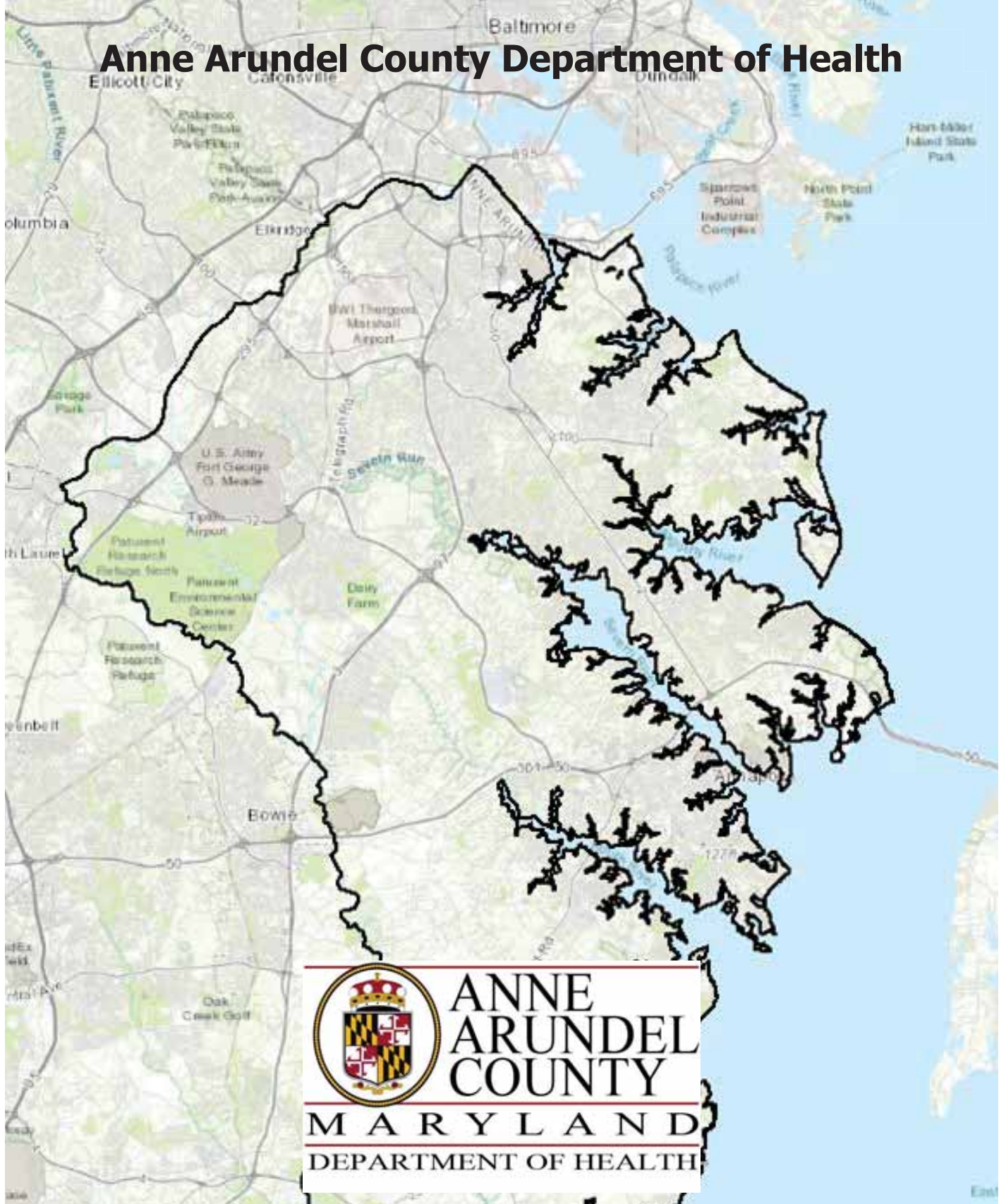


# Anne Arundel County Department of Health



## Report of Community Health Indicators, October 2020



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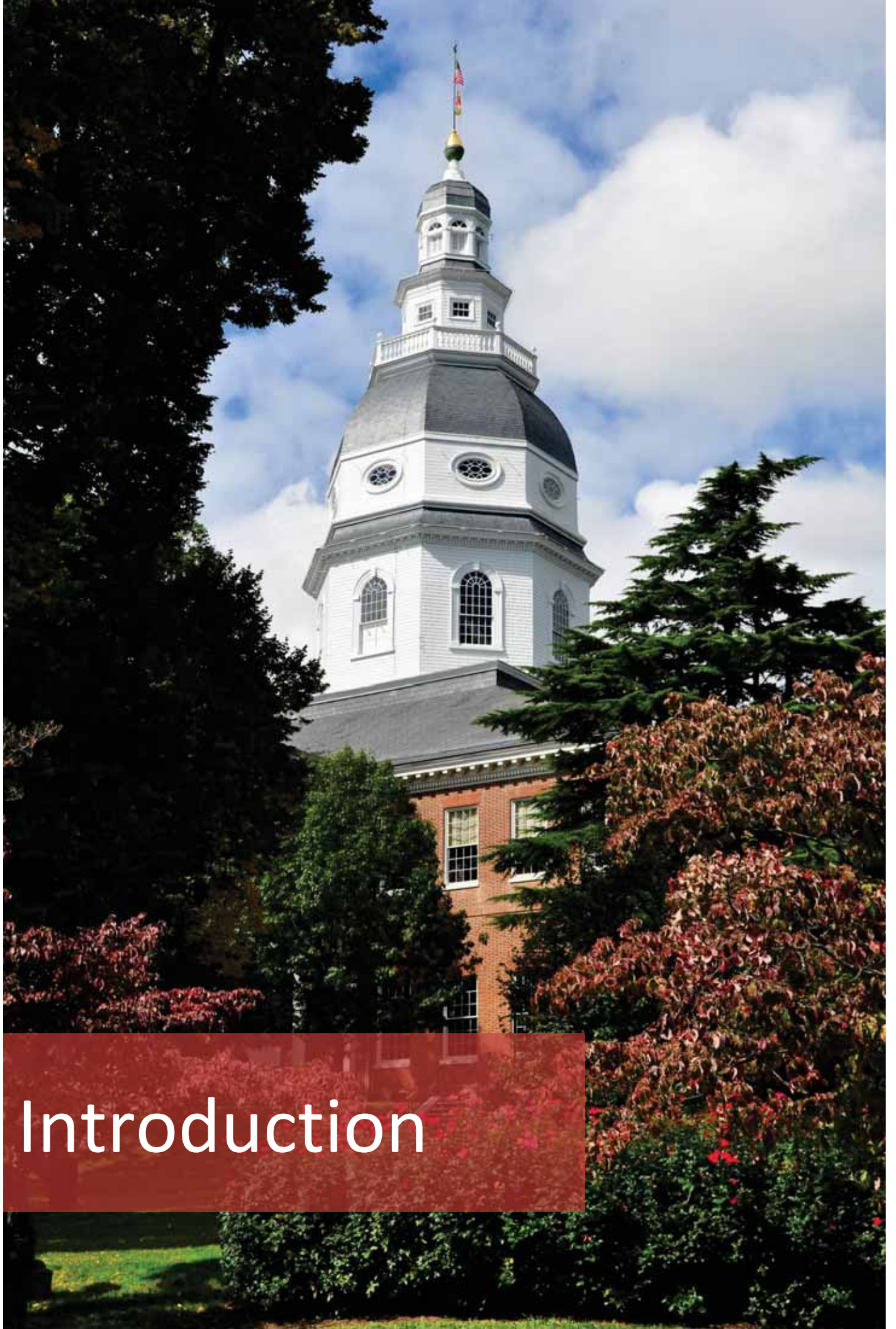
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# Introduction



# County Executive's Message

I am pleased to present the Anne Arundel County Department of Health's 2020 Report of Community Health Indicators. I must begin by expressing my pride, gratitude and absolute reverence to every Department employee. You and your leaders, from Dr. Nilesh Kalyanaraman to our most recent contact tracing hires, have stepped up in a time of crisis and saved lives. So, thank you.

Our work together in response to COVID is not over, but we should celebrate what we've done. Dr. Kalyanaraman and I began hosting regular town halls in March to keep communities informed. We became the only state jurisdiction, and one of few in the country, to initiate universal contact tracing and case management from day one to slow the spread and assist impacted families. We set ambitious testing goals targeting underserved communities, and met these goals. We implemented a massive effort to conduct fair and widespread enforcement of COVID regulations. And we were the only county in the state to establish clear and specific school reopening metrics to take the politics out of the reopening debate.

The pandemic reminded us what we already knew. We have oppressive social determinants of health, like income, housing, education and racism preventing some in our communities from fulfilling their potential. Minorities were hit hardest, and low wage workers lost the most income. I have been proud of the way our Department has confronted these issues, even before the virus struck.

We declared both racism and gun violence public health issues this year. We created the new Office of Health Equity and Racial Justice, and implemented a key recommendation of the Gun Violence Prevention Task Force by creating the new Gun Violence Intervention Team. We also brought back the Opioid Intervention Team.

We also engaged the public. The October 1 launch of Healthy Anne Arundel was a huge success, but so was the participation from day one of the COVID Health Equity Task Force. Participants in the virtual Power of Change youth partnership meetings can attest to the energy and power of these efforts.

I often say that government should be judged not on the size of its tax base but on the health of the people it serves. At the end of the day, it's what we all care about most. It transcends all politics. You in the Department understand that statement, but the good news is that your peers throughout county government and the residents you serve are coming to the same conclusion. That's how I know that we can and will make our county The Best Place - For All!

Respectfully submitted,

Steuart Pittman  
County Executive



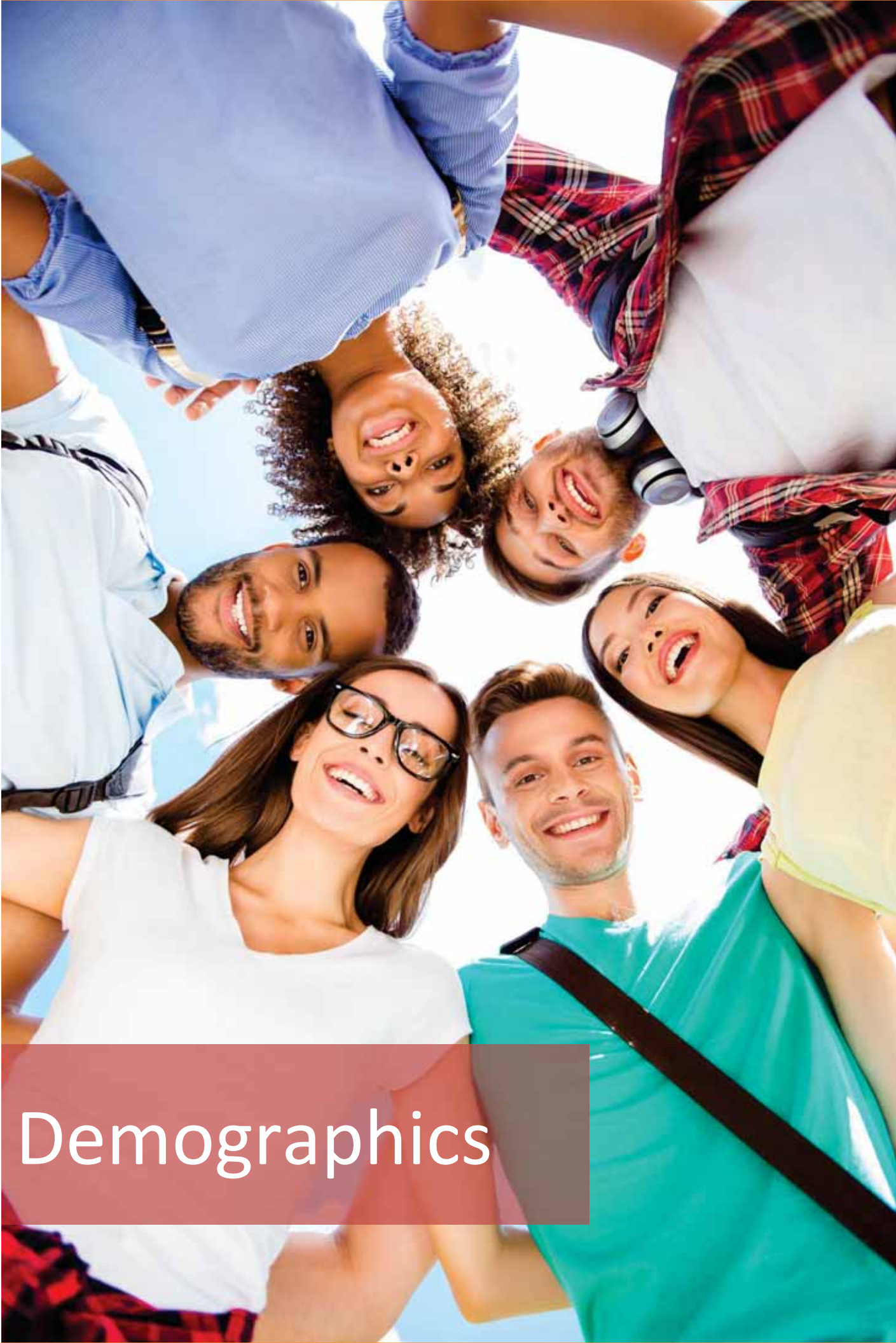
# Health Officer's Message

Anne Arundel County's public health concerns have changed over the years. As the Department of Health celebrates its 90<sup>th</sup> anniversary, one issue has remained constant—achieving health equity. Whether we are addressing cancer prevention, diabetes, substance use or COVID-19, equitable prevention and treatment is the underlying goal. Digging deeper, we know that your race and where you live affect your access to housing, education, healthy food and health. These social determinants of health have a large impact on health outcomes and disparities. This report card lays out the most important data for our county: health outcomes, social determinants of health, and specifics for a range of conditions. This data pulls all of our lived experiences together to paint a broad picture of the health of our county

This year has been challenging like no other year in recent memory. The COVID-19 global pandemic is the worst we've seen in over a century. It has taken a toll on our health, finances and well-being. Public health now takes center stage in our daily life. Every day we see the importance of data, health education, and public health interventions like testing and contact tracing. Over the coming months we'll learn more about health practices and scientific advances that will steadily improve our ability to prevent COVID-19 and ultimately move forward.

This pandemic has highlighted the role of data, preventive practices and health equity as core concerns for us as a county. As we head into the next decade, the Department of Health continues to focus on attaining longer lives free of preventable disease, injury and premature death for all those who live, work and play in our county.

In Health,  
Nilesh Kalyanaraman, MD, FACP  
*Health Officer*



# Demographics



# Demographics

The population of Anne Arundel County in 2018 grew by about **4.7 percent** since 2017. In comparison, the population of the state of Maryland decreased by about 0.2 percent and the United States population grew by 0.4 percent.

2018 Estimates	Anne Arundel	Maryland	United States
<b>Population</b>			
Total Population Size	576,031	6,042,718	327,167,439
Male	49.6%	48.5%	49.2%
Female	50.4%	51.5%	50.8%
<b>Race and Ethnicity*</b>			
White, NH	67.1%	50.2%	60.2%
Black/African American, NH	16.5%	29.5%	12.3%
Hispanic	8.1%	10.4%	18.3%
Asian or Pacific Islander, NH	3.8%	6.2%	5.8%
American Indian, NH	0.2%	0.2%	0.7%
<b>Age</b>			
Under 5 Years Old	6.2%	6.0%	6.0%
18 Years and Over	77.8%	77.9%	77.6%
65 Years and Over	14.7%	15.4%	16.0%
Median Age (Years)	38.2	38.8	38.2

NH-Non-Hispanic

\*Percents will not sum to 100.

Data Source: U.S. Census Bureau: 2018 Population Estimates; 2018 American Community Survey 1-year Estimates.

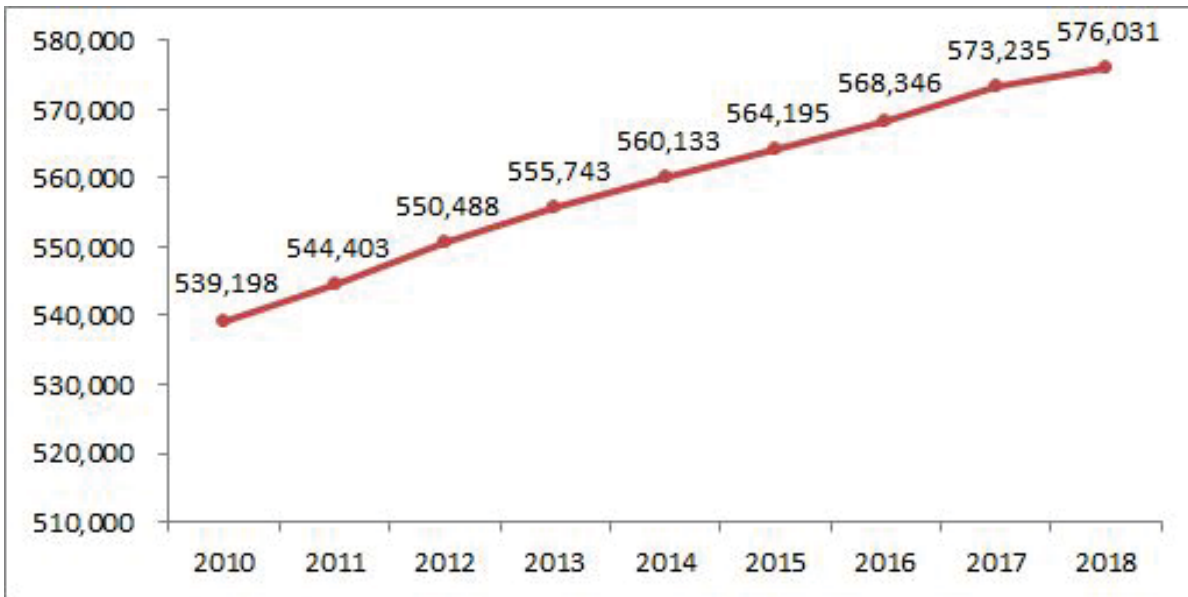




# Demographic Trends

The Black, Hispanic, and Asian/Pacific Islander populations all grew as a percentage of the population continuing a trend towards increased racial and ethnic diversity.

**Anne Arundel County Population, 2010-2020**



<b>Population</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Total Population Size	568,346	573,235	576,031
Male	49.5%	49.6%	49.6%
Female	50.5%	50.4%	50.4%
<b>Race/Ethnicity</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
White, NH	70.3%	68.2%	67.1%
Black/African American, NH	15.6%	16.3%	16.5%
Hispanic	7.0%	7.9%	8.1%
Asian or Pacific Islander, NH	3.6%	3.7%	3.8%
American Indian, NH	0.2%	0.2%	0.2%
<b>Age</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Median Age (years)	38.3	38.5	38.2

Data Source: U.S. Census Bureau: 2010-2018 Population Estimates; U.S. Census Bureau: 2016- 2018 American Community Survey 1-year Estimates.



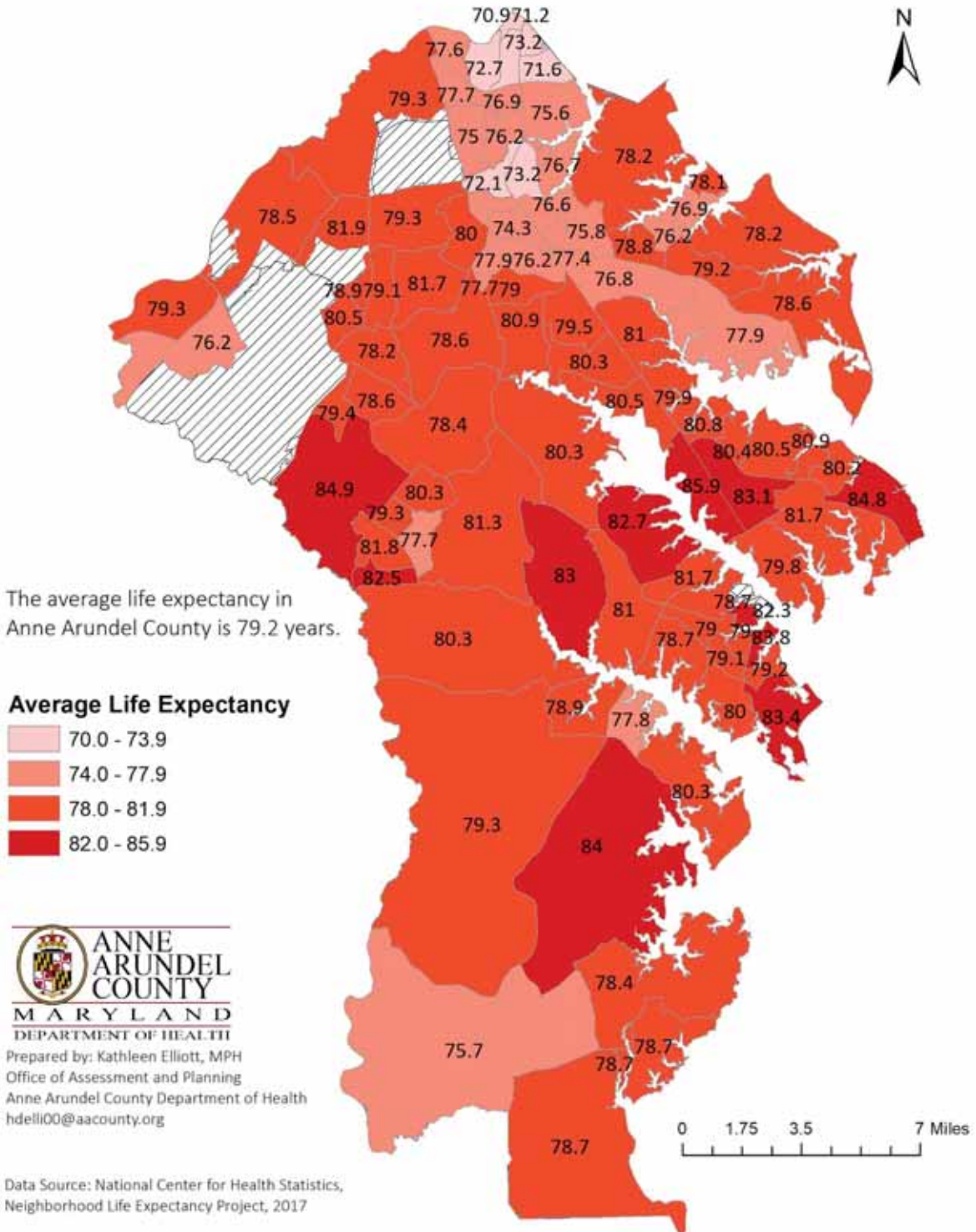
# Health Outcomes



# Life Expectancy

Life expectancy, which is the average age people in a population can expect to live, is affected by the social determinants of health. In Anne Arundel County, there is a 15 year difference between the census tracts with the lowest life expectancy (70.9 years) and the highest life expectancy (85.9 years).

Average Life Expectancy by Census Tract, Anne Arundel County, 2010-2015

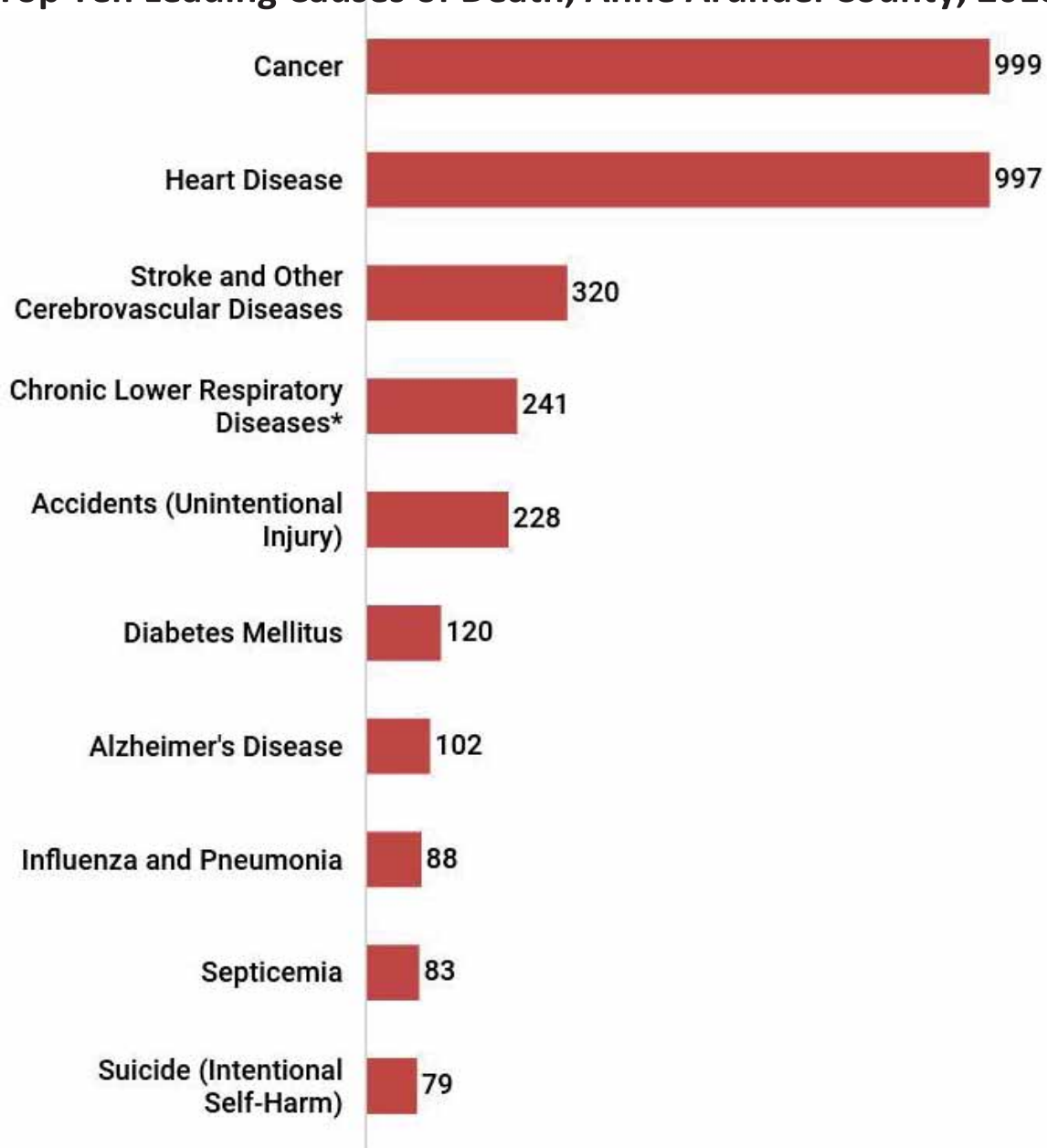




# Leading Causes of Death

In 2018, there were **4,637 deaths** in Anne Arundel County and life expectancy was **79.2 years**. The mortality rate was **727.4 deaths** per 100,000 population which is higher than both the Maryland rate of 717.5 deaths per 100,000 and the county rate of 713.4 deaths per 100,000 in 2017. Cancer was the leading cause of death, followed closely by heart disease. Notably, suicide decreased in the ranking as a leading cause of death from number eight to number ten in the rankings.

## Top Ten Leading Causes of Death, Anne Arundel County, 2018



\*Chronic lower respiratory diseases (CLRD) include chronic obstructive pulmonary disease and asthma.  
Data Source: Maryland Department of Health, Vital Statistics Administration, 2018 Annual Report.



# Leading Causes of Death by Race/Ethnicity

In 2018, there was a total of 4,627 deaths. Of those deaths, 3,757 were White non-Hispanic, 685 were Black non-Hispanic, 88 were Hispanic and 97 were Asian non-Hispanic. Cancer was the leading cause of death for White non-Hispanic, Hispanic and Asian non-Hispanic groups in Anne Arundel County whereas heart disease was the leading cause of death for the Black non-Hispanic group.

## Leading Causes of Death by Race/Ethnicity, Anne Arundel County, 2018

White, NH	Black, NH	Hispanic	Asian, NH
Cancer 813 (21.6%)	Heart Disease 146 (21.3%)	Cancer 15 (17.0%)	Cancer 24 (24.7%)
Heart Disease 813 (21.6%)	Cancer 145 (21.2%)	Heart Disease 14 (15.9%)	Heart Disease 19 (19.6%)
Cerebrovascular Disease 271 (7.2%)	Cerebrovascular Disease 38 (5.5%)	Accidents 12 (13.6%)	Cerebrovascular Disease 8 (8.2%)
CLRD* 211 (5.6%)	Diabetes 31 (4.5%)	Suicide 4 (4.5%)	Accidents 4 (4.1%)
Accidents 186 (5.0%)	CLRD* 28 (4.1%)	Cerebrovascular Disease 3 (3.4%)	Diabetes 4 (4.1%)

NH- non-Hispanic

Data shown as number of deaths (percent)

\*Chronic lower respiratory diseases (CLRD) include chronic obstructive pulmonary disease and asthma.

Data Source: Maryland Department of Health, Vital Statistics Administration, 2018 Annual Report.

# Health Equity and Social Determinants of Health





# Health Equity

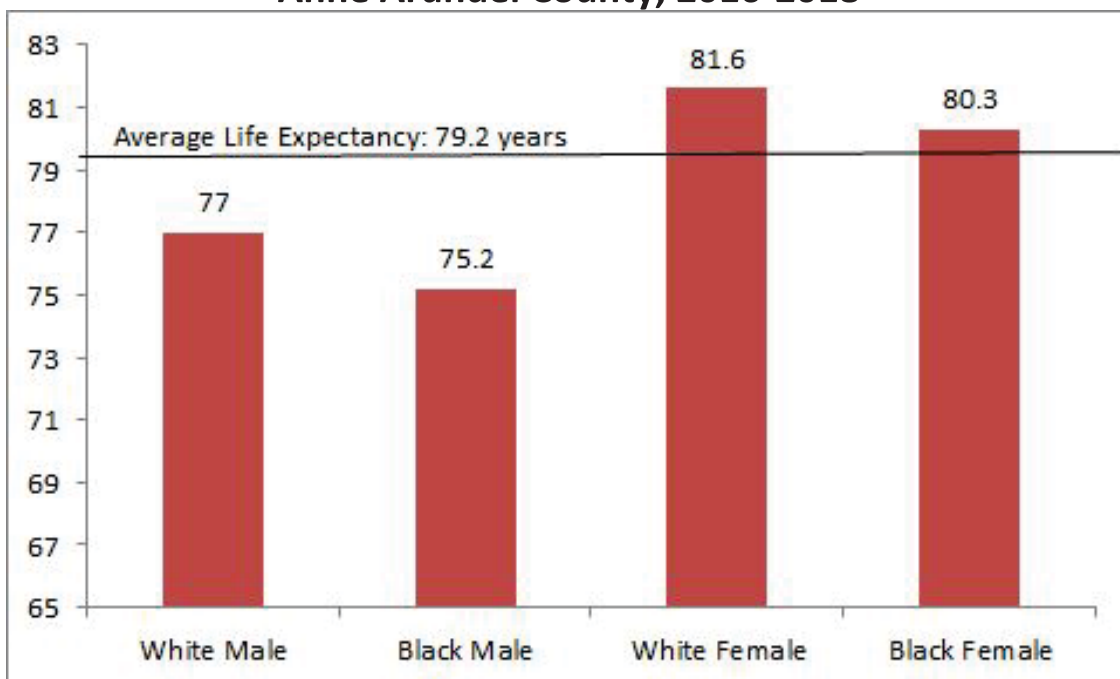
**Health equity** means that everyone has a fair and just opportunity to be as healthy as possible. In 2019, the Department of Health compiled a healthy equity report for Anne Arundel County which showed that racial and ethnic disparities were persistent in health measures for our residents.

The Department of Health established the Office of Health Equity and Racial Justice (HERJ) in July 2020 that will publish race and ethnicity data for health outcomes in the county to better understand health disparities and inequities and how they impact health outcomes.

Health equity is achieved when aspects of someone's identity are no longer predictors of their health outcomes.

The average life expectancy is 79.2 years. In Anne Arundel County, Whites and women have a longer life expectancy than Blacks and men, respectively. Notably, data is not available for life expectancy for Hispanics and Asians.

**Life Expectancy by Race and Sex,  
Anne Arundel County, 2016-2018**



Data Source: American Public Health Association, Creating the Healthiest Nation: Advancing Health Equity; Centers for Disease Control and Prevention: Health Equity Page; Maryland Department of Health, Vital Statistics Administration, 2018 Annual Report



# Social Determinants of Health

The social and environmental circumstances and conditions in which people live, work and play influences their health, well-being, and quality of life. These conditions are called **social determinants of health** and they include economic factors like income, poverty, employment, educational attainment and language, housing and safe neighborhoods, health care, and access to healthy food. For example, those who have less than a high school diploma are at increased risk for chronic diseases like heart disease and diabetes and are more likely to engage in unhealthy behaviors such as smoking or excessive alcohol use.

2018 Estimates	Anne Arundel	Maryland	United States
Families Below Poverty Level	5.1%	6.0%	9.3%
Individuals Below Poverty Level	7.1%	9.0%	13.1%
Median Household Income	\$97,814	\$83,242	\$61,937
Unemployment Rate, March 2020	2.9%	3.3%	4.5%
High Housing Costs*	29.2%	31.6%	31.9%
Violent Crime (per 100,000)	316.8	468.7	368.9
High School Graduation	92.3%	90.5%	88.3%
English as Primary Language	87.9%	80.7%	78.1%
Households Receiving SNAP Benefits	5.4%	9.4%	11.3%
Uninsured	4.2%	6.0%	8.9%
Percent of residents reporting routine check up in past year	82.7%	78.0%	77.0%

\*Percent of people paying 30 percent or more of household income on monthly housing costs.  
 Data Sources: U.S. Census Bureau: 2018 American Community Survey 1-year Estimates; United States Department of Labor: Bureau of Labor Statistics; 2015 Crime in the United States, Federal Bureau of Investigation; Centers for Disease Control, 2018 Maryland BRFSS





# Social Determinants of Health

Differences in the social determinants of health, both those explored in this report and those listed in the table below, are often the result social and economic policies and practices that create barriers to opportunity and continue across generations. They are reflected in differences in length of life; quality of life; rates of disease, disability, and death; severity of disease; and access to treatment.

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				

**Health Outcomes**  
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

The data in this report focuses on the health outcomes in Anne Arundel County where disparities are most evident. We acknowledge that the main driver of disparities are not biological factors, but rather the social determinants of health. The visual below helps explain how race/ethnicity and geography impact poverty level, income, education and access to food. This, in turn, affects life expectancy.





# Economic Factors

The Poverty Level (PL) is a measurement of the minimum amount of annual income needed for individuals and families to pay for essentials, such as housing, food, clothes and transportation. PL takes into account the number of people in a household, their income and the state in which they live and changes every year.

From 2017 to 2018, the proportion of families and individuals below the PL increased in Anne Arundel County while it decreased in both Maryland and the United States. Additionally, the median household income decreased for nearly all racial/ethnic groups and the percent unemployment increased for Hispanic residents. Income and employment are highly associated with health outcomes as those with lower income may not be able to afford the costs associated with health care, and health insurance is often dependent on employment.

Percent Below Poverty Level	2016	2017	2018
White, NH	6.3%	4.1%	5.0%
Black, NH	8.5%	10.7%	12.1%
Hispanic	11.3%	12.5%	13.9%
Asian, NH	3.0%	3.7%	3.7%

Median Household Income	2016	2017	2018
White, NH	\$101,174	\$102,080	\$103,360
Black, NH	\$72,015	\$79,105	\$78,888
Hispanic	\$93,847	\$73,405	\$72,304
Asian, NH	\$107,385	\$107,650	\$82,804

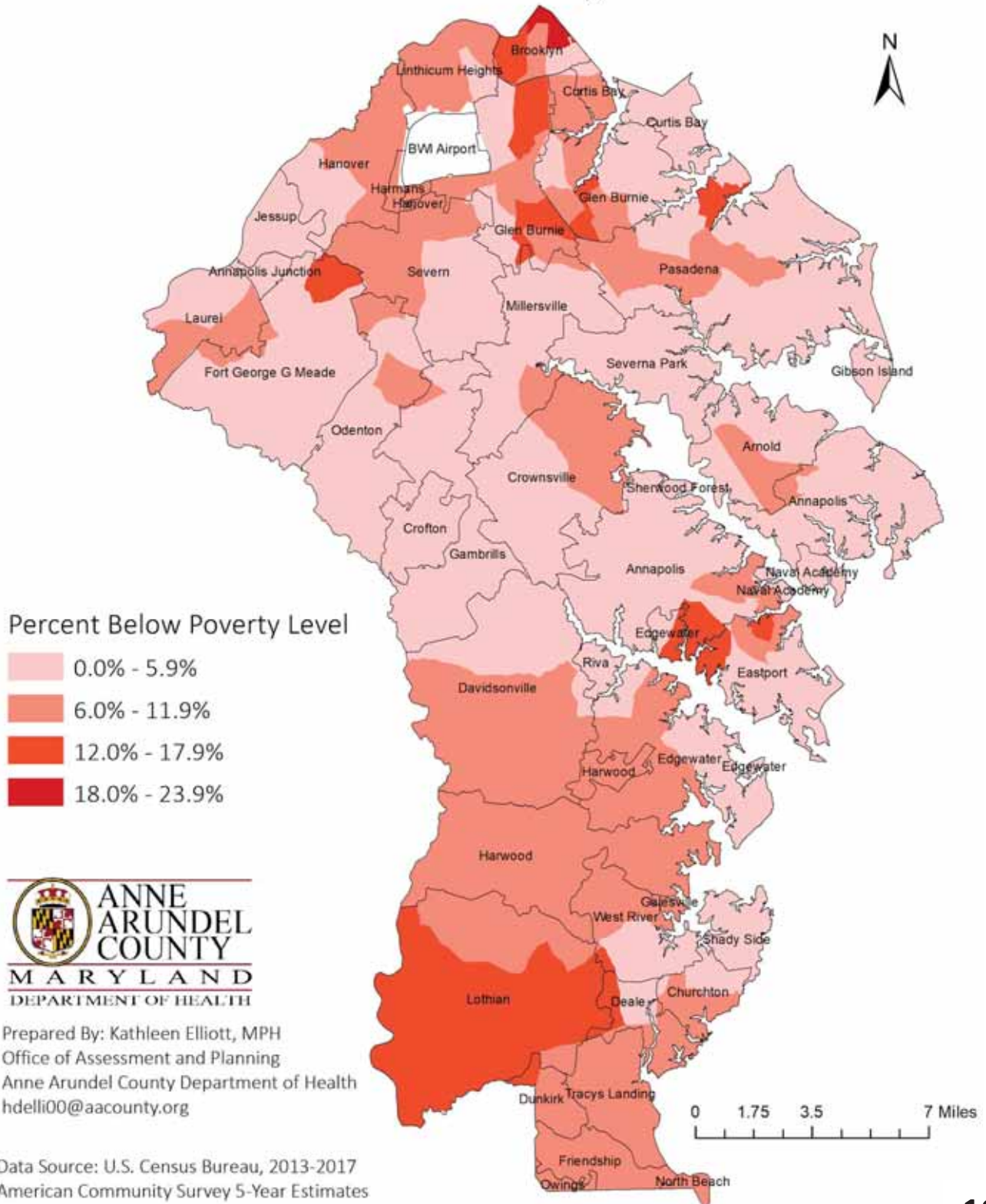
Percent Unemployment	2016	2017	2018
White, NH	4.6%	3.9%	3.4%
Black, NH	6.1%	6.5%	4.3%
Hispanic	3.5%	5.2%	6.3%
Asian, NH	3.6%	3.3%	3.7%



# Households below Poverty Level

Areas of higher poverty are shown in darker red. There are pockets of higher poverty areas throughout the county but they are clustered in the north and south of the county.

Percent of Population Below Poverty Level  
Anne Arundel County, 2017





# Housing

Safe and affordable housing is important for good health. There are four aspects of housing that affect health: stability, quality and safety, affordability, and neighborhood characteristics. Quality housing, free of contaminants, with access to clean air and water is important for maintaining both mental and physical health. As is living in a neighborhood with access to safe spaces to be outdoors.

Housing costs that are more than 30 percent of one's income can lead to housing instability in the form of moving frequently, falling behind in rent or losing housing altogether. While fewer households spend more than 30 percent of their income on rent in 2018 compared to 2017 and 2016, those in lower income brackets spend more of their income on rent than those in higher income brackets.

Additionally, owning a house rather than renting builds wealth, provides long-term stability and can be more affordable over time. In Anne Arundel County in 2018, a much higher proportion of White residents owned their own homes than any other racial/ethnic group.

Monthly Housing Costs Above 30 Percent of Income	2016	2017	2018
Income less than \$50,000	73.6%	72.6%	73.8%
Income more than \$50,000	16.0%	14.3%	17.3%

Percent Owning Own Home	2016	2017	2018
White, NH	80.5%	81.7%	80.2%
Black, NH	50.5%	55.1%	54.8%
Hispanic	59.9%	48.6%	49.6%
Asian, NH	76.6%	69.5%	68.7%

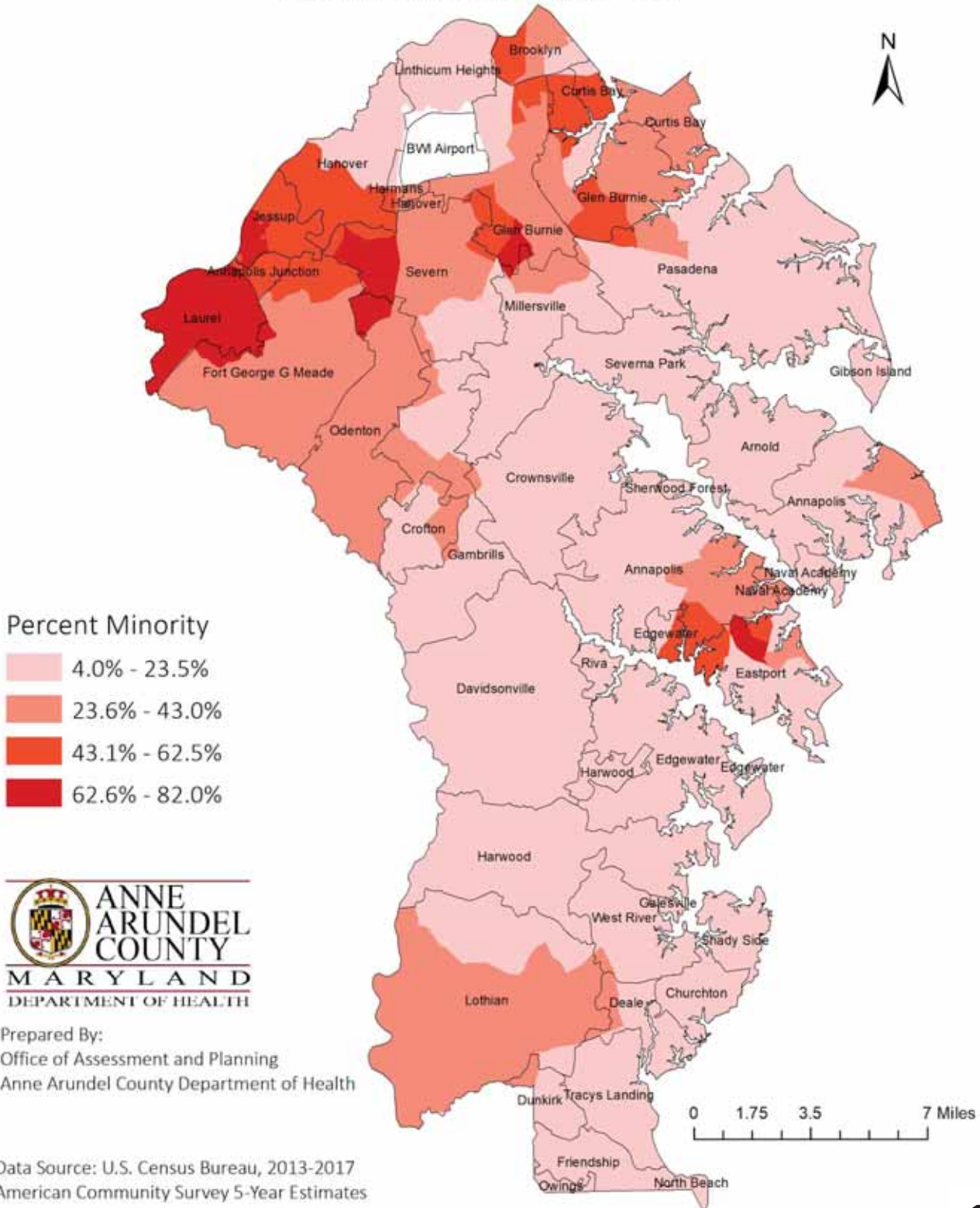
Data Sources: HHS, Office of Disease Prevention and Health Promotion, Healthy People 2020; U.S. Census Bureau: 2016, 2017 and 2018 American Community Survey 1-year Estimates;



# Minority Population

Areas of higher minority population are shown in darker red. There are pockets of higher minority areas in western Anne Arundel County, Annapolis, and Glen Burnie.

### Percent of Population Identifying as a Racial/Ethnic Minority, Anne Arundel County, 2017





# Education and Language

Those with more education on average live longer and healthier lives than those with less education for a variety of reasons. Those with more education are more likely to obtain higher paying jobs with insurance, paid leave and retirement plans. They also face less financial and economic stress which can take a toll on physical and mental health. Lastly, those with less education often live in lower income neighborhoods which can have less green space, higher crime rates, less access to healthy food, fewer high-quality schools, fewer jobs and higher levels of water and air pollution.

People with limited English proficiency are among the most vulnerable populations. They experience higher rates of medical errors, have worse clinical outcomes and receive lower quality care than those who are English-proficient. Since 2016, more county residents speak a language other than English at home and they report less English proficiency than those that speak English at home.

High School Graduate or Higher	2016	2017	2018
White, NH	94.6%	94.3%	94.0%
Black, NH	89.1%	91.3%	93.3%
Hispanic	88.3%	67.4%	73.8%
Asian, NH	90.3%	87.4%	84.8%

Primary Language Spoken at Home	2016	2017	2018
English	88.9%	88.1%	87.9%
Spanish	5.2%	6.2%	5.7%
Other Indo-European Languages	2.5%	2.6%	2.5%
Asian and Pacific Island Languages	2.7%	2.2%	2.5%
Other Languages	0.7%	1.0%	1.4%

NH- non-Hispanic

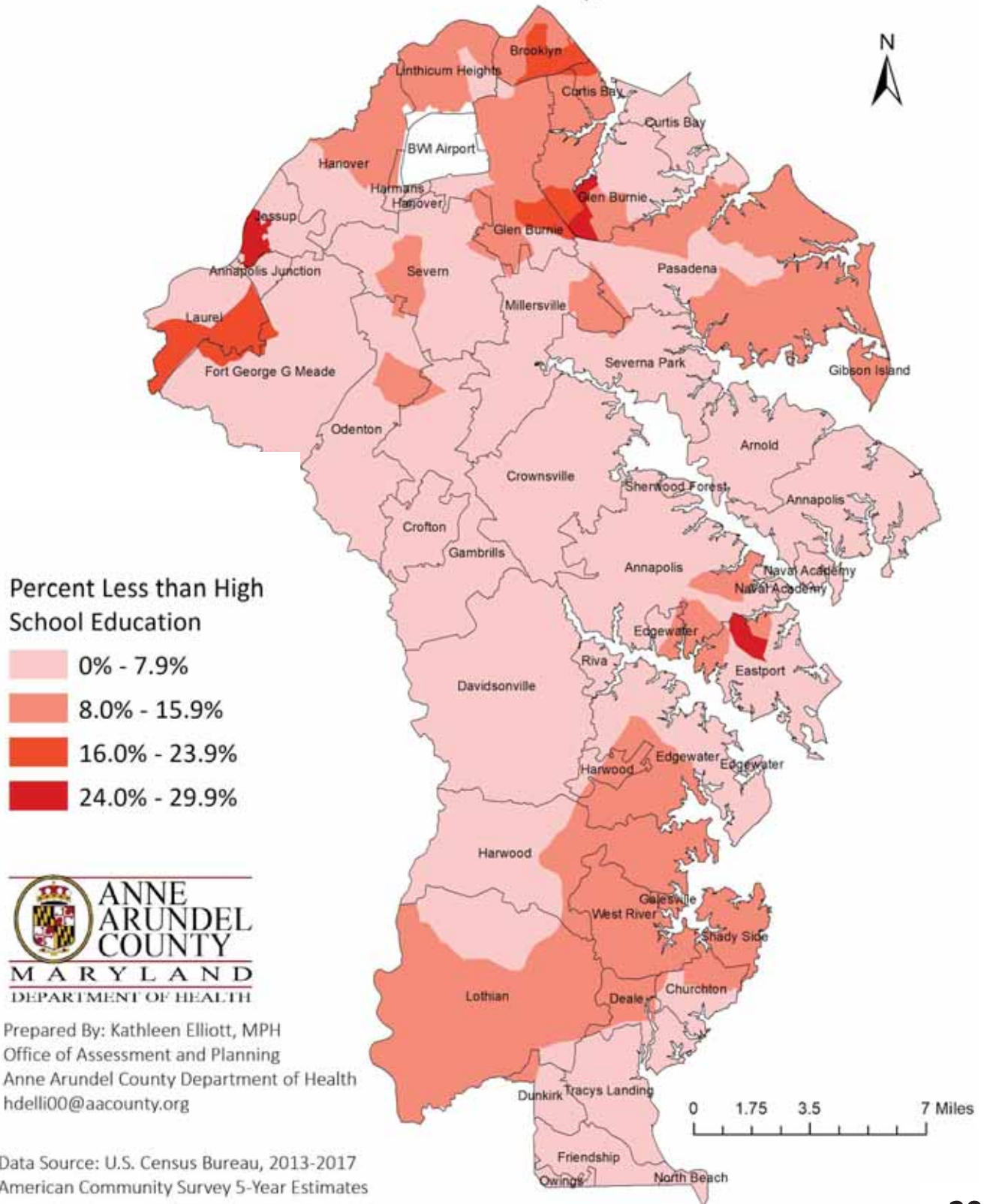
Data Source: Virginia Commonwealth University, Center on Society and Health, Why Education Matters to Health: Exploring the Causes; AMA Journal of Ethics, Language-Based Inequity in Health Care: Who Is the "Poor Historian"?; U.S. Census Bureau: 2016, 2017 and 2018 American Community Survey 1-year Estimates



# Education

Areas with less education are shown in darker red. There are clusters in the north county, Annapolis and Laurel area.

## Percent Less than High School Education, 25 years and older, Anne Arundel County, 2017





# Access to Healthy Food

Lack of access to healthy food, also called food insecurity, has a direct impact on health. Those who can't afford or have trouble getting quality nutritious food have higher risk of chronic illness such as diabetes, heart disease and obesity. Additionally, children who are food insecure may experience trouble focusing in school which can lead to lower education levels and lower income in the future.

One measure of access to food is the number of households that are receiving supplemental nutrition assistance program benefits (SNAP) or food stamps. The proportion of households has decreased from 2016 to 2018. However, nearly double the proportion of Black and Hispanic households are receiving SNAP/food stamps than Asian and White households.

Additionally, access to food can also be measured by how closely people live to grocery stores and supermarkets and if they have access to transportation to get to the store. We defined low access as living further than 1 mile to a store without access to a vehicle. Census tracts with low access to food also tend to have residents with lower levels of education, lower incomes and higher unemployment.

Year	2016	2017	2018
Percent of population who lack adequate access to food	9.0%	8.0%	7.0%

Households on Food Stamps/SNAP Benefits	2016	2017	2018
White, NH	4.4%	4.6%	3.4%
Black, NH	19.3%	12.0%	9.9%
Hispanic	18.8%	13.2%	10.6%
Asian, NH	8.9%	4.4%	4.8%

NH- non-Hispanic

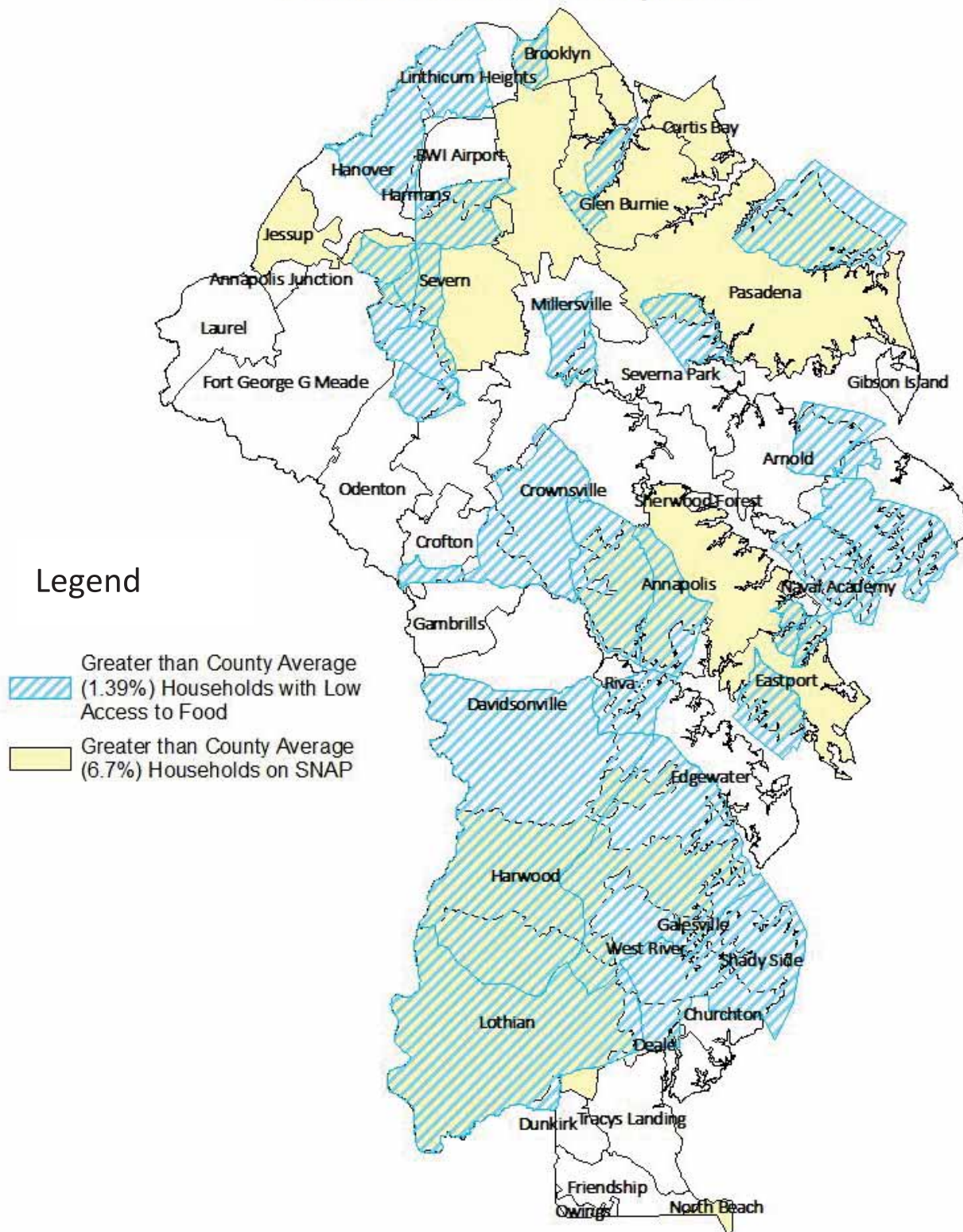
Data Source: US Department of Health and Human Services, Healthy People 2030 Objectives; U.S. Census Bureau: 2016, 2017 and 2018 American Community Survey 1-year Estimates; USDA, Characteristics and Influential Factors of Food Deserts; Robert Wood Johnson Foundation, 2019 County Health Rankings





# Food Environment

## Access to Healthy Food Anne Arundel County, 2019



Data Source: Supplemental Nutrition Assistance Program (SNAP) Participation: 2013-2017 American Community Estimates; Low Access Areas: United States Department of Agriculture (USDA) Food Access Research Atlas.  
 NOTE: Low access is defined as the percentage of housing units more than 1 mile from nearest supermarket or grocery store without access to vehicle.



# Health Insurance and Access

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, dental cleanings and delay necessary care which can lead 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 **4.2 percent** in 2018. While this is encouraging, it still means that over 24,000 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 2018 **11.2 percent** of Anne Arundel County adults reported being unable to see a doctor due to cost even when they needed to which is up from 8.3 percent in 2017 and 9.7 percent in 2016.

Race/Ethnicity	Percent of Residents Uninsured	Number of Residents Uninsured
White, NH	2.5%	9,663
Black, NH	4.7%	4,467
Hispanic	19.0%	8,865
Asian, NH	2.4%	525
Total	4.2%	24,193



# Health Care Access

Adequate access to healthcare 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. High provider-patient ratios are associated with poorer patient health outcomes, as patients can wait longer to see their doctors which can delay necessary preventive care and doctors have less time to devote to each patient and can face burnout.

In 2018, 82.7 percent of county residents reported having a routine yearly check up with their doctor, however only 72.3 percent reported having a dental visit. Additionally, 86.2 percent of residents reported having at least one personal doctor or a doctor they routinely see. Having a relationship with a doctor is important to ensure residents get effective preventive care.

2018 Estimates	Anne Arundel	Maryland	United States
Primary Care Physician Ratio	1,440:1	1,140:1	1,325:1
Mental Health Provider Ratio	530:1	390:1	440:1
Dentist Ratio	1,490:1	1,290:1	1,450:1

2018 Estimates	Black, NH	White, NH	Hispanic
Percent of residents reporting routine check up in past year	87.5%	81.9%	79.5%
Percent of residents reporting dental visit in past year	65.0%	74.9%	66.6%
Percent of residents reporting having one or more personal doctor	85.9%	88.9%	79.7%

Data Sources: CDC, 2018 Maryland BRFSS; Robert Wood Johnson Foundation, 2019 County Health Rankings; U.S. Census Bureau, 2013-2017 American Community Survey.

# COVID-19



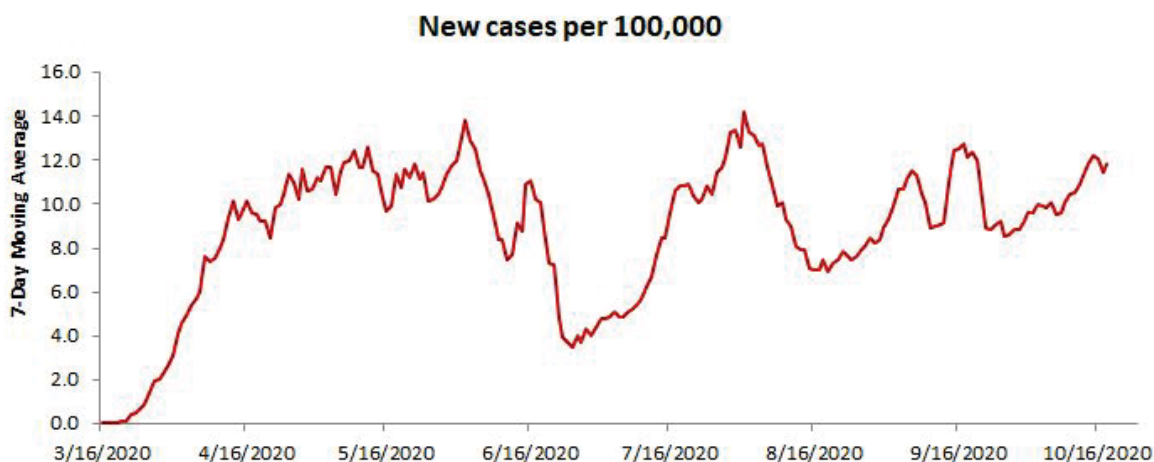


# COVID-19

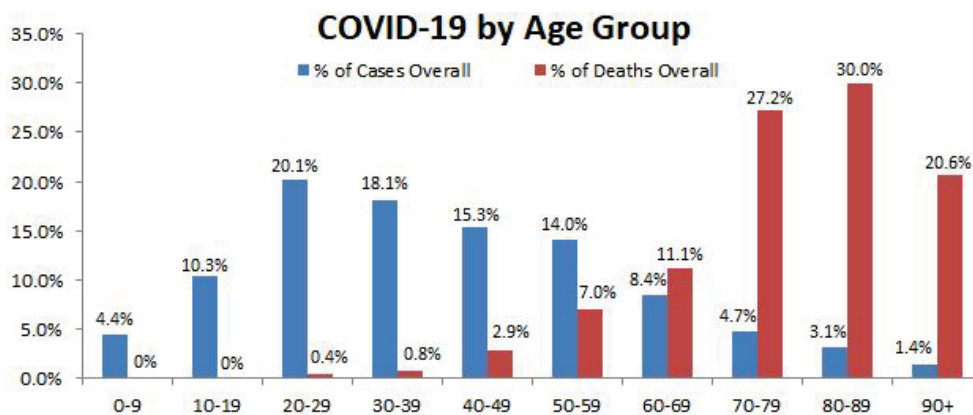
COVID-19, the 2019 Novel Coronavirus, is a disease caused by the virus SARS-CoV-2. SARS-CoV-2 was identified as the cause of an outbreak of respiratory illness first detected in Wuhan, China in December 2019.

COVID-19 is primarily transmitted person-to-person through respiratory droplets, however CDC acknowledges that COVID-19 can be spread via airborne transmission. While many cases are asymptomatic or have mild symptoms, those with severe disease are at higher risk of serious long-term health outcomes and death.

As of October 19, 2020, Anne Arundel County has had 11,336 cases and 251 deaths.



Initially, most of the county’s cases were in adults, and deaths were concentrated in residents aged 60 and over. Over time, there have been many more cases in youth and young adults and there has been an emphasis on encouraging young people to wear masks and social distance to prevent the spread of COVID-19.

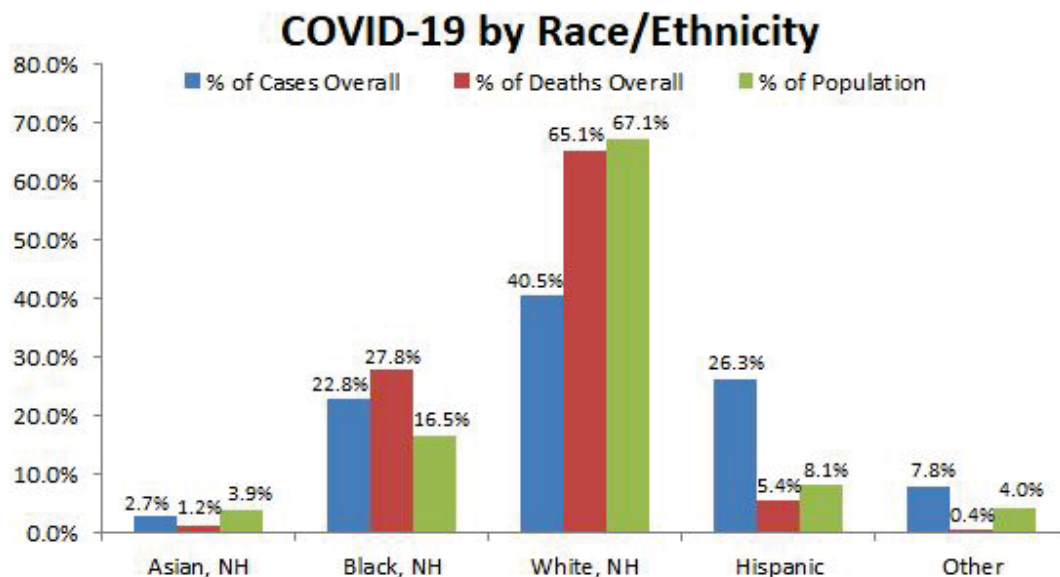


Data Source: Centers for Disease Control and Prevention, Maryland Department of Health, National Electronic Disease Surveillance System (NEDSS)

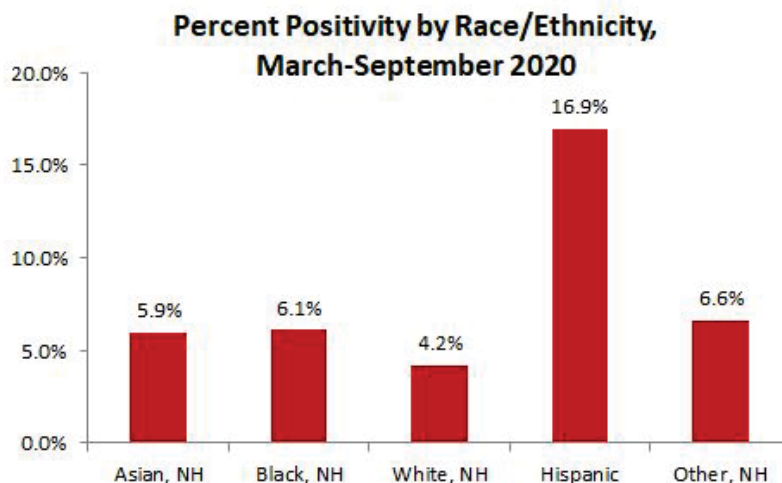


# COVID-19

Since the pandemic hit Anne Arundel County in March, there have been differences in the incidence of COVID-19 based on age group and race/ethnicity. These differences are dependent on where you live, where you work and behaviors such as mask wearing. Since March, we have seen Hispanics and Non-Hispanic Black and Other Race be disproportionately affected by COVID-19 and this has been a focus of the Health Equity Initiative.



Positivity rate is the percentage of people who test positive for COVID-19 out of all residents tested. A high percent positive rate indicates more testing is needed. Looking at positivity rate by race/ethnicity helps us determine which racial/ethnic groups should be targeted for COVID-19 testing. "Other" includes American Indian/Alaska Natives, Native Hawaiian or Other Pacific Islanders, and mixed race residents.





Gun Violence



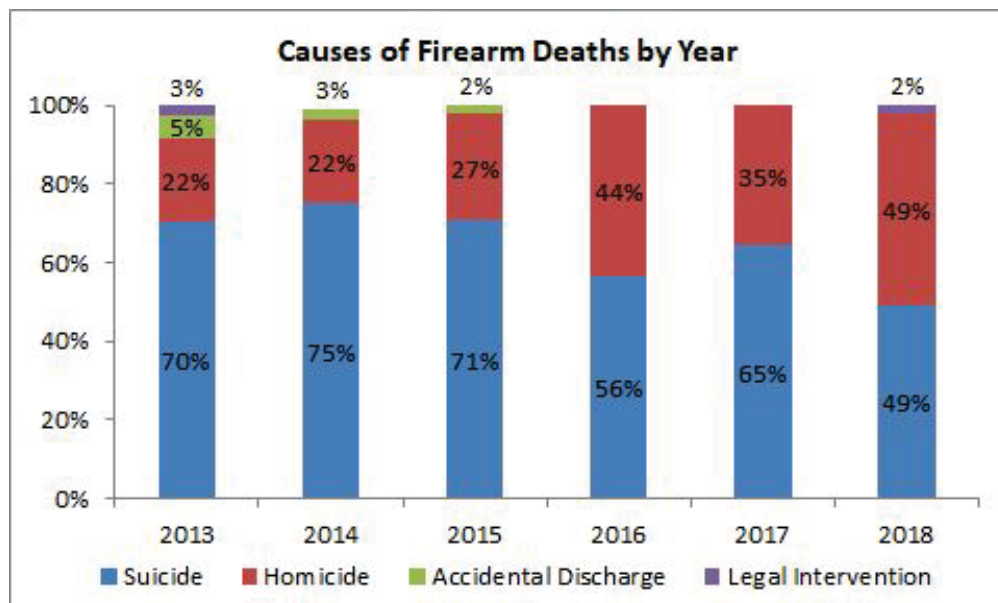
# Gun Violence

In 2019, the Anne Arundel County Executive declared gun violence a public health issue and committed to decreasing gun violence in the county. Over 100,000 people are injured or killed with a firearm every year in the United States including over 200 people in Anne Arundel County.

Gun violence affects all people but it disproportionately affects young black males and older white males. When we compare gun-related deaths by suicide and homicide a stark difference jumps out. Nearly 80 percent of all suicides by firearm are White males while 57 percent of the homicides by firearm occur in Black males.

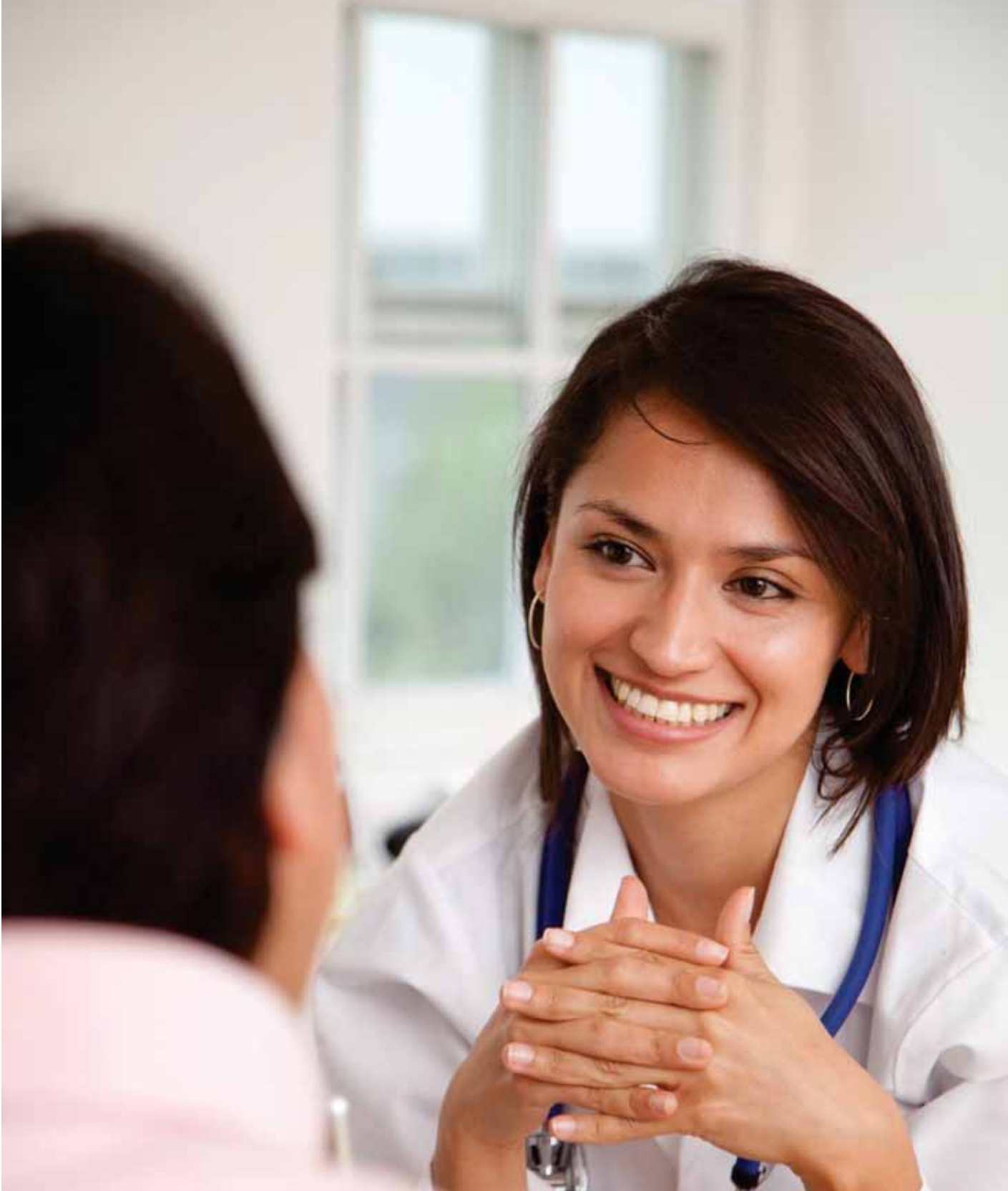
Sex/Race Category	Suicides	Homicides
Black Male	13 (8%)	50 (57%)
White Male	128 (77%)	20 (23%)
Black Female	3 (2%)	3 (3%)
White Female	19 (11%)	8 (10%)
Hispanic Male	3 (2%)	3 (3%)
Hispanic Female/Others	0 (0%)	3 (3%)
Total Deaths	166	88

In 2013, the majority of firearm deaths were due to suicide (70%). By 2018 suicide deaths fell to 49 percent of firearm deaths, equal to the proportion of firearm-related deaths by homicide.



Data Source: Maryland HSCRC Outpatient and Inpatient Files, 2016-2018, Maryland Department of Health, Vital Statistics Administration, Death Files, 2013-2018





# Chronic Diseases



# Cancer Incidence

## Cancer Incidence Rates\*, Anne Arundel County, 2012-2016

Cancer Type	County Case Count	Anne Arundel Rates	Maryland Rates	United States Rates
All Cancer Types**	14,320	461.0	443.9	452.4
Male	7,082	497.2	483.1	494.3
Female	7,234	438.4	418.4	424.3
Colorectal**	1,056	34.7	36.1	38.8
Male	509	36.9	40.4	44.4
Female	546	33.1	32.6	33.9
Lung/Bronchus**	1,926	63.4	55.6	53.4
Male	920	68.2	62.8	69.1
Female	1,006	60.1	50.4	51.7
Melanoma**	994	32.2	23.0	23.2
Male	581	40.9	30.7	27.9
Female	413	45.7	17.4	17.2

Sex-Specific Cancers	County Case Count	Anne Arundel Rates	Maryland Rates	United States Rates
Breast (Female)	2,223	133.7	130.1	130.1
Cervical	99	6.9	6.3	7.4
Prostate	1,749	112.2	120.3	106.8

\*Age-adjusted rates per 100,000 population.

\*\*Includes male, female, and unknown gender cases.

Data Source: 2019 Cancer Report, Cigarette Restitution Fund Program, MDH; CDC Wonder, CDC United States Cancer Statistics



# Cancer Mortality

## Cancer Mortality Rates\*, Anne Arundel County, 2012-2016

Cancer Type	County Death Count	Anne Arundel Rates	Maryland Rates	United States Rates
All Cancer Types**	4,993	165.6	160.3	161.0
Male	2,610	198.1	190.0	193.1
Female	2,383	142.7	140.1	137.7
Colorectal**	398	13.3	14.1	14.2
Male	209	16.1	16.9	16.9
Female	189	11.2	11.9	11.9
Lung/Bronchus**	1,364	45.0	40.1	41.9
Male	690	51.4	48.3	51.6
Female	674	40.3	34.2	34.4
Melanoma**	89	2.9	2.2	2.5
Male	65	4.8	3.6	3.7
Female	24	1.4	1.3	1.5

Sex-Specific Cancers	County Case Count	Anne Arundel Rates	Maryland Rates	United States Rates
Breast (Female)	351	20.7	22.2	20.6
Cervical	28	1.8	1.9	2.3
Prostate	213	18.6	20.1	19.2

\*Age-adjusted rates per 100,000 population.

\*\*Includes male and female cases.

Data Source: 2019 Cancer Report, Cigarette Restitution Fund Program , MDH; CDC Wonder, American Cancer Society Cancer Facts & Figures 2019.



# Diabetes

Diabetes Mellitus Type 2 is a chronic disease that often develops as a result of overweight, obesity and lack of physical activity. Other risk factors include high blood pressure, having low HDL cholesterol or high triglycerides, or being age 45 or older. Diabetes tends to run in families and occurs more often in certain racial/ethnic groups. In 2018, **8.1 percent** of residents of Anne Arundel County had Type 2 Diabetes.

In 2018, residents aged 65+ had the highest percentage of diabetes (**26.6 percent**) compared to other age groups, and **10 percent** of females had diabetes compared to 9.6 percent of males.

Prevalence of Diabetes by Age Group, Anne Arundel County, 2016-2018			
	45-54	55-64	65+
2016	8.0%	17.3%	24.0%
2017	16.5%	12.4%	18.5%
2018	10.1%	16.9%	26.6%

## Health Behavior and Risk Factors

Between 2015 and 2018, the percentage of individuals classified as healthy (BMI 18.5-24.9) increased 1.1 percent, and the percentage of individuals classified as obese increased by 1.4 percent.

Weight Classification, Anne Arundel County, 2015-2018			
	Healthy BMI 18.5-24.9	Overweight BMI 25.0-29.9	Obese BMI 30.0 or above
2016	31.7%	37.1%	31.2%
2017	35.7%	34.5%	29.8%
2018	32.8%	34.7%	32.6%



# Communicable Diseases



# General Disease Reporting

Public health surveillance of these conditions allows the Department of Health to monitor trends in disease, identify populations or geographic areas of high risk, allocate resources, develop policies, formulate and assess the effectiveness of control and prevention measures, and provide early warning of possible disease outbreaks.

## Number of Selected Reportable Diseases In Anne Arundel County

	2015	2016	2017	2018	2019*	5-Year Mean
Campylobacter	61	81	96	78	110	91
Salmonella	141	105	120	130	126	124
Vibrio	4	17	13	11	18	13
Legionellosis	5	6	17	42	29	20
<i>M. tuberculosis</i>	10	10	11	7	12	10
Hepatitis B**	84	95	99	107	100	97
Hepatitis C**	570	619	549	514	470	544
Meningitis, meningococcal	0	1	0	0	0	<1
Pertussis	28	28	9	15	2	16.4
Chlamydia	1,696	1,973	1,636	1,819	1,686	1,762
Gonorrhea	337	546	342	484	652	472
Syphilis***	42	41	22	21	26	30
Lyme Disease	107	173	126	93	107	121
Animal Rabies	38	15	30	11	18	22
Outbreaks: Gastrointestinal	13	5	10	11	8	9
Outbreaks: Respiratory****	18	8	8	17	11	12

\*Provisional data.

\*\*Includes both acute and chronic cases.

\*\*\*Includes primary and secondary.

\*\*\*\*Respiratory Outbreaks include Pneumonia and Influenza/Influenza-like Illness.

Data Source: Bureau of Disease Prevention and Management, Anne Arundel County Department of Health.

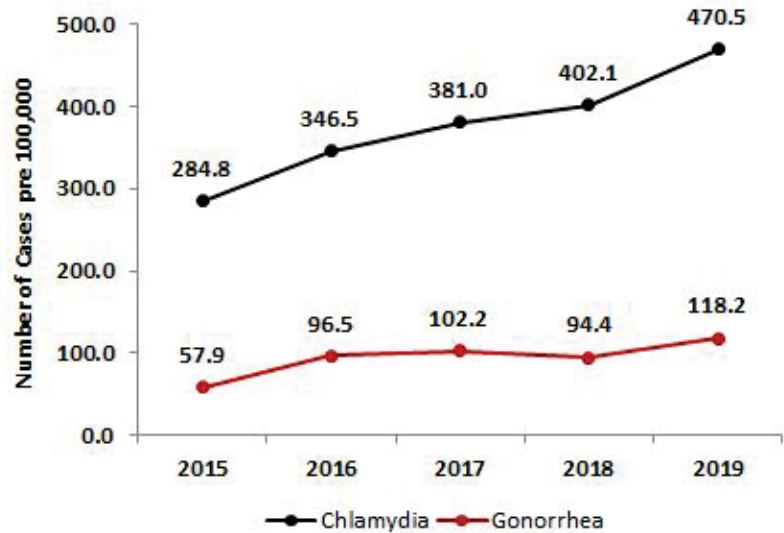


# Sexually Transmitted Infections

Over the past five years, there has been an increase of chlamydia and gonorrhea cases in Anne Arundel County, with Maryland and the US following a similar trend.

In 2018, the 15-24 age-group represented **only 12.5 percent** of the county's population, however they accounted for **53 percent** of chlamydia cases, **37.5 percent** of gonorrhea cases, and **22 percent** of primary and secondary syphilis cases.

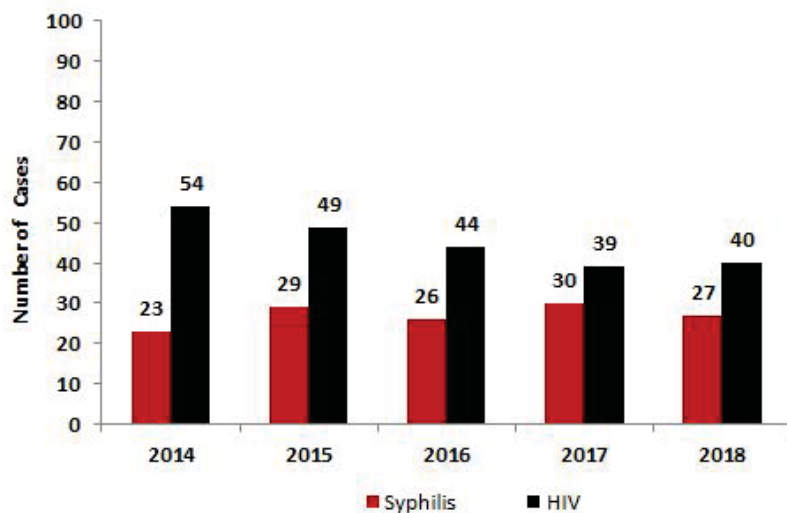
### Chlamydia and Gonorrhea Cases, Anne Arundel County, 2015-2019



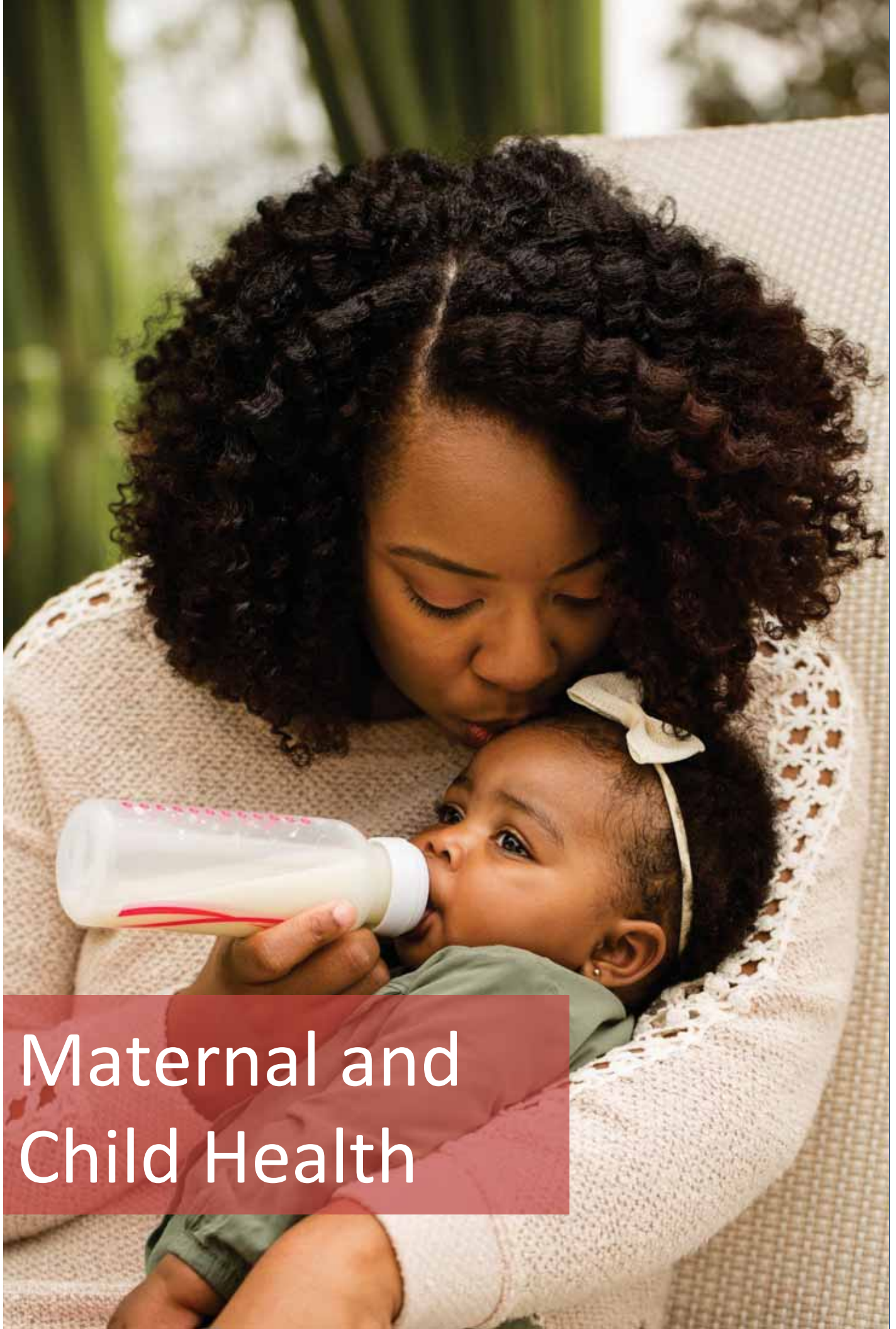
Although diagnoses have decreased, the rate of HIV in Black non-Hispanics is almost **triple** that of Hispanics and almost **nine times** that of non-Hispanic Whites.

Out of the 40 new cases of HIV in 2018, **32.5 percent** were 30-39 years old and **65 percent** were black.

### Primary and Secondary Syphilis and HIV Cases in Anne Arundel County, 2014-2018



Data Source: Anne Arundel County, Maryland Department of Health, Center for STI Prevention, Center for HIV Surveillance, Epidemiology and Evaluation Prevention and Health Promotion Administration



# Maternal and Child Health





# Prenatal Care

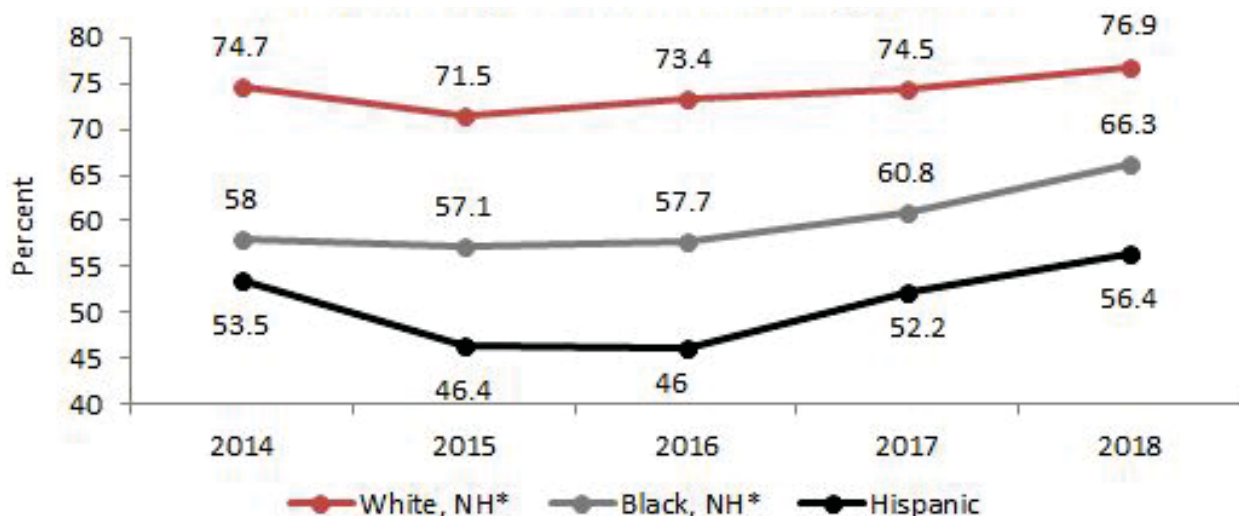
Prenatal care is essential for healthy birth outcomes for both mothers and babies. Women that get regular prenatal care can reduce their risk of pregnancy complications, such as hypertension and diabetes, and reduce their risk of complications for the child, such as congenital abnormalities and low birth weight.

As of 2018, **71 percent** of pregnant women received prenatal care in the first trimester; up from 68 percent in 2017. There were increases in those receiving first trimester prenatal care in women of all races and decreases in those receiving late or no prenatal care.

## Percent of Women Receiving First Trimester Prenatal Care (First trimester includes the first 12 weeks of pregnancy)

	2014	2015	2016	2017	2018
Anne Arundel	68.5%	65.3%	66.1%	68.1%	71.4%
Maryland	66.6%	66.9%	67.8%	66.3%	70.0%

## Percent of Women Receiving First Trimester Prenatal Care by Race/Ethnicity, Anne Arundel County, 2014-2018



\*NH- Non-Hispanic

Data Source: Maryland Department of Health, Vital Statistics Administration, 2014-2018 Annual Reports; U.S. Department of Health and Human Services, Healthy People 2020.



# Maternal and Child Health

In 2018, there were **6,783 live births** in Anne Arundel County. Of those births, 4,118 were non-Hispanic White, 1,251 were non-Hispanic Black and 1,009 were Hispanic. Low birth weight and preterm birth can increase the risk of infant death, and breathing problems, obesity and other diseases during childhood. Black women were much more likely to have low birth weight or preterm infants than White or Hispanic women.

Encouragingly, the percent of low birth weight and preterm births decreased in Black infants in Anne Arundel County from 2017 to 2018.

	2014	2015	2016	2017	2018
<b>Percent of Low Birth Weight Infants (&lt;2,500 grams or about 5.5 lbs)</b>					
Anne Arundel	8.1%	7.8%	7.4%	7.8%	7.7%
Maryland	8.6%	8.6%	8.6%	8.9%	8.9%
United States	8.0%	8.1%	8.2%	8.3%	8.3%
<b>Percent of Low Birth Weight Infants, Anne Arundel by Race/Ethnicity</b>					
White, NH	6.9%	6.4%	6.2%	6.5%	6.7%
Black, NH	13.8%	12.6%	11.7%	12.3%	11.6%
Hispanic, Any Race	6.9%	7.2%	6.2%	7.2%	6.7%
<b>Percent of Women Having Preterm Births (&lt;37 weeks of gestation)</b>					
Anne Arundel	9.1%	9.3%	8.7%	9.7%	10.5%
Maryland	10.1%	10.0%	10.1%	10.5%	10.2%
United States	9.6%	9.6%	9.8%	9.9%	10.0%
<b>Percent of Preterm Infants, Anne Arundel by Race/Ethnicity</b>					
White, NH	8.2%	8.4%	7.8%	9.3%	10.0%
Black, NH	13.5%	12.1%	11.7%	12.1%	12.8%
Hispanic, Any Race	7.9%	9.6%	8.0%	7.7%	10.1%

Data Source: Maryland Department of Health, Vital Statistics Administration, 2014-2018 Annual Reports; U.S. Department of Health and Human Services, Healthy People 2020.



# Infant Mortality

Infant mortality measures deaths of babies during the first year of life. In 2018, there were **22 infant deaths** in Anne Arundel County, with an overall infant mortality rate of **3.2 deaths per 1,000 live births**. This is a decrease from the rate of 4.1 per 1,000 live births in 2017.

From 2017 to 2018, the infant mortality rate in Black infants halved from 7.9 deaths per 1,000 live births to 4.0 per 1,000. This could be due in part to the reductions in low birth weight and preterm births and the increase in early prenatal care seen in the previous pages.

	2014	2015	2016	2017	2018
<b>Infant Mortality – All Races per 1,000 Live Births</b>					
Anne Arundel	5.7	5.1	5.6	4.1	3.2
Maryland	6.5	6.7	6.5	6.5	6.2
United States	5.8	5.9	5.9	5.8	5.9
<b>Infant Mortality – Non-Hispanic White per 1,000 Live Births</b>					
Anne Arundel	3.8	3.6	5.3	2.8	3.2
Maryland	4.4	4.0	4.3	4.0	4.1
United States	4.9	4.8	4.8	4.9	4.9
<b>Infant Mortality – Non-Hispanic Black per 1,000 Live Births</b>					
Anne Arundel	12.7	9.5	10.1	7.9	4.0
Maryland	10.7	11.3	10.5	11.2	10.2
United States	11.0	11.7	11.8	11.4	10.8
<b>Infant Mortality – Hispanic (Any Race) per 1,000 Live Births</b>					
Anne Arundel	**	**	**	5.3	**
Maryland	4.4	5.5	5.4	4.7	3.8
United States	5.0	5.2	5.2	5.0	5.0

\*\*Rate not calculated, fewer than 5 deaths.

Source: Maryland Department of Health, Vital Statistics Administration, 2014-2018 Annual Reports; U.S. Department of Health and Human Services, Healthy People 2020.



# Teen Pregnancy

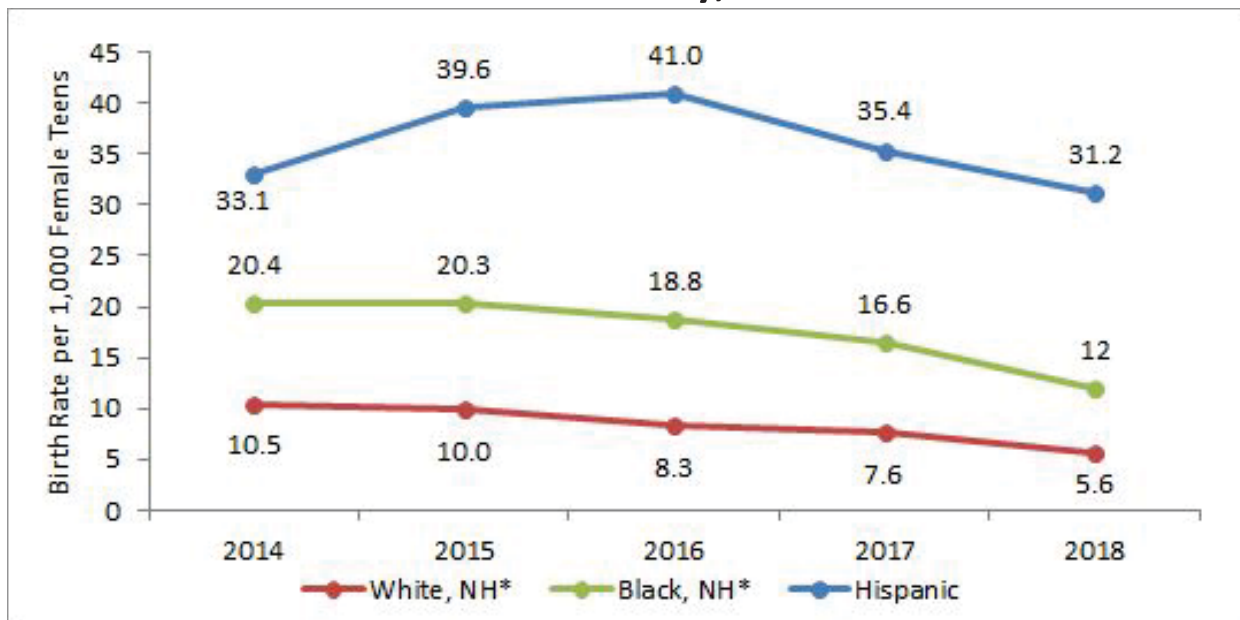
Pregnant teens are at higher risk for complications such as low birth weight, preterm birth, high blood pressure, and postpartum depression. Teenage pregnancy rates have declined over the past five years. In 2018, there were **9.4 births** per every 1,000 women aged 15-19 years in Anne Arundel County; lower than both the state and national averages.

Although the teen birth rate has declined overall since 2014, it is much higher among Hispanic teens than Black and White teens. In fact, the birth rate in Hispanic teens is more than **five times** that of White teens and more than **double** that of Black teens.

## Births to Women 15-19 Years Old per 1,000 Women Ages 15-19

	2014	2015	2016	2017	2018
Anne Arundel	13.9	14.4	13.4	12.1	9.4
Maryland	17.8	16.9	15.9	14.2	14.1
United States	24.2	22.3	20.3	18.8	17.4

**Teen (Aged 15-19) Birth Rates by Race/Ethnicity, Anne Arundel County, 2013-2018**



\*NH- Non-Hispanic

Data Source: Maryland Department of Health, Vital Statistics Administration, 2014-2018 Annual Reports.



Suicide



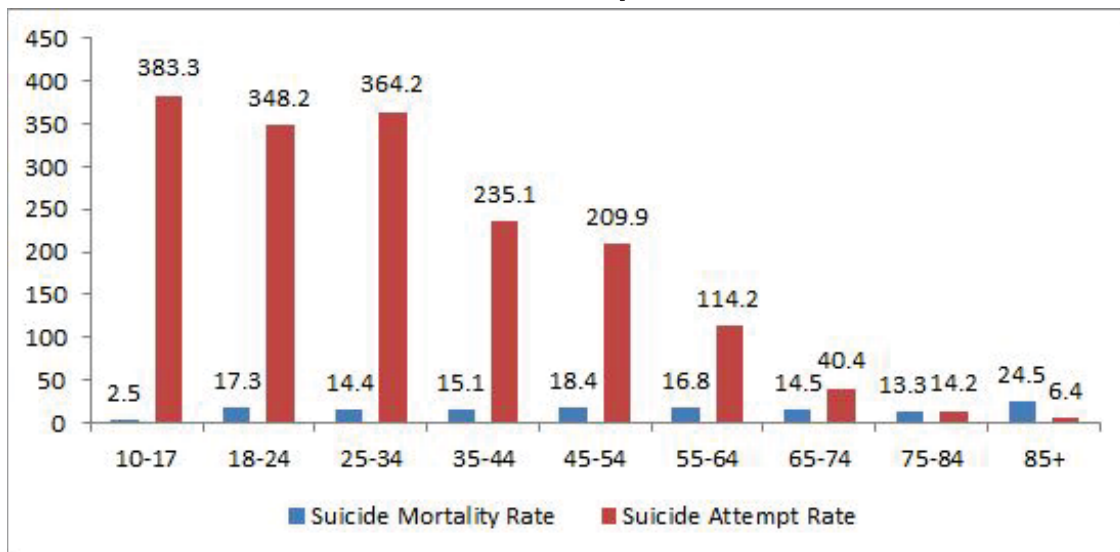
# Suicide

In 2017 the number of deaths by suicide reached the highest level ever. While the number did decrease in 2018, it was still the second highest year for suicide deaths since 2012.

	2012	2013	2014	2015	2016	2017	2018
<b>Number of Deaths</b>	57	58	67	69	53	95	79

Those under the age of 34 attempt suicide at the highest rates while those above 85+ hve the highest death rate. White males make up the majority of suicide deaths in Anne Arundel County followed by Hispanic males and Black males.

**Suicide Mortality and Attempt Rate per 100,000 population by Age, Anne Arundel County, 2014-2018**



Sex/Race Category	Suicides	Rate per 100,000 population
White Male	233 (64%)	23.9
White Female	83 (23%)	8.4
Black Male	24 (7%)	10.7
Black Female	3 (1%)	1.3
Hispanic Male	12 (2%)	11.2
Hispanic Female	0 (0%)	0
Other	8 (2%)	4.1
<b>Total Suicide Deaths</b>	<b>363</b>	<b>12.9</b>

Data Source: Maryland HSCRC Outpatient and Inpatient Files, 2016-2018; Maryland Department of Health, Vital Statistics Administration, Death Files, 2013-2018.



# Alcohol, Tobacco and Substance Use



# Opioid and Other Drug Use



241

Number of drug- and alcohol-related intoxication deaths in 2018



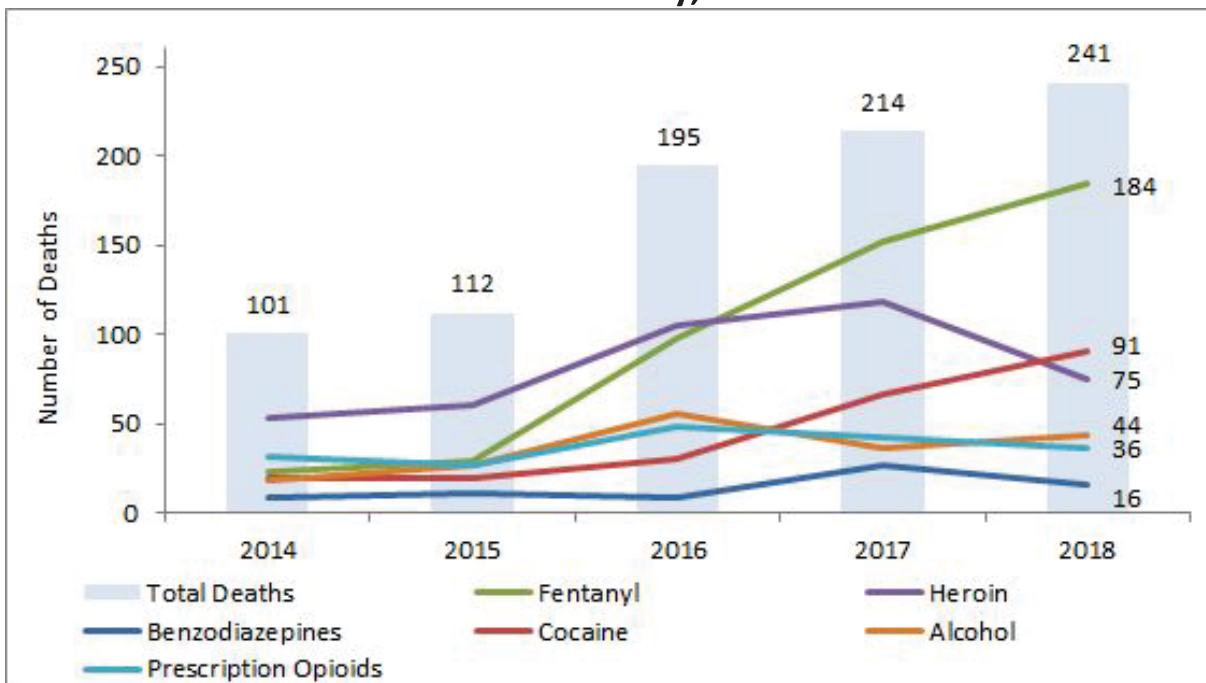
139%

Percent increase in intoxication deaths from 2014 to 2018

Deaths involving fentanyl have increased 700% from 2014 to 2018 and fentanyl was involved in 76% of all intoxication deaths in 2018. Deaths from both prescription opioids and heroin decreased from 2017 to 2018. Better opioid prescribing practices are one of the reasons for the decrease in prescription opioid deaths.

From 2014 to 2018, deaths involving cocaine increased **379 percent** from 19 to 91 deaths. Deaths from benzodiazepines increased **78 percent** from 2014 to 2018 from 4 deaths to 16. 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 **82 percent** of cocaine-related deaths and **56 percent** of the benzodiazepine-related deaths in Maryland also involved fentanyl.

### Drug- and Alcohol-Related Intoxication Deaths, Anne Arundel County, 2014-2018



Data Note: The categories are not mutually exclusive and people could have died with several substances in their bodies.

Data Source: 2018 Drug- and Alcohol-Related Intoxication Deaths Report, Maryland Department of Health.





# Tobacco and E-Cigarette Use

Tobacco use is the leading cause of preventable disease, disability and death in the United States. It increases your risk of cancer, heart disease, stroke, respiratory diseases and other health effects like Type 2 Diabetes and cataracts.

From 2014 to 2018, Anne Arundel County estimated current tobacco use decreased **3.2 percent**, while the estimated current tobacco use in Maryland only decreased 0.7 percent over the same time period.

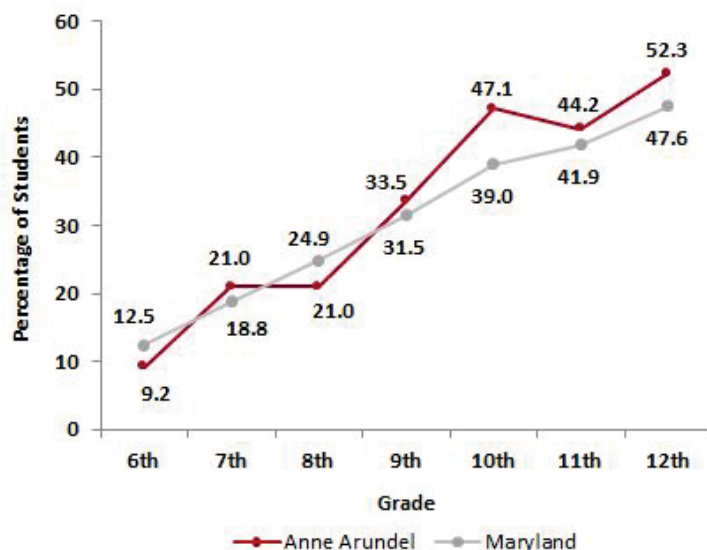
## Estimated Prevalence of Current Tobacco Use\*, Anne Arundel vs. Maryland

Anne Arundel County				Maryland			
Women		Men		Women		Men	
2014	2018	2014	2018	2014	2018	2014	2018
15.3	14.0	25.4	22.9	15.0	13.9	24.5	22.9
8.5% ↓		9.8% ↓		7.3% ↓		6.5% ↓	

**E-cigarettes** are a type of Electronic Smoking Device (ESD). Teen ESD users are more likely to start smoking combustible tobacco products (e.g.; cigarettes, cigars, hookahs) than teens who don't use ESDs.

In 2018, **52.3 percent** of county 12th graders ever used an ESD compared to 47.6 percent 12th graders across Maryland.

## Ever-use of an ESD by Grade, Anne Arundel County vs Maryland, 2018



\*Data collection for ESDs began in 2014. On October 1, 2019, ESDs became tobacco products. As a result, the prevalence of tobacco use was recalculated retrospectively to include ESDs



# Contact Information

**Compiled in 2020 by:**  
Office of Assessment of Planning

**Technical and editorial assistance provided by:**  
The Office of Public Information



The services and facilities of the Anne Arundel County Department of Health are available to all regardless of race, color, religion, political affiliation, national origin, age, gender identity, sexual orientation or disability.

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