Anne Arundel County Department of Health

# Healthy Environments, Healthy People



# Report Card of Community Health Indicators

May 2015

Steven Schuh County Executive

Dr. Jinlene Chan Health Officer



# County Executive's Message

I am pleased to present the Department of Health's 2015 Report Card of Community Health Indicators. This report is a valuable resource to help monitor Anne Arundel County's health status. The Department of Health functions in a complex health environment, collaborating with many agencies, providers and organizations, in order to preserve, promote and protect the public's health.

The health information and data in the Report Card help County leaders to make informed decisions and direct resources to areas that are most in need. This report shows that Anne Arundel County has achieved major accomplishments with some health indicators; however, we face challenges with others, including substance abuse.

This year, I declared a countywide Heroin Public Health Emergency. The Report Card provides a glimpse of the magnitude of the heroin problem and some background for our County's call to action. Under my Administration, a Heroin Action Taskforce was established and has released recommendations to address the heroin and opioid overdose issue.

Health is important, because it affects all of us who live, work and raise our families in Anne Arundel County. I thank the Department of Health staff for their quality services and appreciate the many community partners who have joined together to improve health and wellness in our County.

Respectfully,

Steve

Steven Schuh
County Executive





#### Health Officer's Message

Everyone wants to be healthy. Our health is impacted by everything around us – our homes, schools, worksites and communities. The Department of Health focuses on the public's health, that is the health of the entire population of Anne Arundel County. We keep this focus through our vision of a vibrant Anne Arundel County with healthy people in healthy communities and a mission to preserve, promote and protect the health of all people who live, work and play in Anne Arundel County. These are operationalized through our many programs and services.

Our vision and mission have inspired this year's 2015 Report Card of Community Health Indicators *Healthy Environments, Healthy People*. Our annual report card provides a snapshot of the health status of our community. It summarizes demographic and household indicators that contribute to health, as well as our standing in key health areas. This report also allows us to bring attention to special health issues that affect our county and how they are being addressed. This year, we are examining heroin, our food environment, healthy communities and emerging and re-emerging diseases.

Since the public's health is impacted by so many sectors of our community, collaborating with our many partners harnesses the collective power of agencies and community organizations to address critical health needs. Together we are working toward a healthier Anne Arundel County.

Warm regards,

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



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# **Demographics**

2013 Estimates	Anne Arundel	Maryland	United States
Population			
Total Population	556,348	5,938,737	316,497,531
Male	49.5%	48.5%	49.2%
Female	50.5%	51.5%	50.8%
Race, Ethnicity and Age			
White, non-Hispanic (NH)	70.9%	53.3%	62.6%
Black, NH	15.8%	29.2%	12.4%
Hispanic	6.9%	9.0%	17.1%
Asian, NH	3.6%	6.0%	5.1%
American Indian and Alaska Native, NH	0.3%	0.2%	0.7%
Others	2.5%	2.2%	2.1%
Under 5 Years Old	6.3%	6.2%	6.3%
18 Years and Over	77.2%	77.3%	76.7%
65 Years and Over	13.1%	13.4%	14.1%
Median Age (Years)	38.5	38.0	37.3
Household and Economic Inc	dicators		
Median Household Income	\$87,430	\$73,538	\$53,046
Families Below Poverty Level	4.3%	6.8%	11.3%
Individuals Below Poverty Level	6.3%	9.8%	15.4%
Unemployment Rate, January 2015*	5.1%	5.9%	6.1%
Uninsured	8.2%	12.9%	16.8%

Data Source: U.S. Census Bureau: State and County Quick Facts; 2013 Population Estimates; 2013 American Community Survey 5-year Estimates and 1-year Estimates; U.S. Department of Labor; Bureau of Labor Statistics (\*not seasonally adjusted preliminary unemployment rates); National BRFSS (Behavioral Risk Factor Surveillance System), CDC (U.S. Centers for Disease Control and Prevention); Maryland BRFSS, Maryland Department of Health and Mental Hygiene (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 2013*)		Met National 2020 Goal
Mortality (age-adjusted	d rates per 100,00	00 population)	
Coronary Heart Disease	165.0	103.4	No
Stroke	37.6	34.8	No
Diabetes	20.2	66.6	Yes
Unintentional Injuries	23.9	36.4	Yes
All Cancers	166.1	161.4	No
Lung Cancer	55.2**	45.5	No
Female Breast Cancer	23.0**	20.7	No
Homicide	3.1	5.5	Yes
Suicide	9.4	10.2	Yes

<sup>\*</sup>Rates based on data from 2011-2013.

<sup>\*\*</sup>Rates based on data from 2007-2011.

Lung cancer data also includes data on cancer of bronchus.

Data Source: Maryland Vital Statistics Annual Reports, Vital Statistics Administration, Maryland DHMH; 2014 Cancer Report, Cigarette Restitution Fund Program, Maryland DHMH; Healthy People 2020, U.S. DHHS.



# **Healthy People 2020**

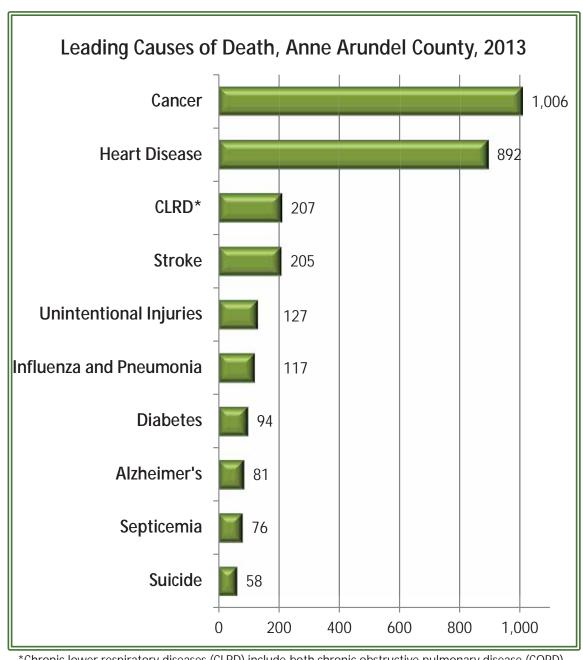
Indicator	Anne Arundel (as of 2013)	National 2020 Goal	
Maternal and Infant H	ealth		
First Trimester Prenatal Care	74.2%	77.9%	No
Low Weight Births*	7.5%	7.8%	Yes
Infant Mortality Rate** (Per 1,000 Live Births)	5.6	6.0	Yes
Risk Factors			
Cigarette Smoking by Adults	18.0%	12.0%	No
Healthy Weight in Adults	36.8%	33.9%	Yes
Obesity in Adults	30.5%	30.5%	Yes
Health Access and Scre	eening		
Mammography Screening in Past Two Years (Ages 50+)***	79.2%	81.1%	No
Colorectal Cancer Screening (Ages 50+)***	75.9%	70.5%	Yes
Cholesterol Checked in Last Five Years	82.7%	82.1%	Yes
Health Insurance	91.8%	100%	No

<sup>\*</sup>Low birth weight is defined as <2,500 grams or approximately 5.5 pounds. \*\*Infant mortality measures deaths during the first year of life.



### **Leading Causes of Death**

In 2013, 4,042 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.

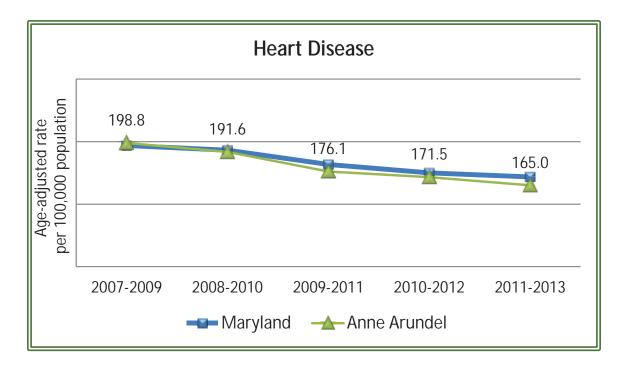


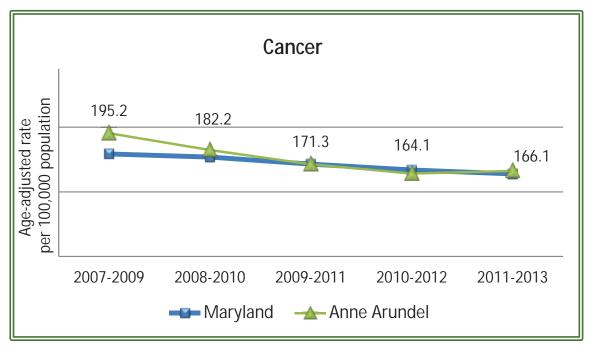
<sup>\*</sup>Chronic lower respiratory diseases (CLRD) include both chronic obstructive pulmonary disease (COPD) and asthma.



# **Mortality Trends**

#### Age-Adjusted Mortality Rates, Anne Arundel County, 2007-2013

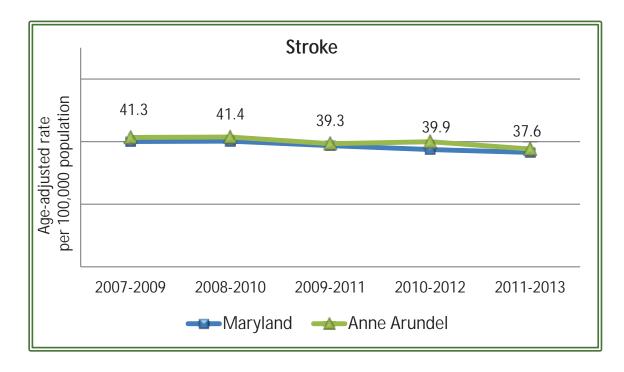


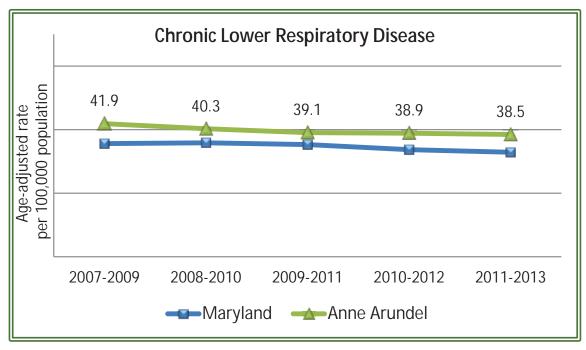




## **Mortality Trends**

#### Age-Adjusted Mortality Rates, Anne Arundel County, 2007-2013



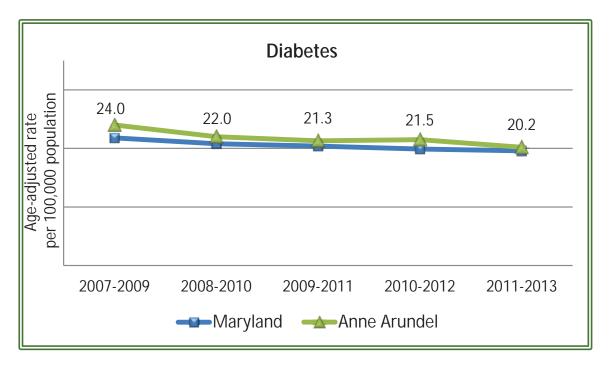




# **Mortality Trends**

#### Age-Adjusted Mortality Rates, Anne Arundel County, 2007-2013







## **Cancer Incidence**

#### Cancer Incidence Rates\*, Anne Arundel County, 2007-2011

Cancer Type	County Case Count	Anne Arundel Rates	Maryland Rates	United States Rates
All Sites (Both Genders**)	13,159	479.2	451.8	467.7
Breast (Female)	1,960	129.3	127.8	122.8
Cervical (Female)	91	6.6	6.7	7.8
Colorectal (Both Genders**)	953	35.7	39.3	43.3
Colorectal (Male)	485	39.8	45.1	50.0
Colorectal (Female)	468	32.1	34.8	37.8
Lung/Bronchus (Both Genders**)	1,817	68.7	59.9	64.9
Lung/Bronchus (Male)	903	76.5	69.9	78.6
Lung/Bronchus (Female)	910	63.0	52.8	54.6
Melanoma (Both Genders**)	899	32.4	21.0	19.7
Prostate (Male)	2,069	151.7	148.7	142.5

<sup>\*</sup>Age-adjusted rates per 100,000 population.

Data Source: 2014 Cancer Report, Cigarette Restitution Fund Program, Maryland DHMH; National Center for Health Statistics, CDC WONDER.

<sup>\*\*</sup>Total also includes unknown gender cases.



# **Cancer Mortality**

#### Cancer Mortality Rates\*, Anne Arundel County, 2007-2011

Cancer Type	County Death Count	Anne Arundel Rates	Maryland Rates	United States Rates
All Sites (Both Genders)	4,684	183.4	175.8	173.8
Breast (Female)	330	23.0	24.0	22.2
Cervical (Female)	30	2.2	2.2	2.3
Colorectal (Both Genders)	365	14.5	16.0	15.9
Colorectal (Male)	194	17.2	20.0	19.1
Colorectal (Female)	171	12.3	13.2	13.5
Lung/Bronchus** (Both Genders)	1,420	55.2	47.7	48.4
Lung/Bronchus (Male)	745	65.6	59.5	61.6
Lung/Bronchus (Female)	675	47.6	39.4	38.5
Melanoma (Both Genders)	90	3.5	2.6	2.7
Prostate (Male)	201	21.4	24.6	22.3

<sup>\*</sup>Age-adjusted rates per 100,000 population.

Data Source: 2014 Cancer Report, Cigarette Restitution Fund Program, Maryland DHMH; National Center for Health Statistics, CDC WONDER.

<sup>\*\*</sup>Includes cancer of the trachea.



#### **Infant Health Indicators**

In 2013, there were 6,814 births in Anne Arundel County. Of those births, 4,399 were non-Hispanic white, 1,204 were non-Hispanic black and 827 were Hispanic. Many factors affect pregnancy and childbirth including the mother's pre-pregnancy health status, mother's age at birth, access to health care and socioeconomic status. Even though Anne Arundel County performs better than Maryland and the United States on several infant health indicators, racial and ethnic disparities still exist. In 2013, non-Hispanic (NH) blacks were more likely to give birth to a preterm or low birth weight infant and less likely to receive prenatal care in the first trimester than NH whites or Hispanics.

	2009	2010*	2011	2012	2013		
Percent of Low Birth Weight Infants (<2,500 grams or approximately 5.5 lbs.)							
Anne Arundel	8.2%	8.2%	8.1%	7.8%	7.5%		
Maryland	9.2%	8.8%	8.9%	8.8%	8.5%		
United States	8.2%	8.2%	8.1%	8.0%	8.0**		
Percent of Wom (First trimester include					Care		
Anne Arundel	-	78.2%	74.7%	71.4%	74.2%		
Maryland	-	69.0%	67.7%	67.9%	67.0%		
Births to Womer 15-19	n 15-19 Yo	ears Old p	er 1,000	Women <i>i</i>	Ages		
Anne Arundel	27.8	25.8	22.3	20.3	15.6		
Maryland	31.2	27.2	24.7	22.1	19.3		
United States	37.9	34.2	31.3	29.4	26.6**		

<sup>\*2010</sup> and more recent data cannot be compared to previous years due to changes to the Maryland birth certificate.

<sup>\*\*</sup>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 Health Indicators**

	2009	2010*	2011	2012	2013	
Percent of Women Having Preterm Births, Anne Arundel County (<37 weeks of gestation)						
White, NH	-	9.3%	9.0%	8.9%	8.0%	
Black, NH	-	14.8%	14.1%	10.4%	11.9%	
Hispanic, Any Race	-	11.2%	8.9%	9.5%	8.9%	
Percent of Low E (<2,500 grams or appro			ts, Anne A	rundel C	ounty	
White, NH	-	6.9%	6.7%	6.5%	6.1%	
Black, NH	-	13.3%	13.5%	12.1%	12.3%	
Hispanic, Any Race	-	7.3%	7.9%	7.9%	7.4%	
Percent of Wome Anne Arundel Co (First trimester include	ounty	ŭ			Care,	
White, NH	-	82.0%	79.9%	75.7%	78.6%	
Black, NH	-	69.1%	63.7%	64.7%	66.5%	
Hispanic, Any Race	-	68.0%	63.6%	57.9%	64.1%	
Births to Women 15-19 Years Old per 1,000 Women Ages 15-19, Anne Arundel County						
White, NH	-	18.2	18.0	14.1	10.2	
Black, NH	-	45.9	33.6	33.9	30.2	
Hispanic, Any Race	-	56.7	39.3	44.7	28.8	

<sup>\*2010</sup> and more recent data cannot be compared to previous years due to changes to the Maryland birth certificate.

NH = Non-Hispanic Data Source: Vital Statistics Administration, Maryland DHMH.



#### **Infant Mortality**

Infant mortality measures deaths during the first year of life. In 2013, there were 38 infant deaths in Anne Arundel County, with an overall infant mortality rate of 5.6 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 2013, black infants in Anne Arundel County had a mortality rate of 10.5 per 1,000 live births, 2.4 times higher than white infants. A similar disparity is seen at the state and national levels.

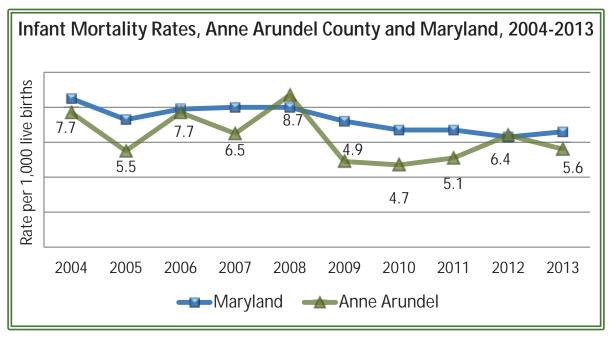
	2009	2010	2011	2012	2013
Infant Mortalit	y – All Ra	ces per 1,0	000 Live B	irths	
Anne Arundel	4.9	4.7	5.1	6.4	5.6
Maryland	7.2	6.7	6.7	6.3	6.6
United States	6.4	6.1	6.0	6.0	6.0
Infant Mortalit	y – White	s per 1,00	0 Live Birt	hs	
Anne Arundel	4.1	3.3	3.5	5.5	4.4
Maryland	4.1	4.1	4.0	4.1	4.5
United States	5.3	5.2	5.1	5.1	5.1
Infant Mortalit	y – Blacks	per 1,000	Live Birth	ns	
Anne Arundel	9.0	10.9	13.0	9.0	10.5
Maryland	13.6	11.8	12.0	10.3	10.5
United States	12.6	11.6	11.4	10.9	10.5

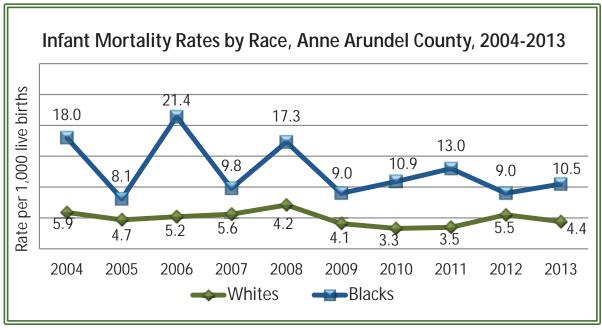
Data Source: Maryland Vital Statistics Annual Reports, Vital Statistics Administration, Maryland DHMH; National Center for Health Statistics, CDC, CDC Wonder.



#### **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. While the overall County's infant mortality rate declined in 2013, the County's black infant mortality rate increased in 2013 compared to 2012.

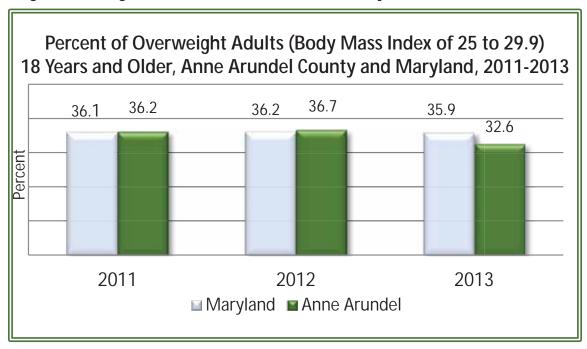


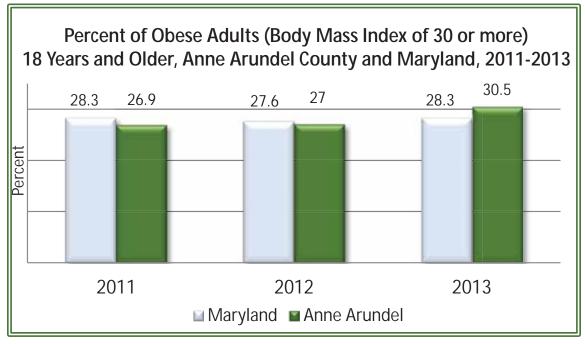




# Overweight and Obesity

Many factors play a role in weight, including lifestyle, surrounding environment, genetics and certain diseases. 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. Overweight and obesity are determined using weight and height to determine a BMI\* or "body mass index" measure.





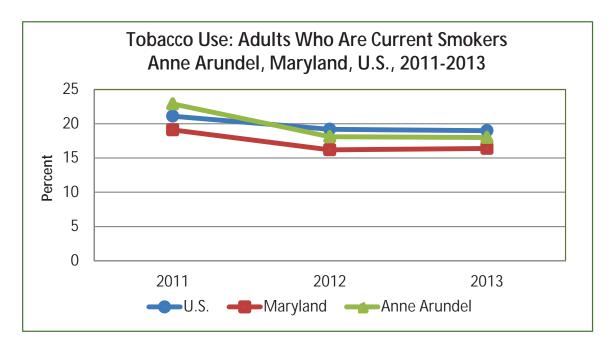
<sup>\*</sup>BMI is measured as weight (pounds) multiplied by 703 divided by height (inches) squared. 2011 and newer data cannot be compared with previous years' data due to changes in data collection methodology.

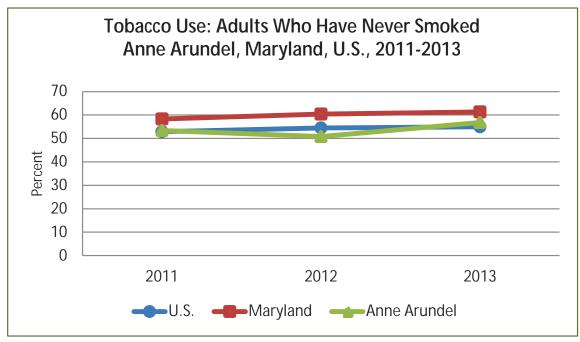
Data Source: Maryland BRFSS.



#### **Tobacco Use**

Smoking is the leading risk factor for lung cancer. It also increases the risk of other health problems, including chronic lower respiratory disease (e.g., COPD and asthma), respiratory infections, heart problems, premature births 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 to 12 percent.



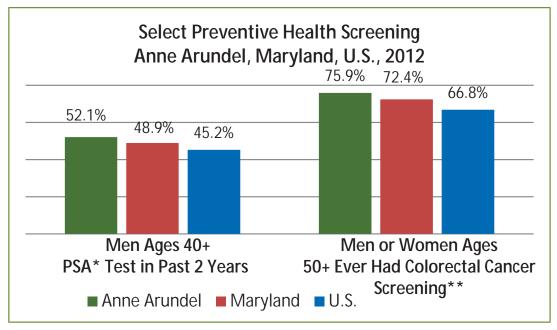


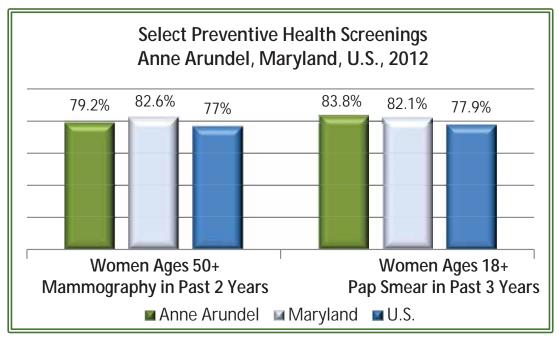
Data Source: National BRFSS, CDC; Maryland BRFSS.



#### **Preventive Health Screening**

Early detection greatly increases the opportunity for successful cancer treatment. Approximately five percent of men and women will develop colorectal cancer during their lifetimes; one in eight women will develop breast cancer; and one 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.

<sup>\*</sup> Prostate-specific antigen \*\* Colorectal cancer screening with sigmoidoscopy or colonoscopy only Data Source: National BRFSS, CDC; Maryland BRFSS; American Cancer Society.



# **General Disease Reporting**

Number of Selected Reportable Diseases In Anne Arundel County					
	2012	2013	2014*	5-Year Mean	
Campylobacter	72	56	78	65	
Salmonella	99	79	76	85	
Vibrio	13	11	9	9	
Legionellosis	11	15	7	11	
M. tuberculosis	10	6	3	7	
M. marinum	7	7	7	7	
Hepatitis A	2	4	0	2	
Hepatitis B**	83	77	102	87	
Hepatitis C**	554	543	493	550	
Meningitis, viral	56	40	35	43	
Meningitis, meningococcal	0	0	0	0	
Pertussis	37	29	42	27	
Streptococcus Pneumonia, Invasive Disease	38	54	27	48	
Chlamydia	1,439	1,392	1,681	1,509	
Gonorrhea	230	274	322	266	
Syphilis***	15	18	27	19	
Lyme Disease	108	99	112	105	
Spotted Fever Rickettsiosis	3	1	3	7	
Animal Rabies	19	40	36	24	
Outbreaks: Gastrointestinal	15	9	8	10	
Outbreaks: Respiratory	1	11	14	7	

<sup>\*</sup>Provisional data.

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

<sup>\*\*</sup>Includes both acute and chronic cases.

<sup>\*\*\*</sup>Includes primary and secondary.

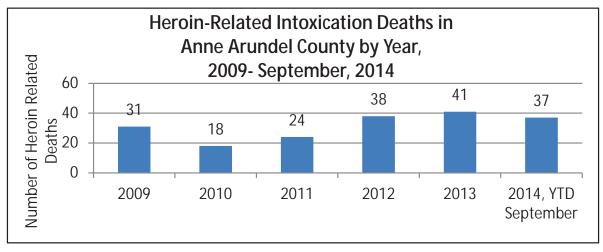


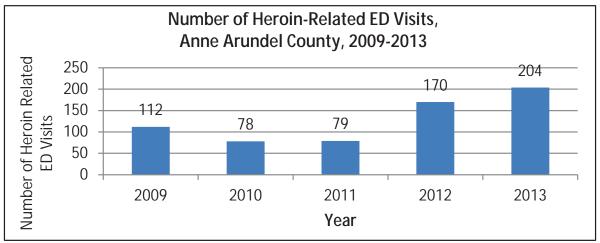
# <u>Heroin</u> Epidemic

Heroin, a derivative of opium, is an illegal opiate drug. Opiates are narcotic pain relievers that affect the central nervous system and alter the mind. Heroin can be mixed with a liquid and injected with a needle; it can also be snorted or smoked.

From 2009 to 2013, 152 people died in Anne Arundel County due to heroin-related intoxication. Among those 152 people, 74% were less than 44 years of age; 92% were white. There was a 128% increase in the number of heroin-related deaths from 2010 to 2013 in the County. The number of County residents visiting hospital emergency departments (EDs) due to heroin-related poisoning increased by 161% from 2010 to 2013.

These significant increases can be attributed to the fact that prescription opiate drugs have become more expensive and harder to obtain illicitly. As a result, people have switched to using heroin, which is much less expensive.





Data Source: Behavioral Health Administration, Maryland DHMH; Outpatient Hospital Discharge Data, Maryland Health Services Cost Review Commission. Death data is for deaths that occurred in Anne Arundel County regardless of person's county residence. ED data includes visits if any diagnosis is poisoning by heroin (ICD9-CM 965.01 or E850.0).



#### Response to Heroin Epidemic

Combatting addiction requires a multifaceted approach, which includes prevention, early intervention, treatment and recovery. The Department of Health offers various programs along this continuum.

#### Overdose Response Program

In 2014, the Department began offering free training and certification to the community on the use of naloxone to reverse an opioid overdose and prevent death.

Opioid overdose occurs when a toxic amount of the drug is ingested, resulting in depressed respiration and decreased level of consciousness, which may lead to death. Fatal overdose can be avoided through the immediate administration of naloxone, a medication which blocks the effects of opiates. It can rapidly reverse sedation and restore normal respiration to a person whose breathing has slowed or stopped as a result of heroin or prescription opioids.

#### **Prevention Coalitions**

An important component of the continuum is evidence-based prevention initiatives. The Department is working with three local community-based coalitions to reduce underage drinking and establish drug-free communities through the use of strategic planning and developing environmental strategies. The coalitions are Northern Lights Against Substance Abuse, Western Anne Arundel Substance Abuse Prevention and South County Bridges to a Drug Free Community. For more information, visit www.preventsubstanceabuse.org.

#### **Treatment**

There are many paths to recovery. The Department is working with County partners to create a behavioral health system that is effective, accessible, and tailored to meet the needs of County residents. The Department works with local treatment providers to ensure quality, evidence-based treatment options are available and funds treatment for eligible individuals.

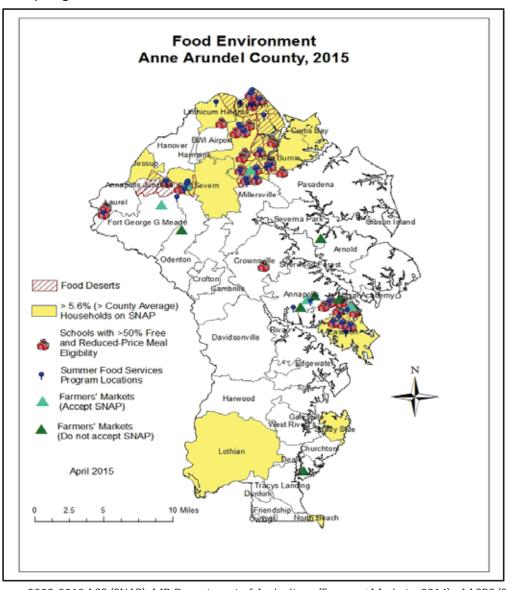
#### Recovery

Recovery is a nonlinear process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. To support this process and assist in removing barriers to achieving long-term recovery, the Department utilizes peer support specialists to assist program participants by offering support and access to services. The Department also funds two adolescent clubhouses for residents ages 12 to 17 who were formerly or are currently enrolled in treatment; a community recovery center; and recovery housing, including housing for women in recovery with children.



#### Food Environment

Food deserts are defined as urban neighborhoods and rural towns without ready access to fresh, healthy and affordable food. Lack of access to healthy food contributes to a poor diet, which can lead to higher levels of obesity, diabetes and heart disease. Approximately 69,000 (or 12% of) Anne Arundel County residents live in an area categorized as a food desert. In response to this need, the following programs exist to help residents access healthy and affordable food in our County: the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps); Anne Arundel County Public Schools (AACPS) Free and Reduced-Price Meal Program and AACPS Summer Food Service Program (including Mobile Meals); and Farmers' Markets that accept SNAP and the Women, Infants and Children's nutritional program.



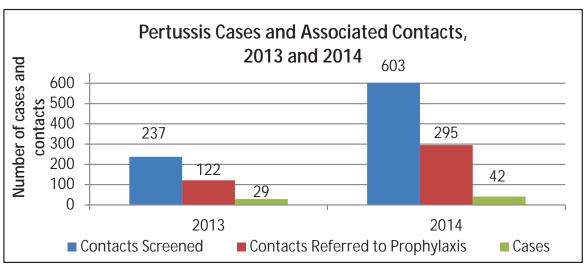
Data Source: 2009-2013 ACS (SNAP); MD Department of Agriculture (Farmers' Markets, 2014); AACPS (Summer Food Service Program, 2013); MD Department of Education (Free and Reduced-Price Meal Eligibility, School Year 2014-2015); USDA (Food Deserts).



# **Emerging and Re-emerging Infectious Diseases**

In the fall of 2014, Anne Arundel County, along with other jurisdictions across the state and country, monitored international developments of the deadly Ebola Virus Disease outbreak in West Africa and planned for its possible local arrival. The Department of Health proactively convened key partners, including County and Annapolis City Fire/EMS, Police and Emergency Management, as well as both major hospitals, BWI Airport and military. Preparation included regular discussions on response plans, supply needs and communication protocols, culminating with an interagency tabletop training exercise. Per CDC recommendations, DHMH\* (in partnership with the Department) monitors all individuals returning from the affected West African countries, in order to ensure quick medical response and containment should a local case develop. Between October 2014 and February 2015, 45 travelers to Anne Arundel County were monitored. Early detection and response is critical to reduce and eliminate the transmission of a disease. This model of collaborative planning serves as a universal framework to not only combat Ebola but other emerging infectious diseases in our community.

Pertussis ("whooping cough") is an example of a vaccine-preventable disease resurging in many communities. There were 42 Anne Arundel County cases of pertussis in 2014, compared to 29 in 2013, a 45% increase. In response, the Department contacted 603 residents potentially exposed to people with confirmed pertussis. This enabled staff to make individual recommendations for prophylactic antibiotic treatment, testing and self-monitoring in order to prevent the further spread of infection in the community.



Data Source: Maryland Department of Health and Mental Hygiene\*. Bureau of Disease Prevention and Management, Anne Arundel County Department of Health.



#### **Healthy Communities**

In 2014, the Department of Health initiated a Community Housing Inspection Program (CHIP). The goal of CHIP is to improve public health in communities where increased housing complaints and health disparities exist. This is done by proactively working with communities to assess three public health indicators: evidence of rodents; refuse and trash; and vacant homes open to casual entry. If during the initial assessment of a property an identified public health indicator was observed, inspectors provided educational materials to property owners and tenants. A re-inspection conducted one month following the initial assessment evaluated whether improvements were made.

Arundel Village, a Brooklyn community in northern Anne Arundel County, was the first of three communities selected for CHIP. This community has 388 properties. The program demonstrated significant community improvements: a 65% reduction in trash and refuse, a 67% reduction in the evidence of rodents and a 50% reduction in vacant homes open to casual entry. This program will continue in 2015.



Number of Observed Public Health Indicators Initial Assessment vs. Re-Inspection

Public Health Indicators	Initial Assessment	Re-Inspection	Reductions Observed
Evidence of Rodents	42	14	67%
Trash and Refuse	131	46	65%
Structures Open to Casual Entry	2	1	50%

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



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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.

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