



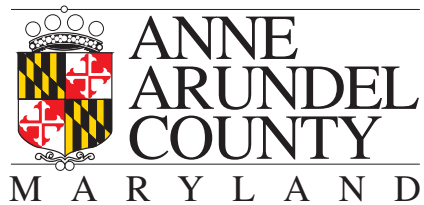
May 2005

REPORT CARD OF COMMUNITY HEALTH INDICATORS

**PUTTING THE PIECES TOGETHER
TO IMPROVE HEALTH**

Janet S. Owens
County Executive

Frances B. Phillips, RN, MHA
Health Officer



DEPARTMENT OF HEALTH

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, sex, sexual orientation or disability.

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COUNTY EXECUTIVE'S MESSAGE



The Anne Arundel County Department of Health is committed to improving the health of all County residents.

This annual report provides an overview of the County's current health status. The report describes our successes as well as our shortcomings in reaching our future health goals.

With continued education, promotion and the adoption of improved health behavior, our residents will enjoy greater quality of life.

Warmest regards,

A handwritten signature in black ink that reads "Janet S. Owens". The signature is written in a cursive, flowing style.

Janet S. Owens
County Executive



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DEMOGRAPHICS



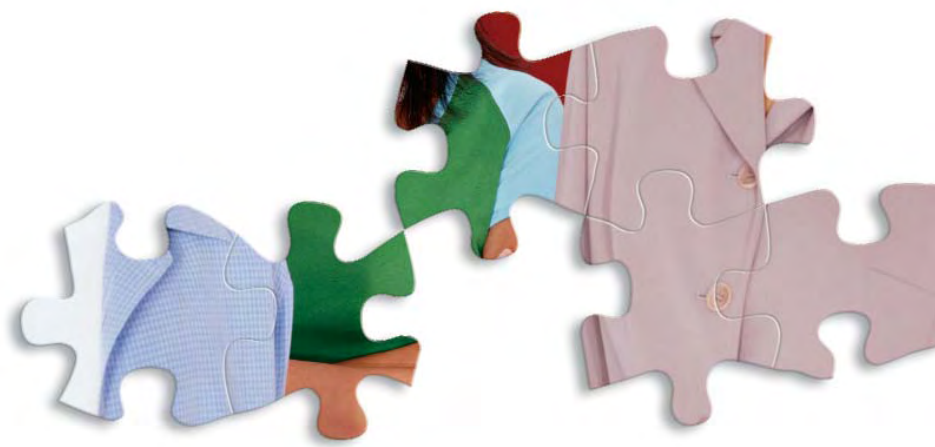
DEMOGRAPHICS

	Anne Arundel %	Maryland # or (%)
Population		
Total Population, 2005 projections	513,650	5,610,490
Male	253,390 (49.3)	(48.2)
Female	260,260 (50.7)	(51.8)
Race & Age, 2005 projections		
White	416,360 (81.1)	(65.0)
All Other Races	97,290 (18.9)	(35.0)
<5 Years Old	32,170 (6.3)	(6.4)
5 - 19 Years Old	106,310 (20.7)	(21.4)
20 - 44 Years Old	184,700 (35.9)	(34.7)
45 - 64 Years Old	134,390 (26.2)	(25.8)
65+ Years Old	56,080 (10.9)	(11.7)
Economic Indicators		
Median Household Income, 2003 est.	\$71,500	\$59,200
Unemployed Rate, Dec. 2004	(3.0)	(3.7)
All ages in poverty, 2002	(5.6)	(8.3)
Age 0 - 17 in poverty, 2002	(6.4)	(10.1)
Under age 5 in poverty, 2002	NA	(9.6)
Age 5 - 17 in poverty, 2002	(6.1)	(9.8)

NA: Not available

Data Source: U.S. Census Bureau, U.S. Department of Labor; Maryland Department of Planning

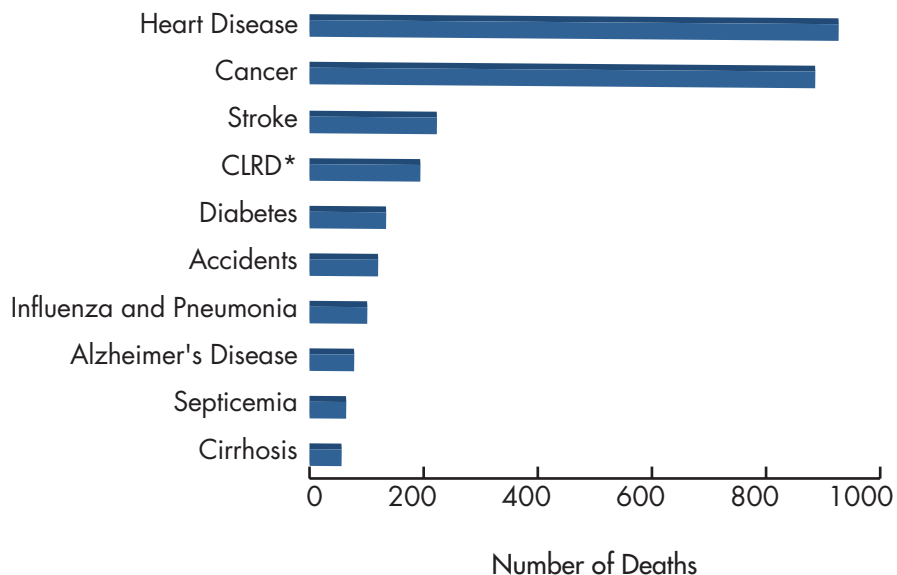
HEALTH INDICATORS



LEADING CAUSES OF DEATH

In Anne Arundel County for 2003, the leading causes of death were heart disease, cancer, stroke, chronic lower respiratory diseases (CLRD*), diabetes, unintentional injuries (accidents), influenza and pneumonia, Alzheimer's disease, septicemia, and chronic liver disease and cirrhosis.

Leading Causes of Death, Anne Arundel County, 2003



*Chronic lower respiratory diseases include both chronic obstructive pulmonary disease and asthma.
Data Source: Death Certificate Data, Maryland Division of Health Statistics, Maryland DHMH.

COMPARISONS TO NATIONAL GOALS (SELECTED LEADING HEALTH INDICATORS)

How Does Anne Arundel County Compare to the Healthy People 2010 National Objectives for Improving Health?

Healthy People 2010 Goal	
Needs to Improve to Meet Goal	Met or Exceeded Goal
Persons with Health Insurance	Childhood Immunizations
Motor Vehicle Accident Deaths	Moderate/Vigorous Physical Activity
Breast-feeding Initiation	Adult Binge Drinkers
Adult Smokers	Homicide
Youth Smokers, grades 9-12	1st Trimester Prenatal Care
Adult Obesity	
Overweight in Children and Adolescents	
Stroke Mortality	
Infant Mortality	
Coronary Heart Disease Mortality	
Cancer Mortality	

Data Source: Healthy People 2010 Objectives, Centers for Disease Control and Prevention; Various data sources, most recent data year available.

INFANT HEALTH INDICATORS

	1999	2000	2001	2002	2003
Number of Births (Mother's Race)					
Total	6,660	6,790	6,893	6,785	6,913
Whites	5,350	5,495	5,568	5,414	5,601
Blacks	1,032	1,022	1,001	1,026	1,021
Hispanic, any race	221	302	299	344	470
Low Birth Weight per 100 births[^]					
Anne Arundel	7.3	6.9	7.7	8.3	8.2
Maryland	9.1	8.7	9.0	9.0	9.1
United States	7.6	7.6	7.6	7.8	NA
Late or No Prenatal Care per 100 Births **					
Anne Arundel	1.9	2.0	2.5	2.0	1.7
Maryland	3.1	3.1	3.7	3.6	3.8
United States	3.8	3.9	3.8	3.6	NA
Infant Mortality - All Races per 1,000 live births					
Anne Arundel	7.1	6.3	6.4	5.9	8.1
Maryland	8.3	7.4	8.0	7.6	8.2
United States	7.1	6.9	6.9	7.0	NA
Infant Mortality - Whites per 1,000 live births					
Anne Arundel	5.6	5.1	5.4	4.2	5.5
Maryland	5.1	4.7	5.5	5.4	5.4
United States	5.8	5.7	5.7	5.8	NA
Infant Mortality - Blacks per 1,000 live births					
Anne Arundel	15.5	12.7	14.0	13.6	22.6
Maryland	14.7	13.0	13.6	12.7	14.8
United States	14.6	14.1	14.2	14.3	NA
Births to Women under 18 years old per 100 births					
Anne Arundel	2.8	2.5	2.0	2.5	2.3
Maryland	3.9	3.6	3.4	3.3	3.0
United States	4.4	4.1	3.8	3.6	NA

[^]Defined as <2,500 grams.

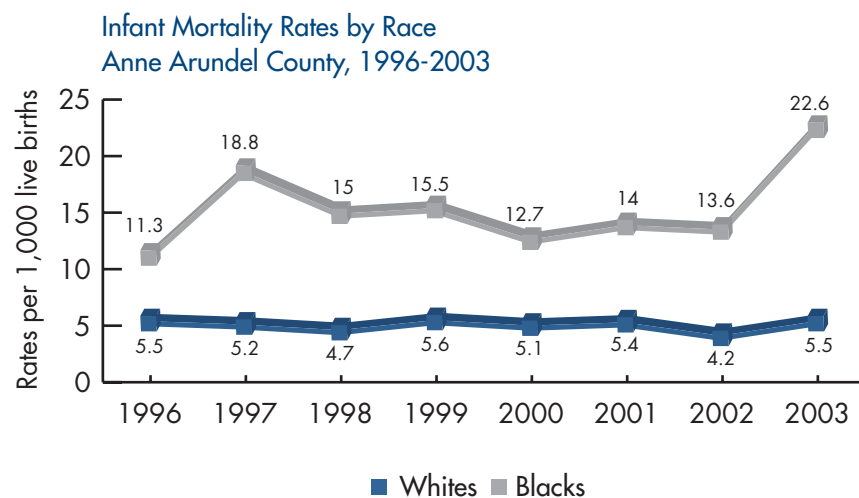
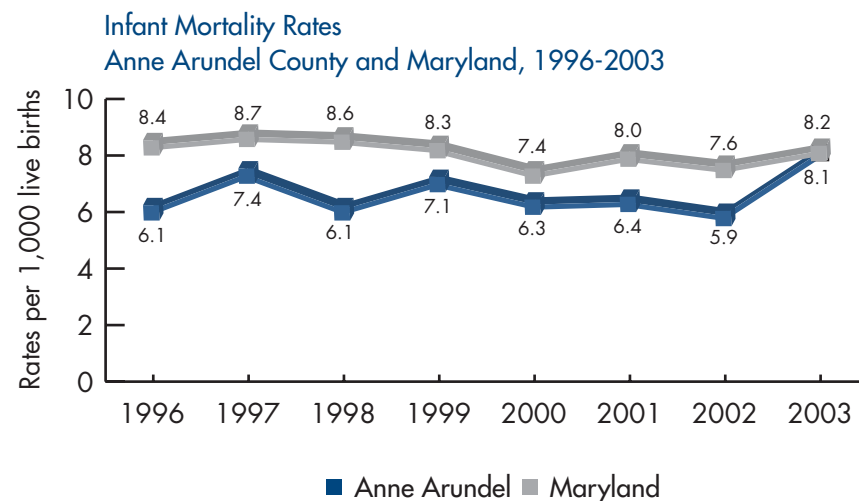
^{**}Defined as 3rd trimester prenatal care or no care before birth.

NA Not Available

Data Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland DHMH; Health, United States, NCHS, CDC.

INFANT MORTALITY RATES

Infant mortality rates can have much variability from year to year. The racial disparity for infant mortality has been a persistent concern both locally and nationally. The Department of Health continues to identify and implement appropriate initiatives to address this issue.

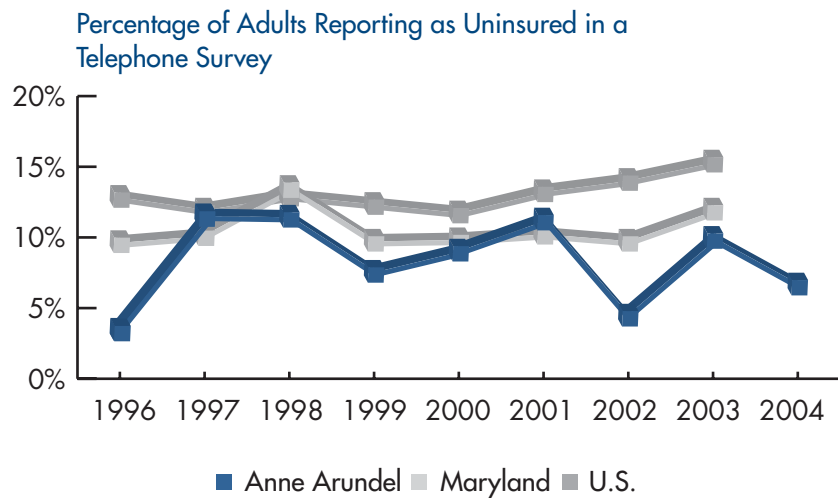


Data Source: Maryland Vital Statistics Reports, Division of Health Statistics, Maryland DHMH.

HEALTHCARE ACCESS

Overall in Anne Arundel County in 2004, 6.7% of adults surveyed reported having no health care coverage. Among whites surveyed, 5.9% reported being uninsured compared to 11.9% among blacks.

The numbers of persons with no health care coverage is related to changes in insurance costs and economic factors.



Data Source: Behavioral Risk Factor Surveillance System, CDC; Anne Arundel County Behavioral Risk Factor Survey, 2004.

CHRONIC DISEASES & RISK FACTORS



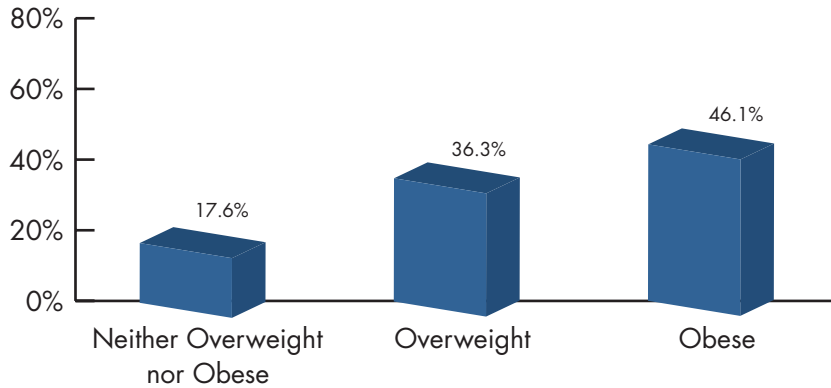
DIABETES

In Anne Arundel County in 2004, 9.4% of the adults surveyed reported being told by a doctor that they have diabetes. Of these, 82.4% were either overweight or obese.

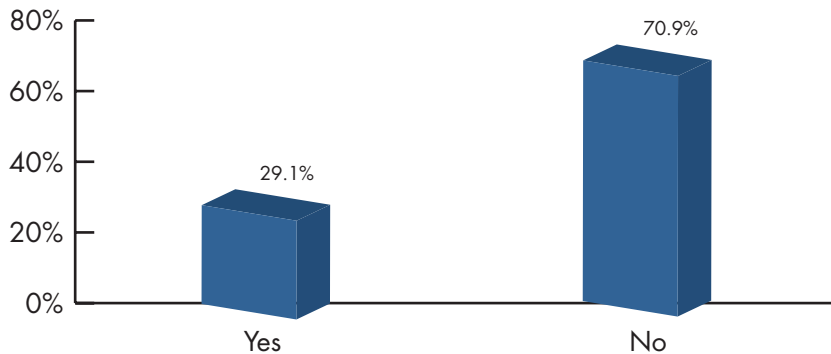
Increased physical activity and healthy eating may reduce the risk for premature death and illness in diabetics.

Of the Anne Arundel County adults with diabetes, only 29.1% reported exercising on a regular basis.

Percentage of adults who report having diabetes by Body Mass Index (BMI) Category
Anne Arundel County, 2004



Percentage of adults who report having diabetes and engaging in regular activity*
Anne Arundel County, 2004



*At least 30 mins. of moderate activity on a regular basis (5-7 days/wk)
Data Source: Anne Arundel County Behavioral Risk Factor Survey, 2004.

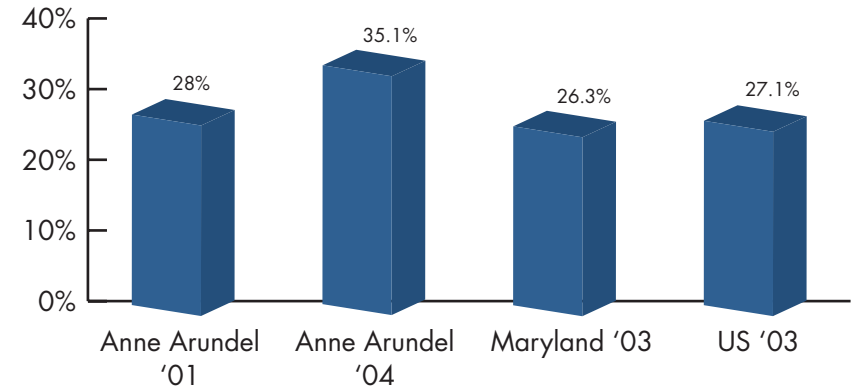
ARTHRITIS

Arthritis is a common chronic disease associated with aging and is a leading cause of disability.

Among white adults surveyed, 37.1% reported being told by a doctor that they have arthritis; 26.7% among blacks. Females were more likely to have been told they have arthritis than males, 39.8% compared to 28.4%. The lower the income, the more likely respondents are to have been told by a doctor they have arthritis.

Two modifiable risk factors for arthritis are inactive lifestyle and overweight/obesity. These risk factors are common for many other chronic diseases.

Percentage of adults who report having arthritis by region



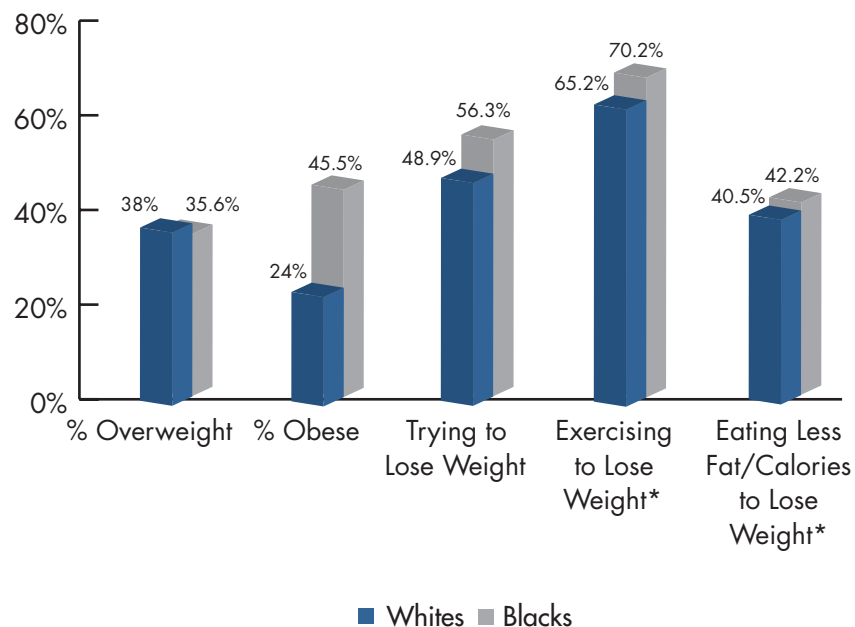
Data Source: Anne Arundel County Behavioral Risk Factor Survey, 2004.

WEIGHT CONTROL, EXERCISE AND NUTRITION

A direct relationship has been shown between many chronic diseases and weight control, exercise and nutrition. Chronic diseases cause a large proportion of our deaths and disabilities. Many of the risk factors for chronic diseases are modifiable.

Two-thirds of Anne Arundel County adults surveyed were either overweight or obese. Half of the Anne Arundel County adults surveyed reported trying to lose weight. Of those trying to lose weight, 71.7% reported diet modification to try to lose weight and 65.7% reported physical activity as a choice to lose weight.

The proportion of Anne Arundel County adults engaging in regular moderate activity has increased from 25.4% in 2001 to 34.7% in 2004.



*Proportion of respondents trying to lose weight
Data Source: Anne Arundel County Behavioral Risk Factor Survey, 2004.

CANCER RATES

Incidence (1997-2001) and Mortality Rates* (1997-2001) by Type of Cancer, Anne Arundel County, Maryland and U.S.

Incidence (1997-2001)				
Type of Cancer	County Number	County Rate	MD Rate	U.S. Rate
All Cancers	10,691	491.7	475.3	479.7
Lung and Bronchus	1,671	79.5	70.4	64.8
Colorectal	1,113	53.7	55.7	54.6
Female Breast	1,730	142.3	132.8	137.5
Prostate	1,552	160.8	178.6	175.5
Oral	266	11.9	10.7	10.9
Melanoma	510	21.7	16.9	18.0
Cervical	97	7.7	8.3	8.4

Mortality (1997-2001)				
Type of Cancer	County Number	County Rate	MD Rate	U.S. Rate
All Cancers	4,402	218.1	209.9	199.8
Lung and Bronchus	1,355	66.4	59.4	56.2
Colorectal	427	21.8	23.1	20.8
Female Breast	354	29.9	28.5	27.0
Prostate	202	31.0	34.3	31.5
Oral	70	3.5	3.1	2.8
Melanoma	57	2.5	2.5	2.7
Cervical	20	**	2.8	2.9

*Rates are per 100,000 and are age-adjusted to 2000 U.S. standard population

** Rates based on cells with 25 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy.
Data Source: Annual Cancer Report, 2004, Maryland DHMH

PREVENTIVE HEALTH SCREENING

In Anne Arundel County, colorectal cancer is the second leading cause of cancer deaths, responsible for 30.8% of cancer mortality. Colorectal cancer accounts for 15.6% of all newly diagnosed cancers.

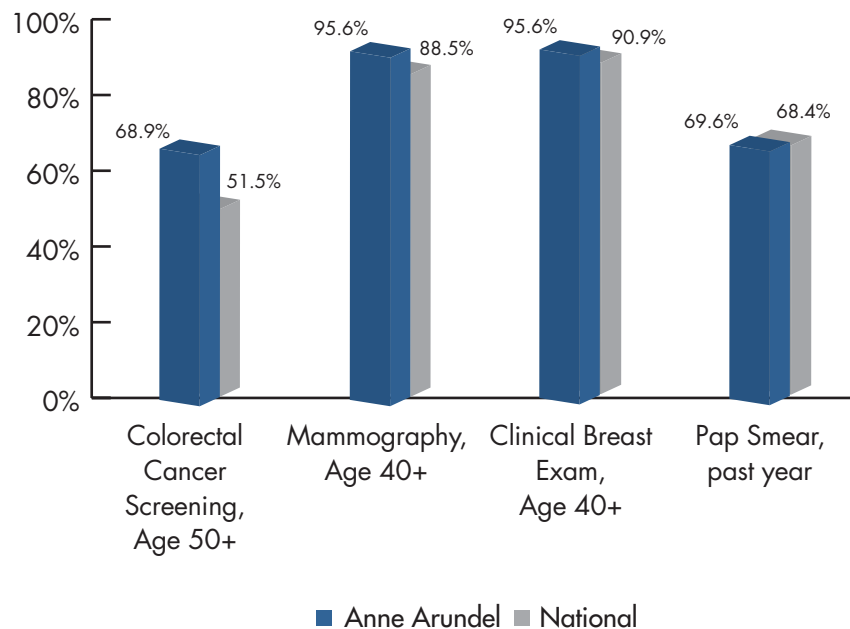
Breast cancer is the most frequently diagnosed cancer in women in Anne Arundel County. Female breast cancer accounts for 33.3% of all newly diagnosed cancer among females and 16.8% of all cancer deaths among females.

For the period 1997-2001, there were 97 newly diagnosed cases of cervical cancer and 20 cervical cancer deaths.

These selected cancers are detectable and treatable at an early stage.

The earlier the stage at diagnosis, the better the outcome.

Percentage of Preventive Screenings
Anne Arundel County (2004) and U.S. (2003)



Data Source: Anne Arundel County Behavioral Risk Factor Survey, 2004;
Behavioral Risk Factor Surveillance System, CDC.

COMMUNICABLE DISEASES



GENERAL DISEASE REPORTING

Number of Cases of Selected Reportable Diseases in Anne Arundel County:

	2000	2001	2002	2003	2004*	5-year Mean
Campylobacter	33	40	33	24	39	34
E. coli 0157:H7	1	3	3	2	4	3
Salmonella	61	81	77	75	77	74
Legionellosis	8	4	7	10	3	6
M. Marinum	8	6	10	5	14	9
Tuberculosis	13	14	12	13	6	12
Hepatitis A	18	56	30	19	5	26
Hepatitis B - all types**	125	116	128	101	167	127
Hepatitis C - all types**	548	751	846	652	821	724
Encephalitis	2	2	3	4	5	3
Meningitis, bacterial	10	7	11	5	8	8
Meningitis, fungal	4	5	4	3	1	3
Meningitis, viral	36	68	37	47	82	54
Meningitis, meningococcal	4	5	2	4	0	3
Streptococcus A	12	18	24	34	25	23
Streptococcus B	12	24	19	30	43	26
Streptococcus pneumonia	48	54	42	66	65	55
Ehrlichiosis	1	1	2	0	1	1
Lyme Disease	84	69	66	74	72	73
Rocky Mountain Spotted Fever	4	2	0	2	6	2
West Nile Virus	0	0	8	9	2	4

Rabies-Related Surveillance Measures:

	2000	2001	2002	2003	2004*	5-year Mean
Animal rabies	42	36	27	20	20	29
Human exposures to animals	1,178	1,181	1,105	1,173	1,274	1,182
Post-exposure treatments	77	152	109	131	107	115

*Provisional data **Types include: Acute, Chronic, Lab Report

Data Source: Communicable Diseases Program, Anne Arundel County Department of Health.

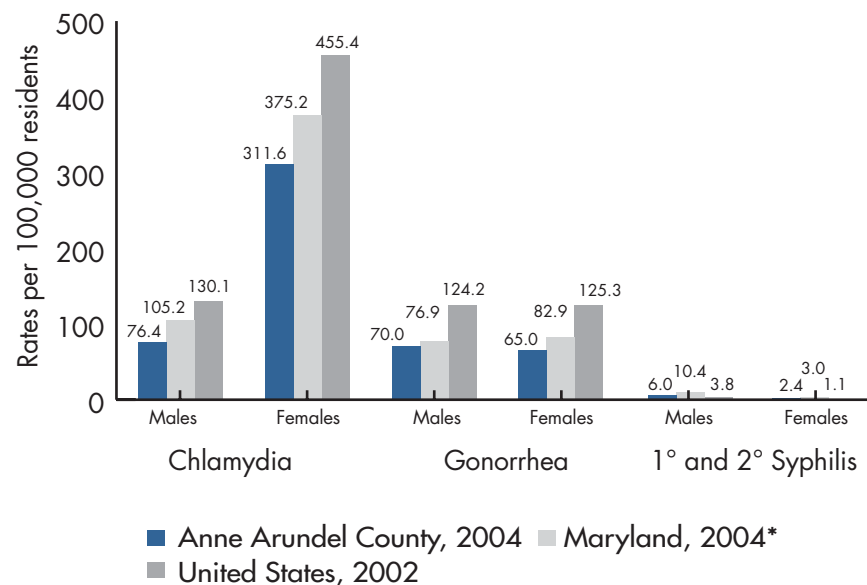
SEXUALLY TRANSMITTED DISEASES

In 2004, chlamydia in Anne Arundel County was below that of Maryland and the U.S. However, chlamydia was the highest in 10 years. Chlamydia levels rose 8.1% above 2003 levels to 194.2/100,000 residents (984 cases). In 2004, 75% of chlamydia occurred in 15-24 year olds. Females had almost four times the rate of chlamydia than did males.

Also in 2004, gonorrhea in Anne Arundel County was below that of Maryland and the U.S. While gonorrhea was down from the 343 cases in 2003 to 335 in 2004, it still is significantly higher than the 5-year median of 308. In 2004, 51% of gonorrhea occurred in 15-24 year olds. Gonorrhea rates for males and females are comparable.

In 2004, 11 new primary, 10 secondary, and 22 early latent syphilis cases set a 10-year high, up from a 10-year low of 13 cases only a year earlier. However, the rate of primary and secondary infections in the county (4.2/100,000 residents) was below that of Maryland (6.7/100,000 residents) in 2004. In Anne Arundel County, men are over twice as likely to be reported with syphilis than are women as compared with over three times as likely in both Maryland and the U.S.

Rates of Sexually Transmitted Diseases by Gender



* Provisional data and 2003 U.S. Census population estimations used to calculate rates.

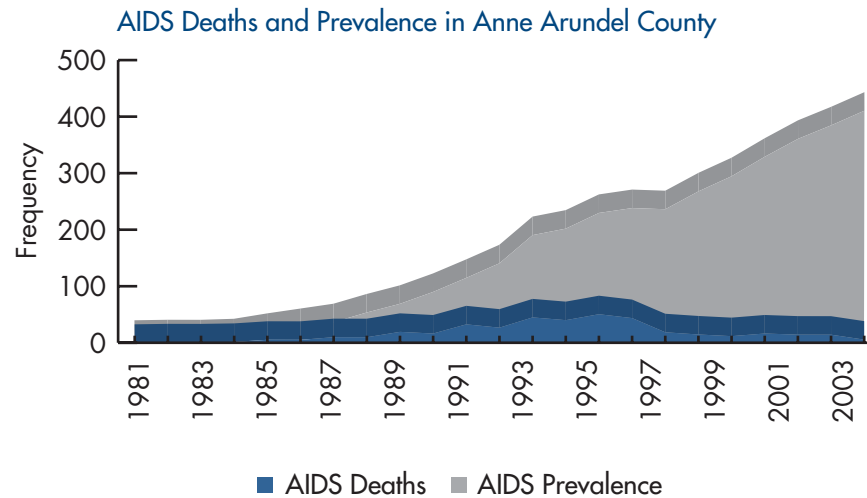
Data Source: Communicable Diseases Program, Anne Arundel County Department of Health.

HIV/AIDS

In 2003, Maryland ranked third in the nation for AIDS prevalence with almost 50% of the cases occurring in Baltimore City and 3% in Anne Arundel County. Prevalence in Anne Arundel County for HIV and AIDS combined increased by 6%, consistent with the increase in cases statewide.

Over the past five years, an average of 48 new HIV cases per year were reported. HIV and AIDS disproportionately affect certain communities in the County. The rate of HIV infection among blacks is over seven times that of whites and the disparity for AIDS is almost 13-fold. Men comprise 72% of new HIV cases, but only 50% of the population.

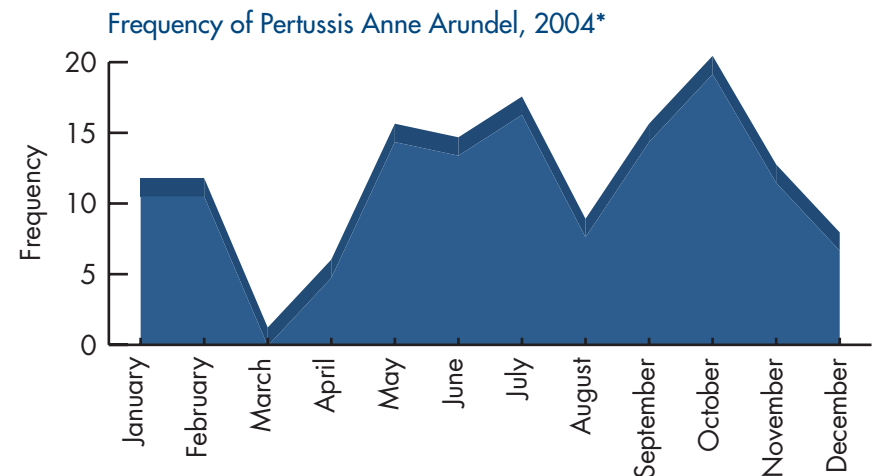
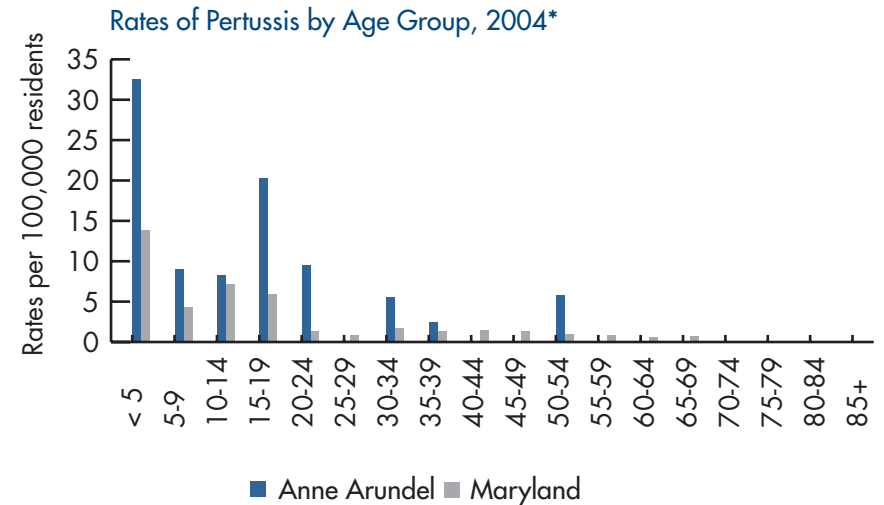
Better treatment also increases survival which increases the number of people living with HIV and AIDS.



Prevalence = Existing cases at one point in time
Data Source: Maryland 2004 HIV/AIDS Annual Report, DHMH and the DHMH AIDS Administration.

PERTUSSIS (WHOOPIING COUGH)

In 2003, the U.S. saw the most cases of pertussis in 40 years. Anne Arundel County had 32 cases reported in 2004, the most in at least 10 years. Adolescents 10-19 years of age comprised 31% of the county's cases, consistent with the 39% seen nationally in 2003. The pertussis immunization series is completed by age 6 but protects incompletely. The highest risk is for children under age 5, especially those with incomplete vaccine series. Approximately 22% (7/32) of the reported cases in the county were hospitalized and reports peaked in October 2004.

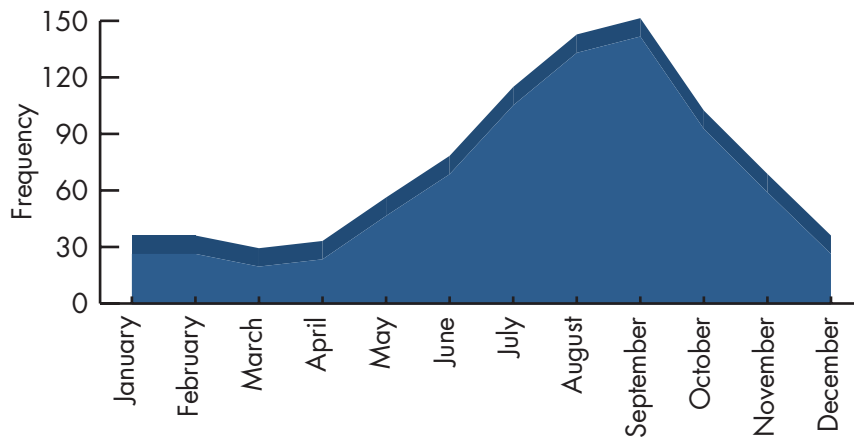


*Provisional data
Data Source: Communicable Diseases Program, Anne Arundel County Department of Health.

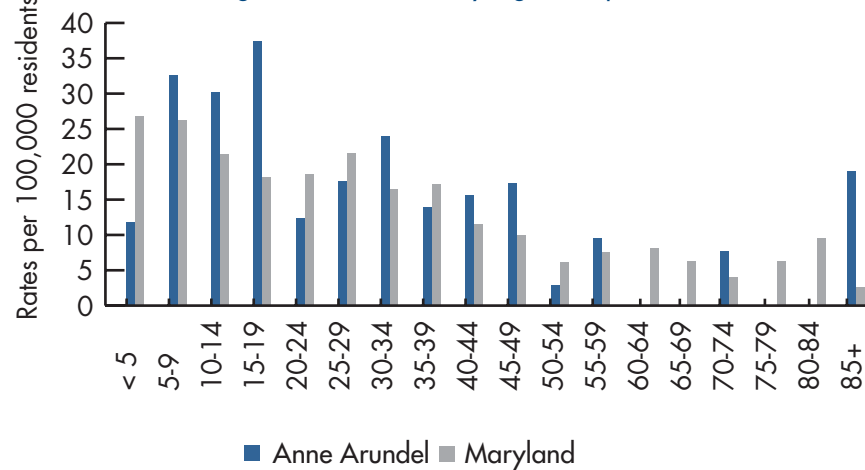
VIRAL MENINGITIS

In 2004, Anne Arundel County experienced the highest number of cases of viral meningitis in the past 10 years. Cases occurred primarily in those under the age of 50. Incidence rate for 15-19 year olds in the county more than doubled the statewide incidence rate for that age group. Approximately 98% (81/83) of all reported cases were hospitalized. Viral meningitis should not be confused with the more serious form of meningitis caused by the bacterium, *Neisseria meningitidis*.

Frequency of Viral Meningitis Anne Arundel, 2004*



Viral Meningitis Incidence Rate by Age Groups, 2004*



*Provisional Data

Incidence = New Cases

Data Source: Communicable Diseases Program, Anne Arundel County Department of Health.

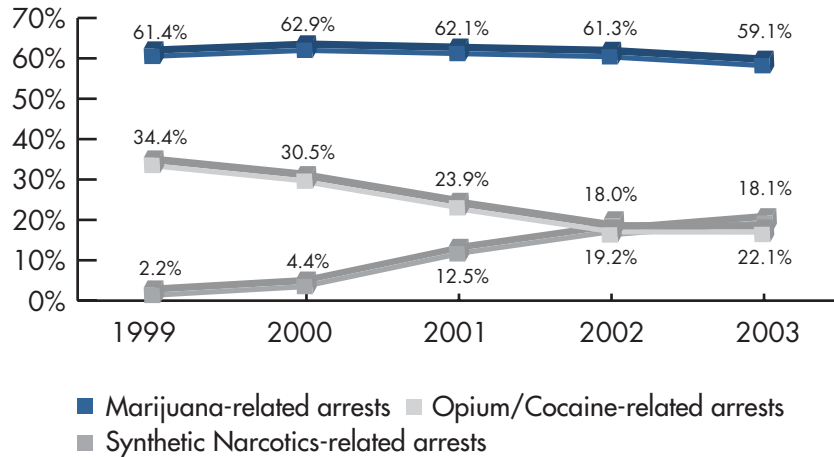
SPECIAL HEALTH TOPICS



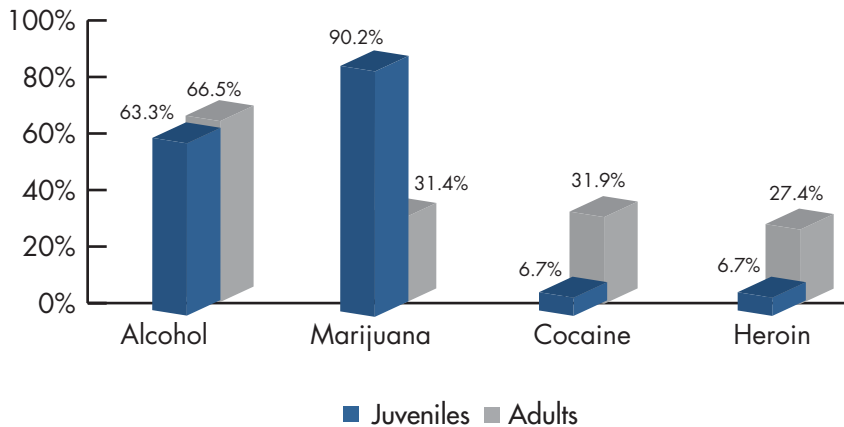
SUBSTANCE ABUSE

(SELECTED SUBSTANCE ABUSE INDICATORS)

Percentage of Drug-Related Arrests, Anne Arundel County, Juveniles and Adults



Percentage of Drug Mentions among Anne Arundel County Treatment Admissions, by Substance and Age Group, FY2002



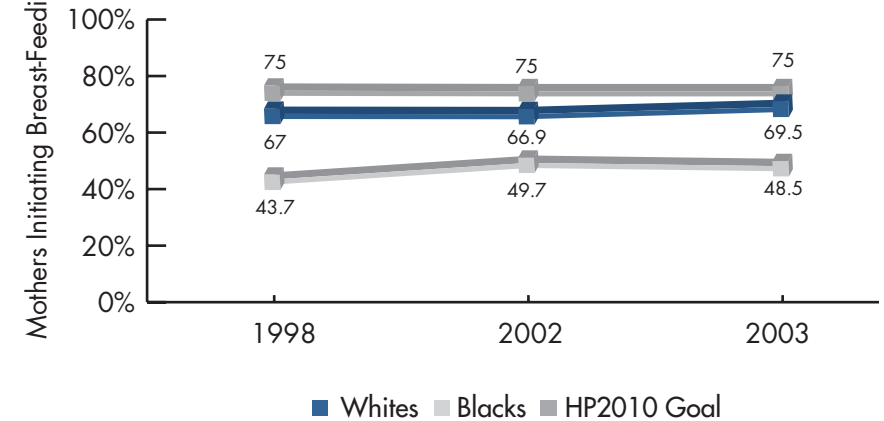
Data Source: Center for Substance Abuse Research (CESAR).

BREAST-FEEDING

Recent reports indicate that increasing breast-feeding rates and duration could reduce infant mortality, breast cancer and obesity rates. The National Institutes of Health reports that breast-feeding lowers post-neonatal infant mortality. Breast-feeding reduces breast cancer risk even for women with high genetic predisposition. Breast-fed children are less likely to be obese.

The American Academy of Pediatrics recommends exclusive breast-feeding for the first 6 months and continued breast-feeding, along with other foods, for at least the first year of life. Breast-feeding benefits the mother, child, family and community. However, for mothers to successfully breast-feed, support is needed from hospitals, family, friends, health providers, employers and the community at large.

Breast-Feeding Initiation by Race, Anne Arundel County



Healthy People 2010 objectives for breast-feeding are: 75% of new mothers initiating breast-feeding, 50% continuing to breast-feed for 6 months and 25% continuing for at least one year. Currently, only breast-feeding initiation rates data is available for Anne Arundel County. However, Maryland has breast-feeding continuation rates of 39.7% and 19% at 6 months and 12 months respectively. (CDC, National Immunization Survey, 2003)

Data Source: Maryland Newborn Screening Survey.

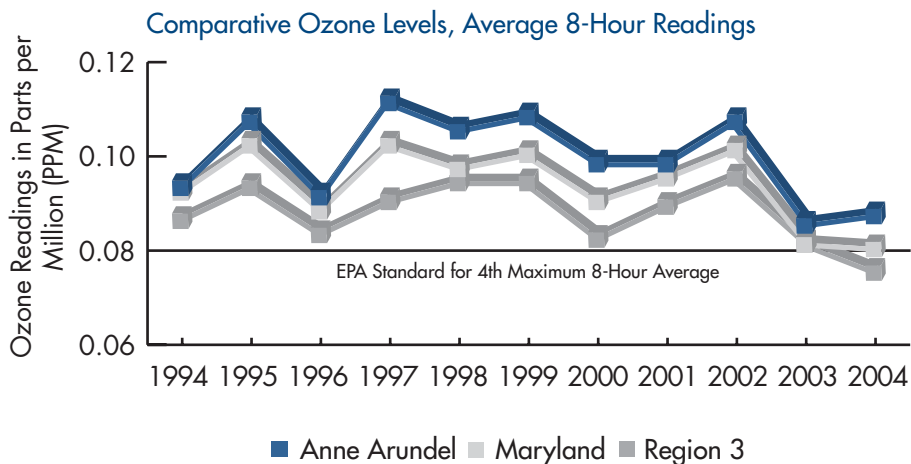
AIR QUALITY

For 5 years, Anne Arundel County has been one of the top 20 most air-polluted counties in the nation according to the American Lung Association. Ozone is the main pollutant of concern.

Ground level ozone is produced by the chemical reaction of nitric oxides and volatile organic compounds in the presence of sunlight, with levels highest in summer. Sources of these pollutants include electrical power plants, industrial facilities, motor vehicles and gasoline fumes. Some pollutants are produced locally but pollutants can also travel from as far away as the Ohio River Valley where many power plants are located. Weather inversions trap ozone in our area. Varying weather patterns can affect ozone levels from year to year.

Ozone reduces lung function and worsens chronic lung conditions such as asthma and emphysema. In children, it may affect lung growth and increase asthma risk. During ozone alerts, some sensitive individuals need to limit outdoor activity.

For area residents, ways to improve air quality include using public transportation, filling up gas tanks late in the evening, and using less gasoline-powered equipment during ozone alerts. However, air quality is a regional issue and requires not only responsible energy use, but the efforts of regulators, policymakers and businesses in our region.



Note: EPA Region 3 includes DC, DE, MD, PA, VA and WV

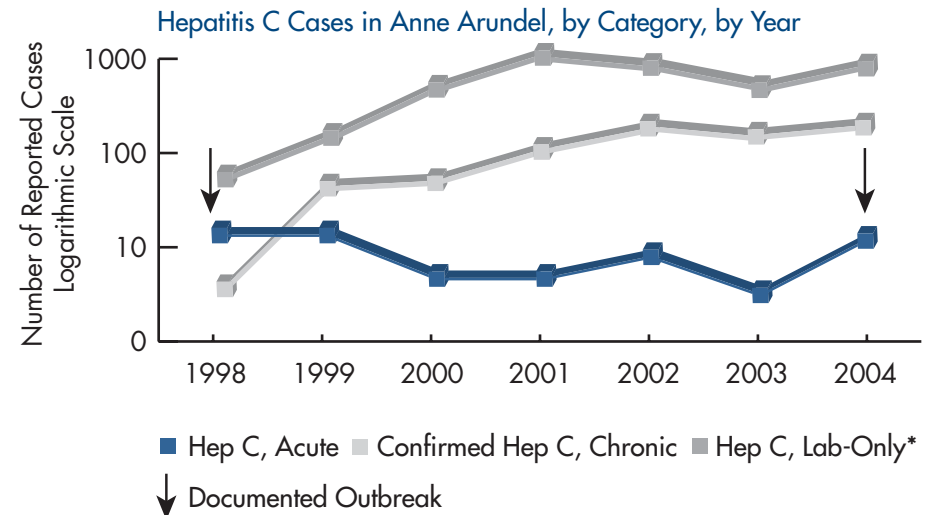
Note: The EPA uses the 4th highest 8-hour reading in a year as the critical ozone indicator.

Data Sources: EPA AirData (www.epa.gov/air); Maryland Department of the Environment (www.mde.md.state.us); American Lung Association *State of the Air*: 2004.

HEPATITIS C

Hepatitis C virus may cause acute hepatitis, chronic hepatitis, liver cirrhosis and liver cancer. Around 75%-85% of people who are positive for hepatitis C become chronically infected. Hepatitis C infection may not cause any symptoms initially and many are unaware of their infection. Hepatitis C is transmitted through blood, and is also rarely passed by sexual contact. Blood transfusions used to carry risk of hepatitis C before a specific blood test was available. Current risk factors include intravenous and inhaled drug use, non-sterile tattooing or body piercing and invasive medical procedures or injuries where sterility is not maintained. Unlike other forms of hepatitis, no preventive vaccine exists.

Anne Arundel County has a progressive surveillance program for hepatitis C cases that identifies and investigates outbreaks and looks for ways to prevent this disease or reduce its impact.



*= See Notes #3.

Notes: 1. MERSS categorizes hepatitis C in three categories: acute, chronic and lab-only.

2. Confirmed hepatitis C, chronic represents reported cases with two positive laboratory reports that are 6 months apart.

3. Lab-only cases include positive hepatitis C laboratory reports without further information. All acute cases, and those confirmed as chronic during the same year, are removed from this category.

Data Source: Maryland Electronic Reporting Surveillance System (MERSS).

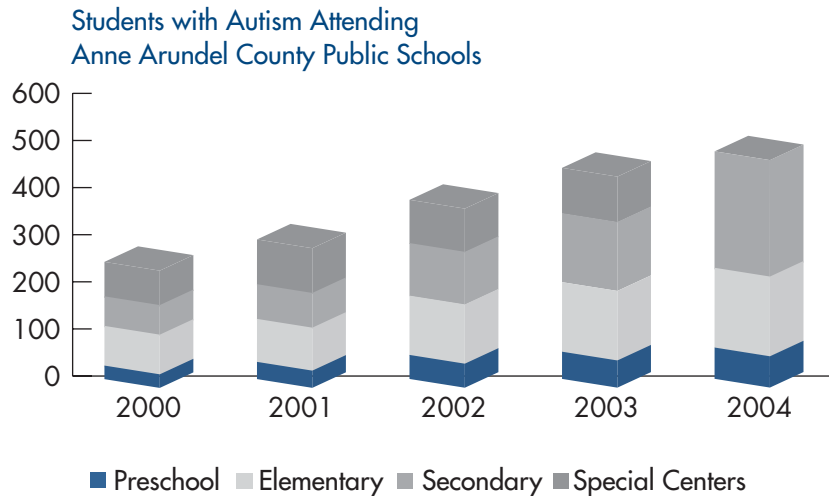
AUTISM

Early intervention services that address developmental delays and disabilities increase a child's potential to learn and provide a foundation for social interaction skills. Developmental delays or disabilities can range anywhere from severe vision impairment or orthopedic handicaps to neurological disorders such as autism.

Autism spectrum disorders, which are marked by delays of communication and social interaction skills, may be present in varying combinations and to varying degrees. Despite much research, the cause of autism spectrum disorders is unknown.

The number of children receiving services related to autism and other disabilities in Anne Arundel County Public Schools is increasing. It is unclear if this rise is related to earlier and better diagnosis and referrals or to the increased incidence of the disorders.

In Maryland, children with autism from birth to three years of age can receive services through the Maryland Infants and Toddlers Program. Children in grades pre-K through 12 receive services in their schools.



Number of children in special centers not available for 2004.

Data Source: Division of Special Education, Anne Arundel County Board of Education.