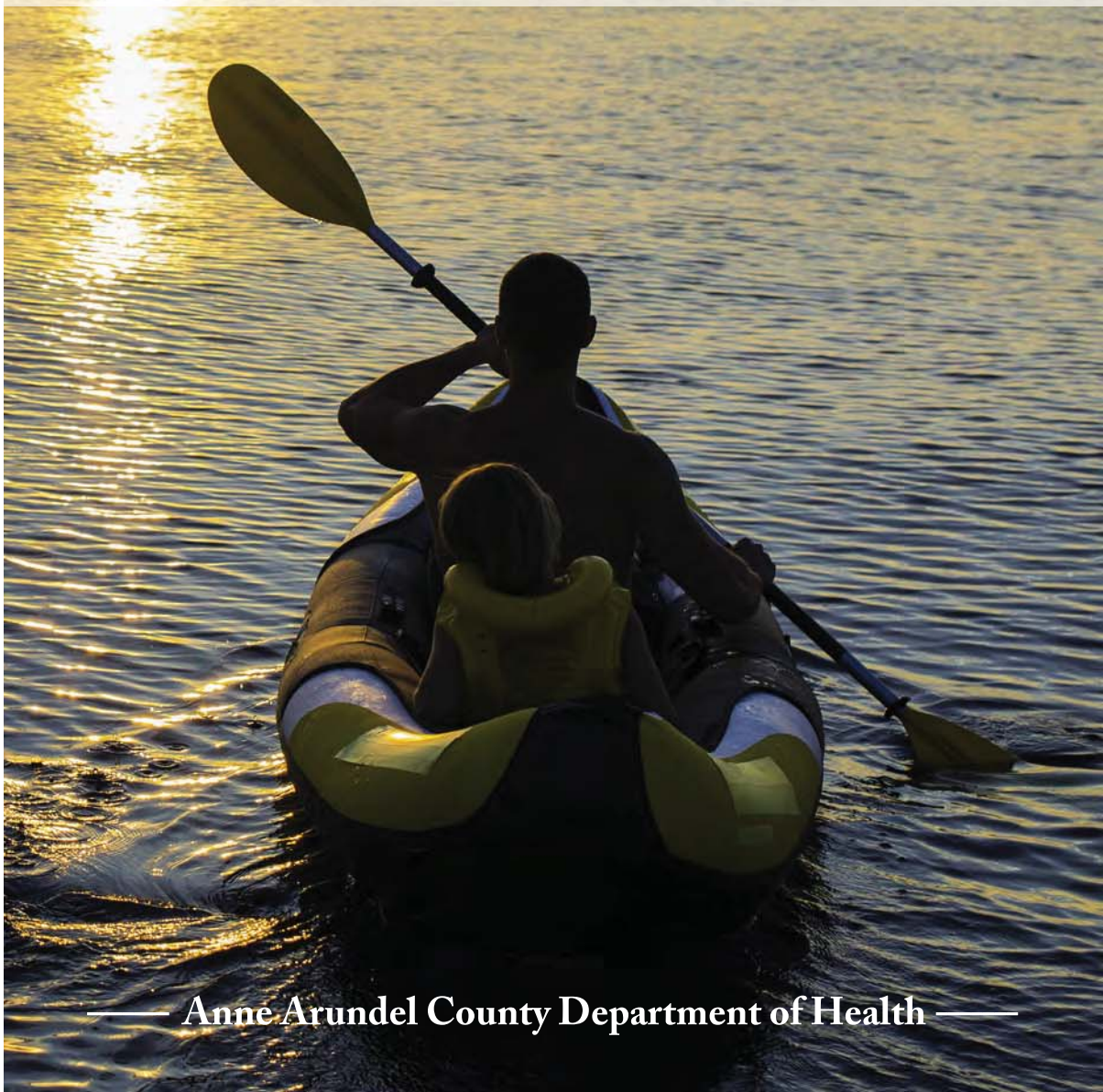




Report Card of Community Health Indicators *May 2018*



— Anne Arundel County Department of Health —



County Executive's Message



I am pleased to present the Anne Arundel County Department of Health's 2018 Report Card of Community Health Indicators. This report is a valuable resource in gauging the health status of County residents, identifying community health needs, and helping us direct resources to neighborhoods and populations most at-risk.

According to the report, Anne Arundel County has continued its progress in several public health areas. For instance, the percent of uninsured residents, the percent of low birth weight infants and the number of teen pregnancies have continued to decline.

Still, the County faces several challenges – foremost is the impact of substance use on the quality of life. The County Executive's Office has worked closely with the Department of Health in battling the current opioid epidemic. Through strong networks with other government agencies, health care providers, schools, faith-based groups, community organizations and businesses, our County has stepped up community awareness and responded to the epidemic with smart and well-planned programs. Some of these outstanding programs, which have involved Department of Health staff, include Not My Child community discussions, the 24/7 Safe Stations Initiative, and the Overdose Survivors Outreach Services at our local hospitals.

I commend the Department of Health staff for their diligence in providing many behavioral, environmental, family health, school health, and disease prevention and control services to strengthen our County's well-being. The partnerships they foster make Anne Arundel County a healthy place to live, work and do business.

Respectfully,

A handwritten signature in blue ink that reads "Steve".

Steven Schuh
County Executive



Health Officer's Message

The 2018 Report Card contains hundreds of numbers. The many percentages, rates and other figures provide a local glimpse of top public health issues, such as opioid overdoses, health care access, teen depression and food deserts. The statistics also answer some of our residents' most frequently asked questions about poverty, violence, leading causes of death, cancer incidence, and the number of Lyme disease, Vibrio and some other reportable disease cases. Public health data help communicate the magnitude of illnesses, identify health trends and are central elements of evidence-based public health policies and strategies.



“Knowledge is power” is a saying that rings true in public health. By raising health awareness among the public, community initiatives can improve social and health outcomes and help to reduce health inequity. With this report card, the Department of Health hopes to put a face on figures that stand for more than just numbers – they represent human lives. Statistics help identify challenges that people face daily and can lead to the formation of community partnerships to address diseases and hardships.

Some successful agency and community partnerships covered in this report include ODSOS (Overdose Survivors Outreach Services) and the Brooklyn Park Rodent Action Team. With the leadership of County Executive Steven Schuh and the support of a wide array of elected and community leaders, the power of data and of people working together is brought to light. Through evidence-based initiatives, better health outcomes are possible for the good of all residents of Anne Arundel County.

Warm regards,

Frances B. Phillips, R.N., M.H.A.
Acting Health Officer



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Who lives in Anne Arundel County?





Demographics

2016 Estimates	Anne Arundel	Maryland	United States
Population			
Total Population	568,346	6,052,177	323,127,513
Male	49.5%	48.4%	49.2%
Female	50.5%	51.6%	50.8%
Race and Ethnicity			
White, non-Hispanic (NH)	70.3%	52.5%	62.0%
Black, NH	15.6%	29.2%	12.3%
Hispanic	7.0%	9.2%	17.3%
Asian, NH	3.6%	6.0%	5.2%
American Indian and Alaska Native, NH	0.2%	0.3%	0.8%
Others	3.3%	2.8%	2.4%
Age			
Under 5 Years Old	6.3%	6.2%	6.2%
18 Years and Over	77.3%	77.4%	76.9%
65 Years and Over	13.4%	13.8%	14.5%
Median Age (Years)	38.3	38.3	37.7

Data Source: U.S. Census Bureau, 2016 Population Estimates; U.S. Census Bureau, 2012-2016 American Community Survey (ACS) 5-Year Estimates

How do social resources affect our health?





Social Environment Factors

Although genetic predisposition and environmental factors are important drivers of health outcomes, economic and social conditions also influence the health of a community. Social determinants of health include income and poverty, employment, educational attainment and housing status. While the county has a higher median household income and lower proportion of those in poverty than other areas in Maryland, there are still pockets of need. The median household income in Brooklyn Park is over \$50,000 less than the rest of the county, while almost double the amount of individuals live below the poverty line in Lothian.

2016 Estimates	Anne Arundel	Maryland	United States
Median Household Income	\$91,918	\$76,067	\$55,322
Families Below Poverty Level	3.9%	6.8%	11.0%
Individuals Below Poverty Level	6.1%	9.9%	15.1%
Children in Single Parent Households	27.4%	35.6%	34.7%
Unemployment Rate, January 2018*	3.9%	4.6%	4.5%
High Housing Costs**	30.2%	33.7%	32.9%
High School Graduation	91.9%	90.7%	87.0%
Violent Crime (per 100,000)	460.0	472.0	386.3

*Not seasonally-adjusted

**Percent of people paying 30 percent or more of household income on monthly housing costs.
Data Source: U.S. Census Bureau, 2012-2016 American Community Survey (ACS) 5-Year Estimates; United States Department of Labor; Bureau of Labor Statistics; 2016 Crime in the United States, Federal Bureau of Investigation.

How do individual behaviors affect our health?





Opioid Use Disorder

The impact of opioid use disorder continues to be a top priority of response in Anne Arundel County. In 2017, Anne Arundel County police reported almost 1,100 opioid-related overdoses occurring within the county, a count that has increased at an alarming rate since 2014.



1,097

Overdoses occurring in Anne Arundel County in 2017.

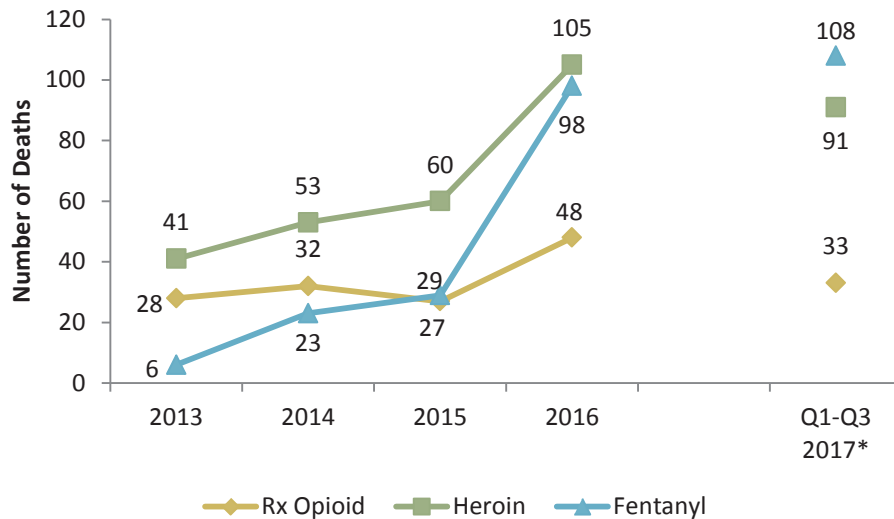


171%

Increase in overdoses occurring in Anne Arundel County since 2014.

A key driver of opioid-related overdose deaths over the past year has been the introduction of fentanyl into the community. Fentanyl-related deaths in the county have increased significantly since 2013 and surpassed heroin-related deaths through currently reported data for 2017.

Opioid-Related Intoxication Deaths in Anne Arundel County, 2013-2017*



*Current data through 9/30/2017 only at time of publication.

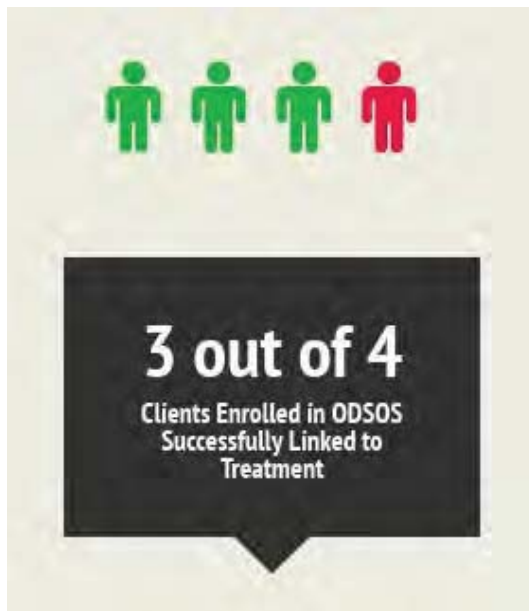
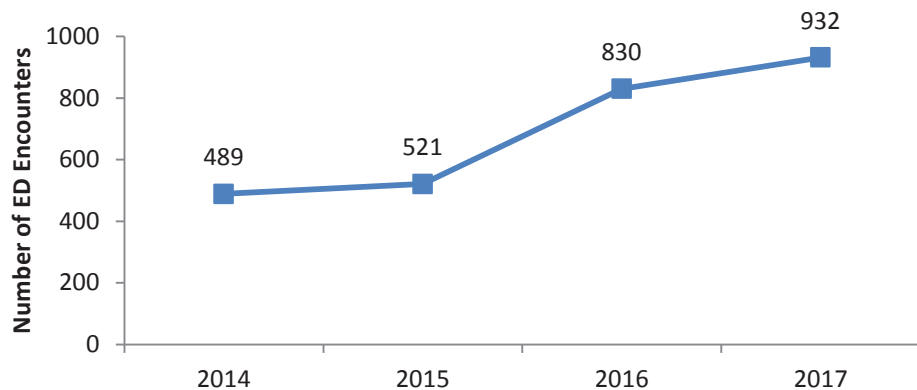
Data Source: 2016 Drug and Alcohol Related Intoxication Deaths Report, Maryland Department of Health; Anne Arundel County Police Department.



Emergency Department Encounters for Opioid Overdose

Another effect of the opioid epidemic is the impact to the health care system, including the increased strain of responding to overdoses in already overburdened hospital emergency departments (ED). The number of opioid-related overdoses the ED encounters by Anne Arundel County residents has almost doubled over the past four years, from 489 encounters in 2014 to 932 encounters in 2017.

ED Encounters for Opioid-Related Overdose in Maryland Hospitals, Anne Arundel County Residents, 2014-2017



The Overdose Survivors Outreach Services (ODSOS) program is a partnership between the Anne Arundel County Department of Health and the two local hospitals: Anne Arundel Medical Center and University of Maryland Baltimore Washington Medical Center. The program employs peer support specialists to offer support to overdose survivors and encourage survivors to access treatment. In Fiscal Year 2018, 74 percent of clients enrolled in the ODSOS were successfully linked to treatment.

Data Source: Maryland Health Services Cost Review Commission, 2014-2016 Outpatient Discharge Files; Anne Arundel County Department of Health, Behavioral Health Bureau.











Teen Risk Behaviors

The latest version of the Youth Risk Behavior Survey (YRBS) was administered in Anne Arundel County schools in 2016. The YRBS monitors six areas of health-related risk factors that contribute to the leading causes of death among youth and adults, including:

- Unintentional injury and violence
- Risky sexual behaviors
- Alcohol and drug use
- Tobacco use
- Dietary behaviors
- Physical activity

The table below describes selected trends with statistically significant change (positive in green/negative in red) between the previous and current YRBS estimates.

Risk Behavior	Trend 2016 vs 2014
Operating a motor vehicle after drinking alcohol	7.0%  10.3%
Current cigar use	10.4%  12.8%
Contraception use to prevent pregnancy (pills/IUD/patch/ring)	33.5%  24.1%
Alcohol or illegal drug use before last sexual intercourse	22.4%  28.7%
Carrying a weapon on school property	7.7%  4.0%
Feeling sad or hopeless so that it impedes normal activity	32.4%  27.4%
Condom use last sexual intercourse	55.2%  61.9%
Proportion overweight	29.8%  26.4%

Data Source: Maryland Department of Health, 2014-2016 Maryland Youth Risk Behavioral Surveys.



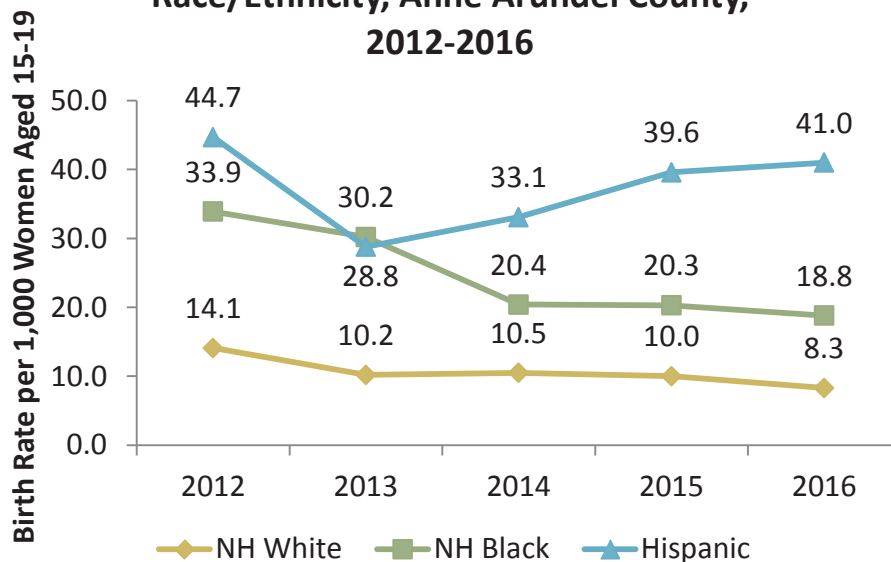
Teen Pregnancy

Teenage pregnancies have declined over the past five years. In 2016, there were 13.4 births per every 1,000 women aged 15-19 years in Anne Arundel County, lower than the state and national averages. Although the teen birth rate has declined overall, driven by fewer births among non-Hispanic black and non-Hispanic white teens, births among Hispanic teens has increased steadily since 2013.

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

	2012	2013	2014	2015	2016
Anne Arundel	20.3	15.6	13.9	14.4	13.4
Maryland	22.1	19.3	17.8	16.9	15.9
United States	29.4	26.6	24.2	22.3	20.3

Teen (Aged 15-19 Years) Birth Rates by Race/Ethnicity, Anne Arundel County, 2012-2016



Data Source: Maryland Department of Health, Vital Statistics Administration, 2012-2016 Annual Reports.

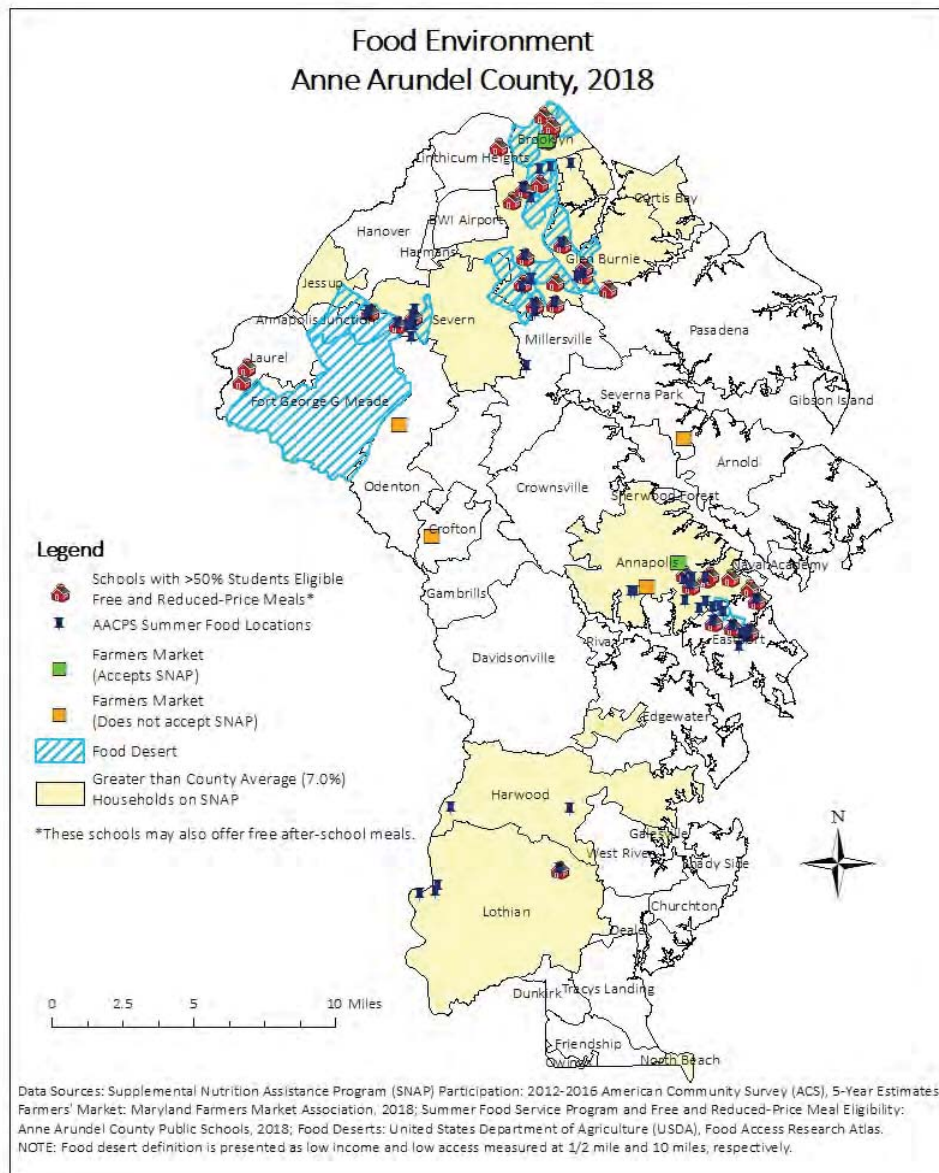


How does the physical environment affect our health?



Food Environment

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. In 2018, over 13 percent of county residents currently reside in a food desert, up from 12 percent in 2015.





Rodent Action Team

Starting in May 2017, the Department of Health conducted more than 13,500 residential and 55 commercial property assessments in Brooklyn Park (21225). The assessments' goal was education and awareness of issues related to trash, rodent food sources and rodent harborage. When a violation was found, educational material that explained how to eliminate the violation was left at the residence. After the first survey in late Spring 2017, one-quarter of properties had trash storage issues or active signs of rodents. After the final survey in Fall 2017, the number of properties with these issues dropped to 10 percent. Beginning November 2017, the program shifted to enforcement initiatives to continue to resolve all property violations.



Additionally, the county provided over 10,000 trash containers to each of the residential properties in Brooklyn Park; 234 bags of trash were removed by the Department of Public Works; and free pesticide services were provided to 547 properties.

Pictured Right:
Housing and Food Protection
Program Manager Cliff Ruehle
and County Executive Steven
Schuh speak with Brooklyn
Park residents.



Data Source: Anne Arundel County Department of Health, Bureau of Environmental Health, 2017.



**How do we
access care?**



Health Care Access

The percent of uninsured residents in Anne Arundel County continued to decline in 2016, reaching a low of 6.0 percent of residents. However, 9.6 percent of emergency department (ED) visits during the same year were by uninsured residents. Although not all visits to the ED may be avoidable, care in lower level settings for some conditions, such as diabetes and hypertension, can potentially reduce the number of ED visits, thereby reducing costs and increasing the quality of care. One barrier to accessing this outpatient care is an inadequate number of medical, dental and mental health providers in a population. As of 2016, the ratio of all three types of providers is worse, on average, than those for the state.



86.1%

Number of Anne Arundel County adults with a regular primary care provider.

	Anne Arundel	Maryland
Uninsured	6.0%	8.1%
Primary care physician ratio	1,450:1	1,140:1
Mental health provider ratio	650:1	460:1
Dentist ratio	1,480:1	1,320:1

Data Source: 2018 County Health Rankings, Robert Wood Johnson Foundation; U.S. Census Bureau, 2012-2016 American Community Survey (ACS) 5-Year Estimates; Maryland State Health Improvement Process (SHIP), 2016 Estimates.



Prenatal Care

Adequate prenatal care access remains a concerning issue in the county. As of 2016, only two-thirds of pregnant women received prenatal care in the first trimester, down from 71 percent in 2012, and much lower than the Healthy People 2020 goal of 77.9 percent. This trend is driven by remarkable decreases in early prenatal care by minority women. Less than half of Hispanic mothers received prenatal care in the first trimester in 2016, and 10.5 percent received late or no care at all.

Prenatal care is essential for positive birth outcomes for both mothers and children. Women that pursue regular prenatal care can reduce the risk of pregnancy complications, such as hypertension and diabetes. Prenatal care also reduces the risk of complications for the child, such as congenital abnormalities.

Percent of Women Receiving First Trimester Prenatal Care (First trimester includes the first 12 weeks of pregnancy)					
	2012	2013	2014	2015	2016
Anne Arundel	71.4%	74.2%	68.5%	65.3%	66.1%
Maryland	67.9%	67.0%	66.6%	66.9%	67.8%
White, NH	74.1%	75.3%	74.7%	71.5%	73.4%
Black, NH	62.4%	62.1%	58.0%	57.1%	57.7%
Hispanic, Any Race	55.6%	61.2%	53.5%	46.4%	46.0%

Data Source: Maryland Department of Health, Vital Statistics Administration, 2012-2016 Annual Reports; U.S. Department of Health and Human Services, Healthy People 2020.

How healthy are we?





Healthy People 2020

At the start of each decade, the U.S. Department of Health and Human Services provides a set of ten-year national objectives for improving health. The Healthy People 2020 goals help guide Anne Arundel County's ongoing efforts toward building a healthier community. The county has already met some of the 2020 goals and continues to work toward others.

Indicator	Anne Arundel (as of 2016*)	National 2020 Goal	Met National 2020 Goal
Mortality (age-adjusted rates per 100,000 population)			
Coronary Heart Disease	160.5	103.4	No
Stroke	41.2	34.8	No
Diabetes	17.6	66.6	Yes
Unintentional Injuries	29.7	36.4	Yes
All Cancer	173.0	161.4	No
Lung Cancer	48.1	45.5	No
Female Breast Cancer	22.9	20.7	No
Homicide	**	5.5	Yes
Suicide	10.7	10.2	No

*Rates based on data from 2014-2016.

**Rates for fewer than 20 deaths not calculated.

Lung cancer data also includes data on cancer of bronchus.

Data Source: Maryland Department of Health, Vital Statistics Administration, 2016 Annual Report;

Maryland Department of Health, Cigarette Restitution Fund Program, 2017 Cancer Report;

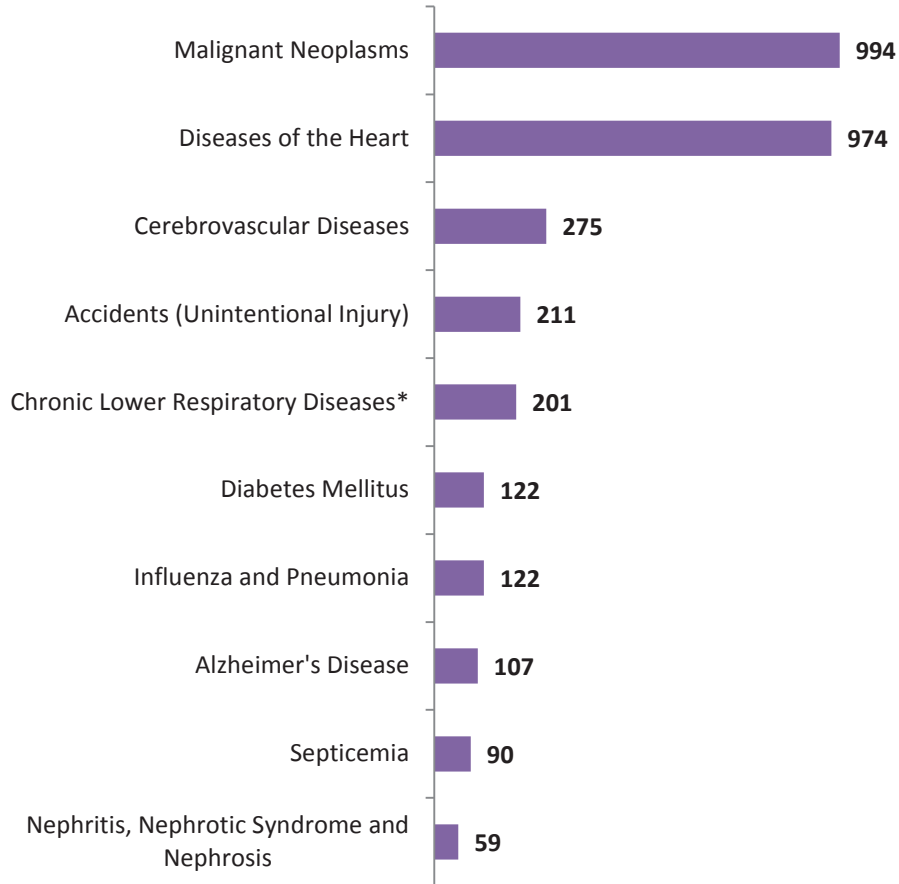
U.S. Department of Health and Human Services, Healthy People 2020.



Leading Causes of Death

In 2016, there were 4,380 deaths in Anne Arundel County, and life expectancy was 79.6 years. Accidental (unintentional injury) deaths rose to the fourth leading cause of death driven by increases in opioid overdose deaths in 2016.

Top Ten Leading Causes of Death Among Anne Arundel County Residents, 2016

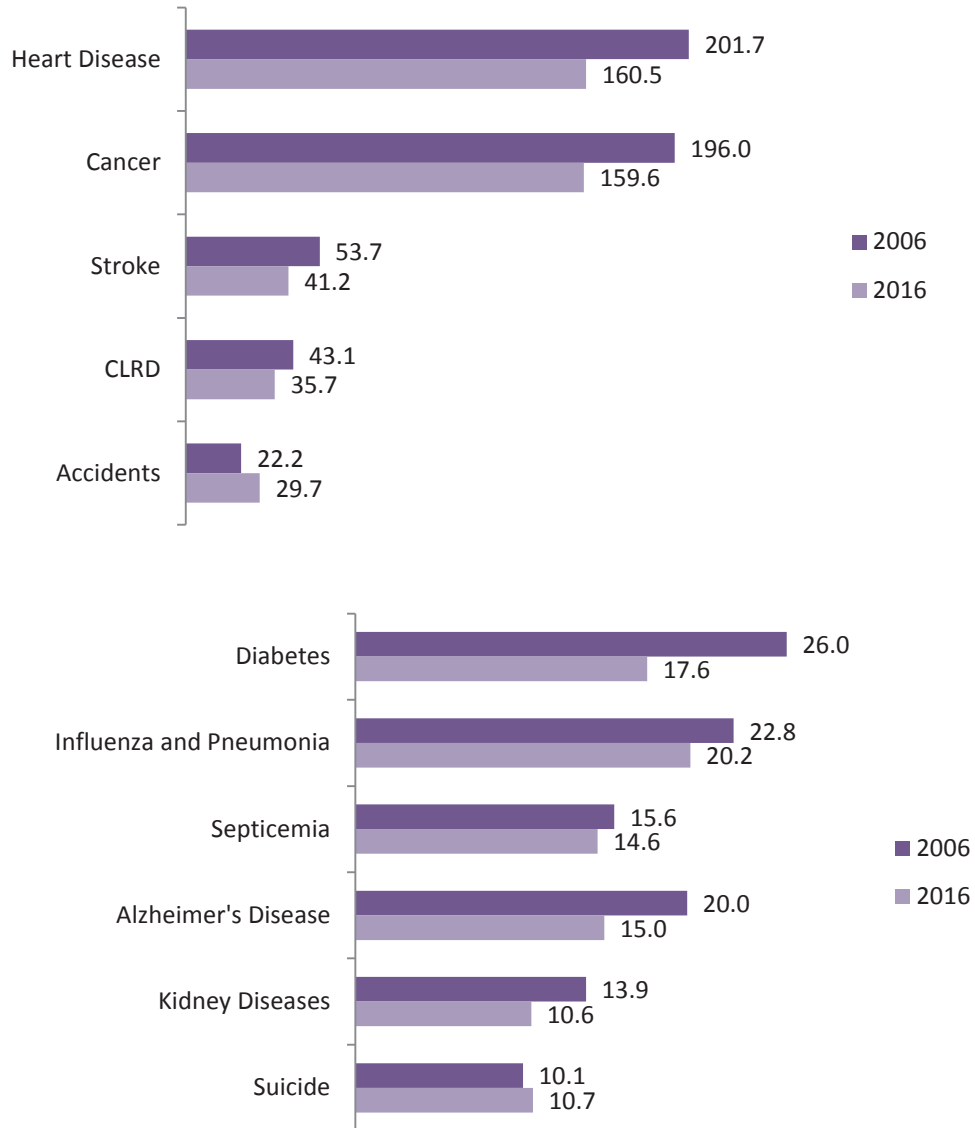


*Chronic lower respiratory diseases (CLRD) include chronic obstructive pulmonary disease and asthma.
Data Source: Maryland Department of Health, Vital Statistics Administration, 2016 Annual Report; Maryland State Health Improvement Process (SHIP), 2016 Estimates.



Mortality Trends

Age-Adjusted Mortality Rates per 100,000 Population, Anne Arundel County, 2006 vs. 2016



Data Source: Maryland Department of Health, Vital Statistics Administration, 2006 and 2016 Annual Reports.



Cancer Incidence

Cancer Incidence Rates*, Anne Arundel County, 2010-2014

Cancer Type	County Case Count	Anne Arundel Rates	Maryland Rates	United States Rates
All Sites (Both Genders**)	13,718	459.2	443.4	451.7
Breast (Female)	2,108	130.1	129.2	123.5
Cervical (Female)	89	6.2	6.4	7.5
Colorectal (Both Genders**)	976	33.3	36.7	39.8
Colorectal (Male)	493	37.6	41.8	45.8
Colorectal (Female)	482	30.1	32.7	34.8
Lung/Bronchus (Both Genders**)	1,828	63.2	56.6	61.2
Lung/Bronchus (Male)	887	69.0	64.6	72.6
Lung/Bronchus (Female)	939	59.0	50.7	52.6
Melanoma (Both Genders**)	939	31.5	21.4	20.7
Prostate (Male)	1,885	126.9	125.4	114.8

*Age-adjusted rates per 100,000 population.

**Total also includes unknown gender cases.

Data Source: Maryland Department of Health, Cigarette Restitution Fund Program, 2017 Cancer Report; National Center for Health Statistics, CDC WONDER.



Cancer Mortality

Cancer Mortality Rates*, Anne Arundel County, 2010-2014

Cancer Type	County Death Count	Anne Arundel Rates	Maryland Rates	United States Rates
All Sites (Both Genders)	4,944	173.0	165.4	166.1
Breast (Female)	364	22.9	22.9	21.2
Cervical (Female)	38	2.5	2.0	2.3
Colorectal (Both Genders)	375	13.2	14.5	14.8
Colorectal (Male)	205	16.3	17.6	17.7
Colorectal (Female)	170	10.8	12.2	10.3
Lung/Bronchus** (Both Genders)	1,375	48.1	43.1	44.7
Lung/Bronchus (Male)	690	54.5	52.0	55.9
Lung/Bronchus (Female)	685	43.4	36.5	36.3
Melanoma (Both Genders)	88	3.1	2.5	2.7
Prostate (Male)	202	18.4	20.3	20.1

*Age-adjusted rates per 100,000 population.

**Includes cancer of the trachea.

Data Source: Maryland Department of Health, Cigarette Restitution Fund Program, 2017 Cancer Report; National Center for Health Statistics, CDC WONDER.



Maternal and Child Health

In 2016, there were 6,994 births in Anne Arundel County. Of those births, 4,357 were non-Hispanic white, 1,251 were non-Hispanic black and 896 were Hispanic. 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 achieved its Healthy People 2020 goal for both low birth weight (less than 7.8 percent) and preterm births (less than 9.4 percent).

	2012	2013	2014	2015	2016
Percent of Low Birth Weight Infants					
Anne Arundel	7.8%	7.5%	8.1%	7.8%	7.4%
Maryland	8.8%	8.5%	8.6%	8.6%	8.6%
United States	8.0%	8.0%	8.0%	8.1%	8.2%
Percent of Low Birth Weight Infants, Anne Arundel by Race/Ethnicity					
White, NH	6.5%	6.1%	6.9%	6.4%	6.2%
Black, NH	12.1%	12.3%	13.8%	12.6%	11.7%
Hispanic, Any Race	7.9%	7.4%	6.9%	7.2%	6.2%
Percent of Women Having Preterm Births					
Anne Arundel	9.4%	8.9%	9.1%	9.3%	8.7%
Maryland	10.3%	9.8%	10.1%	10.0%	10.1%
United States	11.5%	11.4%	9.6%	9.6%	9.8%
Percent of Preterm Infants, Anne Arundel by Race/Ethnicity					
White, NH	8.9%	8.0%	8.2%	8.4%	7.8%
Black, NH	10.4%	11.9%	13.5%	12.1%	11.7%
Hispanic, Any Race	9.5%	8.9%	7.9%	9.6%	8.0%

Data Source: Maryland Department of Health, Vital Statistics Administration, 2012-2016 Annual Reports; U.S. Department of Health and Human Services, Healthy People 2020.



Infant Mortality

Infant mortality measures deaths during the first year of life. In 2016, there were 39 infant deaths in Anne Arundel County, with an overall infant mortality rate of 5.6 per 1,000 live births. The county was successfully below the Healthy People 2020 goal for infant mortality of less than 6.0 deaths per 1,000 live births.

A significant disparity continues to exist between white and black infant mortality. In 2016, non-Hispanic black infants in Anne Arundel County had a mortality rate of 10.5 per 1,000 live births, double that for non-Hispanic white infants. A similar disparity is seen at the state and national levels.

	2012	2013	2014	2015	2016
Infant Mortality – All Races per 1,000 Live Births					
Anne Arundel	6.4	5.6	5.7	5.1	5.6
Maryland	6.3	6.6	6.5	6.7	6.5
United States	6.0	6.0	5.8	5.9	5.9
Infant Mortality – Non-Hispanic White per 1,000 Live Births					
Anne Arundel	5.3	3.9	3.8	3.6	5.3
Maryland	3.8	4.6	4.4	4.0	4.3
United States	5.0	5.1	4.9	4.9	5.0
Infant Mortality – Non-Hispanic Black per 1,000 Live Births					
Anne Arundel	8.4	10.8	12.9	9.5	10.1
Maryland	10.4	10.6	10.7	11.3	10.5
United States	11.2	11.1	10.9	11.3	10.8
Infant Mortality – Hispanic (Any Race) per 1,000 Live Births					
Anne Arundel	7.7	7.3	**	**	**
Maryland	5.5	4.7	4.4	5.5	5.4
United States	5.1	5.0	5.0	5.0	5.0

**Rate not calculated, fewer than 5 deaths. Source: Maryland Department of Health, Vital Statistics Administration, 2012-2016 Annual Reports; U.S. Department of Health and Human Services, Healthy People 2020.



General Disease Reporting

Number of Selected Reportable Diseases In Anne Arundel County						
	2013	2014	2015	2016	2017*	5-Year Mean
Campylobacter	56	81	61	81	97	75
Salmonella	79	81	141	105	120	105
Vibrio	11	9	4	17	13	11
Legionellosis	15	8	5	6	17	10
<i>M. tuberculosis</i>	9	3	15	13	13	11
Hepatitis B**	83	105	78	100	96	92
Hepatitis C**	579	570	546	631	566	578
Meningitis, meningococcal	0	0	0	1	0	<1
Pertussis	29	42	28	28	9	27
Chlamydia	1549	1726	1757	2028	2201	1852
Gonorrhea	298	331	359	586	576	430
Syphilis***	19	23	31	23	33	26
Lyme Disease	98	115	107	175	126	124
Animal Rabies	40	36	38	15	8	27
Outbreaks: Gastrointestinal	9	8	13	5	10	9
Outbreaks: Respiratory	11	14	18	8	12	13

*Provisional data.

**Includes both acute and chronic cases.

***Includes primary and secondary.

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



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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.