers now offer services virtually. At the beginning of the pandemic, regulations changed to allow for billing of tele-behavioral health services, which increased access to services to every demographic. Most participants commented on the importance of this increased capacity, especially for those clients who lack transportation. Mental health providers also noted that virtual capacity decreased the amount of “no-show” patients. As one noted:

"Telehealth has a way of delivering services to people who are having access issues and who can have access to that type of virtual platform, we have less no-shows now than we did back then."

THE SENIOR POPULATION

The trend line for the use of public mental health services is also increasing for those ages 66 and older. (See Figure 66: Number of Maryland Individuals Receiving Mental Health Services by Age Group in the Public Behavioral Health System, 2018-2021 on page 67.) The issue is exacerbated due to the growing number of county seniors over age 75 who may also have issues related to dementia. Several professionals serving the senior population commented on the co-occurring issues related to dementia, mental health, and the shortage of specialized professionals to treat them. As one provider noted:

"Geriatric mental health issues are always an area of significant gap. There aren't a lot of community providers who are focused in those areas and the hospitals don't have the acute care services for that either."

There is no available quantitative data on geriatric mental health services. According to correspondence from the Anne Arundel County Department of Aging and Disabilities (2022), there are only two geriatricians in the county. The majority are located in Baltimore City. Clients appear most willing to disclose mental health challenges to their primary care provider. Health providers in this needs assessment noted that elderly patients may wait in the emergency department for days, sometimes weeks, for an inpatient geriatric psychiatry bed, while at the same time, there are few community services to support the person and their family members. As another provider noted:

"They emergency petition to the ED, they get certified to go in-patient geri-psych, and then they sit forever waiting for an appropriate bed to the point where they stabilize and get discharged back to the family with no support services—so we haven't accomplished anything."

There have been several mental health service improvements since 2018. Luminis Health-Anne Arundel Medical Center (AAMC) has opened an inpatient psychiatric hospital and day center. The system also provides behavioral health therapists and operates Pathways, a residential treatment and detox program. University of Maryland Baltimore Washington Medical Center (UM BWMC) provides inpatient psychiatric care and partial hospitalization and inpatient treatment. Arundel Lodge has received its license to operate an Urgent Care Walk-In Center as part of the Certified Community Behavioral Health Center (CCBCH), located on the Luminis Health-AAMC campus. They began accepting referrals from the Crisis Response System (CRS) and the emergency department at Luminis Health-AAMC in December, 2021.

SUBSTANCE USE

Opioids

The opioid crisis was a major concern for all participants in the 2018 needs assessment. While the number of opioid-related overdoses in 2020 (985) was less than those in 2018 (1,092), the trend line for overdoses continues to rise. (See Figure 71.) According to the Maryland State Department of Health, in 2020, Anne Arundel County had the third highest rate of intoxication deaths for the year at 251. (See Figure 72.) Those figures include overdose deaths from alcohol and cocaine.

FIGURE 71: OPIOID-RELATED OVERDOSES OCCURRING IN ANNE ARUNDEL COUNTY, 2015-2020

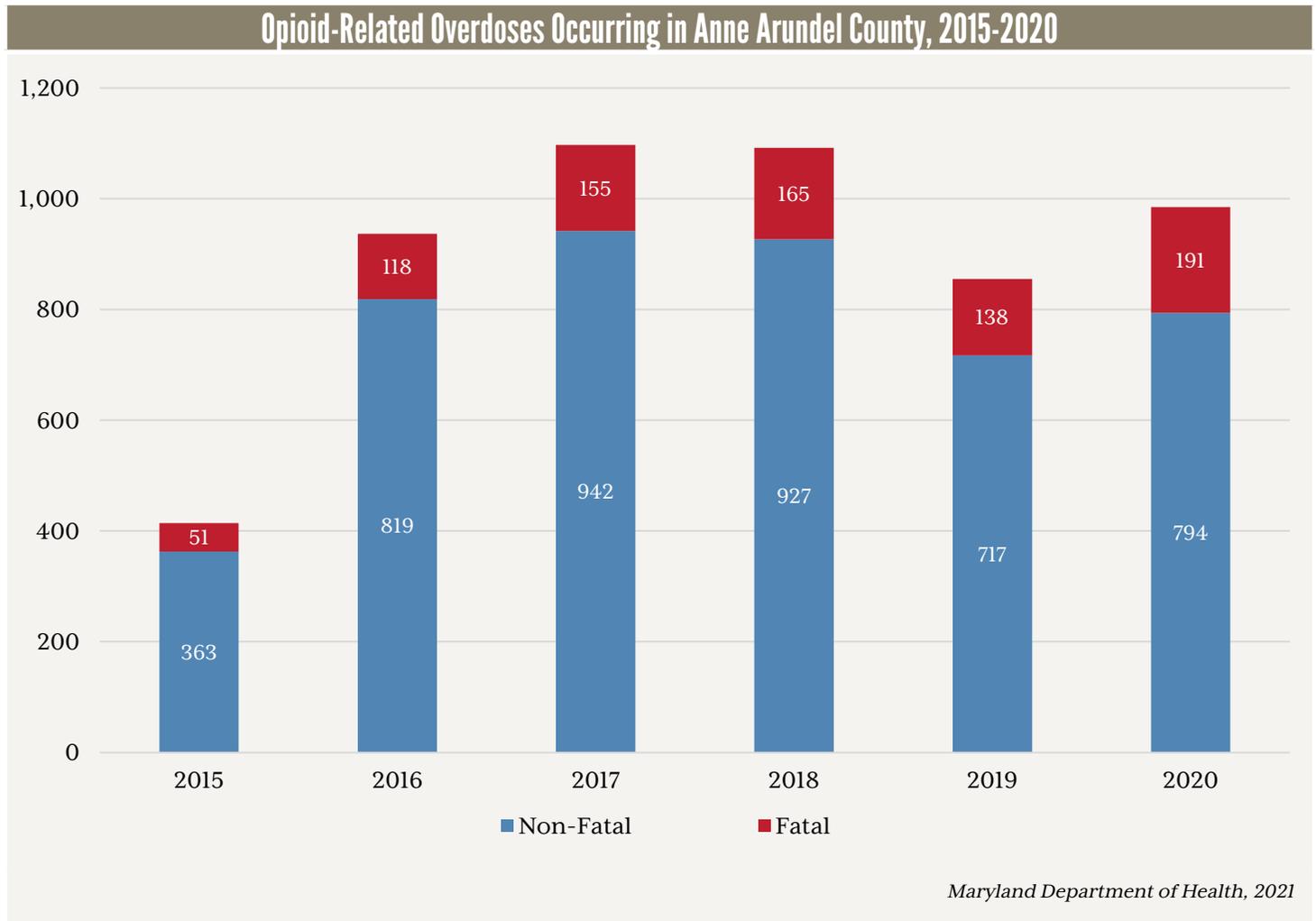
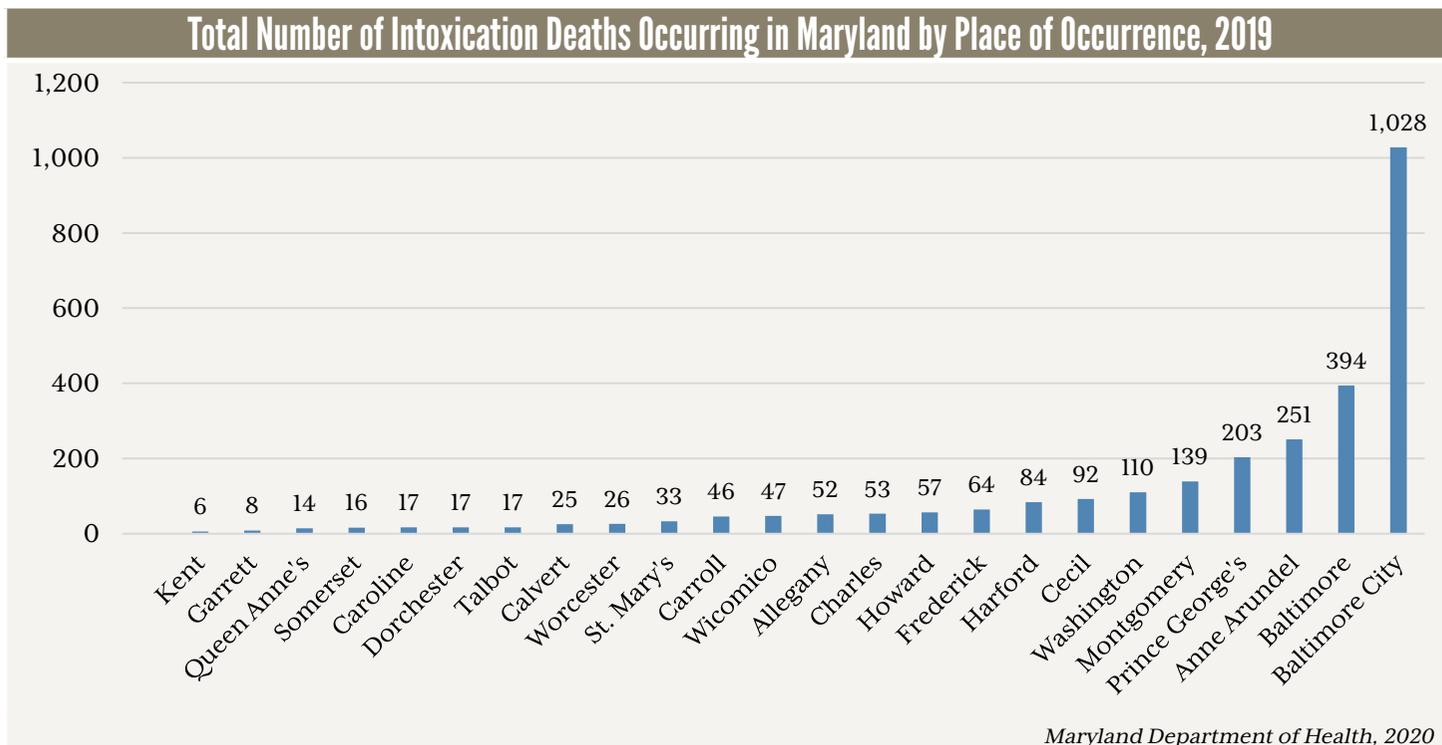




FIGURE 72: TOTAL NUMBER OF INTOXICATION DEATHS OCCURRING IN MARYLAND BY PLACE OF OCCURRENCE, 2019



According to data from the State of Maryland Department of Health, from 2017 to 2019, opioid-related fatalities decreased by 11.5% among non-Hispanic White Marylanders, while increasing by 40.4% among non-Hispanic Black Marylanders, and by 35.9% among Hispanic Marylanders. Overdose deaths involving other races were excluded from due to the relatively small numbers. (See Figure 73: Anne Arundel County Opioid-Related Fatal Overdoses by Race/Ethnicity, 2010-2019 on page 74.) In 2010, near the beginning of the acceleration in overdose-related fatalities in Maryland, non-Hispanic Whites accounted for a vast majority (75.4%) of opioid-related intoxication fatalities. Since that time, as shown in Figure 73, the proportion of opioid-related intoxication deaths involving non-Hispanic Blacks has steadily increased, while the proportion of such deaths involving non-Hispanic Whites has steadily decreased. This numeric data was supported by comments from county residents who attributed the increasing numbers to the increase in pain and trauma created by racism and poverty in vulnerable neighborhoods. As one said:

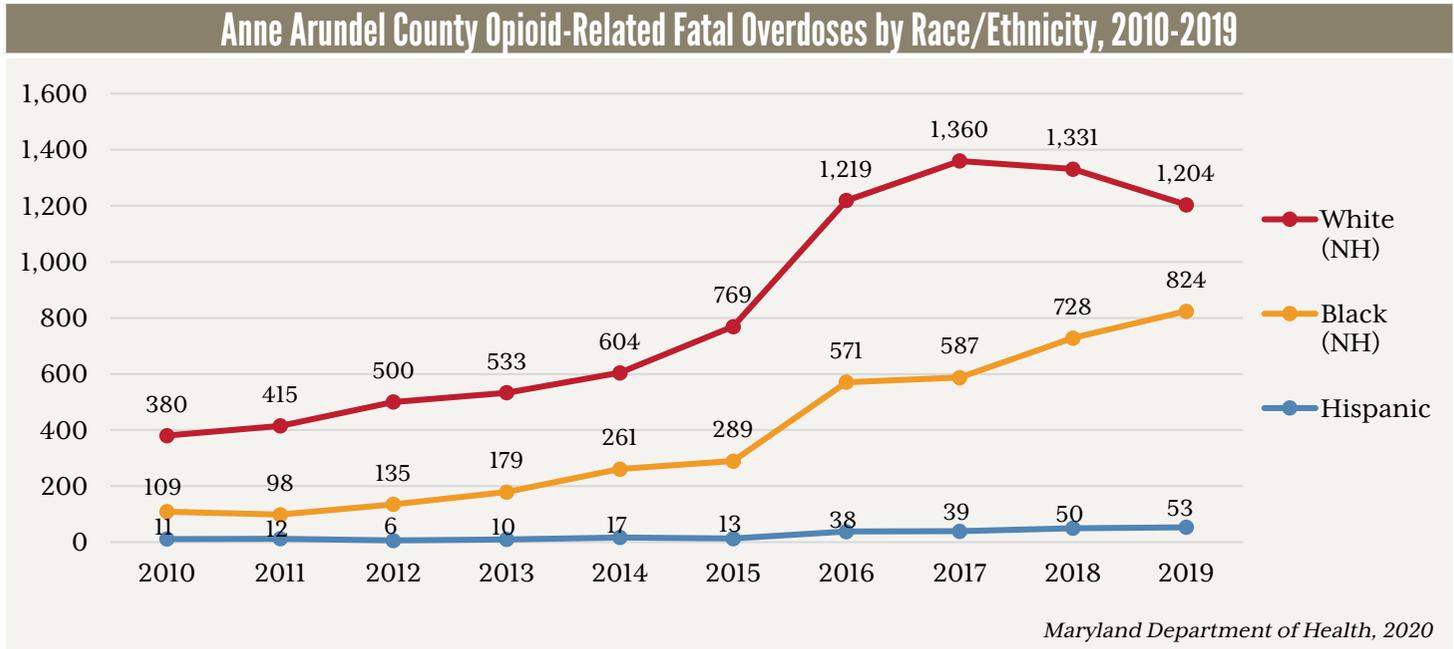
"People will go looking for fentanyl...You hear somebody say 'I got that fenty'- people want that high...people don't want to die, they just don't want to deal with the pain. So, they will get the strongest thing they can to numb that pain for however long."

Some participants felt that local knowledge from the neighborhoods was rarely considered when planning services related to drug use. As one noted:

"Even after I told them what the need was here in the community: NARCAN, fentanyl test strips, and condoms, are what we need here in this community, they still chose to come with something else and didn't have NARCAN and didn't have fentanyl test strips. So people don't listen to the boots on the ground."

SUBSTANCE USE, CONTINUED

FIGURE 73: ANNE ARUNDEL COUNTY OPIOID-RELATED FATAL OVERDOSES BY RACE/ETHNICITY, 2010-2019



In 2019, deaths involving fentanyl decreased for the first time since 2011 but were still up by more than 400% from 2015 and fentanyl was involved in 79% of all intoxication deaths (Anne Arundel County Department of Health, 2020).

County zip code data for 2021 for both fatal and non-fatal overdoses shows the top 10 areas for opioids, although they are not weighted for resident numbers in each zip code. The rural areas of South County are less likely to appear in this list. Opioid overdoses for the first three months of 2022 show a similar pattern. (See Figure 75.)

FIGURE 74: TOTAL OPIOID OVERDOSES BY INCIDENT ZIP CODE, ANNE ARUNDEL COUNTY, 2021

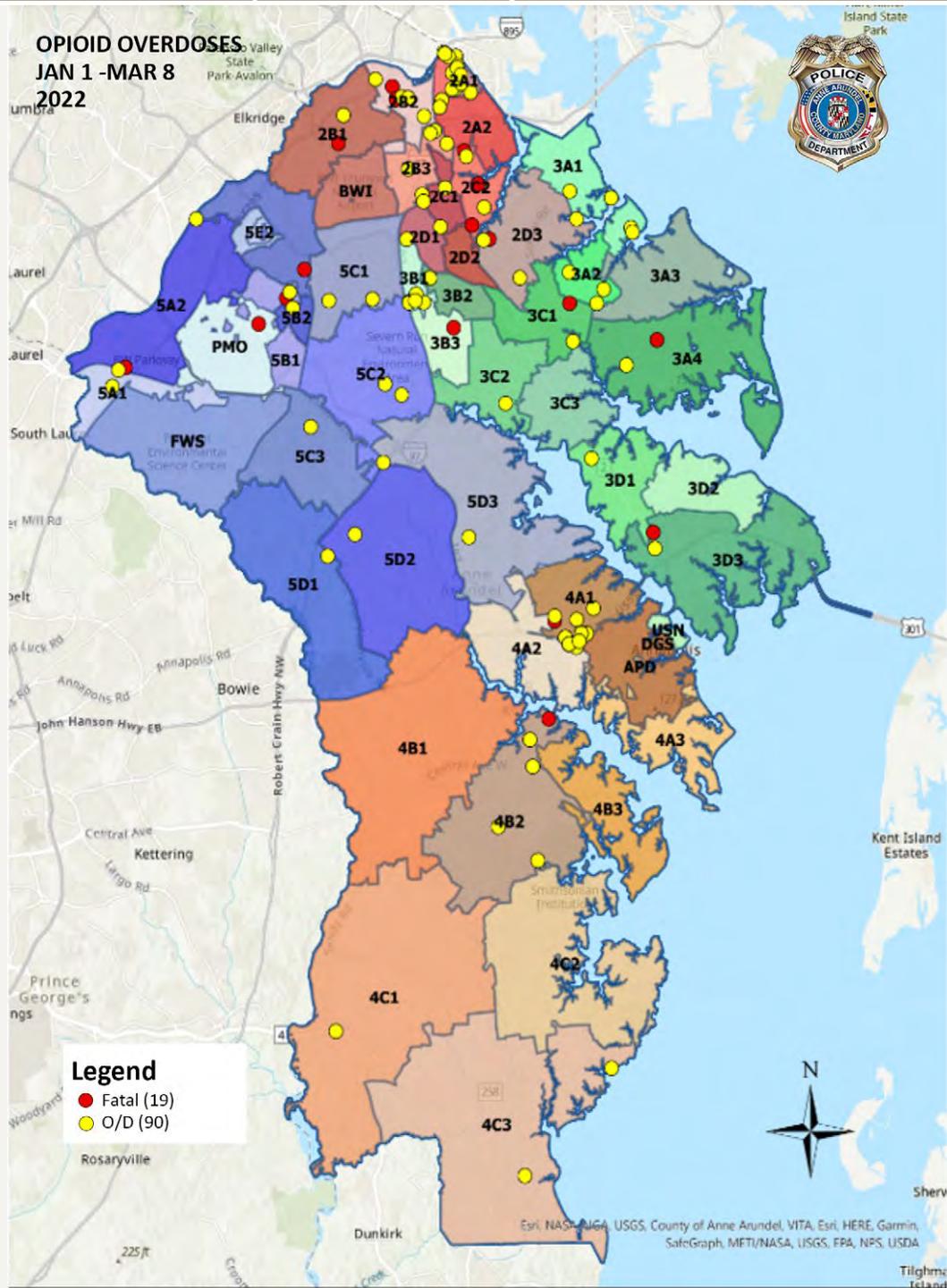
Incident Zip Code	Non-Fatal Opioid Overdoses		Fatal Opioid Overdoses		All Opioid Overdoses	
	Frequency	%	Frequency	%	Frequency	%
Glen Burnie 21061	89	13.8%	24	16.0%	113	14.2%
Annapolis 21401	86	13.4%	10	6.7%	96	12.1%
Brooklyn Park 21225	72	11.2%	18	12.0%	90	11.3%
Pasadena 21122	72	11.2%	16	10.0%	88	11.1%
Glen Burnie 21060	62	9.6%	15	10.0%	77	9.7%
Annapolis 21403	47	7.3%	11	7.4%	58	7.3%
Linthicum 21090	25	3.9%	8	5.4%	33	4.2%
Severn 21144	25	3.9%	4	2.7%	29	3.7%
Edgewater 21037	19	3.0%	4	2.7%	23	2.7%
Hanover 21076	20	3.0%	3	2.0%	23	2.0%

Anne Arundel County Department of Health, 2022



FIGURE 75: OPIOID OVERDOSES, JANUARY 1 - MARCH 8, 2022

Opioid Overdoses, January 1 - March 8, 2022



Anne Arundel County Police Department, 2022

CHAPTER 5 | BEHAVIORAL HEALTH

SUBSTANCE USE, CONTINUED

County emergency department (ED) encounters for opioid overdoses continues to trend downwards. (See Figure 76). This may be due to the very successful Safe Stations program instituted by the county’s mental health agency. This program allows residents to ask for help at any fire or police station. Safe Stations has served over 5,000 residents since 2017. (See Figure 77.)

FIGURE 76: ED ENCOUNTERS FOR OPIOID-RELATED OVERDOSE IN MARYLAND HOSPITALS, ANNE ARUNDEL COUNTY RESIDENTS, 2016-2020

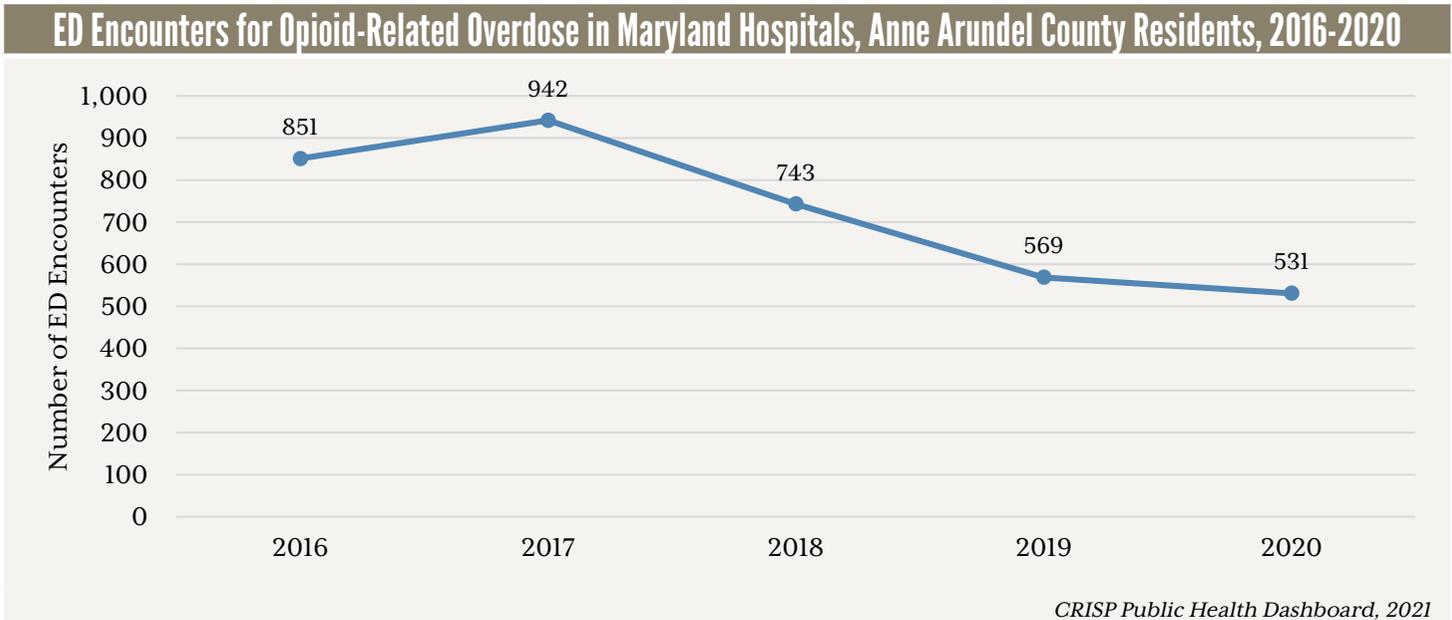
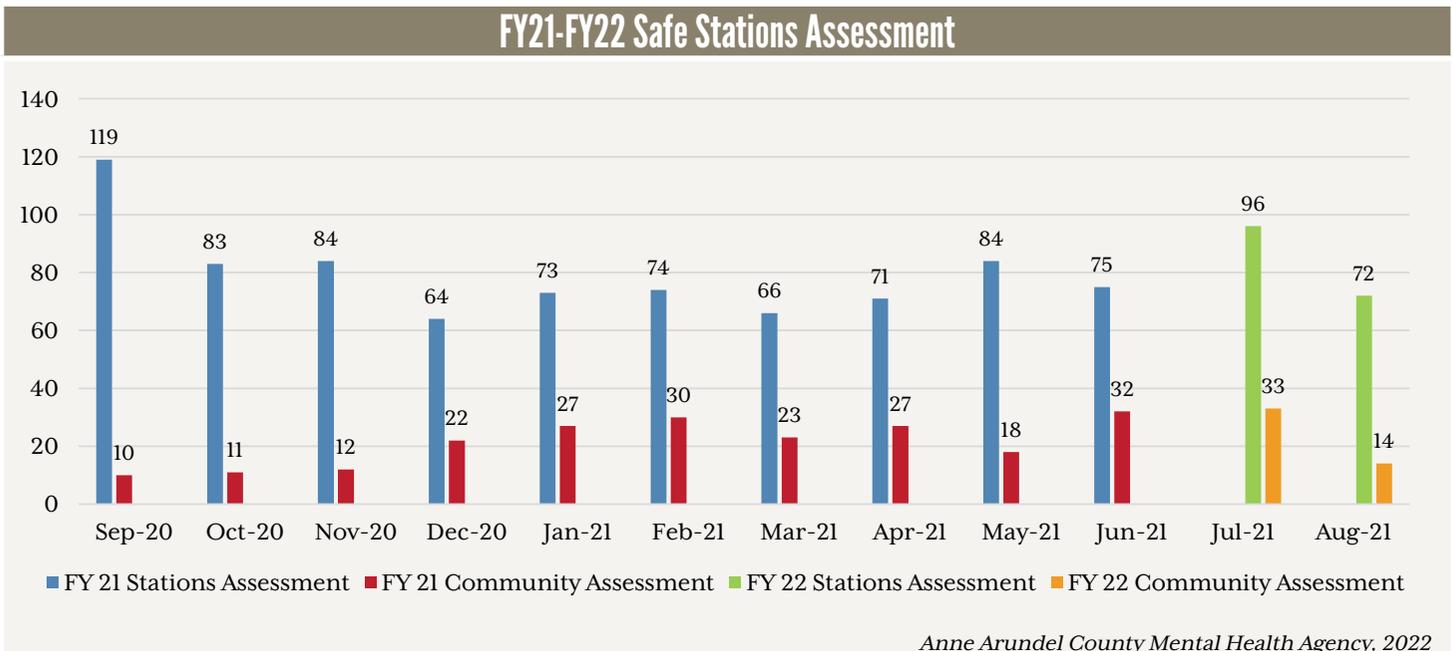


FIGURE 77: FY21-FY22 SAFE STATIONS ASSESSMENT





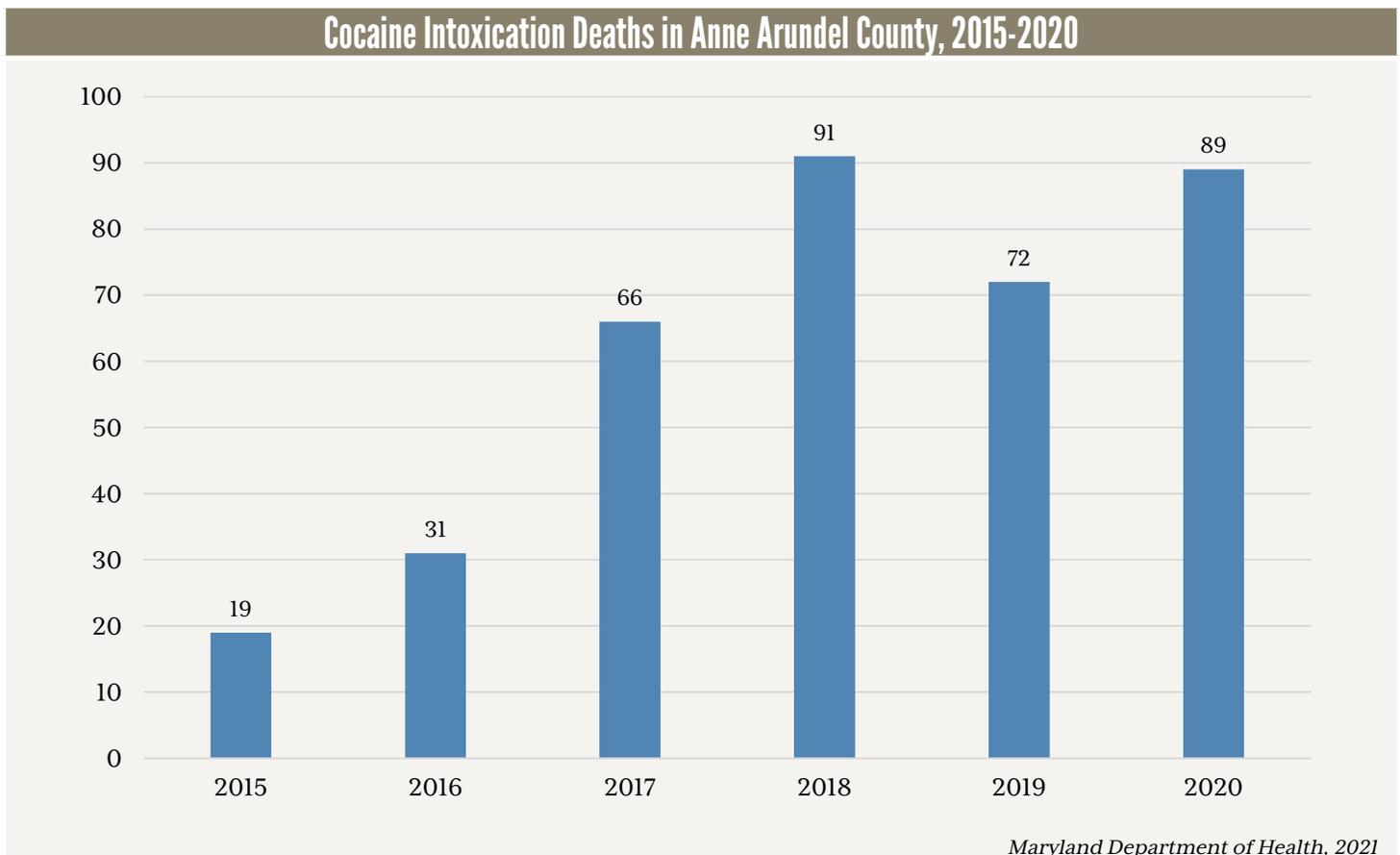
Cocaine and Street Drugs

Between 2015 and 2019, deaths involving cocaine increased 279%, from 19 to 72 deaths. Deaths from benzodiazepines fell to the same level they were at in 2015, with 11 deaths. Much of the increase in deaths involving cocaine and benzodiazepines can be attributed to their combined use with opioids, mainly fentanyl. In fact, more than 85% of cocaine-related deaths and 72% of benzodiazepine-related deaths in Maryland also involved fentanyl (Anne Arundel County Department of Health, 2020). Several participants noted the continuing use of “street drugs” at the neighborhood level. Crack cocaine is still readily available. One participant noted:

"Same old, same old. Crack hasn't gone anywhere. PCP hasn't gone anywhere."

The trend line for intoxication deaths using cocaine continued to rise between 2015 and 2020. (See Figure 78.)

FIGURE 78: COCAINE INTOXICATION DEATHS IN ANNE ARUNDEL COUNTY, 2015-2020

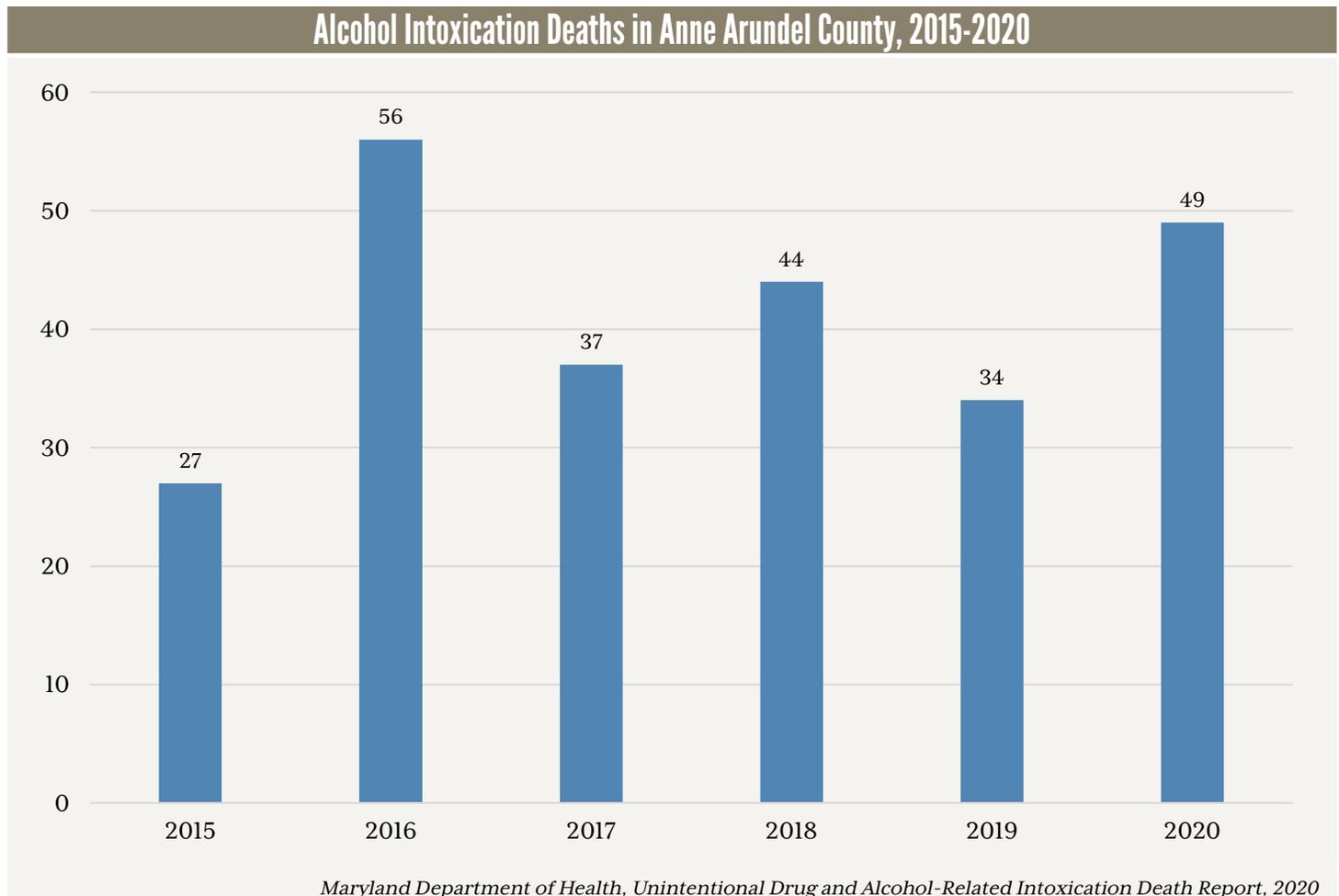


SUBSTANCE USE, CONTINUED

Alcohol

Many participants noted the rise in alcohol use as a response to the pandemic. The county already has a “social norm” of alcohol use, as pointed out in needs assessments since 2012. According to Maryland Department of Health data, alcohol-related deaths continued to rise in the county between 2015 and 2020. (See Figure 79.)

FIGURE 79: ALCOHOL INTOXICATION DEATHS IN ANNE ARUNDEL COUNTY, 2015-2020

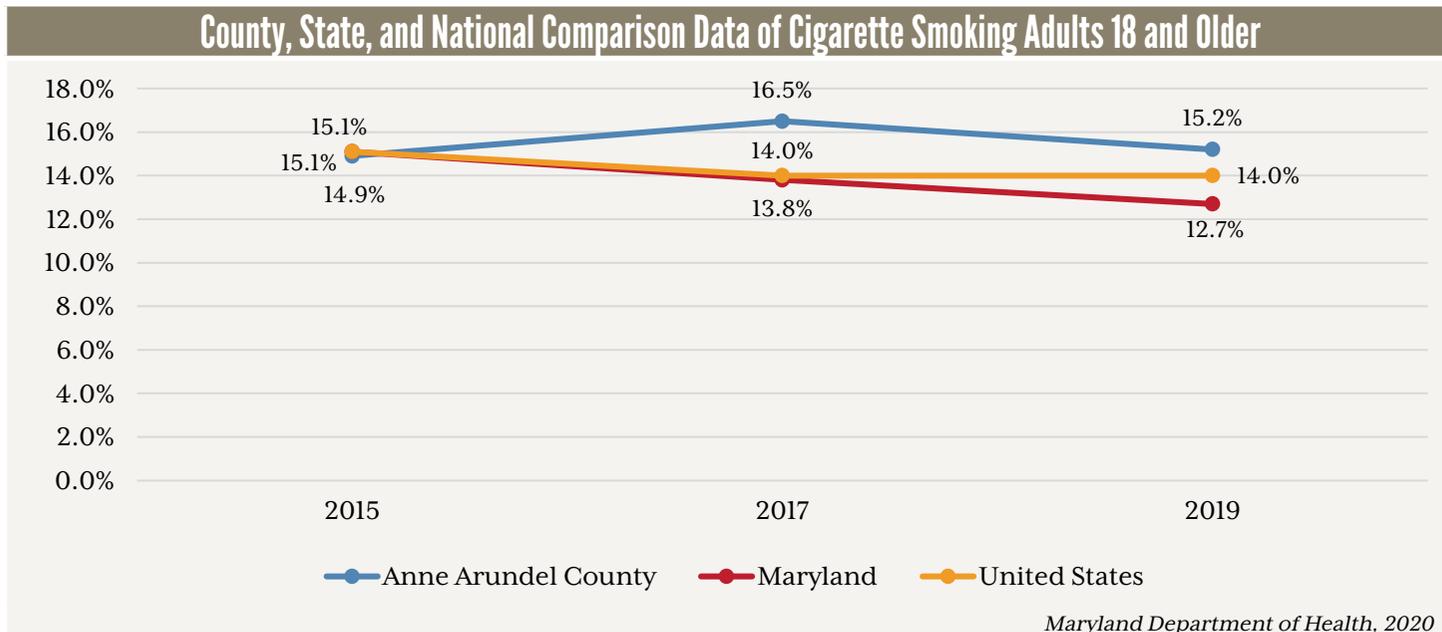


Cigarettes

County, state, and national comparison data for cigarette smoking among those 18 and older is quite disappointing for the county. The rate of smoking in Anne Arundel County continues to be higher than that of the state and nation. Between 2015 and 2019, that trend is increasing. (See Figure 80.)



FIGURE 80: COUNTY, STATE, AND NATIONAL COMPARISON DATA OF CIGARETTE SMOKING ADULTS 18 AND OLDER

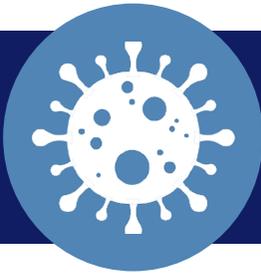


SUMMARY

Rising mental health issues, especially anxiety and depression, were the chief concerns raised by participants in this needs assessment. They are most troublesome at each end of the scale—our children and our seniors. Substance use continues to increase, despite enormous efforts across the various county health agencies. While services have improved since the 2018 needs assessment, there is still too much reliance on programs such as Medicaid to fill gaps in funding. There should be an increased financial commitment from the public and private sectors to address the behavioral health issues impacting so many of our residents, especially given the increase in anxiety and trauma created by the pandemic.

NEEDS & GAPS IN SERVICES

- More providers of psychiatric, geri-psychiatric, and counseling services for the elderly population.
- Support for seniors with co-occurring mental health issues and dementia.
- Increased Spanish-speaking mental health services.
- More residential beds, especially for the adolescent population.
- Further financial support for mental health programming from the private and public sector.
- Increased support at the neighborhood level to address those zip codes where opioid overdoses are highest.
- Commitment to listening and understanding the needs as expressed by residents and those service providers closest to neighborhood residents.
- Higher pay and focus on recruitment and training to address the labor shortages across behavioral health.

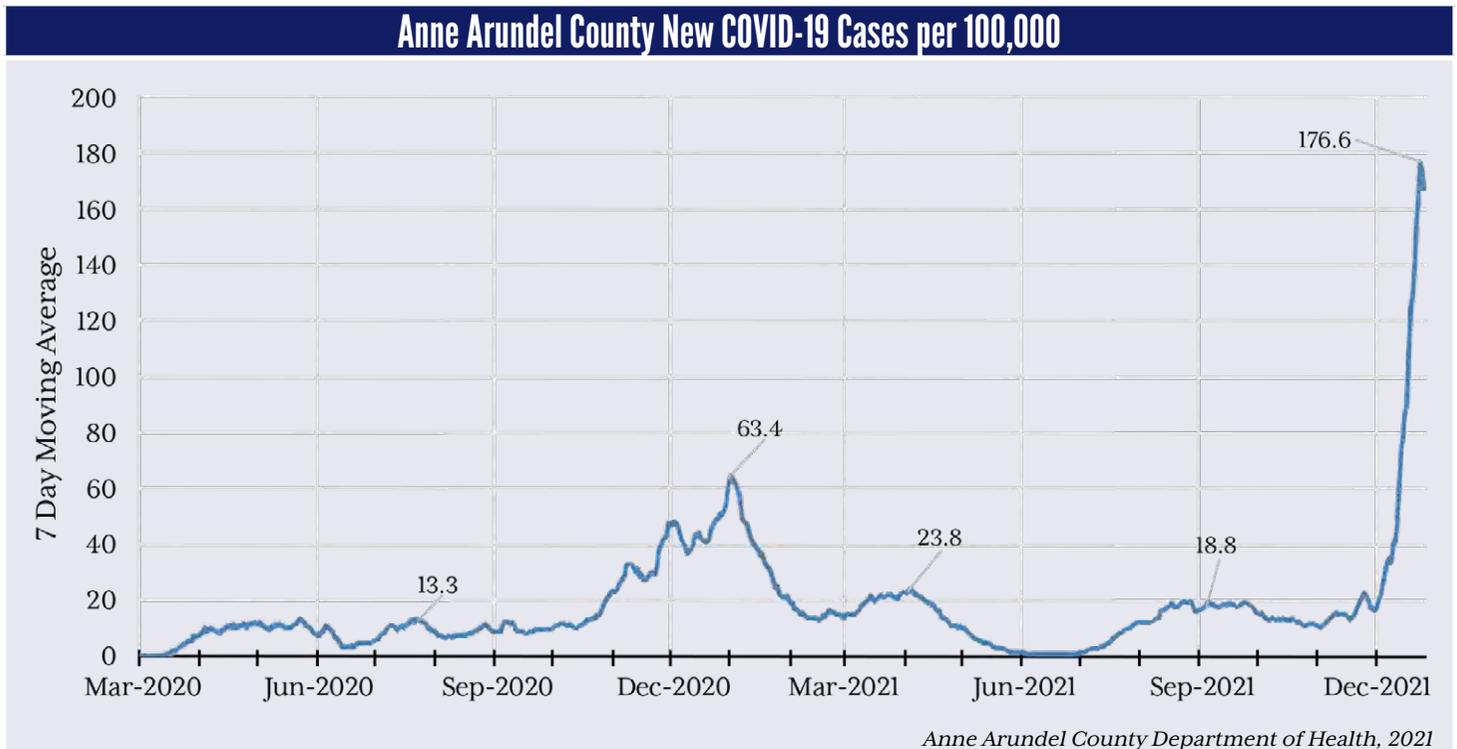


CHAPTER 6 COVID-19 PANDEMIC

IMPACT OF THE COVID-19 PANDEMIC

The pandemic caused by the COVID-19 virus continues to impact every aspect of life for Anne Arundel County residents. According to the CDC (2022), our county has had a total of 99,058 cases as of June 2022 and 1,102 deaths since the pandemic began. Spikes continue to occur related to new variants as we can see from the most recent data showing the Omicron variant in December 2021. (See Figure 81.)

FIGURE 81: ANNE ARUNDEL COUNTY NEW COVID-19 CASES PER 100,000





DISPARITIES RELATED TO COVID-19 AND THE SOCIAL DETERMINANTS OF HEALTH

In Anne Arundel County, health disparities related to race and ethnicity were already noted prior to the onset of the pandemic. As pointed out earlier, economic distress and rising social determinants of health are spread unequally throughout the county, with pockets of low-income and poverty-level families clustered in North and South County areas, parts of Annapolis, and the Meade/Severn area of West County. These areas are disproportionately African American and Hispanic, pointing to a geography and color to county poverty (Anne Arundel County Health Disparities Report, 2020, Anne Arundel County Community Plan, 2020). The geography and color of COVID-19 is clear in the early zip code data for the numbers of COVID-19 cases per 10,000 with Glen Burnie, Brooklyn Park, and Laurel having the highest case rates. (See Figure 82.)

FIGURE 82: COUNTY COVID-19 CASES BY ZIP CODE, 2020

Anne Arundel County COVID-19 Cases, 2020			
Zip Code/Location	Total Cases	Population	Cases/1,000
21060 Glen Burnie	7,239	36,049	201
20724 Laurel	3,504	17,681	198
21225 Brooklyn Park	6,520	33,227	196
21061 Glen Burnie	10,459	55,020	190
21122 Pasadena	10,996	59,664	184
21226 Curtis Bay	1,229	6,699	183
21401 Annapolis	6,969	38,788	180
21144 Severn	6,262	35,680	176
21403 Annapolis	5,267	31,218	169
20776 Harwood	484	2,940	165
20711 Lothian	1,188	7,400	161
21409 Cape St. Claire	3,077	19,304	159
21146 Severna Park	4,364	27,634	158
20765 Galesville	80	530	151
21108 Millersville	2,872	19,136	150
21012 Arnold	3,362	22,746	148

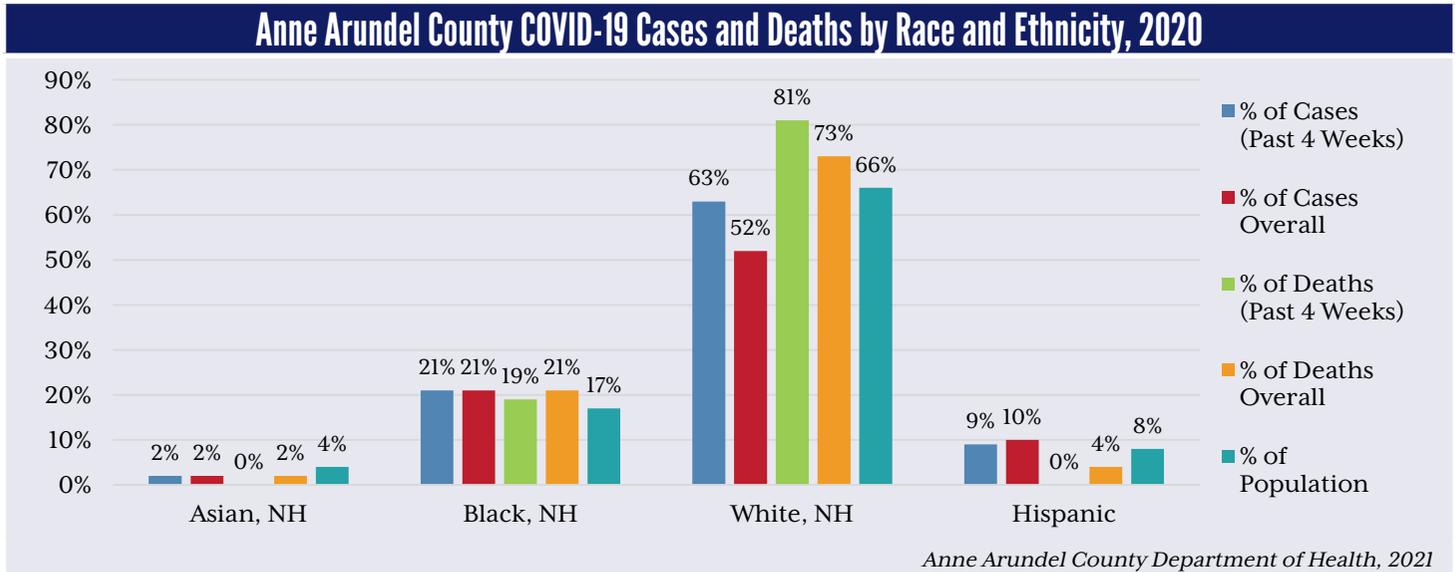
US Census American Community Survey, 2020

As of January 2021, while Whites are 67% of the county's population, they suffered 67% of the COVID-19 related deaths and 46% of the cases. African Americans, at 17% of the population, suffered 27% of the COVID-19 related deaths and 22% of the cases, while Hispanics, at 8% of the population, suffered 5% of the COVID-19 related deaths but 18% of the cases (see Figure 83: Anne Arundel County COVID-19 Cases and Deaths by Race and Ethnicity, 2020 on page 82). While research continues as to why such disparities exist, it is clear that those at the lower end of the economic scale, disproportionately African American and Hispanic, were the least likely to have jobs that allowed work from home and the most likely to find themselves unemployed or have their hours cut. Without good access to transportation, healthy food, and medical care, the burden of the pandemic has fallen squarely on this population.

CHAPTER 6 | COVID-19 PANDEMIC

DISPARITIES RELATED TO COVID-19 AND THE SOCIAL DETERMINANTS OF HEALTH, CONTINUED

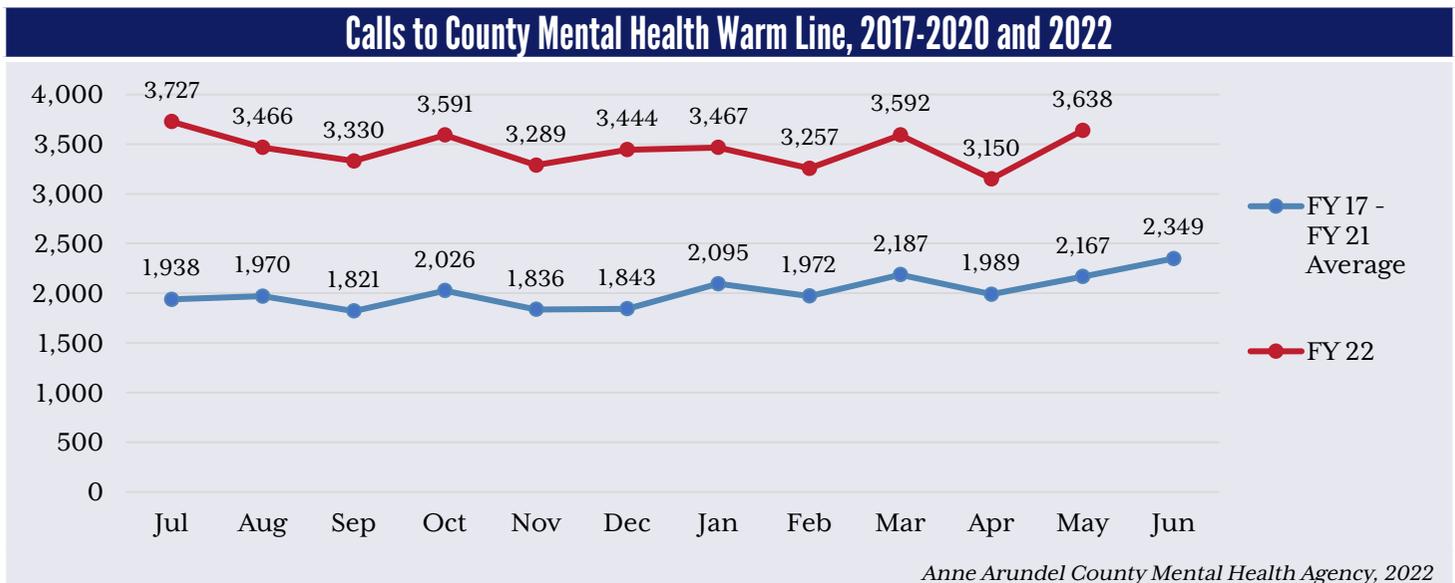
FIGURE 83: ANNE ARUNDEL COUNTY COVID-19 CASES AND DEATHS BY RACE AND ETHNICITY, 2020



INCREASE IN MENTAL HEALTH ISSUES

The numeric data related to the impact of COVID-19 on mental health is currently under collection. However, available data shows that crisis response calls have increased over 30% since the beginning of the pandemic from 2,084 in 2020, to 3,446 in 2022. The Mobile Crisis Team was dispatched 199 times in 2020, which increased to 261 dispatches in 2022 (Anne Arundel County Department of Health, 2022). Most recent data on calls to the County Mental Health Warm Line shows requests for help much higher in 2022 compared to the average for the previous four years. (See Figure 84.)

FIGURE 84: CALLS TO COUNTY MENTAL HEALTH WARM LINE, 2017-2020 AND 2022





The majority of participants in this needs assessment noted the increasing issues seen at every level of our systems and neighborhoods related to the trauma, anxiety, and depression created by social isolation, fear, and grief. As one resident commented:

"There's no question of isolation being an issue, we are social animals. If you isolate us, we become anxious and depressed. Period. It's not a matter of character, or toughness, it's just the way that we are. And so, I think there is a lot more depression and anxiety during this time because of that isolation."

THE EARLY CHILDHOOD (0-5) POPULATION

Throughout the pandemic, parents of young children had the added stress of job instability, the new virtual classroom, and their own mental health. Many young children stayed at home without access to early childhood care. Participants in this needs assessment commented on the increased screen time for the early childhood population during the pandemic. Some child care programs attempted to continue virtually. Pre-K and Kindergarten programming were also offered virtually. Additionally, parents were under stress, trying to work at home and needing to occupy their children. As one participant noted:

"Parents are also using screen time for their little ones so that they can work."

Developmental issues for the 0-5 age population will need to be addressed in the years following the pandemic related to the lack of physical and social contact with other children caused by the pandemic. Children learn gross and fine motor skills when they are in the physical company of other children. Playing and seeing other children play is essential for developing those skills. (Center for Early Childhood Education, 2010.) Children will have missed important lessons related to sharing, body language, and facial expressions. This comment from a stakeholder is typical of many:

"We are going to have more behavior issues and nutrition issues. They'll be behind developmentally...they won't have the vocabulary."

THE K-12 POPULATION

The K-12 population suffered socially, educationally, and emotionally during the pandemic. In the first months of 2020, many low-income children had no access to virtual learning until Chromebooks were provided by the school system. Even then, those already suffering learning barriers related to low-income and poverty were most likely to have minimal or no internet service. The learning loss during the pandemic, although uneven, is real and will need to be addressed. As one provider commented:

"The pandemic has most definitely highlighted and increased educational disparity. Many of the clients I work with are returning to school with little to no educational gains since March, 2020."

THE K-12 POPULATION, CONTINUED

Loss and grief related to COVID-19 were common for some youth and their families but youth also lost social interaction, and many of the markers of educational passage, such as proms and graduations, were canceled. Several providers noted that the return to school was largely focused on practicalities and educational “catch up.” Some participants commented on the need to pay attention to social/emotional issues arising from almost two years of isolation. As one said:

"I feel like we went back to everything the same as it was before. I feel like we went straight from the pandemic right back into school as usual, and I thought there was going to be more focus on that social emotional piece for the children."

VIOLENCE

Participants in this needs assessment also commented on what they believe to be an increase in domestic violence, child abuse, and neglect during the pandemic. There are no available numbers for domestic violence, but the number of child protection investigations decreased for 2020. Local experts believe those numbers relate more to the fact that schools were closed. Teachers tend to act as the eyes and ears of the child welfare system and are often the first to spot an abused child. Reports for child abuse in 2020 were almost half that of the previous year. (See Figure 85.) There was an increase in the number of newborns suffering from substance abuse symptoms in 2020, matching anecdotal data related to the general rise in substance use during the pandemic.

FIGURE 85: ANNE ARUNDEL COUNTY CHILD WELFARE KEY INDICATORS, 2014-2020

Anne Arundel County Child Welfare Key Indicators, 2014-2020							
	2014	2015	2016	2017	2018	2019	2020
Families Receiving in-Home Services	483	607	662	753	625	587	545
New Children Receiving in-Home Services	1,005	1,016	1,139	1,429	1,196	1,093	997
New CPS Accepted Investigations	2,400	2,154	2,161	2,185	2,243	2,917	1,886
New Substance Exposed Newborn Assessments	74	169	197	174	191	145	158

Anne Arundel County Department of Social Services, 2021

Participants reported that workplace violence and the threat of violence is also increasing. Health care workers commented on the increased level of frustration and anger they experience in their patients. This is one more issue exacerbating the current labor shortages. The hospitals report daily occurrences of violence against nurses. Here is a typical comment:

"We just had a worker that's going out now on five weeks, at minimum five to eight week leave because she was assaulted at the bedside and it triggered a trauma response that she's going to need some professional help for. So, she is leaving now to get that professional help. And that's one more not at the bedside."



THE SENIOR POPULATION

Seniors have been disproportionately impacted by the pandemic. The senior centers closed and many seniors became housebound due to the increased risk of serious consequences from COVID-19 exposure. Consequently, they became more isolated. Without in-person care and with increased isolation, some seniors' chronic health conditions worsened. Fortunately, as the county moved to virtual communication, the county's Department of Aging increased focus on reaching out to seniors, helping with Zoom lessons and other issues related to technology. Many health and wellness programs moved to a virtual platform. Participants reported that seniors are now more comfortable with the virtual world than they were prior to the pandemic. As one noted:

"They can click on a link, while they may not be able to drive, or they are too stiff. But they can still move while seated. So that has been a huge improvement for them and when we discussed plans to resume in person, they asked not to. They prefer to stay virtual because, it would take three to four hours of their day to get ready to go to an in-person class. While now, within five minutes they can connect to class and now they can do two or three classes a day."

Providers of services to the elderly were very positive about virtual medical care for their seniors. Many lack any access to transportation, have physical issues that make movement difficult, and may have difficulty keeping in-person scheduled appointments. However, some health care providers worried that they were no longer getting the opportunity to physically see their patients for routine and/or important physical examinations.



CHAPTER 6 | COVID-19 PANDEMIC

THE DISABLED POPULATION

Participants in this needs assessment agreed about the lack of services for the disabled prior to the pandemic. Transportation is a huge issue for the population, as is access to buildings, including the lack of accessible doors in some doctor's offices and health care agencies. Eligibility programs for the disabled already had long waiting lists. Now there is also a shortage of care providers, especially for parents needing respite. For those who are also low income, it is difficult to find any agency willing to pay for support in the home, including aides and mechanical supports. Many of those issues have been exacerbated by the pandemic. Like seniors, disabled residents became more isolated and less likely to receive any in-home care. As one provider noted:

"They're not able to leave their home to access socialization and other activities. They became homebound. They were not able to go places, so they lost out on those resources and socialization. Many became recluses because they couldn't do the things that many other people could do."

When schools closed for the young, disabled population, many of the services they and their parents relied on for support and comfort in the school setting were no longer available. Parents and grandparents, who might also be working from home, became 24-hour providers of care. As one noted:

"My grandson is on the (autism) spectrum and occupational therapy is also a service that he requires, and he was six at the time, and I was just trying to help, help him do whatever it was his occupational therapist would have done to work on the skills that he would have been learning as a kindergartener; we tried the best we could."

THE VIRTUAL WORLD

Telehealth services were rated highly in this needs assessment. They have created more access for our seniors and disabled population and for those low-income residents who lack transportation and who do not get paid for the hours they must use to attend an appointment. The ability to virtually connect is most important during a time of labor shortages. The capacity to attend virtually has increased attendance at parent evenings in the school system, at health-related seminars, and in general education programs. However, alarm bells were sounded by primary care providers related to their need for some hands-on experience with their patients and for those working with the early childhood population and youth. As one provider noted:

"I'm getting all sorts of refill requests from people who have not been seen in over a year. They are supposed to be seen every six months for their condition but they just bailed out because of the pandemic. And I understand that, but I always tell people, I'm not going to give you another 90-day refill; you have to come in. I can't not see you for two years and be doing a proper job caring for you."



LABOR SHORTAGES

While there were shortages of nurses, primary care doctors, and behavioral care professionals prior to the pandemic, those shortages are now at crisis level. For medical professionals, the ongoing trauma of the pandemic has become exhausting. Many are frustrated, tired, and burnt out, leading to an exodus from the profession. According to the Anne Arundel County Department of Health (2022), 20% of health care workers have left their jobs since the beginning of the pandemic in 2020. Additionally, there are shortages at every level of care, including food preparers and custodians. Every health care provider commented on the acute labor shortages they are facing. As one noted:

"The number one health care issue is workforce shortages to care for patients. I worry that we won't be able to get to somebody who is trying to access care in time for them to get what they need. Or that we will get to a point where we will have to choose who gets services, not because we want to, but because we have to prioritize. We're seeing it across the industry."

Concern about labor shortages crossed every sector of participants responding to this needs assessment. The school system has a shortage of teachers, teacher's aides, canteen workers, and custodians. The child care industry is seeing a huge reduction in available places related to a shortage of teachers and caregivers. Both police departments serving the county have shortages of employees at all levels, as do our human services agencies and nonprofit providers. Participants suggested these shortages are due to the enormous fatigue created by COVID-19 for those employees serving the public, especially at a time when county residents are under stress and therefore irritable and impatient. For some workers, COVID-19 offered time to reflect on their career choices and some are choosing less stressful employment.

Salaries in Anne Arundel County lag behind our neighbors in Montgomery and Howard Counties. For example, certified child care workers in Anne Arundel County earn less than those working without qualifications in the fast-food industry. As one provider commented:

"What can we do to get quality staff, and not only quality staff but to pay them more when they can go down the street to Chick-fil-A or Sam's Club where they're going to make \$15 an hour when we can't afford to pay them more than \$12, and they're certified?"



CHAPTER 6 | COVID-19 PANDEMIC

COLLABORATION

Participants in this needs assessment commented on the increased collaboration across the county that was born as a result of the pandemic. County and city government representatives worked shoulder to shoulder with hospitals, nonprofit agencies, and the private sector to develop innovative programming and strategies to combat the damage wreaked by COVID-19. As one noted:

"When you talk about Anne Arundel County, you don't realize how much we have even if it's not in dollar signs, maybe in relationships. So, for me it's just how we all get along and how we don't work in silos."

Notable examples of that collaboration include vaccine clinics to address economic and racial disparities, Chromebook and internet access for low-income youth, food pantries, and food and medical supplies deliveries for low-income COVID-19 positive families without transportation, to name just a few. The county now has a coordinated system of food and baby pantries to reduce the immediate need. As one participant commented:

"I think a lot of new ideas were put out there and especially working in collaboration with other organizations and groups. You've got your blinders on when you're doing your job but then when you have to think about feeding people, well how are you going to do that? It required working with partners to accomplish. I do think there are a lot of innovative ideas that have happened, too."

Several service providers noted, also, that the spirit of collaboration is beginning to decline after two years, as lockdowns end and emergency needs are met. As one said:

"It felt like the agencies were being more collaborative with one another; they weren't working in silos, like we normally do. Now we're back to 'these are my families; these are the people that I work with.' But before it was like, 'well let's try to get as many families as we can,' so, the barriers were down a little bit and we were able to access more and communicate more and work with other agencies, but now the walls are back up."





SUMMARY

Much of the quantitative data that will help us understand the true impact of the pandemic is still to be gathered. The current shift in the economy related to inflation, high gas prices, and general food costs are felt most by the residents who were already struggling to survive. Much of the federal programming that allowed for food pantries, eviction prevention, and general subsidies are being terminated. Many providers noted this as a “perfect storm” to contend with.

The COVID-19 pandemic has changed the world, the nation, and our county. Residents in every sector and age group of the county have been traumatized by lockdowns, uncertainty, and changing information. Yet, we have learned to adapt. Seniors are learning skills that allow them to receive care and socialize virtually. Our children are increasingly adept in a technological world. Most importantly, the public and private sector have learned to collaborate as our county moves through COVID-19 related changes to life in our county.

NEEDS & GAPS IN SERVICES

- A countywide and collaborative focus on labor shortages to include the public and private sectors.
- Increased support for telehealth and tele-behavioral health.
- Increased support for high-speed internet access, countywide.
- Increased focus on trauma-informed care and settings, especially for children and seniors.
- Increased understanding of the racial, economic, and health disparities highlighted by COVID-19.
- A countywide focus on the social determinants of health at the neighborhood level.
- Recognition of the importance of inter- and intra-agency/sector and resident collaboration, not just when there is an emergency.
- Increased focus on the 0-5 age population related to spending the majority of their short lives living with the consequences of a global pandemic. Quantitative data is not yet available but early childhood participants in this needs assessment believe there will be consequences related to the developmental stages where social interaction is most important.



HOW YOU CAN HELP

Community needs assessments such as this one not only examine the gaps in community services, but also offer opportunities for positive change—change that takes place with a community working together. You can help tackle the challenges outlined in this most recent needs assessment, *Poverty Amidst Plenty VII: Moving Forward Together*, by contributing to a grantmaking fund at the Community Foundation of Anne Arundel County (CFAAC) such as the Fund for Anne Arundel.



The Fund for Anne Arundel was established in 2017 to help meet the critical needs of the county and improve the quality of life for all county residents, now and in the future. The last community needs assessment report, *Poverty Amidst Plenty VI: On the Road to Progress for All*, presented an opportunity to develop a strategic and comprehensive grantmaking approach to address the needs outlined in that report. For that reason, Fund for Anne Arundel grantmaking has supported nonprofits that prioritize the physical, mental, and behavioral health of children and families for the past three years.



Moving forward, the Fund for Anne Arundel's focus can change to strategically align its grantmaking with the county's most critical needs. As a partially endowed fund, the Fund for Anne Arundel will continue to make a positive impact on our community now and in perpetuity.

CFAAC has Donor Advised, Designated, and Field of Interest Funds, as well as Agency Endowments, that support areas of need that are highlighted in this needs assessment report. Giving to these funds is one of the ways you can help fund solutions and work together to move Anne Arundel County forward. Visit www.cfaac.org to find out more about the Fund for Anne Arundel and other CFAAC Funds.



Photos Top to Bottom

CFAAC presents Fund For Anne Arundel Grants to: The Complete Player Charity; Seeds 4 Success; Court Appointed Special Advocates (CASA) of Anne Arundel County; Girls on the Run of the Greater Chesapeake

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ABOUT CFAAC

Established in 1998, the Community Foundation of Anne Arundel County (CFAAC) has grown to be one of the largest funders of nonprofit organizations in Anne Arundel County. CFAAC is a tax-exempt, 501(c)(3), publicly supported philanthropic organization with the long-term goal of building permanent funds that provide support to local nonprofit organizations through grants and special projects. We partner with our donors so that they can reach their philanthropic goals. Our mission is to inspire and promote giving in Anne Arundel County by connecting people who care with causes that matter. CFAAC has more than \$25 million in assets intended for community grantmaking. Over the last 10 years, our active funds have more than doubled and our community support has grown from \$400,000 to more than \$4 million in annual grantmaking. In the last decade, we've distributed more than \$23 million dollars to local nonprofits.

CFAAC offers a variety of educational programs to the community and is a significant contributor to important philanthropic leadership initiatives; helping to harness the power of collective giving to address persistent community needs today and for generations to come. We partner with donors to maximize the impact of their philanthropic investments for the long-term and make charitable giving easy, effective and accessible to everyone.

CFAAC publishes a community needs assessment report every three years to inform our donors, our partners, and our county's policymakers about our county so that they understand the needs and can decide how they can help tackle those needs to move our county forward. We rely on this report to not only make strategic decisions about our grantmaking but also to provide educational programs and information to community members. With this knowledge, community members can better understand the issues that affect our community as they make decisions about how to best support the nonprofits that are on the front lines working to improve the lives of all who live, work, and play in Anne Arundel County.

Photos Top to Bottom

Members of the CFAAC 2022 Board of Trustees

Pamela Brown, Ph.D. presenting *Poverty Amidst Plenty VI: On the Road to Progress for All* in 2019

Participants of CFAAC's Community Impact Speaker Series: Strategic Leadership for Nonprofit Leaders, presented in partnership with the Junior League of Annapolis, Inc.

CFAAC presents a scholarship from the Lance Corporal Eric Herzberg, USMC and Lance Corporal William Taylor Wild, IV, USMC Scholarship Fund

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