



Building Partnerships for a Healthier Community



Anne Arundel County Department of Health

May 2014

Report Card of Community Health Indicators

Laura Neuman
County Executive

Dr. Jinlene Chan
Acting Health Officer



Health Officer's Message

Helen Keller said, "Alone we can do so little; together we can do so much." This truly represents the future of public health and the sentiments of the Department of Health. The vision of the Department is a vibrant Anne Arundel County with healthy people in healthy communities. Our mission is to preserve, promote and protect the public health of all people who live, work and play in Anne Arundel County. The essential building blocks to achieve our vision and mission are based on a set of core values that include integrity, excellence, collaboration, innovation and respect.

The health of the public is impacted by so many factors within our community. In response, the Department of Health's Strategic Plan for Fiscal Years 2013-2016 emphasizes the importance of partnerships to improving public health. The Department collaborates with our partners in many ways. Under the leadership of County Executive Laura Neuman, the Department serves as the lead organization for the Healthy Anne Arundel Coalition, Conquer Cancer Coalition, Co-Occurring Disorders Steering Committee, HIV/AIDS Commission and other community-based partnerships to improve public health. Many public health issues are addressed in this report, and all of our collaborations help harness the collective power of agencies and the community to address critical health needs.

This annual report is a valuable resource as we all continue to work together toward building a healthier County. It details progress we have made toward Healthy People 2020 goals, identifies areas needing improvement, and serves as a guide to monitoring emerging health issues in the future. Together we can work toward a healthier Anne Arundel County.

Warm regards,

A handwritten signature in black ink that reads "Jinlene Chan MD". The signature is stylized with a large, sweeping underline.

Jinlene Chan, M.D., M.P.H.
Acting Health Officer





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Demographics

2012 Estimates	Anne Arundel	Maryland	United States
Population			
Total Population	550,175	5,884,868	313,873,685
Male	49.5%	48.4%	49.2%
Female	50.5%	51.6%	50.8%
Race, Ethnicity and Age			
White, non-Hispanic (NH)	71.5%	53.9%	63.0%
Black, NH	15.6%	29.1%	12.3%
Hispanic	6.6%	8.7%	16.9%
Asian, NH	3.6%	5.9%	5.0%
American Indian and Alaska Native, NH	0.3%	0.2%	0.7%
Others	2.4%	2.2%	2.1%
Under 5 Years Old	6.3%	6.2%	6.4%
18 Years and Over	77.2%	77.2%	76.5%
65 Years and Over	12.7%	13.0%	13.7%
Median Age (Years)	38.6	38.0	37.3
Household and Economic Indicators			
Median Household Income	\$86,987	\$72,999	\$53,046
Families Below Poverty Level	4.0%	6.5%	10.9%
Individuals Below Poverty Level	5.9%	9.4%	14.9%
Unemployment Rate, January 2014*	5.4%	6.1%	7.0%
Uninsured	11.7%	13.2%	17.1%

Data Source: U.S. Census Bureau: State and County Quick Facts; 2012 Population Estimates; 2012 American Community Survey 5-year Estimates and 1-year Estimates; United States Department of Labor; Bureau of Labor Statistics (*not seasonally adjusted preliminary unemployment rates); National BRFSS, CDC; Maryland BRFSS, DHMH.



Healthy People 2020

At the start of each decade, the U.S. Department of Health and Human Services provides a set of 10-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 2012*)	National 2020 Goal	Met National 2020 Goal
Mortality (age-adjusted rates per 100,000 population)			
Coronary Heart Disease	171.5	100.8	No
Stroke	39.9	33.8	No
Diabetes	21.5	65.8	Yes
Unintentional Injuries	22.4	36.0	Yes
All Cancer	164.1	160.6	No
Lung Cancer	58.7**	45.5	No
Female Breast Cancer	23.5**	20.6	No
Homicide	3.4	5.5	Yes
Suicide	9.3	10.2	Yes

*Rates based on data from 2010-2012.

**Rates based on data from 2006-2010.

Lung cancer data also includes data on cancer of bronchus.

Data Source: Maryland Vital Statistics Annual Reports, Vital Statistics Administration, Maryland DHMH; 2013 Cancer Report, Cigarette Restitution Fund Program ,Maryland DHMH ; Healthy People 2020, U.S. DHHS.



Healthy People 2020

Indicator	Anne Arundel (as of 2012)	National 2020 Goal	Met National 2020 Goal
Maternal and Infant Health			
First Trimester Prenatal Care	69.5%	77.9%	No
Low Weight Births*	7.8%	7.8%	Yes
Infant Mortality Rate** (Per 1,000 Live Births)	6.4	6.0	No
Risk Factors			
Cigarette Smoking by Adults	18.1%	12.0%	No
Healthy Weight in Adults	36.3%	33.9%	Yes
Obesity in Adults	27.0%	30.5%	Yes
Health Access and Screening			
Mammography Screening in Past 2 Years (Ages 50+)	79.2%	81.1%	No
Colorectal Cancer Screening (Ages 50+)	75.9%	70.5%	Yes
Cholesterol Checked in Last 5 Years	81.0% (as of 2011)	82.1%	No
Health Insurance	88.3%	100%	No

*Low birth weight is defined as <2,500 grams or approximately 5.5. pounds.

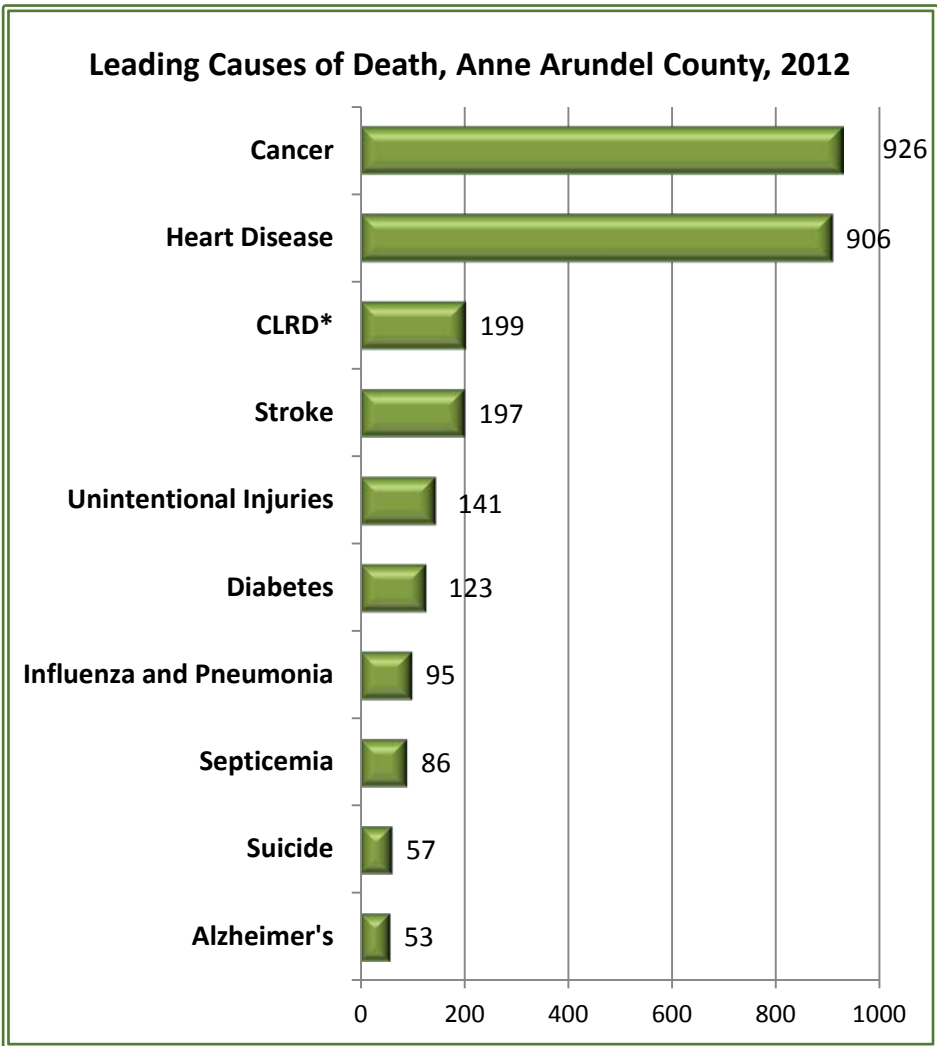
**Infant mortality measures deaths during the first year of life.

Data Source: Maryland Vital Statistics Annual Report, Vital Statistics Administration, Maryland DHMH; Maryland BRFSS; U.S. DHHS; Healthy People 2020, U.S. DHHS.



Leading Causes of Death

In 2012, 3,864 Anne Arundel County residents were reported to have died, and life expectancy was 79.8 years. There are many modifiable risk factors that contribute to the leading causes of death, including smoking, high blood pressure, overweight and obesity, physical inactivity, poor diet and excess alcohol consumption. Leading a healthy lifestyle can reduce the burden of long-term disability and premature death.



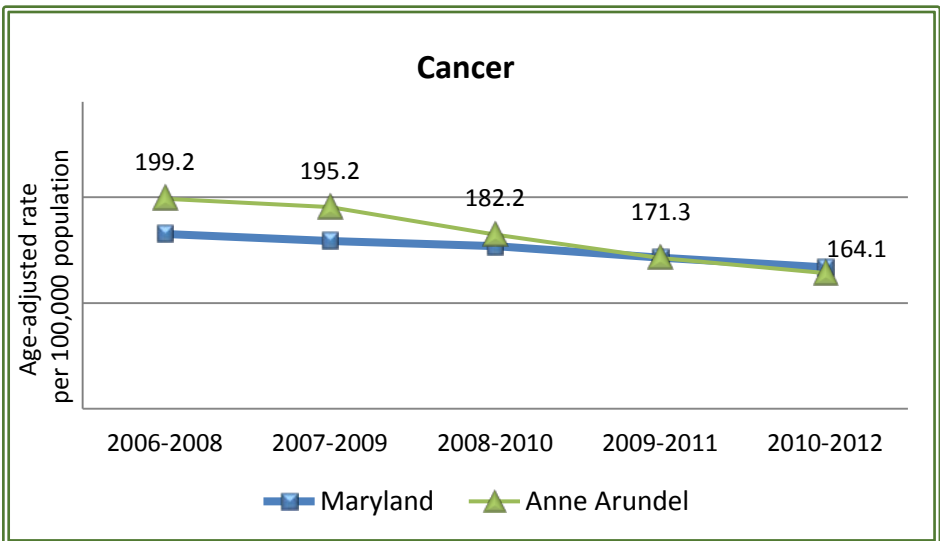
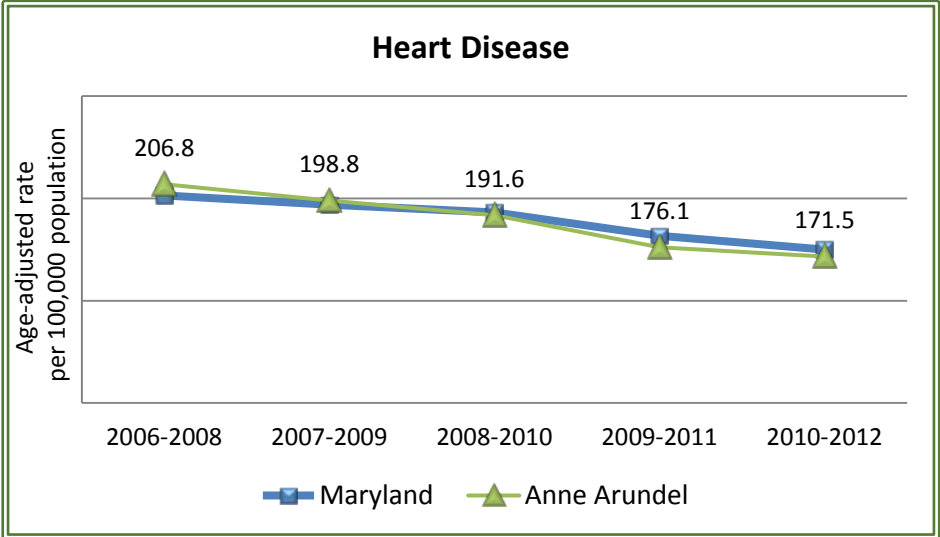
*Chronic lower respiratory diseases (CLRD) include both chronic obstructive pulmonary disease (COPD) and asthma.

Data Source: Maryland Vital Statistics Annual Report, Vital Statistics Administration, Maryland DHMH.



Mortality Trends

Age-Adjusted Mortality Rates, Anne Arundel County, 2006-2012

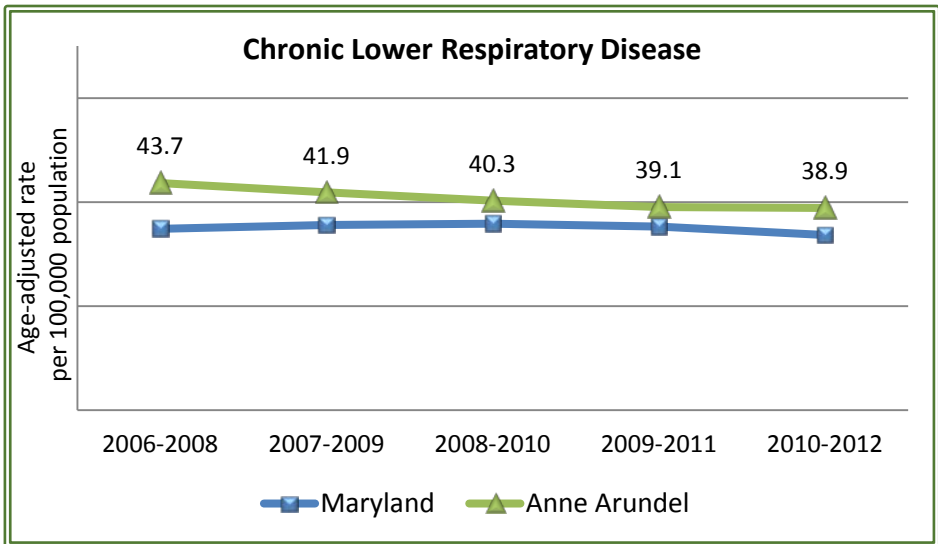
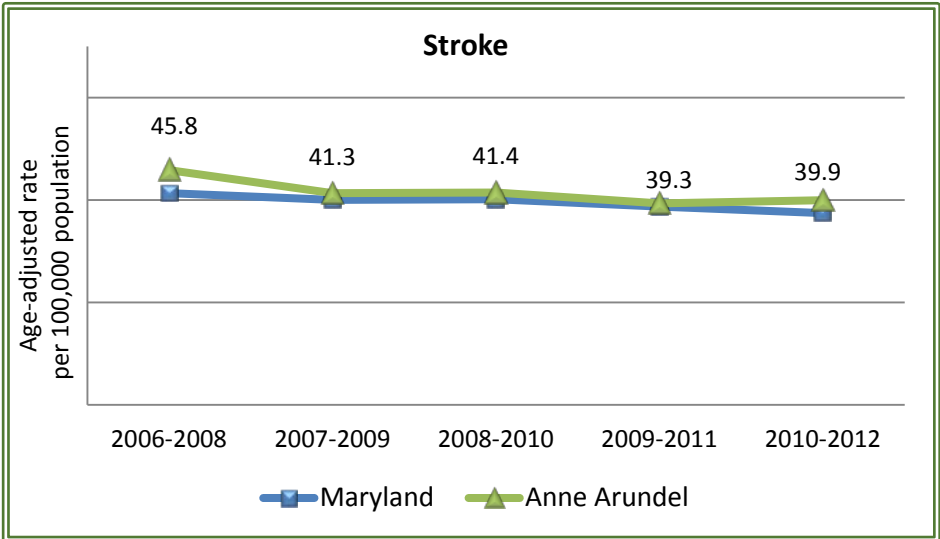


Data Source: Maryland Vital Statistics Annual Reports, Vital Statistics Administration, Maryland DHMH.



Mortality Trends

Age-Adjusted Mortality Rates, Anne Arundel County, 2006-2012

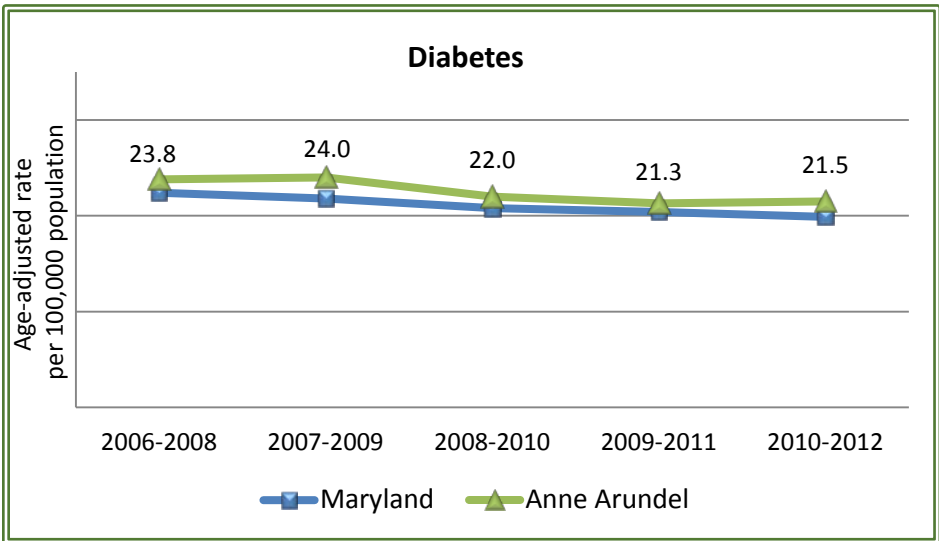
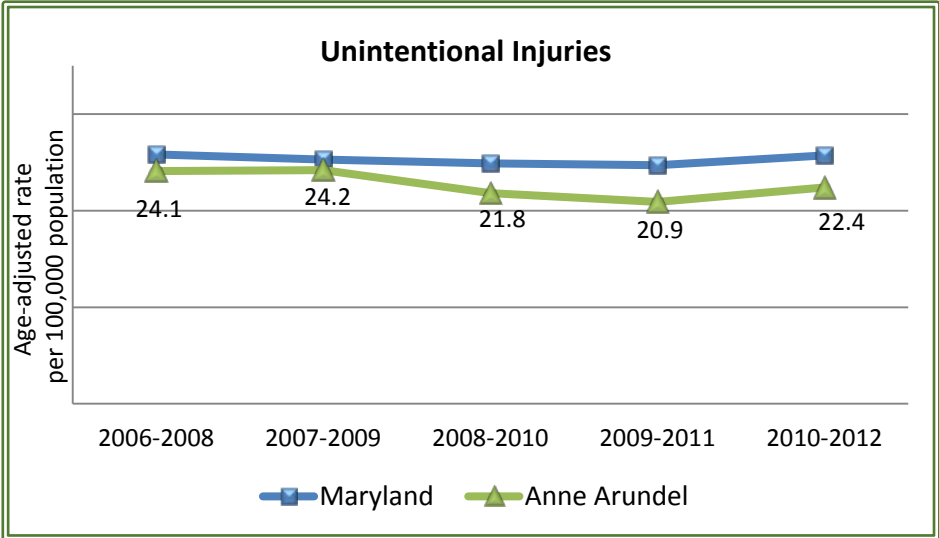


Data Source: Maryland Vital Statistics Annual Reports, Vital Statistics Administration, Maryland DHMH.



Mortality Trends

Age-Adjusted Mortality Rates, Anne Arundel County, 2006-2012



Data Source: Maryland Vital Statistics Annual Reports, Vital Statistics Administration, Maryland DHMH.



Cancer Incidence

Cancer Incidence Rates*, Anne Arundel County, 2006-2010

Cancer Type	County Case Count	Anne Arundel Rates	Maryland Rates	United States Rates
All Sites (Both Genders**)	12,727	477.9	449.2	469.1
Breast (Female)	1,876	127.6	125.1	121.9
Cervical (Female)	82	6.0	6.7	7.9
Colorectal (Both Genders**)	964	37.6	40.1	44.7
Colorectal (Male)	510	43.4	46.2	51.7
Colorectal (Female)	453	32.3	35.4	39.1
Lung/Bronchus (Both Genders**)	1,802	70.5	61.2	66.1
Lung/Bronchus (Male)	895	78.8	72.1	80.6
Lung/Bronchus (Female)	896	64.1	53.5	55.3
Melanoma (Both Genders**)	863	31.9	20.8	19.3
Prostate (Male)	1,984	151.3	153.4	146.3

*Age-adjusted rates per 100,000 population.

**Total also includes unknown gender cases.

Data Source: 2013 Cancer Report, Cigarette Restitution Fund Program, Maryland DHMH; National Center for Health Statistics, CDC WONDER.



Cancer Mortality

Cancer Mortality Rates*, Anne Arundel County, 2006-2010

Cancer Type	County Death Count	Anne Arundel Rates	Maryland Rates	United States Rates
All Sites (Both Genders)	4,721	189.2	179.0	176.4
Breast (Female)	335	23.5	24.5	22.6
Cervical (Female)	33	2.4	2.3	2.4
Colorectal (Both Genders)	387	16.1	16.8	16.4
Colorectal (Male)	210	19.3	20.6	19.6
Colorectal (Female)	177	13.3	14.0	13.9
Lung/Bronchus** (Both Genders)	1,474	58.7	49.4	49.5
Lung/Bronchus (Male)	776	70.1	61.7	63.5
Lung/Bronchus (Female)	698	50.3	40.5	39.2
Melanoma (Both Genders)	99	4.0	2.7	2.7
Prostate (Male)	205	22.5	25.0	23.0

*Age-adjusted rates per 100,000 population.

**Includes cancer of the trachea.

Data Source: 2013 Cancer Report, Cigarette Restitution Fund Program, Maryland DHMH; National Center for Health Statistics, CDC WONDER.



Infant Health Indicators

	2008	2009	2010	2011	2012
Number of Births (Mother's Race), Anne Arundel County					
Total	7,156	7,103	7,075	6,824	6,852
Whites	5,456	5,333	5,431	5,196	5,256
Blacks	1,270	1,332	1,280	1,232	1,222
Hispanic, Any Race	773	770	825	819	782
Percent of Low Birth Weight Infants (<2,500 grams or approximately 5.5 lbs)					
Anne Arundel	9.2%	8.2%	8.2%	8.1%	7.8%
Maryland	9.3%	9.2%	8.8%	8.9%	8.8%
United States	8.2%	8.2%	8.2%	8.1%	8.0%**
Percent of Women Receiving First Trimester Prenatal Care (First trimester includes the first 12 weeks of pregnancy)					
Anne Arundel	89.2%	88.4%	70.4%*	71.5%*	69.5%*
Maryland	80.2%	80.2%	69%*	67.7%*	65.7%*
Births to Women 15-19 Years Old per 1,000 Women Ages 15-19					
Anne Arundel	28.9	27.8	25.8	22.3	20.3
Maryland	32.7	31.2	27.2	24.7	22.1
United States	40.2	37.9	34.2	31.3	29.4**

*2010 and newer data cannot be compared to previous years due to changes to the Maryland birth certificate.

**Preliminary data.

National data on percent of women receiving first trimester prenatal care is no longer available
Data Source: Maryland Vital Statistics Annual Reports, Vital Statistics Administration, Maryland DHMH;
National Center for Health Statistics, CDC.



Infant Mortality

Infant mortality measures deaths during the first year of life. In 2012, there were 44 infant deaths in Anne Arundel County, with an overall infant mortality rate of 6.4 per 1,000 live births. The Healthy People 2020 goal for infant mortality is less than 6.0 deaths per 1,000 live births.

A significant disparity continues to exist between white and black infant mortality. In 2012, black infants in Anne Arundel County had a mortality rate of 9.0 per 1,000 live births, 1.63 times higher than white infants. A similar disparity is seen at the state and national levels.

	2008	2009	2010	2011	2012
Infant Mortality – All Races per 1,000 Live Births					
Anne Arundel	8.7	4.9	4.7	5.1	6.4
Maryland	8.0	7.2	6.7	6.7	6.3
United States	6.6	6.4	6.15	6.05	N/A
Infant Mortality – Whites per 1,000 Live Births					
Anne Arundel	7.1	4.1	3.3	3.5	5.5
Maryland	5.2	4.1	4.1	4.0	4.1
United States	5.6	5.3	5.2	5.11	N/A
Infant Mortality – Blacks per 1,000 Live Births					
Anne Arundel	17.3	9.0	10.9	13.0	9.0
Maryland	13.4	13.6	11.8	12.0	10.3
United States	12.7	12.6	11.6	11.42	N/A

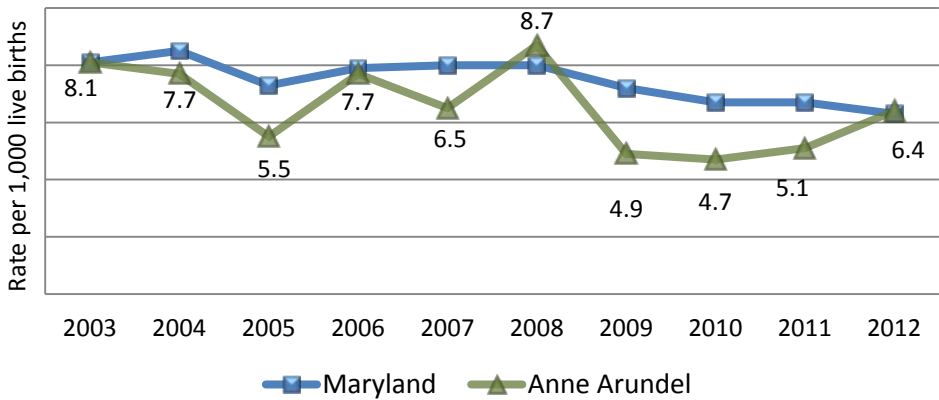
Data Source: Maryland Vital Statistics Annual Reports, Vital Statistics Administration, Maryland DHMH; National Center for Health Statistics, CDC.



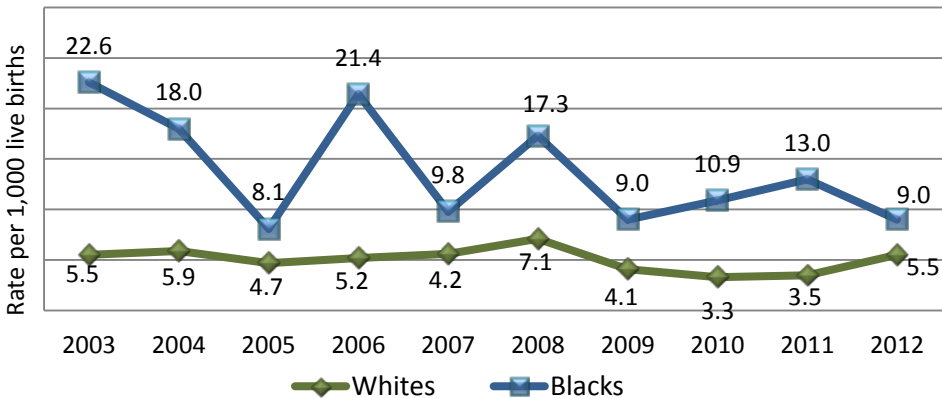
Infant Mortality

Premature births and issues such as smoking, substance abuse, obesity and chronic health conditions impact pregnancy outcomes. Early and continuous prenatal care and education about healthy pregnancies and caring for a baby (e.g., immunizations, injury prevention, safe sleep position) may help improve the health and survival of infants. Although the infant mortality rate for Black infants declined in 2012, the County's 2012 overall infant mortality rate was its highest since 2008.

Infant Mortality Rates, Anne Arundel County and Maryland, 2003-2012



Infant Mortality Rates by Race, Anne Arundel County, 2003-2012

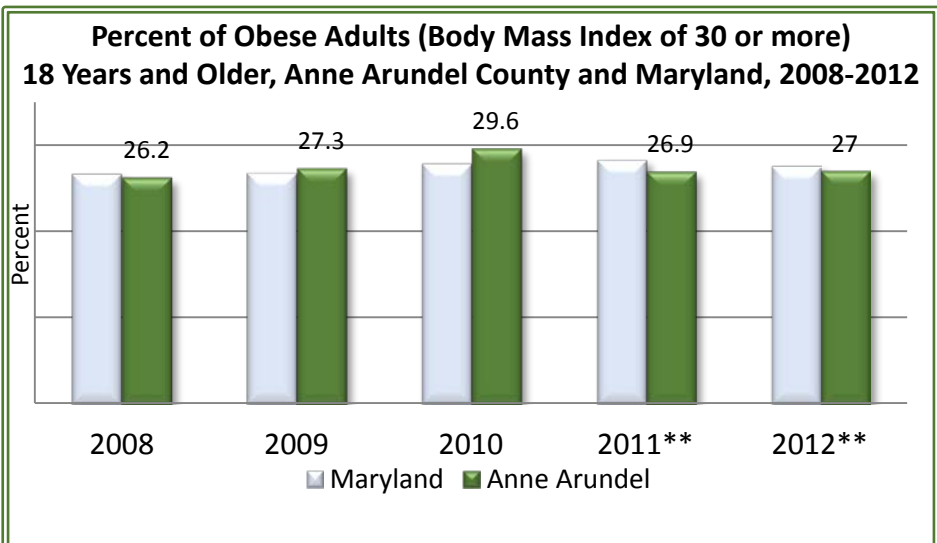
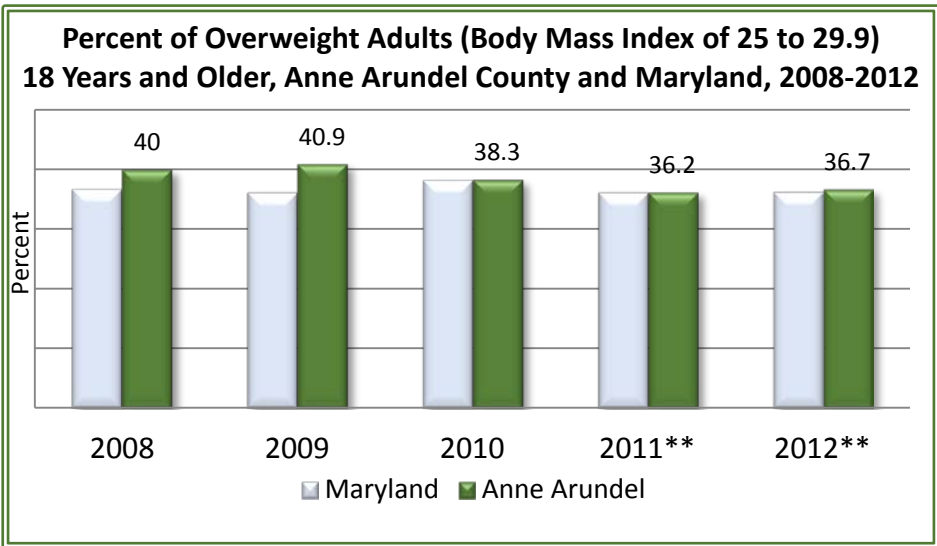


Data Source: Maryland Vital Statistics Annual Reports, Vital Statistics Administration, Maryland DHMH.



Overweight and Obesity

Being overweight or obese increases the risk of diabetes, heart disease, cancer, stroke, high cholesterol, high blood pressure, sleep disorders, respiratory problems and other health issues. Many factors play a role in weight, including lifestyle, surrounding environment, genetics and certain diseases. Overweight and obesity are determined using weight and height to determine a BMI* or “body mass index” measure.



*BMI is measured as weight (pounds) multiplied by 703 divided by height (inches) squared.

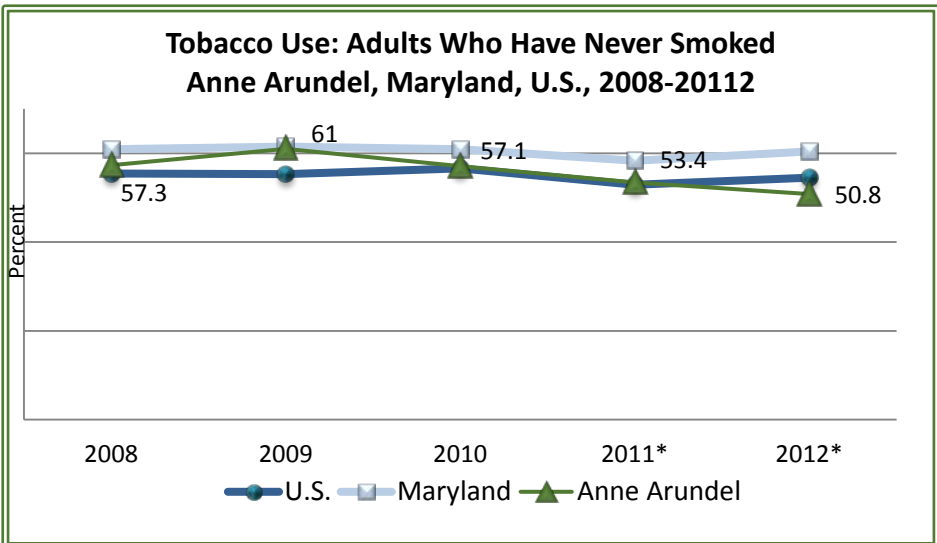
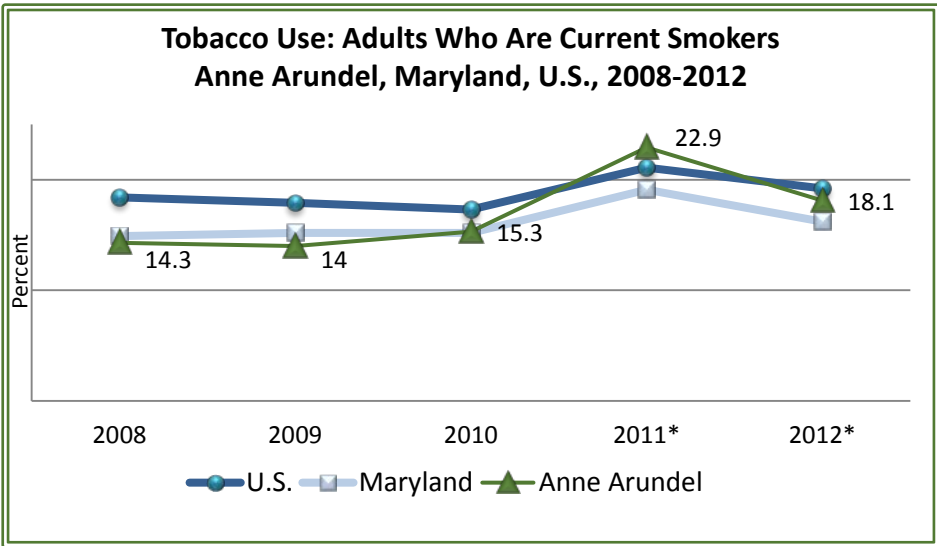
**2011 and newer data cannot be compared with previous years' data due to changes in data collection methodology.

Data Source: National BRFSS, CDC; Maryland BRFSS.



Tobacco Use

Smoking is the leading risk factor for lung cancer, and it also increases the risk of other health problems, including chronic lower respiratory disease (e.g., COPD and asthma), respiratory infections, heart problems, premature birth and Sudden Infant Death Syndrome (SIDS). To meet the Healthy People 2020 goal, Anne Arundel County will need to reduce the percentage of current adult smokers from 18.1 to 12 percent.



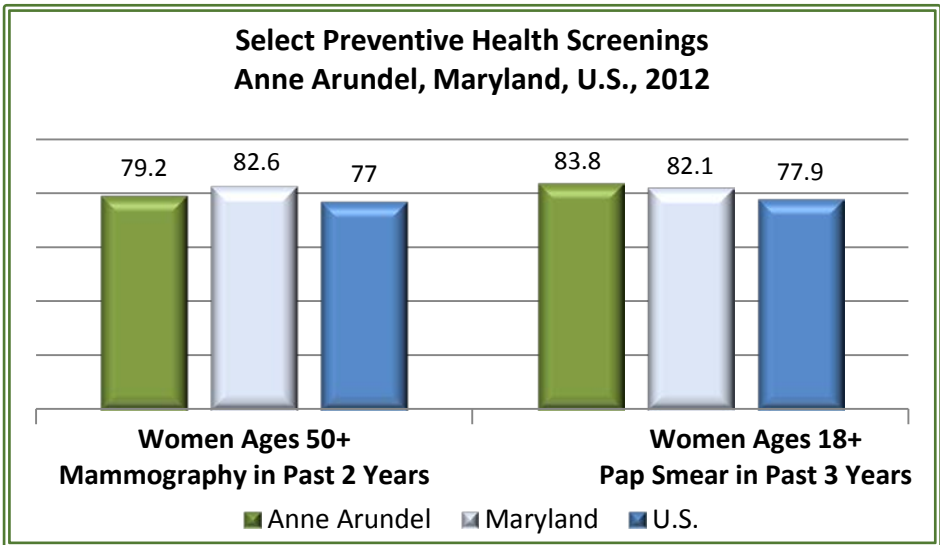
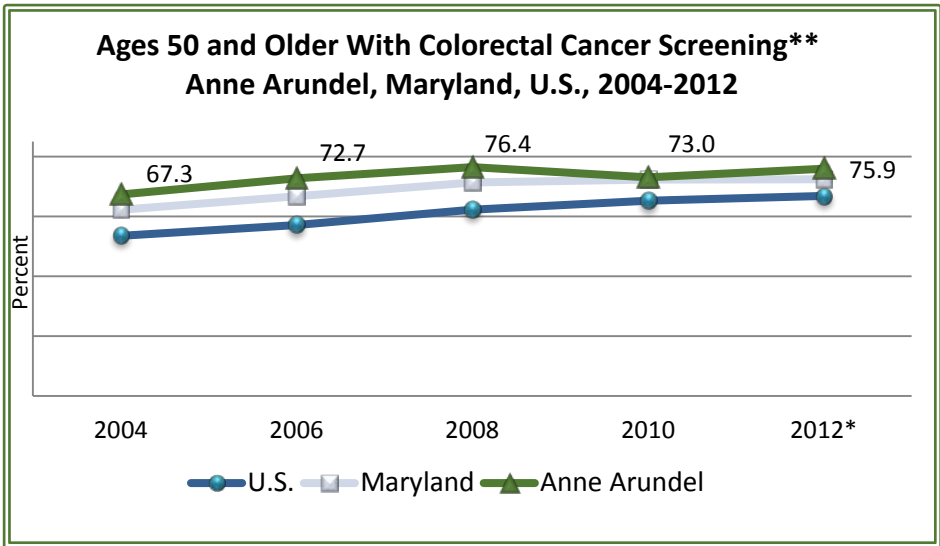
*2011 and 2012 data cannot be compared with previous years' data due to changes in data collection methodology.

Data Source: National BRFSS, CDC; Maryland BRFSS.



Preventive Health Screening

Early detection greatly increases the opportunity for successful cancer treatment. Approximately 5 percent of men and women will develop colorectal cancer during their lifetimes; 1 in 8 women will develop breast cancer; and 1 in 147 women will develop cervical cancer. Recommendations to help prevent cancer include maintaining a healthy weight, being physically active, eating a healthy diet and limiting alcohol consumption.



*2011 and newer data cannot be compared with previous years' data due to changes in data collection methodology.

** Colorectal Cancer Screening with Sigmoidoscopy or Colonoscopy only

Data Source: National BRFSS, CDC; Maryland BRFSS; American Cancer Society.

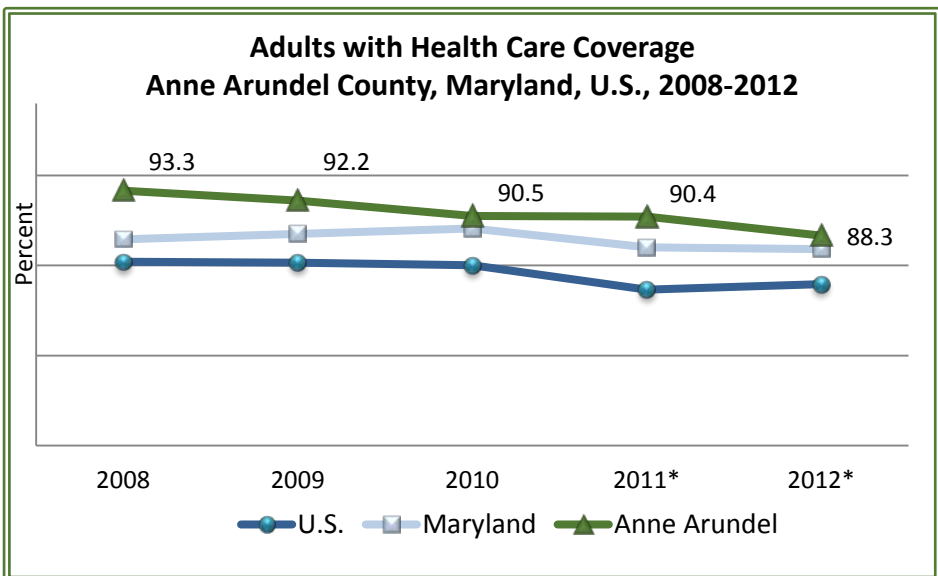


Health Care Insurance

Around 11.7 percent of County residents lacked any kind of health care insurance in 2012. This means there are approximately 64,000 residents in Anne Arundel County without health insurance, most of whom were ages 18-64. Of the approximately 26,000 emergency department visits made in 2012 that were not covered through some form of insurance, approximately 60 percent were from residents of Glen Burnie, Brooklyn, Pasadena and Annapolis.

Lack of health insurance varies not only by age and geography, but also by gender, race and ethnicity. More men lack insurance than women (9.2 percent versus 6.8 percent). The white, non-Hispanic population has the best health insurance coverage, with only 5.5 percent lacking insurance. Ten percent (9.9%) of the Black population, 12.7 percent of the Asian population and 31.7 percent of the Hispanic population (any race) are estimated to lack insurance.

Improving access to health care insurance is essential to increasing health and wellness and reducing health disparities. Federal health care reform is expected to increase the number of people with health care insurance.



*2011 and newer data cannot be compared with previous years' data due to changes in data collection methodology.

Data Source: National BRFSS, CDC; Maryland BRFSS, DHMH; 2008-2012 American Community Survey, 5-Year Estimates; Maryland Health Services Cost Review Commission



Health Care Reform

The Patient Protection and Affordable Care Act (ACA) was enacted in 2010 to improve the nation's health and includes provisions to increase access to health care. The ACA provides states with an option to access funds to increase Medicaid eligibility; provides federal subsidies to help low to moderate income people purchase private health insurance plans from an insurance exchange marketplace beginning in 2014; requires insurers to offer affordable plans with ten essential health benefits; and offers many consumer protections. In 2013, the Department of Health presented public forums throughout the County to advise citizens of these changes.

The Department of Health and HealthCare Access Maryland (HCAM) currently collaborate to enroll eligible County residents in Maryland's Medicaid program. HCAM also has staff located at Department of Health sites to assist County residents enroll in the private insurance plans available from Maryland Health Connection, the insurance exchange marketplace. Some people may not be eligible for these programs, and some may choose to pay a fine in lieu of having coverage.



Data Source: U.S. Department of Health and Human Services (infographic)



General Disease Reporting

Number of Selected Reportable Diseases In Anne Arundel County				
	2011	2012	2013*	5-Year Mean
Campylobacter	55	72	58	60
Salmonella	97	99	79	82
Vibrio	6	13	11	9
Legionellosis	13	11	15	12
<i>M. tuberculosis</i>	8	10	8	7
<i>M. marinum</i>	7	7	7	6
Hepatitis A	3	2	4	3
Hepatitis B**	80	83	77	94
Hepatitis C**	622	554	514	620
Meningitis, viral	42	56	39	47
Meningitis, meningococcal	0	0	0	1
Pertussis	17	37	30	23
Streptococcus Pneumonia, Invasive Disease	52	38	54	56
Chlamydia	1,674	1,439	1,392	1,424
Gonorrhea	213	230	274	250
Syphilis***	19	15	18	19
Lyme Disease	90	108	100	123
Rocky Mountain Spotted Fever	5	3	3	9
Animal Rabies	7	19	40	21
Outbreaks: Gastrointestinal	10	15	9	11
Outbreaks: Respiratory	5	1	10	5

*Provisional data.

**Includes both acute and chronic cases.

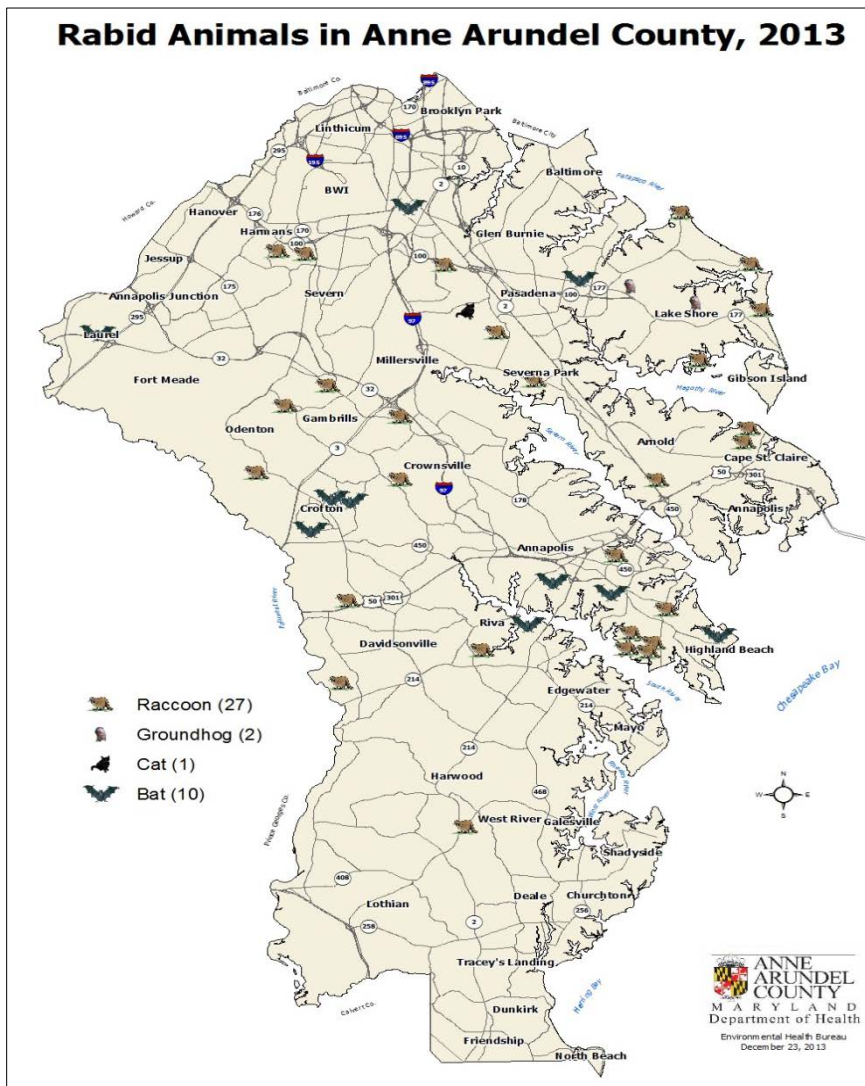
***Includes primary and secondary.

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



Rabies

Rabies is a fatal viral infection spread through the saliva of infected mammals. Annually, over 1,500 County residents are screened after contact with animals to assess their risk for rabies, with over 150 needing preventive treatment. Exposures to dogs and cats account for about 80 percent of assessed cases. An oral rabies vaccine program for wild raccoons helped reduce the number of reported rabid animals in the County from nearly 100 in 1998 to 7 in 2011. Since a lack of federal funding discontinued the program in 2011, the number of confirmed rabid raccoons has increased from 4 in 2011 to 30 in 2013.

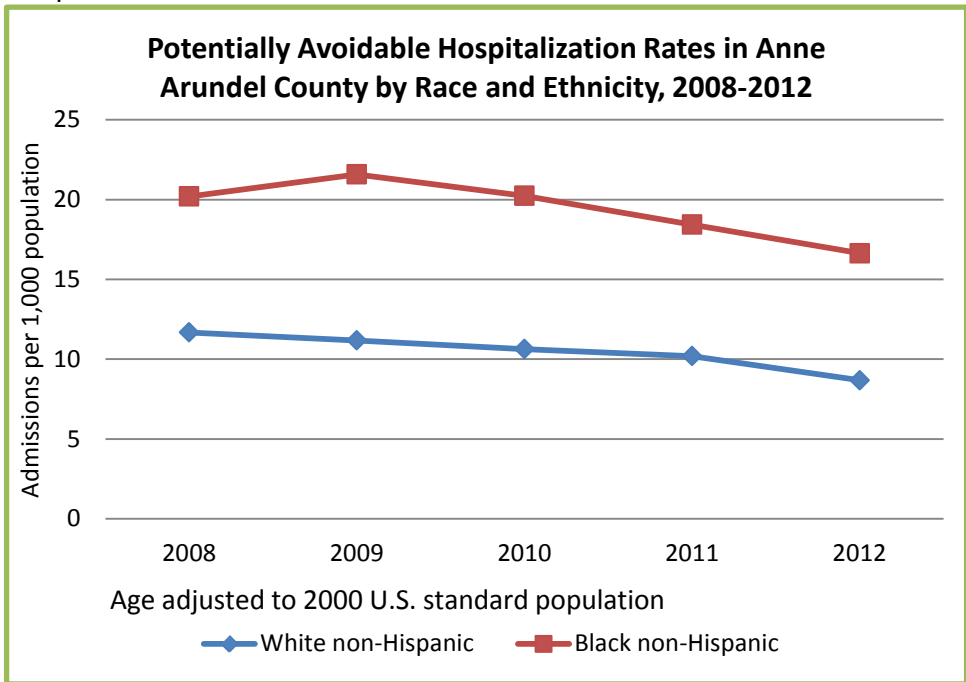




Potentially Avoidable Hospitalizations

The Anne Arundel County Department of Health conducted a study to estimate the incidence of potentially avoidable hospitalizations among adults. Rates of potentially avoidable hospitalizations for ambulatory care-sensitive conditions (ACSCs) are used as an indicator of access to effective primary care. ACSCs are chronic and acute diagnoses for which timely and effective outpatient care is expected to reduce the need for hospitalization and prevent complications or more severe disease.

Overall, 14 percent of approximately 200,000 hospitalizations among County residents (2008-2012) meet the criteria for potentially avoidable hospitalizations. Of these, 64 percent were hospitalizations related to chronic conditions (e.g., diabetes, hypertension, asthma, COPD, angina, congestive heart failure) and 36 percent were hospitalizations related to acute conditions (e.g., urinary tract infection, dehydration, bacterial pneumonia). Age-adjusted rates of potentially avoidable hospitalizations are higher among non-Hispanic Blacks and the average age of admission is lower among Blacks and Hispanics than among whites. The northern part of the County had the highest rates of potentially avoidable hospitalizations.

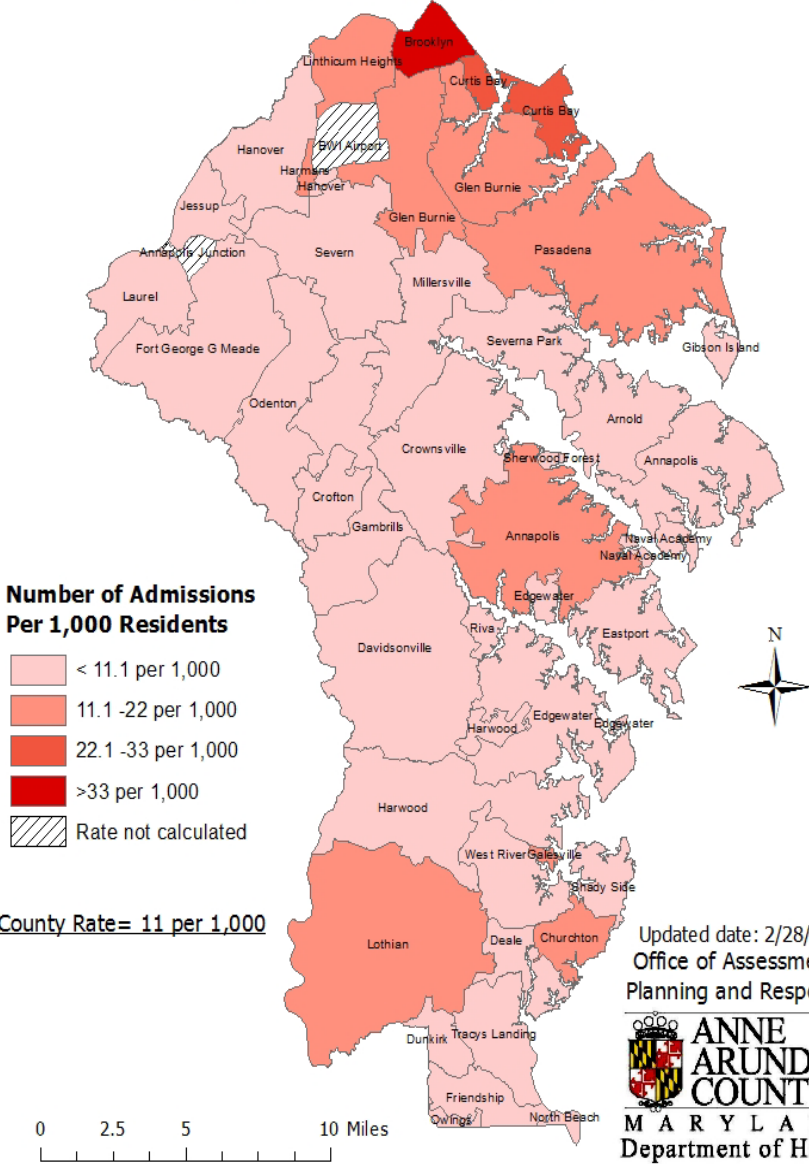


Data Source: Maryland Health Services Cost Review Commission, 2008-2012 Inpatient Data



Potentially Avoidable Hospitalizations

Potentially Avoidable Hospitalizations Anne Arundel County, 2008-2012



Data Source: Maryland Health Services Cost Review Commission



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Special thanks to the following individuals for their contributions to this report:

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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.

Anne Arundel County Department of Health

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