

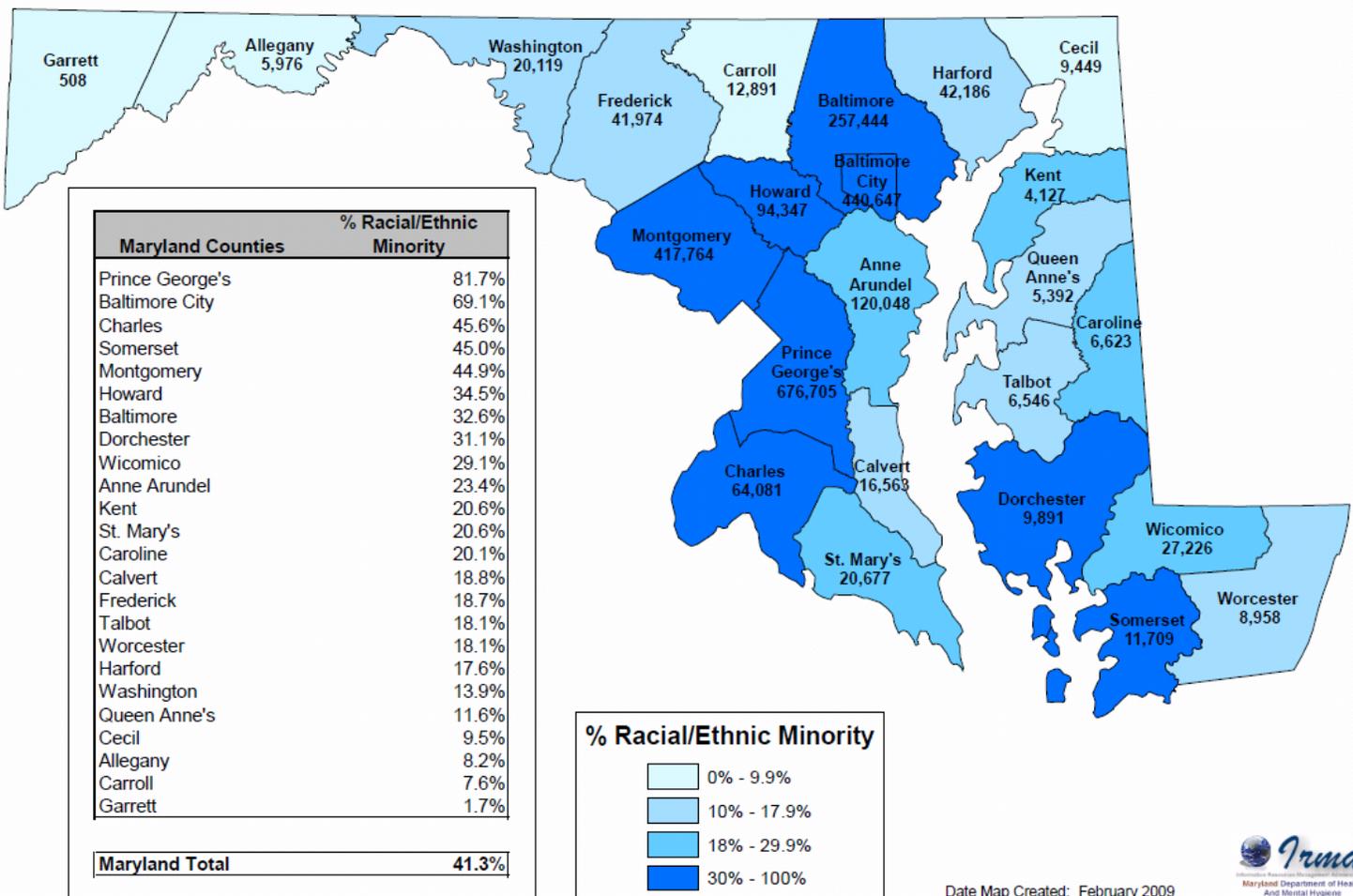


**Minority Health and Health Disparities**  
 Maryland Department of Health and Mental Hygiene

# Maryland Minority Health Disparities Statewide Data Update

February 2009

**Racial or Ethnic Minority Population (Number and Percent), by Jurisdiction, Maryland 2007**



Date Map Created: February 2009



## Minority Population in Maryland

- Maryland is quickly becoming a state where the combined racial and ethnic minority population will exceed the white population. The 2007 estimated Maryland population is 41.3 percent minority, up by 0.3 percentage points from the previous year (41%).
- Eight of twenty-four jurisdictions have 30 % or more minorities. Almost 20 percent of the population in the Eastern Shore is minority.

### Maryland Population, July 1 2007 by Race and Ethnicity (41.3% Minority)

*(Data from Maryland Vital Statistics Annual Report 2007)*

Race	All Ethnicity		Non-Hispanic		Hispanic	
White	3,608,339	64.2%	3,296,493	58.7%	311,846	5.6%
Non-White	2,010,005	35.8%	1,965,624	35.0%	44,381	0.8%
<i>Black</i>	1,687,861	30.0%				
<i>Asian/Pac Isle</i>	300,062	5.3%				
<i>American Indian</i>	22,082	0.4%				
MD Total	5,618,344	100.0%	5,262,117	93.7%	356,227	6.3%

## Minority Population by Jurisdiction, Maryland 2007

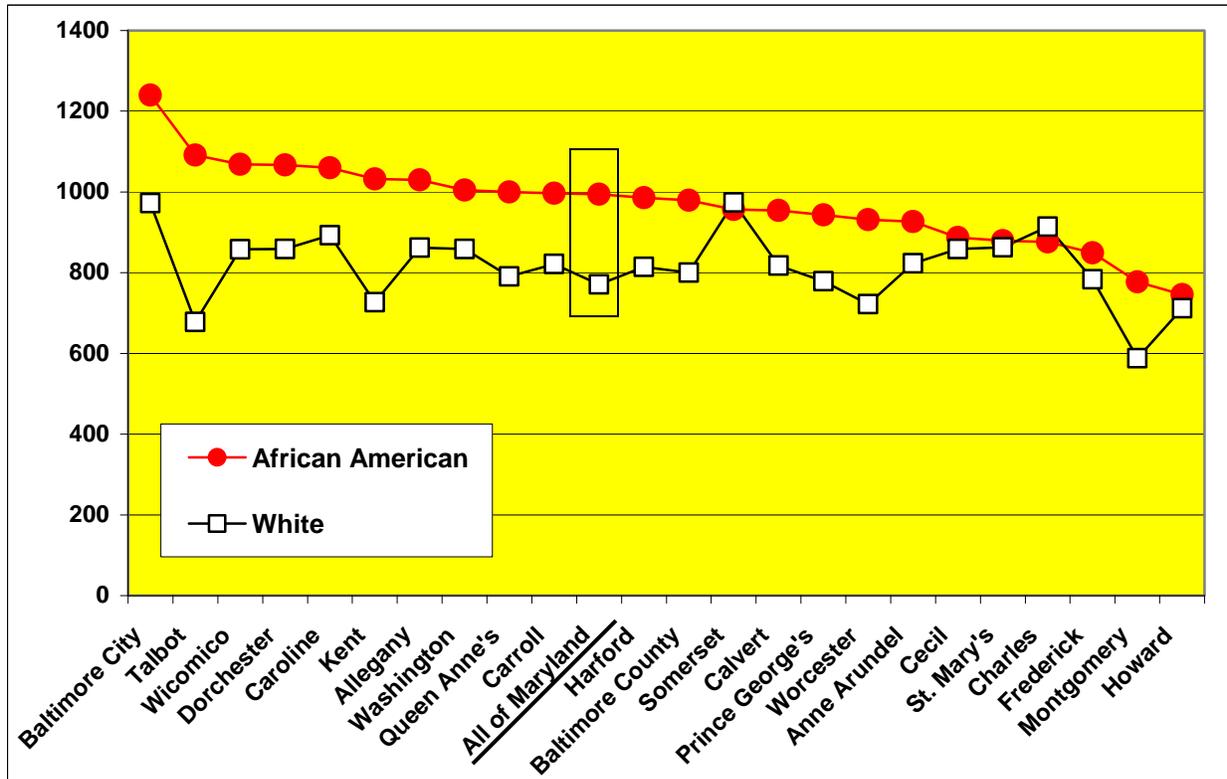
REGION AND POLITICAL SUBDIVISION	TOTAL	Non Hispanic White	Minority Population	Percent Minority	Percent African American	Percent Asian/PI	Percent AI/AN	Percent Hispanic
<b>MARYLAND</b>	<b>5,618,344</b>	<b>3,296,493</b>	<b>2,321,851</b>	<b>41.3%</b>	<b>30.0%</b>	<b>5.3%</b>	<b>0.4%</b>	<b>6.3%</b>
<b>NORTHWEST AREA</b>	<b>472,039</b>	<b>403,462</b>	<b>68,577</b>	<b>14.5%</b>	<b>8.5%</b>	<b>2.4%</b>	<b>0.2%</b>	<b>3.7%</b>
GARRET	29,627	29,119	508	1.7%	0.8%	0.3%	0.1%	0.6%
ALLEGANY	72,594	66,618	5,976	8.2%	6.5%	0.7%	0.2%	1.0%
WASHINGTON	145,113	124,994	20,119	13.9%	9.8%	1.5%	0.2%	2.5%
FREDERICK	224,705	182,731	41,974	18.7%	9.3%	3.9%	0.3%	0.6%
<b>BALTIMORE METRO AREA</b>	<b>2,621,485</b>	<b>1,653,922</b>	<b>967,563</b>	<b>36.9%</b>	<b>29.7%</b>	<b>4.1%</b>	<b>0.3%</b>	<b>3.2%</b>
BALTIMORE CITY	637,455	196,808	440,647	69.1%	64.7%	2.2%	0.4%	2.5%
BALTIMORE COUNTY	788,994	531,550	257,444	32.6%	25.4%	4.4%	0.4%	2.9%
ANNE ARUNDEL	512,154	392,106	120,048	23.4%	15.8%	3.5%	0.4%	4.2%
CARROLL	169,220	156,329	12,891	7.6%	3.9%	1.7%	0.2%	1.8%
HOWARD	273,669	179,322	94,347	34.5%	17.9%	12.1%	0.3%	4.8%
HARFORD	239,993	197,807	42,186	17.6%	12.7%	2.4%	0.3%	2.6%
<b>NATIONAL CAPITAL AREA</b>	<b>1,759,583</b>	<b>665,114</b>	<b>1,094,469</b>	<b>62.2%</b>	<b>40.5%</b>	<b>9.5%</b>	<b>0.5%</b>	<b>13.3%</b>
MONTGOMERY	930,813	513,049	417,764	44.9%	17.4%	14.1%	0.5%	14.3%
PRINCE GEORGE'S	828,770	152,065	676,705	81.7%	66.5%	4.3%	0.5%	12.2%
<b>SOUTHERN AREA</b>	<b>329,045</b>	<b>227,724</b>	<b>101,321</b>	<b>30.8%</b>	<b>25.1%</b>	<b>2.4%</b>	<b>0.6%</b>	<b>3.1%</b>
CALVERT	88,223	71,660	16,563	18.8%	14.6%	1.5%	0.3%	2.5%
CHARLES	140,444	76,363	64,081	45.6%	38.7%	2.9%	0.8%	3.6%
SAINT MARY'S	100,378	79,701	20,677	20.6%	15.3%	2.5%	0.4%	2.8%
<b>EASTERN SHORE AREA</b>	<b>436,192</b>	<b>346,271</b>	<b>89,921</b>	<b>20.6%</b>	<b>16.7%</b>	<b>1.2%</b>	<b>0.3%</b>	<b>2.7%</b>
CECIL	99,695	90,246	9,449	9.5%	5.9%	1.1%	0.3%	2.2%
KENT	19,987	15,860	4,127	20.6%	16.4%	0.9%	0.2%	3.5%
QUEEN ANNE'S	46,571	41,179	5,392	11.6%	8.3%	1.2%	0.2%	2.0%
CAROLINE	32,910	26,287	6,623	20.1%	14.9%	0.8%	0.6%	4.5%
TALBOT	36,193	29,647	6,546	18.1%	14.2%	1.1%	0.2%	3.1%
DORCHESTER	31,846	21,955	9,891	31.1%	28.1%	1.0%	0.2%	2.1%
WICOMICO	93,600	66,374	27,226	29.1%	24.1%	1.8%	0.2%	3.3%
SOMERSET	26,016	14,307	11,709	45.0%	41.9%	1.0%	0.4%	2.2%
WORCESTER	49,374	40,416	8,958	18.1%	14.9%	1.0%	0.2%	2.2%

Source: Maryland Vital Statistics Annual Report 2007

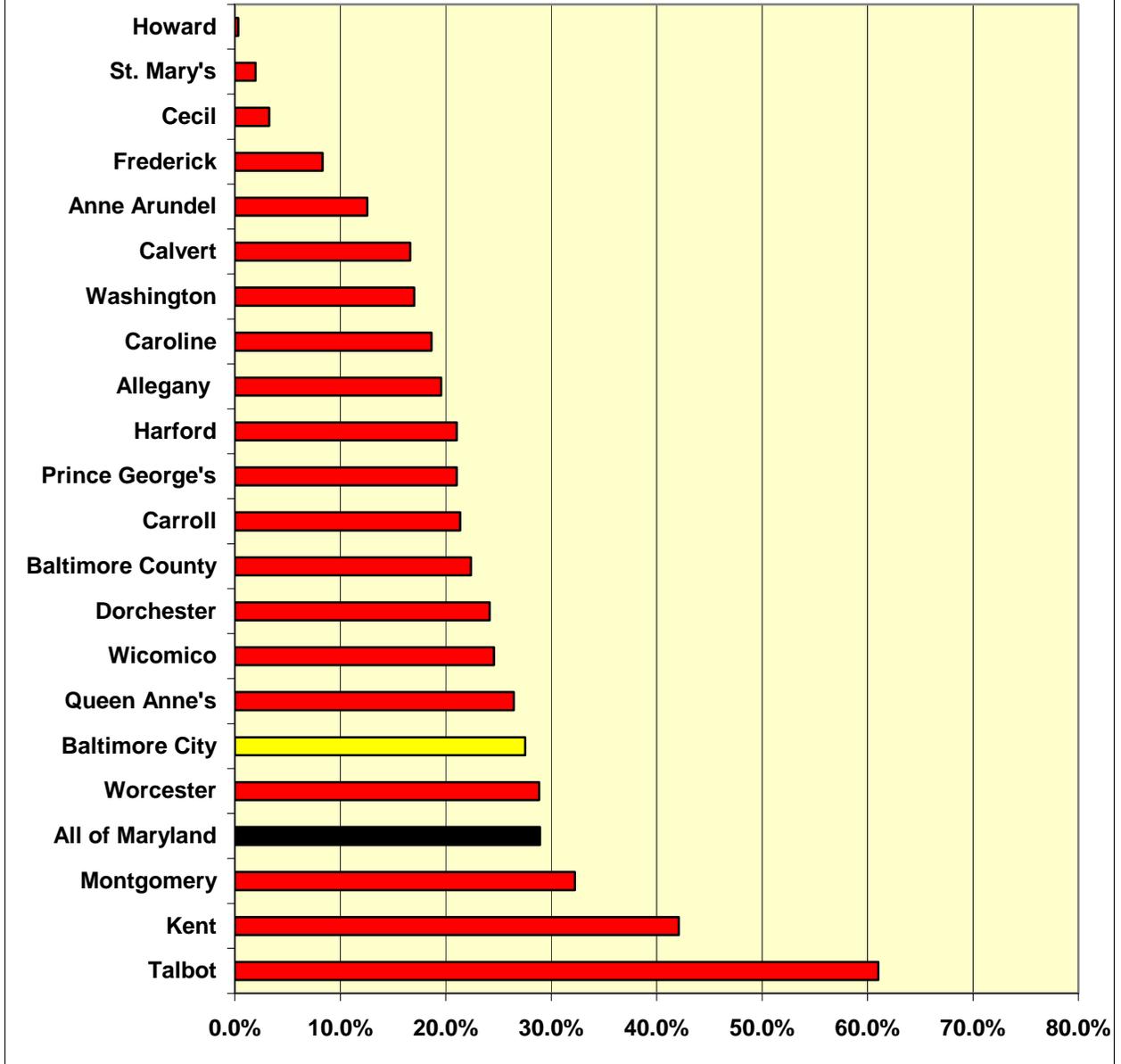
## Geographic Distribution of Mortality Disparities

- Data compiled by our Office of Minority Health and Health Disparities show that African American death rates exceed White death rates in 20 Maryland jurisdictions where the age-adjusted rates could be calculated. **Four jurisdictions** have a larger Black vs. White mortality ratio than Baltimore City, and **nine other jurisdictions** have ratios that are comparable to the City. The mortality disparity by jurisdiction could not be calculated for other minority groups.

**Figure 1. Age-Adjusted All-Cause Mortality (rate per 100,000) by White or Black Race and Jurisdiction, Maryland 2003- 2005 Pooled**



**Figure 2: Excess Black Death Rate (Compared to Non-Hispanic Whites) in Maryland by Jurisdiction 2003-2005 Combined**



*Age-adjusted to the projected U.S. 2000 population.*

*Age-adjusted death rates for Blacks could not be calculated for Garrett County.*

Source: Division of Health Statistics, Vital Statistics Administration, DHMH

## Mortality Disparities

- Nine of the top 15 causes of death show a mortality disparity between Blacks and Whites.
- Black age-adjusted heart disease mortality exceeds that for whites by 47.5 deaths per 100,000 population.
- Blacks are 23 times more likely to die from HIV/AIDS than Whites.

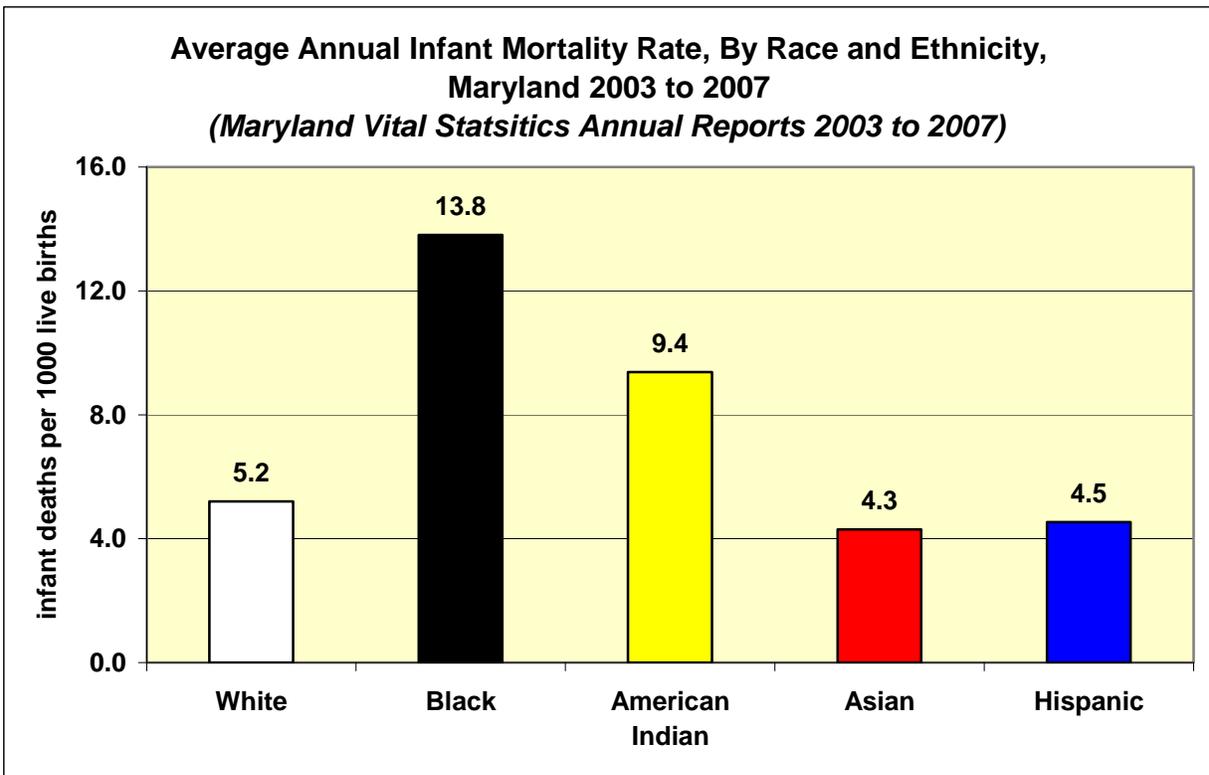
**African American vs. White Mortality Disparity, 15 Leading Causes of Death, Maryland 2007**

Ratio Disparity Rank	Excess Rate Disparity Rank	Statewide Cause of Death Rank	Disease	Age-adjusted Mortality per 100,000		Ratio	Age-adjusted Difference per 100,000
				Black	White		
8	1	1	Heart Disease	242.6	195.1	1.2	47.5
9	2	2	Cancer	207.3	176.3	1.2	31.0
7	7	3	Stroke	49.6	37.8	1.3	11.8
		4	Chronic lung Disease	22.5	39.5	0.6	-17.0
4	5	5	Diabetes	38.8	19.2	2.0	19.6
		6	Accidents	25.0	26.4	0.9	-1.4
		7	Flu&Pneumonia	17.7	18.5	1.0	-0.8
5	6	8	Septicemia	26.3	14.2	1.9	12.1
		9	Alzheimer's Disease	16.0	16.5	1.0	-0.5
1	4	10	HIV/AIDS	23.0	1.0	23.0	22.0
6	8	11	Kidney diseases	20.0	11.2	1.8	8.8
2	3	12	Homicide	25.7	3.2	8.0	22.5
		13	Chronic Liver Disease	7.1	7.7	0.9	-0.6
		14	Suicide	4.8	10.8	0.4	-6.0
3	9	15	Certain Perinatal	12.4	4.0	3.1	8.4

Source: Maryland Vital Statistics Annual Report 2007

## Infant Mortality

African Americans and American Indians in Maryland experience infant mortality rates between two and three times higher than the rate among Whites, as shown below.



Infant mortality is the most extreme adverse pregnancy outcome. The rate of neonatal intensive care unit (NICU) admissions (percent of all newborns that spend some time in NICU at birth) can be determined.

In 2004, 7.8% of African American newborns had a NICU admission  
5.0% of White newborns had a NICU admission

In addition, the average cost for African American NICU admissions was 53% higher than the White average cost, indicating more severe problems for the African American NICU newborns.

## Disparities in Prevalence of Selected Conditions and Risk Factors

Prevalence of Selected Conditions and Risk Factors by Race and Ethnicity Maryland Behavioral Risk Factor Surveillance System, 2003 to 2007 Pooled					
		Diagnosed Diabetes	Diagnosed Hypertension	Diagnosed High Cholesterol	Current Smoker
<b>Age 18 to 44</b>	<b>Non Hispanic White</b>	2.0%	11.0%	22.0%	23.2%
	<b>Non-Hispanic Black</b>	<b>3.4%</b>	<b>14.6%</b>	20.0%	21.2%
	Ratio vs. White	<b>1.7</b>	<b>1.3</b>	0.9	0.9
	<b>Non-Hispanic Other</b>	2.0%	<i>4.1%</i>	22.2%	<i>15.0%</i>
	Ratio vs. White	1.0	<i>0.4</i>	1.0	<i>0.6</i>
	<b>Hispanic</b>	2.0%	8.8%	25.4%	<i>17.0%</i>
	Ratio vs. White	1.0	0.8	1.2	<i>0.7</i>
<b>Age 45 to 64</b>	<b>Non Hispanic White</b>	8.5%	33.3%	43.0%	18.2%
	<b>Non-Hispanic Black</b>	<b>14.3%</b>	<b>45.8%</b>	<i>38.4%</i>	<b>22.8%</b>
	Ratio vs. White	<b>1.7</b>	<b>1.4</b>	<i>0.9</i>	<b>1.3</b>
	<b>Non-Hispanic Other</b>	9.9%	<b>40.3%</b>	39.5%	17.9%
	Ratio vs. White	1.2	<b>1.2</b>	0.9	1.0
	<b>Hispanic</b>	9.0%	<i>26.3%</i>	39.7%	13.0%
	Ratio vs. White	1.1	<i>0.8</i>	0.9	0.7
<b>Age 65 and older</b>	<b>Non Hispanic White</b>	16.1%	58.0%	53.1%	8.0%
	<b>Non-Hispanic Black</b>	<b>31.8%</b>	<b>69.8%</b>	50.0%	<b>12.9%</b>
	Ratio vs. White	<b>2.0</b>	<b>1.2</b>	0.9	<b>1.6</b>
	<b>Non-Hispanic Other</b>	21.2%	59.4%	42.1%	12.9%
	Ratio vs. White	1.3	1.0	0.8	1.6
	<b>Hispanic</b>	18.9%	<i>42.5%</i>	<i>34.8%</i>	6.7%
	Ratio vs. White	1.2	<i>0.7</i>	<i>0.7</i>	0.8

**Bold and highlight indicate a statistically significant difference (larger than the margin of error) greater for minority than for Whites.**

*Italics and box indicate statistically significant difference smaller for minority than for Whites*

**Because minorities have less health care access, for the diagnosis of conditions, lower rates for minorities may be due to poor health care access, rather than to having less disease.**

## Summarizing the table above:

### Diabetes:

African Americans adults of all ages have **higher rates** of diagnosed diabetes compared to Whites that exceed the margin or error of the survey.

For middle and older ages, the other racial groups, Hispanic, and Other (Asians and American Indians) show higher rates of diagnosed diabetes that do not exceed the margin of error of the survey.

### Hypertension (High Blood Pressure)

African Americans adults of all ages have **higher rates** of diagnosed hypertension compared to Whites that exceed the margin or error of the survey.

Hispanics show lower rates of diagnosed hypertension that exceed the margin of error of the survey. This may reflect poor access to care and to diagnosis, rather than less hypertension in this population.

### High Cholesterol

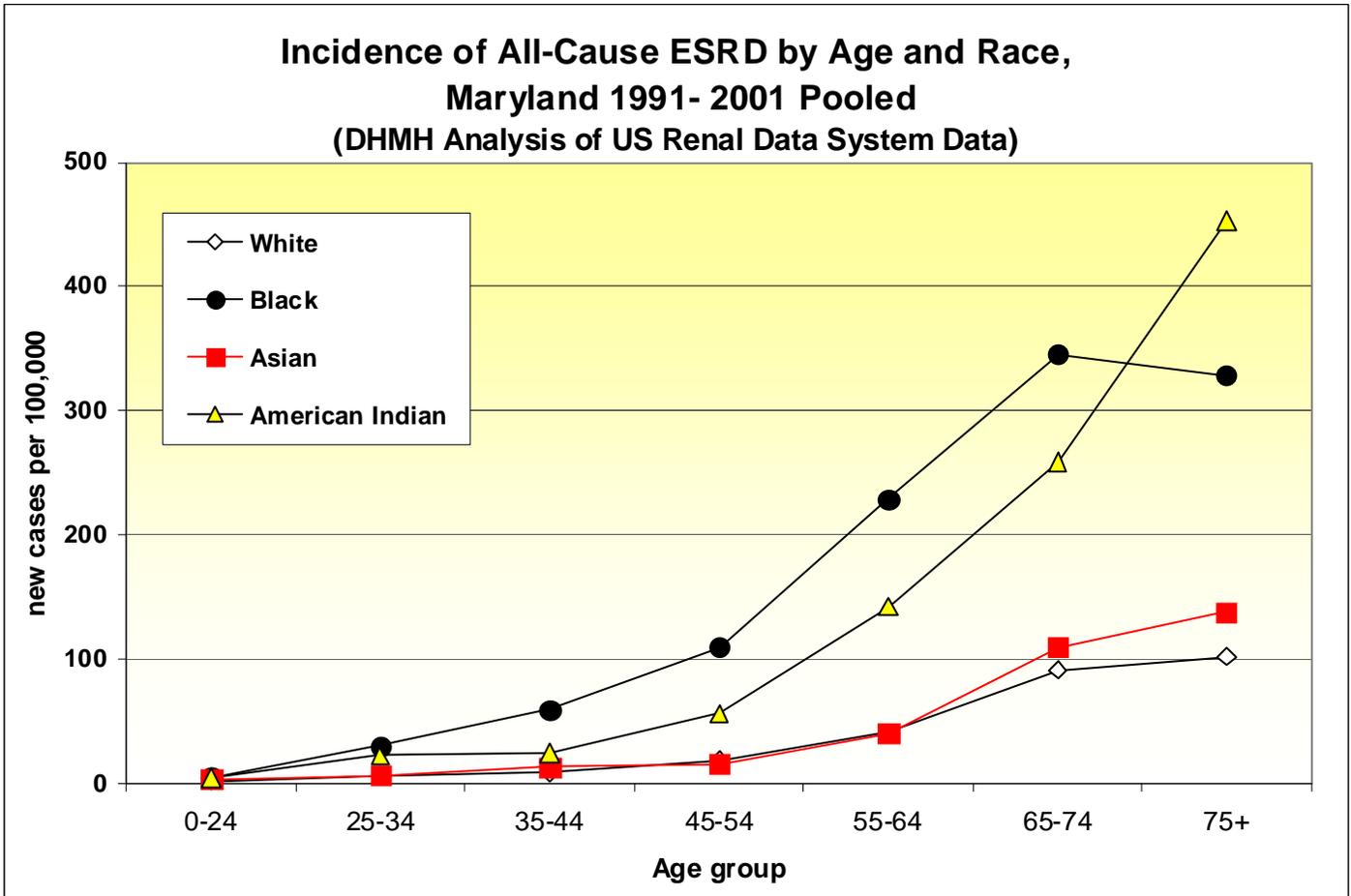
The minority and White rates of diagnosed high cholesterol were generally similar, except for statistically significantly lower rates for African Americans of middle age and elderly Hispanics. These latter two differences could be due to issues of health care access.

### Smoking

Elderly and middle aged African Americans have higher smoking rates than Whites, which exceed the margin of error of the survey. Smoking rates are significantly lower (compared to Whites) for Hispanics and the combined group Asians and American Indians among young adults.

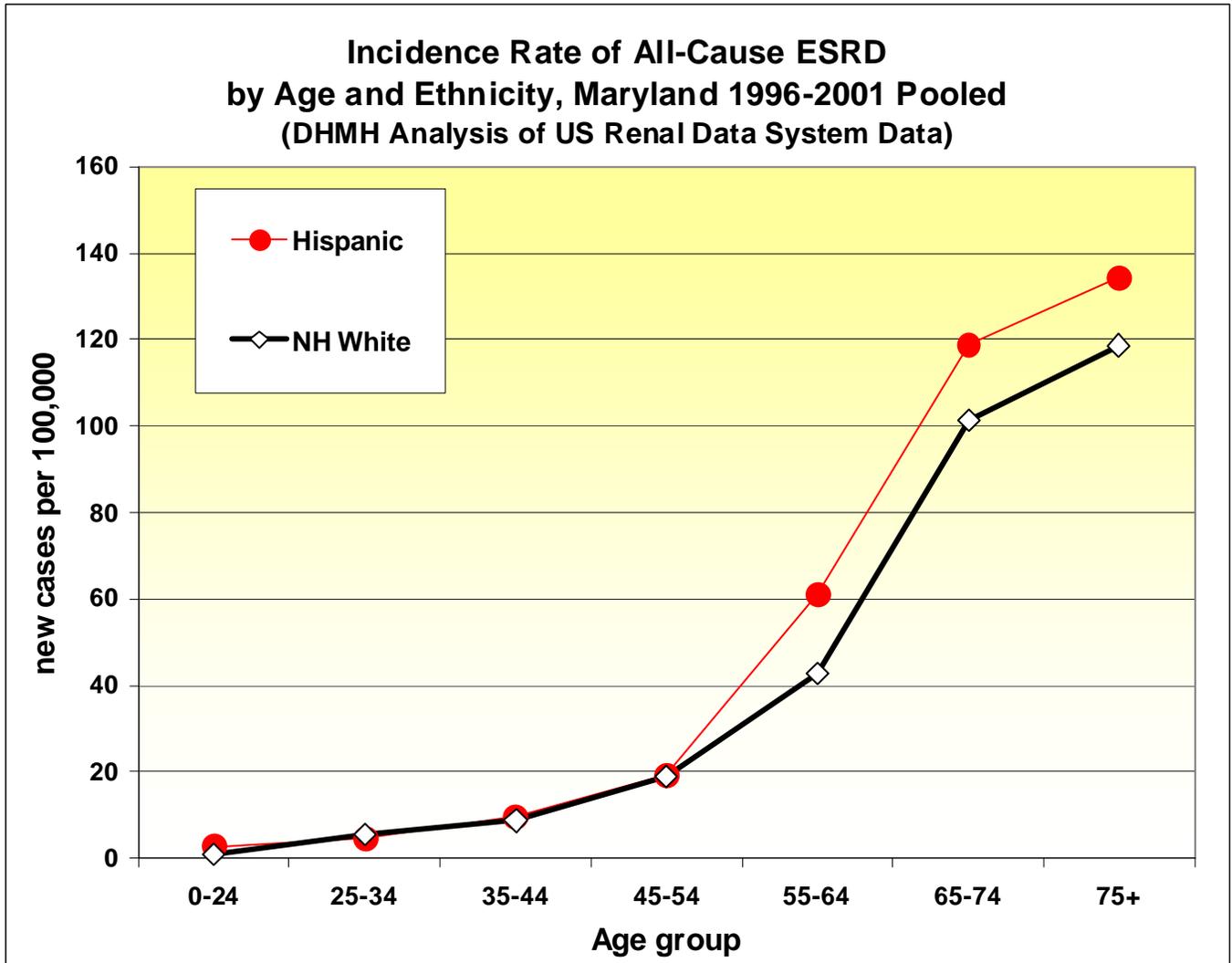
## Disparities in the Burden of End-Stage Renal Disease (ESRD)

Based on pooled data from 1991 through 2001, the rates of new cases of End-Stage Renal Disease (kidney disease, referred to as ESRD) in Maryland have been about three times higher for African Americans and American Indians than for Whites.



Since diabetes and hypertension cause about two-thirds of all ESRD, the higher levels of ESRD in American Indians in Maryland suggest that they have higher rates of and/or poorer control of diabetes and hypertension than do Whites.

Based on pooled data from 1996 through 2001, the rates of new cases of End-Stage Renal Disease (kidney disease, referred to as ESRD) in Maryland have been about 20% to 30% higher for Hispanics than for Non-Hispanic Whites in the age groups older than 54 years of age. (Hispanic ethnicity was not collected prior to 1996)

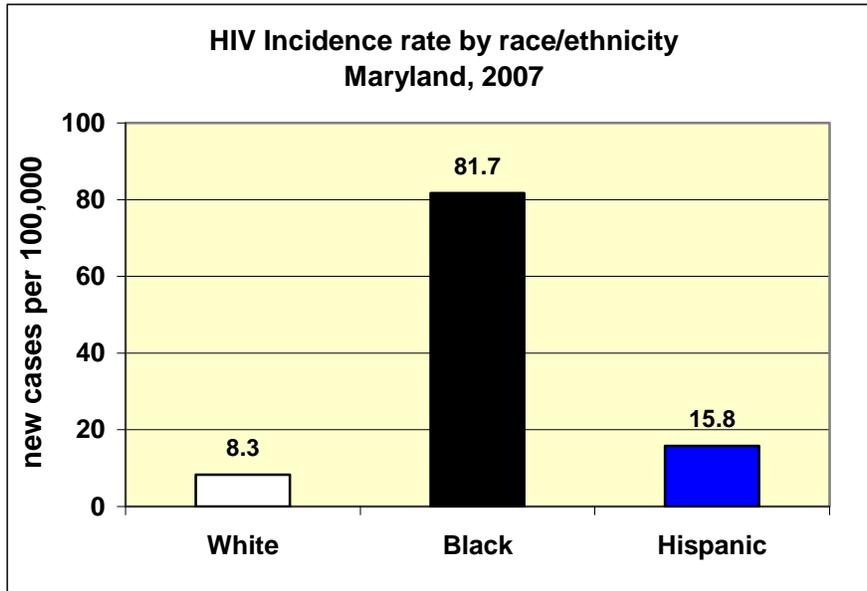


## Disparity in HIV and AIDS New Case (Incidence) Rates

Compared to Whites, incidence rates for HIV infection are

About 10 times higher for African Americans

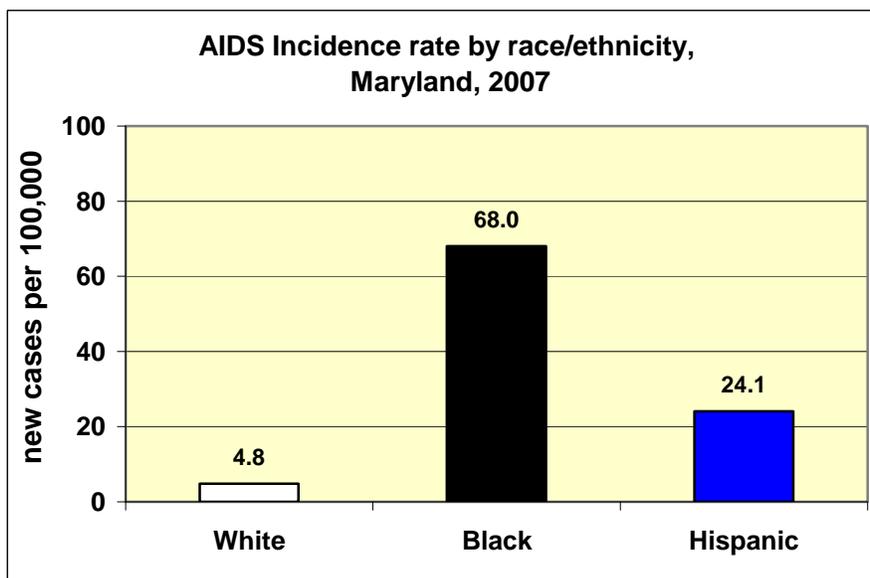
About 2 times higher for Hispanics



Compared to Whites, incidence rates for AIDS are

About 12 times higher for African Americans

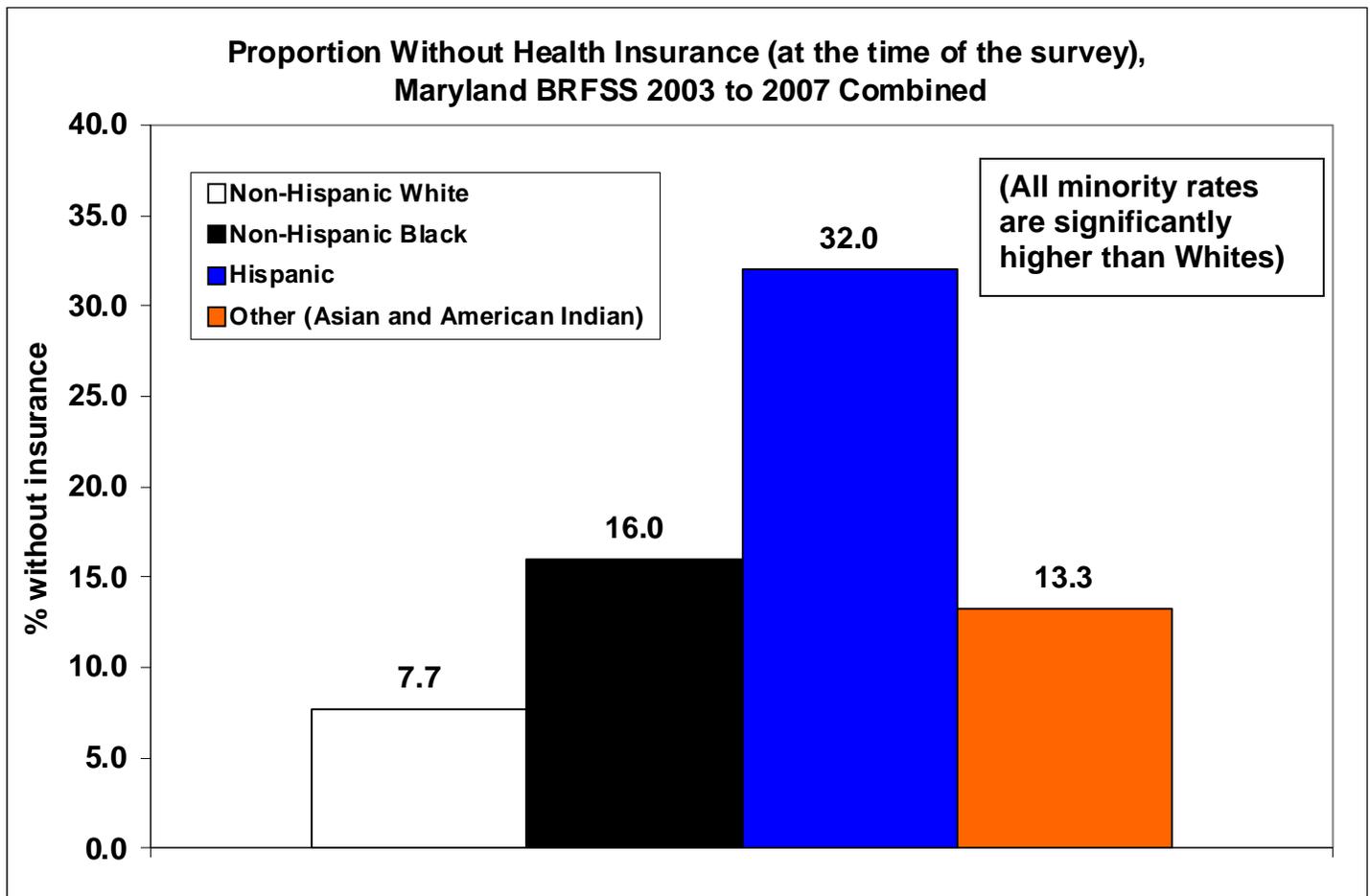
About 5 times higher for Hispanics



## Disparities in Health Care Access

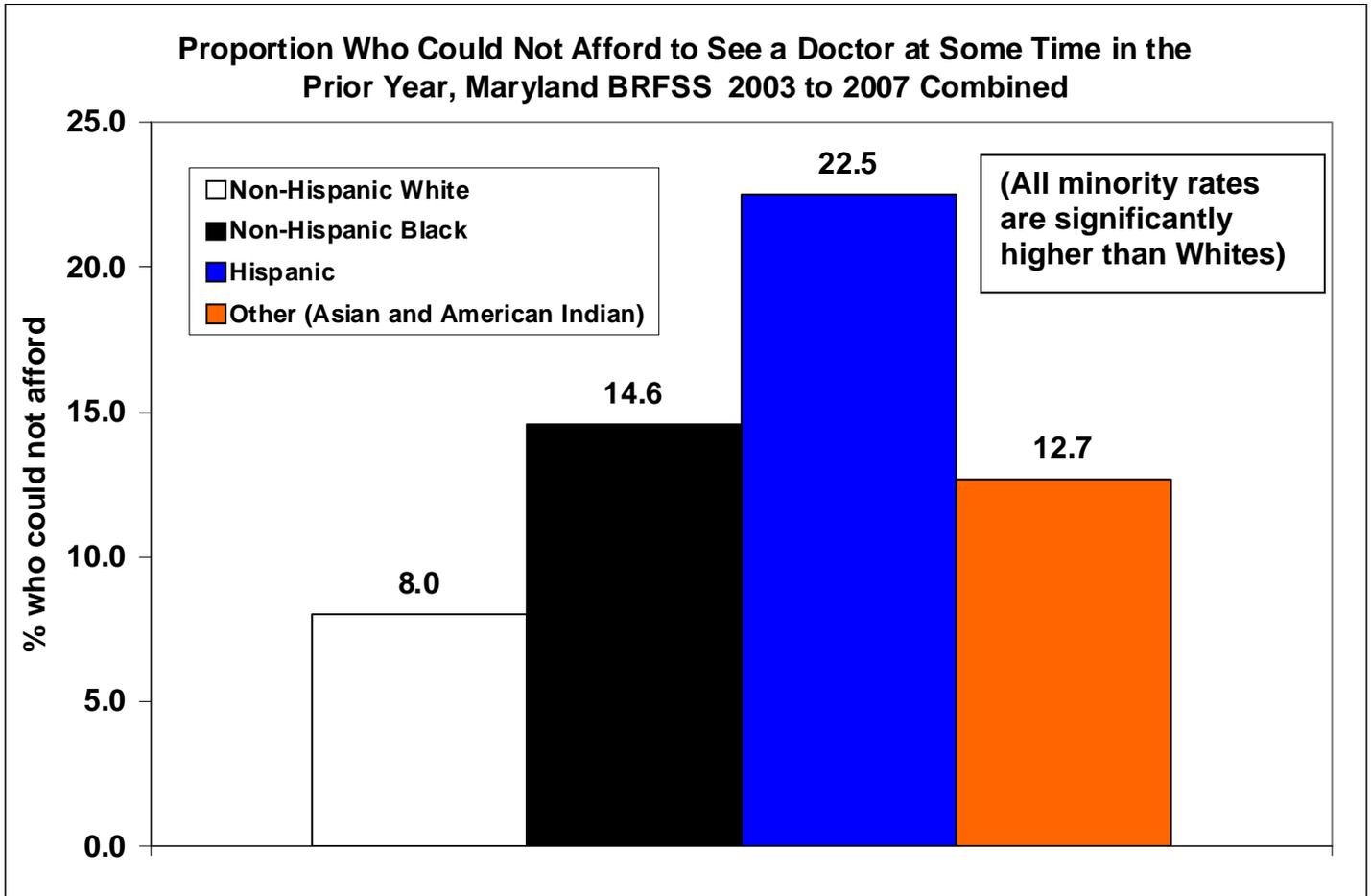
### Insurance:

Combining data from the 2003 through 2007 BRFSS, Maryland adults of all racial and ethnic minority groups were more likely to be without health insurance (at the time of the survey) than were White adults.



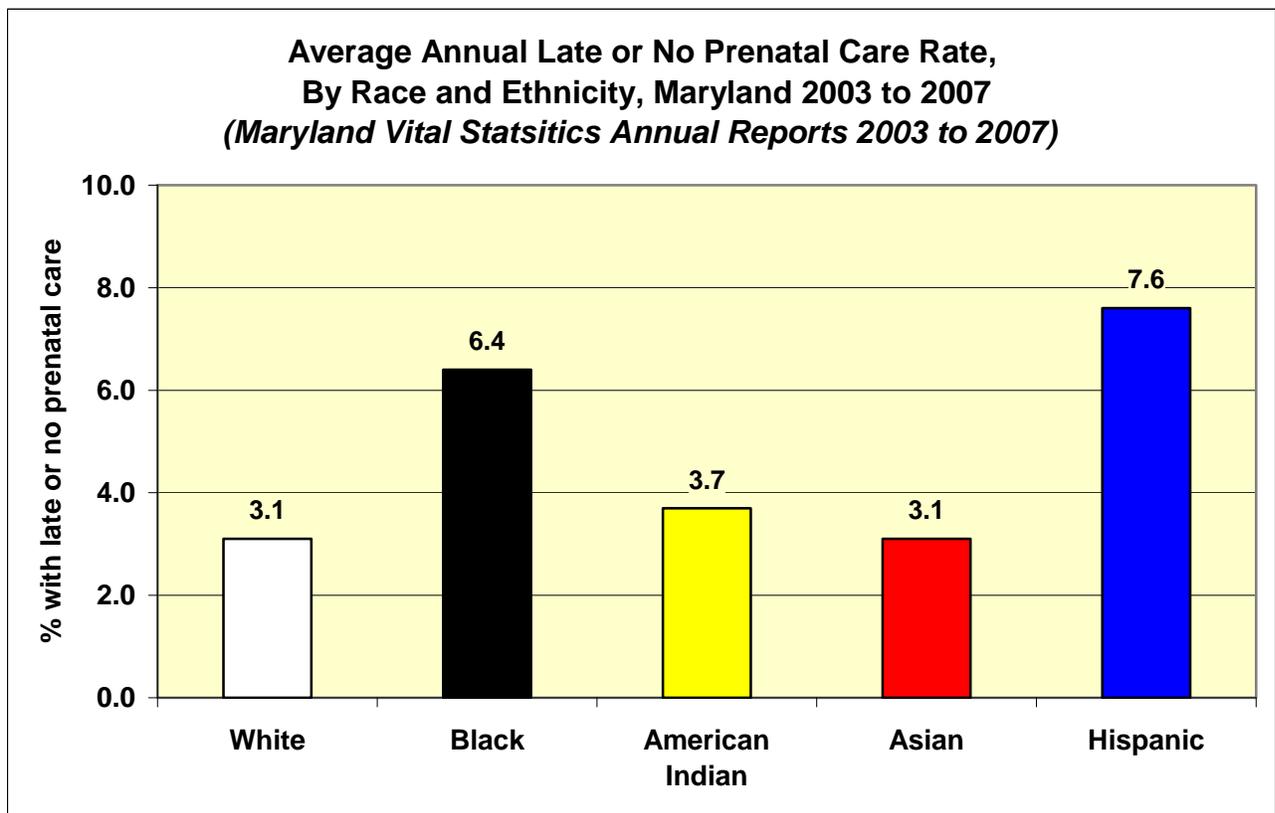
Unable to Afford Care:

Combining data from the 2003 to 2007 BRFSS, Maryland adults of all racial and ethnic minority groups were more likely to be unable to afford to see a doctor (at some time in the prior year) than were White adults.



From 2003 to 2007, compared to pregnant white women, the percent of pregnant minority women receiving late or no prenatal care was:

- About 2 times higher for African American women,
- About 2.5 times higher for Hispanic women,
- And about 19% higher for American Indian women



## **Cost of Disparities: Cost of Excess African American Hospital Admissions**

Maryland Hospital Discharge Data permits an estimation of the hospital component cost of excess African American hospital admissions. Estimates of this cost of disparities in 2004, for all admissions and for selected conditions, for Medicaid and for all payers, are shown below.

<b>Cost of Disparities, Maryland 2004</b>		
<b>Cost of Excess African American Admissions</b>		
<b>Hospital Component of Hospital Admissions</b>		
<b><i>MHHD Analysis of HSCRC Hospital Discharge Data</i></b>		
<b>Primary Diagnosis</b>	<b>Medicaid Excess Cost</b>	<b>All Payer Excess Cost</b>
<b>All Diagnoses</b>	<b>\$59 Million</b>	<b>\$481 Million</b>
<b>Heart Disease</b>	<b>\$5 Million</b>	<b>\$38 Million</b>
<b>Cancer</b>	<b>\$1 Million</b>	<b>\$7 Million</b>
<b>Diabetes</b>	<b>\$3 Million</b>	<b>\$26 Million</b>
<b>Asthma</b>	<b>\$2 Million</b>	<b>\$18 Million</b>
<b>Neonatal Intensive Care Admissions</b>	<b>\$3 Million</b>	<b>\$20 Million</b>
<b><i>Does not include Physician component of Hospital Admission</i></b>		
<b><i>Does not include Emergency Room costs</i></b>		
<b><i>Does not include Outpatient Care costs</i></b>		

*MHHD – Office of Minority Health and Health Disparities, DHMH*  
*HSCRC – Health Services Cost Review Commission*

## **Cost of Disparities: Cost of Excess African American Hospital Admissions for Ambulatory Care Sensitive Conditions (ACSC).**

The Maryland Health Care Commission (MHCC), in consultation with the Office of Minority Health and Health Disparities, commissioned an analysis of factors accounting for differences in rates of admission for ambulatory care sensitive conditions (ACSC) in the Maryland fee-for-service Medicare population in 2006

ACSCs are conditions where optimal outpatient care can prevent the need for most hospital admissions. The estimated costs of excess African American admissions for Maryland Medicare fee-for-service enrollees age 65 and older, in 2006 are shown below. (Source: <http://mhcc.maryland.gov/spotlight/disparities2006.pdf>)

<b>Cost of Disparities, Maryland 2006</b>	
<b>Cost of Excess African American Admissions</b>	
<b>Hospital Component of Hospital Admissions</b>	
<i>MHCC analysis of Maryland Medicare data</i>	
<u>Primary Diagnosis</u>	<u>Medicare Excess Cost</u>
<b>Congestive Heart Failure</b>	<b>\$13 Million</b>
<b>Urinary Tract Infection</b>	<b>\$2 Million</b>
<b>Dehydration</b>	<b>\$2 Million</b>
<b>Diabetes</b>	<b>\$5 Million</b>
<b>Asthma</b>	<b>\$1 Million</b>
<b>Hypertension</b>	<b>\$1 Million</b>
<i>Does not include Physician component of Hospital Admission</i>	
<i>Does not include Emergency Room costs</i>	
<i>Does not include Outpatient Care costs</i>	

# Success in Reducing Cancer Mortality Disparities in Maryland

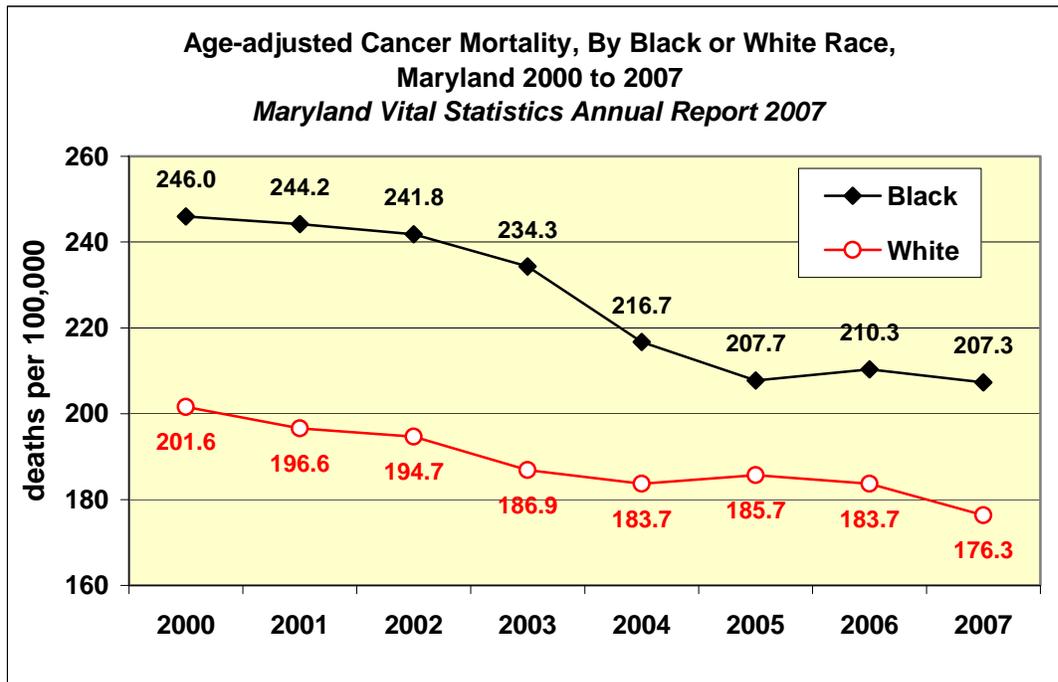
## Reduction in the Cancer Mortality Disparity for African Americans in Maryland, 2000-2007

Cancer Mortality Rates, Rate Differences, and Percent Change, By White or Black Race, Maryland 2000 and 2007 (rates are age-adjusted rates per 100,000)

	2000	2007	Percent Change
Black Cancer Mortality	246.0	207.3	-15.7%
White Cancer Mortality	201.6	176.3	-12.5%
Mortality Difference	44.4	31.0	-30.2%

Source: Maryland Vital Statistics Annual Report 2007

- Since 2000, Tobacco settlement funds have been used in cancer control
- Awareness and screening activities were undertaken, targeting minorities
- Since 2000, the cancer mortality disparity has been cut by almost one third:
  - White cancer mortality was reduced by 12.5%
  - African American cancer mortality was reduced by 15.7%
  - The mortality difference between the groups was reduced by 30.2%



# Mortality Disparity Trends for Other Chronic Conditions

## Heart disease:

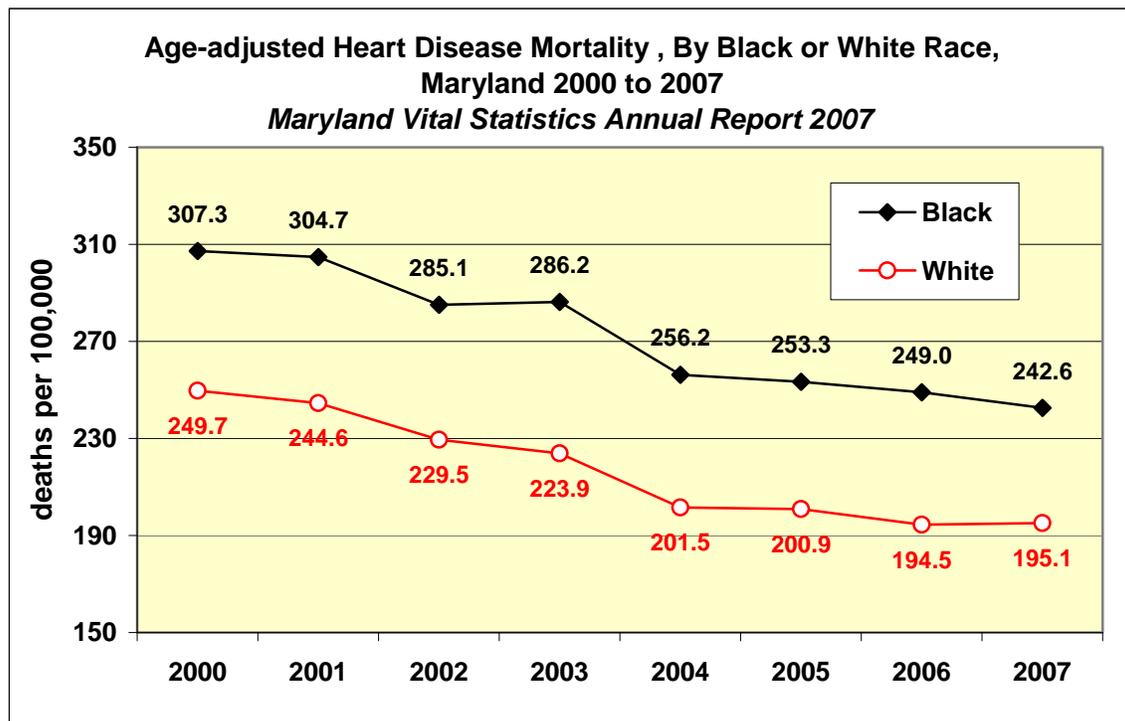
### *Change in the Heart Disease Mortality Disparity for African Americans, 2000-2007*

**Heart Mortality Rates, Rate Differences, and Percent Change, By White or Black Race, Maryland 2000 and 2007 (rates are age-adjusted rates per 100,000)**

	2000	2007	Percent Change
Black Heart Mortality	307.3	242.6	-21.1%
White Heart Mortality	249.7	195.1	-21.9%
Mortality Difference	57.6	47.5	-17.5%

Source: Maryland Vital Statistics Annual Report 2007

- African American heart disease mortality was reduced by 21.1%
- White heart disease mortality was reduced by 21.9%
- The mortality difference between the groups was reduced by 17.5%



**Stroke:**

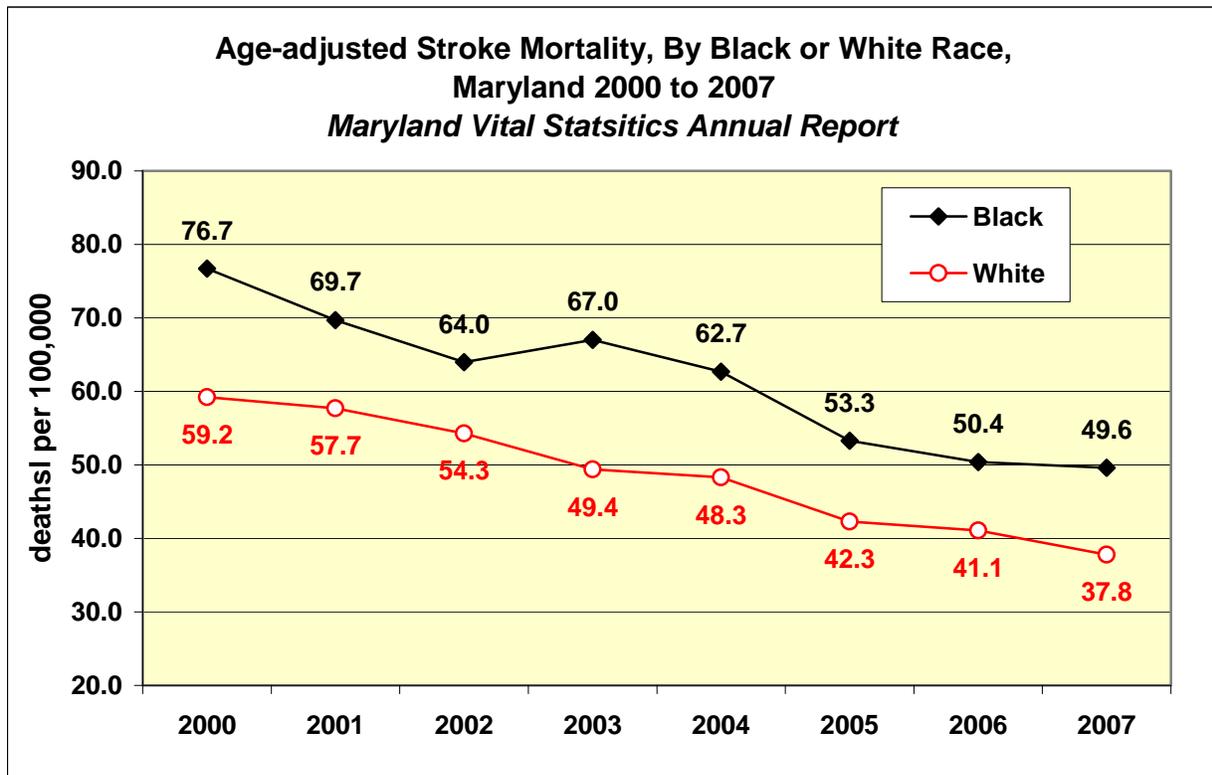
***Change in the Stroke Mortality Disparity for African Americans, Maryland 2000-2007***

**Stroke Mortality Rates, Rate Differences, and Percent Change, By White or Black Race, Maryland 2000 and 2007 (rates are age-adjusted rates per 100,000)**

	2000	2007	Percent Change
<b>Black Stroke Mortality</b>	76.7	49.6	-35.3%
<b>White Stroke Mortality</b>	59.2	37.8	-36.1%
<b>Mortality Difference</b>	17.5	11.8	-32.6%

Source: Maryland Vital Statistics Annual Report 2007

- African American stroke mortality was reduced by 35.3%
- White stroke mortality was reduced by 36.1%
- The mortality difference between the groups was reduced by 32.6%



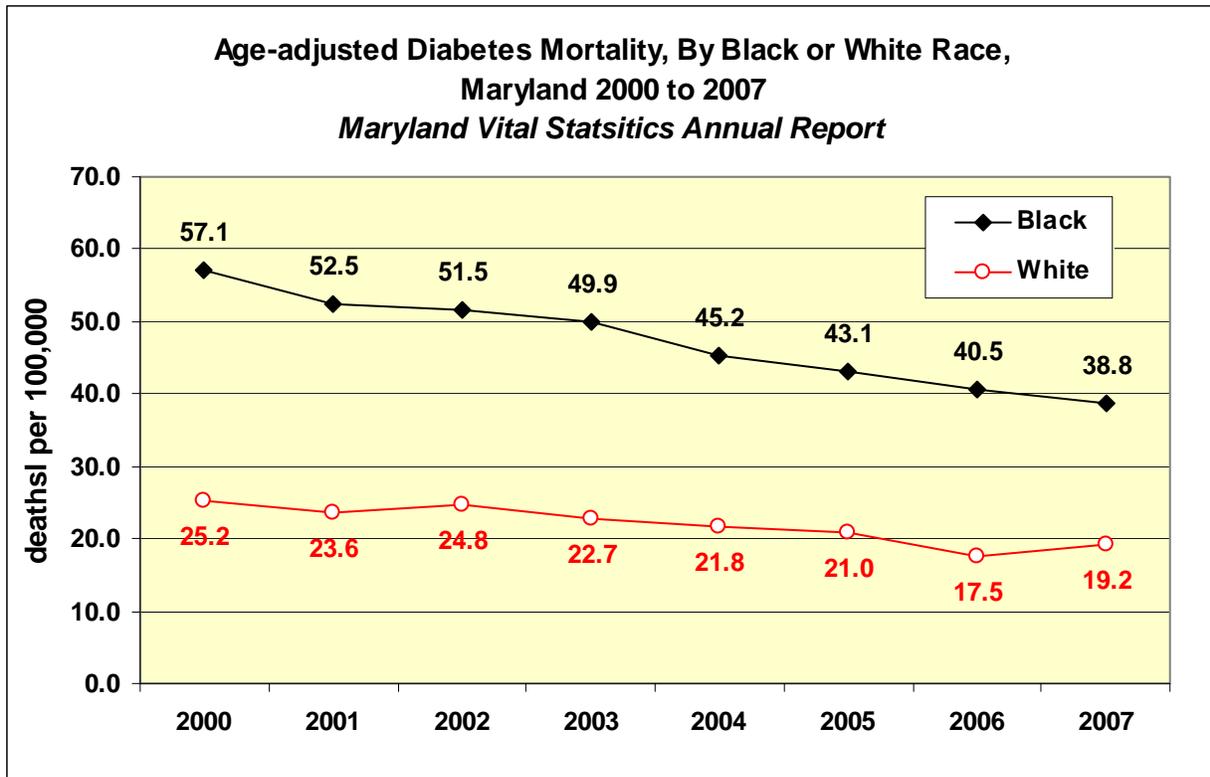
**Diabetes:**

***Change in the Diabetes Mortality Disparity for African Americans, Maryland 2000-2007***

	2000	2007	Percent Change
<b>Black Diabetes Mortality</b>	<b>57.1</b>	<b>38.8</b>	<b>-32.0%</b>
<b>White Diabetes Mortality</b>	<b>25.2</b>	<b>19.2</b>	<b>-23.8%</b>
<b>Mortality Difference</b>	<b>31.9</b>	<b>19.6</b>	<b>-38.6%</b>

Source: Maryland Vital Statistics Annual Report 2007

- African American diabetes mortality was reduced by 32.0%
- White diabetes mortality was reduced by 23.8%
- The mortality difference between the groups was reduced by 38.6%



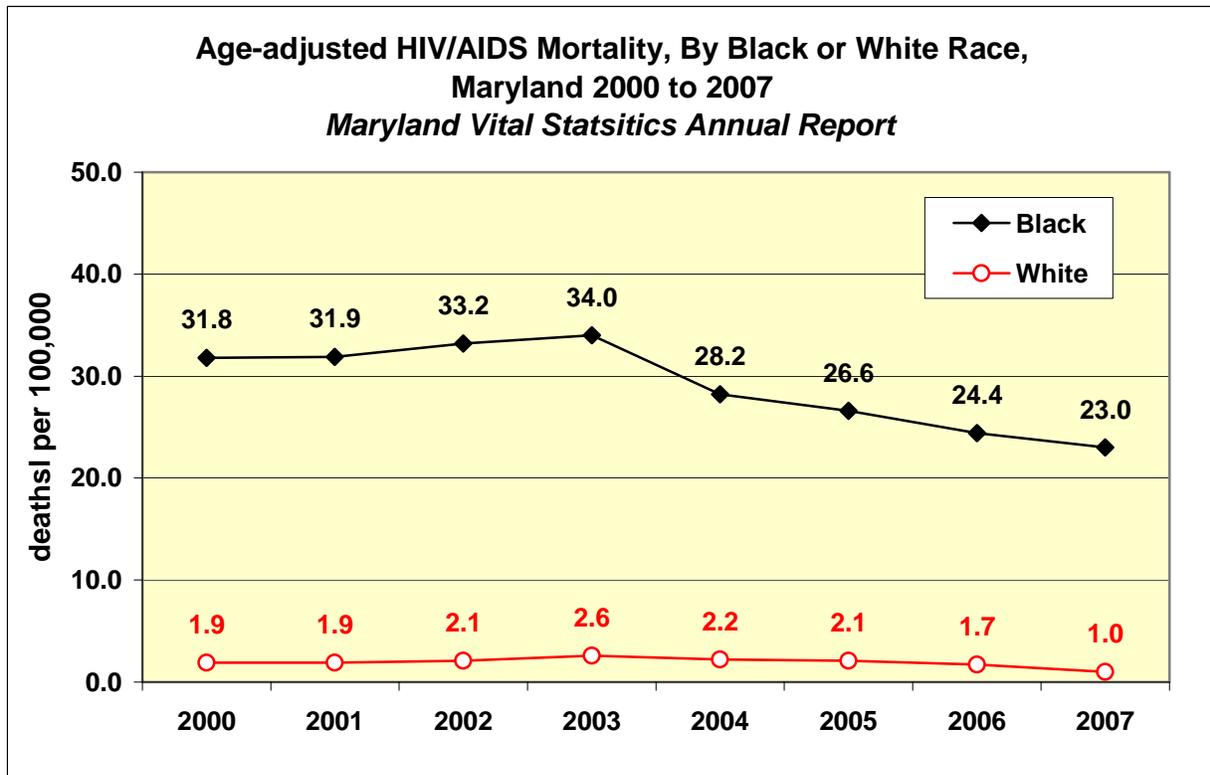
**HIV/AIDS:**

***Change in the HIV / AIDS Mortality Disparity for African Americans, Maryland 2000-2007***

	2000	2007	Percent Change
<b>Black HIV/AIDS Mortality</b>	<b>31.8</b>	<b>23.0</b>	<b>-27.7%</b>
<b>White HIV/AIDS Mortality</b>	<b>1.9</b>	<b>1.0</b>	<b>-47.4%</b>
<b>Mortality Difference</b>	<b>29.9</b>	<b>22.0</b>	<b>-26.4%</b>

Source: Maryland Vital Statistics Annual Report 2007

- African American HIV / AIDS mortality was reduced by 27.7%
- White HIV / AIDS mortality was reduced by 47.4%
- The mortality difference between the groups was reduced by 26.4%



**All-causes of Death:**

***Change in the All-cause Mortality Disparity for African Americans, Maryland 2000-2007***

<b>All-cause Mortality Rates, Rate Differences, and Percent Change, By White or Black Race, Maryland 2000 and 2007 (rates are age-adjusted rates per 100,000)</b>			
	<b>2000</b>	<b>2007</b>	<b>Percent Change</b>
<b>Black All-cause Mortality</b>	<b>1120.3</b>	<b>925.0</b>	<b>-17.4%</b>
<b>White All-cause Mortality</b>	<b>849.2</b>	<b>744.7</b>	<b>-12.3%</b>
<b>Mortality Difference</b>	<b>271.1</b>	<b>180.3</b>	<b>-33.5%</b>

Source: Maryland Vital Statistics Annual Report 2007

- African American all-cause mortality was reduced by 17.4%
- White all-cause mortality was reduced by 12.3%
- The mortality difference between the groups was reduced by 33.5%

