



Anne Arundel County Department of Health
**Report Card of
Community Health Indicators**

April 2003
Bridging the Gap to Better Health

Photos provided by AAACCVB

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The Anne Arundel County Department of Health provides leadership for safeguarding our community's health. Their mission is to preserve, protect and promote the health of all County residents. By expanding their system of partnerships, they can address the need to connect our residents with information and services essential to improving the quality of life for all.

This report, compiled by the Anne Arundel County Department of Health, highlights areas of accomplishment as well as continued challenges that we face in assuring our residents a healthy existence.

I encourage you to use this valuable resource as we work together to bridge the gap to better health.

Warmest regards,

Janet S. Owens

County Executive



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	Anne Arundel		Maryland	United States
		(%)	# or (%)	# or (%)
Population				
Total Population, 2001 est.	497,893		5,375,156	284,796,887
Male	247,951	(49.8)	(48.3)	(49.1)
Female	249,942	(50.2)	(51.7)	(50.9)
Race, Ethnicity & Age, 2000				
White	397,789	(81.2)	(64.0)	(75.1)
Black	66,428	(13.6)	(27.9)	(12.3)
Asian/Pacific Is.	11,535	(2.4)	(4.0)	(3.7)
Am. Ind./Eskimo	1,455	(0.3)	(0.3)	(0.9)
Other	4,164	(0.9)	(1.8)	(5.5)
Hispanic (any race)	12,902	(2.6)	(4.3)	(12.5)
< 18 Years Old	123,636	(25.2)	(25.6)	(25.7)
≥ 65 Years Old	48,820	(10.0)	(11.3)	(12.4)
Economic Indicators, 2000				
Median Household Income, 2001 est.	\$68,500		\$58,500	\$42,228
Poverty Rate - All Individuals, 1999	24,335	(5.1)	(8.5)	(12.4)
Average Unemployed Number or Rate, 2002	8,587	(3.2)	(3.8)	(6.0)
Homeownership rate		(75.5)	(67.7)	(66.2)
Other Indicators, 2000				
Foreign Born	23,211	(4.7)	(9.8)	(11.1)
Total Households	178,670			
High School Graduates, age 25+	282,676	(86.4)	(83.8)	(80.4)
Language other than English spoken at home, age 5+	33,522	(7.3)	(12.6)	(17.9)

Anne Arundel County versus Maryland, US and Healthy People (HP) 2010 Goals

Mortality Risk*	Anne Arundel 1999-2000	MD 1999-2000	U.S. 2000	HP 2010
All Causes Rate	912.4	898.3	872.4	NA
Coronary Heart Disease	267.1	257.0	257.5	166.0
Stroke	68.6	62.2	60.2	48.0
All Cancer	214.2	206.2	200.5	159.9
Female Breast Cancer^	28.9	28.9	27.1	22.3
Lung Cancer^	56.4	55.2	56.5	44.9
Suicide^	9.8	8.9	10.3	5.0
Homicide^	2.8	9.4	5.8	3.0
Motor Vehicle^	7.9	10.8	15.7	9.2

* Death rate per 100,000 population, age adjusted to year 2000 US standard population.

^ Crude rate per 100,000 for Anne Arundel County and Maryland.

Child Health ** 2001	Anne Arundel	MD	U.S. Prelim.	HP 2010
Births to Women <18 (%)	2.0%	3.4%	3.6%	4.3%
Low Birth Weight (%)	7.7%	9.0%	7.6%	5.0%
1st Trimester Prenatal Care (%)	88.0%	83.7%	83.4%	90.0%
Infant Mortality Rate* - Black	14.8	13.6	13.5	4.5
Infant Mortality Rate* - White	5.4	5.5	5.7	4.5

** Percent of all births, or death rate per 1,000 live births. *2000

Infectious Diseases ***	Anne Arundel 2001	MD 2001	U.S. 2001	HP 2010
Chlamydia	149.5	292.7	278.3	NA
Gonorrhea	54.1	176.4	128.5	19.0
HIV rate (newly reported cases)	15.5	32.8	14.8	NA
Syphilis (1° & 2°)	2.4	5.0	2.2	0.2
Tuberculosis	2.8	4.9	5.6	1.0
Hepatitis A	11.2	5.5	3.7	NA
Hepatitis B (Acute)	5.4	2.6	2.8	NA
Hepatitis C (Acute)	0.8	0.2	1.4	NA
Lyme Disease	13.8	11.3	6.0	9.7

*** Incidence Rate per 100,000 population

NA: Not Available

Preliminary (Prelim.)

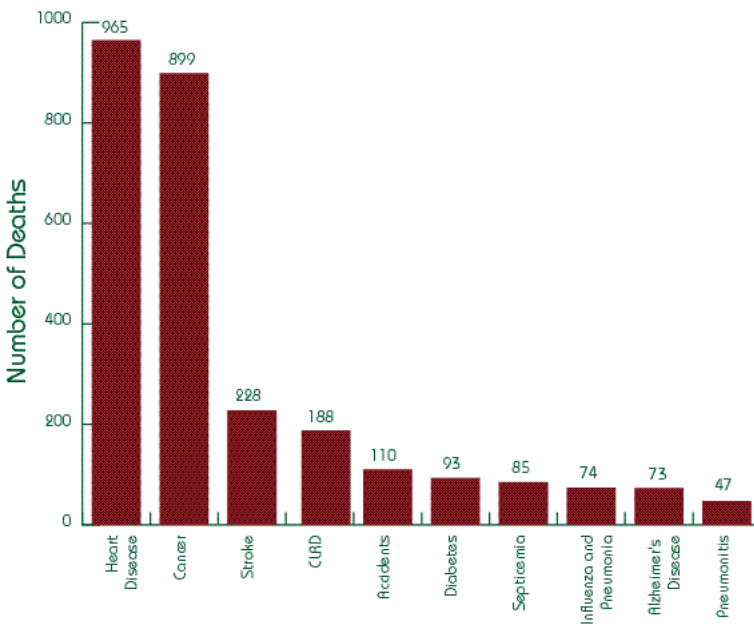
Data Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland DHMH; MMWR, CDC; Communicable Diseases Program, Anne Arundel County Department of Health; Maryland AIDS Administration, Maryland DHMH



In Anne Arundel County for 2001, the leading causes of death were heart disease, cancer, stroke, chronic lower respiratory diseases (clrd), unintentional injuries (accidents), diabetes, septicemia, influenza and pneumonia, Alzheimer's disease, and pneumonitis due to solids and liquids.

The number of deaths from diabetes has been declining since 1998 from 147 down to 93 in 2001, moving diabetes from 5th to 6th in the ranking of causes of death.

Leading Causes of Death, Anne Arundel County, 2001



Note: Cause-of-death statistics for 2001 are classified in accordance with the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10). The ICD-9 title Chronic obstructive pulmonary diseases is comparable to the ICD-10 title Chronic lower respiratory diseases.

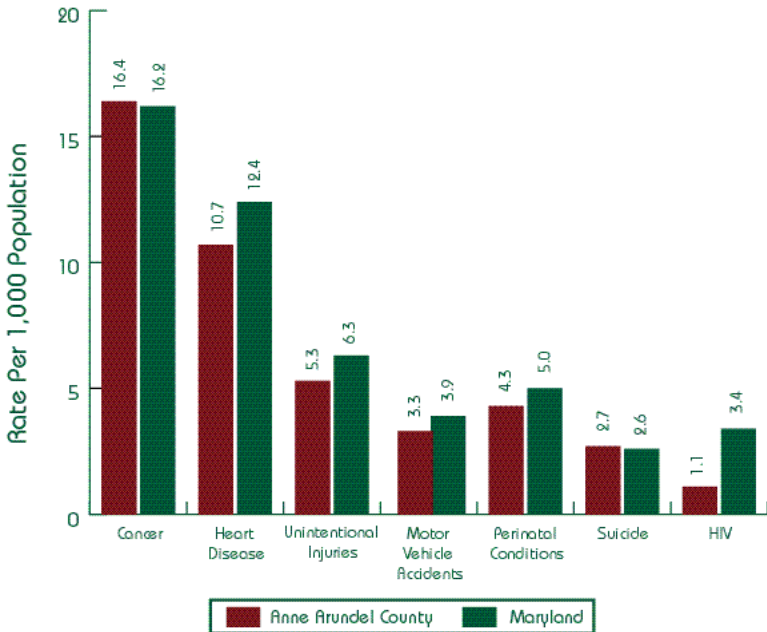
Data Source: Death Certificate Data, Maryland Division of Health Statistics, Maryland DHMH

Years of Potential Life Lost

Years of Potential Life Lost (YPLL) help to characterize premature mortality. These rates reflect the impact of deaths occurring before the age of 75.

Many of the causes of these early deaths are preventable.

Selected Causes of Years of Potential Life Lost Before Age 75
Anne Arundel County and Maryland, 1999-2001



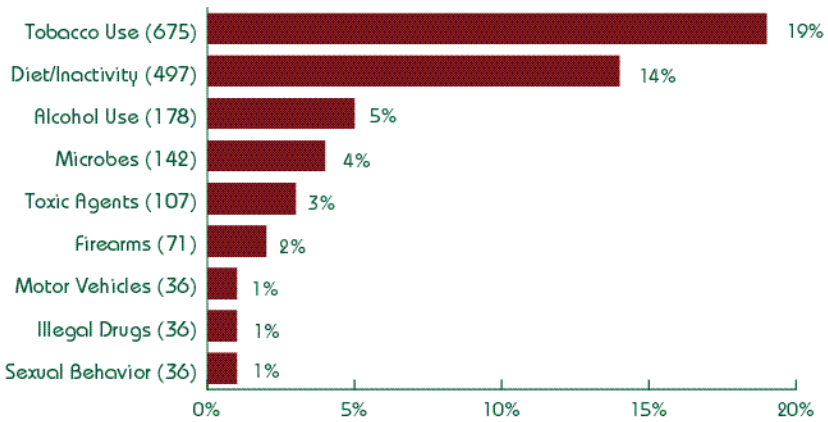
Data Source: Maryland Division of Health Statistics, DHMH



What Really Kills Anne Arundel Countians?

Estimated Deaths by Preventable Causes for 3,551 Deaths in 2001

Smoking, unhealthy diets and lack of exercise cause one-third of the deaths in the County.



Source: Estimated Deaths by Percent from McGinnis JM, Foege WH. Actual Causes of Death in the United States. JAMA. 1993, 270 (18) 2207-2212, adapted to Anne Arundel County Death Certificate Data

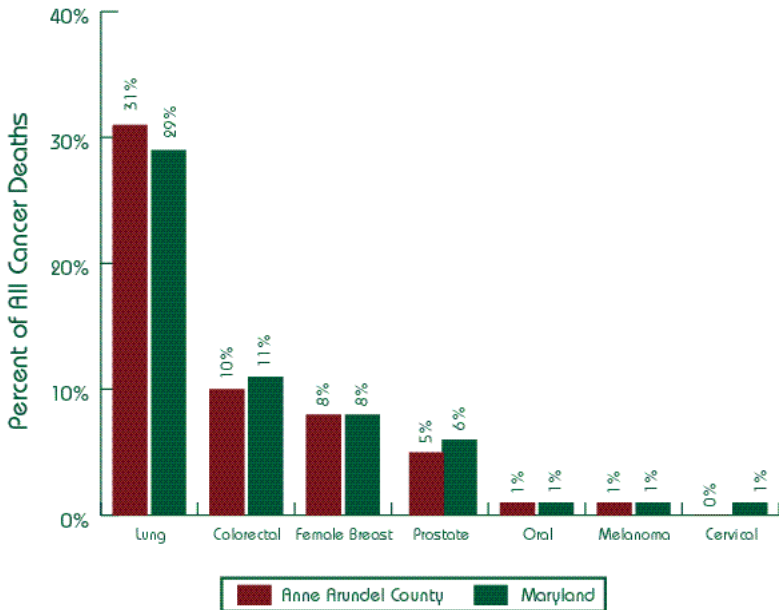


Cancer is the second leading cause of death and is responsible for one of every four deaths in Anne Arundel County. On average in Anne Arundel County, two people die each day from cancer and five more are newly diagnosed with cancer. As the population ages, the burden of cancer in Anne Arundel County will increase.

The number of new cases of cancer and cancer deaths can be reduced by adopting positive health behavior practices such as increased physical exercise, good nutrition, protecting skin from sunlight, and smoking prevention and cessation.

Many of these prevention efforts are not only effective in reducing morbidity and mortality from cancer but several other chronic conditions as well.

Cancer Deaths, Selected Sites
Anne Arundel County and Maryland, 1998-2000



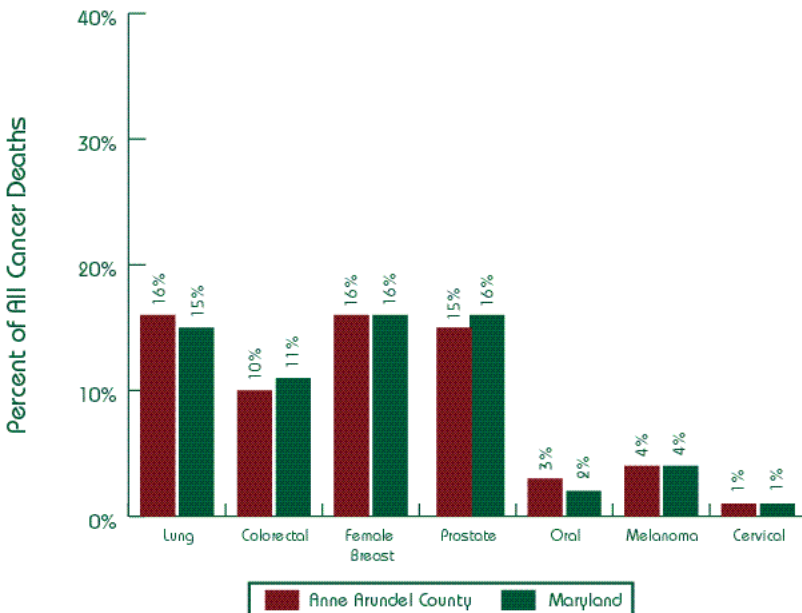
Data Source: Maryland Cancer Registry; Death Certificate Data, Maryland DHMH



There are also screening tools, such as mammography and colonoscopy, that are effective methods for detecting cancers at early and treatable stages.

Cancer mortality may be reduced through the greater use of these screening tools. However, as screening detects more previously undiagnosed cancers, incidence, or the number of new cases of cancer, may rise.

New Cancer Cases, Selected Sites
Anne Arundel County and Maryland, 1998-2000



Data Source: Maryland Cancer Registry

Infant Health Indicators

	1996	1997	1998	1999	2000	2001
Number of Births						
Total	6,419	6,465	6,602	6,660	6,790	6,893
Whites	5,267	5,163	5,271	5,350	5,495	5,568
Blacks	884	959	1,003	1,032	1,022	1,001
Hispanic, any race	143	157	186	221	302	299
Low Birth Weight per 100 births[^]						
Anne Arundel	7.8	8.3	7.0	7.3	6.9	7.7
Maryland	8.6	8.8	8.7	9.1	8.7	9.0
United States	7.4	7.5	7.6	7.6	7.6	NA
Late or No Prenatal Care per 100 Births^{**}						
Anne Arundel	1.8	1.5	2.2	1.9	2.0	2.5
Maryland	2.6	2.6	2.9	3.1	3.1	3.7
United States	4	3.9	3.9	3.8	3.9	NA
Infant Mortality - Blacks per 1,000 live births						
Anne Arundel	11.3	18.8	15.0	15.5	12.7	14.0
Maryland	14.5	16.1	15.4	14.7	13.0	13.6
United States	14.7	14.2	14.3	14.6	14.0	NA
Infant Mortality - Whites per 1,000 live births						
Anne Arundel	5.5	5.2	4.7	5.8	5.1	5.4
Maryland	5.9	5.3	5.5	5.2	4.7	5.5
United States	6.0	6.0	6.0	5.8	5.7	NA
Births to Women under 18 years old per 100 births						
Anne Arundel	3.1	2.9	2.9	2.8	2.5	2.0
Maryland	4.3	4.2	3.9	3.9	3.6	3.4
United States	5.1	4.9	4.6	4.4	4.1	NA

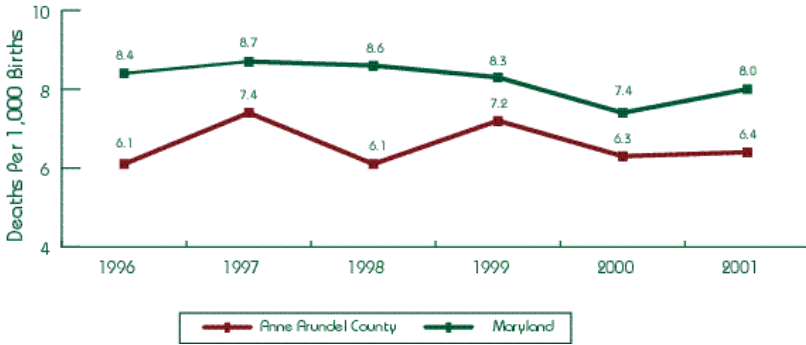
[^]Defined as <2500 grams

^{**} Defined as 3rd trimester prenatal care or no care before birth.

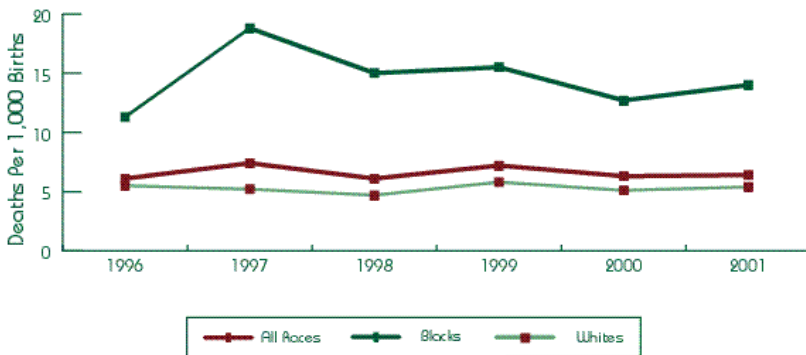
NA Not Available



Infant Mortality Rates
Anne Arundel County and Maryland, 1996-2001



Infant Mortality Rates by Race
Anne Arundel County, 1996-2001



Data Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland DHMH; Anne Arundel County Birth and Death Certificate Data

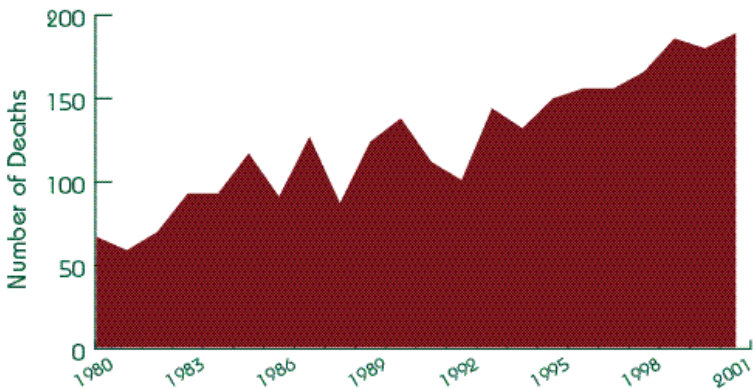
Chronic Lower Respiratory Diseases

Chronic lower respiratory diseases include chronic bronchitis, emphysema and asthma and rank 4th among the leading causes of death in Anne Arundel County. This grouping of diseases is characterized by airflow obstruction; for asthma, this obstruction is usually reversible. However, chronic bronchitis and emphysema are progressive debilitating diseases that can cause irreversible damage to the lungs.

Smoking is the leading cause of chronic bronchitis and emphysema. Other causes include air pollution, dust and fumes exposure, and lung infections. Heredity is believed to play a role in the development of chronic lower respiratory diseases.

Although most of the increase in deaths from chronic lower respiratory diseases is due to the growth and the aging of the population, chronic lower respiratory diseases are preventable by not smoking, avoiding exposure to secondhand smoke, and protecting yourself from unhealthy air.

Chronic Lower Respiratory Diseases (CLRD) Deaths
Anne Arundel County, 1980-2001



Note: 1980-1998 numbers reflect the International Classification of Diseases, 9th revision (ICD9). 1999-2001 numbers reflect the International Classification of Diseases, 10th revision (ICD10). The ICD-9 title Chronic obstructive pulmonary diseases is comparable to the ICD-10 title Chronic lower respiratory diseases.

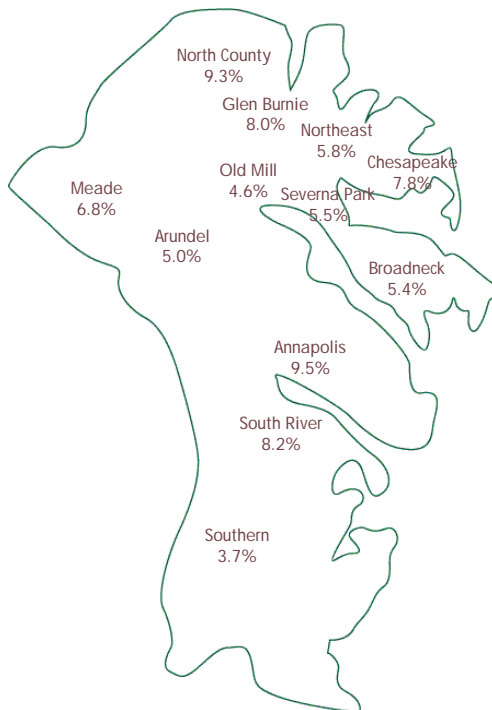
Data Source: CDC; Maryland Division of Health Statistics, Maryland DHMH



Asthma is a chronic illness that is a leading cause of school absenteeism. The prevalence of asthma among children continues to increase and many children with asthma suffer unnecessarily. Nationally, the current* asthma prevalence among 0-17 year olds in 2001 was 8.7%.

An asthma initiative, begun in Anne Arundel County in the 1998-99 school year, focuses on identifying students with asthma with goals to provide effective asthma management education and improve school attendance.

Asthma Prevalence by School Cluster Anne Arundel County, School Year 2002-2003



Note: *Population reported having asthma at the time of the interview. This includes people who have been diagnosed with asthma by a health professional and who still have asthma.

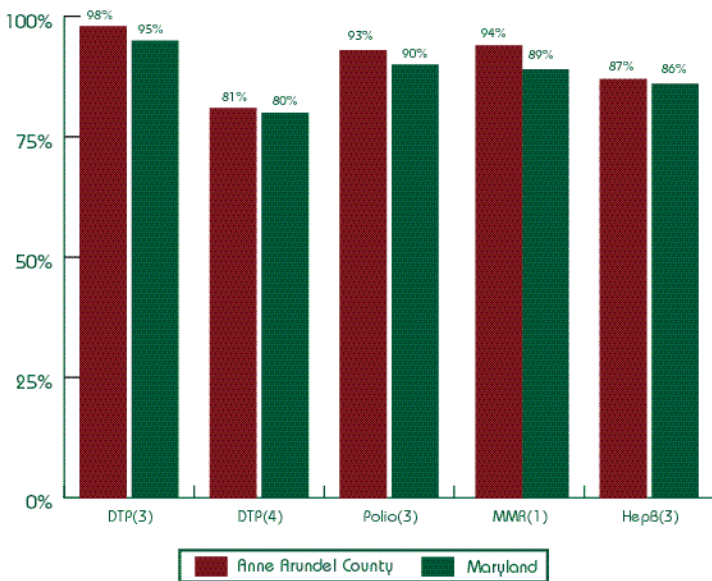
Data Source: Anne Arundel County Department of Health, School Health Services, February 2003; National Center for Health Statistics, National Health Interview Survey, 1997-1999

Immunization Coverage

High immunization levels in the population are necessary to decrease vaccine preventable diseases and their transmission. An important component of the U.S. immunization program is the assessment of immunization coverage. Current goals, as stated in Healthy People 2010, are for $\geq 90\%$ coverage with recommended vaccines during the first 2 years of life.

A retrospective survey of first graders in Anne Arundel County conducted in fall 2002 revealed that approximately 97% of first grade students were appropriately immunized by age 2 according to the State immunization schedule. In 1998, immunization coverage for DTP(3), DTP(4), Polio(3), and Hepatitis B(3) at 24 months of age was greater than estimates of coverage reported for the State of Maryland.

Estimated Immunization Coverage at 24 months of age
Anne Arundel County and Maryland, 1998



Note: DTP = diphtheria, tetanus, pertussis; MMR = measles, mumps, rubella

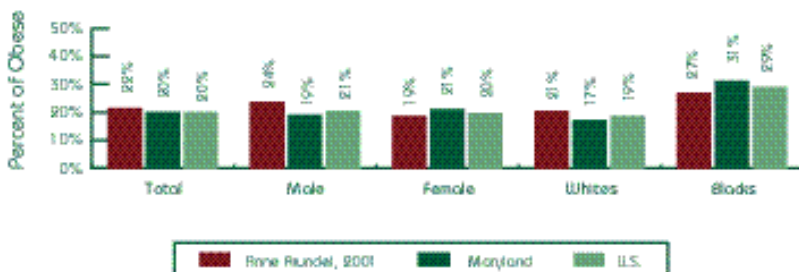
Data Source: "Retrospective Survey of Immunization Coverage for First Graders in Anne Arundel County", Joann Kim, M.D., M.P.H., Anne Arundel County Department of Health, December 2002; CDC National Immunization Survey



Obesity is associated with conditions such as high blood pressure, high blood cholesterol, diabetes, heart disease, and stroke among others. Each year the percentage of the population that is obese continues to climb.

Increasing physical activity and healthy eating reduce the risk for premature death and illness.

Prevalence of Obesity
Anne Arundel County, Maryland, and U.S., 2000



Prevalence of Overweight
Anne Arundel County, Maryland and U.S., 2000



Note: Obesity defined as body mass index of 30 to 99.8.
Overweight defined as body mass index of 25 to 29.9.

Data Source: CDC BRFSS; Anne Arundel County BRFSS 2001

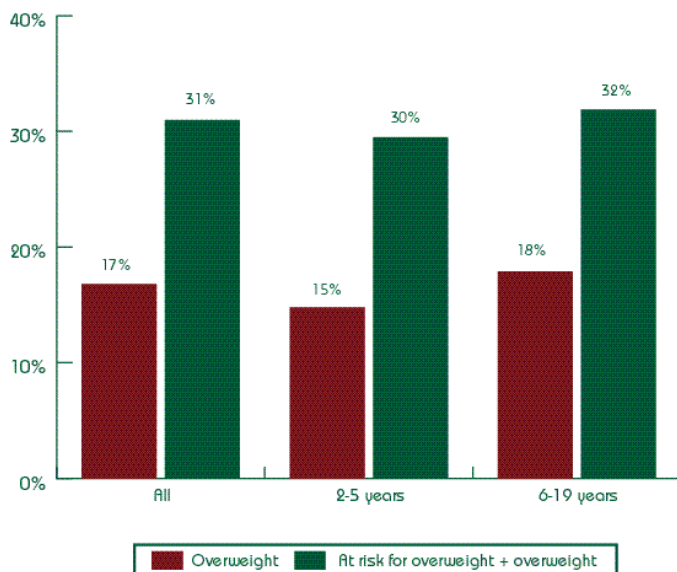
Overweight in Children

Overweight and obesity in adulthood had been known for many years to reduce life expectancy and to lead to serious chronic health conditions such as heart disease, diabetes, high blood pressure, stroke and arthritis. With the relatively recent rise of overweight in childhood and adolescence, it is becoming apparent that even young people can suffer serious health consequences.

Overweight in youth has also been linked with emotional health problems such as loss of self-esteem and depression.

Physicians in the County volunteered to weigh and measure patients for a week in November 2002. This gives us our first estimate of childhood overweight in the County.

Overweight in Children and Adolescents in Anne Arundel County, 2002/Percentage by Age Group



Note: At risk for overweight = A Body Mass Index plotted for age and sex that is equal to or greater than 85% but less than 95% of the population

Overweight = A Body Mass Index plotted for age and sex that is 95% or greater than the rest of the population

Data Source: "The Prevalence of Overweight in Children and Adolescents in Anne Arundel County", Sharon Sugarman, M.D., M.P.H., February 2003

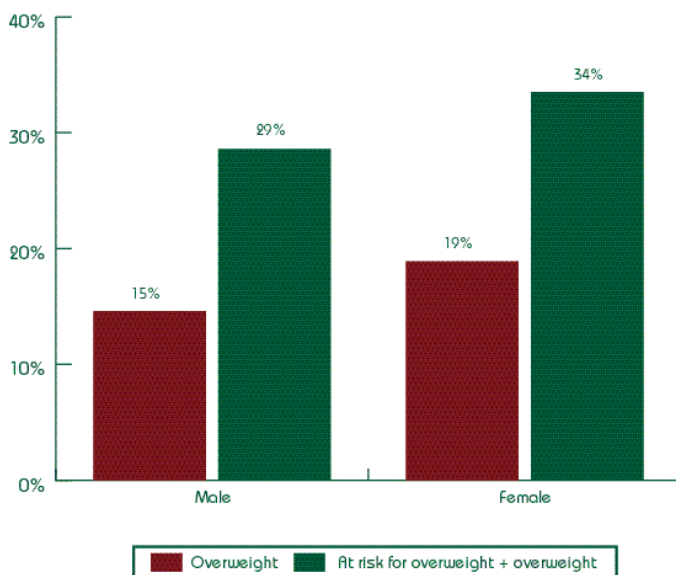


The percentage of children and adolescents that are at risk of overweight and overweight continues to rise. Studies show that overweight children are at greater risk of becoming overweight adults with all the additional negative consequences that this carries.

Considering the short and long term health consequences of overweight, it is vital to implement interventions to decrease the burden of this disease.

Research needs to continue into environmental determinants of overweight and which interventions are most effective.

Overweight in Children and Adolescents in Anne Arundel County, 2002/Percentage by Gender



Note: At risk for overweight = A Body Mass Index plotted for age and sex that is equal to or greater than 85% but less than 95% of the population

Overweight = A Body Mass Index plotted for age and sex that is 95% or greater than the rest of the population

Data Source: "The Prevalence of Overweight in Children and Adolescents in Anne Arundel County", Sharon Sugarman, M.D., M.P.H., February 2003

2002 was the fifth year of the County's oral rabies vaccination program targeting raccoons. The number of rabid raccoons on the Annapolis peninsula decreased from an average of 19 between 1996 and 1998 to zero in 2000, 2001 and 2002. The program was expanded to Gibson Island in 2000 and the Broadneck Peninsula in 2001 with equal success. Only one rabid raccoon has been reported on Broadneck Peninsula since the start of the program.

Prior to the initiation of the oral rabies vaccination program in 1998, Anne Arundel County reported more rabid animals than any other Maryland county. In 2001, Anne Arundel County ranked fourth with 36 rabid animals. Most were raccoons (23) followed by bats (6), foxes (4), two cats and a skunk. The oral vaccination program has had a significant impact on reducing animal rabies in Anne Arundel County.



Oral Rabies Vaccination Program Areas

Data Source: Epidemiology & Disease Control Program, Center for Veterinary Public Health, Maryland DHMH; Communicable Diseases Program, Anne Arundel County Health Department



A new virus was detected for the first time ever in the Western Hemisphere during the summer of 1999 when an outbreak of West Nile Virus disease occurred in New York City. Sixty-two people developed severe disease with 7 deaths. Cases were also found in birds and horses. Prior to this outbreak, West Nile Virus has been commonly found in humans, birds, and animals only in Africa, Eastern Europe and the Middle East. How it crossed the Atlantic is unknown. From the New York City epicenter, West Nile Virus has spread to involve most of the continental United States.

Mosquitoes transmit the virus from the bird reservoir to other animals and humans. Most people infected with West Nile have no symptoms, about twenty percent (20%) have a mild illness. But about 1 in 150 people will have severe neurological disease, and some will die. It is only these severe cases that are counted as "cases".

West Nile Virus (WNV) was first found in Anne Arundel County in 2000 in birds (no human cases). In 2002, there were 8 human cases (2 fatalities), ages ranged from 28 to 79 years old. In addition, there were 6 positive horses and 2 positive mosquito pools. Thirty-six (36) human WNV cases were identified in Maryland in 2002 from 9 jurisdictions and 30 horses tested positive from 9 jurisdictions. Currently there is a vaccine for horses but none for humans.

The best way to avoid infection with West Nile Virus is to avoid being bitten by mosquitoes. People need to be educated about the importance of eliminating breeding sites for mosquitoes around their homes and the use of repellents and protective clothing.

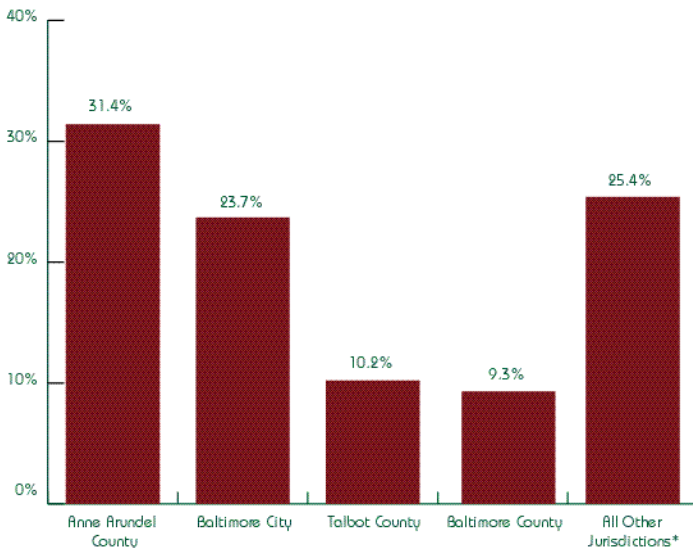
Mycobacterium marinum (*M. marinum*) is a bacterium found in aquariums and natural bodies of water. It occasionally infects human skin or joints. Handling infected fish or exposure to natural waters can transmit this organism if skin is not protected.

Typical *M. marinum* infections are slow healing skin lesions at the site of exposure (such as knees, fingers etc).

Of the 118 cases of human *M. marinum* identified in Maryland from October 1997 to November 2002, almost one-third were among Anne Arundel County residents. This is to be expected since many people here live and work around natural water bodies. Our total coastline exceeds that of any other county in Maryland.

To prevent *M. marinum* infection, wash off skin after contact with natural bodies of water or cleaning aquariums and use dressings or gloves to protect open wounds.

**Mycobacterium Marinum Identifications
by Maryland Jurisdiction, 10/97 to 11/02**



*Queen Anne's, Allegany, Frederick, Montgomery, Wicomico, Prince George's, St. Mary's, Washington, Worcester, Howard, Kent, Somerset Counties



Mission Statement

The Department of Health's mission is to preserve, protect and promote the health of all Anne Arundel County residents.

Equal Opportunity Statement

The services and the facilities of the Anne Arundel County Department of Health are available to all without regard to race, color, religion, political affiliation or opinion, national origin, age, sex, sexual orientation or disability.