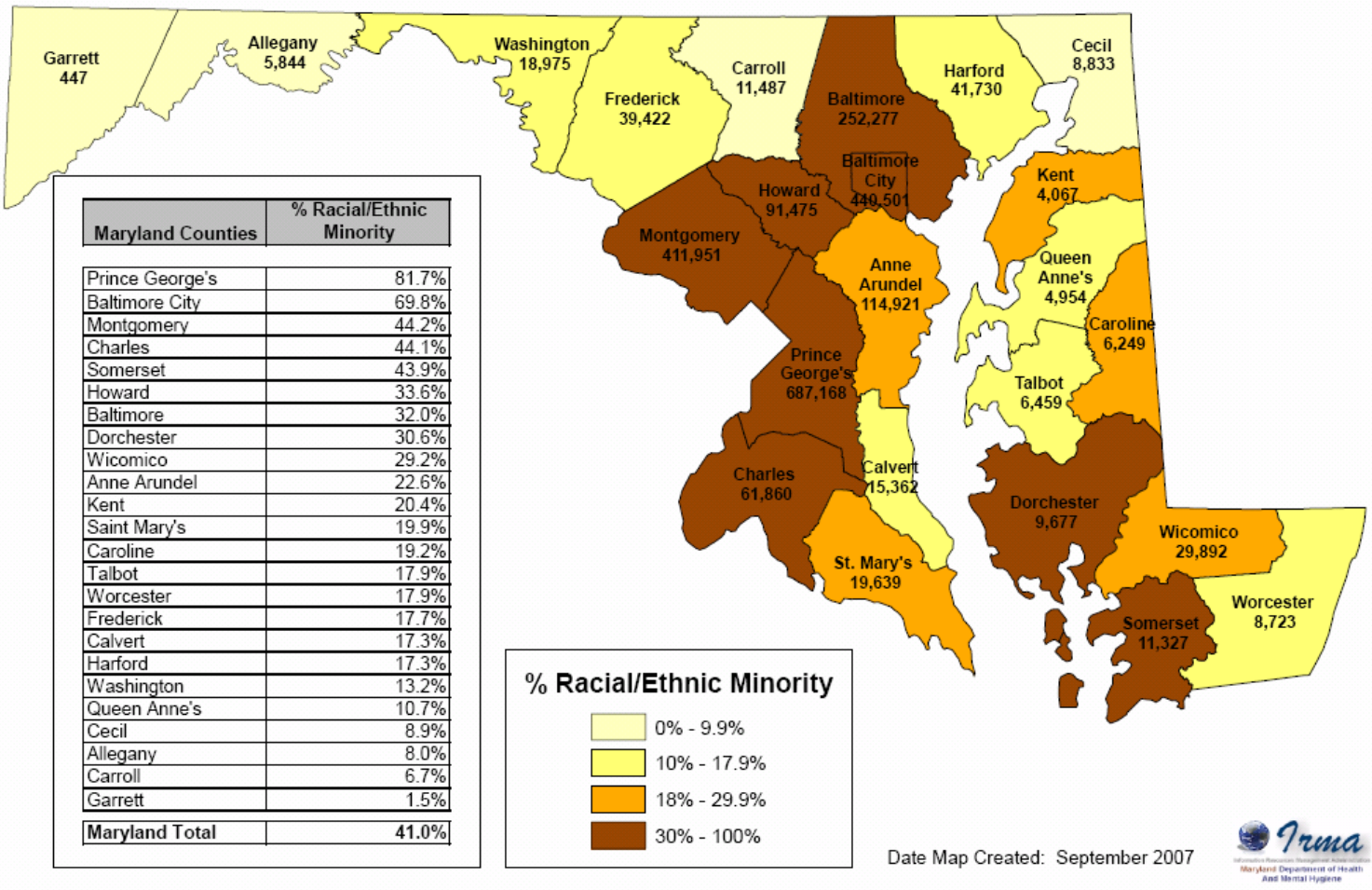
Maryland Health Disparities Data Highlights

July 2008

Racial or Ethnic Minority Population (Number and Percent), by Jurisdiction, Maryland 2006



Maryland Counties	% Racial/Ethnic Minority
Prince George's	81.7%
Baltimore City	69.8%
Montgomery	44.2%
Charles	44.1%
Somerset	43.9%
Howard	33.6%
Baltimore	32.0%
Dorchester	30.6%
Wicomico	29.2%
Anne Arundel	22.6%
Kent	20.4%
Saint Mary's	19.9%
Caroline	19.2%
Talbot	17.9%
Worcester	17.9%
Frederick	17.7%
Calvert	17.3%
Harford	17.3%
Washington	13.2%
Queen Anne's	10.7%
Cecil	8.9%
Allegany	8.0%
Carroll	6.7%
Garrett	1.5%
Maryland Total	**41.0%**

Minority Population in Maryland

- Maryland is quickly becoming a state where the combined racial and ethnic minority population will exceed the white population. The 2006 estimated Maryland population is 41.0 percent minority, up by 0.7 percentage points from the previous year (40.3%).
- 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 2006, by Race and Ethnicity (41% minority)

(Data from Maryland Vital Statistics Annual Report 2006)

Race	All Ethnicity		Non-hispanic		Hispanic	
White	**3,610,808**	**64.3%**	**3,315,487**	**59.0%**	**295,321**	**5.3%**
Non-white	**2,004,919**	**35.7%**	**1,962,899**	**35.0%**	**42,020**	**0.7%**
Black	***1,688,378***	***30.1%***				
Asian / Pac Isle	***295,178***	***5.3%***				
American Indian	***21,363***	***0.4%***				
MD total	**5,615,727**	**100.0%**	**5,278,386**	**94.0%**	**337,341**	**6.0%**

All percents are percentage of the total Maryland population.

Minority Population by Jurisdiction, Maryland 2006

REGION AND POLITICAL SUBDIVISION	TOTAL	Non Hispanic White	Minority Population	Percent Minority	Percent African American	Percent Asian/PI	Percent AI/AN	Percent Hispanic
MARYLAND	**5,615,727**	**3,315,487**	**2,300,240**	**41.0%**	**30.1%**	**5.3%**	**0.4%**	**6.0%**
NORTHWEST AREA	**469,376**	**404,688**	**64,688**	**13.8%**	**8.2%**	**2.4%**	**0.2%**	**3.3%**
GARRET	29,859	29,412	447	1.5%	0.7%	0.3%	0.1%	0.5%
ALLEGANY	72,831	66,987	5,844	8.0%	6.3%	0.7%	0.2%	0.9%
WASHINGTON	143,748	124,773	18,975	13.2%	9.7%	1.4%	0.2%	2.1%
FREDERICK	222,938	183,516	39,422	17.7%	8.9%	3.8%	0.3%	5.2%
BALTIMORE METRO AREA	**2,612,164**	**1,659,773**	**952,391**	**36.5%**	**29.6%**	**4.1%**	**0.3%**	**2.9%**
BALTIMORE CITY	631,366	190,865	440,501	69.8%	65.5%	2.1%	0.4%	2.4%
BALTIMORE COUNTY	787,384	535,107	252,277	32.0%	25.1%	4.3%	0.3%	2.7%
ANNE ARUNDEL	509,300	394,379	114,921	22.6%	15.4%	3.4%	0.4%	3.7%
CARROLL	170,260	158,773	11,487	6.7%	3.3%	1.7%	0.2%	1.6%
HOWARD	272,452	180,977	91,475	33.6%	17.3%	12.1%	0.3%	4.3%
HARFORD	241,402	190,672	50,730	21.0%	12.6%	2.3%	0.3%	2.4%
NATIONAL CAPITAL AREA	**1,773,446**	**674,327**	**1,099,119**	**62.0%**	**40.9%**	**9.3%**	**0.5%**	**12.8%**
MONTGOMERY	932,131	520,180	411,951	44.2%	17.3%	14.0%	0.4%	13.8%
PRINCE GEORGE'S	841,315	154,147	687,168	81.7%	67.1%	4.2%	0.5%	11.7%
SOUTHERN AREA	**328,074**	**231,213**	**96,861**	**29.5%**	**24.3%**	**2.3%**	**0.6%**	**2.7%**
CALVERT	88,804	73,442	15,362	17.3%	13.6%	1.4%	0.3%	2.1%
CHARLES	140,416	78,556	61,860	44.1%	37.6%	2.8%	0.8%	3.3%
SAINT MARY'S	98,854	79,215	19,639	19.9%	15.0%	2.4%	0.4%	2.4%
EASTERN SHORE								
AREA	**432,667**	**345,486**	**87,181**	**20.1%**	**16.5%**	**1.2%**	**0.3%**	**2.5%**
CECIL	99,506	90,673	8,833	8.9%	5.5%	1.1%	0.3%	2.1%
KENT	19,983	15,916	4,067	20.4%	16.1%	0.8%	0.3%	3.5%
QUEEN ANNE'S	46,241	41,287	4,954	10.7%	7.9%	1.1%	0.2%	1.6%
CAROLINE	32,617	26,368	6,249	19.2%	14.3%	0.8%	0.5%	4.1%
TALBOT	36,062	29,603	6,459	17.9%	14.4%	1.0%	0.2%	2.7%
DORCHESTER	31,631	21,954	9,677	30.6%	27.8%	0.9%	0.2%	1.9%
WICOMICO	91,987	65,095	26,892	29.2%	24.3%	2.0%	0.3%	3.1%
SOMERSET	25,774	14,447	11,327	43.9%	41.2%	0.9%	0.4%	1.9%
WORCESTER	48,866	40,143	8,723	17.9%	14.9%	1.0%	0.2%	0.2%

Source: Maryland Vital Statistics Annual Report 2006

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 all 22 Maryland jurisdictions where the age-adjusted rates could be calculated. **Twelve jurisdictions** have a larger Black vs. White mortality ratio than Baltimore City, and **five 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 2001- 2003 Pooled

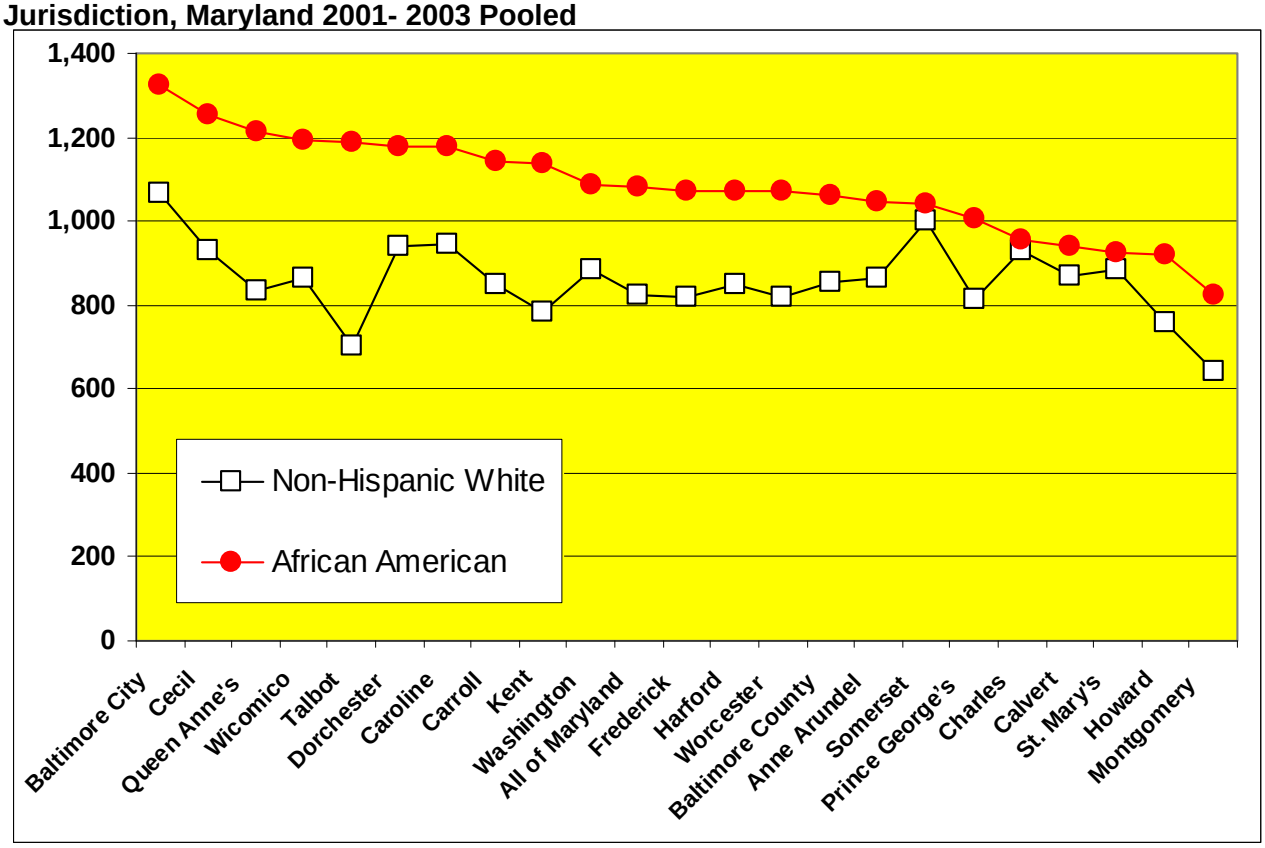
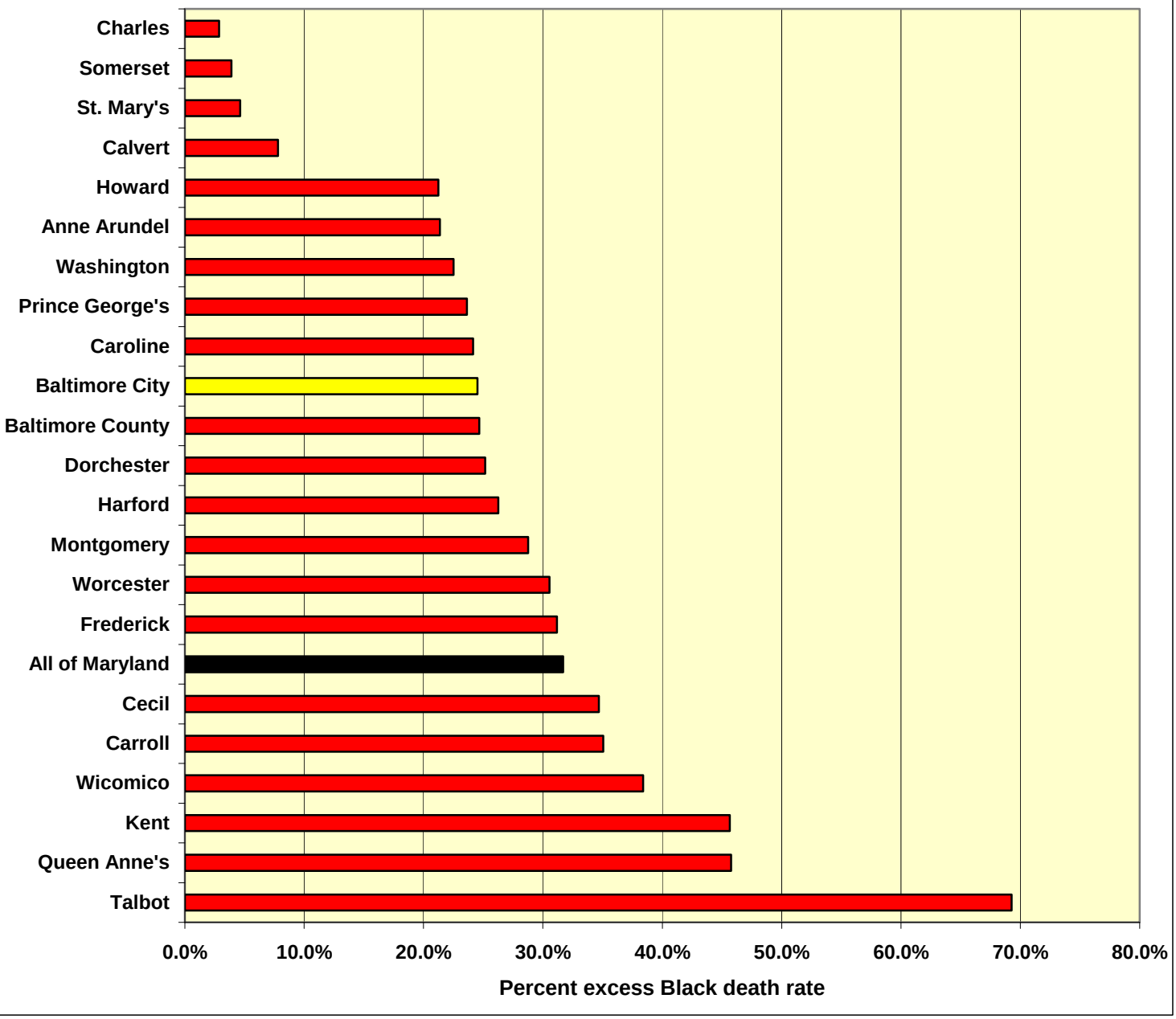


Figure 2. Excess Black Death Rate (Compared to Non-Hispanic Whites) In Maryland, by Jurisdiction, 2001-03 Combined.



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

Age-adjusted death rates for Blacks could not be calculated for Garrett and Allegany Counties.

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

Mortality Disparities

- Ten 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 52.4 deaths per 100,000 population.
- Blacks are 12.7 times more likely to die from HIV/AIDS than Whites.

African American vs. White Mortality Disparity, 15 Leading 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	253.3	200.9	1.26	52.4
9	4	2	Cancer	207.7	185.7	1.12	22.0
7	8	3	Stroke	53.3	42.3	1.26	11.0
		4	Chronic Lung Disease	25.4	38.4	0.66	-13.0
6	3	5	Diabetes	43.1	21	2.05	22.1
		6	Accidents	24.8	24.7	1.00	0.1
10	10	7	Flu & Pneumonia	24	21.9	1.10	2.1
5	6	8	Septicemia	32.9	16	2.06	16.9
12	12	9	Alzheimer's Disease	15.2	18.3	0.83	-3.1
1	2	10	HIV / AIDS	26.6	2.1	12.67	24.5
4	7	11	Kidney diseases	23.7	10.6	2.24	13.1
2	5	12	Homicide	25.2	3.6	7.00	21.6
		13	Chronic Liver Disease	7.5	8.4	0.89	-0.9
		14	Suicide	4.6	10	0.46	-5.4
3	9	15	Certain Perinatal	9.9	3.8	2.61	6.1

Source: Maryland Vital Statistics Annual Report 2005

Disparities in Diabetes and Hypertension Burden

Results from the 2001 through 2004 Behavioral Risk Factor Surveillance System (BRFSS) survey show that in Maryland:

- African American adults have at least twice as much diagnosed diabetes as do White adults.

- Hispanic adults have at least 50% more diagnosed diabetes than White adults.

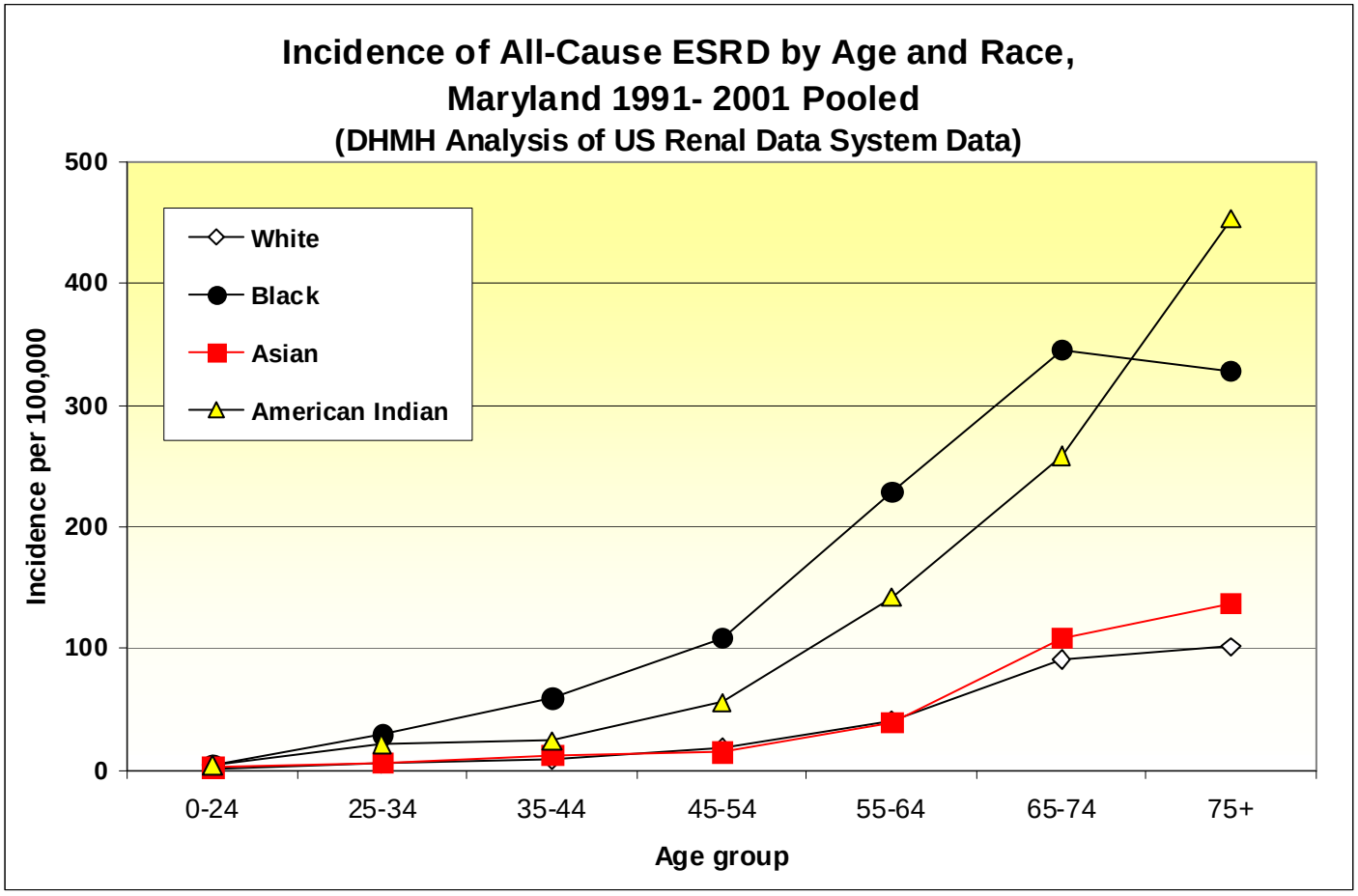
- In middle and older age groups, African American adults have 30% and 17% more diagnosed hypertension than White adults.

Because minority groups have less access to health care (data presented later in this document), more of the diabetes and hypertension burden among minorities goes undiagnosed. So the disparities in the burden of these diseases are probably even larger than the disparities in diagnosed disease presented above.

Small sample sizes in the BRFSS limit our ability to estimate the hypertension disparity for Hispanics, and both disparities for Asians and American Indians at this time. We are working on pooling additional years of BRFSS data in order to estimate these disparities for these groups.

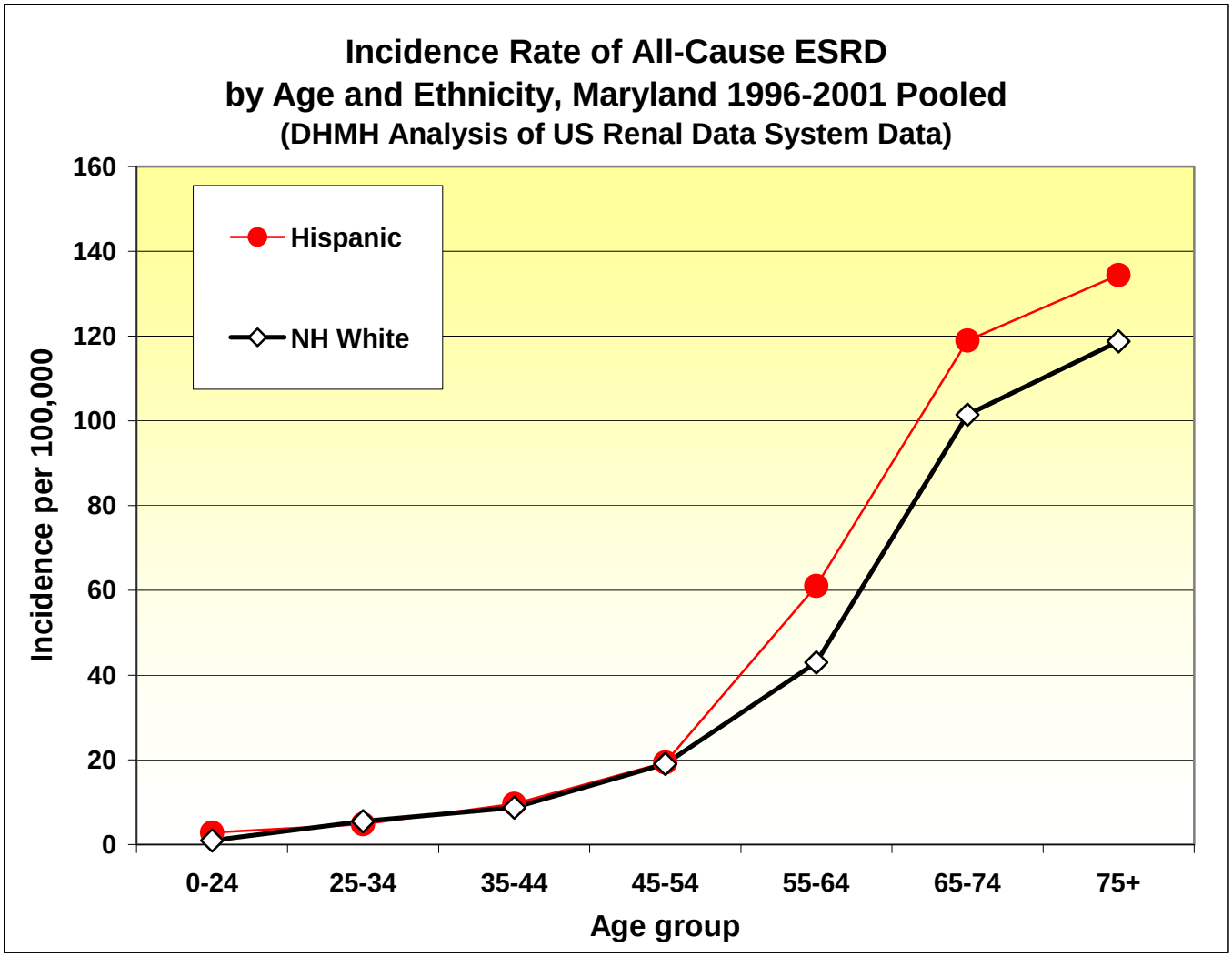
Disparities in the Burden of End-Stage Renal Disease (ESRD)

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 Native Americans than for Whites.



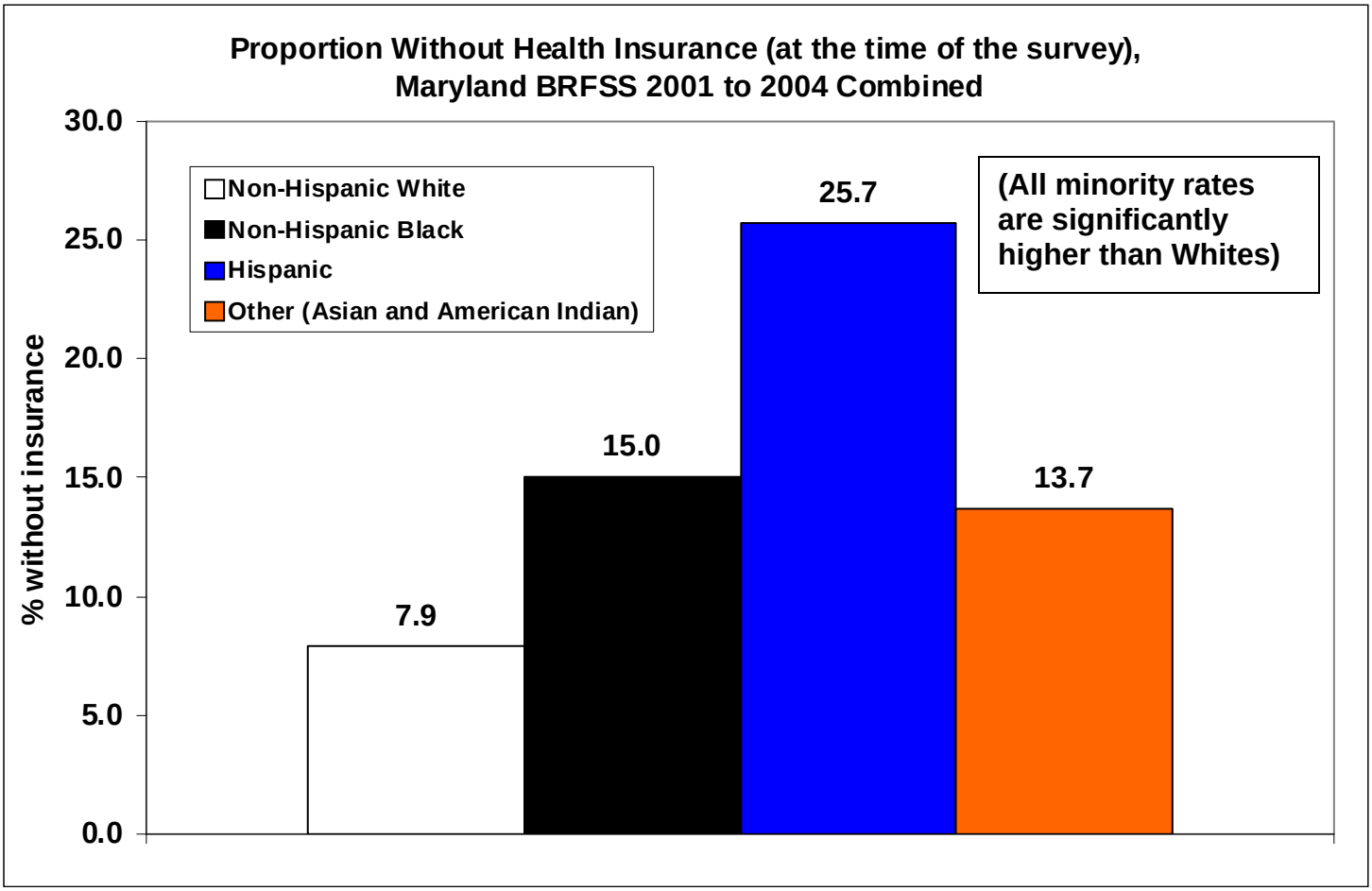
Since diabetes and hypertension are cause about two-thirds of all ESRD, the higher levels of ESRD in American Indians in Maryland suggest that they have higher rates of and/or poorer control of diabetes and hypertension than do Whites.

Based on pooled data from 1996 through 2001, the rates of new cases of End-Stage Renal Disease (kidney disease, referred to as ESRD) 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)

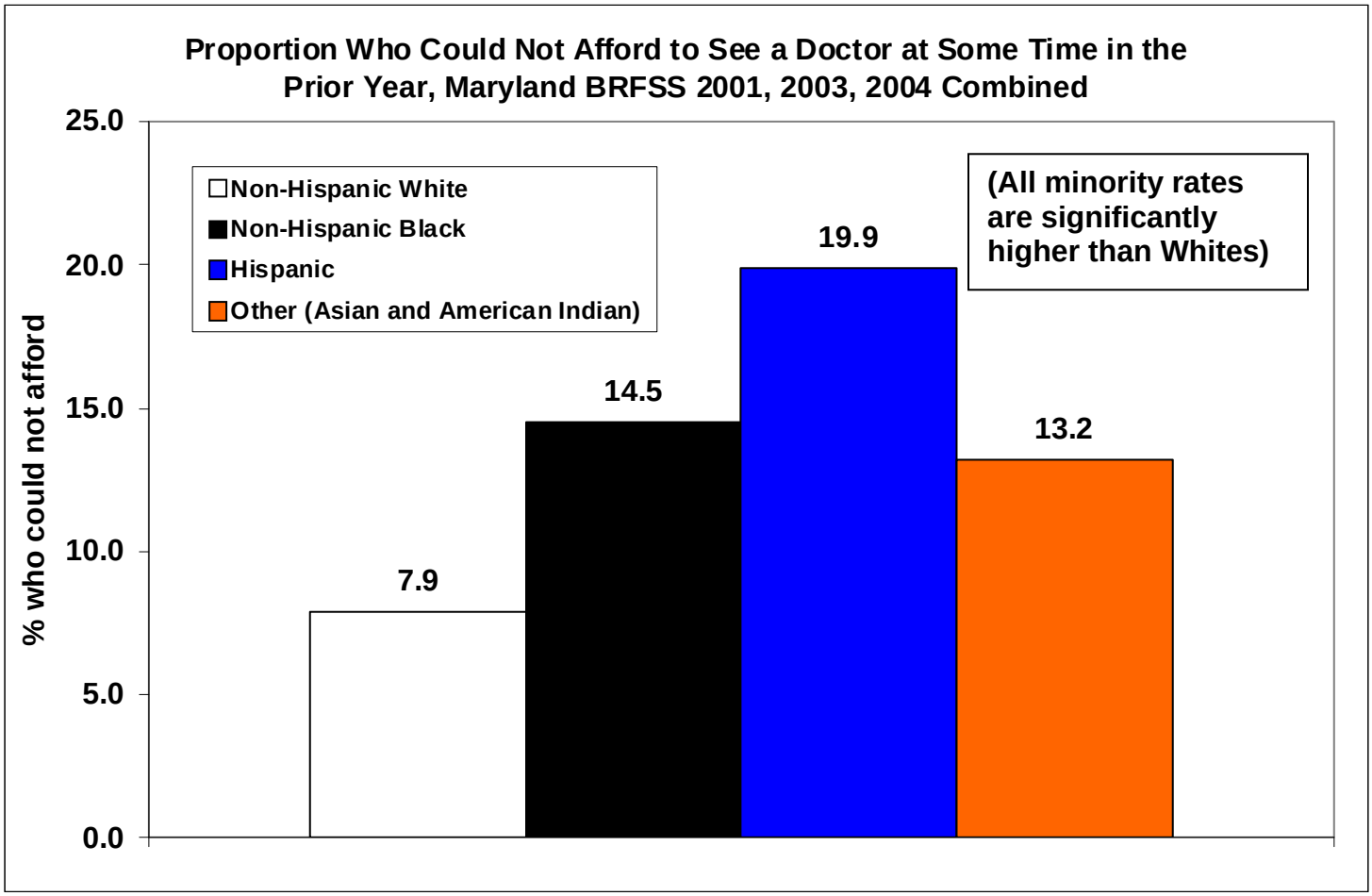


Disparities in Health Care Access

Combining data from the 2000 through 2004 BRFSS, Maryland adults of all racial and ethnic groups were more likely to be without health insurance (at the time of the survey) than were White adults.

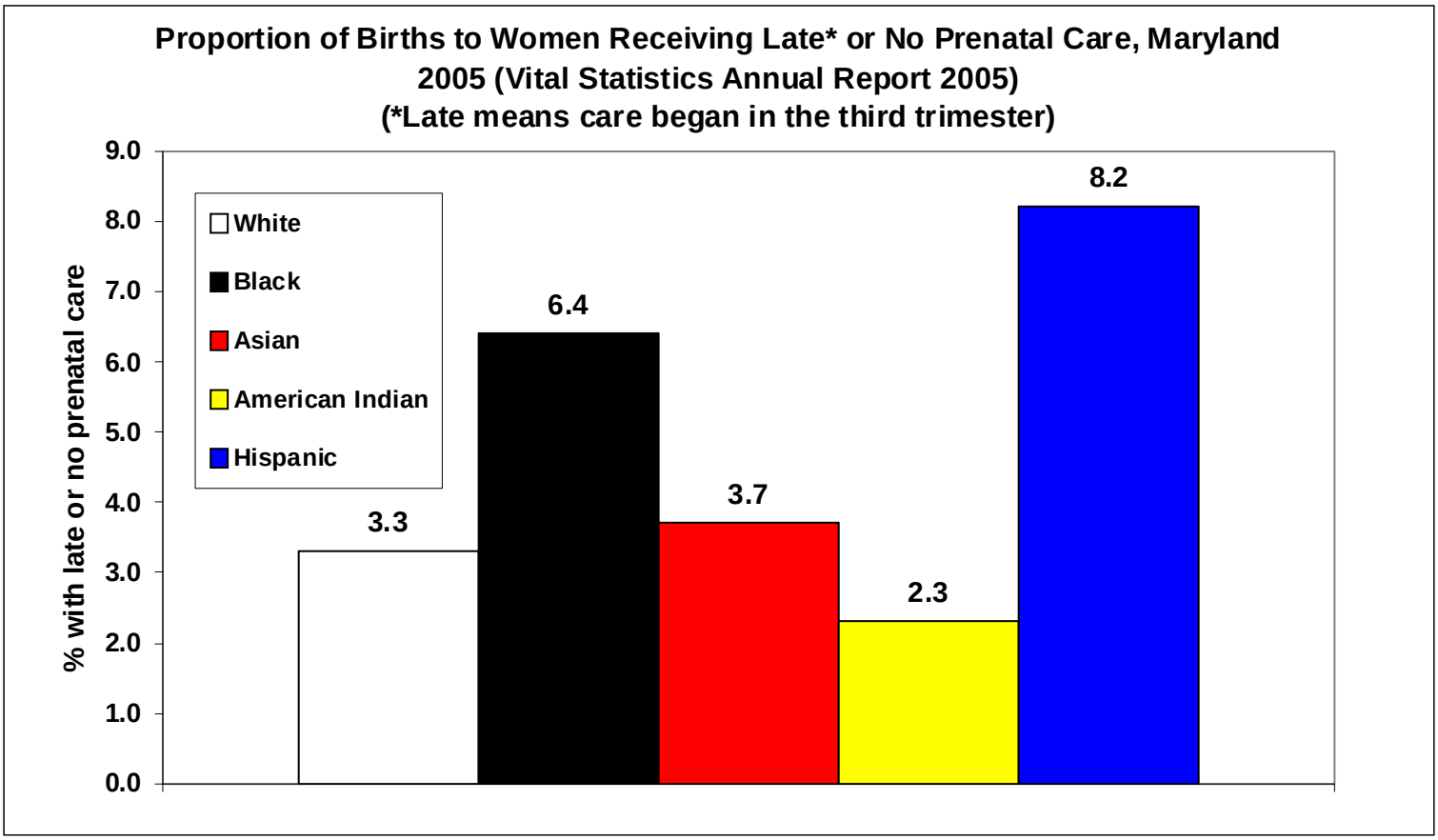


Combining data from the 2001, 2003 and 2004 BRFSS, Maryland adults of all racial and ethnic groups were more likely to be unable to afford to see a doctor (at some time in the prior year) than were White adults.
(This question was not asked in 2002)



In 2005, compared to White women, the percent of births to women receiving late or no prenatal care was:

- About 2 times higher for African Americans and 2.5 times higher for Hispanic women, and

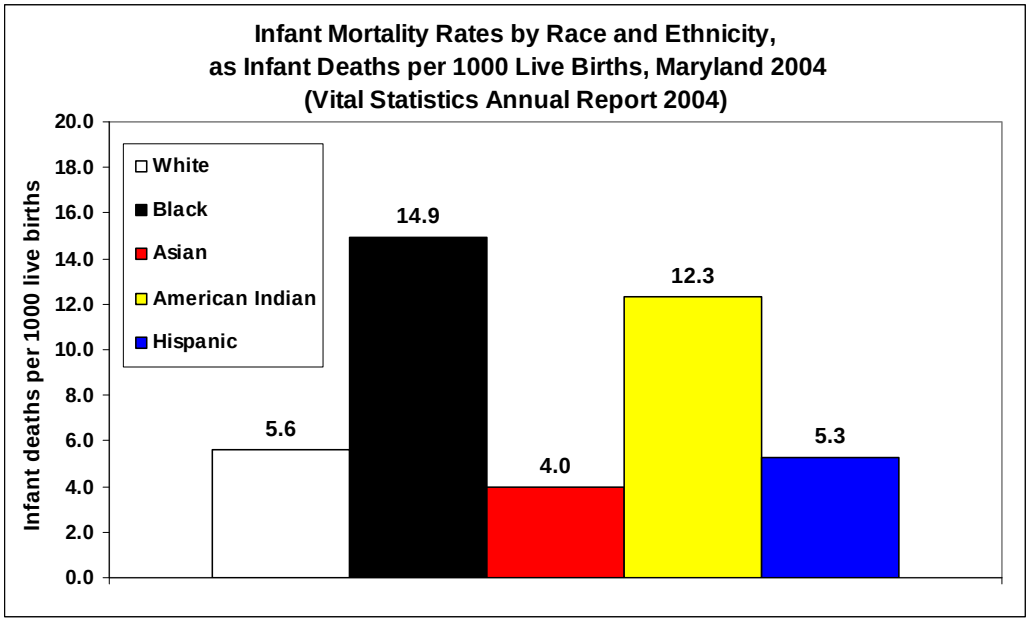


- About 12% higher for Asian women.

Note that during the eleven years from 1995 to 2005, the American Indian rate of late or not prenatal care exceeded the white rate in 8 of those years: only in 1996, 2002 and 2005 was the American Indian rate at or below to the white rate.

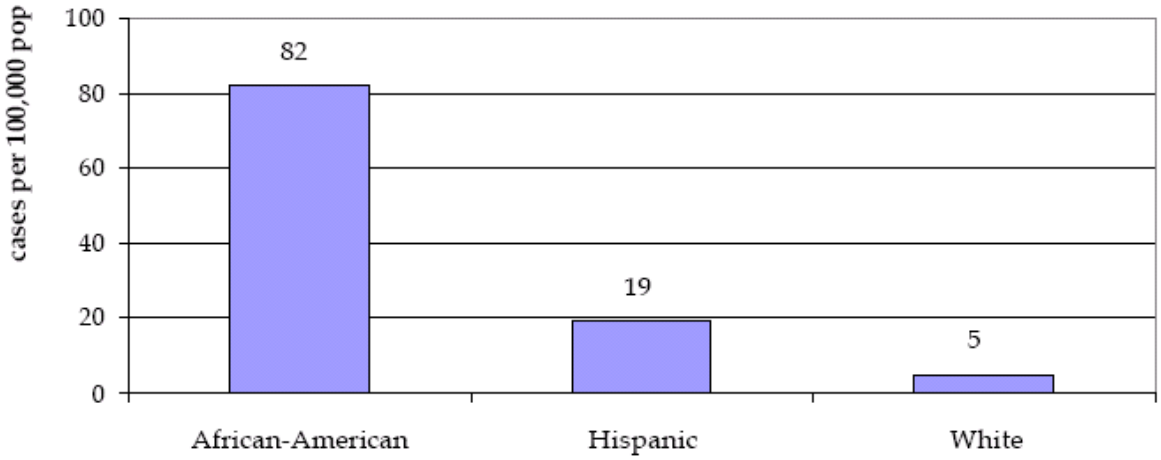
The relatively small size of Maryland's American Indian population results in large year-to-year fluctuations in statistics for that group. So the low rate for American Indians in 2005 is unfortunately not what is usually seen.

Infant Mortality is an Issue for Native Americans and African Americans

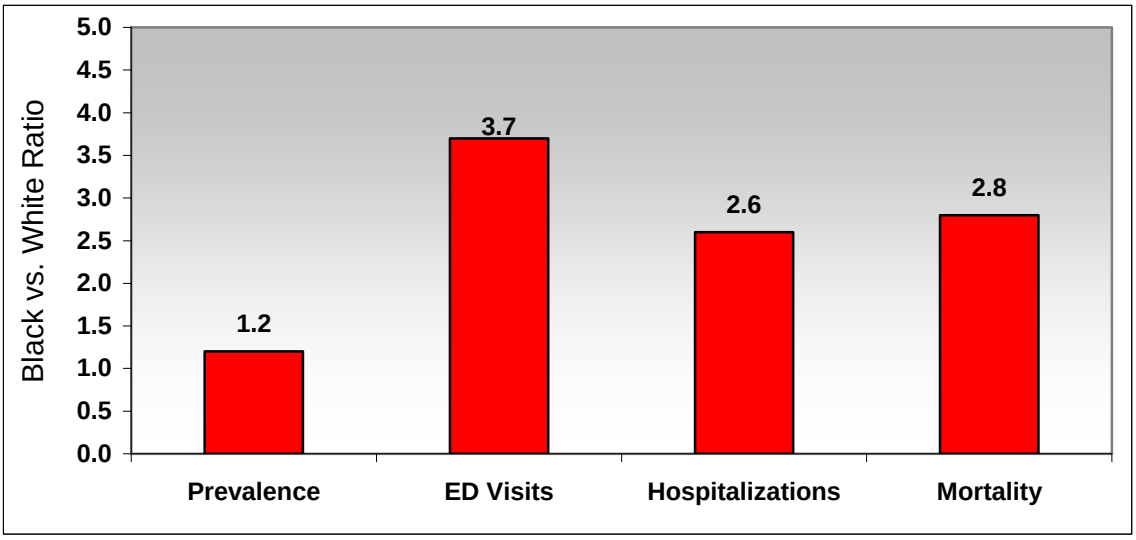


Disparity in HIV New Case (Incidence) Rate

Figure 1: Maryland HIV Incidence Rate during 2003 by Race/Ethnicity



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



Source: Asthma in Maryland 2004

Expected Relative Risk of Asthma Hospitalization, if African Americans had equal asthma treatment success as Whites: 1.2 (matching the prevalence ratio).

Observed Relative Risk of Asthma Hospitalization for African Americans compared to Whites: 2.6

If the White hospitalization rate is X, the African American rate is 2.6X, but we expect 1.2X absent the treatment success disparity.

So the African American excess rate is 1.4X (2.6X – 1.2X)

1.4X / 2.6X = 53.8%

<u>So 53.8% of asthma hospitalizations among African Americans are preventable if the disparity in asthma treatment success were eliminated.</u>

How many Medicaid dollars were spent on how many African American asthma hospitalizations in 2004?

Total number of hospitalizations among African Americans where Primary diagnosis is asthma, and Primary payer is Medicaid = 492.

<u>Preventable = 0.538 x 492 = 264</u> (Cost per admission = $4636)

Total cost for hospitalizations among African Americans where Primary diagnosis is asthma, and Primary payer is Medicaid $2,280,860

Preventable = 0.538 x $2,280,860 = $ 1,227,103

In addition, there were 62 admissions among African Americans on Medicaid where primary diagnosis is respiratory failure and any secondary diagnosis is asthma.

Preventable = 0.538 x 62 = 33 **(Cost per admission $23,608)**

Total cost for these 62 admissions: $1,463,714

Preventable = 0.538 x $1,463,714 = $ 787,478

Estimated Annual Medicaid Hospital Savings by eliminating asthma outpatient treatment disparity for African Americans:

$ 1,227,103 + $ 787,478 = $ 2,014,581

Success in Reducing Cancer Mortality Disparities in Maryland

Reduction in the Cancer Mortality Disparity for African Americans in Maryland, 2000-2005

Cancer Mortaltity Rates, Rate Differences, and Percent Change, By White or Black Race, Maryland 2000 and 2005 (rates are age-adjusted rates per 100,000)

	2000	2005	Percent Decrease
Black Cancer Mortality	**246.0**	**207.7**	**15.6%**
White Cancer Mortality	**201.6**	**185.7**	**7.9%**
Mortality Difference	**44.4**	**22.0**	**50.5%**

Source: Maryland Vital Statistics Annual Report 2005

- 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 in half:
    - White cancer mortality was reduced by 7.9%
    - African American cancer mortality was reduced by 15.6%
    - The mortality difference between the groups was reduced by 50.5%