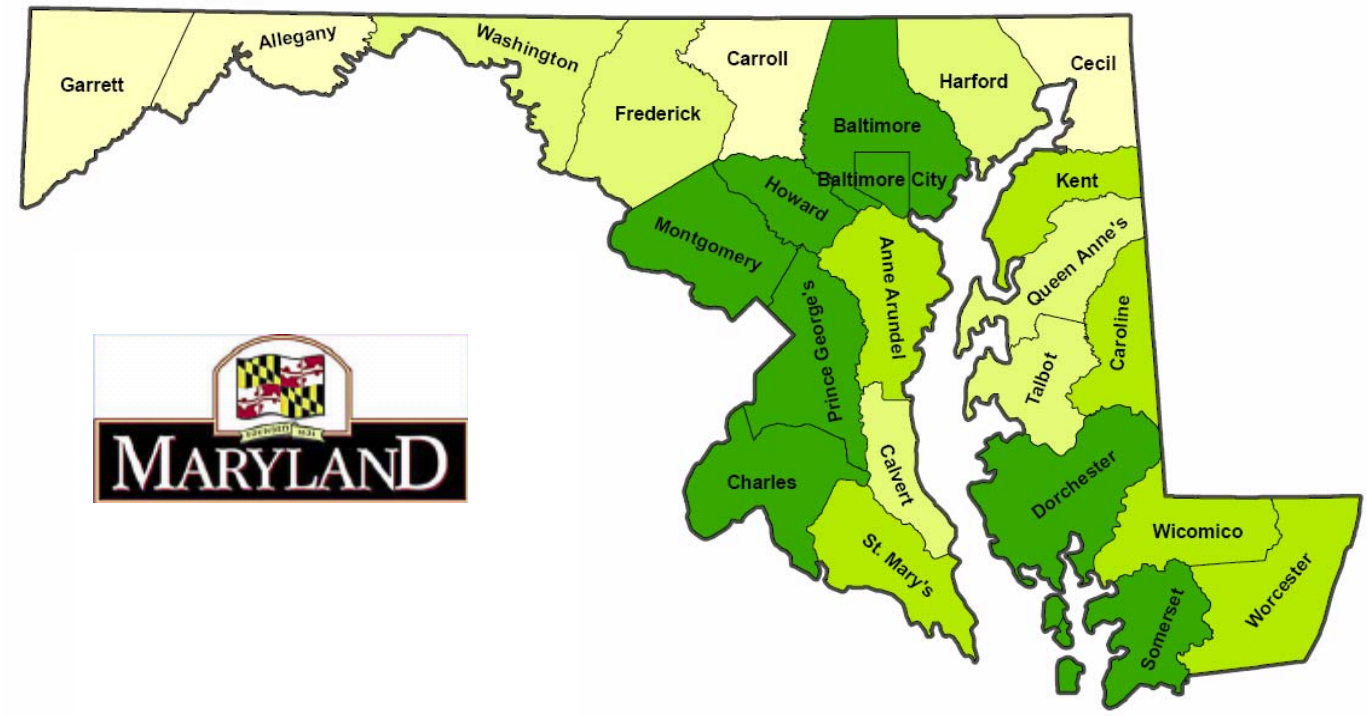
Maryland Department of Health and Mental Hygiene

Minority Health and Health Disparities
Maryland Department of Health and Mental Hygiene

Maryland Chartbook of Minority Health And Minority Health Disparities Data

With Sections on Gender-specific Health And Jurisdiction-specific Health

September 2007



Martin O'Malley, Governor

Anthony G. Brown, Lt. Governor

John M. Colmers, Secretary

Maryland Department of Health and Mental Hygiene

Maryland Chartbook of Minority Health and Minority Health Disparities

With Sections on Gender-Specific Health and Jurisdiction-Specific Health

Minority Health and Health Disparities

Prepared by:

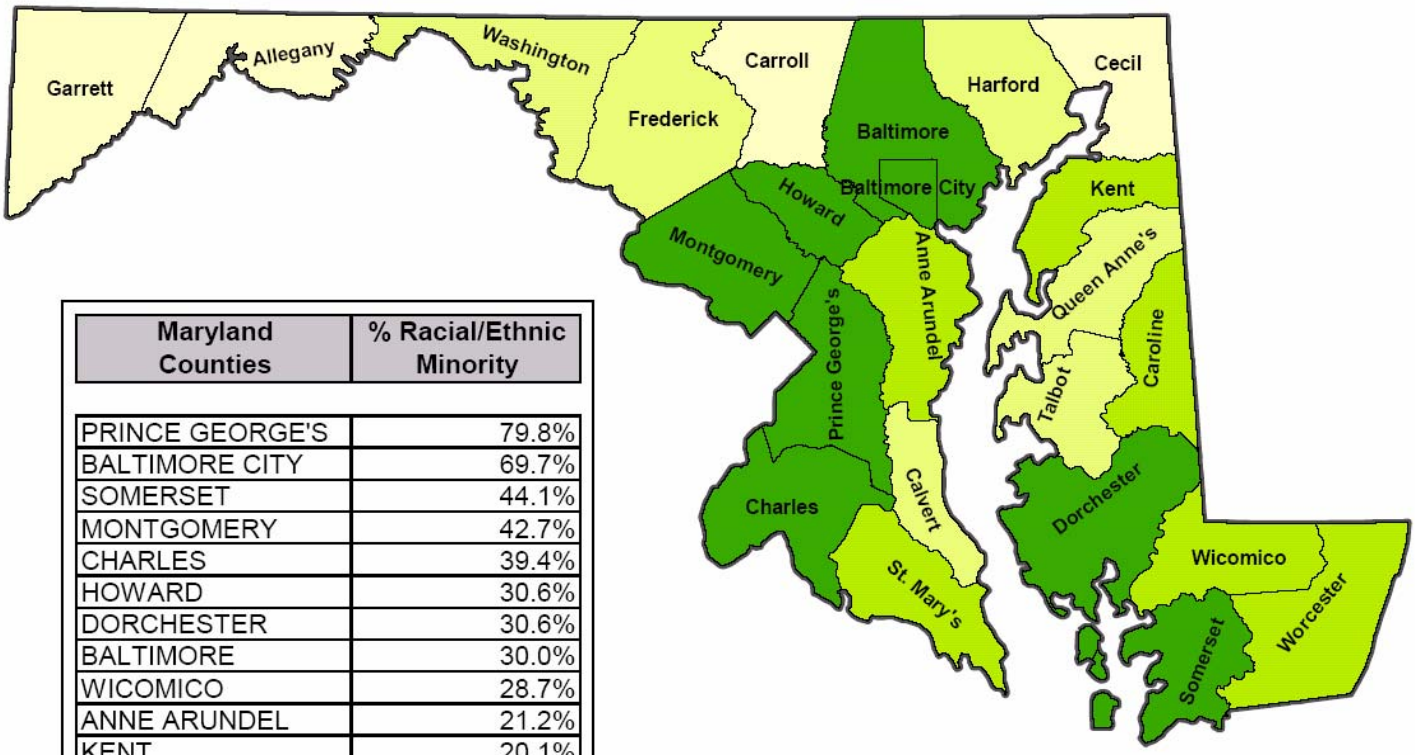
Carlessia A. Hussein, RN, Dr. PH
Director
Minority Health and Health Disparities

Sneha M. Bhavsar, MPA
Research Assistant
Minority Health and Health Disparities

David A. Mann, MD, MS
Epidemiologist
Minority Health and Health Disparities

September 2007

Percent of Population that is a Racial or Ethinic Minority Group, Maryland 2004



Maryland Counties	% Racial/Ethnic Minority
PRINCE GEORGE'S	79.8%
BALTIMORE CITY	69.7%
SOMERSET	44.1%
MONTGOMERY	42.7%
CHARLES	39.4%
HOWARD	30.6%
DORCHESTER	30.6%
BALTIMORE	30.0%
WICOMICO	28.7%
ANNE ARUNDEL	21.2%
KENT	20.1%
ST MARY'S	19.0%
CAROLINE	18.9%
WORCESTER	18.2%
TALBOT	17.8%
CALVERT	16.3%
HARFORD	15.6%
FREDERICK	14.3%
WASHINGTON	11.8%
QUEEN ANNE'S	10.5%
CECIL	7.9%
ALLEGANY	7.4%
CARROLL	5.8%
GARRETT	1.3%
MARYLAND TOTAL	**39.6%**

% Racial/Ethnic Minority

- 0% - 9.9%
- 10% - 17.9%
- 18% - 29.9%
- 30% - 100%

Irma

0 4 8 16 24 32 Miles

Table of Contents

Purpose, Methods, and Data Sources **1**
Part I: Minority Health and Minority Health Disparities **4**
Racial and Ethnic Minority Populations 4
Geographic Distribution of Maryland Minority Populations 6
Socio-economic Characteristics of Minority Populations 8
Income 8
Education 8
Health Status Issues for Minorities 10
Mortality in Minority Populations 10
Mortality, Occurrence and Risk Factors for Selected Conditions 16
Heart disease 16
Cancer 22
Stroke 26
Diabetes 30
HIV/AIDS 36
Infant Mortality 38
Asthma 44
Health Care Issues for Minorities 45
Health Insurance 45
Access to Care 46
Health Care Quality 48
Part II: Gender-Specific Health **50**
Women's Health 50
Leading Causes of Death for Women 50
Women's cancer 52
Men's Health 53
Leading Causes of Death for Men 53
Men's cancer 55
Part III: Jurisdiction-Specific Health **56**
Characteristics of Jurisdictions in Maryland 56
Age composition 56
Racial composition 62
Gender 68
Mortality data by Jurisdiction 73
Cancer data by Jurisdiction 96
References **101**
Appendices **103**
Appendix 1. List of Figures 103
Appendix 2. List of Tables 108

Purpose, Methods, and Data Sources

Purpose

The Office of Minority Health and Health Disparities (MHHD) was established in the Maryland Department of Health and Mental Hygiene in 2004 by legislation passed in the Maryland General Assembly session of that same year. One of the charges to MHHD is the compilation and distribution of minority health and health disparities data. This Chartbook is one response to that charge.

Adequate and accurate data are essential to any effort to identify and address health problems in general and health disparities in particular. With regard to health disparities, whether defined by ethnicity/race or other factors (geography, gender, income, education, etc.), data are required to complete three essential tasks:

1. Identify and measure disparities

2. Determine the causes of the disparity and plan interventions

3. Track progress toward eliminating health disparities

The compilation of Maryland health disparities data in this Chartbook is intended to enable each of these three critical functions. The section on Minority Health and Minority Health Disparities begins by describing the characteristics of Maryland's minority populations. It then presents data on disparities for the leading causes of death, and then makes the connections between the disparities in mortality rates and the disparities in the occurrence and risk factors for these diseases. It concludes with an examination of health care disparities experienced by Maryland's minority communities.

In some cases, the Chartbook presents a comparison of disparities in the occurrence of the disease with the disparities in the consequences of the disease: healthcare utilization, disease complications, and deaths from the disease. These comparisons provide important first clues as to whether a focus on disease development disparities or on disease management disparities is more important for a particular disease.

Health problems and disparities may also exist based on gender and geography. Therefore, the Chartbook also contains sections on gender-specific and jurisdiction-specific health. These sections will be expanded to become separate data publications in the future.

This initial Chartbook is detailed, but not exhaustive. Future editions will be expanded to include additional analyses for the conditions discussed in this volume, as well as include compilations of available data for conditions not yet covered.

Data Sources and Methods

Because the African American population is 75 percent of Maryland's minority population, data for that group is the most extensive among the minority groups; this allows for a more statistically sound analysis in that population. For this reason, several analyses are limited to comparisons of African Americans to Whites. In addition, the very small size of the Native American population makes analysis of their health disparities especially challenging. The Office of Minority Health and Health Disparities within the Department of Health and Mental Hygiene is committed to developing approaches to data collection and analysis that will allow us to improve data reporting for Maryland's smaller minority communities.

Age-adjustment

Many of the analyses present age-adjusted data. Age-adjustment is a method of making a fair comparison between two groups regarding a condition whose impact is vastly different at different ages, when the two groups have important differences in their age pattern. For most chronic diseases (which are also the leading causes of death), both the occurrence of the disease, and the mortality from the disease are greatest in persons at or above the age of 65. About 13 percent of Maryland Whites are 65 or older, while only about 8 percent of African Americans are that age [1]**.** This difference in age pattern makes the overall White death rate larger than the African American death rate if age is not taken into account. This is despite the fact that at any age, the death rate for African Americans is higher. Age-adjustment solves this problem, and is the correct way to assess disparity for most chronic conditions.

Age stratification, which is presenting data in a variety of age categories, is an alternative method of accounting for age differences between two groups being compared.

Statistical Significance

The CDC Wonder data, U.S. Census data and Maryland Vital Statistics Administration data represent analysis of all events in the years indicated. The original sources of these data do not include statistical significance test (p-values or confidence intervals). Since these data sources are not samples of the population, such significance testing is not essential, as there is no within year sampling error (each year's result reflects the population statistic that year without sampling error). Some analysts use significance tests to reflect how well a particular year is representative of the set of all years. While our data sources do not allow us to do this, in most cases year-to-year variation issues are either minimized by pooling multiple years of data, or by presenting a series of years so that the variation can be seen and a multi-year average calculated.

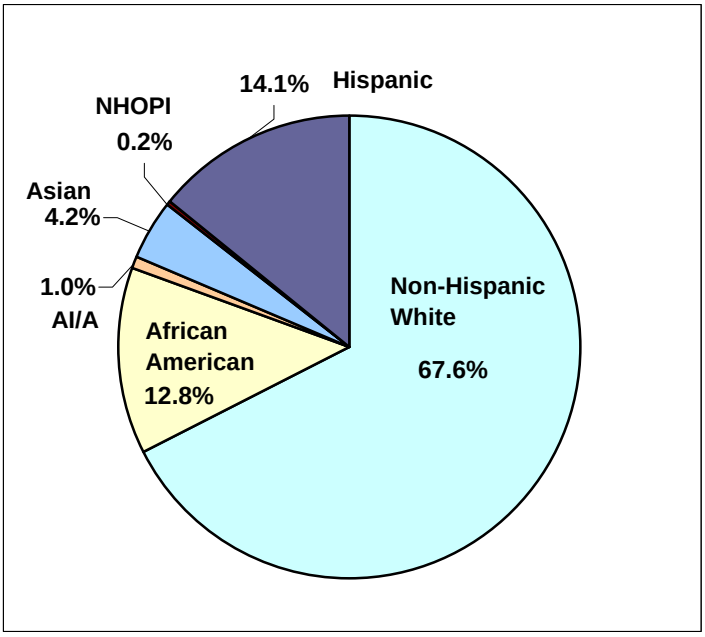
The Behavioral Risk Factor Surveillance System (BRFSS) produces survey data, which is a sample of the total population. As with any survey that only reaches a small sample of the population, sampling error must be considered. The Maryland BRFSS on-line reporting tool provides 95% confidence intervals, and this allows us to determine whether observed differences are statistically significant (i.e. not just due to a chance sampling error). Statistically significant differences in BRFSS analysis (at an alpha level of 0.05) are indicated as such in the figures and tables.

Part I: Minority Health and Minority Health Disparities

Racial and Ethnic Minority Populations

In 2004 the population of the United States was estimated to be more than 32 percent racial and ethnic minority. Hispanics and Latinos have been the fastest growing minority group since 2000 [2]. It is expected that the non-Hispanic White population in the United States will fall below 50% after the year 2050 [3].

Figure 1. Percent of U.S. Population by Race and Ethnicity, United States, 2004



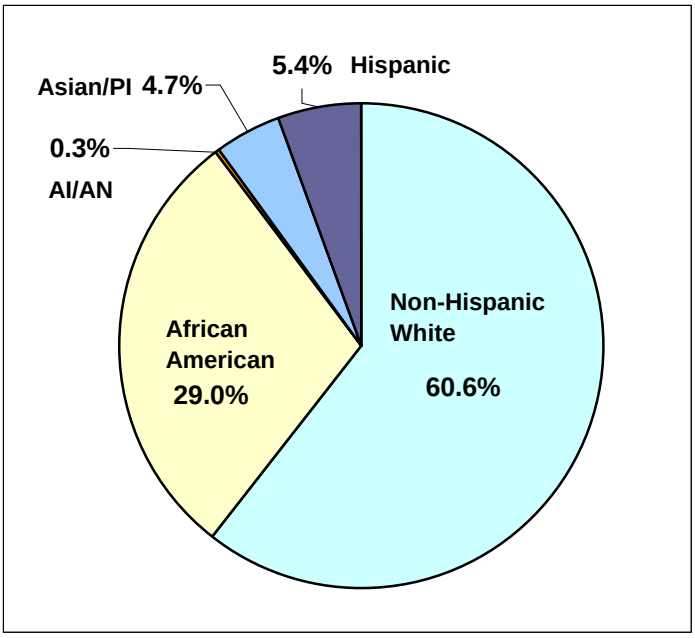
Source: U.S. Census Bureau, Statistical Abstract of the United States, 2006 [4].

Maryland's minority population, and in particular its African American population, is a larger proportion of total population than in the U.S., as shown in Figure 2 and Table 1. In 2004 (for comparison with the U.S. data) its minority population was 39.6 percent [1]. By specific minority group, Maryland was 29.6 percent African American, 4.9 percent Asian, 5.4 percent Hispanic, and 0.4 percent American Indian in 2004. Maryland is quickly becoming a state where the combined racial and ethnic minority population will exceed the White population. In 2004, Maryland ranked 5th among states in the percent of its population that is African American. Also among states, Maryland is 7th in the percent of its population that is Asian or Pacific Islander [4].

Because the African American population is 75 percent of Maryland's minority population, data for that group is the most extensive among the minority groups; this allows for a more statistically sound analysis in that population. For this reason, several analyses below are limited to comparisons of African Americans to Whites. In addition, the very small size of the Native American population makes analysis of their health disparities especially challenging.

The Office of Minority Health and Health Disparities within the Department of Health and Mental Hygiene is committed to developing approaches to data collection and analysis that will allow us to improve data reporting for Maryland's smaller minority communities.

Figure 2. Percent of Population by Race and Ethnicity, Maryland, 2004



Source: Maryland Department of Planning, Planning Data Services, from the Population Division, U.S. Census Bureau, August 2005 [5].

Table 1. Maryland Population by Race and Ethnicity, July 1, 2004

Race	All Ethnicity		Non-Hispanic		Hispanic	
White	3,617,094	65.1%	3,355,955	60.4%	261,139	4.7%
Non-White	1,940,964	34.9%	1,904,386	34.3%	36,578	0.7%
Black	*1,645,781*	*29.6%*				
Asian / Pac Island	*274,298*	*4.9%*				
American Indian	*20,885*	*0.4%*				
MD total	5,558,058	100.0%	5,260,341	94.6%	297,717	5.4%

All percents are percentage of the total Maryland population.
Source: Maryland Vital Statistics Annual Report 2004 [1].

Geographic Distribution of Maryland Minority Populations

The geographic distribution of minority populations by Maryland jurisdictions is shown in Table 2 for 2005 [6]. Important observations from this table include:

- Maryland's population is now composed of over 40% racial and ethnic minorities.

- Montgomery and Prince George's counties, adjacent to Washington D.C., as a region have a minority population of 61.2 percent, the largest regional percentage minority.

- Prince George's County has the highest minority population at 80.8%, followed by Baltimore City at 69.7%, Somerset County at 44.4%, Montgomery County at 43.4%, and Charles County at 41.5%.

- Five jurisdictions have 40% or more minorities, and eight jurisdictions have 30% or more minorities.

- Jurisdictions with highest proportion of their population that is African American include Prince George's County (67.3%), Baltimore City (65.6%), Somerset County (42.0%), Charles County (35.4%), Dorchester County (27.8%), Baltimore County (24.4%) and Wicomico County (24.2%).

- Jurisdictions with highest proportion of their population that is Asian or Pacific Islander include Montgomery County (13.8%), Howard County (11.4%), Prince George's County (4.2%), Baltimore County (4.1%), Frederick County (3.2%), and Anne Arundel County (3.2%).

- Jurisdictions with highest proportion of their population that is American Indian include Charles County (0.8%), Prince George's County (0.5%), Montgomery County (0.4%), Saint Mary's County (0.4%), Anne Arundel County (0.4%) and Baltimore City (0.4%).

- Jurisdictions with highest proportion of their population that is Hispanic or Latino include Montgomery County (13.6%), Prince George's County (10.7%), Frederick County (4.6%), Howard County (4.0%), Anne Arundel County (3.6%), Kent County (3.3%), and Charles County (3.1%).

Table 2. Minority Population Estimates by Maryland Jurisdictions, 2005

REGION AND POLITICAL SUBDIVISION	TOTAL	Non-Hispanic White	Minority Population	Percent Minority	Percent African American	Percent Asian/PI	Percent AI/AN	Percent Hispanic
MARYLAND	**5,600,388**	**3,345,777**	**2,254,611**	**40.3%**	**29.9%**	**5.1%**	**0.4%**	**5.7%**
NORTHWEST AREA	**466,144**	**407,591**	**58,553**	**12.6%**	**7.7%**	**2.0%**	**0.2%**	**2.9%**
GARRETT	29,909	29,518	391	1.3%	0.6%	0.2%	0.0%	0.5%
ALLEGANY	73,639	67,971	5,668	7.7%	6.2%	0.6%	0.1%	1.0%
WASHINGTON	141,895	124,491	17,404	12.3%	9.2%	1.2%	0.2%	1.9%
FREDERICK	220,701	185,611	35,090	15.9%	8.2%	3.2%	0.3%	4.6%
BALTIMORE METRO AREA	**2,610,063**	**1,675,932**	**934,131**	**35.80%**	**29.3%**	**3.8%**	**0.3%**	**2.7%**
BALTIMORE CITY	635,815	192,809	443,006	69.7%	65.6%	2.1%	0.4%	2.2%
BALTIMORE COUNTY	786,113	542,504	243,609	31.0%	24.4%	4.1%	0.3%	2.4%
ANNE ARUNDEL	510,878	399,262	111,616	21.8%	15.1%	3.2%	0.4%	3.6%
CARROLL	168,541	158,087	10,454	6.2%	3.1%	1.5%	0.2%	1.5%
HOWARD	269,457	183,240	86,217	32.0%	16.7%	11.4%	0.3%	4.0%
HARFORD	239,259	200,030	39,229	16.4%	12.0%	2.2%	0.3%	2.4%
NATIONAL CAPITAL AREA	**1,773,706**	**687,810**	**1,085,896**	**61.20%**	**40.9%**	**9.2%**	**0.4%**	**12.2%**
MONTGOMERY	927,583	525,146	402,437	43.4%	16.9%	13.8%	0.4%	13.6%
PRINCE GEORGE'S	846,123	162,664	683,459	80.8%	67.3%	4.2%	0.5%	10.7%
SOUTHERN AREA	**323,265**	**232,357**	**90,908**	**28.10%**	**23.2%**	**2.1%**	**0.5%**	**2.6%**
CALVERT	87,925	73,396	14,529	16.5%	13.1%	1.2%	0.3%	2.0%
CHARLES	138,822	81,181	57,641	41.5%	35.4%	2.6%	0.8%	3.1%
SAINT MARY'S	96,518	77,780	18,738	19.4%	14.8%	2.2%	0.4%	2.3%
EASTERN SHORE AREA	**427,210**	**342,087**	**85,123**	**19.90%**	**16.5%**	**1.1%**	**0.3%**	**2.3%**
CECIL	97,796	89,566	8,230	8.4%	5.2%	1.0%	0.3%	2.0%
KENT	19,899	15,915	3,984	20.0%	16.0%	0.9%	0.2%	3.3%
QUEEN ANNE'S	45,612	40,828	4,784	10.5%	8.0%	1.1%	0.2%	1.4%
CAROLINE	31,822	25,809	6,013	18.9%	14.3%	0.5%	0.6%	4.0%
TALBOT	35,683	29,369	6,314	17.7%	14.4%	1.0%	0.2%	2.6%
DORCHESTER	31,401	21,825	9,576	30.5%	27.8%	0.8%	0.2%	1.9%
WICOMICO	90,402	64,371	26,031	28.8%	24.2%	1.8%	0.3%	2.8%
SOMERSET	25,845	14,370	11,475	44.4%	42.0%	0.9%	0.3%	1.8%
WORCESTER	48,750	40,034	8,716	17.9%	15.1%	0.9%	0.2%	1.8%

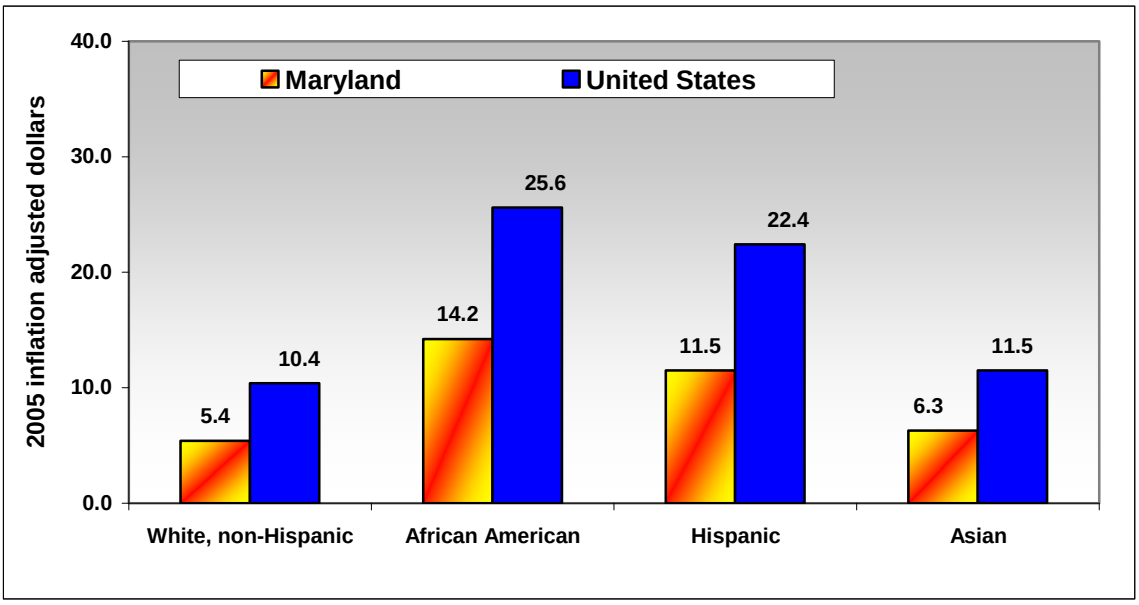
Source: Maryland Vital Statistics Annual Report 2005 [6].

Socio-economic Characteristics of Minority Populations

Income

Percent below the poverty level for the U.S. and Maryland by race and ethnicity is shown in Figure 3 [7]. In general, minority persons are more likely to be in poverty than whites. For each racial or ethnic group, poverty rates are lower in Maryland than they are nationally.

Figure 3. Percent Below Poverty Level in the past 12 months, Maryland and U.S., 2005

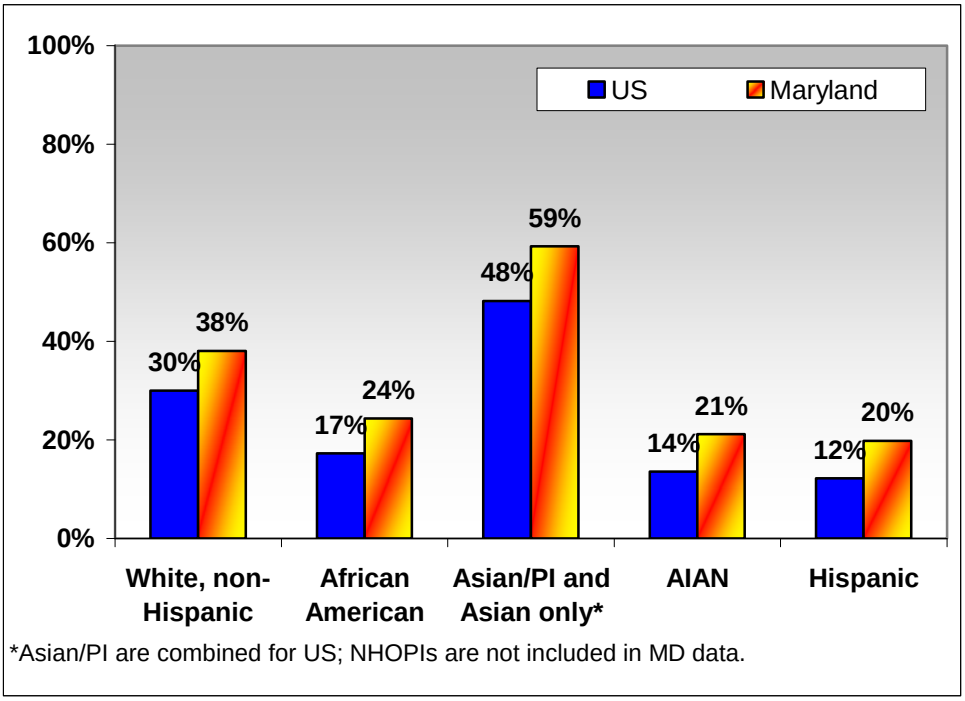


Source: U.S. Census Bureau, American Community Survey 2005 [7].

Education

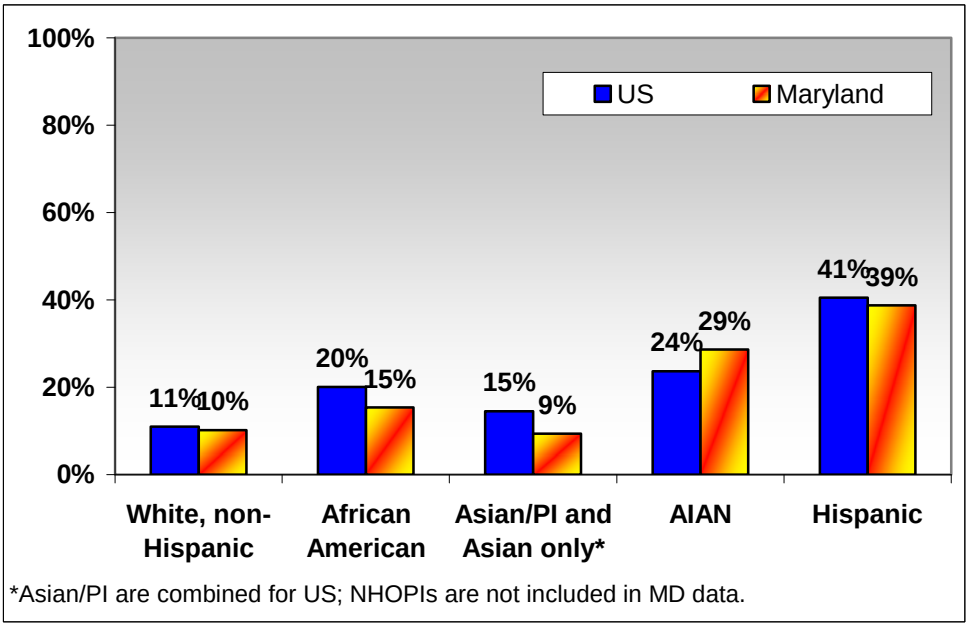
Maryland minority persons are more likely to hold a bachelors or higher degree compared to U.S. minorities (Figure 4). In Maryland, minorities are somewhat more likely to have at least a high school diploma than U.S. minorities, except for American Indians (Figure 5).

Figure 4. Percent of Bachelor Degrees or higher within Racial and Ethnic groups, Maryland and US, 2005 (population ages 25 and over)



Source: U.S. Census Bureau, American Community Survey 2005 [8].

Figure 5. Percent with Less than a High School Diploma within Racial and Ethnic groups, Maryland and US, 2005 (population ages 25 and over)



Source: U.S. Census Bureau, American Community Survey 2005 [8].

Health Status Issues for Minorities

Mortality in Minority Populations

All-cause mortality rates for the U.S. have been decreasing since the early 20th century [9]. However, disparities in mortality rates for minority groups compared to Whites still exist for many causes of death. Table 3 presents age-adjusted mortality rates and ratios for the leading causes of death in the nation. For seven of the 11 leading causes of death, including the top three (heart disease, cancer, and stroke), African Americans have a greater rate of mortality than their White counterparts [10].

Table 3. Age-Adjusted Mortality Rates (per 100,000) and Mortality Ratios for 11 Leading Causes of Death, United States 2003

Cause of Death	**White, Non-Hispanic Death Rate**	**African American Death Rate**	*African American/White Ratio*	**AIAN Death Rate**	*AIAN/White Ratio*	**Asian/PI Death Rate**	*API/White Ratio*	**Hispanic Death Rate**	*Hispanic/White Ratio*
All Cause Mortality	826.1	1,065.9	*1.3*	685.0	*0.8*	465.7	*0.6*	621.2	*0.8*
Diseases of heart	230.9	300.2	*1.3*	160.2	*0.7*	127.6	*0.6*	173.2	*0.8*
Malignant neoplasms	192.4	233.3	*1.2*	119.3	*0.6*	113.5	*0.6*	126.6	*0.7*
Stroke	51.7	74.3	*1.4*	34.6	*0.7*	45.2	*0.9*	40.5	*0.8*
Chronic lung disease	47.0	30.1	*0.6*	31.7	*0.7*	16.2	*0.3*	20.2	*0.4*
Influenza and pneumonia	22.0	23.3	*1.1*	24.1	*1.1*	17.3	*0.8*	18.4	*0.8*
Chronic liver disease	9.0	8.4	*0.9*	22.6	*2.5*	3.0	*0.3*	14.7	*1.6*
Diabetes	22.1	49.2	*2.2*	43.7	*2.0*	17.3	*0.8*	35.0	*1.6*
HIV	2.0	21.3	*10.7*	2.5	*1.3*	0.7	*0.4*	5.9	*3.0*
Accidents	38.8	36.1	*0.9*	56.4	*1.5*	18.0	*0.5*	30.6	*0.8*
Suicide	12.7	5.2	*0.4*	10.0	*0.8*	5.6	*0.4*	5.6	*0.4*
Homicide	2.7	21.0	*7.8*	7.3	*2.7*	2.9	*1.1*	7.7	*2.9*

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Health United States, 2006 [10].

For minority groups other than African Americans, age-adjusted death rates for the leading causes of death are lower than the White rates. This may be due to data limitations such as misclassification of minorities on death certificates and/or the return of older foreign-born minorities to their home countries. If there is misclassification of these minorities as non-Hispanic Whites on death certificates, the count of minority deaths will be too low, and the minority death rate will be underestimated. The return of foreign-born minorities to their home

country in the later stages of life may also underestimate mortality rates for minority populations with higher percentages of foreign-born residents.

Table 3 provides a foundation for further discussion of differences in health outcomes for specific diseases and among racial and ethnic groups as well as serves as comparison to Maryland data (Table 4). Because the African American population is 75 percent of Maryland's minority population, data for that group is the most extensive among the minority groups; this allows for a more statistically sound analysis in that population. For this reason, several analyses below are limited to comparisons of African Americans to Whites. In addition, the very small size of the Native American population makes analysis of their health disparities especially challenging. The Office of Minority Health and Health Disparities within the Department of Health and Mental Hygiene is committed to developing approaches to data collection and analysis that will allow us to improve data reporting for Maryland's smaller minority communities.

Table 4. Age-Adjusted Mortality Rates (per 100,000), Ratios, and Excess Mortality Rates for the 15 Leading Causes of Death, Maryland 2005

Cause of Death	White Death Rate	African American Death Rate	African American/White Mortality Ratio	Excess Mortality Rate
All Causes	754.6	956.6	1.3	202.0
Diseases of the Heart	200.9	253.3	1.3	52.4
Cancer	185.7	207.7	1.1	22.0
Stroke	42.3	53.3	1.3	11.0
Chronic Lower Respiratory Disease	38.4	25.4	0.7	-13.0
Diabetes	21	43.1	2.1	22.1
Accidents	24.7	24.8	1.0	0.1
Motor Vehicle Accidents	11.5	11.1	1.0	-0.4
Influenza and Pneumonia	21.9	24	1.1	2.1
Septicemia	16	32.9	2.1	16.9
Alzheimer's Disease	18.3	15.2	0.8	-3.1
HIV/AIDS	2.1	26.6	12.7	24.5
Kidney Diseases	10.6	23.7	2.2	13.1
Homicide	3.6	25.2	7.0	21.6
Chronic Liver Disease	8.4	7.5	0.9	-0.9
Suicide	10	4.6	0.5	-5.4
Certain Perinatal Conditions	3.8	9.9	2.6	6.1

Source: Maryland Vital Statistics Annual Report 2005 [6].

In Table 5, the African American to White mortality rate ratios for the United States and Maryland are compared for the leading causes of death. For most of the conditions, the mortality rate ratios are virtually identical for Maryland and the United States. For homicide, the Maryland ratio of 7.0 is less than the U.S. ratio of 7.8, while for HIV disease, the Maryland ratio of 12.7 is higher than the 10.7 ratio seen for the U.S.

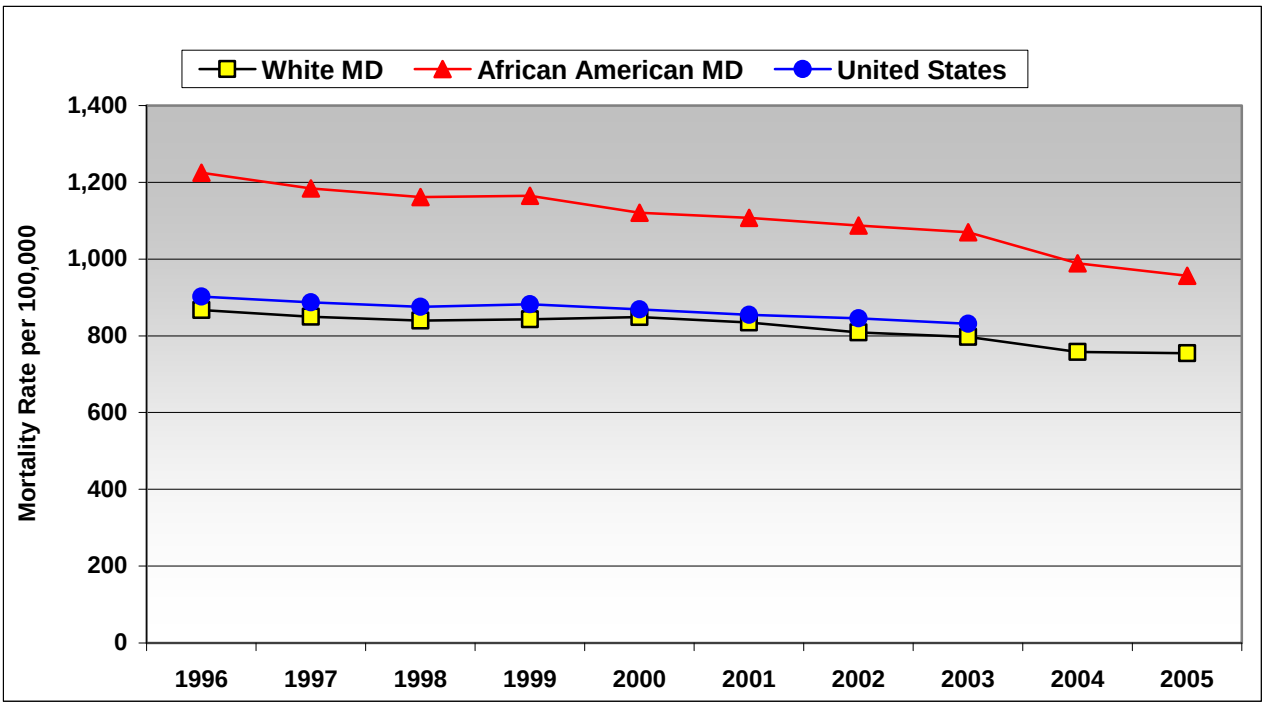
Table 5. Age-Adjusted Mortality Rates (per 100,000) and Mortality Ratios for the 10 Leading Causes of Death, United States 2003 and Maryland 2005

Cause of Death	Cause of Death Rank, United States	*African American/White Mortality Ratio, United States*	*African American/White Mortaltity Ratio, Maryland*
All Cause Mortality		1.3	1.3
Diseases of heart	1	1.3	1.3
Malignant neoplasms	2	1.2	1.1
Stroke	3	1.4	1.3
Chronic lung disease	4	0.6	0.7
Accidents	5	0.9	1.0
Diabetes	6	2.2	2.1
Influenza and pneumonia	7	1.1	1.1
Suicide	8	0.4	0.5
Chronic liver disease	9	0.9	0.9
Homicide	10	7.8	7.0
HIV	11	10.7	12.7

U.S. Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Health United States, 2006 [10].
MD Source: Maryland Vital Statistics Annual Report 2005 [6].

From 1996 to 2005 age-adjusted all-cause mortality rates for African Americans and Whites has been decreasing. In addition, the mortality rate difference between African Americans and Whites has decreased 43 percent from 1996 to 2005 (Figure 6).

Figure 6. Age-Adjusted All-Cause Mortality Rate by Race, United States and Maryland, Selected Years 1996-2005

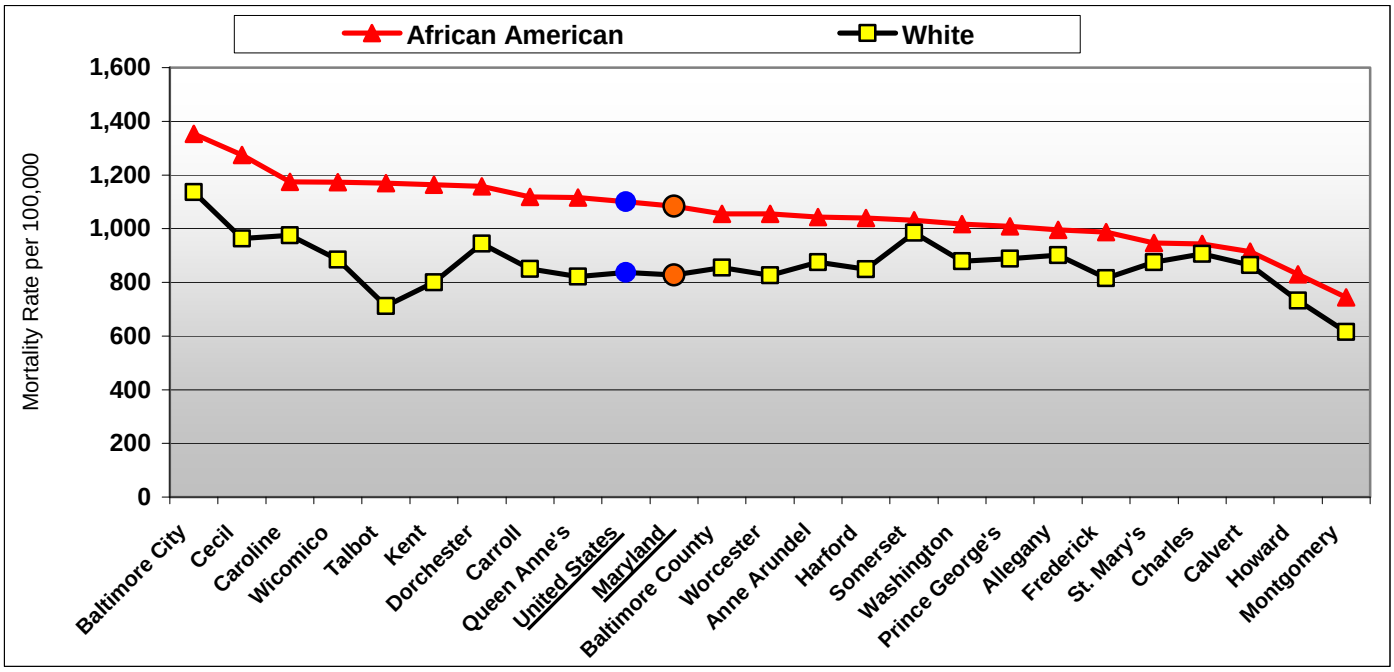


Source: Maryland Vital Statistics Annual Report 2005 [6].
Note: United States mortality rates for 2004 and 2005 were not available at the time of this report.

Most Maryland jurisdictions have lower all-cause mortality rates than the state overall and the nation. In general, mortality rates are higher for African Americans than Whites in every Maryland jurisdiction, the state and the nation (Figure 7). However, mortality rates for African Americans in some jurisdictions are lower than mortality rates for Whites in other jurisdictions. For instance, the Montgomery county African American all-cause mortality rate is lower than White all-cause mortality in 20 different counties, Maryland overall, and the nation (Figure 7).

These data demonstrate that mortality disparities exist between racial groups within all analyzable Maryland jurisdictions, and also that mortality disparities exist among the Maryland jurisdictions, even within racial groups.

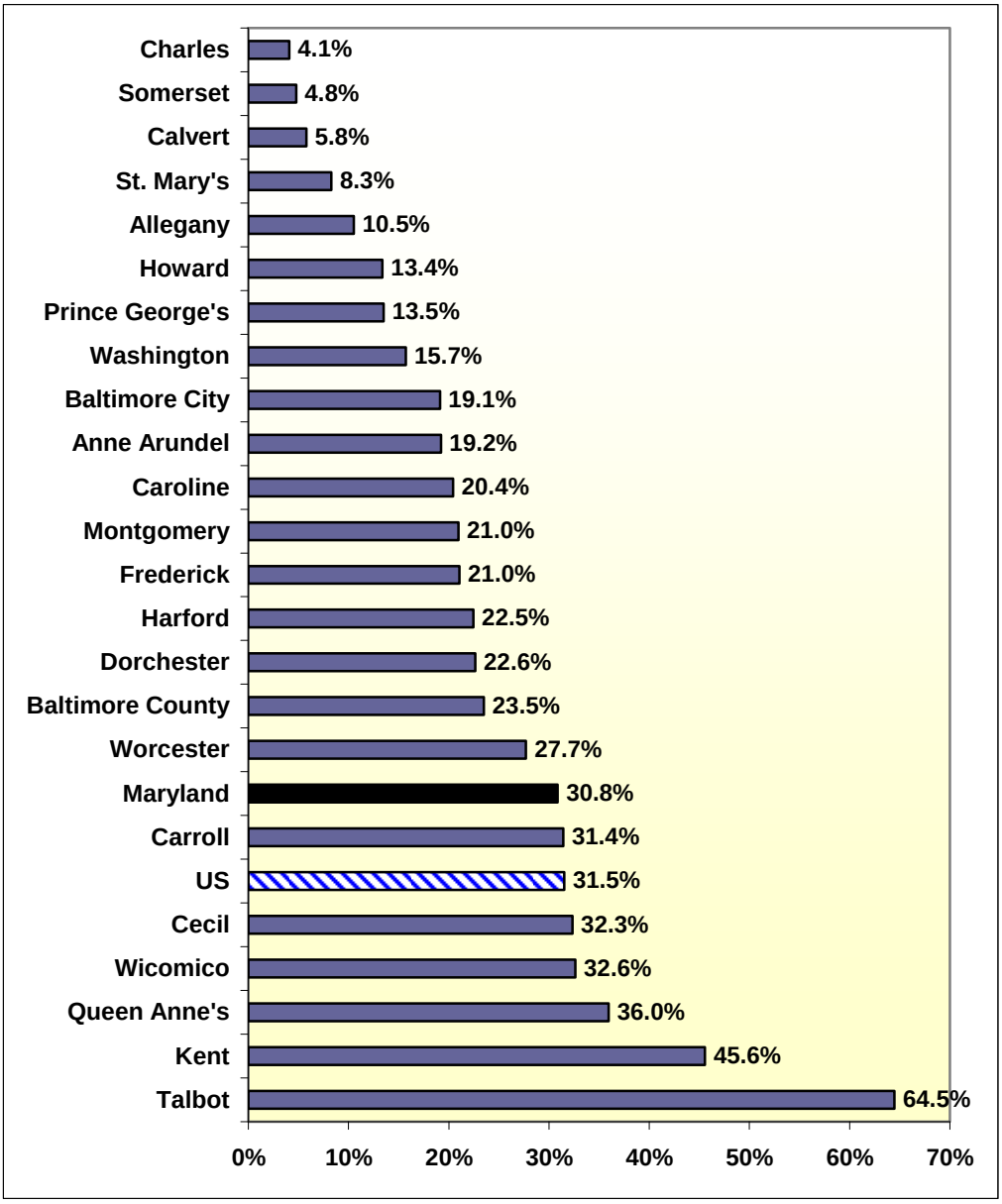
Figure 7. Age-Adjusted All-Cause Mortality by White and African American Race and U.S, State, and Maryland Jurisdiction, 1999-2003 combined



Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].
Note: Age-adjusted rates could not be estimated for Garrett County due to insufficient data.

Maryland has a slightly lower excess in the African American death rate (compared to Whites) than does the U.S. The percent of excess African American age-adjusted death rates are higher than the Maryland state average in six jurisdictions (Figure 8).

Figure 8. Percent of Excess African American Death Rate (compared to Whites) in Maryland Jurisdictions, 1999-2003 combined



Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].
Notes: Death Rates are Age-Adjusted to 2000 population standard.
Age-adjusted death rates could not be calculated for Garrett County due to insufficient data.

Mortality, Occurrence and Risk Factors for Selected Conditions

Many factors contribute to minority disparities in mortality rates. These include a variety of factors that affect access and quality of healthcare, and a variety of factors that influence the rate of acquiring particular diseases or conditions. In addition to disparities in death rates, Maryland's minority populations also experience disparities in the occurrence of various diseases, compared to the White population.

Disease occurrence is measured in two ways. **Incidence** of disease expresses the rate at which persons without the disease develop the disease. This can be applied to diseases that resolve, such as some infections and some injuries, or to chronic conditions that remain after onset. **Prevalence** of disease expresses the proportion of the population that has a disease at a particular time. This is usually used to describe chronic diseases, since it contains both the new cases and the old cases. Diabetes, high blood pressure, end-stage renal (kidney) disease, and HIV/AIDS are presented as examples of disparities in disease occurrence.

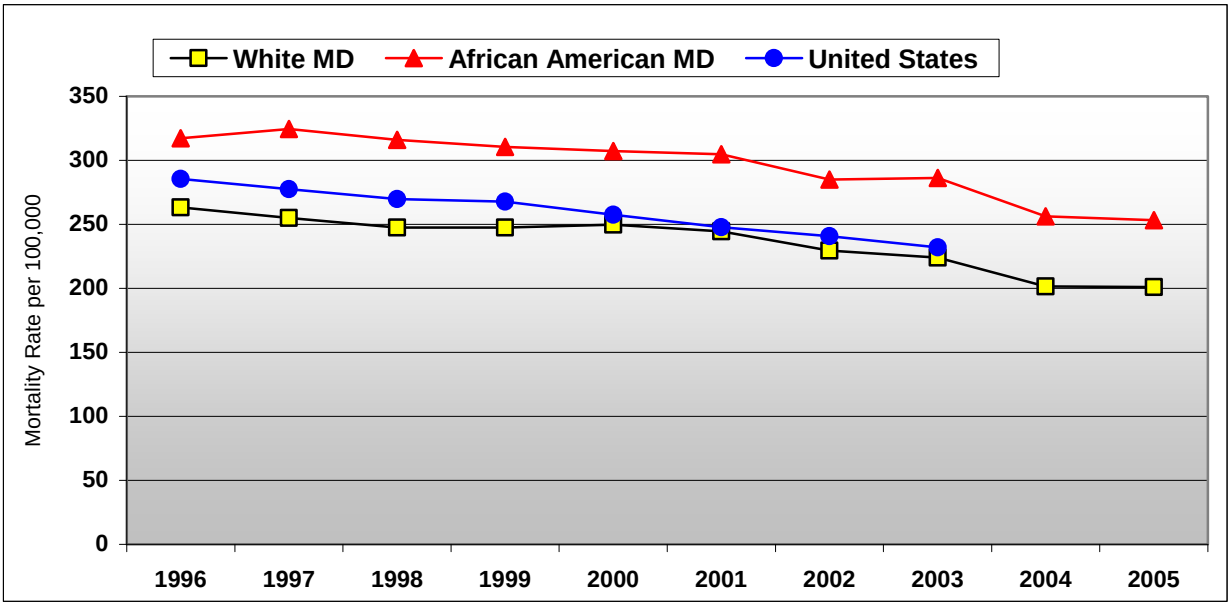
Heart disease

Heart disease is the leading cause of death in both the U.S. and Maryland [6] [12]. Although age-adjusted heart disease death rates have been declining for both Whites and African Americans in Maryland, there is still a mortality disparity (Figure 9). In 2005, the age-adjusted heart disease mortality rate for African Americans in Maryland was 26 percent higher than for Whites [6]. The difference in those rates reveal 52.4 (per 100,000) more African American deaths from heart disease than White deaths [6].

Figure 10 shows age-adjusted heart disease mortality rates for the U.S., Maryland, and Maryland jurisdictions combining data from 1999 to 2003 [11]. Key findings from these data, for these pooled years, include:

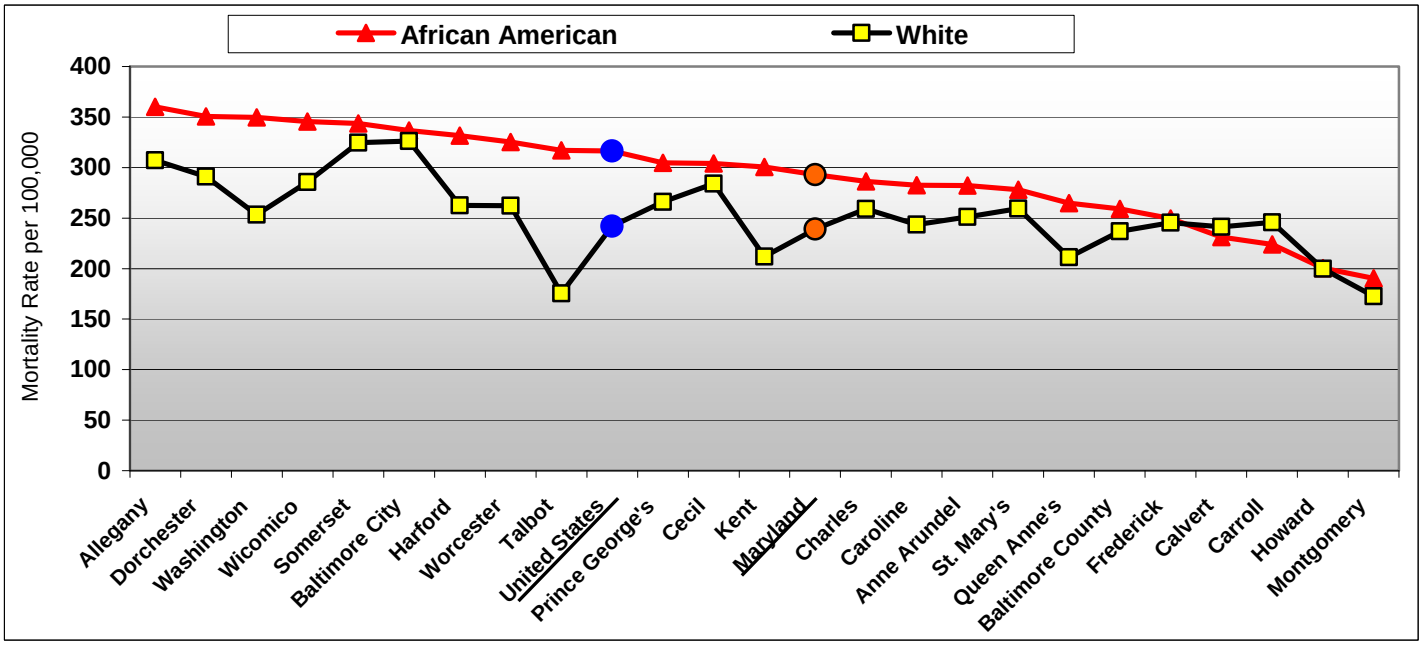
- The disparity in the U.S. was an African American to White mortality rate ratio of 1.3 and a mortality rate difference of 72.1 per 100,000. The disparity in Maryland (statewide) was an African American to White mortality rate ratio of 1.2 and a mortality rate difference of 53.8 per 100,000.
- The jurisdiction with the largest disparity was Talbot County, where the mortality rate ratio was 1.8 and the mortality rate difference was 141.6 per 100,000.
- The mortality rate difference between the best and worst African American jurisdictions was 169.6, and between the best and worst White jurisdictions was 153.6. These are higher than the difference between the two races in Talbot County.
- Somerset County and Baltimore City had small disparities, but only because their White mortality was much higher than the White statewide rate. Their African American heart disease mortality was among the highest in the state. Low disparity does not guarantee good minority health.
- Calvert and Carroll counties had White heart disease mortality that is slightly higher than African American heart disease mortality.
- African Americans in Montgomery and Howard counties had lower heart disease mortality rates than did Whites in the U.S., in Maryland overall, and all Maryland jurisdictions except for Montgomery, Howard and Talbot counties.

Figure 9. Age-Adjusted Death Rate for Diseases of the Heart by Race, United States and Maryland, 1996-2005



Source: Maryland Vital Statistics Annual Report 2005 [6].
Note: U. S. mortality rates for 2004 and 2005 were not available at the time of this report.

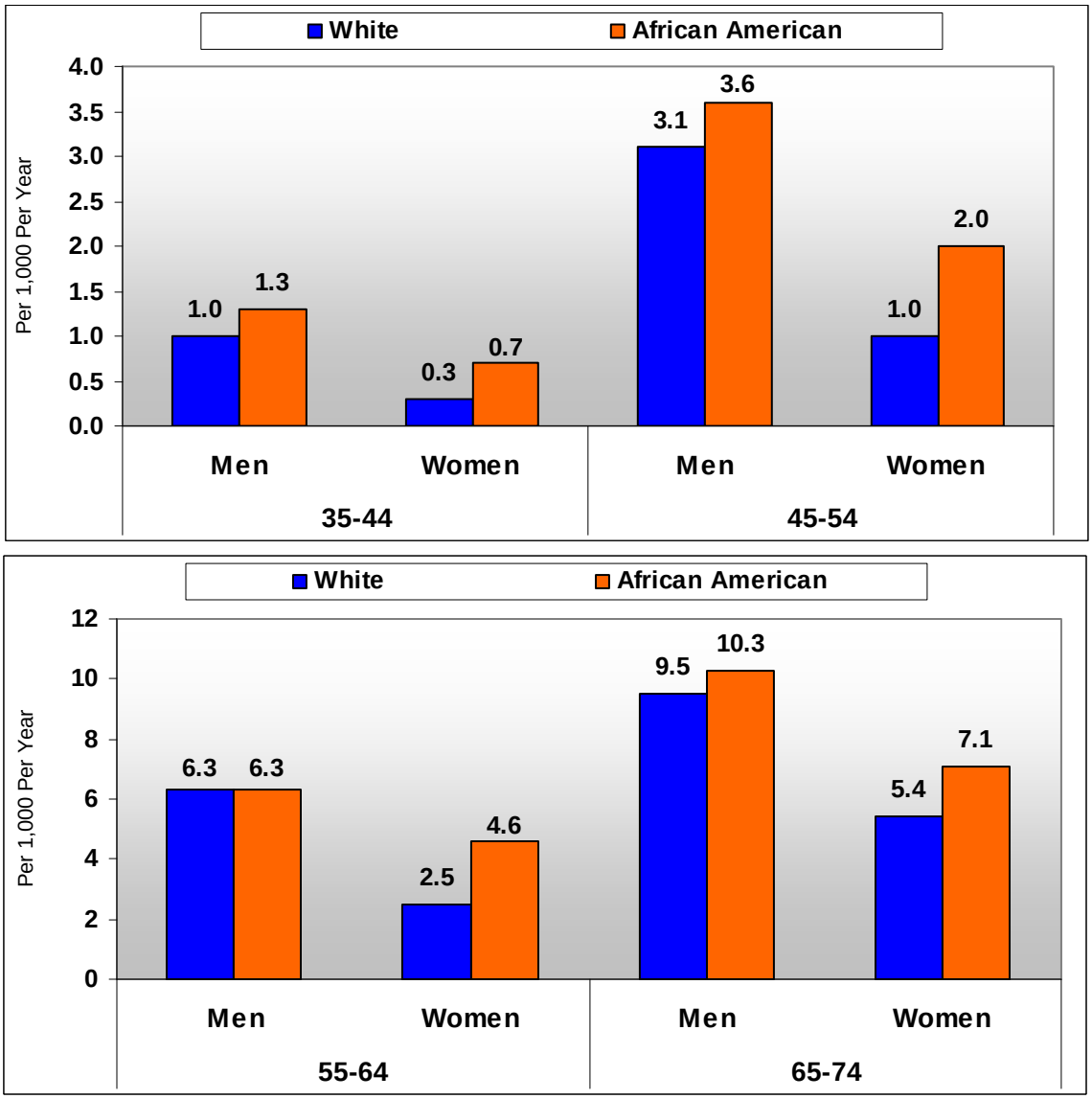
Figure 10. Age-Adjusted Heart Disease Mortality by White and African American Race for U.S, Maryland, and Maryland Jurisdiction, 1999-2003 Combined



Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].
Note: Age-adjusted rates could not be estimated for Garrett County due to insufficient data.

Higher mortality rates for heart disease in African Americans are in part related to the fact that the disease occurs more frequently in African Americans. Figure 11 shows that incidence (the rate of new cases) of heart attack (myocardial infarction) is higher in African Americans that in Whites in the United States [13].

Figure 11 Incidence of Myocardial Infarction for adults ages 35-44 and 45-54, by race and sex, United States 1987-2001.

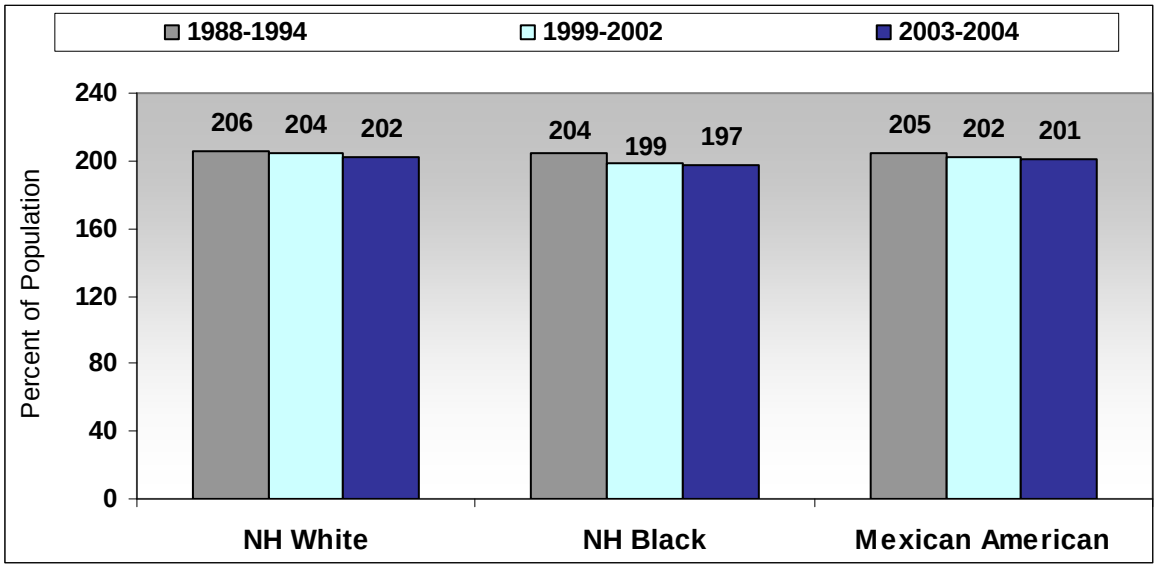


Source: American Heart Association, *Heart Disease and Stroke Statistics-2007 Update*. [13]

Analogous Maryland data on incidence of heart disease are not available. Prevalence data for heart attack in the BRFSS shows that prevalence is similar between African Americans and Whites [14]. However, prevalence data can be misleading regarding disparity in disease occurrence. If a disease has higher incidence in a minority group and also has poorer survival in that group, prevalence may be similar. That is despite higher rates of new disease, and lower rates of survival in the minority group. Therefore, similar disease prevalence for a condition where minorities have higher mortality is not reassuring.

Higher occurrence of heart disease reflects differences in risk factors for heart disease. African Americans have higher rates of hypertension (high blood pressure) and diabetes than whites, as will be presented later. Survey data in the U.S., however, does not show a difference in cholesterol levels, illustrated in Figure 12 [13].

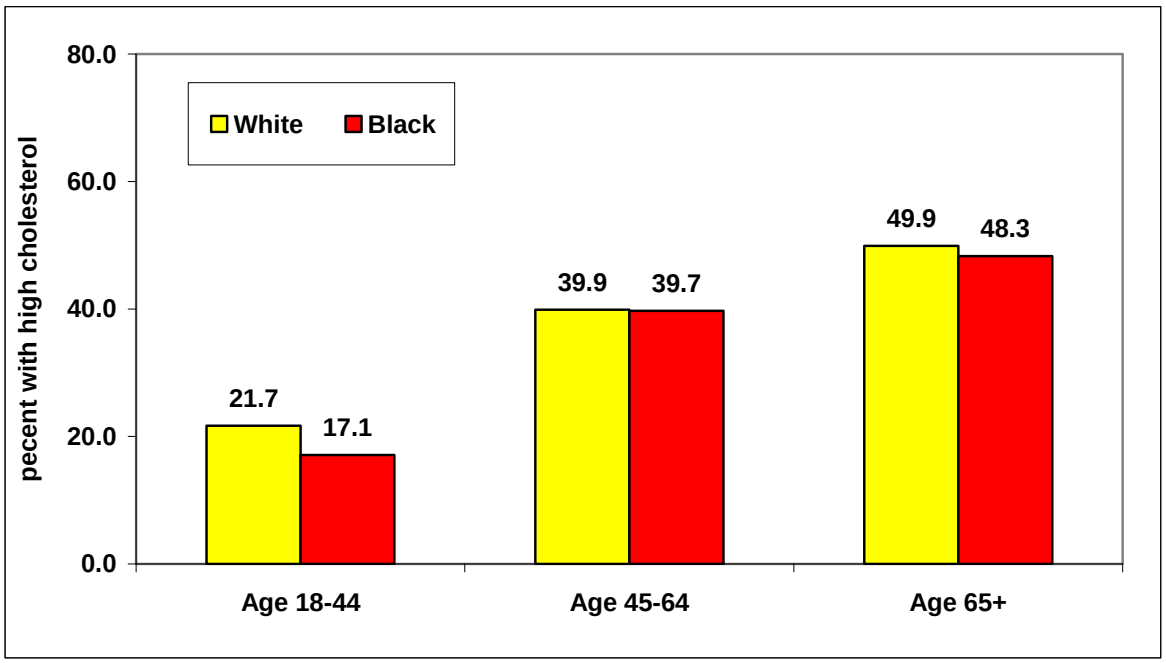
Figure 12 Trends in mean total serum cholesterol among adults by race/ethnicity, United States 1988 through 2004.



Source: American Heart Association, *Heart Disease and Stroke Statistics-2007 Update*. [13]

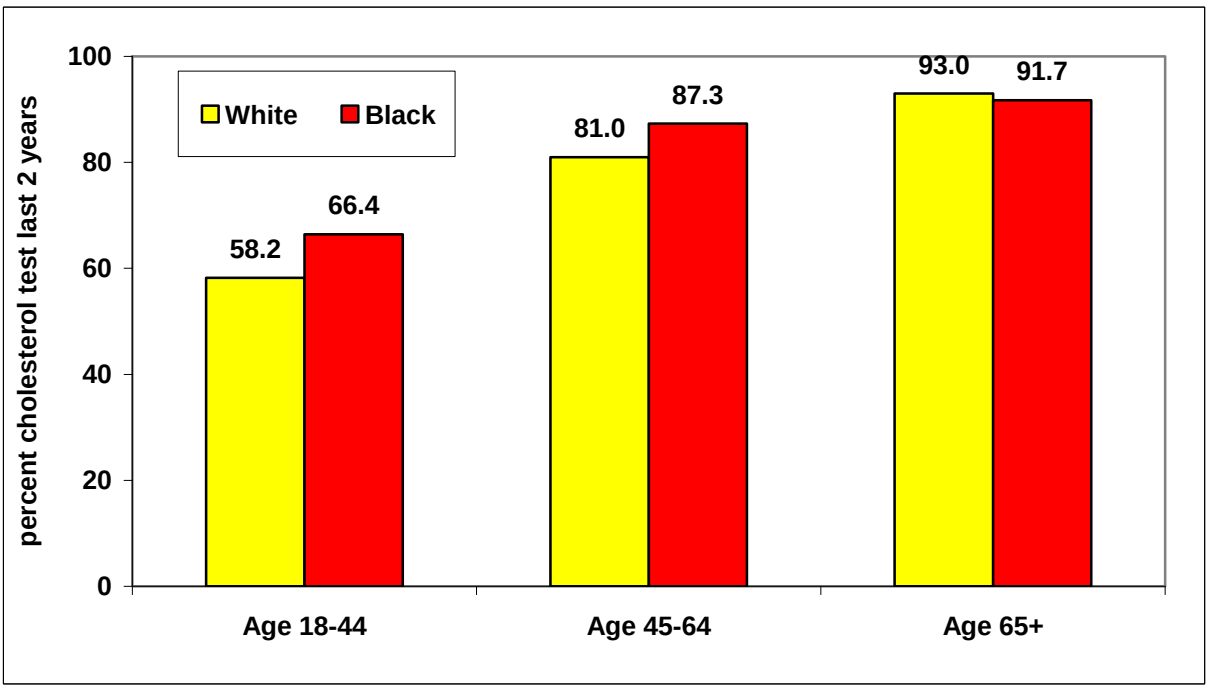
BRFSS survey data in Maryland does not show a difference in the number of adults reporting a diagnosis of high cholesterol between African Americans and Whites. Rates of cholesterol testing are also similar between the two groups[14] .

Figure 13. Prevalence of High Cholesterol, by Race, Maryland 2001 and 2003 pooled



Source: Pooled data from Maryland BRFSS [14]

Figure 14. Percent with Cholesterol Test in Last Two Years, Maryland 2001, 2003 pooled



Source: Pooled data from Maryland BRFSS [14]

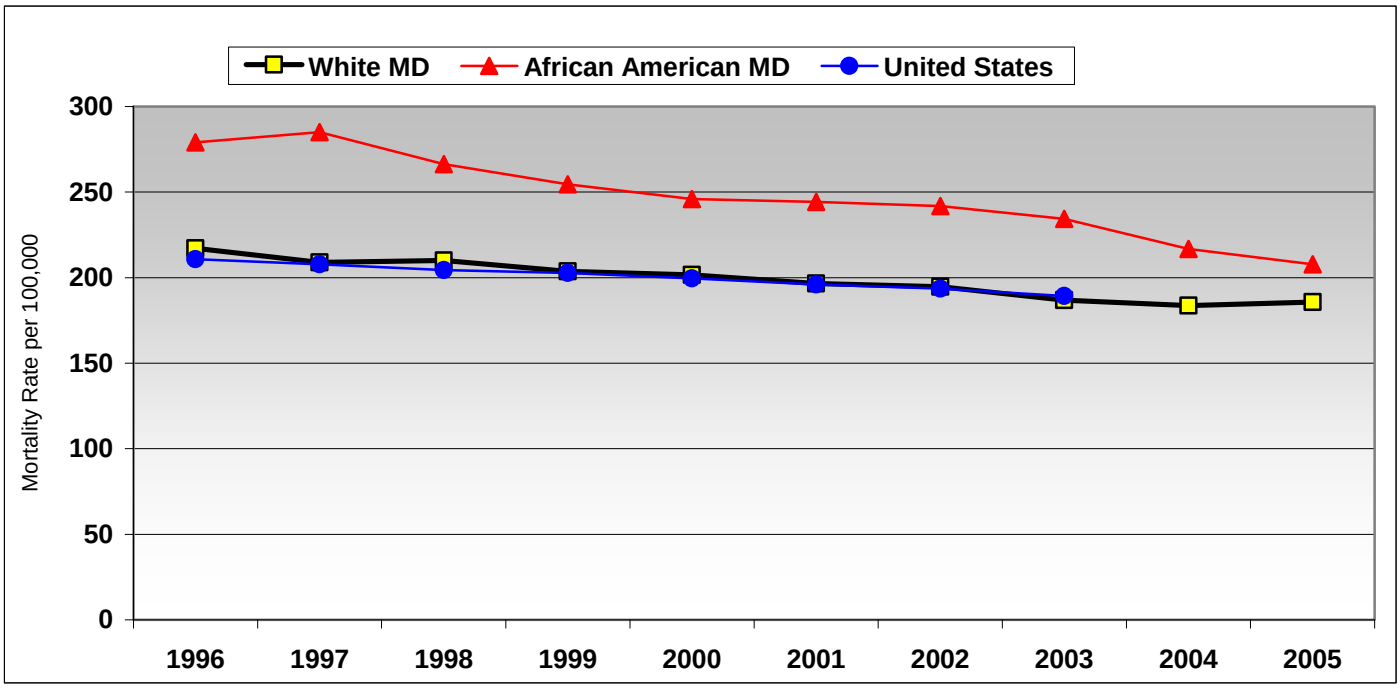
Cancer

Cancer is the second leading cause of death in both the U.S. and in Maryland [6] [12]. The age-adjusted cancer death rates have been declining for both Whites and African Americans in Maryland, although African Americans have experienced a steeper decline in rates than Whites (Figure 15). Progress has been made in reducing the cancer disparity. In 1996, African Americans had 28 percent higher cancer mortality rates than Whites, while in 2005, the age-adjusted cancer mortality rate for African Americans in Maryland was 12 percent higher than for Whites [6]. The difference between African American and White cancer mortality rates in 2000 was 44 deaths per 100,000, while in 2005 the difference was 22 deaths per 100,000 [6]. **This represents a 50% reduction of the cancer mortality disparity in Maryland from 2000 to 2005.**

Figure 16 shows age-adjusted cancer mortality rates for the U.S., Maryland, and Maryland jurisdictions combining data from 1999 to 2003 [11]. Key findings from these data, for these pooled years, include:

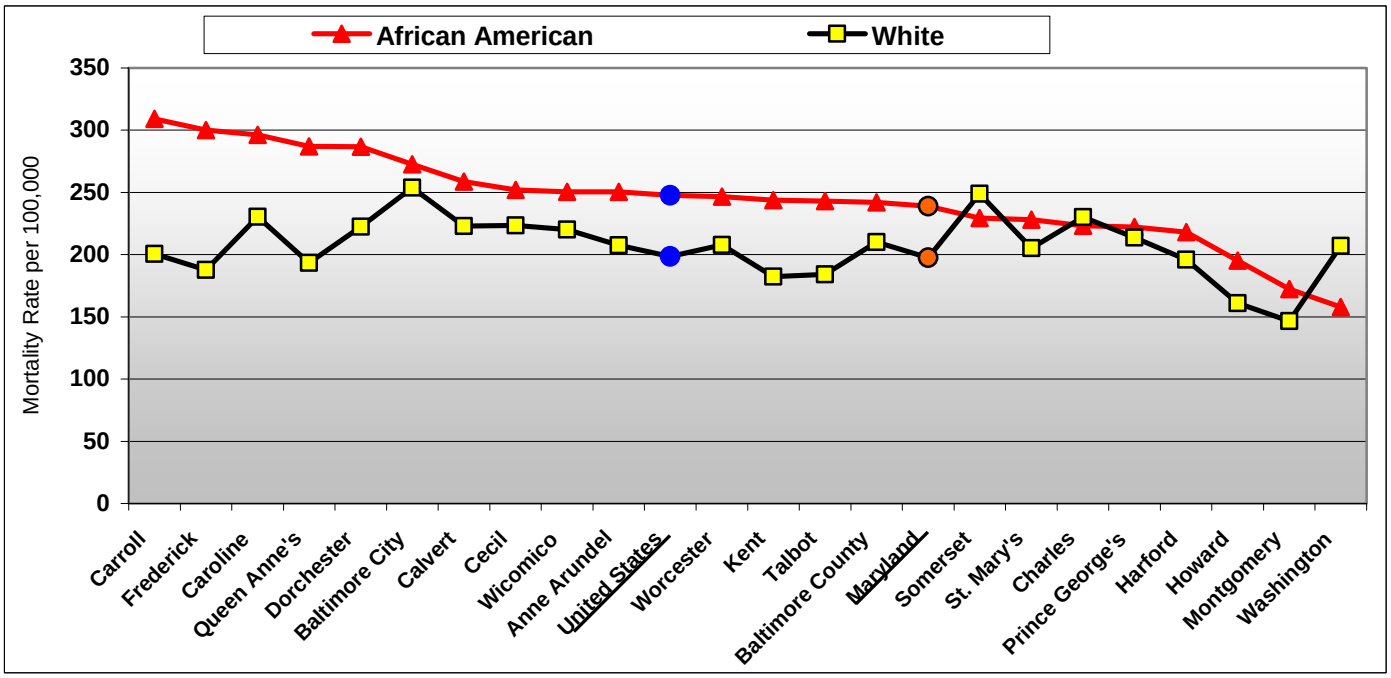
- In the U.S., African Americans had 1.2 times the mortality rate than Whites and a mortality rate difference of 49.0 per 100,000. The disparity in Maryland (statewide) was an African American to White mortality rate ratio of 1.2 and a mortality rate difference of 41.5 per 100,000.
- The jurisdiction with the largest disparity was Frederick County, where the mortality rate ratio was 1.6 and the mortality rate difference was 112.4 per 100,000.
- The mortality rate difference between the best and worst African American jurisdictions was 151.4, and between the best and worst White jurisdictions was 107.3. The difference between the best and worst African American rates was higher than the difference between the two races in Frederick County.
- Somerset, Charles, Prince George's and Washington counties had small or reversed disparities, mainly because their White mortality was higher than the White statewide rate.
- Washington County had a White cancer mortality that was much higher than African American cancer mortality. The difference in the rates between the two races shows that Whites had 49.3 (per 100,000) more deaths from cancer than African Americans.

Figure 15. Age-Adjusted Death Rate for Cancer by Race, United States and Maryland, Selected Years 1996-2005



Source: Maryland Vital Statistics Annual Report 2005 [6].
Note: United States mortality rates for 2004 and 2005 were not available at the time of this report.

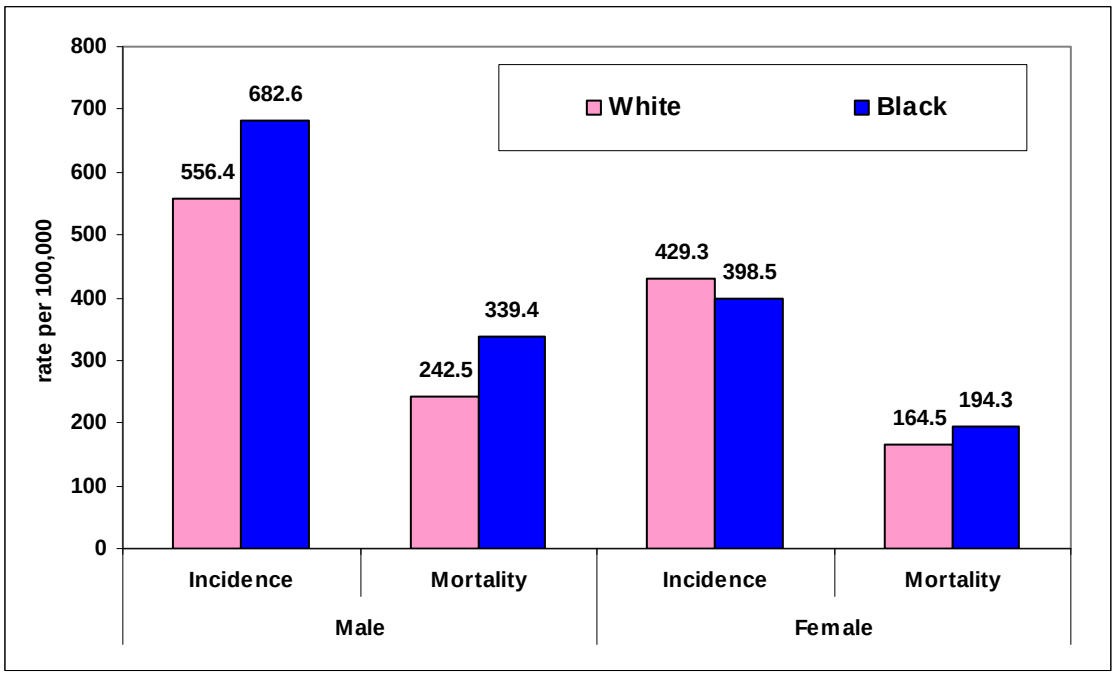
Figure 16. Age-Adjusted Cancer Mortality by White and African American Race and U.S, State, and Maryland Jurisdiction, 1999-2003 combined



Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].
Note: Age-adjusted rates could not be estimated for Allegany and Garrett counties due to insufficient data.

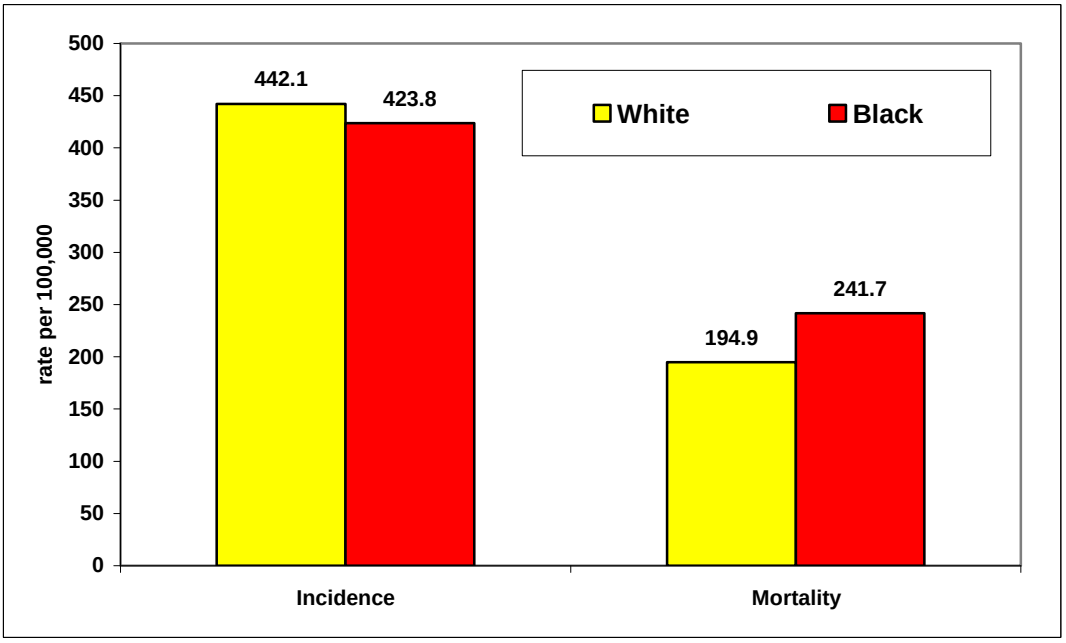
In the United States, African American women have lower cancer incidence but higher cancer mortality than White women, shown in Figure 17 [15]. This suggests that they suffer from less access to screening, have later stage disease on diagnosis, and poorer survival. A similar pattern is seen for Maryland in Figure 18. [16]

Figure 17. Age-adjusted All Cancer Incidence & Mortality, by Race & Sex, U.S. 1998-2002



Source: American Cancer Society, Cancer Facts and Figures 2006 [15]

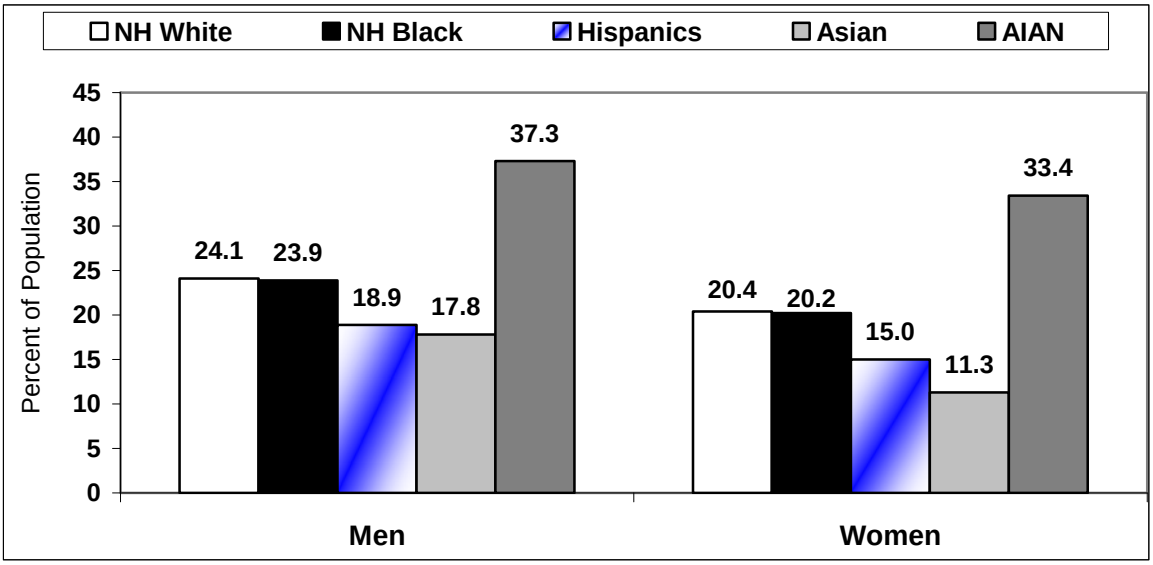
Figure 18. Age-adjusted All Cancer Incidence & Mortality, by Race, Maryland 2001



Source: *Maryland Annual Cancer Report 2004* [16]

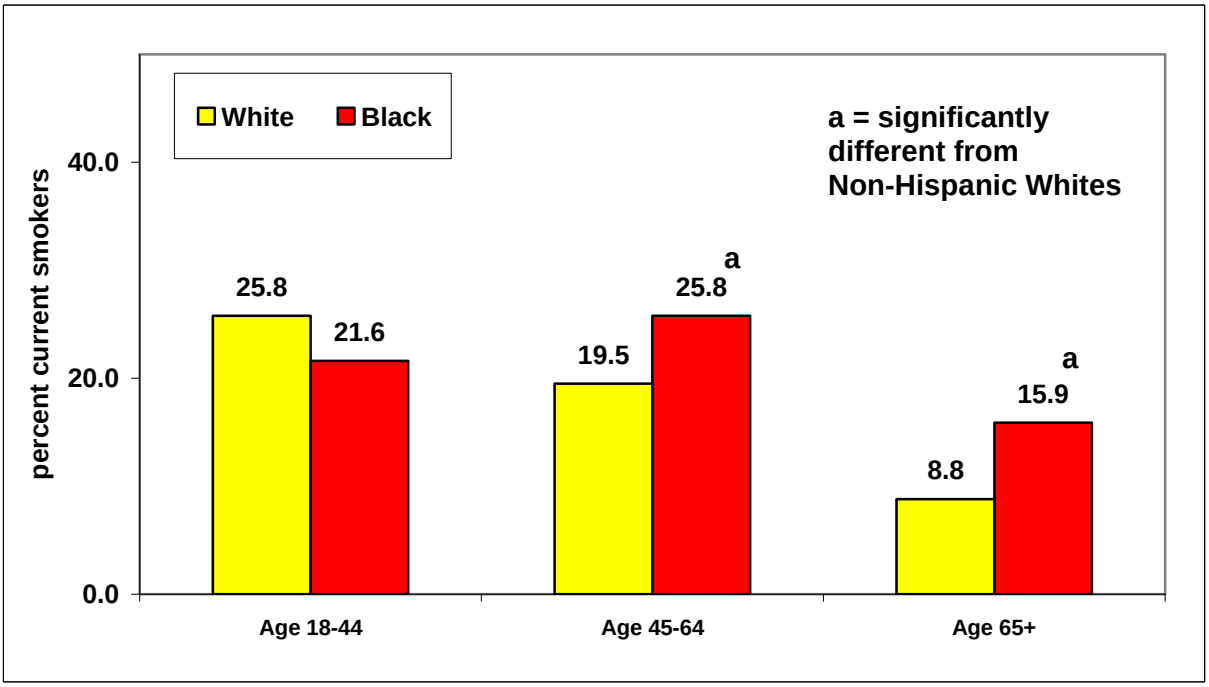
Cigarette smoking is a risk factor for many forms of cancer. National survey data indicate that minority smoking rates are the same or lower than white rates except for American Indians/Alaskan Natives, shown in Figure 19 [13]. In Maryland, African Americans have higher smoking prevalence at older ages, shown in Figure 20 [14].

Figure 19 Prevalence of current smoking for adults age 18 and older by sex and race/ethnicity, United States 2004.



AIAN is American Indian or Alaskan Native.
Source: American Heart Association, *Heart Disease and Stroke Statistics-2007 Update*. [13]

Figure 20. Age-stratified Prevalence of Current Smoking, by Race, Maryland 2000-2004



Source: Pooled data from Maryland BRFSS [14]

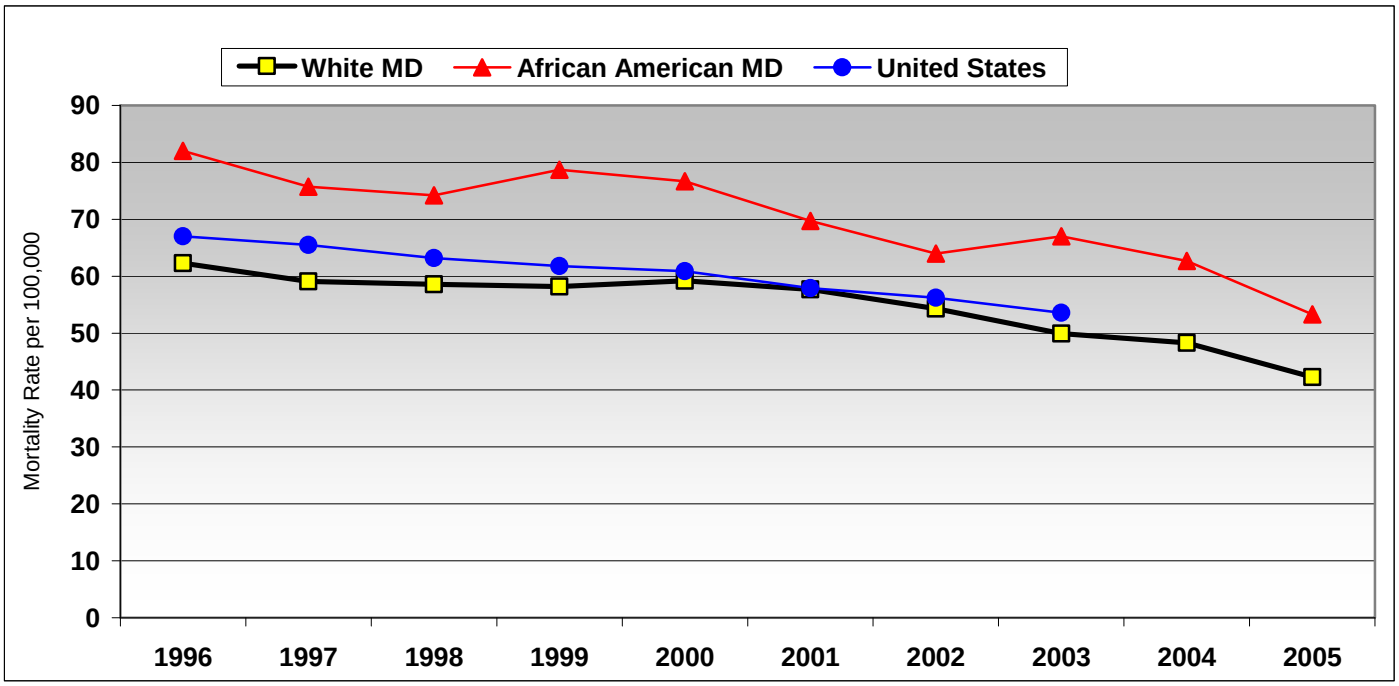
Stroke

Stroke is the third leading cause of death in the U.S. and Maryland [6] [12]. While stroke mortality rates have declined for both races, mortality disparities between races still exist (Figure 21). In 2005, the age-adjusted stroke mortality rate for African Americans in Maryland was 26 percent higher than for Whites [6]. The difference in those rates indicates there were 11.0 (per 100,000) more African American deaths from stroke than White deaths [6].

Figure 22 shows age-adjusted stroke mortality rates for the U.S., Maryland, and Maryland jurisdictions combining data from 1999 to 2003 [11]. Key findings from these data, for these pooled years, include:

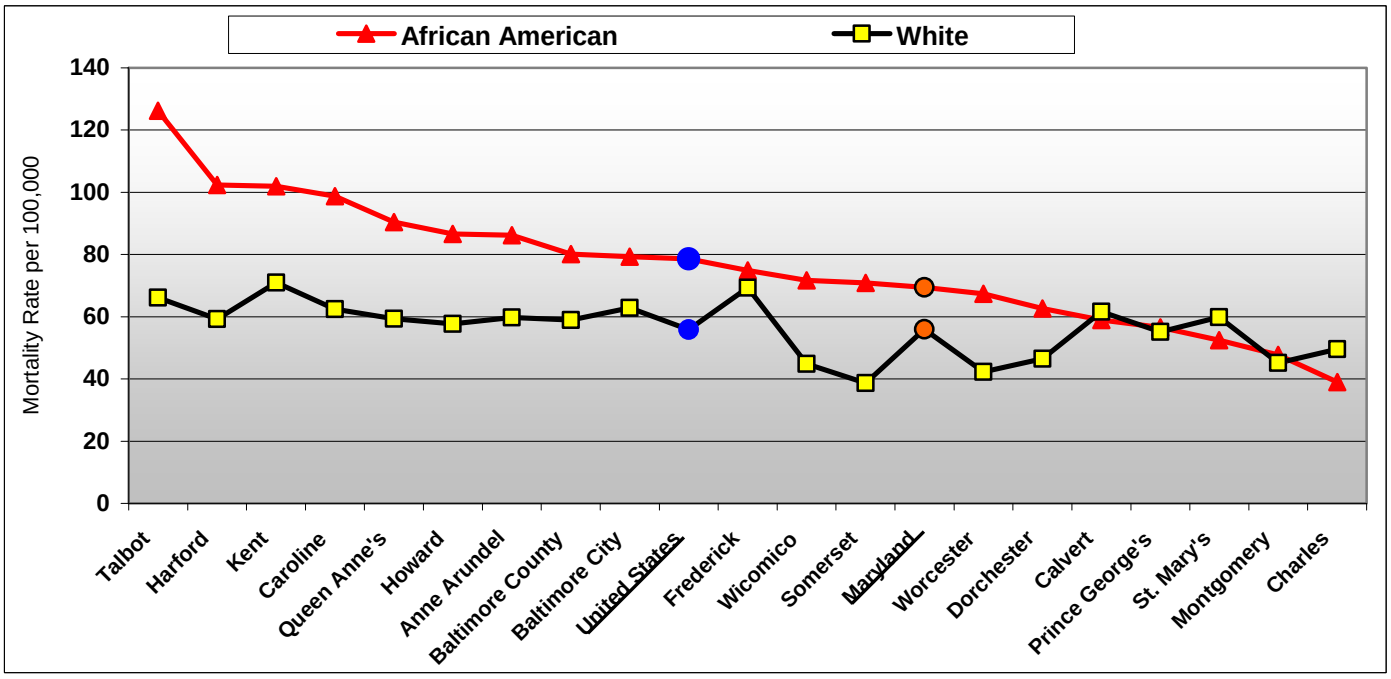
- In the U.S. the African American to White mortality rate ratio disparity was 1.4 and mortality rate difference was 22.7 per 100,000. The disparity in Maryland (statewide) was an African American to White mortality rate ratio of 1.2 and a mortality rate difference of 13.4 per 100,000.
- The jurisdiction with the largest disparity was Talbot County, where the mortality rate ratio was 1.9 and the mortality rate difference was 60.1 per 100,000.
- The mortality rate difference between the best and worst African American jurisdictions was 87.2, and between the best and worst White jurisdictions was 32.3. The difference between the best and worst African American rates is higher than the difference between the two races in Talbot County.
- Charles County had a White mortality rate that is 27 percent higher than the African American stroke rate and 13 percent lower than the Maryland statewide White mortality rate.
- Frederick, Calvert, and St. Mary's counties had small or reversed mortality disparities. However, each of these counties has a White mortality rate that is higher than the statewide White rate. Poor white health can lead to small minority disparities, but this may not guarantee good minority health.

Figure 21. Age-Adjusted Death Rate for Stroke by Race, United States and Maryland, Selected Years 1996-2005



Source: Maryland Vital Statistics Annual Report 2005 [6].
Note: United States mortality rates for 2004 and 2005 were not available at the time of this report.

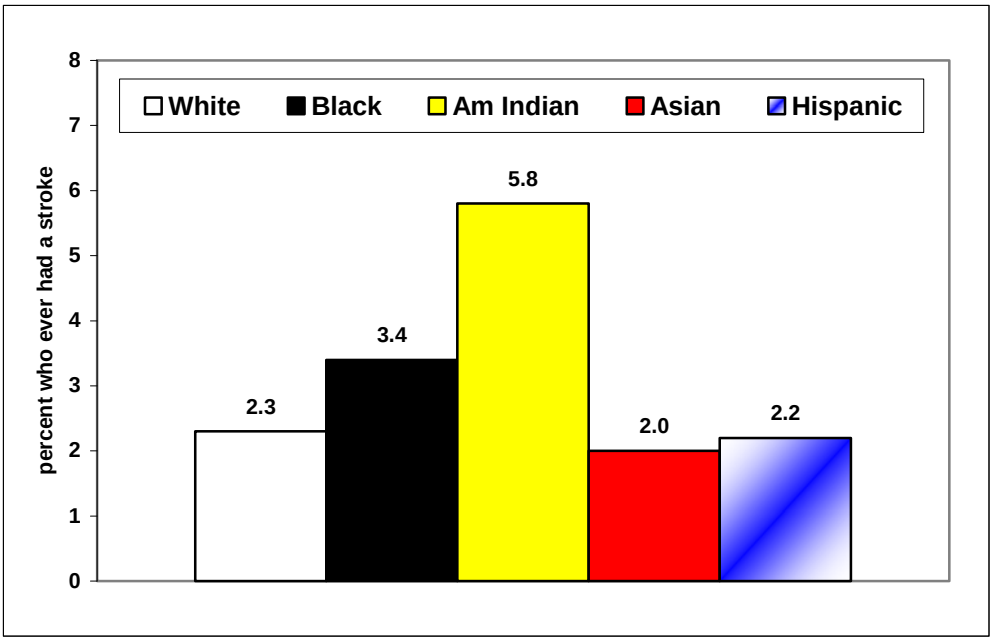
Figure 22. Age-Adjusted Stroke Mortality by White and African American Race and U.S, State, and Maryland Jurisdiction, 1999-2003 combined



Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].
Note: Age-adjusted rates could not be estimated for Allegany, Carroll, Cecil, Garrett and Washington counties due to insufficient data.

Figure 23 shows that nationally, the prevalence of stroke is highest among American Indians/Alaskan Natives, followed by African Americans.

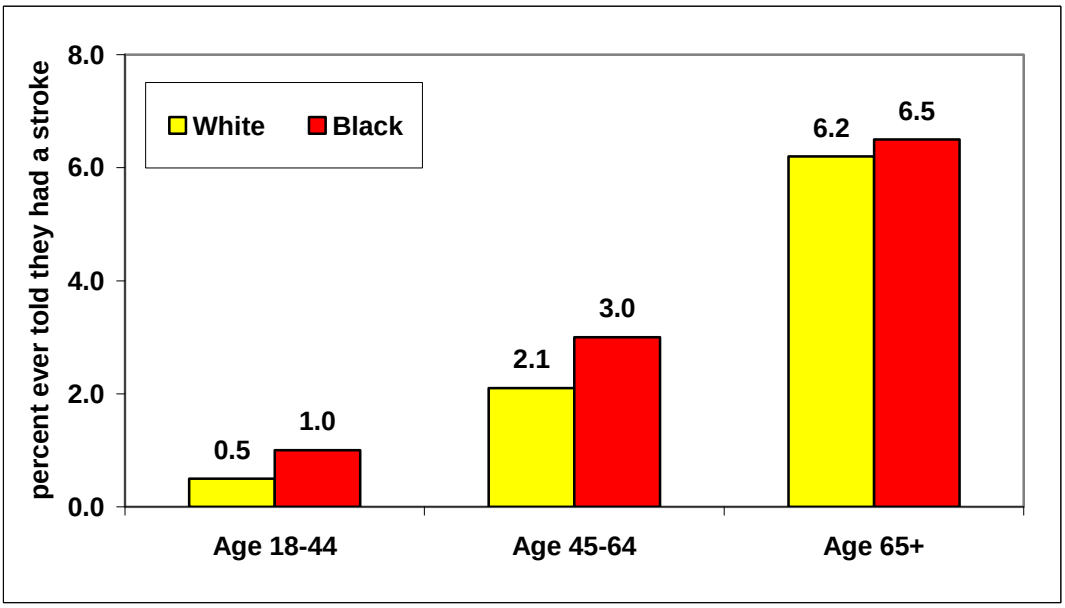
Figure 23. Age-adjusted prevalence of Stroke in Adults by Race/Ethnicity, U.S. 2005



Source: ***Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2005*** **[17]**

In Maryland, information on prevalence of stroke was collected in the 2005 BRFSS. The survey finding was that reported prevalence of stroke was higher for African American adults than for White adults, but the numbers of African American subjects in each age group were too small for the result to be statistically significant. This is shown in Figure 24.

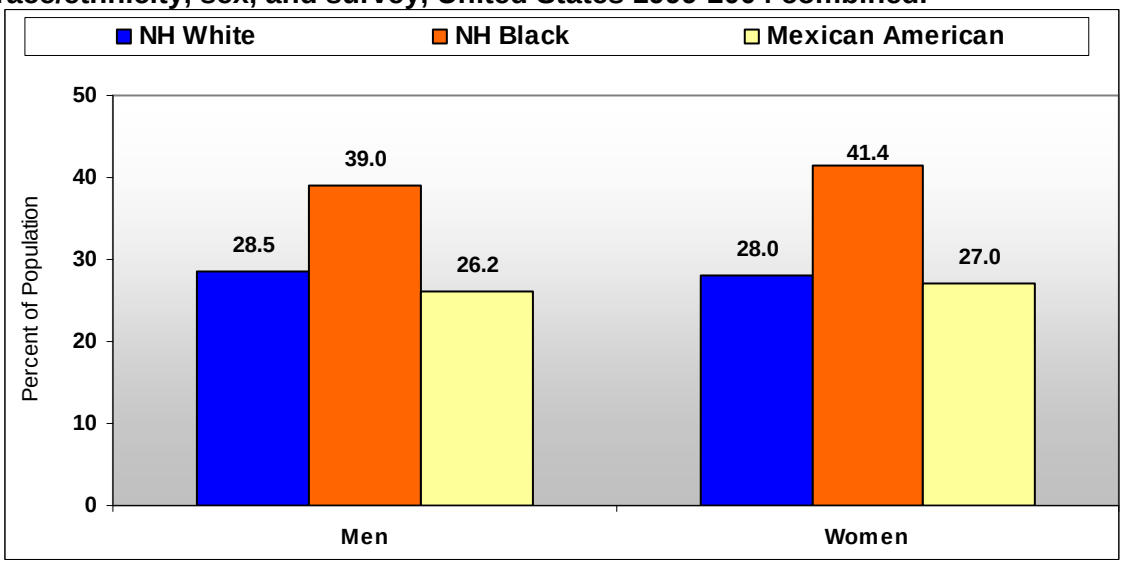
Figure 24. Age-stratified prevalence of Stroke in Adults by Race, Maryland. 2005



Source: 2005 data from Maryland BRFSS [14]

Hypertension (high blood pressure) is an important risk factor for stroke. Figure 25 shows that in the Unites States, hypertension is about 50% more common in African Americans than in Whites [13].

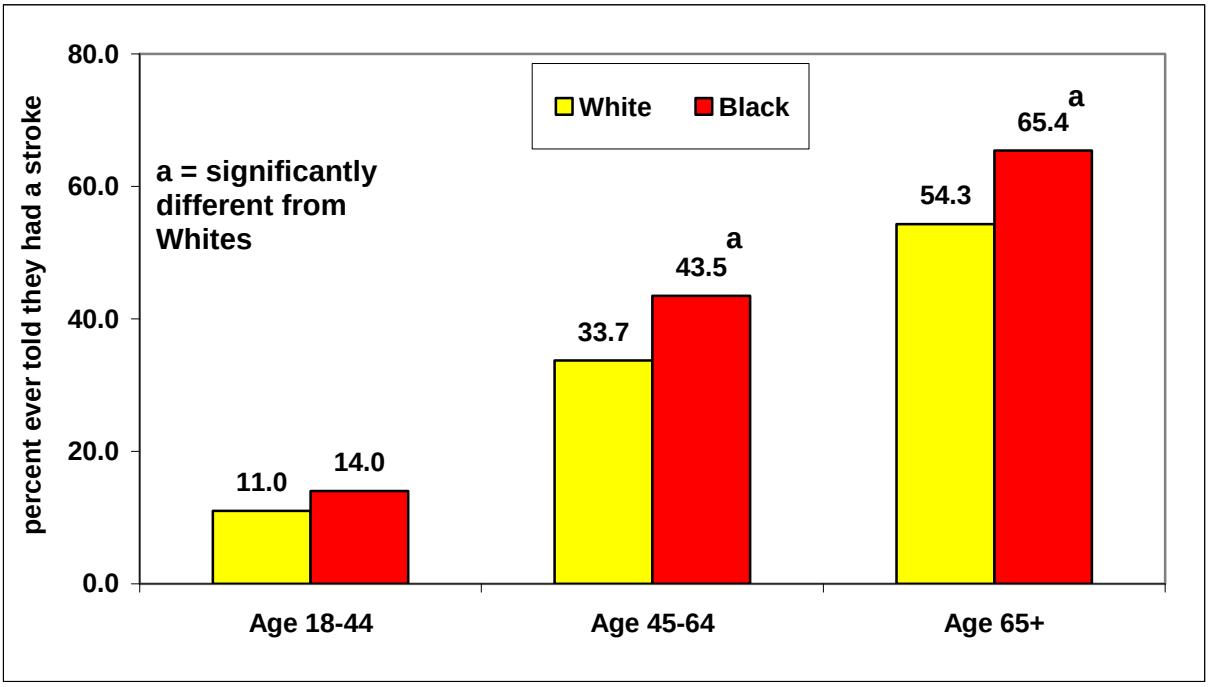
Figure 25 Age-adjusted prevalence for high blood pressure in adults age 20 and older by race/ethnicity, sex, and survey, United States 1999-2004 combined.



Source: American Heart Association, *Heart Disease and Stroke Statistics-2007 Update*. [13]

In the 2005 Maryland BRFSS survey, African Americans are more likely to report having high blood pressure at ages 45 or older, compared to Whites , as shown in Figure 26 [14].

Figure 26. Age-stratified prevalence of Hypertension in Adults by Race, Maryland. 2005

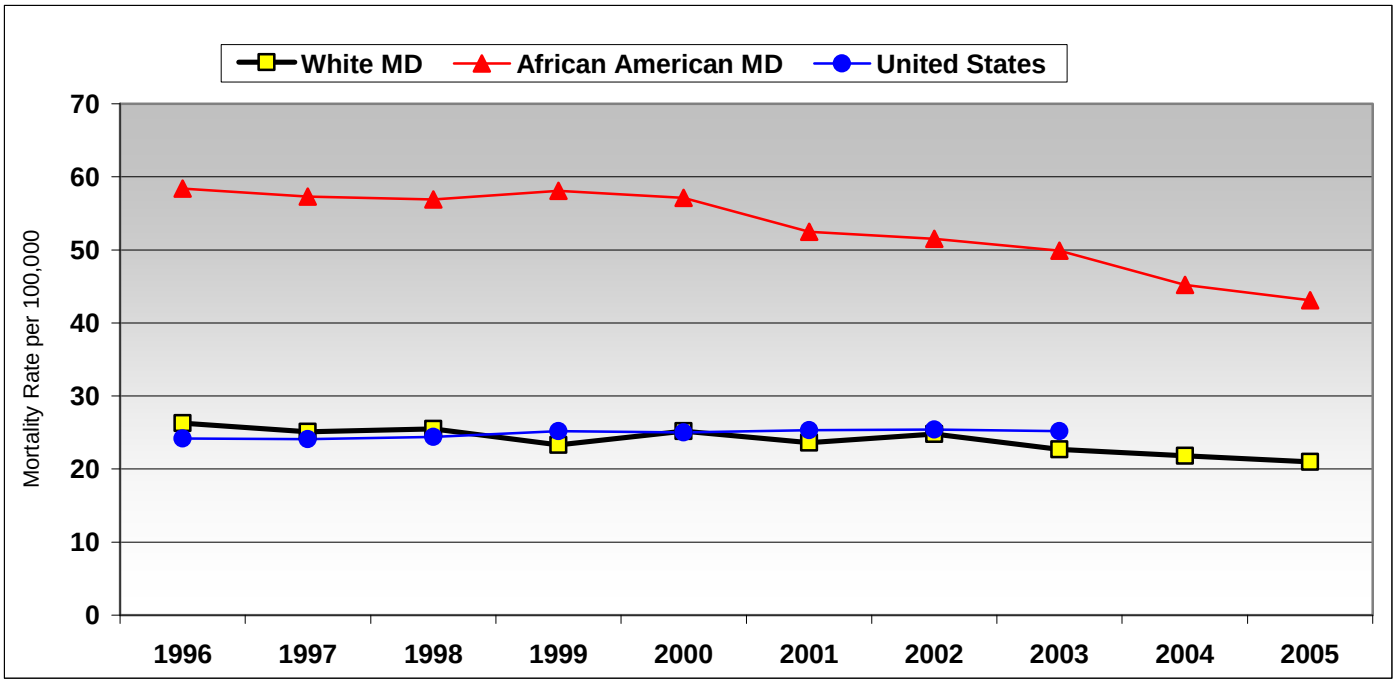


Source: 2005 data from Maryland BRFSS [14]

Diabetes

In Maryland, diabetes is the fourth leading cause of death for African Americans and the seventh leading cause of death for Whites [6]. Figure 27 shows decreasing diabetes mortality rates in Maryland for both African Americans and Whites and relatively steady rates for the U.S. In Maryland, African American diabetes mortality decreased 26% from 1996 to 2005, although there is still a large mortality disparity between the two races.

Figure 27. Age-Adjusted Death Rate for Diabetes by Race, United States and Maryland, Selected Years 1996-2005

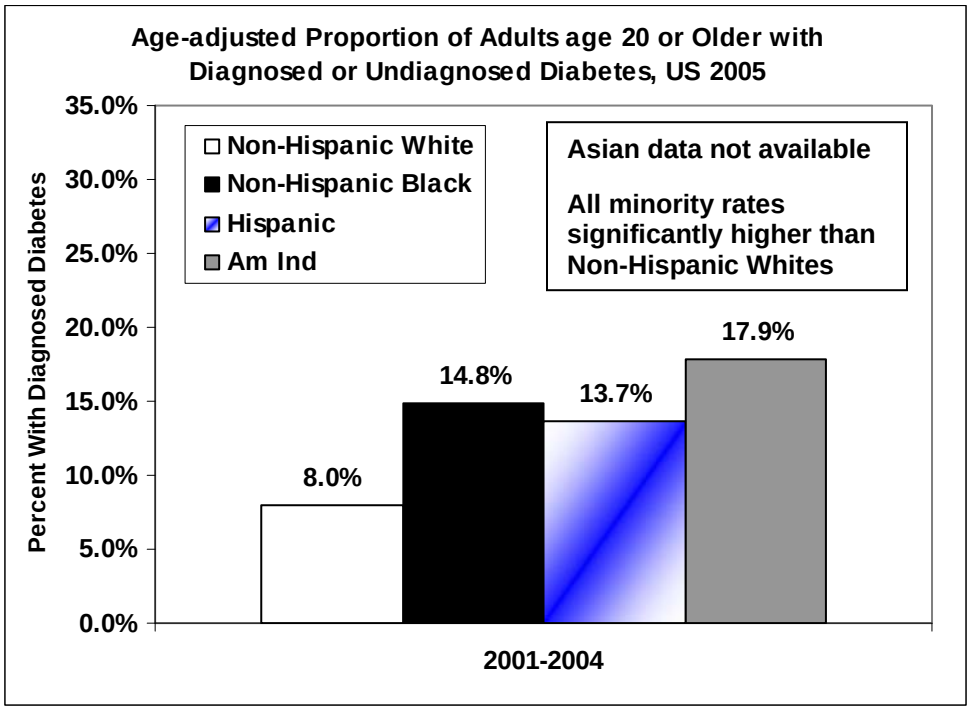


Source: Maryland Vital Statistics Annual Report 2005 [6].
Note: United States mortality rates for 2004 and 2005 were not available at the time of this report.

Complications of diabetes include heart disease, stroke, peripheral artery disease, nerve damage, kidney disease, blindness, and amputations.

Risk factors for type 2 diabetes, which makes up 90% of all adult diabetes, include older age, family history of diabetes, overweight and obesity, and non-white race or Hispanic ethnicity. The prevalence of diagnosed and undiagnosed diabetes among U.S. adults is shown in Figure 28. Racial and ethnic minorities have 1.5 to two times the prevalence of diabetes as non-Hispanic Whites for adults age 20 or older, after adjusting for age differences between the race/ethnic groups.

Figure 28. Prevalence of Diagnosed and Undiagnosed Diabetes in Adults Age 20 or older, by Race/Ethnicity, US 2005.



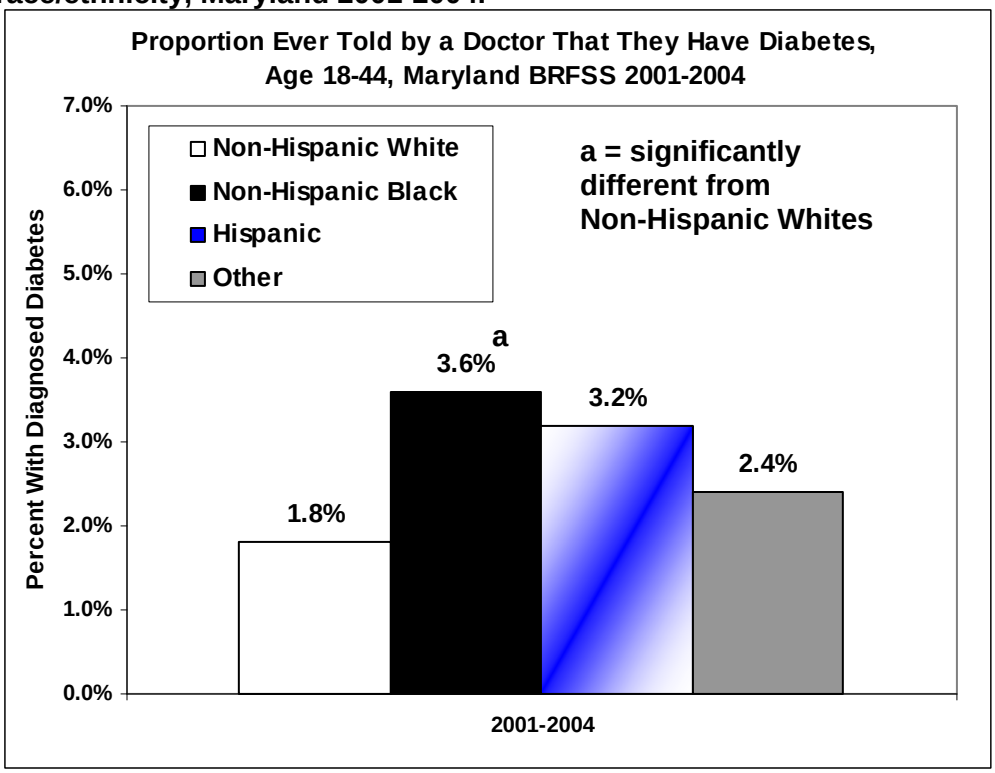
Source: Projections from 1999-2002 NHANES, in *National Diabetes Fact Sheet* [18].

The prevalence (percent of people who have) a doctor diagnosis of diabetes in Maryland, by age group and race/ethnicity, is shown in Figure 29, Figure 30, and Figure 31 below. Even with pooling of several years, there was insufficient data to separately report Asian and American Indian prevalence. And there was insufficient data to report the prevalence in Hispanics age 65 or older.

Separating the analysis into separate age groups is another way to adjust for age, and it reveals any differences between the age groups. The consistent finding for diabetes is that across all of these age groups, diagnosed diabetes is about twice as common for African Americans, and about 1.5 times as common for other minority populations, compared to non-Hispanic Whites [14]. The results for African Americans are statistically significant, meaning that the difference is larger than the margin of error for the survey. Due to small sample sizes for other minority groups, the margin of error for their comparison to non-Hispanic Whites is larger, and that comparison is not greater than the margin of error (not statistically significant). We expect that when additional years of data can be pooled, we will see a significantly higher prevalence of diagnosed diabetes in these smaller minority groups.

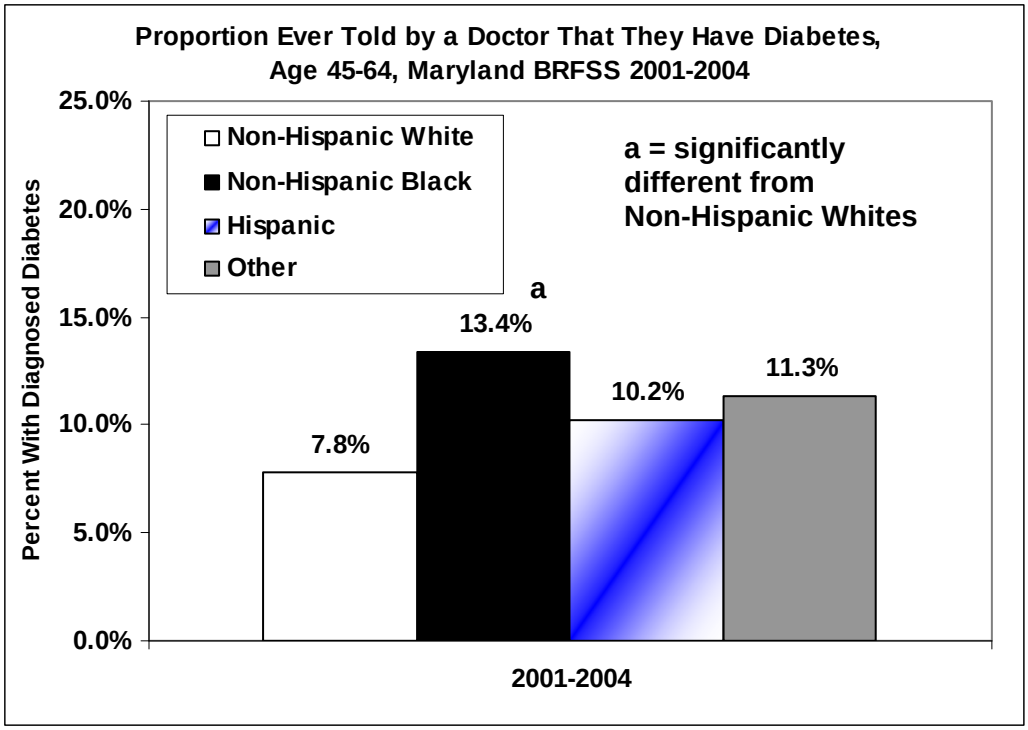
Diabetes can remain undiagnosed for several years after it develops, and minorities may well be more likely to have their diabetes undiagnosed due to their disparity in access to healthcare. So the disparities in total diabetes (diagnosed and undiagnosed) are probably even larger than the numbers presented here.

Figure 29. Prevalence of doctor diagnosed diabetes in adults age 18-44, by race/ethnicity, Maryland 2001-2004.



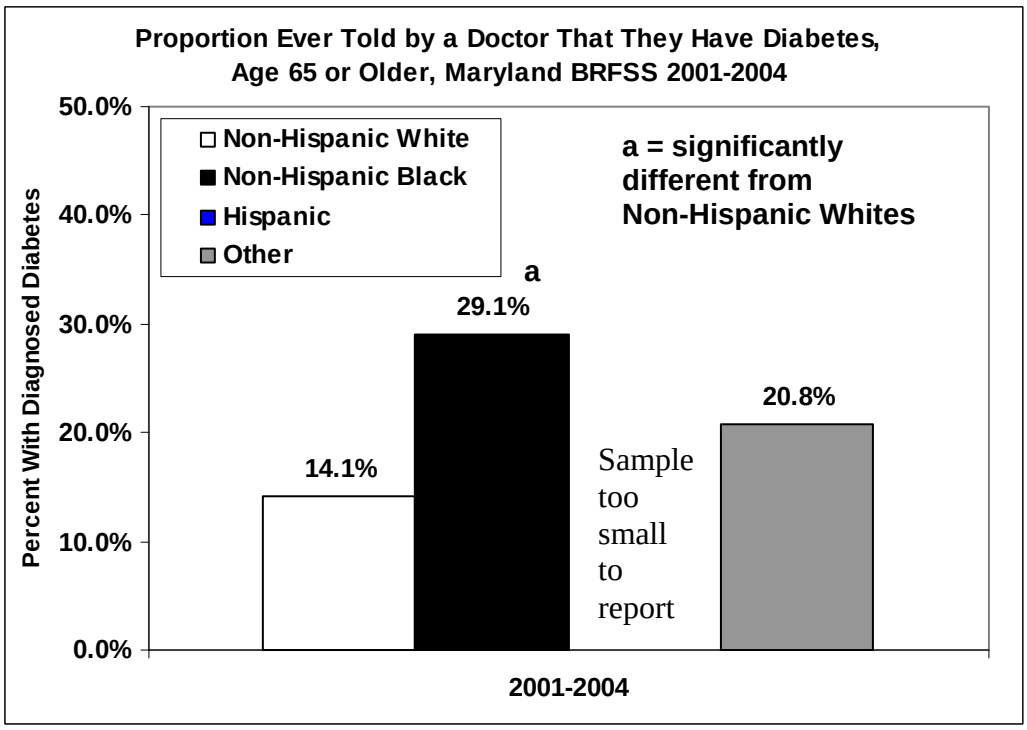
Source: Pooled data from Maryland BRFSS [14]

Figure 30. Prevalence of doctor diagnosed diabetes in adults age 45-64, by race/ethnicity, Maryland 2001-2004.



Source: Pooled data from Maryland BRFSS [14].

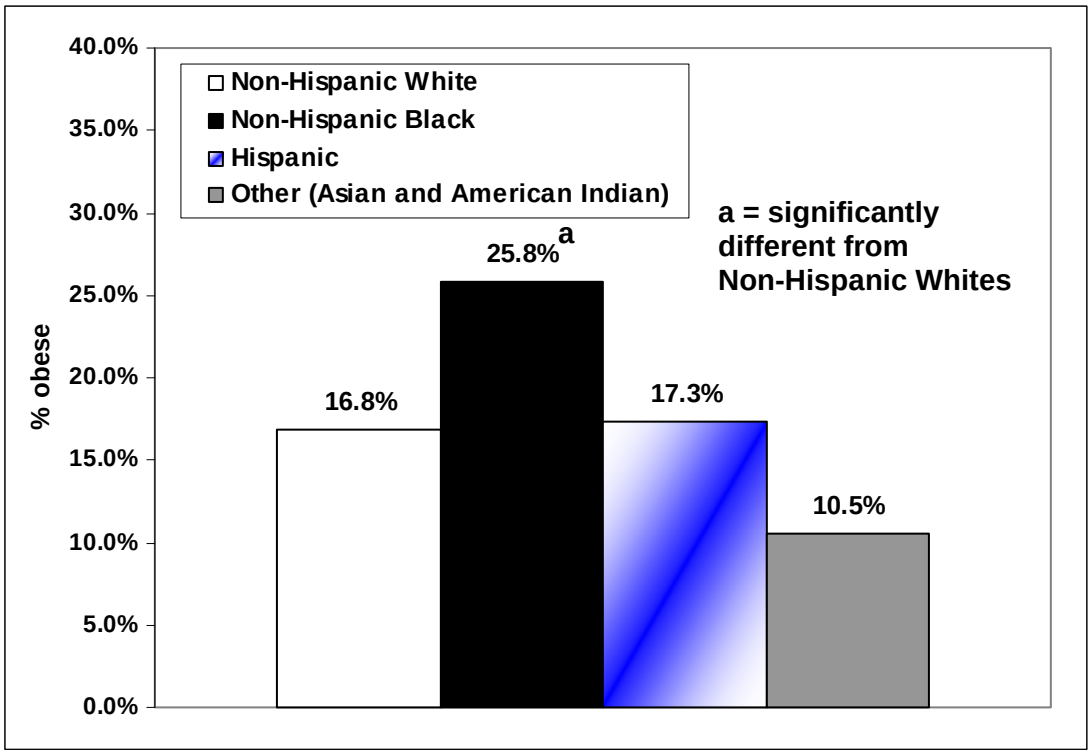
Figure 31. Prevalence of doctor diagnosed diabetes in adults age 65 or older, by race/ethnicity, Maryland 2001-2004.



Source: Pooled data from Maryland BRFSS [14].

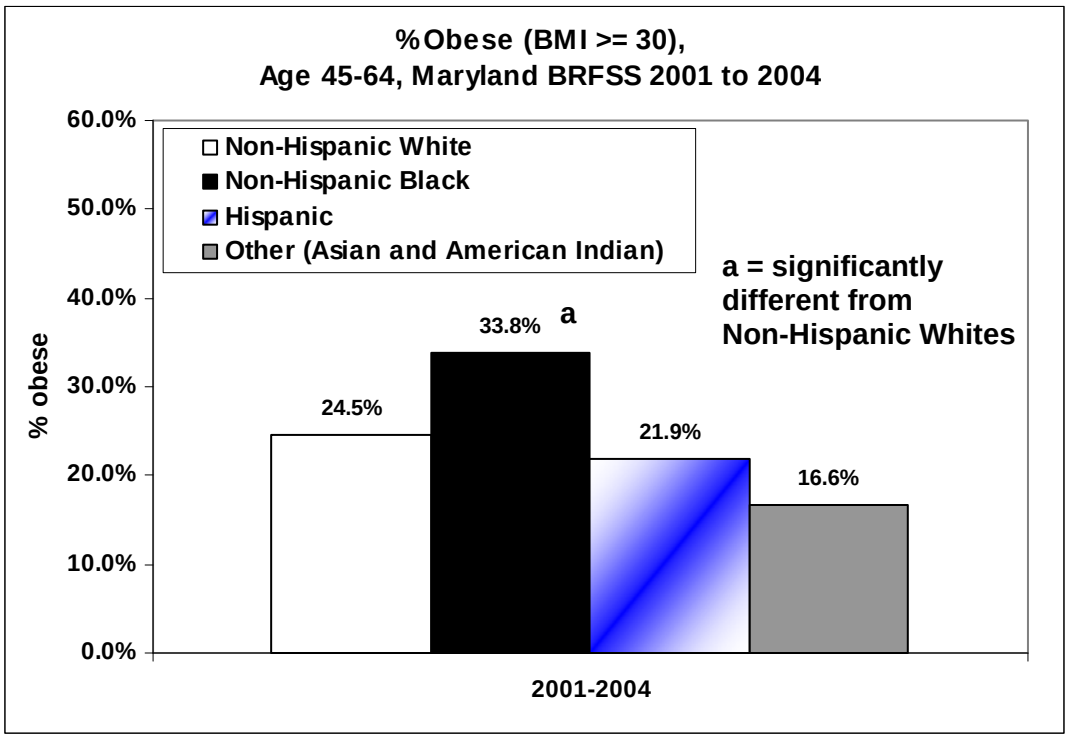
Obesity is a major risk factor for diabetes, as well as for hypertension, cardiovascular disease, certain cancers, and arthritis. The three following figures show rates of obesity in Maryland by adult age group combining data over 2000 to 2004. In each of the three age groups, African Americans have higher rates of obesity than whites (which are statistically significant). These higher obesity rates among African Americans contribute to their higher rates of diabetes.

Figure 32. Prevalence of Obesity, Adults age 18-44, by Race/Ethnicity, Maryland 2000-2004 Pooled Data



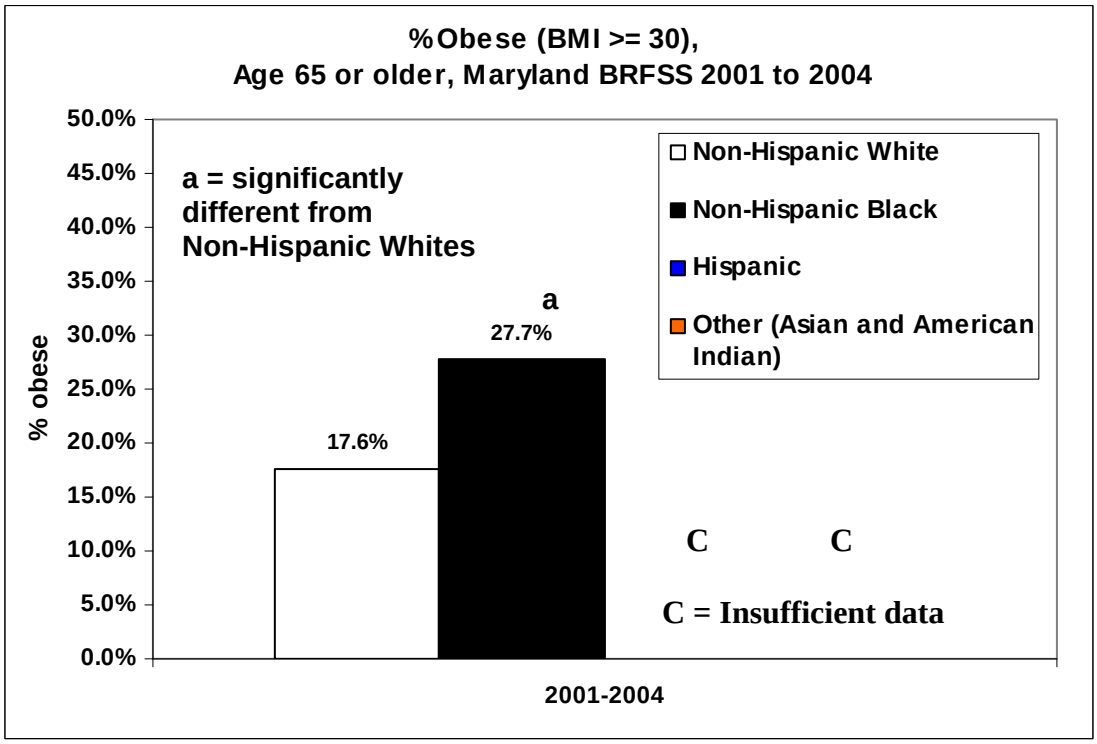
Source: Pooled data from Maryland BRFSS [14].

Figure 33. Prevalence of Obesity, Adults age 45 to 64, by Race/Ethnicity, Maryland 2000-2004 Pooled Data



Source: Pooled data from Maryland BRFSS [14].

Figure 34. Prevalence of Obesity, Adults age 65 or Older, by Race/Ethnicity, Maryland 2000-2004 Pooled Data

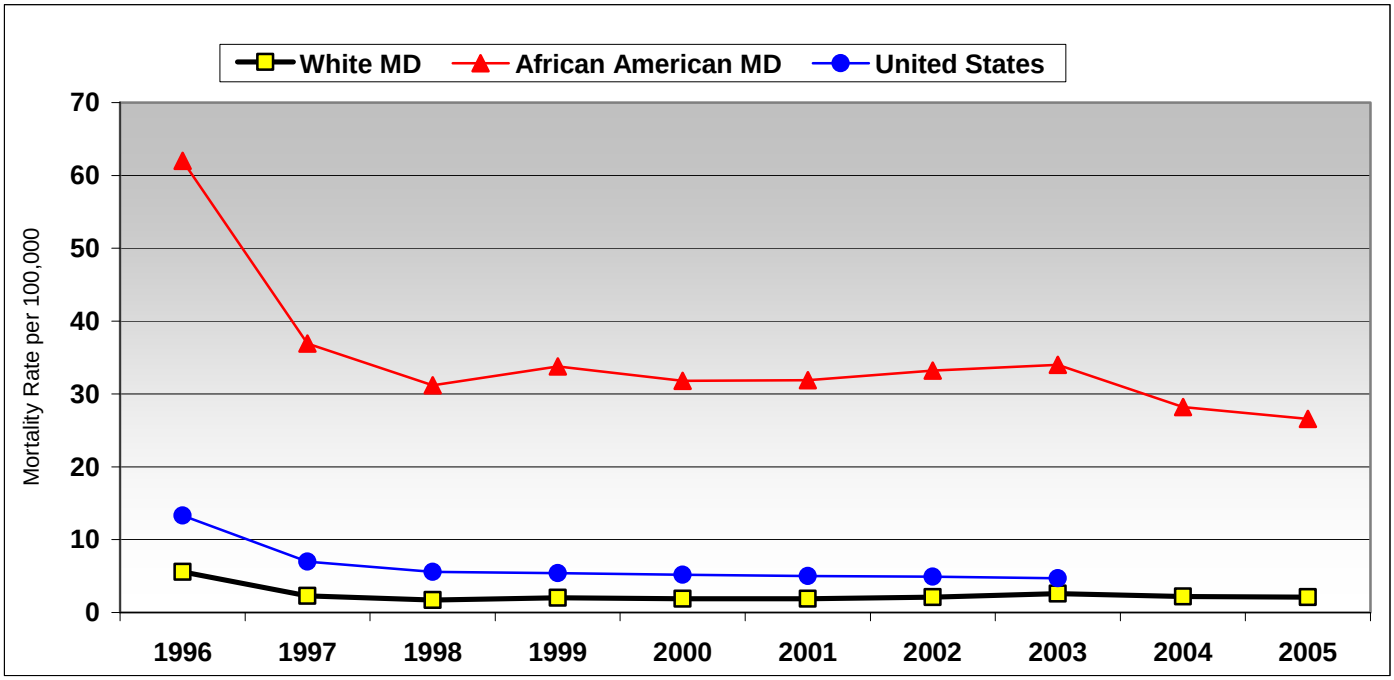


Source: Pooled data from Maryland BRFSS [14].

HIV/AIDS

In 2005, HIV was the sixth leading cause of death for African Americans and the 15th leading cause of death for Whites in Maryland [6]. Figure 35 shows African American mortality rates hovering around 30 per 100,000 since 2000, while White rates have been less than 5 per 100,000. In 2005, the African American mortality rate was 26.6 per 100,000 while the white rate was 2.1 per 100,000. As shown previously in Table 4, this nearly 13-fold higher mortality ratio is the highest mortality ratio disparity of all leading causes of death.

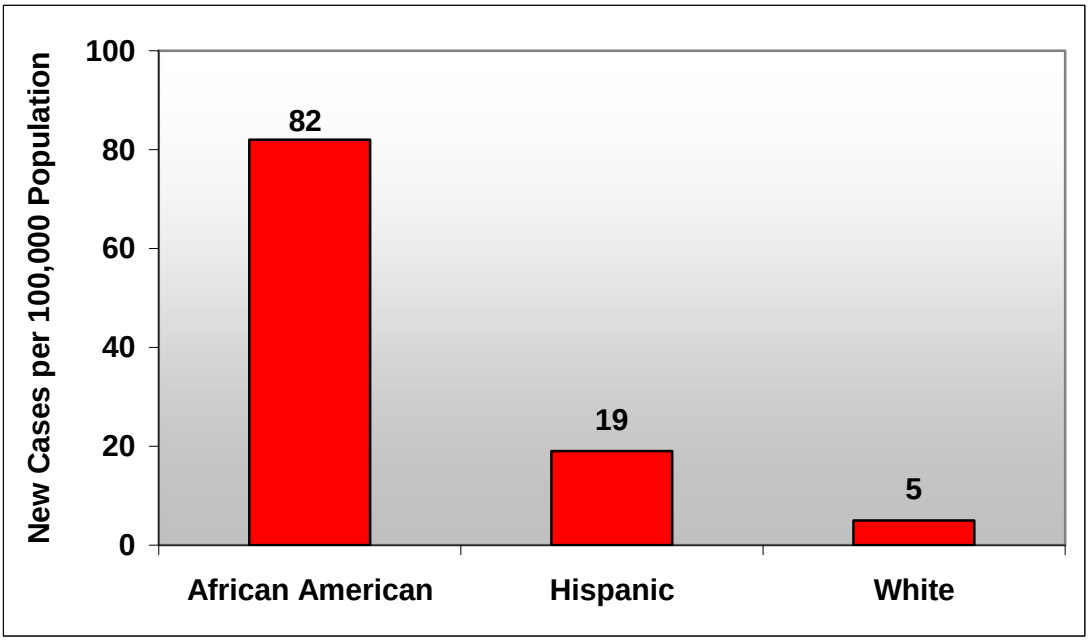
Figure 35. Age-Adjusted Death Rate for HIV by Race, United States and Maryland, 1996-2005



Source: *Maryland Vital Statistics Annual Report 2005* [6].
Note: United States mortality rates for 2004 and 2005 were not available at the time of this report.

In Maryland, striking minority disparities in HIV incidence exist. Figure 36 shows the disparities in the rates of new cases (incidence) of HIV for African Americans and Hispanics, compared to non-Hispanic Whites.

Figure 36 Maryland HIV Incidence Rate by Race/Ethnicity, 2003.



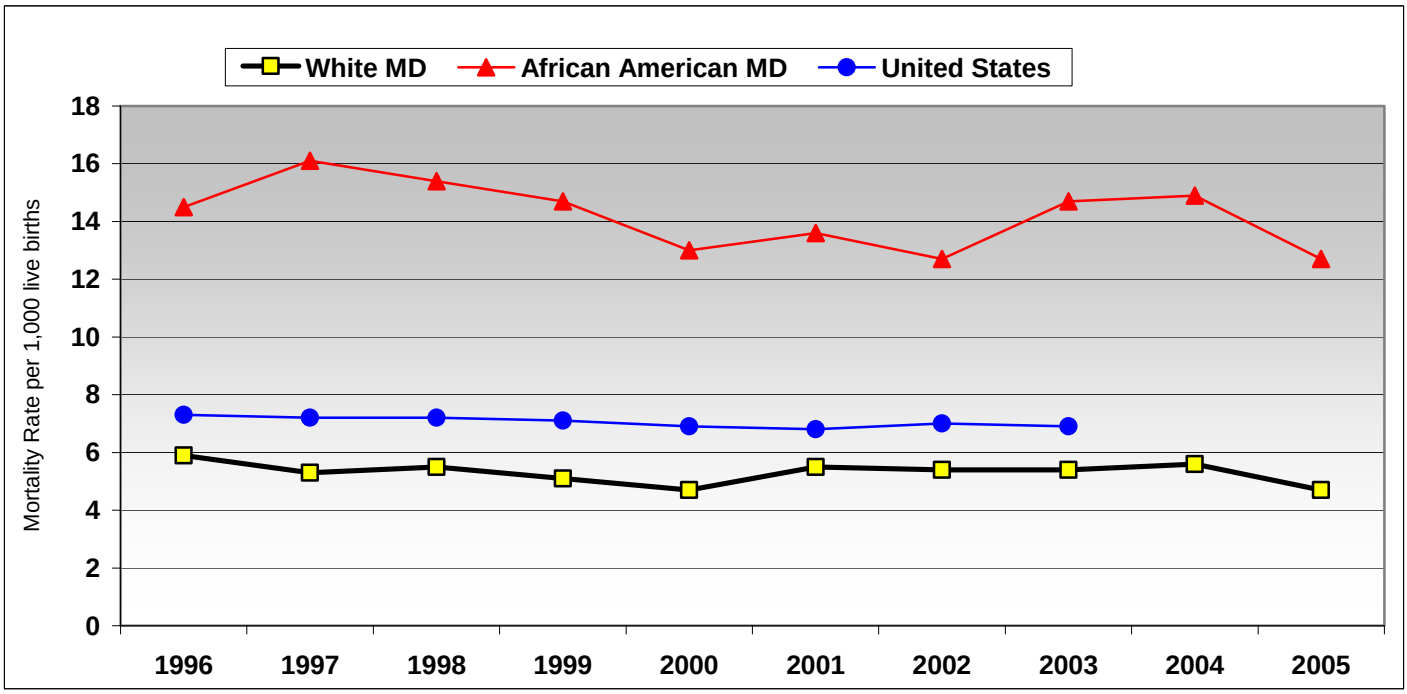
Source: Maryland 2005 HIV/AIDS Annual Report [19]

The rate of new HIV cases among African Americans is about 16 times higher than it is for Whites, and the rate for Hispanics is almost four times higher [19]. Since the disparity in mortality from HIV/AIDS for African Americans is about 13 to one [6], virtually all of the African American mortality disparity in HIV/AIDS is driven by the disparity in the rate of new cases. Only a solution that can address this huge difference in incidence rates will effectively reduce the African American mortality disparity due to HIV/AIDS.

Infant Mortality

In 2005, Maryland African American infant mortality rates were 2.7 times the rate in Maryland Whites [6]. Figure 37 shows a large disparity in infant mortality rates for African Americans in Maryland compared to Whites in Maryland and all races in the U.S. [6]

Figure 37. Infant Mortality Rate by Race, United States and Maryland, 1996-2005



Source: Maryland Vital Statistics Annual Report 2005 [6].
Note: United States mortality rates for 2004 and 2005 were not available at the time of this report.

The infant mortality rates in the U.S. and in Maryland from 1999 to 2003 by race and ethnicity are show in Table 6 [1] [20] . Generally, the Maryland rates are similar to the U.S. rates for each racial group. Nationally and in Maryland, African American infant mortality rates are more than twice as high as the White rates. Nationally, Hispanic infant mortality is similar to that of Whites. In Maryland, since White rates are slightly better than the national White rates, Hispanic infant mortality rates are about 5% higher than for Whites.

Asian infant mortality rates both nationally and in Maryland are lower than for Whites. Nationally, American Indian infant mortality rates are about 56% higher than for Whites. In Maryland, due to the small percent of population that is American Indian, large year-to-year fluctuation in the rate is seen. Averaging the American Indian rate over the five years, the average rate is 7.6 in infant deaths per 1000 live births, just below the U.S. rate, and 40% higher than the Maryland White rate. Infant mortality rates by ethnicity and race in Maryland for 2004 are shown in Figure 38. [1]

Table 6. Infant mortality rates (infant deaths per 1000 live births), U.S. and Maryland by ethnicity and race, 1999 - 2003

	1999	2000	2001	2002	2003
White US	5.8	5.7	5.7	5.8	5.7
White MD	5.1	4.7	5.5	5.4	5.4
Black US	14.0	13.5	13.3	13.8	13.5
Black MD	14.7	13.0	13.6	12.7	14.7
American Indian US	9.3	8.3	9.7	8.6	8.7
American Indian MD	10.7	4.3	14.4	8.6	0.0
Asian / Pac Islander US	4.8	4.9	4.7	4.8	4.8
Asian / Pac Islander MD	6.2	3.5	2.8	2.8	3.2
Hispanic US	5.7	5.6	5.4	5.6	5.6
Hispanic MD	(Not Reported)	5.1	6.2	5.3	6.0

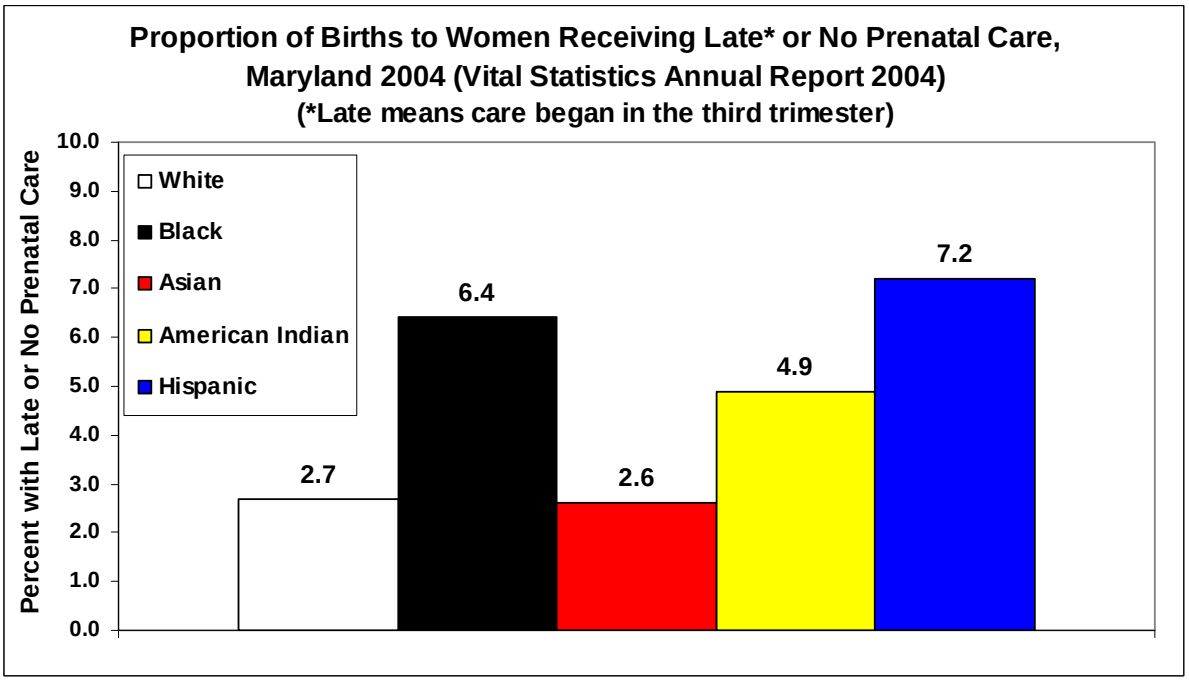
Sources: US data *from Health, United States, 2006* [20]
Maryland data from *Maryland Vital Statistics Annual Reports* 1999-2003 [1]

Figure 38. Infant Mortality Rates by Race and Ethnicity, Maryland 2004

Source: Maryland Vital Statistics Annual Report 2004 [1]

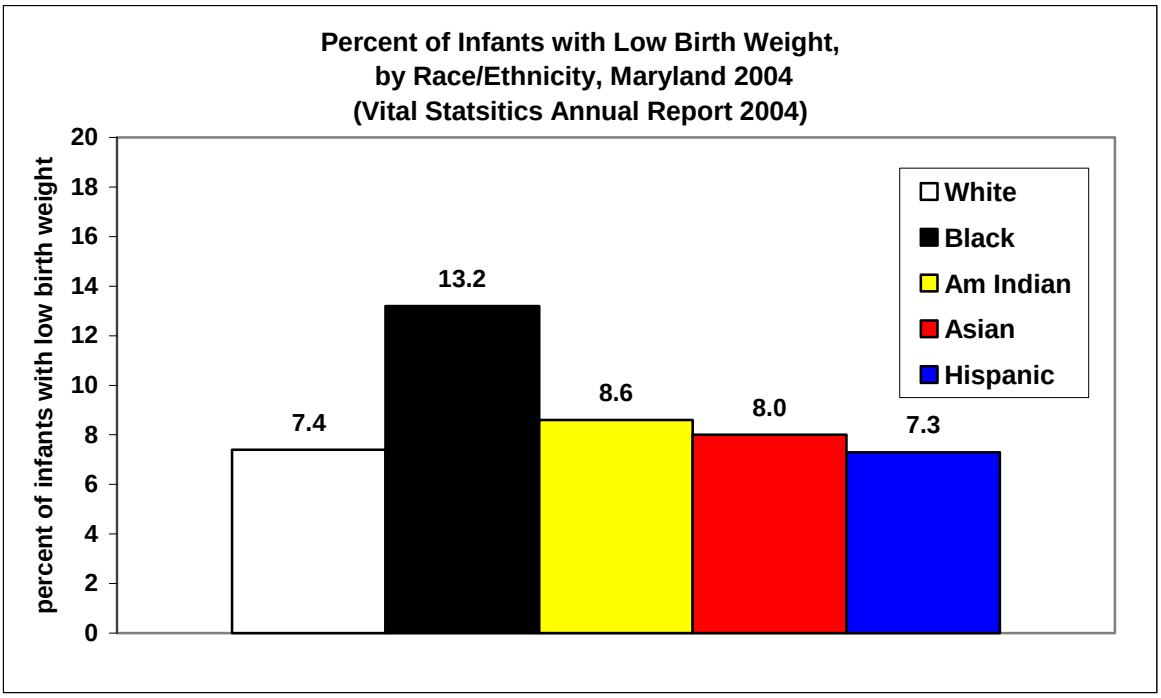
Disparities in infant mortality can be caused by disparities in receipt of prenatal care, and by disparities in the rates of low birth weight deliveries. Ethnic and racial disparities in these two factors in Maryland for 2004 are shown in Figure 39 and Figure 40 [1].

Figure 39. Disparity in the Timeliness of Prenatal Care.



Source: Maryland Annual Vital Statistics Report 2004 [1]

Figure 40. Disparity in Percent of Infants with Low Birth Weight



Source: Maryland Annual Vital Statistics Report 2004 [1]

End-Stage Renal Disease (ESRD)

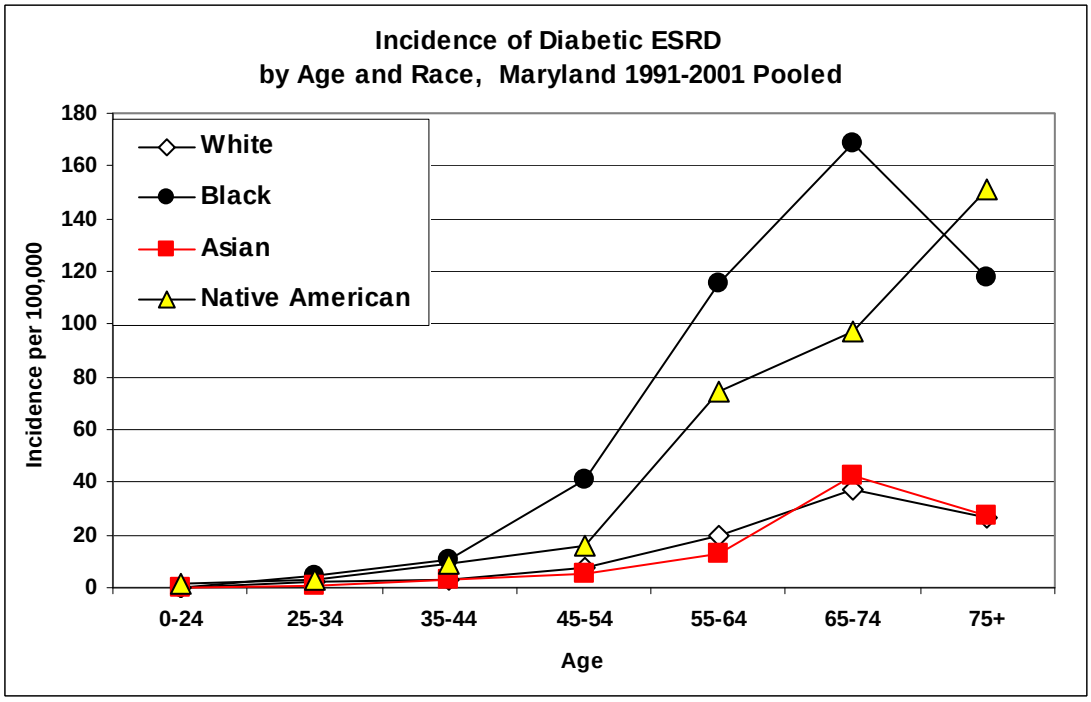
Diabetes and hypertension are the leading causes of end-stage renal (kidney) disease (ESRD) in Maryland, accounting for about 70 percent of cases [21]. Disparities in the new cases of ESRD for these causes are shown in following four figures.

In these analyses, data were pooled over 11 years for race, and over the six available years for ethnicity, to have enough numbers among the smaller minority groups for meaningful analysis by age group.

Large disparities in ESRD incidence are seen for African Americans and American Indians. Depending on age group, incidence rates for adults are about two to six times higher for diabetic ESRD in these two minority groups, and from three to 24 times higher for hypertensive ESRD, than for Whites [21]. These incidence ratios far exceed the ratios for the prevalence of diabetes and hypertension, which suggests that these minority groups have hypertension and diabetes that is less well controlled.

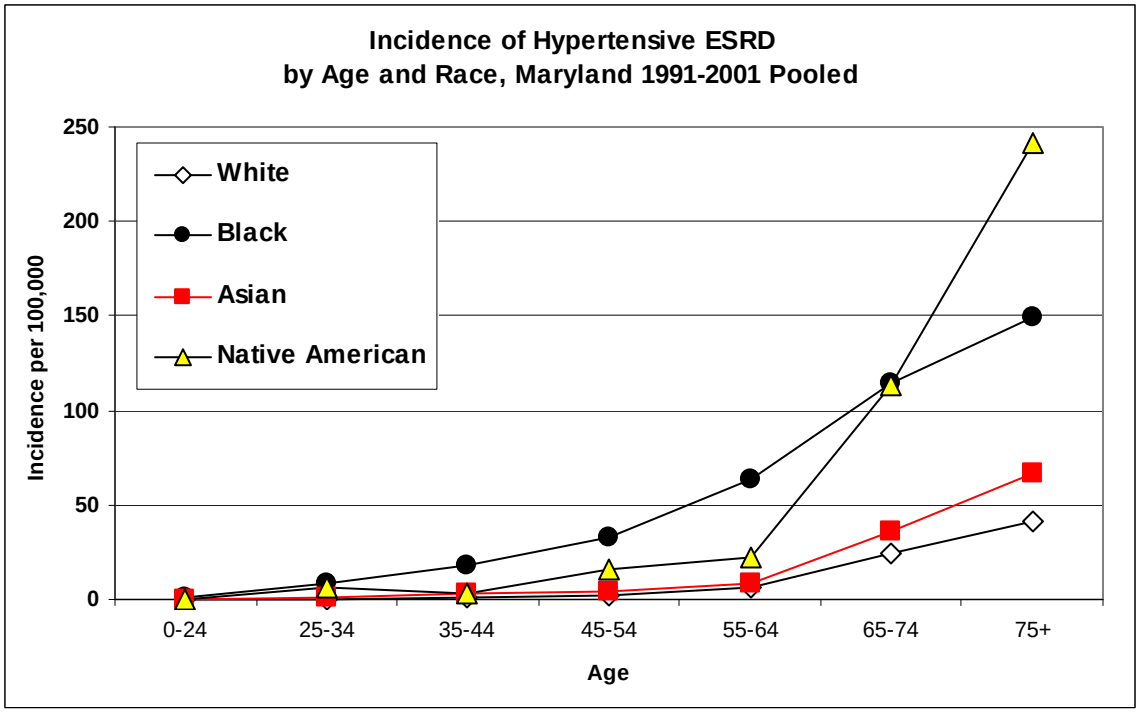
ESRD rates for Asians are similar to those for Whites for diabetic ESRD, and slightly higher at older ages for hypertensive ESRD [21]. Diabetic ESRD rates for Hispanics are 10 to 20 percent higher than for Whites for adults age 55 or older, and hypertensive ESRD rates for Hispanics are 1.5 to four times higher than for Whites at those ages [21].

Figure 41. Incidence of Diabetic End-Stage Renal Disease in Maryland, by Race 1991-2001 Pooled Data.



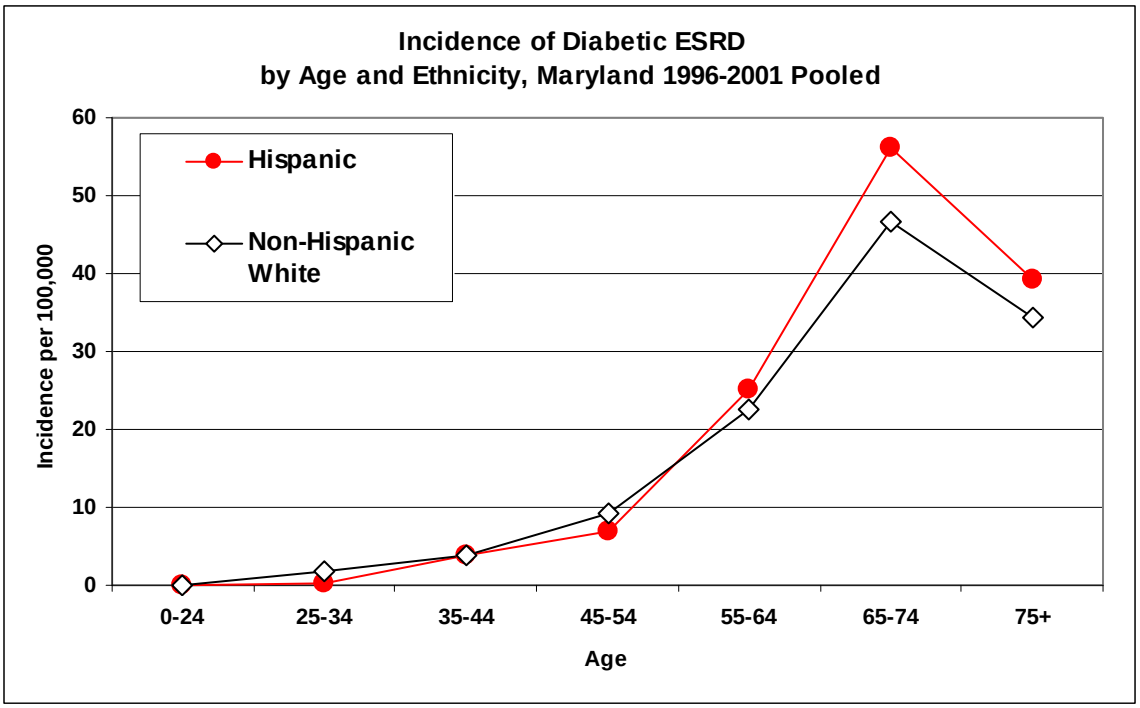
Source: DHMH analysis of U.S. Renal Data System Data [21]

Figure 42. Incidence of Hypertensive End-Stage Renal Disease in Maryland, by Race, 1991-2001 Pooled Data.



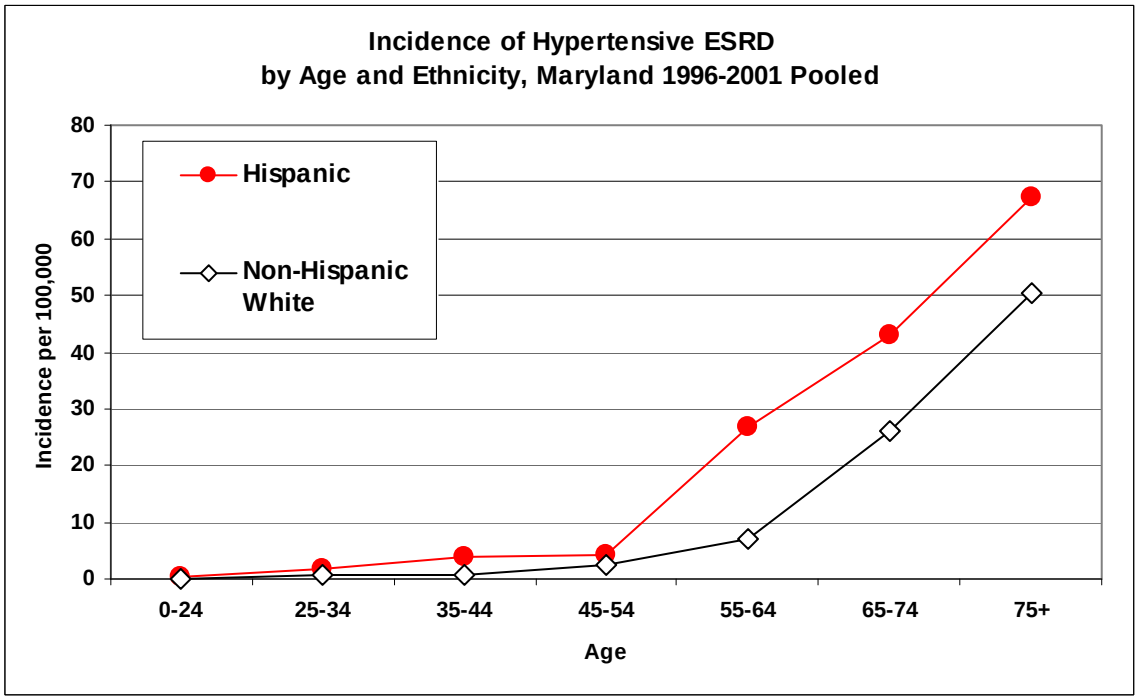
Source: DHMH analysis of U.S. Renal Data System Data [21]

Figure 43. Incidence of Diabetic End-Stage Renal Disease in Maryland, by Ethnicity, 1996-2001 Pooled Data.



Source: DHMH analysis of U.S. Renal Data System Data [21]

Figure 44. Incidence of Hypertensive End-Stage Renal Disease in Maryland, by Ethnicity, 1996-2001 Pooled Data.

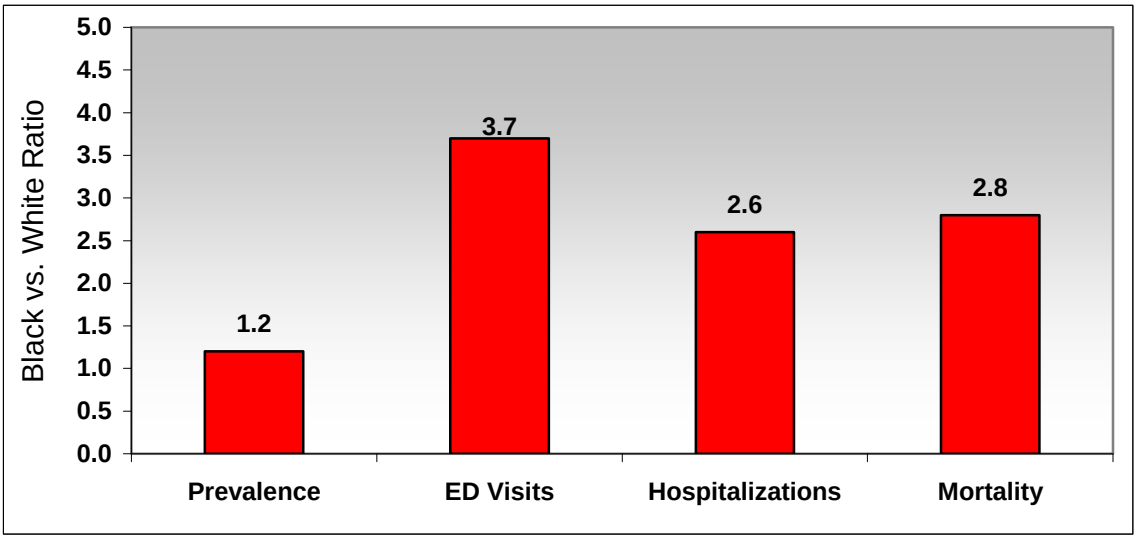


Source: DHMH analysis of U.S. Renal Data System Data [21]

Asthma

Data from the DHMH report "Asthma in Maryland 2004" are presented in Figure 45 [22]. The prevalence of asthma, from the Maryland BRFSS, is 1.2 times higher for African Americans that for Whites. Based on that, it might be expected that African American adults would experience 1.2 times as many asthma emergency department visits, asthma hospitalizations, and asthma deaths. However, African Americans experience 3.7 times as many asthma emergency visits, 2.6 times as many asthma hospitalizations, and 2.8 times as many asthma deaths [22]. The disparity in these asthma consequences indicates that African Americans experience less treatment success in managing their asthma. Treatment success for asthma depends on access to care, quality of provider treatment planning, and the ability of patients to carry out their treatment plan at home (understanding of plan, affordability of medications and devices). It also depends on the ability to remove asthma triggers from the patient's environment. Individual differences in asthma severity and in patient responsiveness to or side effects from medications also influence treatment success. Elimination of the disparities in asthma outcomes will only occur when the disparities in asthma treatment success are eliminated.

Figure 45. African American vs. White Disparity Ratios for Adults with Asthma, Maryland 1999-2003



Source: ***Asthma in Maryland 2004*** **[22]**

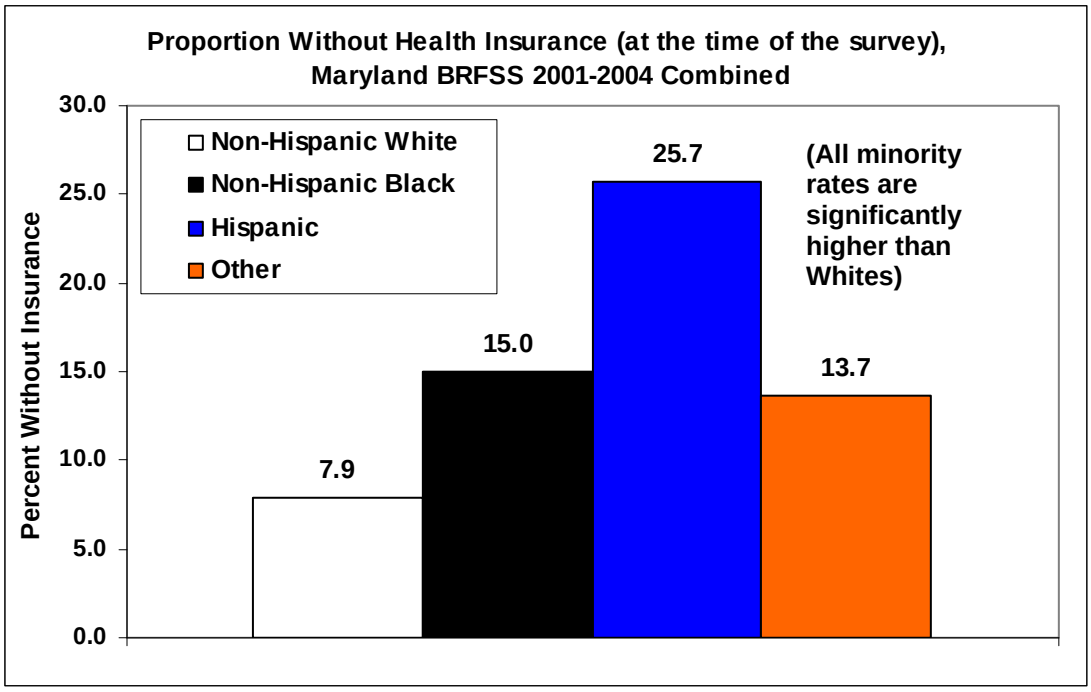
The Office of Minority Health and Health Disparities, using Maryland Discharge data from the Health Services Cost Review Commission [23], estimates that the excess asthma hospital admissions for African Americans cost the Medicaid program just over two million dollars in 2004. This includes 264 excess admissions where the primary diagnosis was asthma, costing $ 4,636 per admission and $ 1,227,103 in total; and 62 admissions with a primary diagnosis of respiratory failure and a secondary diagnosis of asthma, costing $23,608 (prolonged or intensive care treatment) per admission and $787,487 in total.

Health Care Issues for Minorities

Health Insurance

Information on health insurance status is asked in the Maryland BRFSS survey. The rates of uninsurance at the time of the survey are presented in Figure 46. Hispanics have the highest rate of uninsurance by this measure, three times higher than non-Hispanic Whites [14]. African Americans and the group of other races have an uninsurance rate that is about two times higher than non-Hispanic Whites [14].

Figure 46. Disparity in Health Insurance, Maryland 2001-2004 Pooled Data.

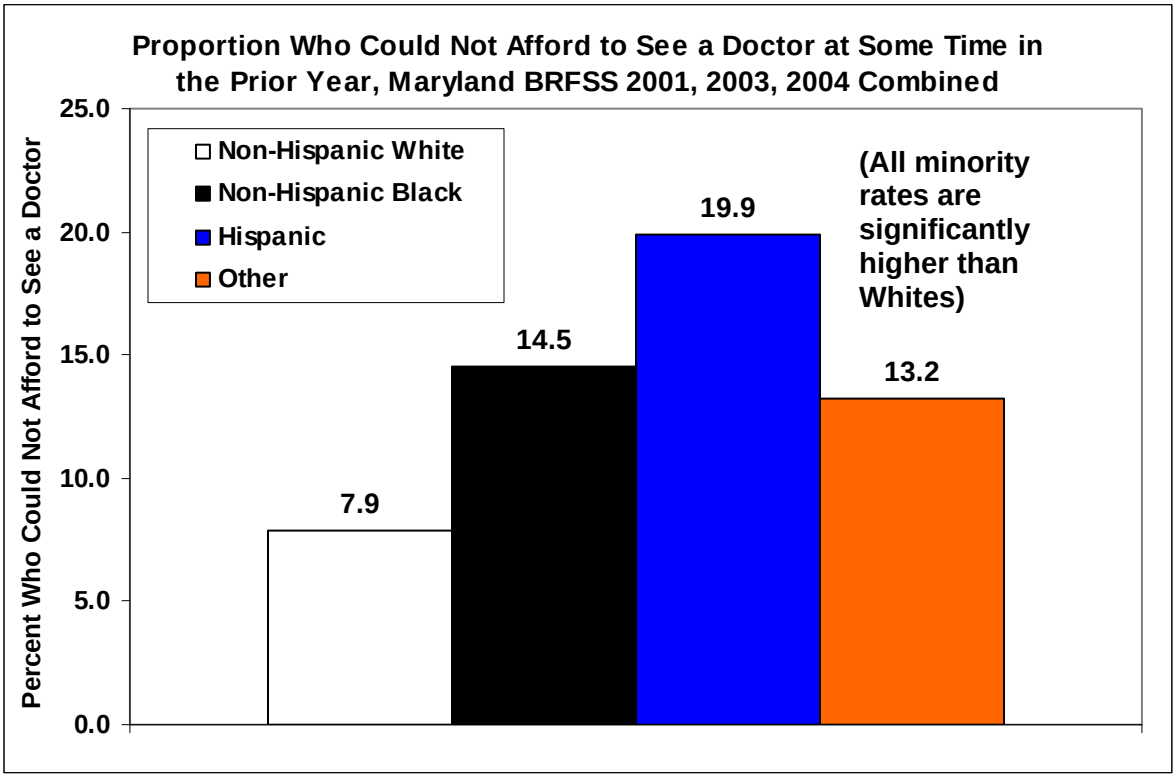


Source: Pooled data from Maryland BRFSS [14]

Access to Care

In most years, the BRFSS survey also asks if subjects were unable to afford to see a doctor at a time that they needed healthcare during the last year. The results for this analysis in the years 2001, 2003 and 2004 are almost identical to those for uninsured rates (Figure 47) [14]. Hispanics have the highest unable to afford care rate, 2.5 times higher than non-Hispanic Whites [14]. African Americans and the group of other races have an unable to afford care rate that is about 1.75 times higher than non-Hispanic Whites [14].

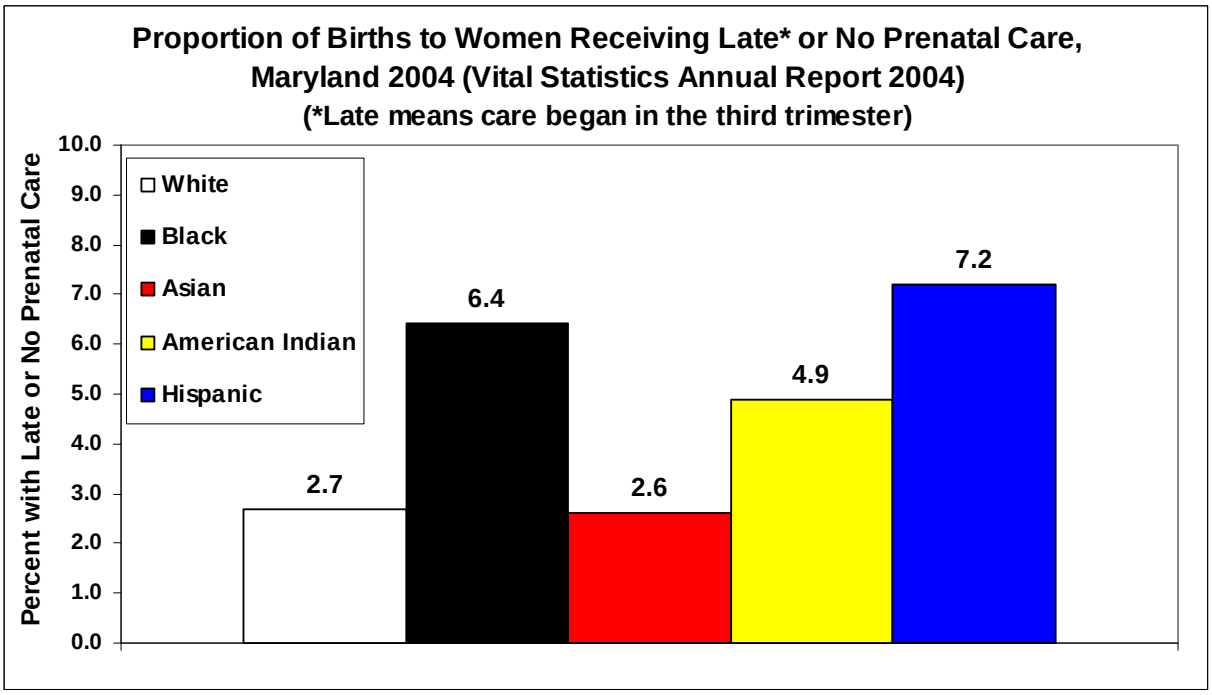
Figure 47. Disparity in Ability to Afford Healthcare, Maryland 2001, 2003 and 2004 Pooled Data



Source: Pooled data from Maryland BRFSS [14]

Vital records data includes information on the timeliness of prenatal care, and this is reported in the Maryland Annual Vital Statistics Reports. Disparities in the percent of pregnant women who receive late or no prenatal care (late prenatal care means care that did not begin until the third trimester) are shown in Figure 48 . Compared to Whites, African Americans and Hispanics were about twice as likely, and American Indians about 1.5 times more likely, to receive late or no prenatal care in 2004 [1]. Asian rates of late or no prenatal care were similar to Whites in 2004 [1], but had been slightly higher than Whites in the three previous years.

Figure 48. Disparity in the Timeliness of Prenatal Care



Source: Maryland Annual Vital Statistics Report 2004 [1]

Health Care Quality

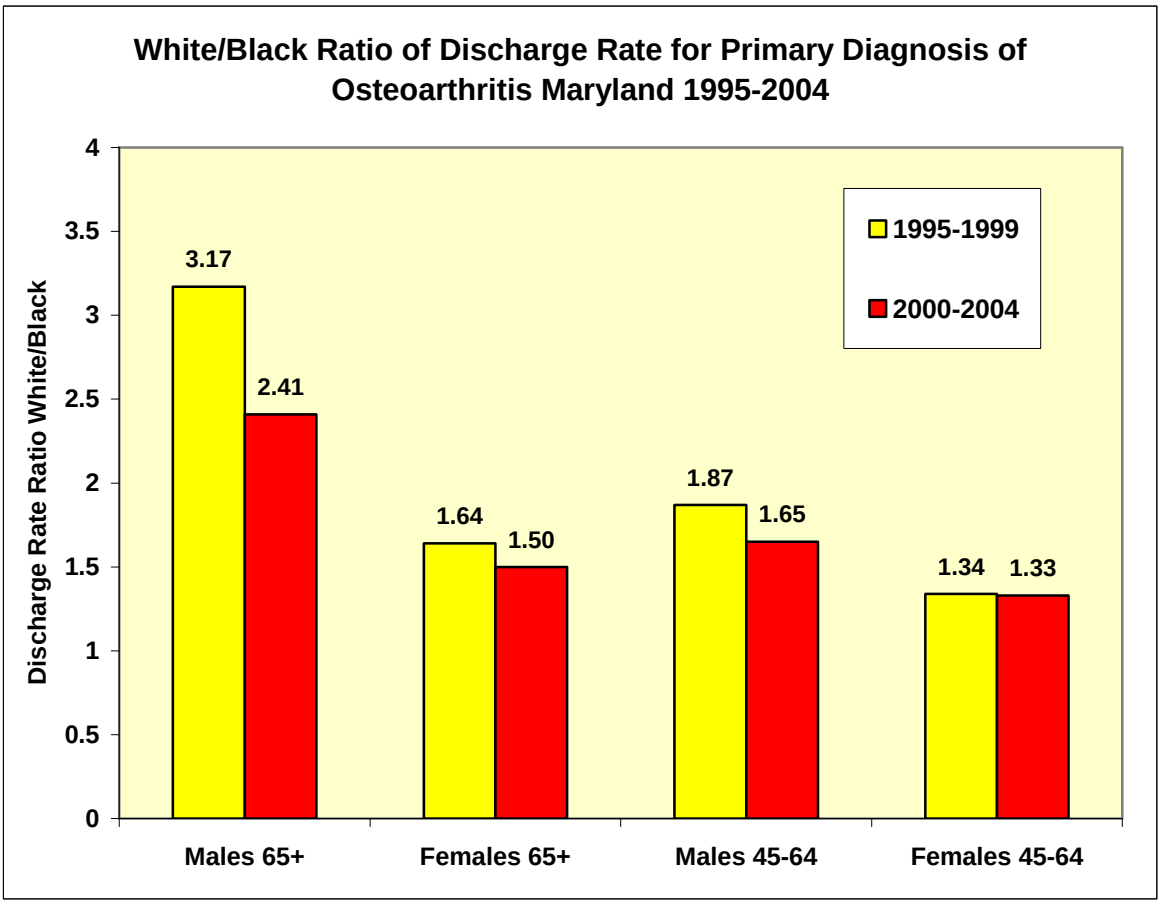
In Maryland, disparities exist in the receipt of other beneficial healthcare services. Such disparities may represent an issue of disparity in access. But they may also represent an issue of disparity in provider recommendations. Differences in utilization of beneficial preventive and restorative services, when equal need is expected, represent issues of health care quality: either provider-level quality if there is recommendation disparity, or system-level quality for access-driven utilization disparities.

An example of such a restorative service disparity is the disparity in joint replacement surgery for arthritis. Data from the BRFSS indicate that for adults age 45 or older in Maryland, the rates of arthritis are similar for African Americans and Whites [14]. In addition, African Americans report more activity limitation due to arthritis than do Whites [14]. Thus, arthritis is equally common between the two races, and perhaps somewhat more severe in African Americans. Therefore, we would expect the need for joint replacement surgery to be similar for the two races, if not larger for African Americans.

Discharge data from the Maryland Health Services Cost Review Commission indicate that African Americans age 45 or older are less likely than Whites to get joint replacement surgery [23]. This is shown in Figure 49. The figure displays the disparity in the rate of hospital admissions (discharges) for a diagnosis of osteoarthritis, the most common form of arthritis (chart shows how many times higher the White rate of admissions is compared to African Americans). Since more than 90 percent of these admissions are for a knee or hip joint replacement [23], these ratios also represent the disparity in the use of joint replacement surgery.

It is notable that the disparity is particularly large for males age 65 or older, where Whites were three time more likely to have this surgery in 1995 to 1999, and 2.4 times more likely in 2000 to 2004 [23]. Figure 49 shows that the magnitude of disparities may be different for different age groups or genders, and it does show that for most age-gender groups, some progress has been made in reducing this disparity.

Figure 49. Disparity in Hospital Admissions for Osteoarthritis (which represents disparity in joint replacement surgery)



Source: DHMH analysis of Maryland HSCRC discharge data [23]

Part II: Gender-Specific Health

Women's Health

This section on women's health highlights mortality rates for women for leading cause of death, and some health outcomes that are unique to women. In future editions data will be expanded to show the types of health conditions that disproportionately affect women and result in an undue burden of morbidity and mortality between racial and ethnic groups.

Currently, data on minority groups is most reliable for African Americans since they represent the largest proportion of minorities in Maryland. For future editions of the chartbook The Office of Minority Health and Health Disparities is working to develop approaches to data collection and analysis that will allow us to improve data reporting for Maryland's smaller minority communities.

Leading Causes of Death for Women

Table 7 shows the mortality disparity between African American and White women for the top 15 causes of death. The table includes ranking results for mortality rate ratios, excess mortality rates, and the statewide cause of death rank. Key findings are:

- HIV/AIDS is the 10th statewide leading cause of death; however, it has the number one mortality rate ratio disparity for African Americans compared to Whites. African American women have 17.4 times the death rate of White women.
- White women have a greater mortality rates than African American women for 4 of the top 15 causes of death.
- Heart disease is the number one cause of death for women, and ranks first in the number of excess African American deaths compared to White deaths.

Table 7. African American vs. White Women's Mortality Disparity for the Top 15 Causes of Death, Maryland 2005

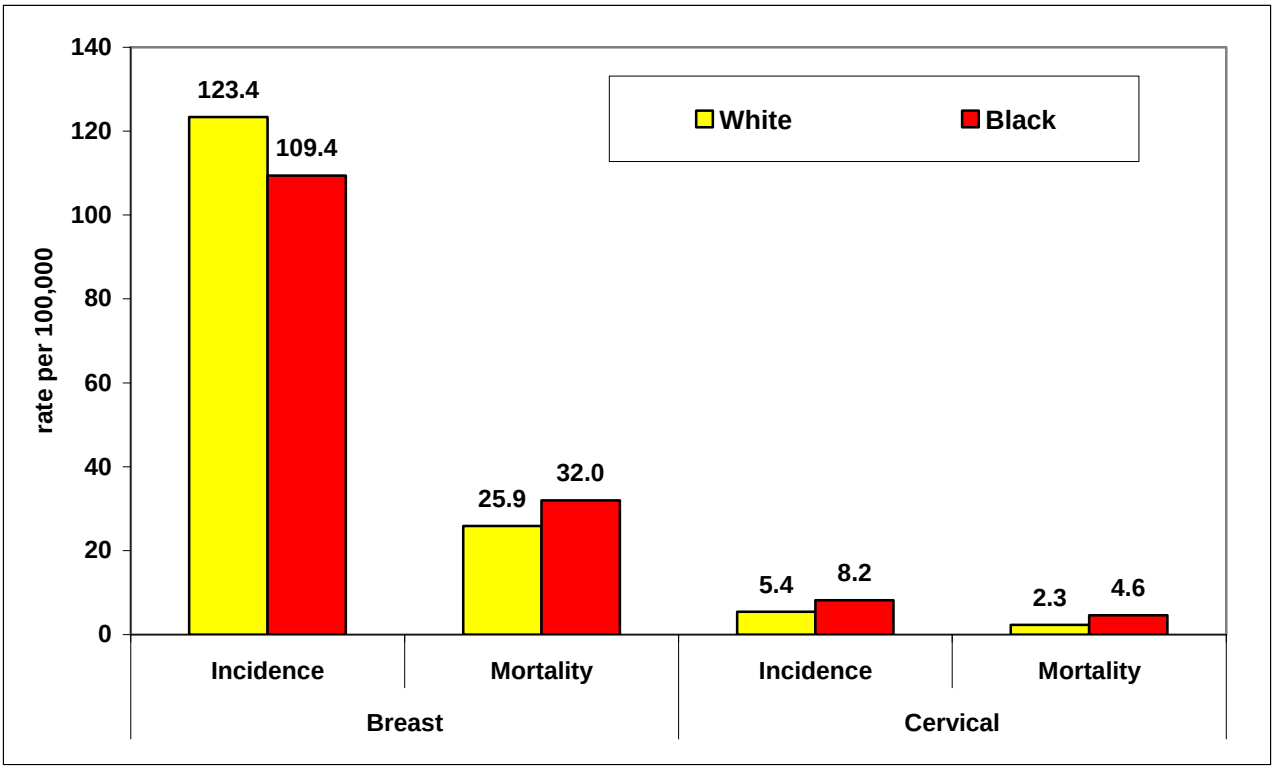
Ratio Disparity Rank	Excess rate Disparity Rank	Statewide Cause of Death Rank	Disease	Age-adjusted Mortality per 100,000 Black	White	Ratio	Age-adjusted Difference per 100,000
7	1	1	Heart Disease	216.2	166.3	1.30	49.9
11	8	2	Cancer	167.2	160.8	1.04	6.4
8	6	3	Stroke	49.2	41.9	1.17	7.3
		4	Chronic Lung Disease	22.1	38.0	0.58	-15.9
6	2	5	Diabetes	35.5	17.8	1.99	17.7
10	11	6	Accidents	14.6	13.1	1.11	1.5
9	10	7	Flu & Pneumonia	21.9	19.5	1.12	2.4
5	4	8	Septicemia	29.7	14.8	2.01	14.9
		9	Alzheimer's Disease	16.2	21.2	0.76	-5.0
1	3	10	HIV / AIDS	17.4	1.0	17.40	16.4
4	5	11	Kidney Diseases	22.3	7.9	2.82	14.4
3	9	12	Homicide	4.6	1.6	2.88	3.0
		13	Chronic Liver Disease	3.8	6.1	0.62	-2.3
		14	Suicide	1.5	3.7	0.41	-2.2
2	7	15	Certain Perinatal	9.6	3.1	3.10	6.5

Source: Maryland Vital Statistics Annual Report 2005 [6].

Women's cancer

Reproductive system cancers are examples of gender-specific health issues. Breast and cervical cancer represent two important cancers for women, for which screening, early detection, and prompt treatment can be lifesaving. Figure 50 [16] shows that for cervical cancer, both the incidence (rate of new cases) and mortality are higher for African American women than for White women in Maryland. For breast cancer, despite lower incidence, African American women suffer higher mortality than White women in Maryland. For both of these cancers, improving screening and treatment for African American women is needed to close the disparity in cancer mortality.

Figure 50. Age-adjusted Incidence and Mortality Rates for Breast and Cervical Cancer, by Race, Maryland 2001.



Source: ***Maryland Annual Cancer Report 2004*** **[16]**

Men's Health

The following section on men's health highlights mortality rates for men for leading cause of death, and some health outcomes that are unique to men. Currently, data on minority groups is most reliable for African Americans since they represent the largest proportion of minorities in Maryland. For future editions of the chartbook The Office of Minority Health and Health Disparities is working to develop approaches to data collection and analysis that will allow us to improve data reporting for Maryland's smaller minority communities.

Leading Causes of Death for Men

Table 8 shows mortality disparities between African American and White men for the top 15 causes of death. Rankings for the disparity ratio, excess disparity rate, and statewide cause of death are included. Key findings are:

- HIV/AIDS is the 10th statewide leading cause of death; however, it has the number one mortality rate ratio disparity for African Americans compared to Whites. African American men have 11.6 times the death rate of White men.
- White men have greater age-adjusted mortality rates for three of the top 15 causes of death.
- Heart Disease is the leading statewide cause of death and ranks first in excess mortality rates for African American men compared to White men.
- Although homicide ranks as the 12th statewide cause of death, it is ranked second and third in the mortality rate ratio and excess mortality (respectively) for African American men compared to White men.

Table 8. African American vs. White Men's Mortality Disparity for the Top 15 Causes of Death, Maryland 2005

Ratio Disparity Rank	Excess rate Disparity Rank	Statewide Cause of Death Rank	Disease	Age-adjusted Mortality per 100,000 Black	White	Ratio	Age-adjusted Difference per 100,000
8	1	1	Heart Disease	301.6	244.1	1.24	57.5
9	2	2	Cancer	273.5	221.6	1.23	51.9
7	7	3	Stroke	58.4	41.6	1.40	16.8
		4	Chronic Lung Disease	30.8	38.4	0.80	-7.6
5	5	5	Diabetes	53.6	25.4	2.11	28.2
12	12	6	Accidents	37.6	37.5	1.00	0.1
11	11	7	Flu & Pneumonia	26.6	25.4	1.05	1.2
4	6	8	Septicemia	39.1	17.3	2.26	21.8
		9	Alzheimer's Disease	12.7	12.9	0.98	-0.2
1	4	10	HIV / AIDS	38.1	3.3	11.55	34.8
6	8	11	Kidney Diseases	25.6	14.4	1.78	11.2
2	3	12	Homicide	48.2	5.5	8.76	42.7
10	10	13	Chronic Liver Disease	12.5	11.1	1.13	1.4
		14	Suicide	7.9	16.9	0.47	-9.0
3	9	15	Certain Perinatal	10.2	4.5	2.27	5.7

Source: Maryland Vital Statistics Annual Report 2005 [6].

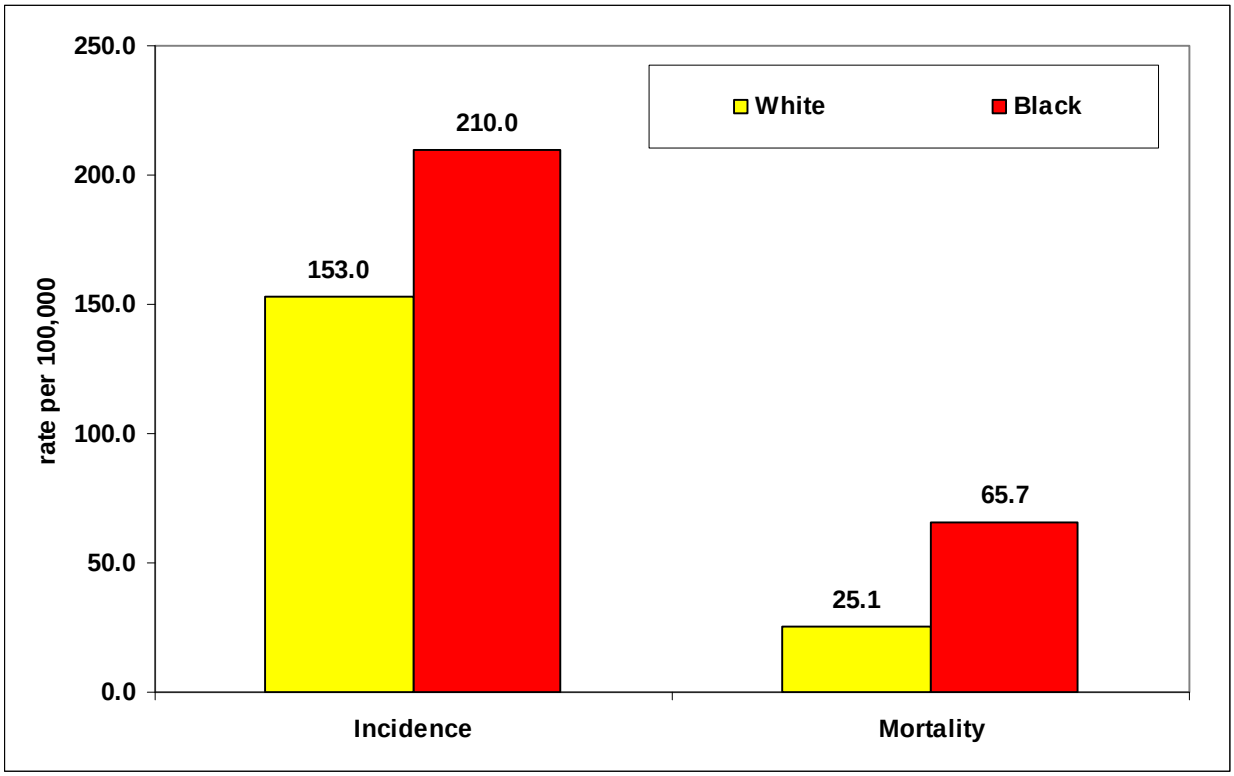
Men's cancer

Prostate cancer is a gender-specific health issue for men. Because some prostate cancers grow very slowly, some older patients with prostate cancer will not have any meaningful impact on their lifespan or their health from the disease. Other patients may develop prostate cancer at a younger age and have a type that grows and spreads rapidly. Because of this variability in the disease, decisions about screening and treatment can be complex.

Figure 51 shows that in Maryland, both the incidence and mortality due to prostate cancer are higher for African American men than for White men [16]. While the ratio of incidence is only 1.4 to one, the ratio of mortality is 2.6 to one. This suggests that prostate cancer in African American men is diagnosed at a more advanced stage, when long term survival is less likely.

Mortality rates for breast cancer in White women are similar to mortality rates for prostate cancer for White men. However, prostate cancer mortality in African American men is about two times higher than breast cancer mortality in African American women.

Figure 51. Age-adjusted Incidence and Mortality Rates for Prostate Cancer, by Race, Maryland 2001



Source: ***Maryland Annual Cancer Report 2004*** **[16]**

Part III: Jurisdiction-Specific Health

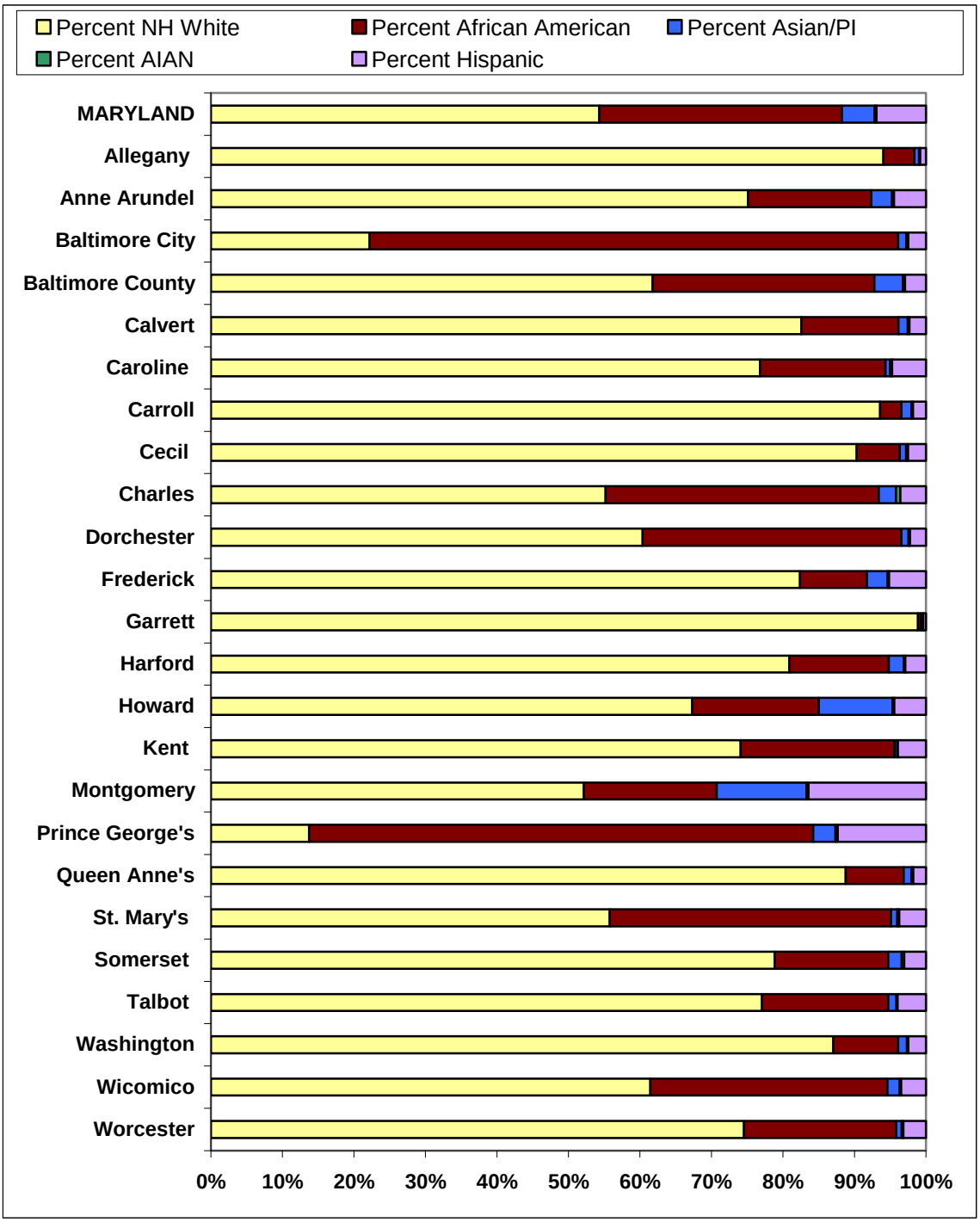
Characteristics of Jurisdictions in Maryland

Age composition

The following series of figures show the distribution of race and ethnicity by age (age groups) for Maryland jurisdictions. In general, Maryland's minority population tends to be younger than the non-minority population.

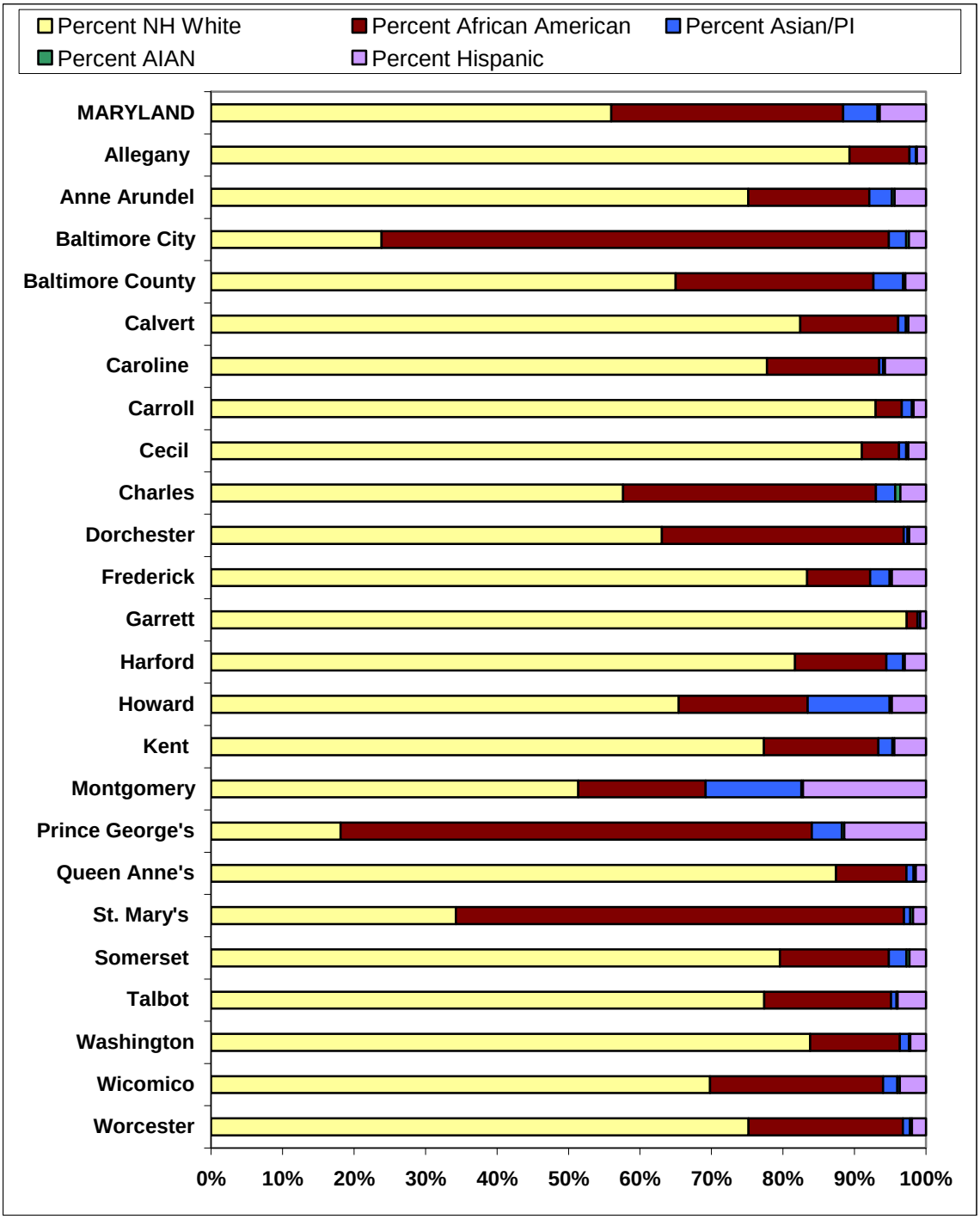
- In 2005, Maryland's minority population (all ages) was 40.3%.
- For ages 0-14, the minority population in Maryland is 45.7% (Figure 52).
- For ages 15-24, the minority population in Maryland is 44.0% (Figure 53).
- For ages 25-44, the minority population in Maryland is 43.8% (Figure 54).
- For ages 45-64, the minority population in Maryland is 34.0% (Figure 55).
- For ages 65 and over, the minority population in Maryland is 25.2% (Figure 56).

Figure 52. Race/Ethnicity Distribution of Population Ages 0-14, by Jurisdiction, Maryland 2004



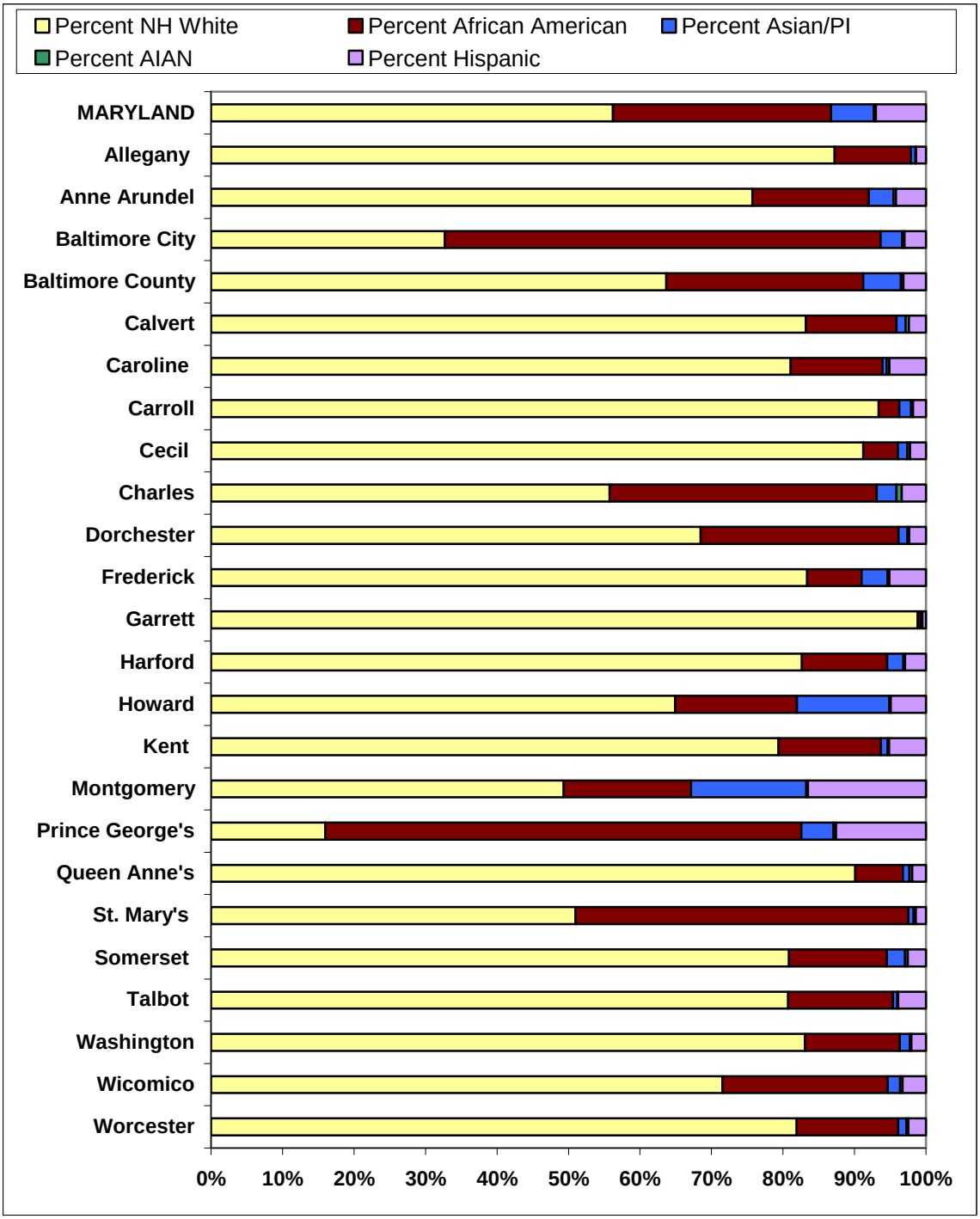
Source: CDC WONDER On-line Database, Bridged-Race Population Estimates, United States, 1990 – 2004.

Figure 53. Race/Ethnicity Distribution of Population Ages 15-24, by Jurisdiction, Maryland 2004



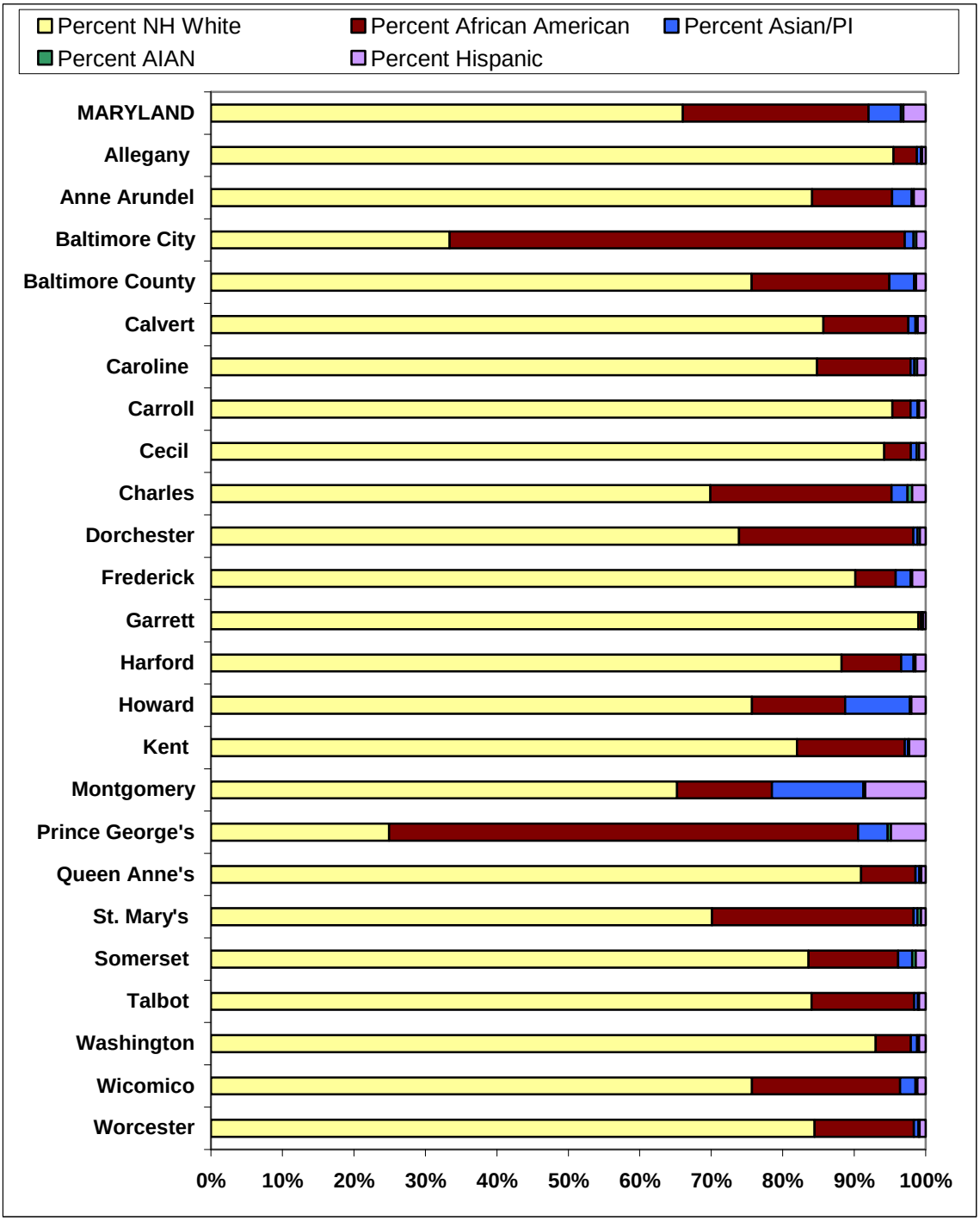
Source: CDC WONDER on-line Database, Bridged-Race Population Estimates, United States, 1990 – 2004.

Figure 54. Race/Ethnicity Distribution of Population Ages 25-44, by Jurisdiction, Maryland 2004



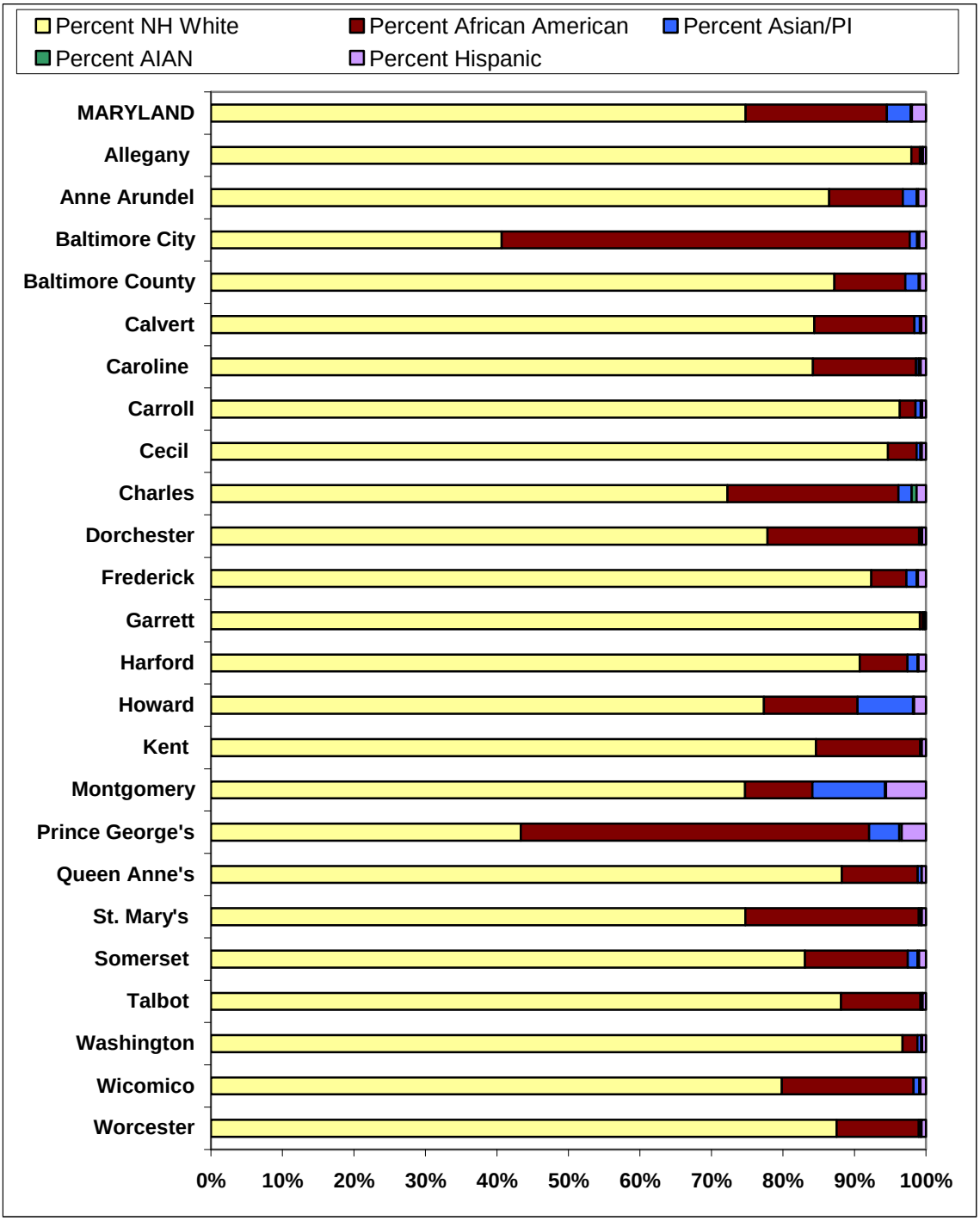
Source: CDC WONDER on-line Database, Bridged-Race Population Estimates, United States, 1990 – 2004.

Figure 55. Race/Ethnicity Distribution of Population Ages 45-64, by Jurisdiction, Maryland 2004



Source: CDC WONDER on-line Database, Bridged-Race Population Estimates, United States, 1990 – 2004.

Figure 56. Race/Ethnicity Distribution of Population Ages 65 and over, by Jurisdiction, Maryland 2004



Source: CDC WONDER on-line Database, Bridged-Race Population Estimates, United States, 1990 – 2004.

Racial composition

Minority Population Estimates, Maryland, July 01, 2005

REGION AND POLITICAL SUBDIVISION	TOTAL	Non-Hispanic White	Minority Population	Percent Minority	Percent African American	Percent Asian/PI	Percent AI/AN	Percent Hispanic
MARYLAND	**5,600,388**	**3,345,777**	**2,254,611**	**40.3%**	**29.9%**	**5.1%**	**0.4%**	**5.7%**
NORTHWEST AREA	**466,144**	**407,591**	**58,553**	**12.6%**	**7.7%**	**2.0%**	**0.2%**	**2.9%**
GARRETT	29,909	29,518	391	1.3%	0.6%	0.2%	0.0%	0.5%
ALLEGANY	73,639	67,971	5,668	7.7%	6.2%	0.6%	0.1%	1.0%
WASHINGTON	141,895	124,491	17,404	12.3%	9.2%	1.2%	0.2%	1.9%
FREDERICK	220,701	185,611	35,090	15.9%	8.2%	3.2%	0.3%	4.6%
BALTIMORE METRO AREA	**2,610,063**	**1,675,932**	**934,131**	**35.8%**	**29.3%**	**3.8%**	**0.3%**	**2.7%**
BALTIMORE CITY	635,815	192,809	443,006	69.7%	65.6%	2.1%	0.4%	2.2%
BALTIMORE COUNTY	786,113	542,504	243,609	31.0%	24.4%	4.1%	0.3%	2.4%
ANNE ARUNDEL	510,878	399,262	111,616	21.8%	15.1%	3.2%	0.4%	3.6%
CARROLL	168,541	158,087	10,454	6.2%	3.1%	1.5%	0.2%	1.5%
HOWARD	269,457	183,240	86,217	32.0%	16.7%	11.4%	0.3%	4.0%
HARFORD	239,259	200,030	39,229	16.4%	12.0%	2.2%	0.3%	2.4%
NATIONAL CAPITAL AREA	**1,773,706**	**687,810**	**1,085,896**	**61.2%**	**40.9%**	**9.2%**	**0.4%**	**12.2%**
MONTGOMERY	927,583	525,146	402,437	43.4%	16.9%	13.8%	0.4%	13.6%
PRINCE GEORGE'S	846,123	162,664	683,459	80.8%	67.3%	4.2%	0.5%	10.7%
SOUTHERN AREA	**323,265**	**232,357**	**90,908**	**28.1%**	**23.2%**	**2.1%**	**0.5%**	**2.6%**
CALVERT	87,925	73,396	14,529	16.5%	13.1%	1.2%	0.3%	2.0%
CHARLES	138,822	81,181	57,641	41.5%	35.4%	2.6%	0.8%	3.1%
SAINT MARY'S	96,518	77,780	18,738	19.4%	14.8%	2.2%	0.4%	2.3%
EASTERN SHORE AREA	**427,210**	**342,087**	**85,123**	**19.9%**	**16.5%**	**1.1%**	**0.3%**	**2.3%**
CECIL	97,796	89,566	8,230	8.4%	5.2%	1.0%	0.3%	2.0%
KENT	19,899	15,915	3,984	20.0%	16.0%	0.9%	0.2%	3.3%
QUEEN ANNE'S	45,612	40,828	4,784	10.5%	8.0%	1.1%	0.2%	1.4%
CAROLINE	31,822	25,809	6,013	18.9%	14.3%	0.5%	0.6%	4.0%
TALBOT	35,683	29,369	6,314	17.7%	14.4%	1.0%	0.2%	2.6%
DORCHESTER	31,401	21,825	9,576	30.5%	27.8%	0.8%	0.2%	1.9%
WICOMICO	90,402	64,371	26,031	28.8%	24.2%	1.8%	0.3%	2.8%
SOMERSET	25,845	14,370	11,475	44.4%	42.0%	0.9%	0.3%	1.8%
WORCESTER	48,750	40,034	8,716	17.9%	15.1%	0.9%	0.2%	1.8%

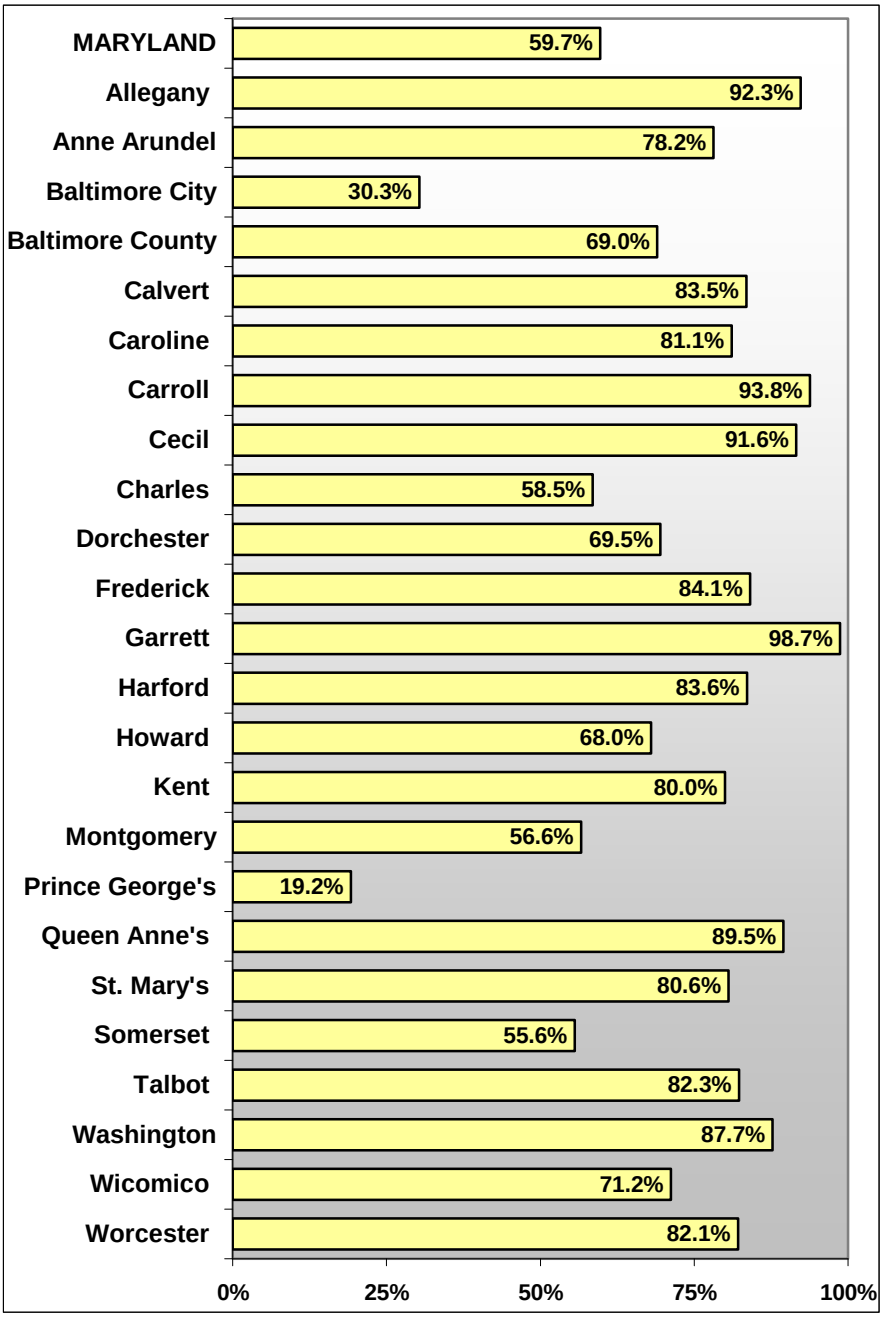
Prepared by the Office of Minority Health and Health Disparities, DHMH, 01/2007.
Source: Division of Health Statistics, Vital Statistics Administration, DHMH.

Non-Hispanic White population

Figure 57 shows the distribution of the Non-Hispanic White population within each jurisdiction.

- Garrett County is the jurisdiction with the largest proportion of its population that is Non-Hispanic White.
- Of all jurisdictions, Prince George's has the smallest proportion of its population that is Non-Hispanic White.

Figure 57. Percent Non-Hispanic White Population by Jurisdiction, Maryland 2005



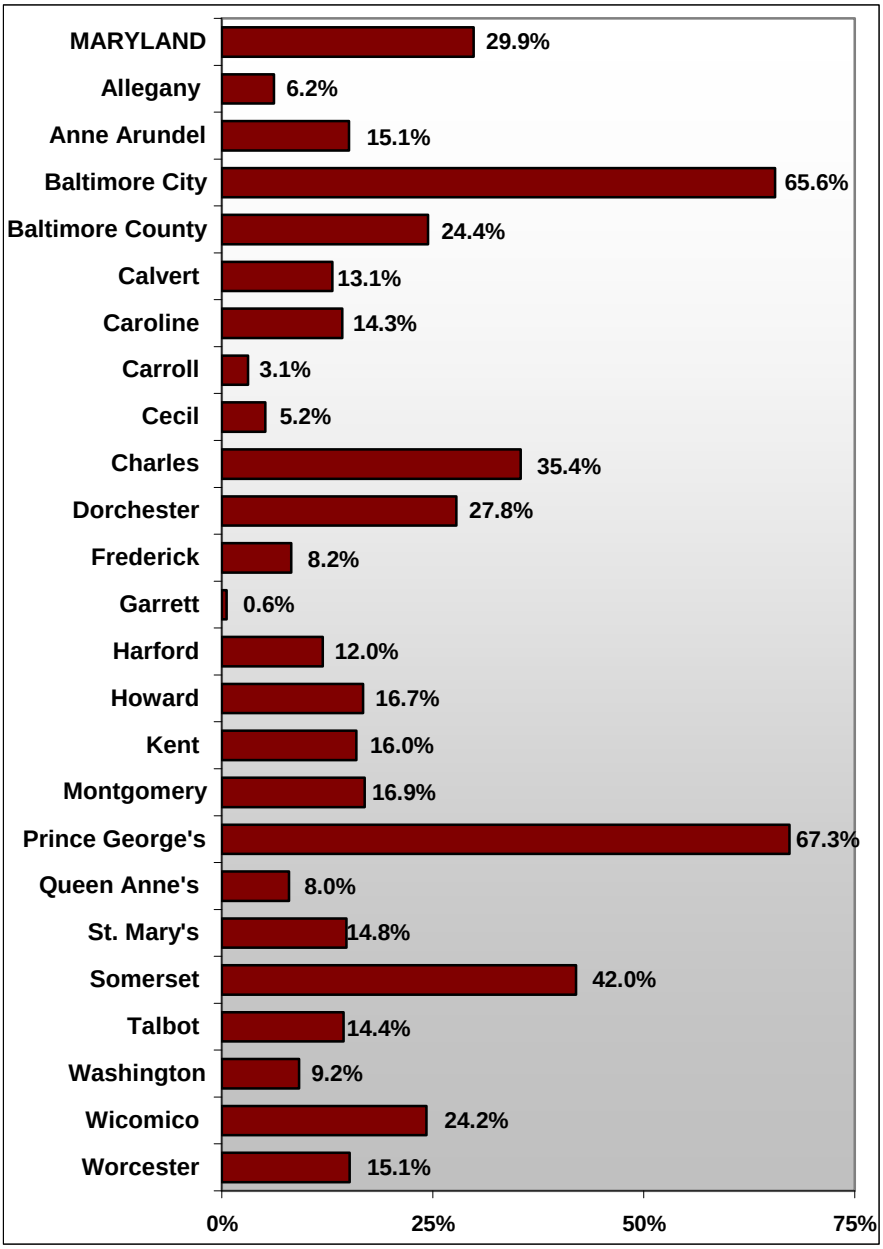
Source: Maryland Vital Statistics Annual Report 2005 [6].

African American Population

Figure 58 shows the distribution of the African American population within each jurisdiction.

- The two jurisdictions where the largest proportion of their populations is African American are Baltimore City and Prince George's County. These are the only two jurisdictions with an African American population that is over 50%.
- Of all jurisdictions, Garrett County has the smallest proportion of its population that is African American.

Figure 58. Percent African American Population by Jurisdiction, Maryland 2005



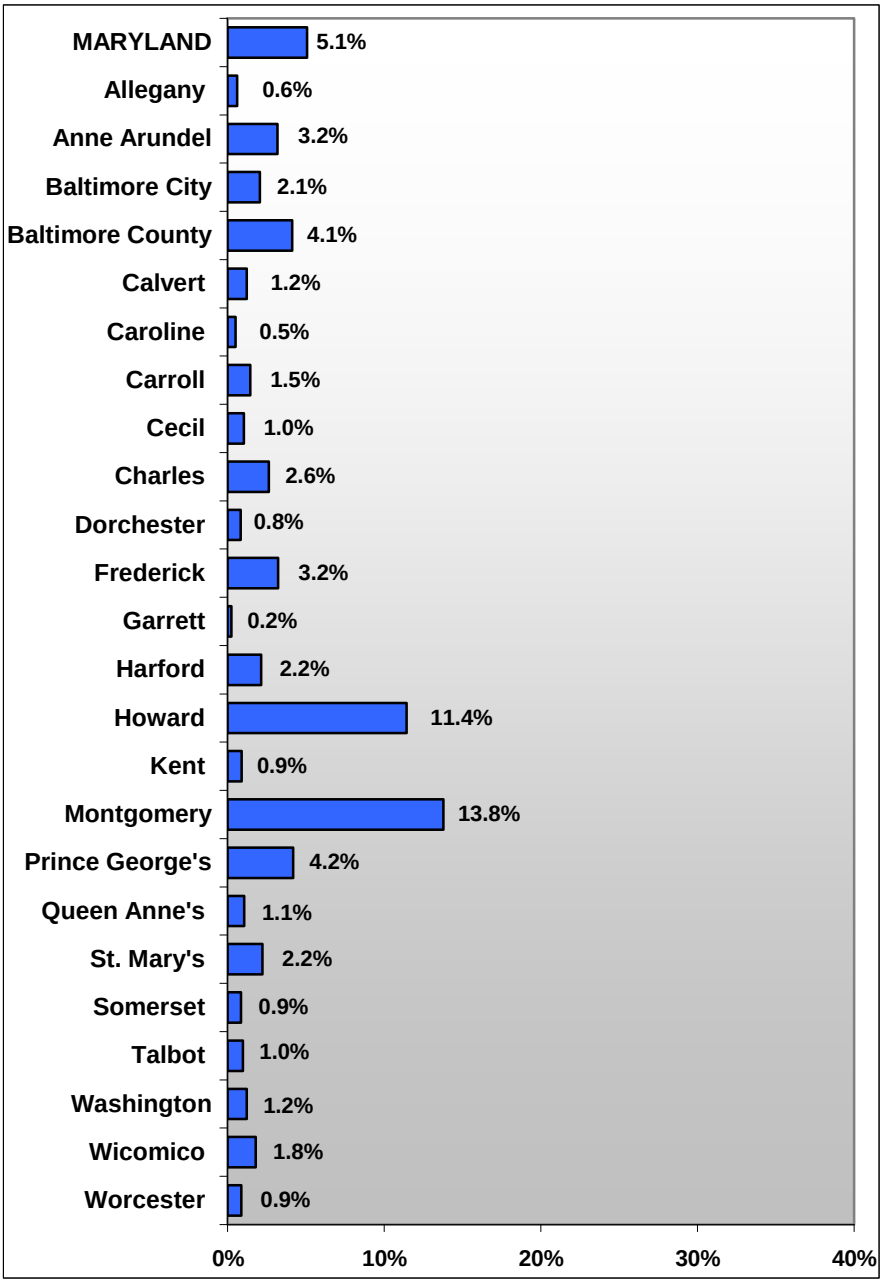
Source: Maryland Vital Statistics Annual Report 2005 [6].

Asian and Pacific Islander Population

Figure 59 shows the distribution of the Asian and Pacific Islander population within each jurisdiction.

- The jurisdiction with the largest proportion of its population that is Asian/Pacific Islander is Montgomery County, followed by Howard County.
- Of all jurisdictions, Garrett County has the smallest proportion of its population that is Asian/Pacific Islander.

Figure 59. Percent Asian/Pacific Islander Population by Jurisdiction, Maryland 2005



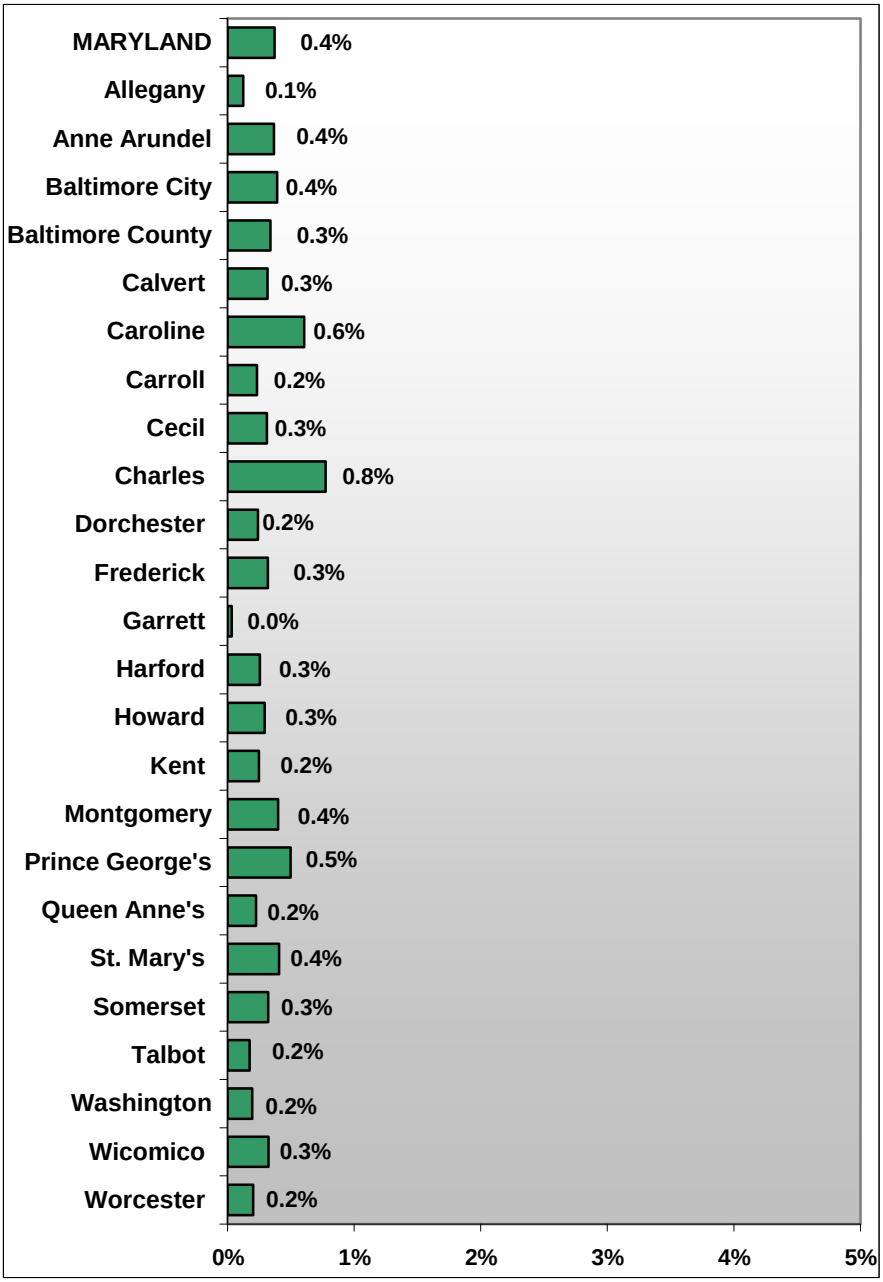
Source: Maryland Vital Statistics Annual Report 2005 [6].

American Indian or Alaskan Native population

Figure 60 shows the distribution of the American Indian and Alaskan Native population within each jurisdiction.

- Of all jurisdictions, Charles County has the largest proportion of its population that is American Indian/Alaskan Native.
- Garrett and Allegany counties have the smallest proportions of their populations that are American Indian/Alaskan Native.

Figure 60. Percent American Indian/Alaskan Native Population by Jurisdiction, Maryland 2005



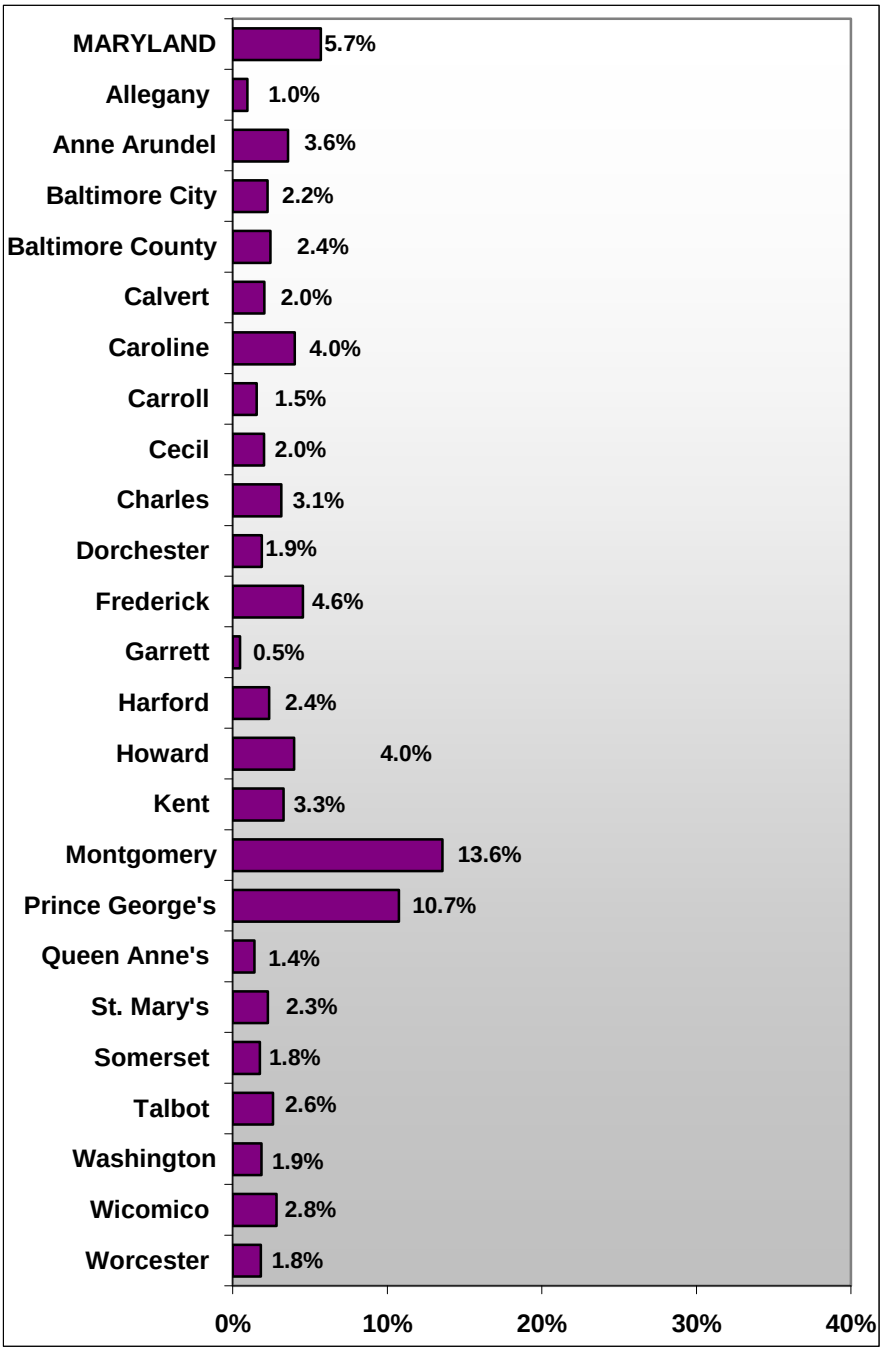
Source: Maryland Vital Statistics Annual Report 2005 [6].

Hispanic population

Figure 61 shows the distribution of the Hispanic population within each jurisdiction.

- Of all jurisdictions, Montgomery and Prince George's counties have the largest proportion of their populations that are Hispanic.
- Garrett has the smallest proportion of its population that is Hispanic.

Figure 61. Percent Hispanic Population by Jurisdiction, Maryland 2005



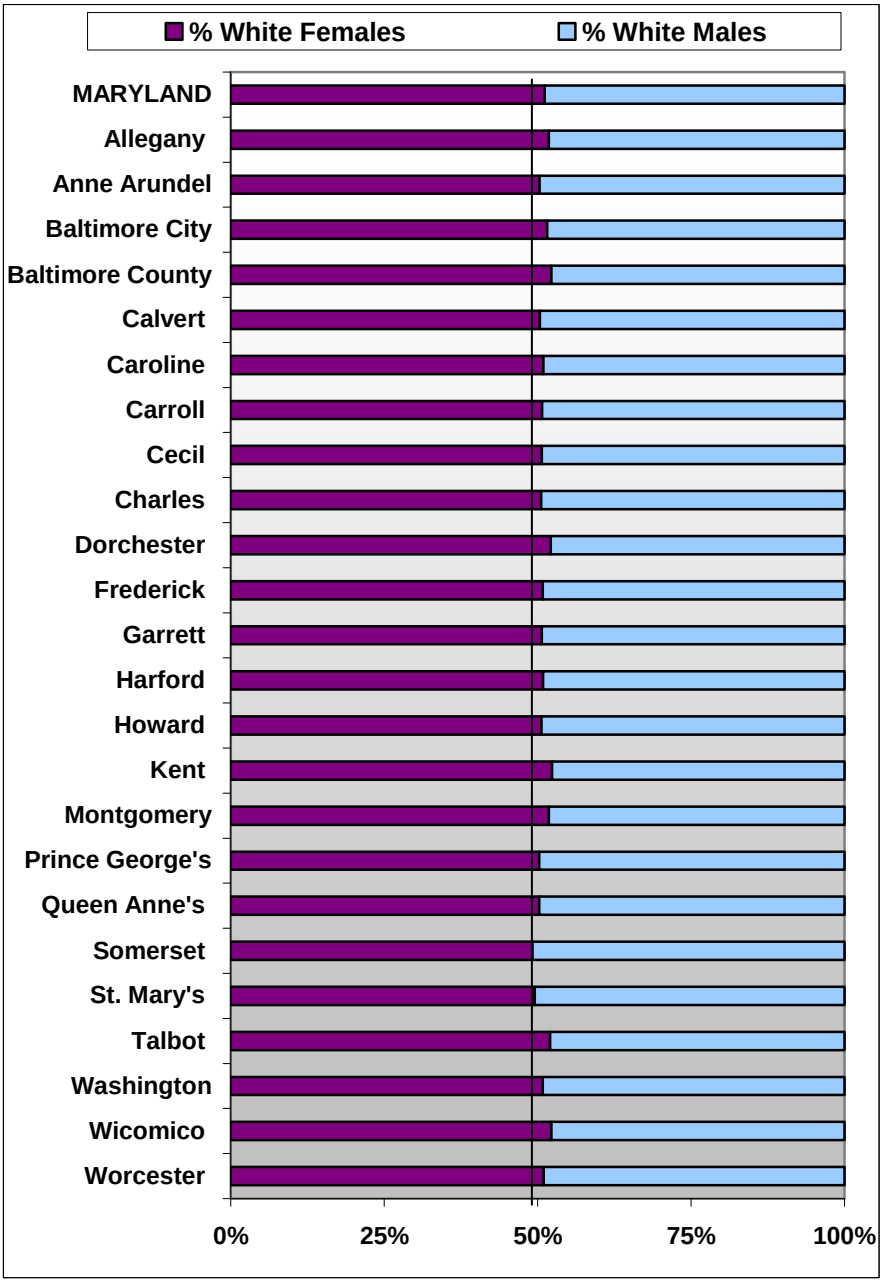
Source: Maryland Vital Statistics Annual Report 2005 [6].

Gender

This section displays charts on the gender distribution of each race and ethnic group by jurisdiction. In general, females in Maryland have a slight majority over males within every race and ethnic group, except Hispanics.

The distribution of Non-Hispanic White females and males is about equal in all Maryland jurisdictions (Figure 62).

Figure 62. Gender Distribution in Non-Hispanic Whites, by Jurisdiction, Maryland 2004



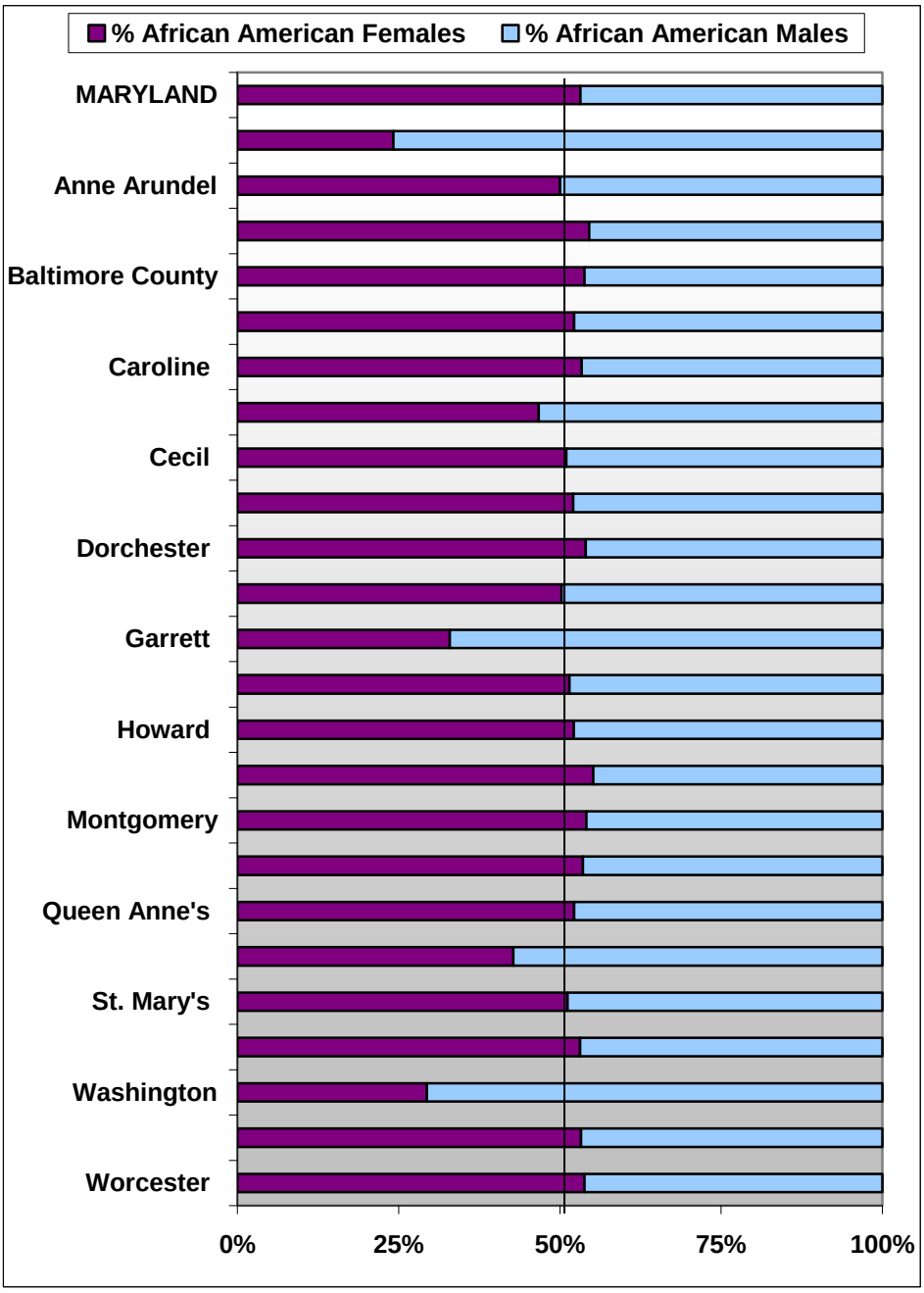
Source: CDC Wonder on-line Database, Bridged-Race Population Estimates (Vintage 2004)

African American population

Figure 63 shows the distribution of females and males in the African American populations within each jurisdiction.

- Statewide, Maryland has slightly more female African Americans than male. However, in Allegany, Garrett, and Washington counties over 65% of their African American populations are male.

Figure 63. Gender Distribution among African Americans, by Jurisdiction, Maryland 2004



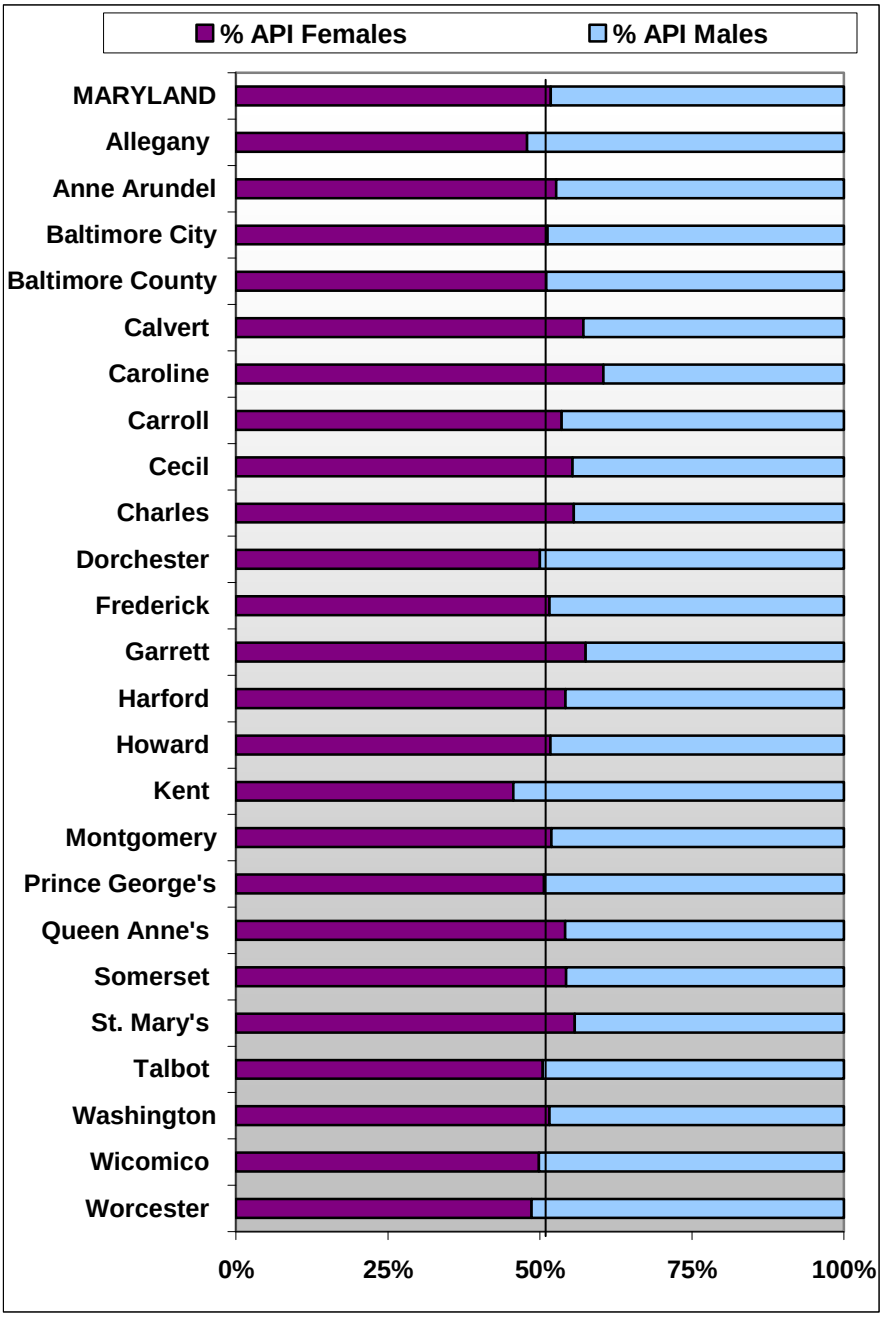
Source: CDC Wonder on-line Database, Bridged-Race Population Estimates (Vintage 2004)

Asian/Pacific Islander Population

Figure 64 shows the gender distribution among Asian/Pacific Islanders by jurisdiction.

- The jurisdiction with the largest proportion of its Asian/PI population that is female is Caroline County (60.5%).
- Kent County has the largest proportion of its API population that is male (54.4%).

Figure 64. Gender Distribution among Asian/Pacific Islanders, by Jurisdiction, Maryland 2004



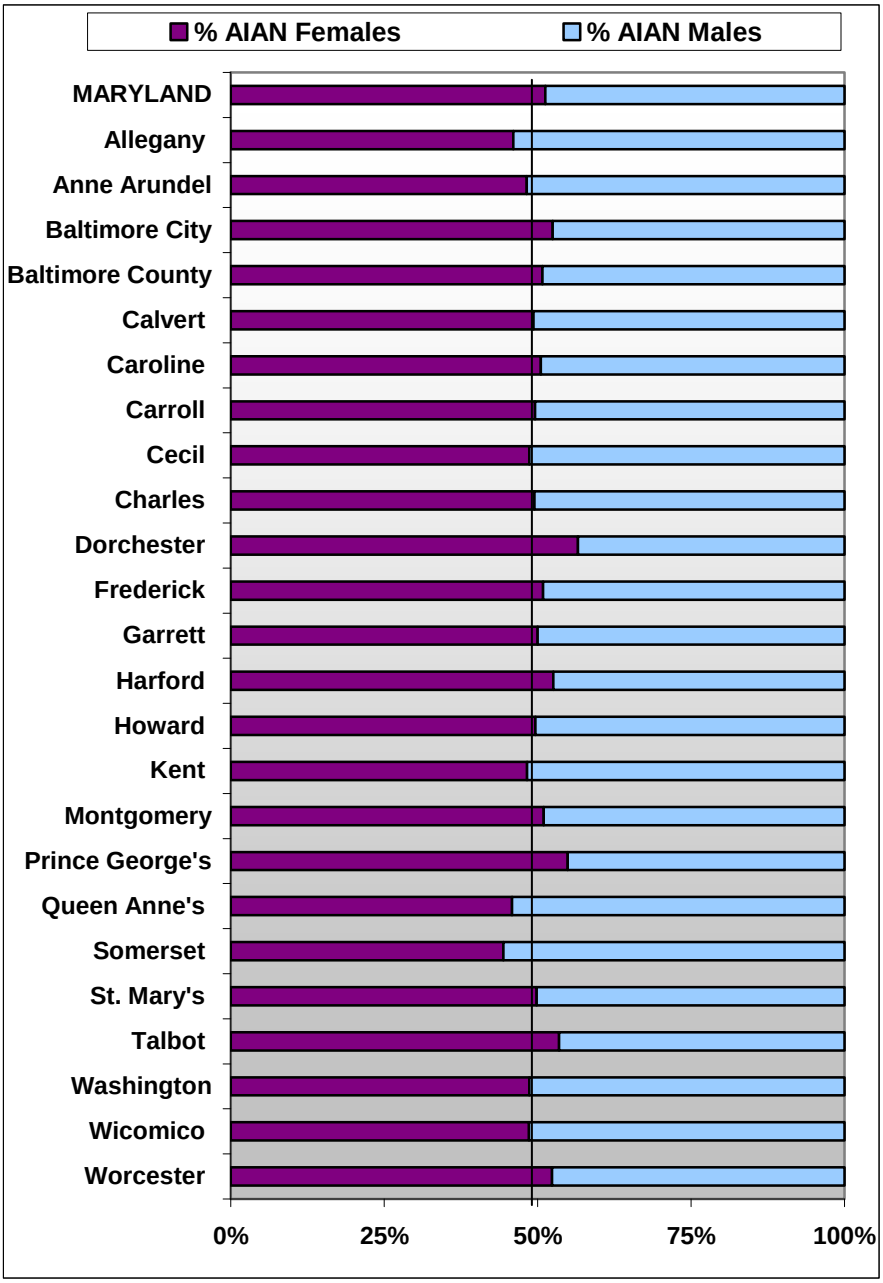
Source: CDC Wonder on-line Database, Bridged-Race Population Estimates (Vintage 2004)

American Indian/Alaskan Native population

Figure 65 displays the proportion of females and males among the American Indian/Alaskan Native population within jurisdictions.

- Of all jurisdictions, Dorchester County has the largest percent of its AI/AN population that is female (56.6%).
- Somerset County has the largest percent of its AI/AN population that is male (55.6%).

Figure 65. Gender Distribution among American Indian/Alaskan Native, by Jurisdiction, Maryland 2004



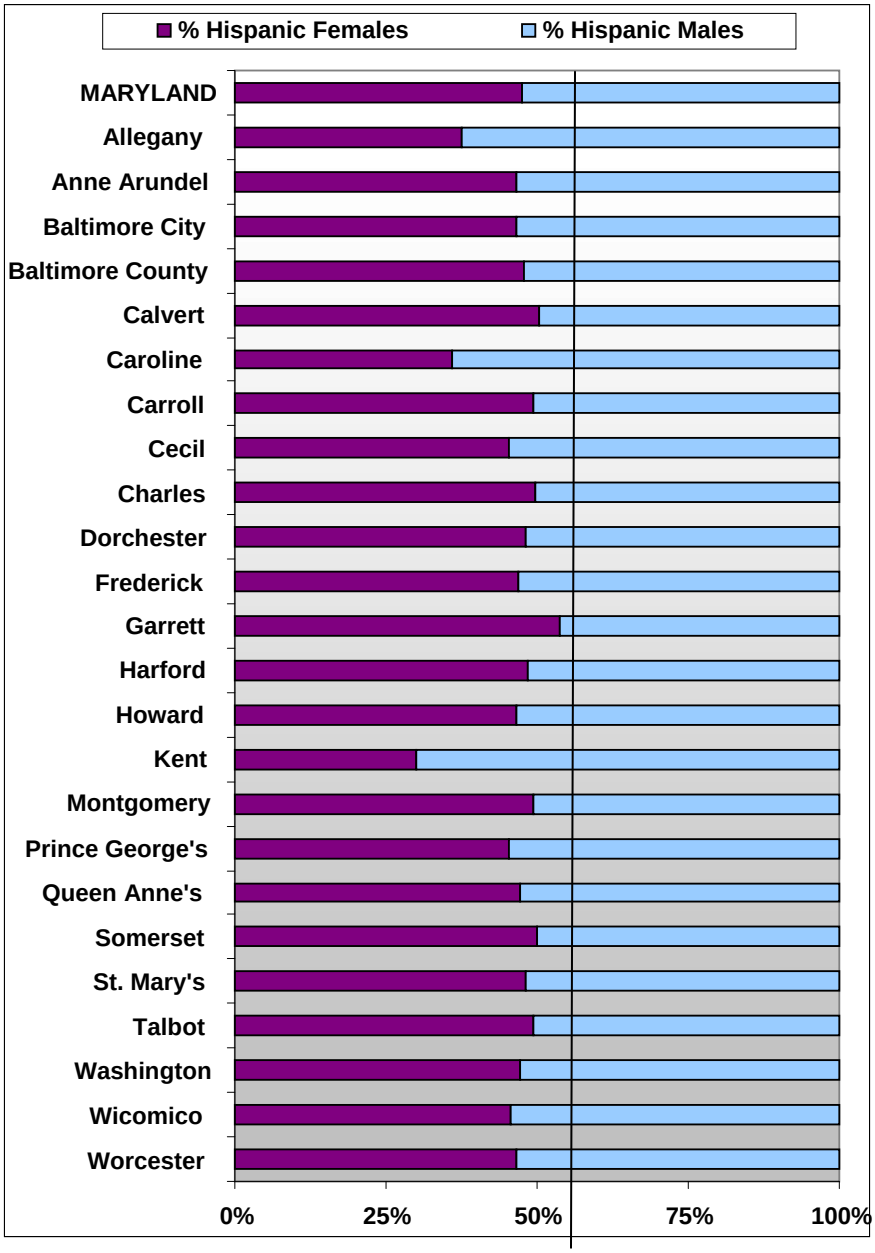
Source: CDC Wonder on-line Database, Bridged-Race Population Estimates (Vintage 2004)

Hispanic population

Figure 66 shows the gender distribution of the Hispanic population by jurisdiction.

- Hispanics are the only race/ethnic group that has an average of more males than females.
- Garrett County has the largest proportion of its Hispanic population that is female (54%).
- Kent County has the largest proportion of its Hispanic population that is male (70%) and Caroline and Allegany counties have over 60% of their Hispanic populations that are male.

Figure 66. Gender Distribution among Hispanics, by Jurisdiction, Maryland 2004



Source: CDC Wonder on-line Database, Bridged-Race Population Estimates (Vintage 2004)

Mortality data by Jurisdiction

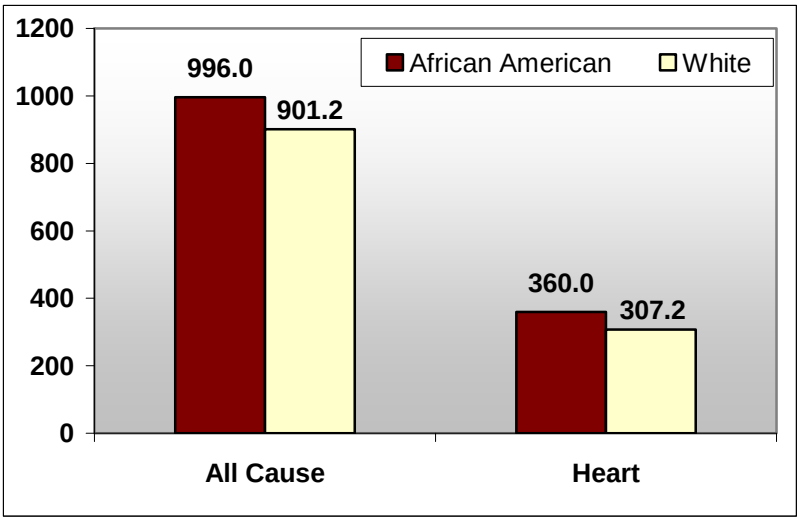
The following section presents age-adjusted mortality rates for the top eight causes of death for African Americans and Whites by each jurisdiction. In some jurisdictions, all eight causes of death were not included due to insufficient data. Furthermore, only data for African Americans and Whites is presented due to insufficient data on other racial and ethnic groups.

Figure 67 shows age-adjusted mortality rates for Allegany County combining data from 1999 to 2003.

- African Americans in Allegany County have 1.1 times the all-cause mortality rate compared to Whites, and 1.2 times the mortality rate for diseases of the heart.

Allegany County

Figure 67. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Allegany County, Maryland 1999-2003 Combined



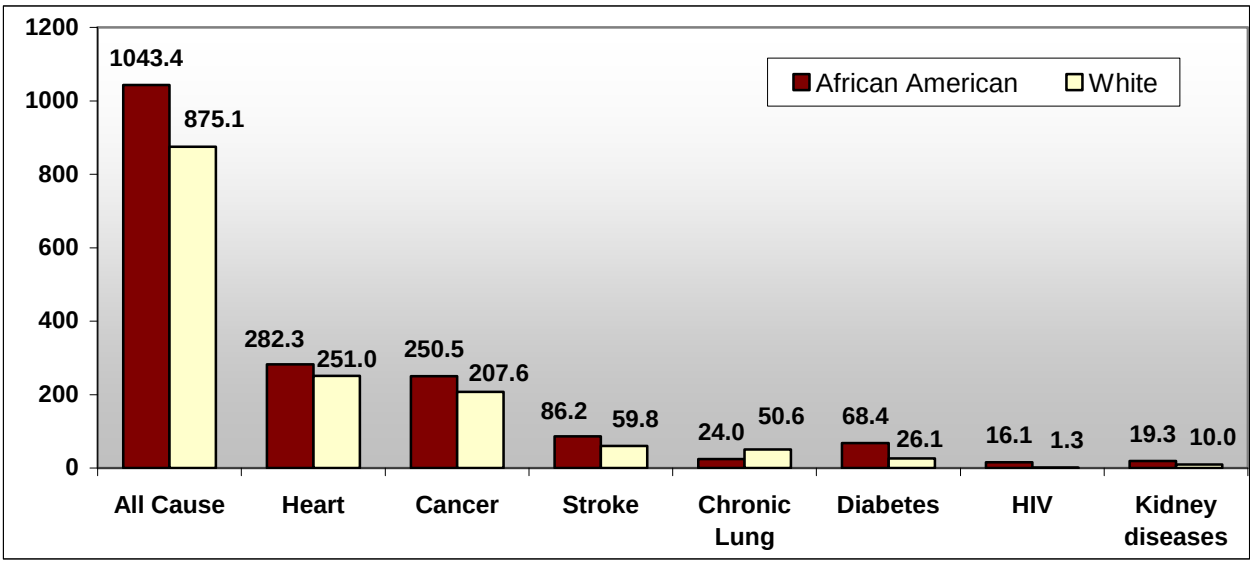
Notes: Additional causes of death were not included due to insufficient data.
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Anne Arundel County

Figure 68 shows age-adjusted mortality rates for Anne Arundel County. Key findings include:

- African Americans in Anne Arundel County have higher rates of mortality for six of the seven causes of death and all-cause mortality than Whites (exception is chronic lung disease).
- The mortality ratio disparity is greatest with HIV and diabetes, where African Americans have 12.4 times the HIV death rate and 2.6 times the diabetes death rate compared to Whites.

Figure 68. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Anne Arundel County, Maryland 1999-2003 Combined



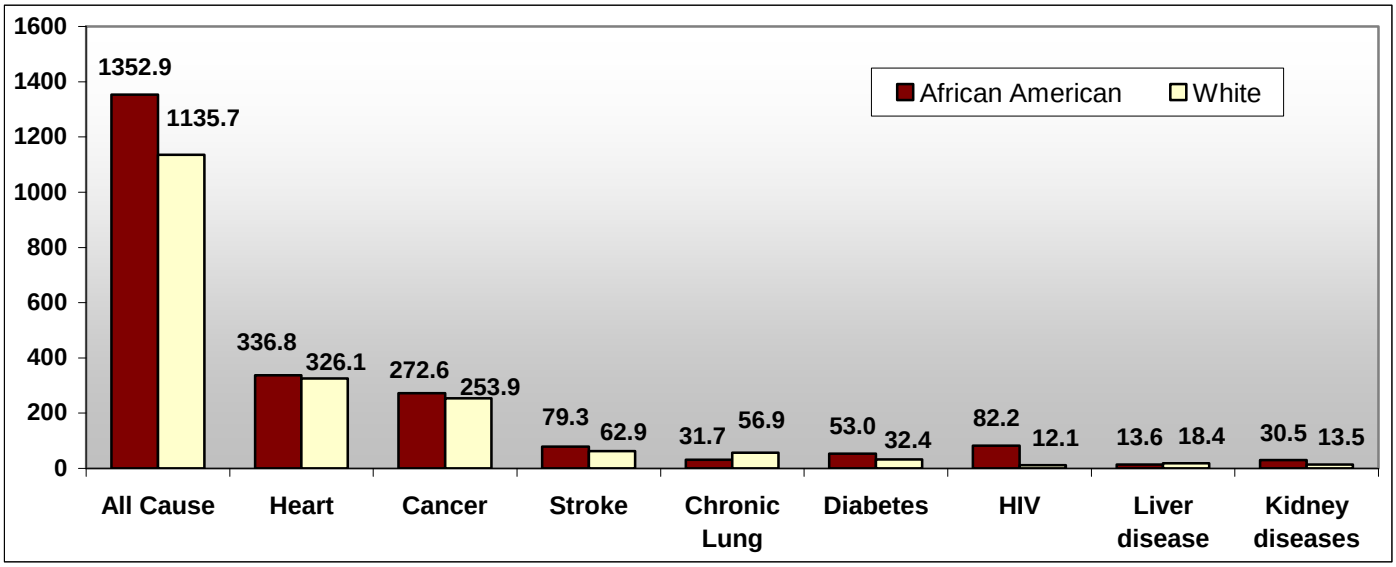
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Baltimore City

Figure 69 shows age-adjusted mortality rates for Baltimore City. Key findings include:

- African Americans in Baltimore City have higher rates of mortality for six of the eight top causes of death and all-cause mortality than Whites (exceptions are chronic lung disease and liver disease).
- The largest mortality ratio disparities for African Americans are seen with HIV, 6.8 times the White rate; and kidney disease, 2.3 times the White rate.

Figure 69. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Baltimore City, Maryland 1999-2003 Combined



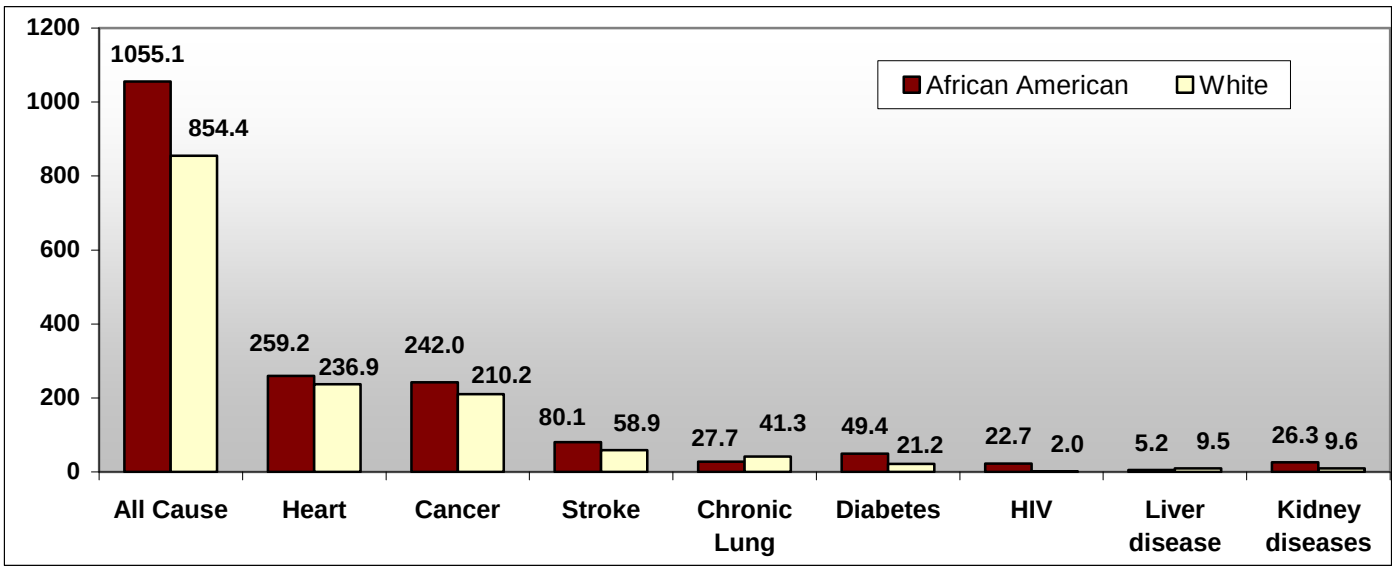
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Baltimore County

Figure 70 shows age-adjusted mortality rates for Baltimore County. Key findings include:

- African Americans in Baltimore County have higher rates of mortality for six of the eight top causes of death and all-cause mortality than Whites (exceptions are chronic lung disease and liver disease).
- The mortality ratio disparity is greatest with HIV, kidney disease and diabetes, where African Americans have 11.4 times the HIV death rate, 2.8 times the kidney disease death rate and 2.3 times the diabetes death rate compared to Whites.

Figure 70. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Baltimore County, Maryland 1999-2003 Combined



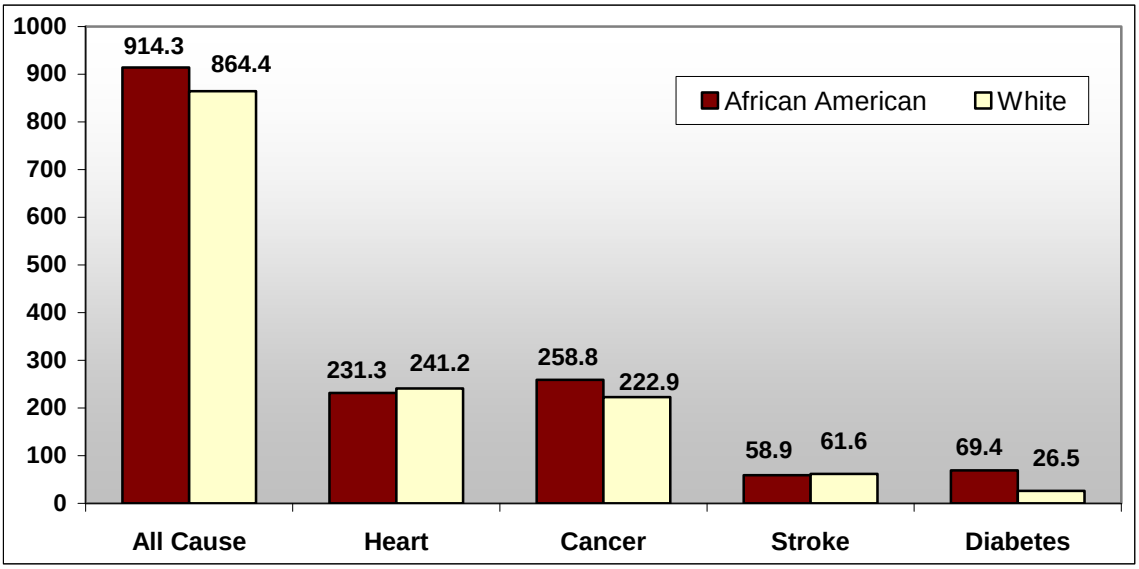
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Calvert County

Figure 71 shows age-adjusted mortality rates for Calvert County. Key findings include:

- African Americans in Calvert County have higher rates of mortality for two of the four causes of death and all-cause mortality than Whites (exceptions are diseases of the heart and stroke).
- Whites have 9.9 excess deaths (per 100,000) from heart disease and 2.7 excess deaths (per 100,000) from stroke compared to African Americans.
- The mortality disparity for African Americans is greatest for diabetes, where African Americans have 2.6 times the rate and 42.9 excess deaths (per 100,000) compared to Whites.

Figure 71. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Calvert County, Maryland 1999-2003 Combined



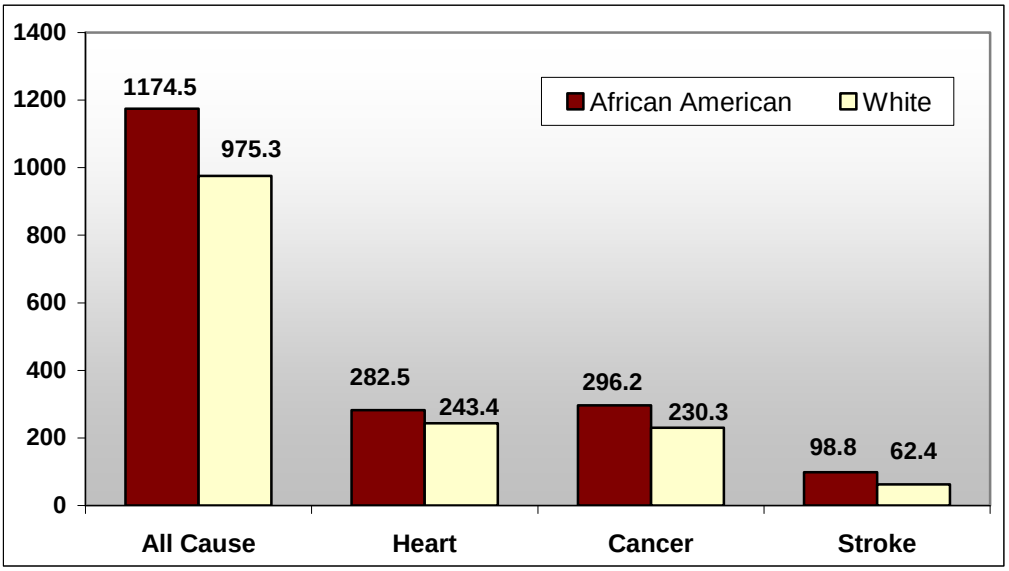
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Caroline County

Figure 72 shows age-adjusted mortality rates for Caroline County. Key findings include:

- African Americans in Caroline County have higher rates of mortality for the top three causes of death and all-cause mortality than Whites.
- The greatest mortality ratio disparity for African Americans compared to Whites is for stroke. African Americans have 60% more deaths from stroke than Whites.

Figure 72. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Caroline County, Maryland 1999-2003 Combined



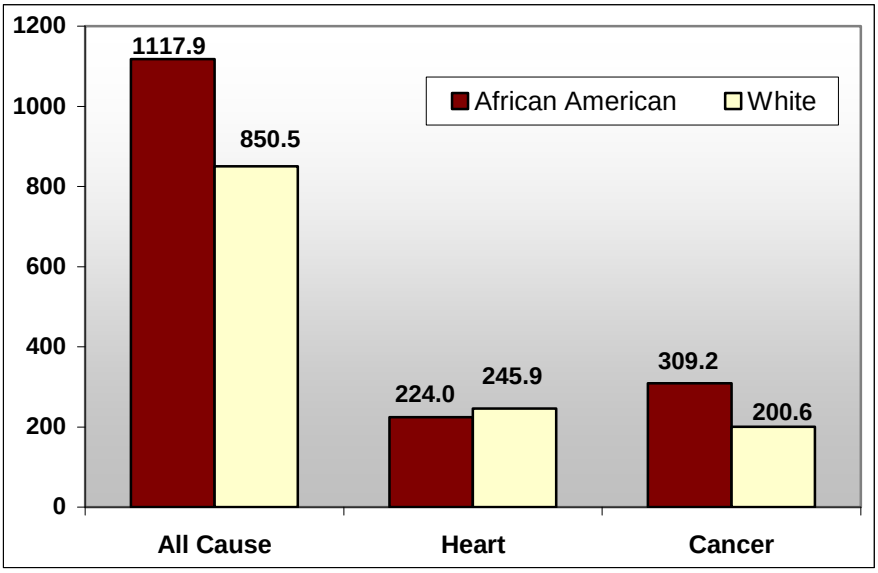
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Carroll County

Figure 73 shows age-adjusted mortality rates for Carroll County.

- African Americans have higher mortality rates than Whites for all-cause mortality and cancer death rates. Whites have higher mortality for diseases of the heart compared to African Americans.
- Cancer mortality is 50% higher for African Americans than for Whites.

Figure 73. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Carroll County, Maryland 1999-2003 Combined



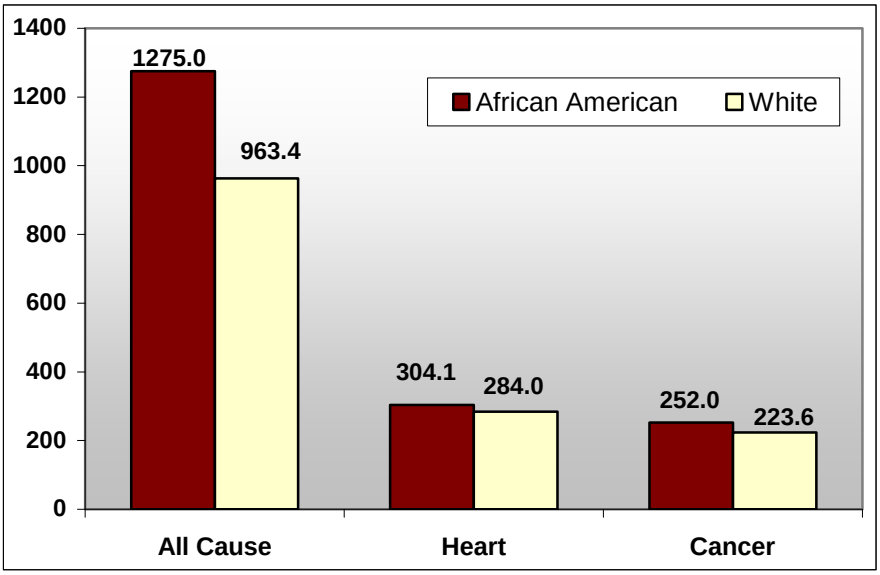
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Cecil County

Figure 74 shows age-adjusted mortality rates for Cecil County.

- African Americans in Cecil have higher rates of mortality for the top two causes of death and for all-cause mortality than Whites.

Figure 74. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Cecil County, Maryland 1999-2003 Combined



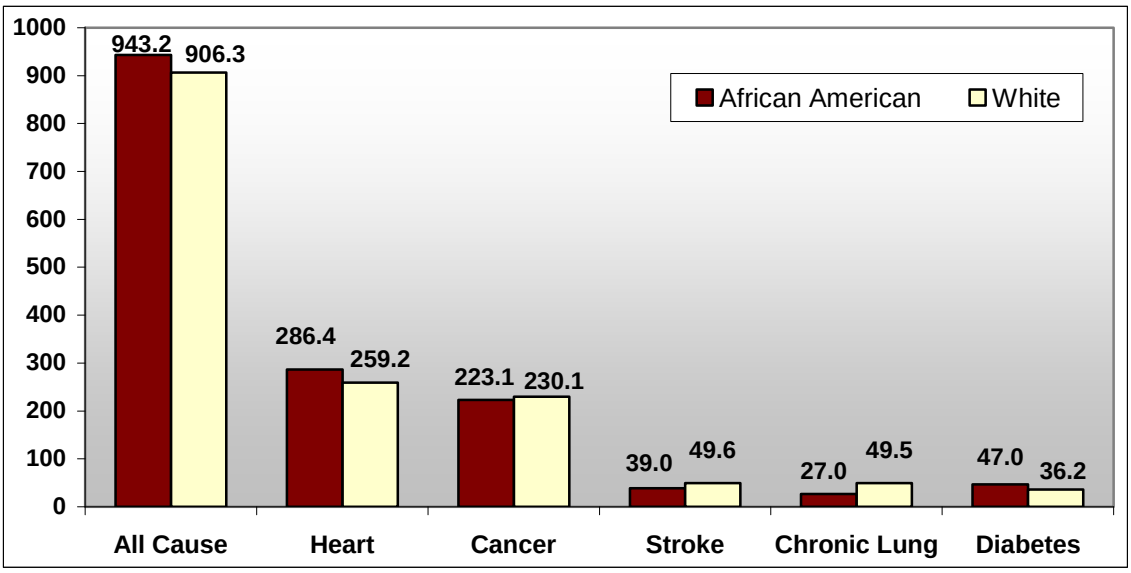
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Charles County

Figure 75 shows age-adjusted mortality rates for Charles County. Key findings include:

- African Americans in Charles County have higher rates of mortality than Whites for all-cause mortality and two of the top five causes of death (diseases of the heart and diabetes).
- The greatest mortality ratio disparity for African Americans compared to Whites is with diabetes, where African Americans have a 30% higher death rate than Whites.

Figure 75. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Charles County, Maryland 1999-2003 Combined



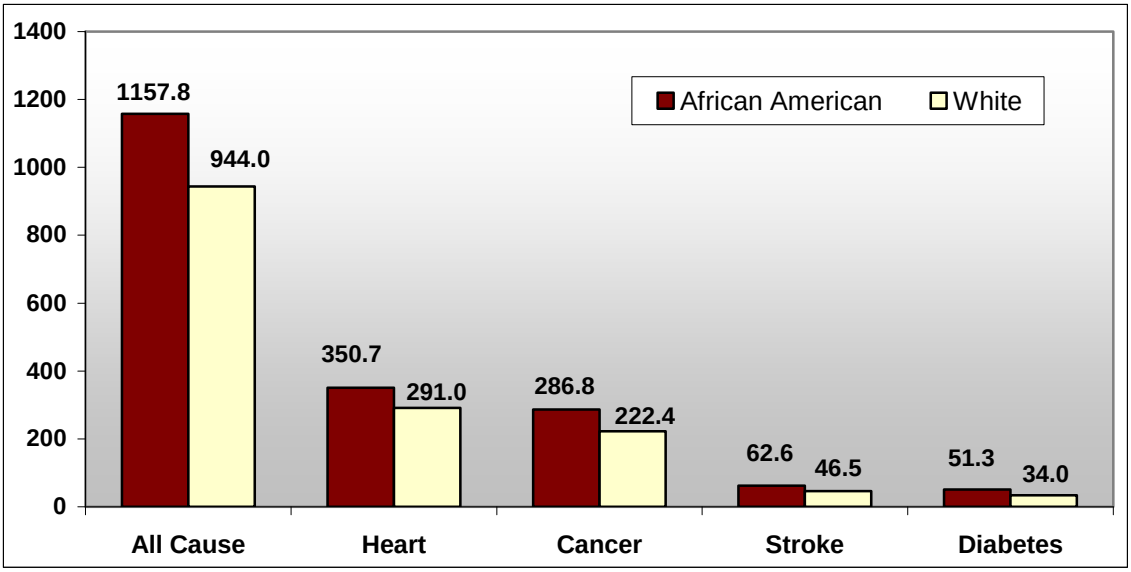
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Dorchester County

Figure 76 shows age-adjusted mortality rates for Dorchester County. Key findings include:

- African Americans in Dorchester have higher rates of mortality than Whites for all-cause mortality and the top four causes of death.
- The greatest mortality ratio disparity for African Americans compared to Whites is with diabetes, where African Americans have a 50% higher death rate than Whites.

Figure 76. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Dorchester County, Maryland 1999-2003 Combined



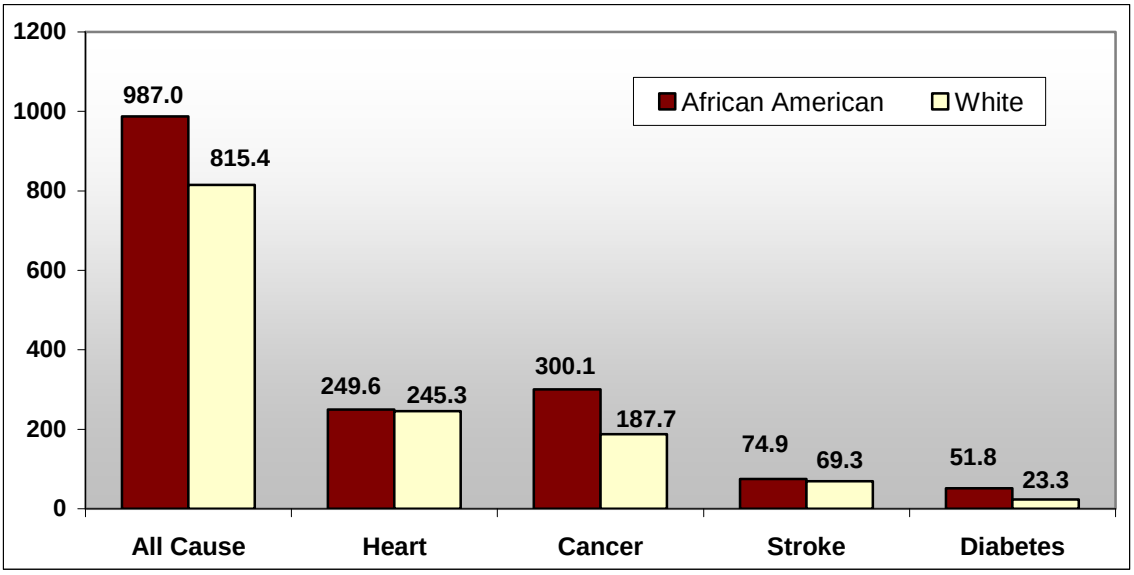
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Frederick County

Figure 77 shows age-adjusted mortality rates for Frederick County. Key findings include:

- African Americans in Frederick County have higher rates of mortality than Whites for all-cause mortality and the top four causes of death.
- The mortality ratio disparity for African Americans is greatest for diabetes, where African Americans have 2.2 times the death rate compared to Whites.

Figure 77. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Frederick County, Maryland 1999-2003 Combined



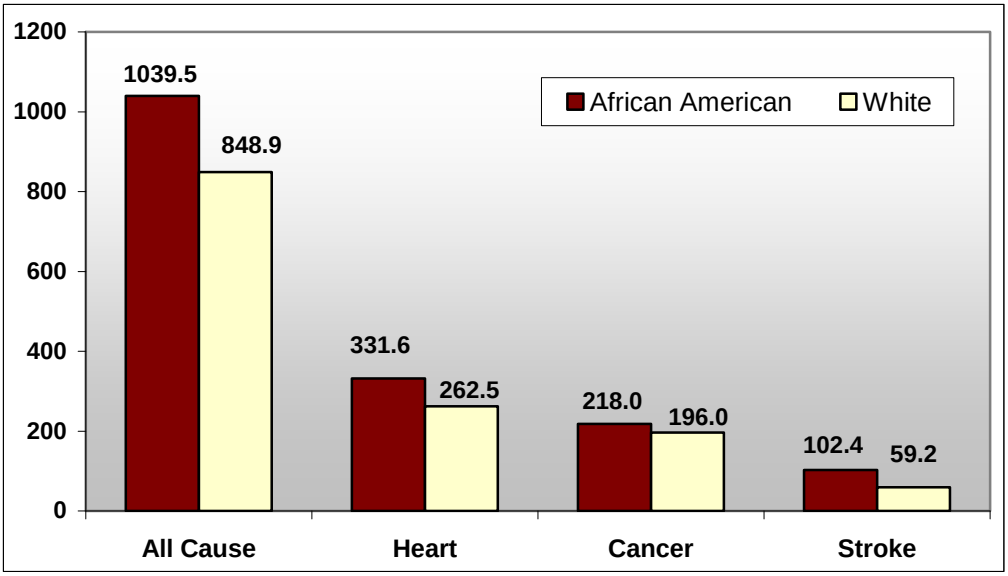
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Harford County

Figure 78 shows age-adjusted mortality rates for Harford County. Key findings include:

- African Americans in Harford County have higher rates of mortality than Whites for all-cause mortality and the top three causes of death.
- The greatest mortality ratio disparity for African Americans compared to Whites is for stroke, where African Americans have a 70% higher death rate than Whites.

Figure 78. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Harford County, Maryland 1999-2003 Combined



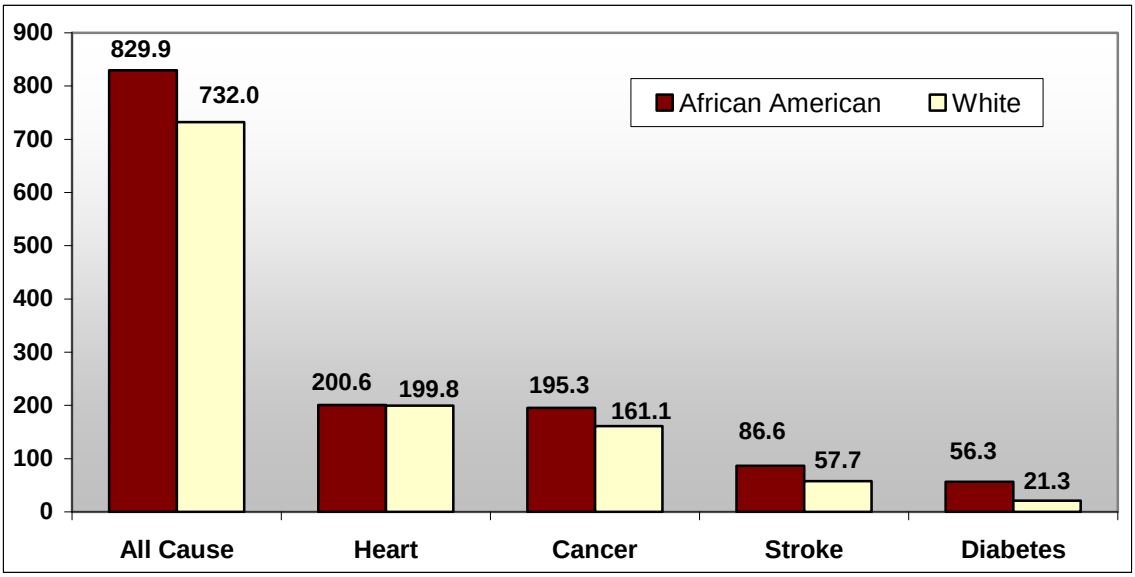
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Howard County

Figure 79 shows age-adjusted mortality rates for Howard County. Key findings include:

- African Americans in Howard County have higher rates of mortality than Whites for all-cause mortality and the top four causes of death.
- The greatest mortality ratio disparity for African Americans compared to Whites is with diabetes, where African Americans have 2.6 times the rate of death of Whites.

Figure 79. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Howard County, Maryland 1999-2003 Combined



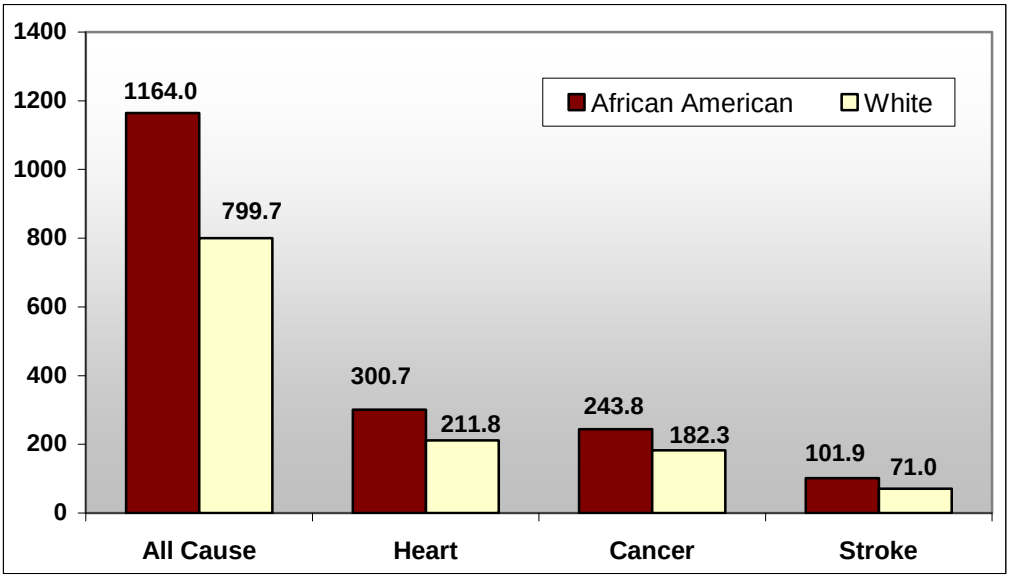
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Kent County

Figure 80 shows age-adjusted mortality rates for Kent County. Key findings include:

- African Americans in Kent have higher rates of mortality than Whites for all-cause mortality and the top three causes of death.
- African Americans have 40% higher death rates from diseases of the heart and from stroke compared to Whites.

Figure 80. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Kent County, Maryland 1999-2003 Combined



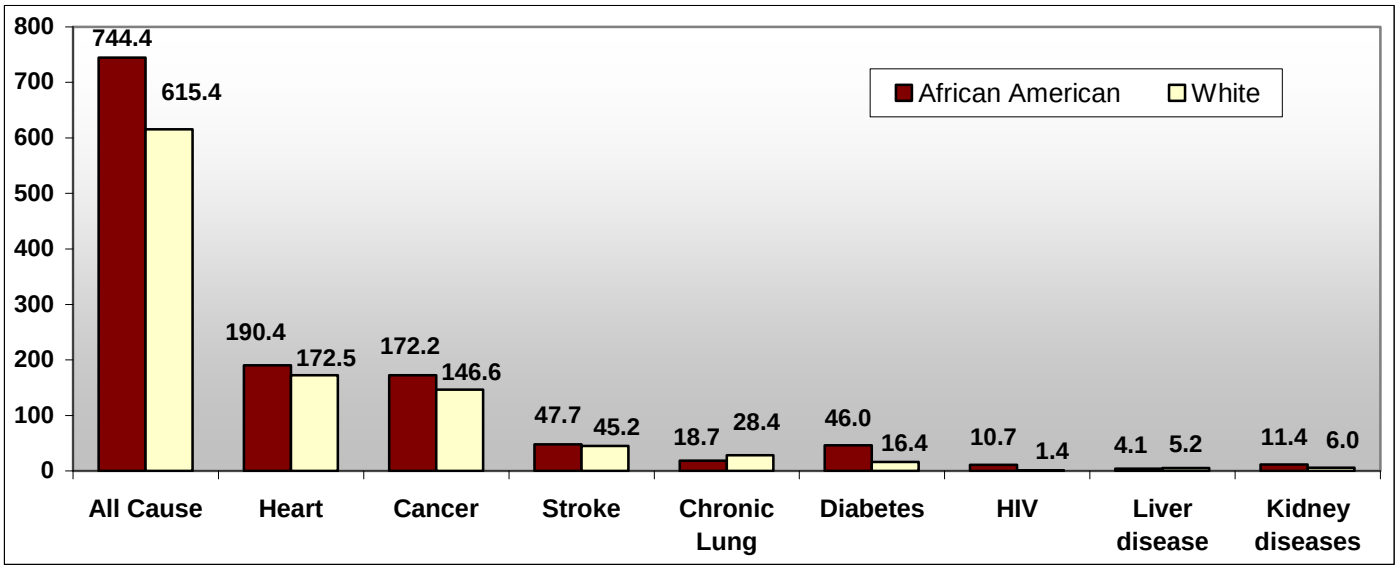
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Montgomery County

Figure 81 shows age-adjusted mortality rates for Montgomery County. Key findings include:

- African Americans in Montgomery County have higher rates of mortality than Whites for all-cause mortality and six of the top eight causes of death (exceptions are chronic lung and liver disease).
- The mortality ratio disparity is greatest with HIV and diabetes, where African Americans have 7.6 times the HIV death rate and 2.8 times the diabetes death rate of Whites.

Figure 81. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Montgomery County, Maryland 1999-2003 Combined



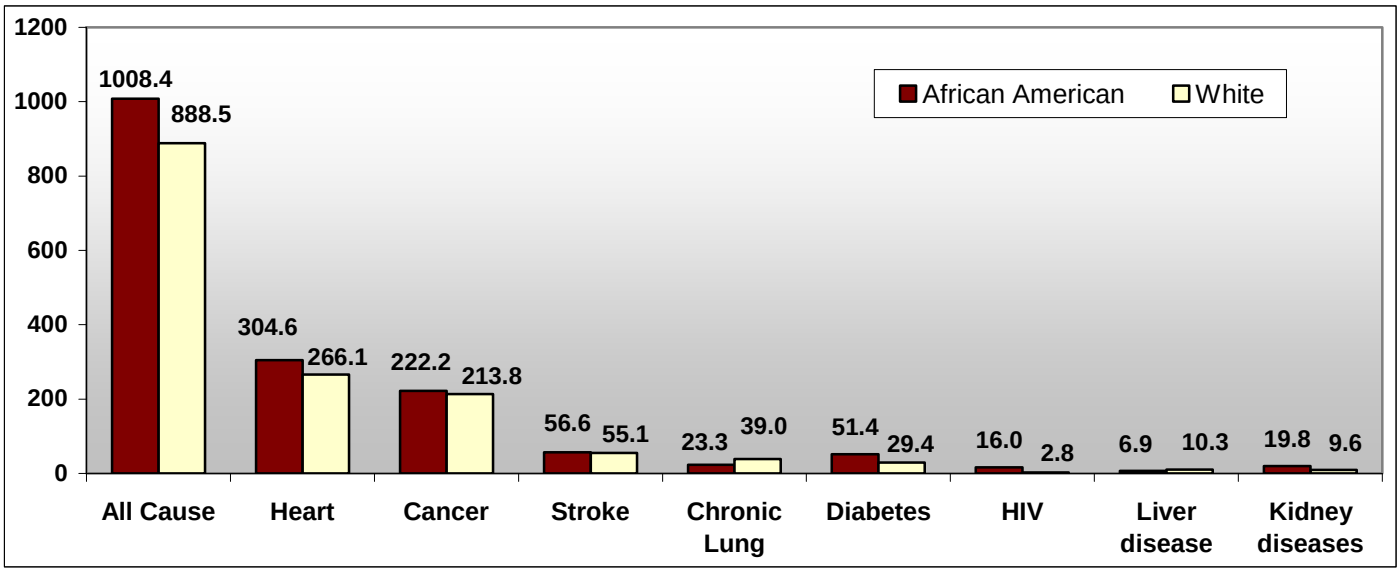
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Prince George's County

Figure 82 shows age-adjusted mortality rates for Prince George's County. Key findings include:

- African Americans in Prince George's County have higher rates of mortality than Whites for all-cause mortality and six of the top eight causes of death (exceptions are chronic lung and liver disease).
- The mortality ratio disparity is greatest with HIV and kidney disease, where African Americans have 5.7 times the HIV death rate and 2.1 times the kidney disease death rate of Whites.

Figure 82. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Prince George's County, Maryland 1999-2003 Combined



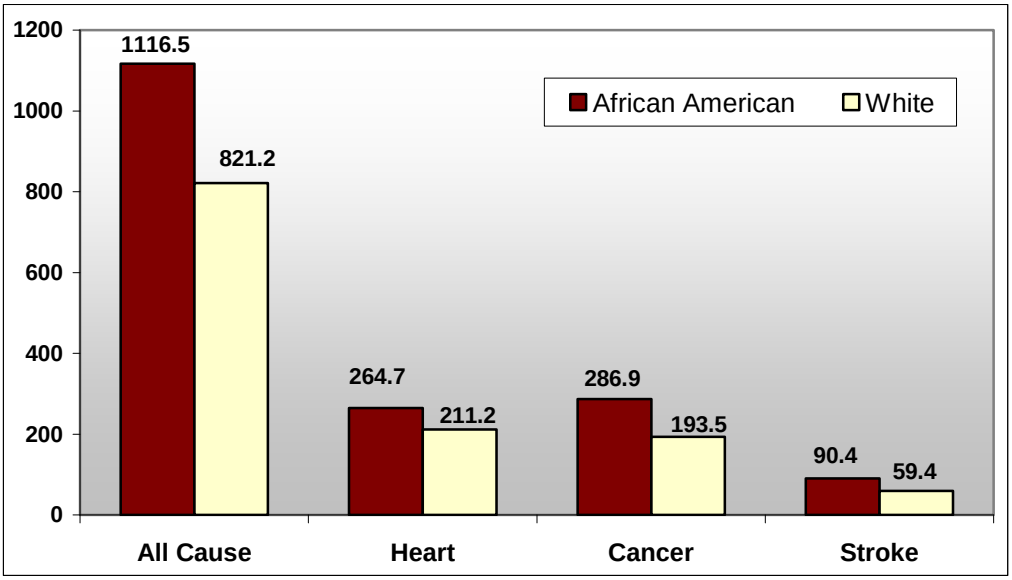
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Queen Anne's County

Figure 83 shows age-adjusted mortality rates for Queen Anne's County. Key findings include:

- African Americans in Queen Anne's County have higher rates of mortality than Whites for all-cause mortality and the top three causes of death.
- The greatest mortality ratio disparity for African Americans compared to Whites is with cancer and stroke, where African Americans have 50% higher mortality rates than Whites.

Figure 83. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Queen Anne's County, Maryland 1999-2003 Combined



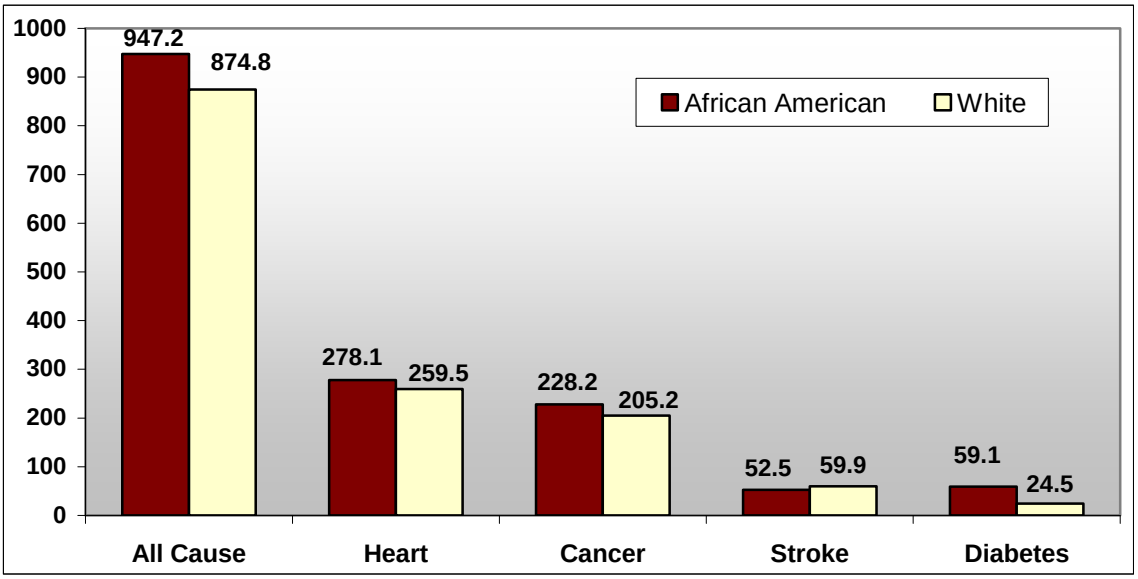
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

St. Mary's County

Figure 84 shows age-adjusted mortality rates for St. Mary's County. Key findings include:

- African Americans in St. Mary's County have higher rates of mortality than Whites for all-cause mortality and three of the top four causes of death (exception is stroke).
- The greatest mortality ratio disparity for African Americans compared to Whites is with diabetes, where African Americans have 2.4 times the rate of deaths compared to Whites.

Figure 84. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, St. Mary's County, Maryland 1999-2003 Combined



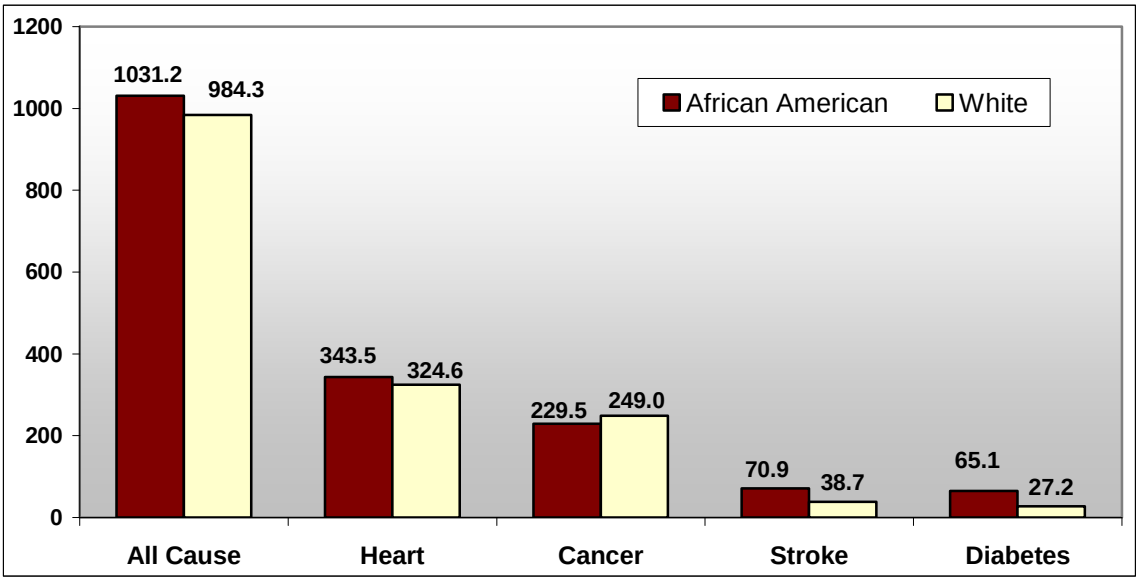
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Somerset County

Figure 85 shows age-adjusted mortality rates for Somerset County. Key findings include:

- African Americans in Somerset County have higher rates of mortality than Whites for all-cause mortality and three of the top four causes of death (exception is cancer).
- The greatest mortality ratio disparity for African Americans compared to Whites is with diabetes, where African Americans have 2.4 times the rate of death compared to Whites.

Figure 85. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Somerset County, Maryland 1999-2003 Combined



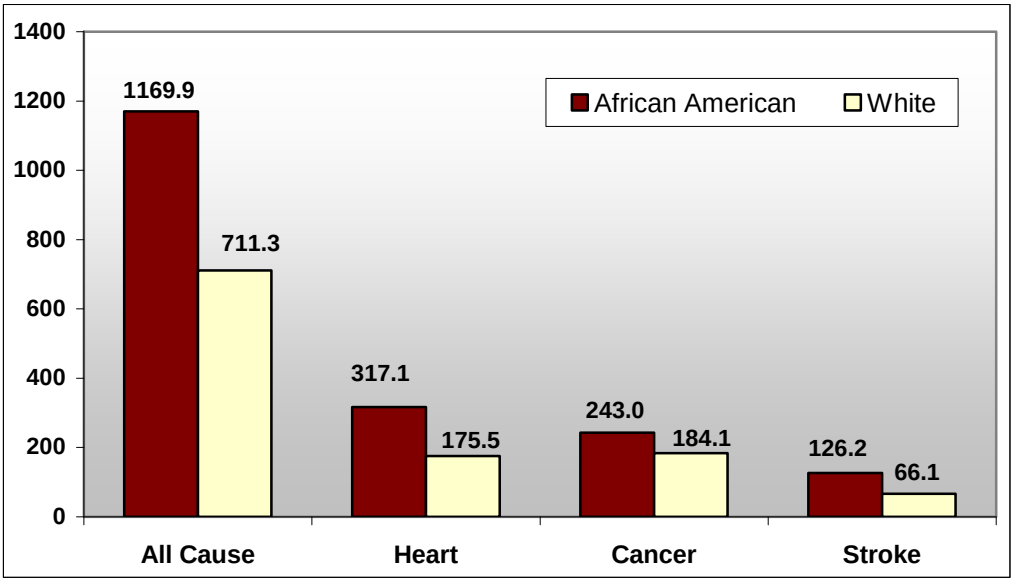
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Talbot County

Figure 86 shows age-adjusted mortality rates for Talbot County. Key findings include:

- African Americans in Talbot County have higher rates of mortality than Whites for all-cause mortality and the top three causes of death.
- The greatest mortality ratio disparity for African Americans compared to Whites is with stroke, where African Americans have a 90% higher mortality rate from stroke than Whites.

Figure 86. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Talbot County, Maryland 1999-2003 Combined



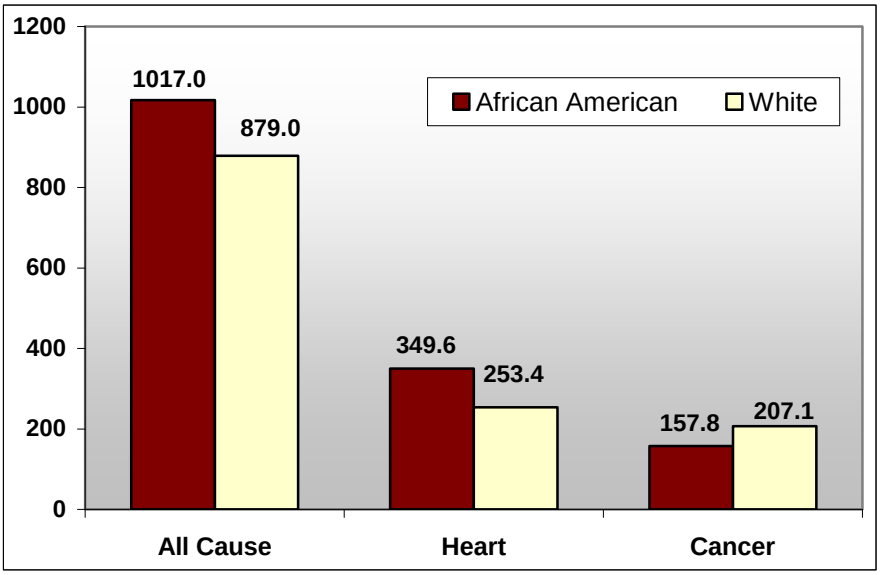
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Washington County

Figure 87 shows age-adjusted mortality rates for Washington County. Key findings include:

- African Americans in Washington County have higher rates of mortality than Whites for all-cause mortality and one of the top two causes of death (exception is cancer).

Figure 87. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Washington County, Maryland 1999-2003 Combined



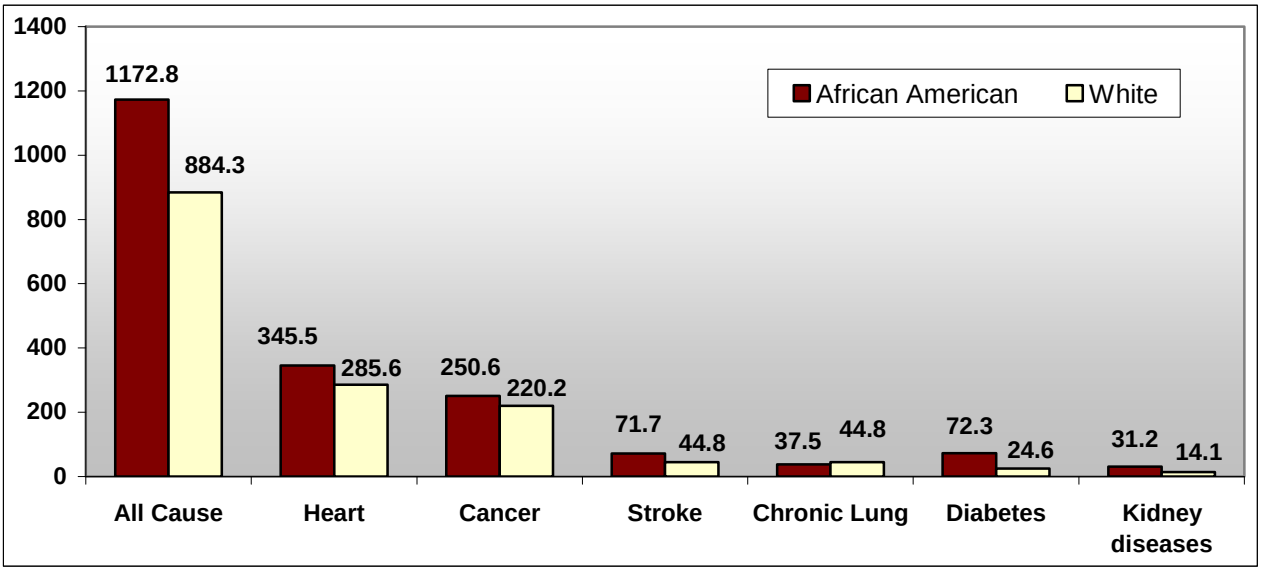
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Wicomico County

Figure 88 shows age-adjusted mortality rates for Wicomico County. Key findings include:

- African Americans in Wicomico County have higher rates of mortality than Whites for all-cause mortality and five of the top six causes of death (exception is chronic lung disease).
- The mortality ratio disparity is greatest with diabetes and kidney disease, where African Americans have 2.9 times the diabetes death rate and 2.2 times the kidney disease death rate of Whites.

Figure 88. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Wicomico County, Maryland 1999-2003 Combined



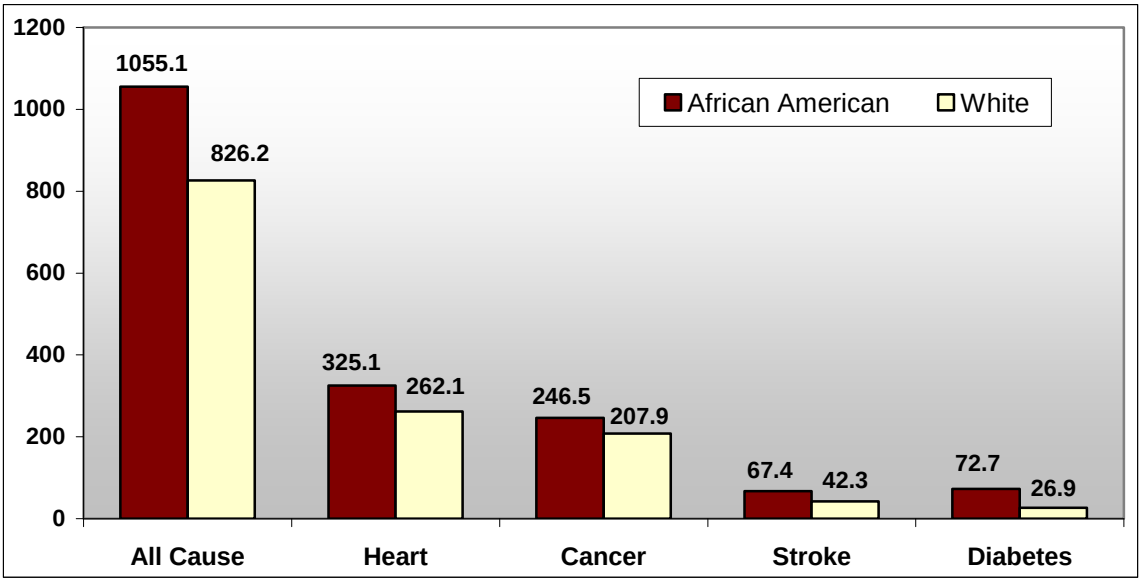
Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

Worcester County

Figure 89 shows age-adjusted mortality rates for Worcester County. Key findings include:

- African Americans in Worcester County have higher rates of mortality than Whites for all-cause mortality and the top four causes of death.
- The greatest mortality ratio disparity for African Americans compared to Whites is with diabetes, where African Americans have 2.7 times the rate of deaths compared to Whites.

Figure 89. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Worcester County, Maryland 1999-2003 Combined



Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].

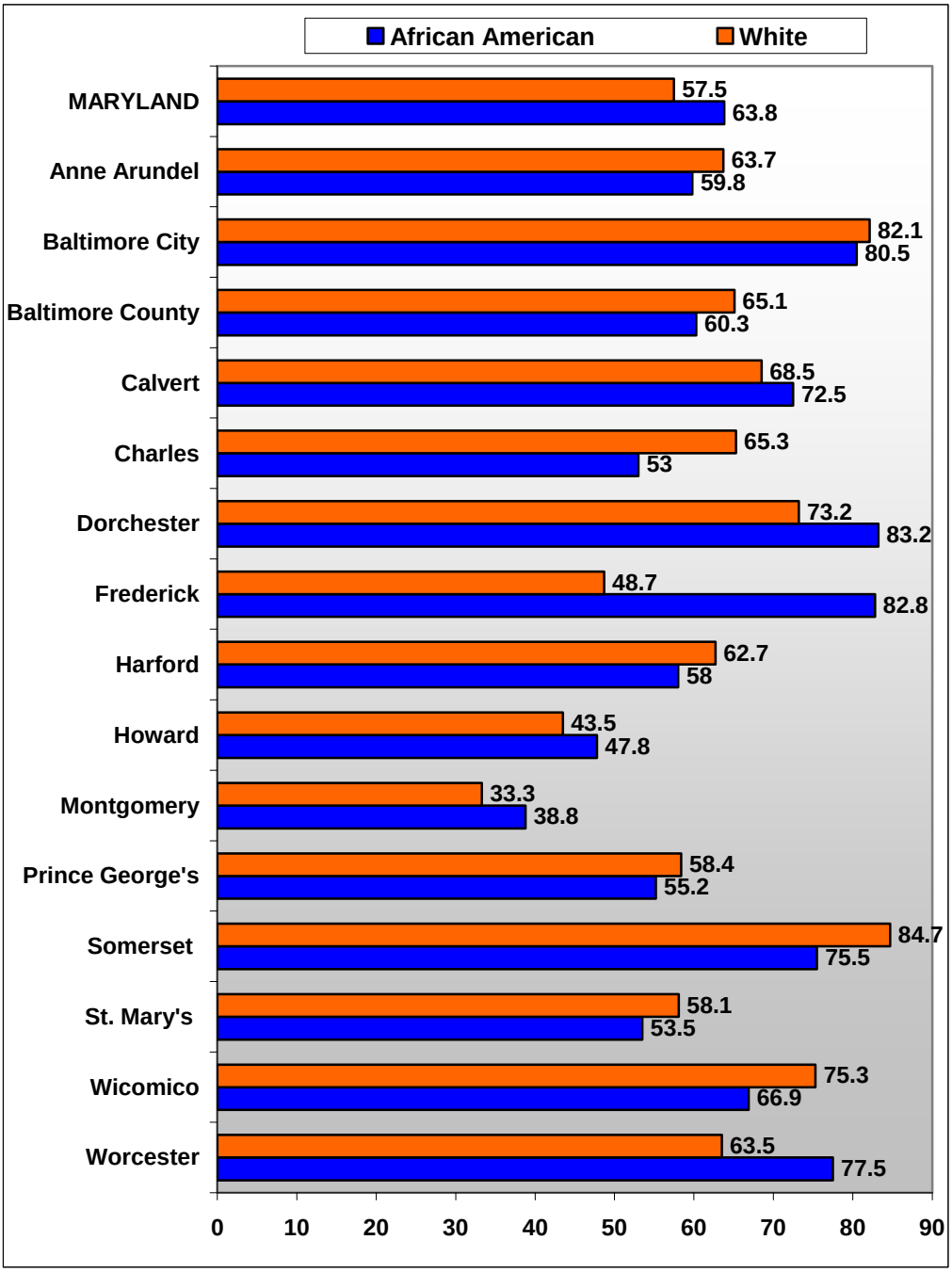
Cancer data by Jurisdiction

The following series of charts presents age-adjusted cancer mortality rates for specific types of cancer, by race and ethnicity, and by jurisdiction, where data were available. For certain types of cancer, jurisdiction level data could not be reliably calculated due to small numbers; therefore the jurisdiction was excluded from the chart.

Figure 90 shows age-adjusted mortality rates for lung and bronchus cancer for African Americans and Whites, by jurisdiction. Key findings include:

- In six of fifteen jurisdictions (40%) and Maryland statewide, African American lung and bronchus cancer mortality rates exceed those of Whites.
- Of all jurisdictions, Frederick County has the greatest mortality rate disparity for African Americans compared to Whites, where African Americans have 1.7 times the rate of death, and 34.1 excess deaths (per 100,000) than Whites.
- The jurisdiction with the smallest difference in mortality between African Americans and Whites is Baltimore City. White cancer mortality rates exceed those of African Americans; however, both African American and White cancer mortality rates are among the highest of all jurisdictions and Maryland statewide.

Figure 90. Age-Adjusted Lung and Bronchus Cancer Mortality Rates by Race/Ethnicity, by Jurisdiction, Maryland 1999-2003 Combined

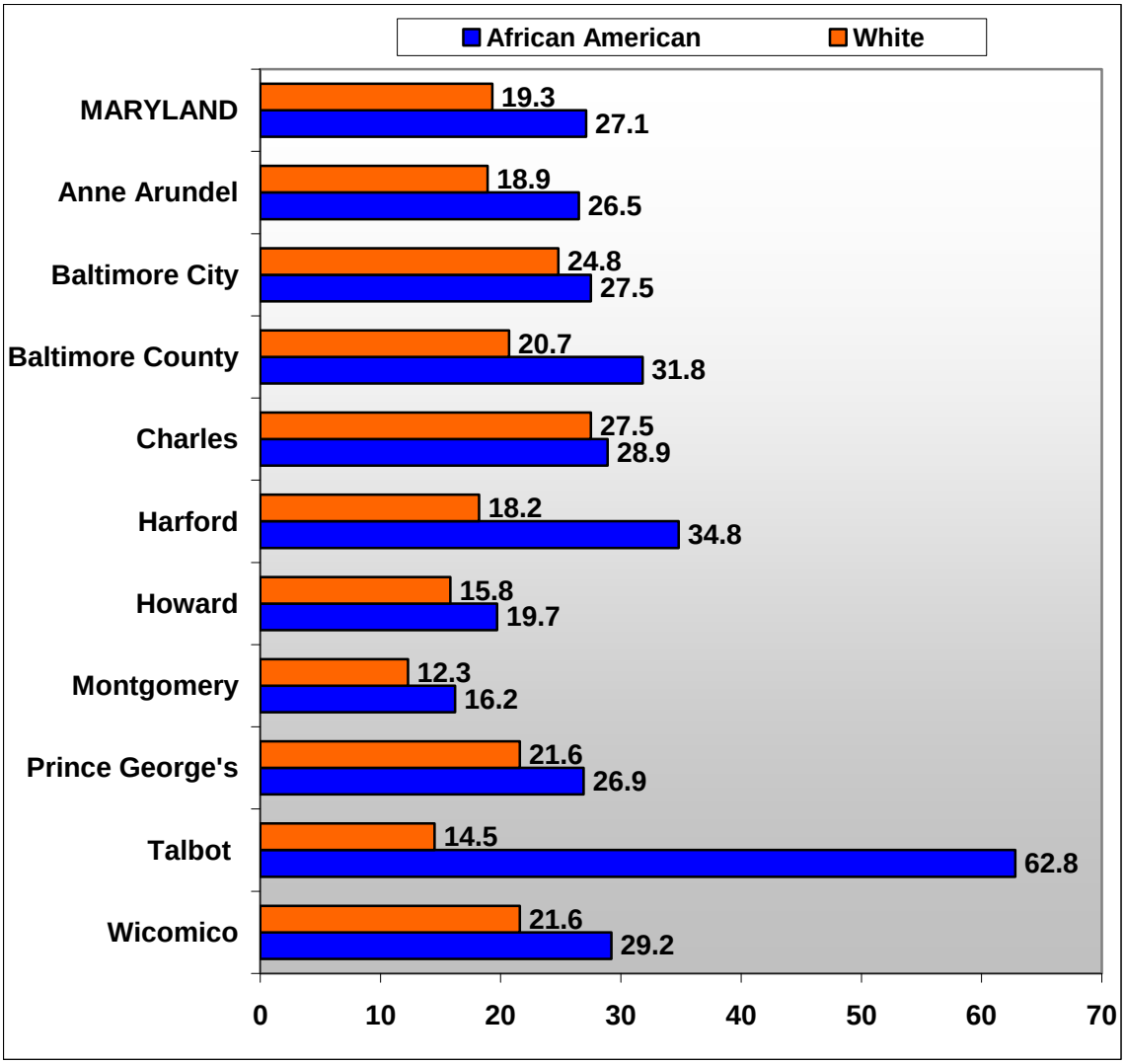


Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].
Note: Excluded jurisdictions had estimates that could not be reliably reported due to small numbers.

Figure 91 shows age-adjusted colon and rectal cancer mortality rates for African Americans and Whites, by jurisdiction. Key findings include:

- In all 10 jurisdictions and Maryland statewide, African American colorectal cancer mortality rates exceed those of Whites.
- Of all jurisdictions, Talbot has the largest mortality rate disparity for African Americans compared to Whites, where African Americans have 4.3 times the rate of death, and 48.3 excess deaths (per 100,000) than Whites.
- The jurisdiction with the smallest difference in mortality between African Americans and Whites is Charles County.

Figure 91. Age-Adjusted Colorectal Cancer Mortality Rates by Race/Ethnicity, by Jurisdiction, Maryland 1999-2003 Combined

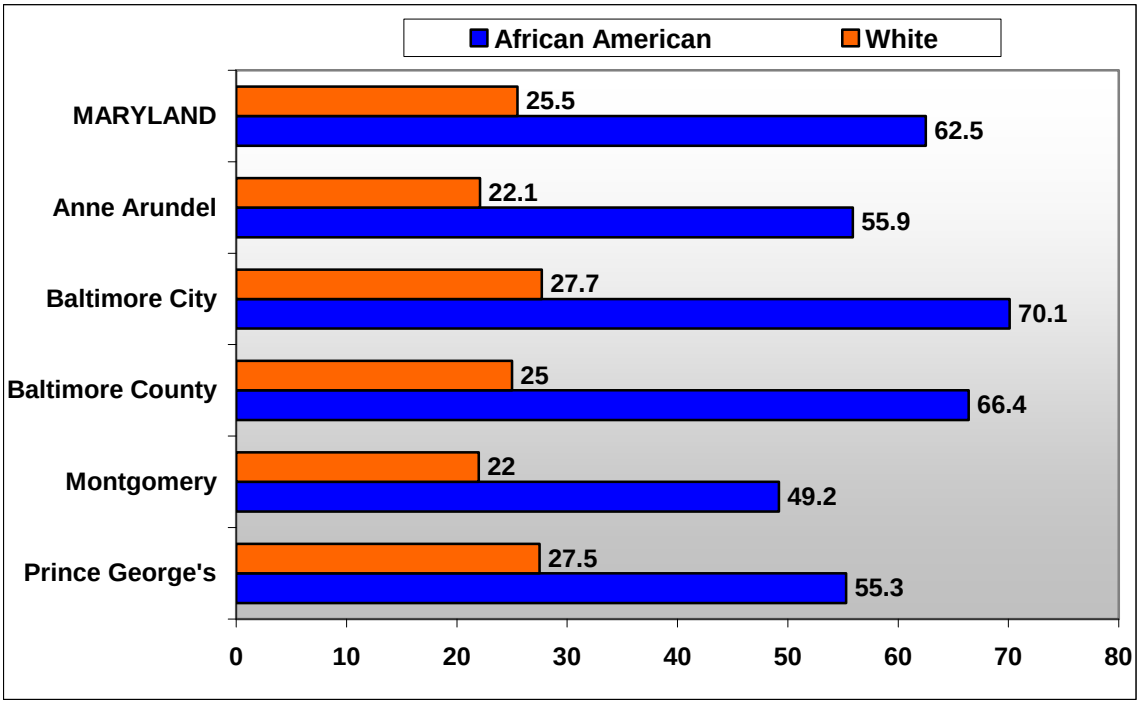


Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].
Note: Excluded jurisdictions had estimates that could not be reliably reported due to small numbers.

Figure 92 shows age-adjusted prostate cancer mortality rates for African Americans and Whites, by jurisdiction. Key findings include:

- In Maryland statewide, and the five jurisdictions where data were available, African American prostate cancer mortality rates far exceed those of Whites.
- In all jurisdictions, African American males have over two times the rate of death from prostate cancer than White males.
- Of all jurisdictions, Baltimore County has the largest mortality ratio disparity for African Americans compared to Whites, where African Americans have 2.7 times the rate of death.
- The jurisdiction with the largest number of excess African American deaths is Baltimore City with 42.4 excess African American deaths per 100,000 than Whites.

Figure 92. Age-Adjusted Prostate Cancer Mortality Rates by Race/Ethnicity, by Jurisdiction, Maryland 1999-2003 Combined

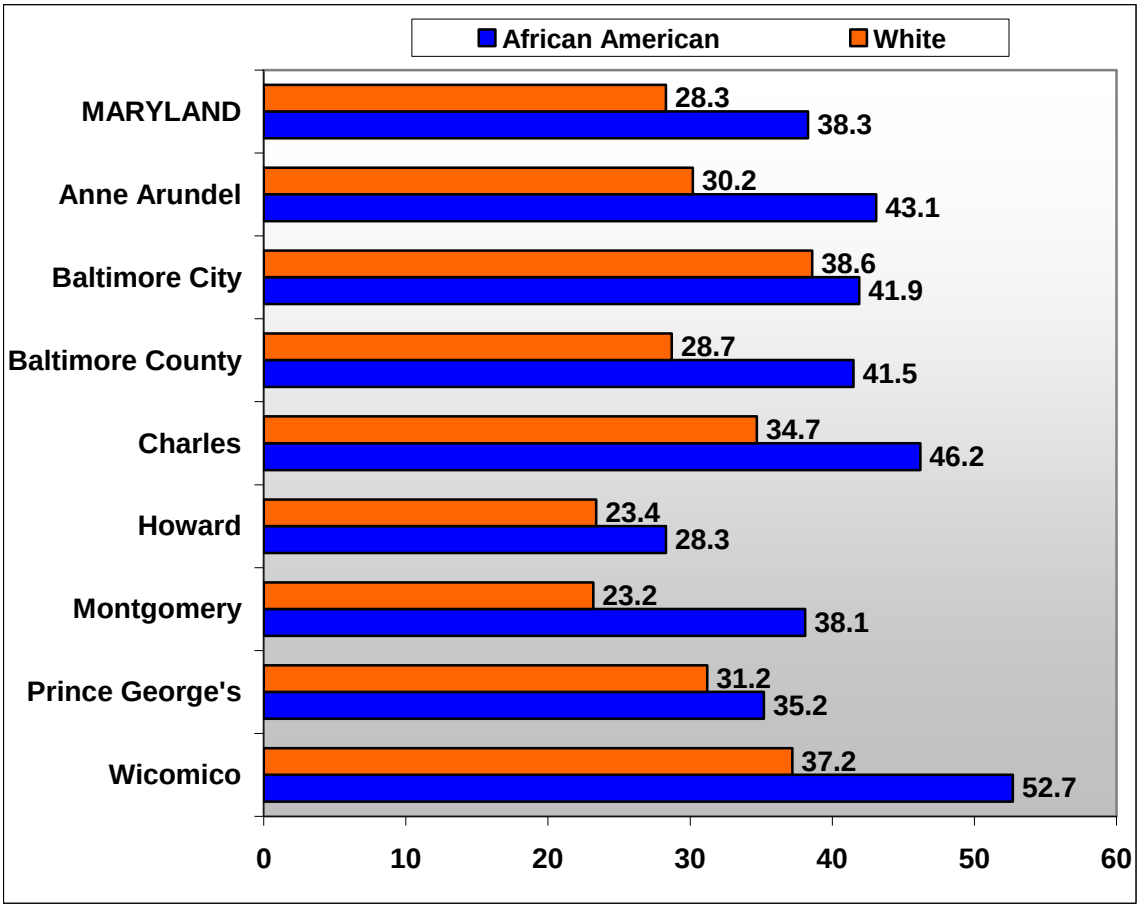


Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].
Note: Excluded jurisdictions had estimates that could not be reliably reported due to small numbers.

Figure 93 shows age-adjusted cancers of the breast and cervix for African American and White females, by jurisdiction. Key findings include:

- In all jurisdictions (where rates could be calculated), and Maryland statewide, African American females have higher combined mortality rates from breast and cervical cancers than White females.
- Of all jurisdictions, Montgomery County has the largest mortality ratio disparity for African Americans compared to Whites, where African Americans have 1.6 times the rate of death compared to whites.
- The jurisdiction with the smallest number of excess African American deaths per 100,000 is Baltimore City; however, both the African American and White mortality rate is among the highest of all jurisdictions.

Figure 93. Age-Adjusted Combined Breast and Cervical Cancer Mortality Rates by Race/Ethnicity, by Jurisdiction, Maryland 1999-2003 Combined



Source: CDC Wonder online Database, Compressed Mortality Files 1999-2003 [11].
Note: Excluded jurisdictions had estimates that could not be reliably reported due to small numbers.

References

1. Maryland Vital Statistics Administration, Division of Health Statistics, *Maryland vital statistics annual report 2004*. 2005, Maryland Department of Health and Mental Hygiene, Vital Statistics Administration, Division of Health Statistics: Baltimore, MD.
2. U.S. Census Bureau. *American FactFinder Fact Sheet, United States*. 2005 [cited 2007 January 16]; Available from: http://factfinder.census.gov/servlet/ACSSAFFFacts?_submenuId=factsheet_0&_sse=on.
3. U.S. Census Bureau. *U.S. interim projections by age, sex, race, and Hispanic origin*. 2004 [cited 2007 January 19]; Available from: http://www.census.gov/ipc/www/usinterimproj/.
4. U.S. Census Bureau. *Statistical Abstract of the United States*. 2006 [cited 2007 January 16]; Available from: http://www.census.gov/popest/estimates.php.
5. Maryland Department of Planning. *Population Projections*. 2006 [cited 2007 January 16]; Available from: http://www.mdp.state.md.us/msdc/dw_Popproj.htm.
6. Maryland Vital Statistics Administration, *Maryland Vital Statistics Annual Report 2005*. 2005, Maryland Department of Health and Mental Hygiene.
7. United States Census Bureau. *Maryland data from 2005 American Community Survey*. December 7, 2006 [cited; Available from: http://factfinder.census.gov/servlet/ACSSAFFFacts?_event=&geo_id=04000US24&_geoContext=01000US%7C04000US24&_street=&_county=&_cityTown=&_state=04000US24&_zip=&_lang=en&_sse=on&ActiveGeoDiv=geoSelect&_useEV=&pctxt=fph&pgsl=040&_submen.
8. U.S. Census Bureau. *2005 American Community Survey*. 2005 [cited 2007 January 16]; Available from: http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_submenuId=datasets_1&_lang=en&_ts=.
9. National Center for Health Statistics, *Health United States, 2005, with chartbook on trends in the health of Americans*. 2005, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Hyattsville, MD.
10. Centers for Disease Control and Prevention, National Center for Health Statistics. *Health United States, 2006*. 2006 [cited; Available from: www.cdc.gov/nchs/hus.htm.
11. Centers for Disease Control and Prevention, National Center for Health Statistics. *Compressed Mortality File (CMF) compiled from 1999-2003*. [cited 2007 January 16]; Available from: http://wonder.cdc.gov/.
12. Center for Disease Control and Prevention, National Center for Health Statistics (NCHS). *Fast Facts A to Z, Deaths - leading causes*. 2004 [cited 2007 January 3]; Available from: http://www.cdc.gov/nchs/fastats/lcod.htm.
13. Rosamond, W., et al., *Heart disease and stroke statistics--2007 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee.* Circulation, 2007. **115**(5): p. e69-171.
14. Maryland Behavioral Risk Factor Surveillance System. *Maryland behavioral risk factor surveillance system ad hoc reporting tool*. [cited December 7, 2006]; Available from: http://www.marylandbrfss.org/cgi-bin/broker.

15. American Cancer Society, *Cancer Facts & Figures 2006*. 2006, American Cancer Society.
16. Maryland Cancer Prevention, Education, Screening and Treatment Program, *Annual cancer report*. 2004, Maryland Department of Health and Mental Hygiene, Cigarette Restitution Fund Program, Cancer Prevention, Education, Screening and Treatment Program.
17. Pleis, J.R. and Lethbridge-Cejku, *Summary health statsitics for U.S. adults: National health interview survey, 2005*. 2006, National Center for Health Statistics.
18. Centers for Disease Control and Prevention, N.H.a.N.E.S. *National diabetes fact sheet, United States 2005*. 2005 [cited 2007 January 16]; Available from: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf.
19. Maryland AIDS Administration, *The Maryland 2005 HIV/AIDS annual report*. 2005, Maryland Department of Health and Mental Hygiene, AIDS Administration.
20. National Center for Health Statistics, *Health United States, 2006, with chartbook on trends in the health of Americans*. 2006, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Hyattsville, MD.
21. Maryland Office of Minority Health and Health Disparities, *Analysis of U.S. renal data system 1991-2001 pooled*. 2006, Maryland Department of Health and Mental Hygiene, Office of Minority Health and Health Disparities: Baltimore, MD.
22. Maryland Asthma Control Program, *Asthma in Maryland 2004*. 2004, Maryland Department of Health and Mental Hygiene, Family Health Administration, Center for Maternal and Child Health, Maryland Asthma Control Program.
23. Maryland Arthritis Project, *Analysis of discharge data of the Maryland health services cost review commission*. 2006, Maryland Department of Health and Mental Hygiene, Center for Health Promotion, Education, and Tobacco Use Prevention, Maryland Arthritis Project.

Appendices

Appendix 1. List of Figures

Figure 1. Percent of U.S. Population by Race and Ethnicity, United States, 2004 ... 4
Figure 2. Percent of Population by Race and Ethnicity, Maryland, 2004 ... 5
Figure 3. Percent Below Poverty Level in the past 12 months, Maryland and U.S., 2005 ... 8
Figure 4. Percent of Bachelor Degrees or higher within Racial and Ethnic groups, Maryland and US, 2005 (population ages 25 and over) ... 9
Figure 5. Percent with Less than a High School Diploma within Racial and Ethnic groups, Maryland and US, 2005 (population ages 25 and over) ... 9
Figure 6. Age-Adjusted All-Cause Mortality Rate by Race, United States and Maryland, Selected Years 1996-2005 ... 13
Figure 7. Age-Adjusted All-Cause Mortality by White and African American Race and U.S, State, and Maryland Jurisdiction, 1999-2003 combined ... 14
Figure 8. Percent of Excess African American Death Rate (compared to Whites) in Maryland Jurisdictions, 1999-2003 combined ... 15
Figure 9. Age-Adjusted Death Rate for Diseases of the Heart by Race, ... 17
Figure 10. Age-Adjusted Heart Disease Mortality by White and African American Race for U.S, Maryland, and Maryland Jurisdiction, 1999-2003 Combined ... 17
Figure 11 Incidence of Myocardial Infarction for adults ages 35-44 and 45-54, by race and sex, United States 1987-2001. ... 18
Figure 12 Trends in mean total serum cholesterol among adults by race/ethnicity, United States 1988 through 2004. ... 19
Figure 13. Prevalence of High Cholesterol, by Race, Maryland 2001 and 2003 pooled ... 20
Figure 14. Percent with Cholesterol Test in Last Two Years, Maryland 2001, 2003 pooled ... 20
Figure 15. Age-Adjusted Death Rate for Cancer by Race, United States and Maryland, Selected Years 1996-2005 ... 23
Figure 16. Age-Adjusted Cancer Mortality by White and African American Race and U.S, State, and Maryland Jurisdiction, 1999-2003 combined ... 23
Figure 17. Age-adjusted All Cancer Incidence & Mortality, by Race & Sex, U.S. 1998-2002 ... 24
Figure 18. Age-adjusted All Cancer Incidence & Mortality, by Race, Maryland 2001 ... 24
Figure 19 Prevalence of current smoking for adults age 18 and older by sex and race/ethnicity, United States 2004. ... 25
Figure 20. Age-stratified Prevalence of Current Smoking, by Race, Maryland 2000-2004 ... 25
Figure 21. Age-Adjusted Death Rate for Stroke by Race, United States and Maryland, Selected Years 1996-2005 ... 27
Figure 22. Age-Adjusted Stroke Mortality by White and African American Race and U.S, State, and Maryland Jurisdiction, 1999-2003 combined ... 27

Figure 23. Age-adjusted prevalence of Stroke in Adults by Race/Ethnicity, U.S. 2005 28
Figure 24. Age-stratified prevalence of Stroke in Adults by Race, Maryland. 2005 28
Figure 25 Age-adjusted prevalence for high blood pressure in adults age 20 and older by race/ethnicity, sex, and survey, United States 1999-2004 combined. 29
Figure 26. Age-stratified prevalence of Hypertension in Adults by Race, Maryland. 2005 29
Figure 27. Age-Adjusted Death Rate for Diabetes by Race, United States and Maryland, Selected Years 1996-2005 30
Figure 28. Prevalence of Diagnosed and Undiagnosed Diabetes in Adults 31
Figure 29. Prevalence of doctor diagnosed diabetes in adults age 18-44, by race/ethnicity, Maryland 2001-2004. 32
Figure 30. Prevalence of doctor diagnosed diabetes in adults age 45-64, by race/ethnicity, Maryland 2001-2004. 33
Figure 31. Prevalence of doctor diagnosed diabetes in adults age 65 or older, by race/ethnicity, Maryland 2001-2004 33
Figure 32. Prevalence of Obesity, Adults age 18-44, by Race/Ethnicity, Maryland 2000-2004 Pooled Data 34
Figure 33. Prevalence of Obesity, Adults age 45 to 64, by Race/Ethnicity, Maryland 2000-2004 Pooled Data 35
Figure 34. Prevalence of Obesity, Adults age 65 or Older, by Race/Ethnicity, Maryland 2000-2004 Pooled Data 35
Figure 35. Age-Adjusted Death Rate for HIV by Race, United States and Maryland, ... 36
Figure 36 Maryland HIV Incidence Rate by Race/Ethnicity, 2003. 37
Figure 37. Infant Mortality Rate by Race, United States and Maryland, 1996-2005 38
Figure 38. Infant Mortality Rates by Race and Ethnicity, Maryland 2004 39
Figure 39. Disparity in the Timeliness of Prenatal Care. 40
Figure 40. Disparity in Percent of Infants with Low Birth Weight 40
Figure 41. Incidence of Diabetic End-Stage Renal Disease in Maryland, by Race 1991-2001 Pooled Data. 42
Figure 42. Incidence of Hypertensive End-Stage Renal Disease in Maryland, by Race, 1991-2001 Pooled Data. 42
Figure 43. Incidence of Diabetic End-Stage Renal Disease in Maryland, by Ethnicity, 1996-2001 Pooled Data. 43
Figure 44. Incidence of Hypertensive End-Stage Renal Disease in Maryland, by Ethnicity, 1996-2001 Pooled Data. 43
Figure 45. African American vs. White Disparity Ratios for Adults with Asthma, Maryland 1999-2003 44
Figure 46. Disparity in Health Insurance, Maryland 2001-2004 Pooled Data. 45
Figure 47. Disparity in Ability to Afford Healthcare, Maryland 2001, 2003 and 2004 Pooled Data 46
Figure 48. Disparity in the Timeliness of Prenatal Care 47

Figure 49. Disparity in Hospital Admissions for Osteoarthritis (which represents disparity in joint replacement surgery) 49
Figure 50. Age-adjusted Incidence and Mortality Rates for Breast and Cervical Cancer, by Race, Maryland 2001. 52
Figure 51. Age-adjusted Incidence and Mortality Rates for Prostate Cancer, by Race, Maryland 2001 55
Figure 52. Race/Ethnicity Distribution of Population Ages 0-14, by Jurisdiction, Maryland 2004 57
Figure 53. Race/Ethnicity Distribution of Population Ages 15-24, by Jurisdiction, Maryland 2004 58
Figure 54. Race/Ethnicity Distribution of Population Ages 25-44, by Jurisdiction, Maryland 2004 59
Figure 55. Race/Ethnicity Distribution of Population Ages 45-64, by Jurisdiction, Maryland 2004 60
Figure 56. Race/Ethnicity Distribution of Population Ages 65 and over, by Jurisdiction, Maryland 2004 61
Figure 57. Percent Non-Hispanic White Population by Jurisdiction, Maryland 2005 63
Figure 58. Percent African American Population by Jurisdiction, Maryland 2005 64
Figure 59. Percent Asian/Pacific Islander Population by Jurisdiction, Maryland 2005 65
Figure 60. Percent American Indian/Alaskan Native Population by Jurisdiction, .. 66
Figure 61. Percent Hispanic Population by Jurisdiction, Maryland 2005 67
Figure 62. Gender Distribution in Non-Hispanic Whites, by Jurisdiction, Maryland 2004 68
Figure 63. Gender Distribution among African Americans, by Jurisdiction, Maryland 2004 69
Figure 64. Gender Distribution among Asian/Pacific Islanders, by Jurisdiction, .. 70
Figure 65. Gender Distribution among American Indian/Alaskan Native, by Jurisdiction, Maryland 2004 71
Figure 66. Gender Distribution among Hispanics, by Jurisdiction, Maryland 2004 72
Figure 67. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Allegany County, Maryland 1999-2003 Combined 73
Figure 68. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Anne Arundel County, Maryland 1999-2003 Combined 74
Figure 69. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Baltimore City, Maryland 1999-2003 Combined 75
Figure 70. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Baltimore County, Maryland 1999-2003 Combined 76

Figure 71. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Calvert County, Maryland 1999-2003 Combined 77
Figure 72. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Caroline County, Maryland 1999-2003 Combined 78
Figure 73. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Carroll County, Maryland 1999-2003 Combined 79
Figure 74. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Cecil County, Maryland 1999-2003 Combined 80
Figure 75. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Charles County, Maryland 1999-2003 Combined 81
Figure 76. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Dorchester County, Maryland 1999-2003 Combined 82
Figure 77. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Frederick County, Maryland 1999-2003 Combined 83
Figure 78. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Harford County, Maryland 1999-2003 Combined 84
Figure 79. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Howard County, Maryland 1999-2003 Combined 85
Figure 80. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Kent County, Maryland 1999-2003 Combined 86
Figure 81. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Montgomery County, Maryland 1999-2003 Combined 87
Figure 82. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Prince George's County, Maryland 1999-2003 Combined 88
Figure 83. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Queen Anne's County, Maryland 1999-2003 Combined 89
Figure 84. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, St. Mary's County, Maryland 1999-2003 Combined 90
Figure 85. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Somerset County, Maryland 1999-2003 Combined 91
Figure 86. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Talbot County, Maryland 1999-2003 Combined 92

Figure 87. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Washington County, Maryland 1999-2003 Combined 93
Figure 88. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Wicomico County, Maryland 1999-2003 Combined 94
Figure 89. Age-Adjusted Mortality Rates (per 100,000), Selected Causes of Death for African Americans and Whites, Worcester County, Maryland 1999-2003 Combined 95
Figure 90. Age-Adjusted Lung and Bronchus Cancer Mortality Rates by Race/Ethnicity, by Jurisdiction, Maryland 1999-2003 Combined 97
Figure 91. Age-Adjusted Colorectal Cancer Mortality Rates by Race/Ethnicity, by Jurisdiction, Maryland 1999-2003 Combined 98
Figure 92. Age-Adjusted Prostate Cancer Mortality Rates by Race/Ethnicity, by Jurisdiction, Maryland 1999-2003 Combined 99
Figure 93. Age-Adjusted Combined Breast and Cervical Cancer Mortality Rates by Race/Ethnicity, by Jurisdiction, Maryland 1999-2003 Combined 100

Appendix 2. List of Tables

Table 1. Maryland Population by Race and Ethnicity, July 1, 2004 5
Table 2. Minority Population Estimates by Maryland Jurisdictions, 2005 7
Table 3. Age-Adjusted Mortality Rates (per 100,000) and Mortality Ratios for 11 Leading Causes of Death, United States 2003 10
Table 4. Age-Adjusted Mortality Rates (per 100,000), Ratios, and Excess Mortality Rates for the 15 Leading Causes of Death, Maryland 2005 11
Table 5. Age-Adjusted Mortality Rates (per 100,000) and Mortality Ratios for the 10 Leading Causes of Death, United States 2003 and Maryland 2005 12
Table 6. Infant mortality rates (infant deaths per 1000 live births), U.S. and Maryland 39
Table 7. African American vs. White Women's Mortality Disparity for the Top 15 Causes of Death, Maryland 2005 51
Table 8. African American vs. White Men's Mortality Disparity for the Top 15 Causes of Death, Maryland 2005 54