The 2009 Kentucky Minority Health Status Report

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Introduction

The Kentucky Office of Health Equity (OHE) was established in September 2008 through funding support from the United States Department of Health and Human Services (DHHS), Office of Minority Health. The Office of Health Equity addresses health disparities among racial and ethnic minorities, low-income, and geographically isolated populations in the Commonwealth. The primary objectives of the Office are to increase awareness of health disparities; strengthen leadership at all levels for addressing health disparities; enhance patient-provider communication; improve cultural and linguistic competency in delivering health services; and improve coordination and utilization of research and outcome evaluations.

OHE operationally functions and reports directly to the Commissioner of the Kentucky Department for Public Health.

The Office of Health Policy (OHP) was created on July 15, 2005 to ensure coordinated, timely, efficient and cost effective health planning and policy research. The Office reports directly to the Secretary of the Cabinet for Health and Family Services.

The 2009 Kentucky Minority Health Status Report is a joint effort of OHE and OHP. The report highlights statistical data for minority populations in Kentucky in compliance with Kentucky legislation KRS 216.2929 Section 6 which states the following:

> "The cabinet shall report at least biennially, no later than October 1 of each odd-numbered year, on the special health needs of the minority population in the Commonwealth as compared to the population in the Commonwealth as compared to the population at large. The report shall contain an overview of the health status of minority Kentuckians, shall identify the diseases and conditions experienced at disproportionate mortality and morbidity rates within the minority population, and shall make recommendations to meet the identified health needs of the minority population."

This report highlights the health outcomes for minority Kentuckians. The key findings are listed below:

Background

Healthy People 2010, the framework of prevention for public health, identified overarching goals of eliminating health disparities and increasing the quality and years of life. OHE strives to complement these goals by engaging in activities that encourage achievement of these goals. OHE will utilize the social determinants of health, or an array of the critical influences that determine the health of individuals and community to address health disparities in the state of Kentucky. The figure below displays a pictorial diagram of the social determinants of health concept.

How do social determinants influence health?

Multiple models describing how social determinants influence health outcomes have been proposed.[30-40] Although differences in the models exist, some fairly consistent elements and pathways have emerged. The model presented here contains many of these elements and pathways and focuses on the distribution of social determinants (see Figure 1.1). As the model shows, social determinants of health broadly include both societal conditions and psychosocial factors, such as opportunities for employment, access to health care, hopefulness, and freedom from racism. These determinants can affect individual and community health directly, through an independent influence or an interaction with other determinants, or indirectly, through their influence on health-promoting behaviors by, for example, determining whether a person has access to healthy food or a safe environment in which to exercise.

Policies and other interventions influence the availability and distribution of these social determinants to different social groups, including those defined by socioeconomic status, race/ethnicity, sexual orientation, sex, disability status, and geographic location. Principles of social justice influence these multiple interactions and the resulting health outcomes: inequitable distribution of social determinants contributes to health disparities and health inequity, whereas equitable distribution of social determinants contributes to health equity. Appreciation of how societal conditions, health behaviors, and access to health care affect health outcomes can increase understanding about what is needed to move toward health equity.

Figure 1.1: Pathways from Social Determinants to Health

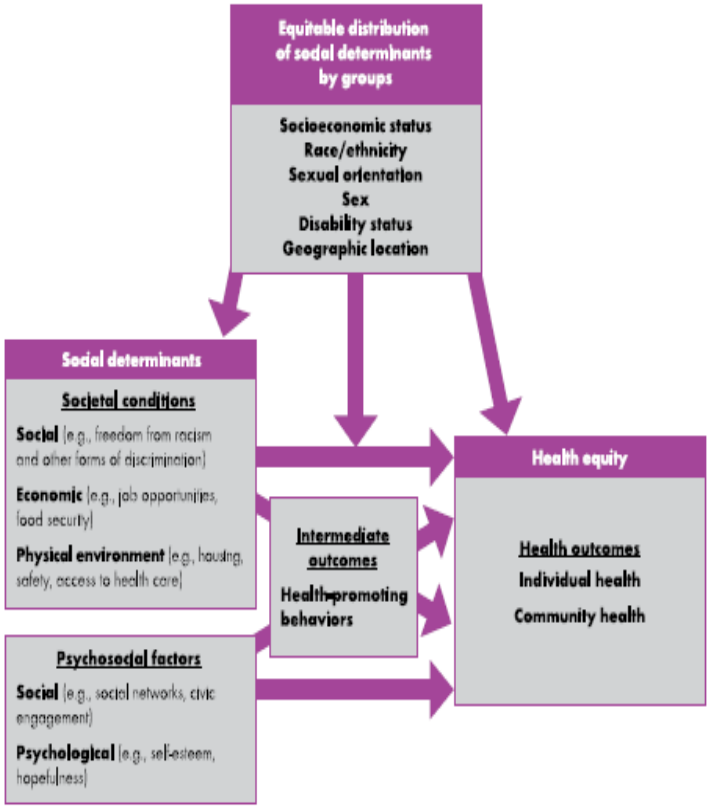


Figure adapted from Blue Cross and Blue Shield of Minnesota Foundation, http://www.bcbsmnfoundation.org/objects/Tier_4/mbc2_determinants_charts.pdf and Anderson et al, 2003.[38,39]

What are health disparities?

Health disparities are the persistent gaps between the health status of minorities and non-minorities in the United States.

Two major factors for health disparities are:

1. Inadequate access to care

   Barriers to care can result from economic, geographic, linguistic, cultural and health care financing issues. Even when minorities have similar levels of access to care,

health insurance, and education, the quality and intensity of health care they receive are often poor. The same may also be true for impoverished and or rural populations.

2. Substandard quality of care

   Lower quality care has many causes, including patient-provider miscommunication, provider discrimination, stereotyping, or prejudice. Quality of care is usually rated on the four measures of effectiveness, patient safety, timeliness, and patient centeredness.

What is health equity?

A basic principle of public health is that all people have a right to health. Differences in the incidence and prevalence of health conditions and health status between groups are commonly referred to as health disparities. Most health disparities affect groups marginalized because of socioeconomic status, race/ethnicity, sexual orientation, gender, disability status, geographic location, or some combination of these. People in such groups not only experience worse health but also tend to have less access to the social determinants or conditions (e.g., healthy food, good housing, good education, safe neighborhoods, freedom from racism and other forms of discrimination) that support health. Health disparities are referred to as health inequities when they are the result of the systematic and unjust distribution of these critical conditions. Health equity, then, as understood in public health literature and practice, is when everyone has the opportunity to "attain their full health potential" and no one is "disadvantaged from achieving this potential because of their social position or other socially determined circumstance."

Key Findings

- The rate of population increase is higher for communities of color indicating that Kentucky is becoming increasingly diverse.
- Kentucky's Hispanic population is younger, on average, than other groups.
- The proportion of the population to complete high school or receive their GED is comparable for non-Hispanic whites and African Americans. However, African-Americans are less likely to graduate and complete college. Hispanics trail both racial groups in both areas.
- African American are twice as likely to live in poverty as non-Hispanic whites in Kentucky. More than 44% of African American children under 5 live in poverty.
- Of the 54 Appalachia counties in Kentucky, 38 have been classified as economically distressed by the Appalachian Regional Commission, placing them in the worst 10% of the nation's counties.

- More than 29,000 Kentuckians had limited English proficiency at the time of the 2000 Census, and this number has likely increased since then.
- Age-adjusted mortality rates for African Americans in Kentucky are markedly higher than for non-Hispanic whites or Hispanics and is most pronounced in early childhood and middle age.
- African Americans are more likely to die from heart disease 261.1/ 100,000 than non-Hispanic whites 235.1/100,000.
- The cancer mortality rate is higher among blacks than non-Hispanic whites.
- In 2008, African Americans has the highest rate of obesity and overweight 73.7% than non-Hispanic whites 64.7% and Hispanics 48.7%.
- On average from 2003-2007, The AIDS Diagnosis rates per 100,000 population for Blacks was approximately eight times higher than for Whites and five times higher for Hispanics than for Whites in Kentucky.
- Chlamydia, Gonorrhea, and Syphilis disproportionately impacts African Americans in Kentucky.
- African American infants were approximately 2 times as likely as Asian infants to be born preterm during 2004-2006 (average).Hispanics had the highest rates of being with out insurance coverage.
- Whites utilize hospital services the most at 13,846 per 100,000 population. Hispanics are hospitalized 22% less often than whites, and African Americans are hospitalized 8% less often than whites.
- African Americans utilize emergency department services the most at 47,657 per 100,000 population. Hispanics utilize emergency departments 55% less often than African Americans, and whites utilize emergency departments 21% less often than African Americans.
- African Americans utilize outpatient services the most at 70,327 per 100,000 population. Hispanics utilize outpatient services 57% less than African Americans, and whites utilize outpatient services 5% less often than African Americans.
- African Americans utilize inpatient hospital services for asthma the most at 313 per 100,000 population. Hispanics utilize inpatient hospital services for asthma 81% less often than African Americans, and whites utilize inpatient hospital services for asthma 55% less often than African Americans.

- African Americans utilize emergency department services for asthma the most at 1,253 per 100,000 population. Hispanics utilize emergency department services for asthma 80% less often than African Americans, and whitles utilize emergency department services for asthma 73% less often than African Americans.

- Whites utilize inpatient hospital services for Chronic Obstructive Pulmonary Disease (COPD) the most at 498 per 100,000 population. African Americans utilize inpatient hospital services for COPD 55% less often than whites, and Hispanics utilize inpatient hospital services for COPD 94% less often than whites.

- African Americans utilize emergency department services for COPD the most at 767 per 100,000 population. Hispanics utilize emergency department services for COPD 65% less often than African Americans, and whites utilized emergency department services for COPD 9% less often than African Americans.

- African Americans utilize inpatient hospital services for heart failure the most at 437 per 100,000 population. Whites utilize inpatient hospital services for heart failure 14% less often than African Americans, and Hispanics utilize inpatient hospital services for heart failure 92% less often than African Americans.

The first project of OHE was to address racial/ethnic health disparities in infant mortality. Infant mortality is recognized as a critical indicator of overall health of a community and is frequently used by healthcare professionals, program planners, and decision makers to monitor the health status of a community or region. Infant mortality is defined as the number of infant deaths in a year for every 1000 live births. Infant mortality has been steadily decreasing in Kentucky and the United States. From 1992-2004 infant mortality declined 20% in the United States and Kentucky. Although infant mortality has significantly declined, rates among different racial groups have not exhibited similar improvements. In the United States and Kentucky, African Americans are more than twice as likely to die within the first year of life than a white infant. African American births comprise 8.8% of births in Kentucky yet their infant mortality rate is more than twice that of Whites (10.9 per 1000 live births compared to 6 .4per 1000 live births). There are a variety of explanations for this drastic difference in infant mortality between different racial groups. Evidence suggest that low birth weight, preterm births, accessing prenatal care after the first trimester, engaging in risky behaviors, maternal age being less than 20 and less than high school education are factors associated with more adverse outcomes.

The Office of Health Equity partnered with the Louisville Center for Health Equity to identify the influences that lead to infant mortality by utilizing a social ecological perspective. The social ecological perspective or social determinants of health include addressing both societal conditions and psychosocial factors by which directly or indirectly impact health. Social

determinants of health can be employment, access to health care, hopefulness, policies and interventions-from individual level factors to environmental factors. Through the use of this model we conducted focus groups with local community members of the Louisville, West End area, to determine the potential influences in that predominantly African American community, which contribute to the high rate of infant mortality in Kentucky.

The results of these focus groups are still being analyzed. However, insightful issues precipitated from the focus groups suggesting a need to improve housing, safety, and access to health care to encourage healthier pregnancy and birth outcomes for pregnant women in that area.

Future Direction

The 2009 Kentucky Minority Health Status Report provides a snapshot of the health status of minorities in the state given limited and low numbers of reported occurrences. However; there are glaring disparities for a significant number of preventable disease outcomes. More data is needed to fully understand the health of minority populations in Kentucky. This requires an expansion of funding and policies in order to adequately address these health disparities. Communities, policy-makers, public and private agencies, universities and individuals must come together to further expand research in the area of health disparities to move toward health equity. The Kentucky Office of Health Equity along with its partners are committed to working with partners to eliminate health disparities and improve the quality of life for all Kentuckians.

PART I

DEMOGRAPHICS

- AGE AND POPULATION
- EDUCATION
- INCOME AND EMPLOYMENT
- POVERTY
- NATIVITY AND ENGLISH PROFICIENCY

Demographics

The boundaries of the Appalachian region do not correspond to Area Development District or other Kentucky regional designations larger than the county. As such, demographic data for the Appalachian region must be assembled from county-level data. The most current data available at this scale is from the 2000 Census. For this reason, to maintain comparability, all demographic data presented is from the 2000 Census.

Table1.1 Kentucky Total Population by Race, Ethnicity and Geographic Region, 1990 and 2000

	1990 Census		2000 Census		Change	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Kentucky (Total)	3,685,296	100.0%	4,041,769	100.0%	15,030	9.7%
One Race	3,685,296	100.0%	3,999,326	98.9%	314,030	8.5%
White, non-Hispanic	3,378,022	91.7%	3,608,013	89.3%	229,991	6.8%
Black or African American	262,907	7.1%	295,994	7.3%	33,087	12.6%
American Indian and Alaska Native	5,769	0.2%	8,616	0.2%	2,847	49.3%
Asian	16,983	0.5%	29,744	0.7%	12,761	75.1%
Native Hawaiian and Other Pacific Islander	829	0.0%	1,460	0.0%	631	76.1%
Some Other Race	6,976	0.2%	22,623	0.6%	15,647	224.3%
Two or More Races	(X)	(X)	42,443	1.1%	(NA)	(NA)
Hispanic or Latino (of any race)	21,984	0.6%	59,939	1.5%	37,955	172.6%
Not Hispanic or Latino	3,663,312	99.4%	3,981,830	98.5%	318,518	8.7%
Appalachian Counties	1,088,416	29.5%	1,160,627	28.7%	72,211	6.6%
Non-Appalachian Counties	2,596,880	70.5%	2,881,142	71.3%	284,262	11.0%

Source: U.S. Census Bureau, Census 1990 Summary File 1 and Census 2000 Summary File 1 as analyzed by the Kentucky State Data Center

Between 1990 and 2000, Kentucky's total population grew by nearly 10%. Although the majority of the state's residents are non-Hispanic whites, the rate of population increase is higher for communities of color. This indicates that Kentucky is becoming increasingly diverse. While the methodology for population projections used in Kentucky does not address race or ethnicity, we expect that this trend will continue in the future.

Despite the statewide trend towards increasing diversity, most people of color live in a few specific counties. This suggests that racial and ethnic segregation persists in Kentucky today.

Figure 1.1: Kentucky County Black Populations

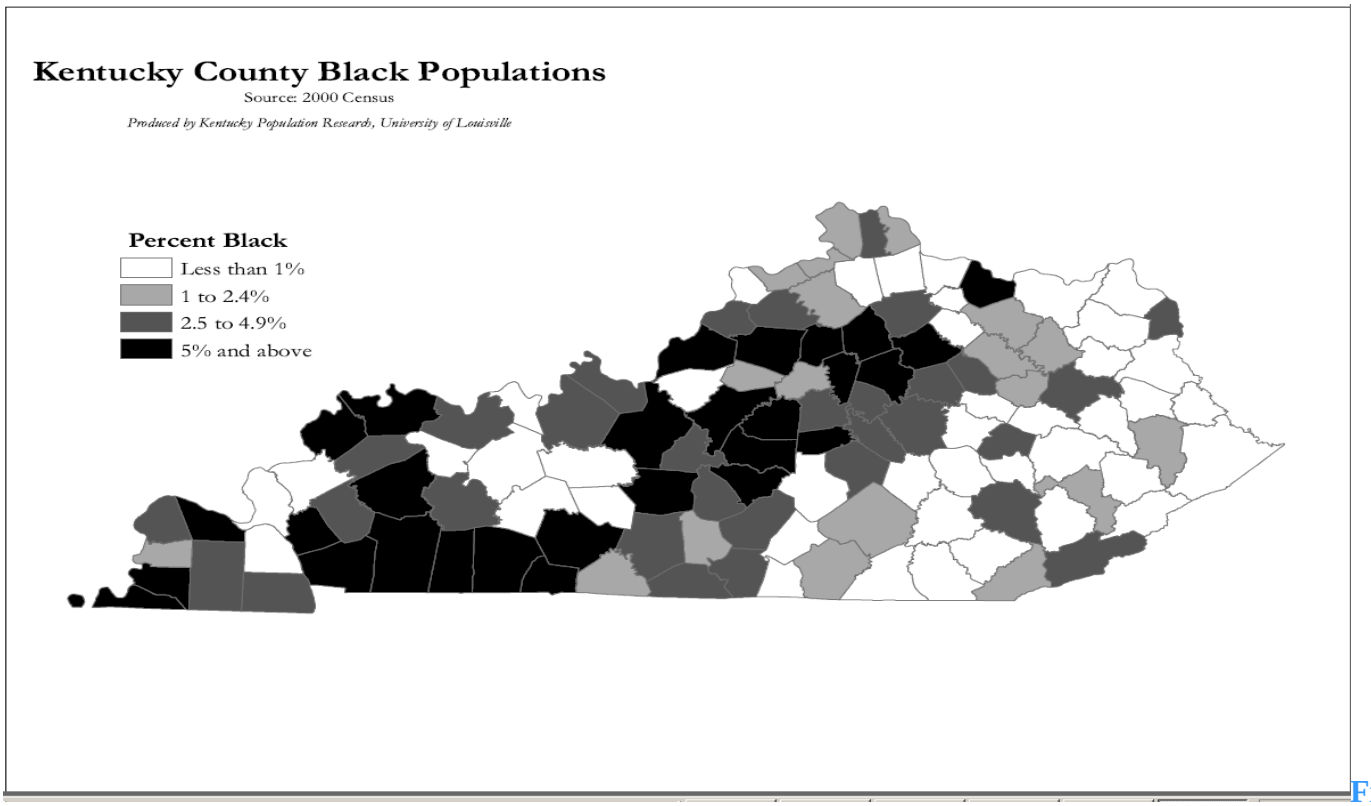
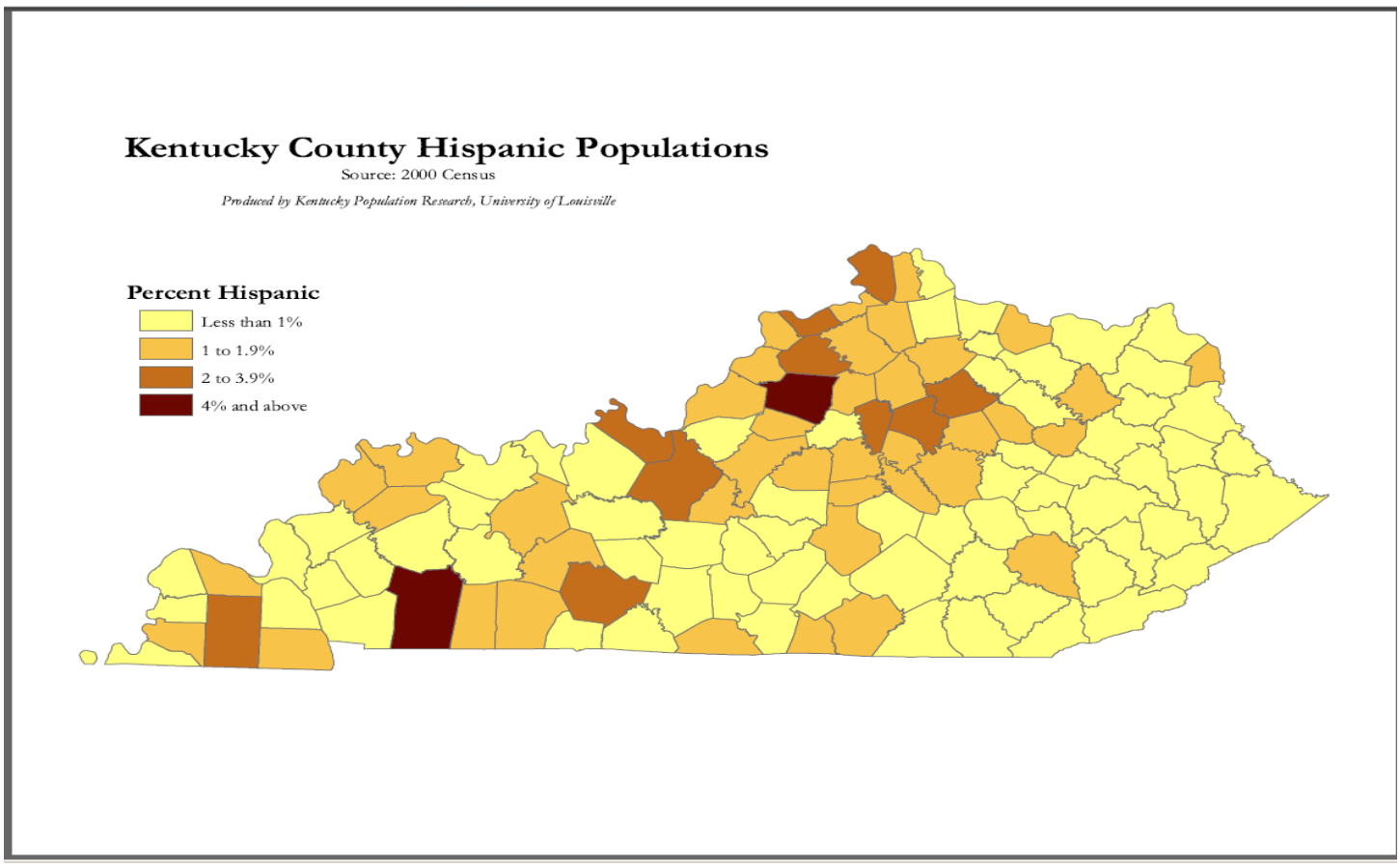


Figure 1.2: Kentucky Hispanic Population



Age and Population

As illustrated in the first pyramid, Kentucky's total population is defined by the aging of the "baby boom" generation, with the largest age group being those who were aged 35-49 in 2000. Obviously, the baby boomers have continued to age since 2000 and now in their late 40s, 50s, and early 60s.

Looking at the pyramids for individual racial and ethnic groups, we see the dominant baby boom in the African American population, but also a greater proportion of young people coming up behind them.

Figure 1.3: Kentucky 2000 Population Estimate s (Total, Black Alone, Asian Alone)

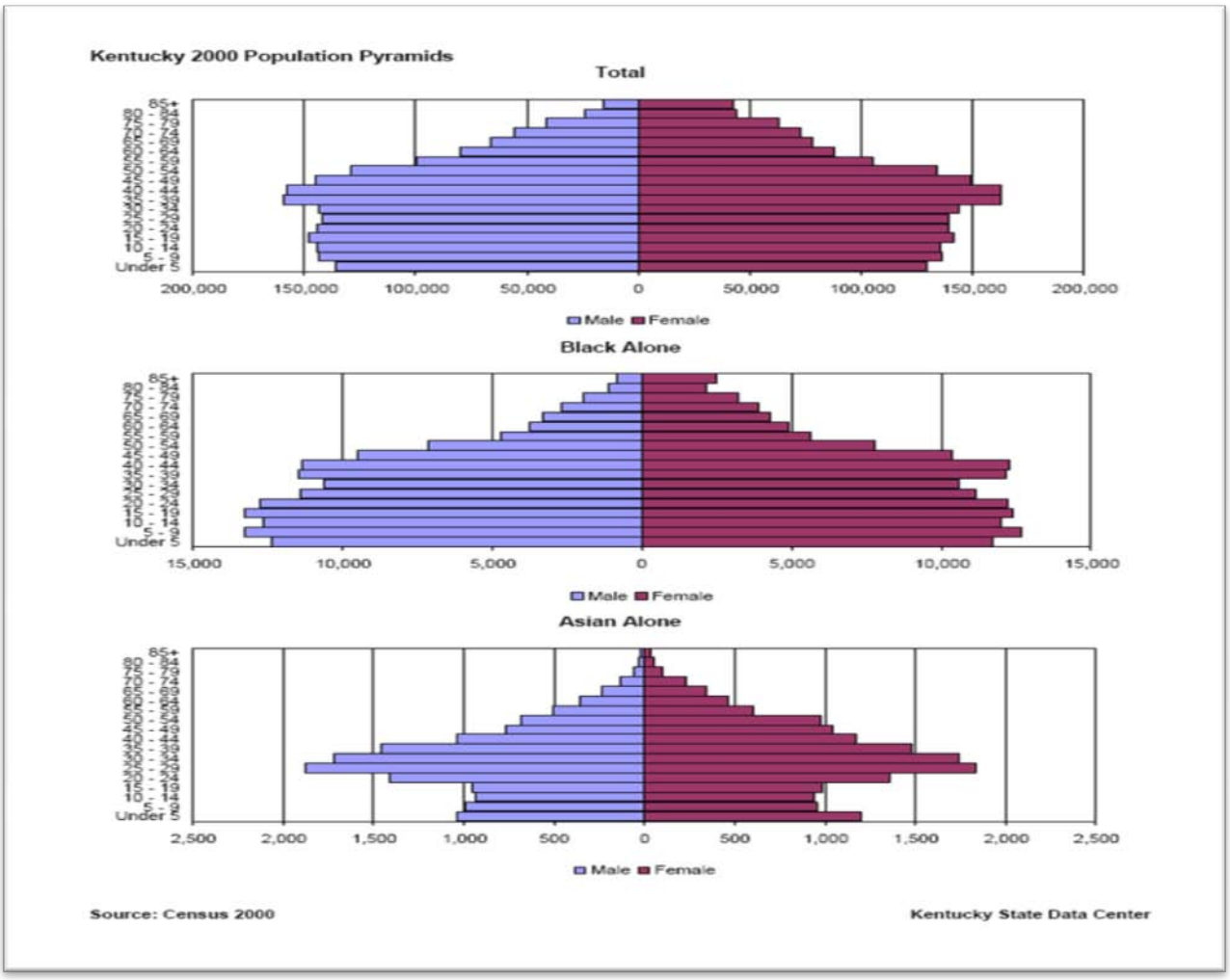
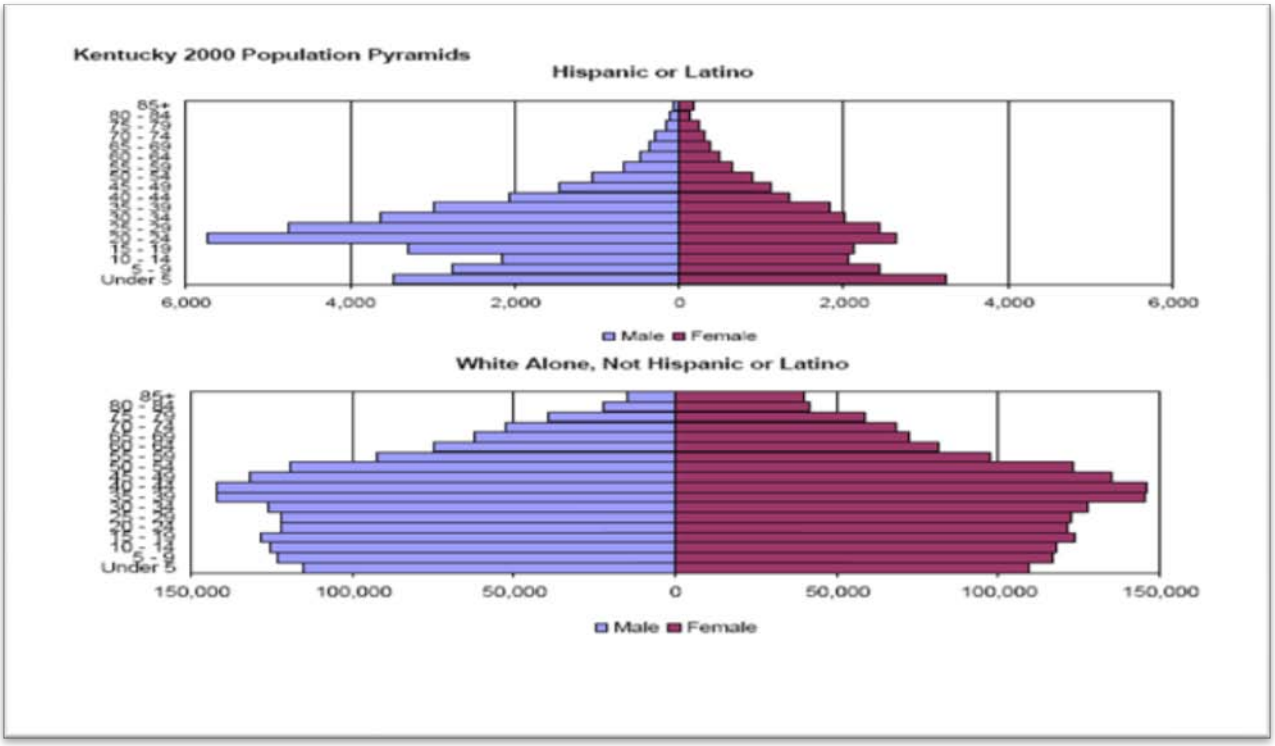


Figure 1.4: Kentucky 2000 Population Pyramids (Hispanic, White Alone)



Kentucky's Hispanic population is younger, on average, than other groups. Most Hispanics in Kentucky are working age or younger, with a comparatively small number of seniors. Rather than being defined by the baby boom, this pyramid tells the story of more recent immigration.

Education

Table 1.2: Educational Attainment by Race and Ethnicity, Population Aged 25 and Older, 2000

		State			
		Total	White, non-Hispanic	Black or African American	Hispanic (any race)
Total		2,646,397	2,404,049	170,321	28,131
Male		1,259,425	1,142,178	79,221	17,218
	Less than 9th grade	200,519	142,685	5,578	4,585
	9th to 12th grade, no diploma	137,886	162,647	15,690	3,043
	High school graduate (or GED)	419,712	382,634	28,306	4,290
	Some college, no degree	225,542	201,856	17,720	2,625
	Associate degree	49,332	43,838	3,895	688
	Bachelor's degree	138,688	128,745	5,424	1,052
	Graduate or professional degree	87,746	79,773	2,608	935
Female		1,386,972	1,261,871	91,100	10,913
	Less than 9th grade	203,868	143,732	6,703	1,876
	9th to 12th grade, no diploma	142,727	169,360	17,706	2,013
	High school graduate (or GED)	468,565	430,974	28,795	2,733
	Some college, no degree	264,628	236,032	22,319	2,057
	Associate degree	80,149	72,730	5,453	575
	Bachelor's degree	132,730	122,001	6,237	1,117
	Graduate or professional degree	94,305	87,042	3,887	542

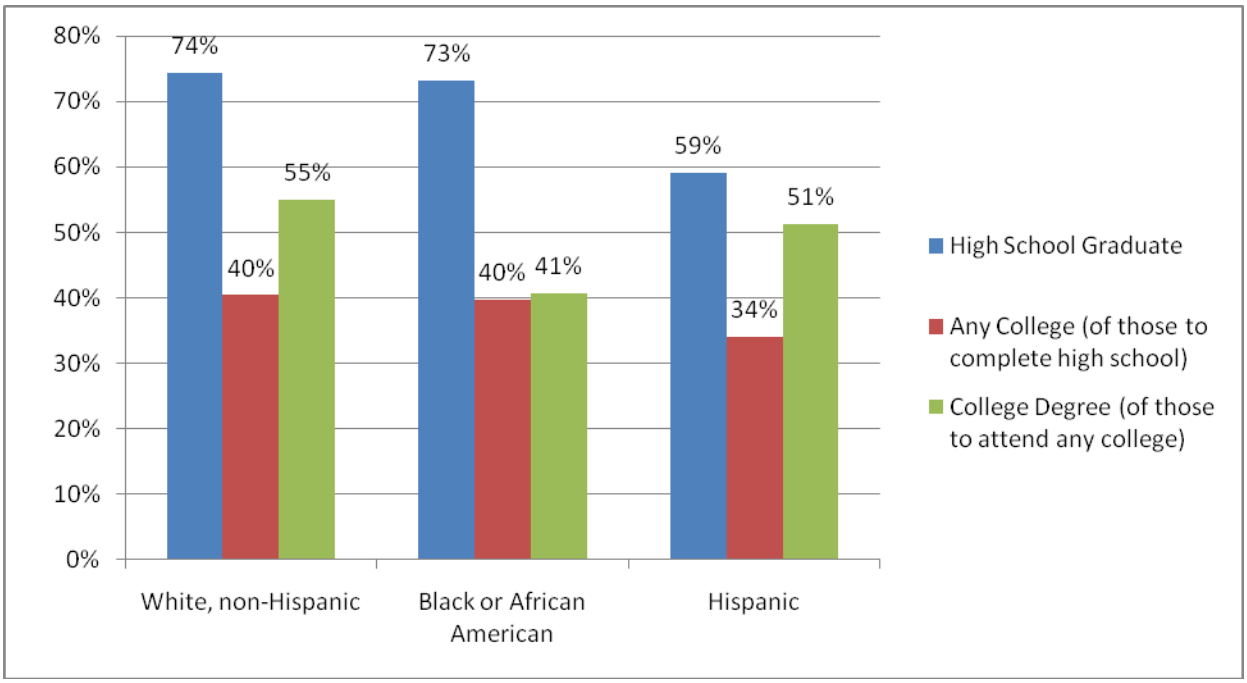
Source: U.S. Census Bureau, Census 2000 Summary File 3 as analyzed by the Kentucky State Data Center

The proportion of the population to complete high school or receive their GED is comparable for non-Hispanic whites and African Americans in the state. In Kentucky, 74.3% of non-Hispanic whites and 73.2% of African Americans in Kentucky aged 25 and older have finished high school. The percent of individuals going on to college is likewise similar, with 40.4% of non-Hispanic whites and 39.7% of African Americans over 25 having attended at least some college. A disparity arises when it comes to college completion, although Kentucky African Americans attend college in similar numbers, they are less likely to graduate.

Of those who attended at least some college, 55.0% of non-Hispanic whites have completed a degree program (22.2% of all non-Hispanic whites over 25), while only 40.7% of African Americans receive degrees (16.1% of all African Americans over 25).

Hispanics trail both of these groups with only 59.1% high school completion and 34.1% college attendance. However, college-bound Hispanics seem to fare slightly better than African Americans. Of those who attend at least some college, 51.2% of Hispanics have a college degree (17.5% of all Hispanics over 25).

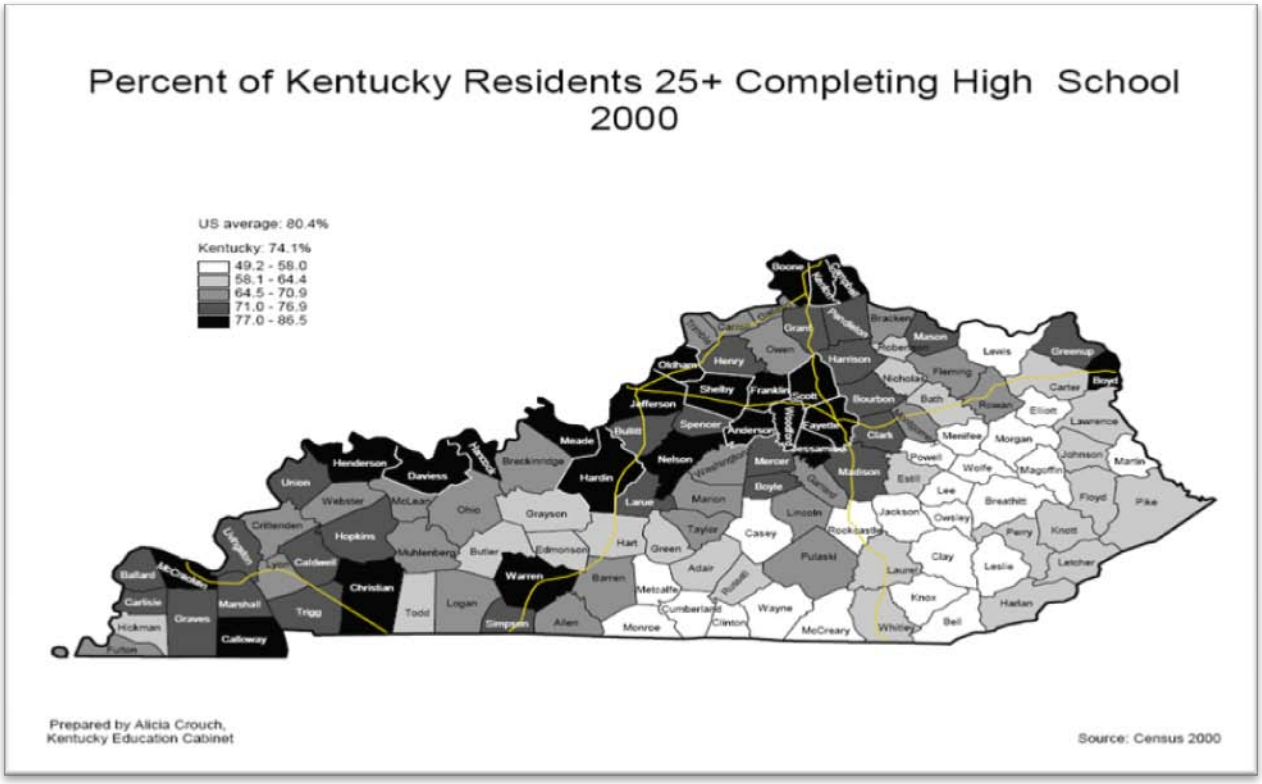
Figure 1.5: Educational Attainment by Race and Ethnicity, Population Aged 25 and Older, 2000



Source: U.S. Census Bureau, Census 2000 Summary File 3 as analyzed by the Kentucky State Data Center

The following map illustrates the profound regional variation in educational attainment in Kentucky. The percent of adults aged 25 and older who have completed high school or received their GED is markedly lower in the Appalachian region. This pattern of limited educational attainment impacts the ability of eastern Kentucky residents to find good-paying jobs, and ultimately to afford health care and preventive service

Figure 1.6: Percent of Kentucky Residents 25+ Completing High School 2000



Income and Employment

African American men are less likely to be in the workforce (meaning not employed and not seeking work) in Kentucky than non-Hispanic white or Hispanic men. Of those who are in the workforce, African American men were also more likely to be unemployed (12%) than non-Hispanic white (5%) or Hispanic men (8%).

People of color enlist in the military at a disproportionate rate relative to non-Hispanic whites. Five percent of all African American men and 9% of all Hispanic men in the workforce are in the armed forces, whereas only 1% of non-Hispanic white men in the workforce are in the armed forces.

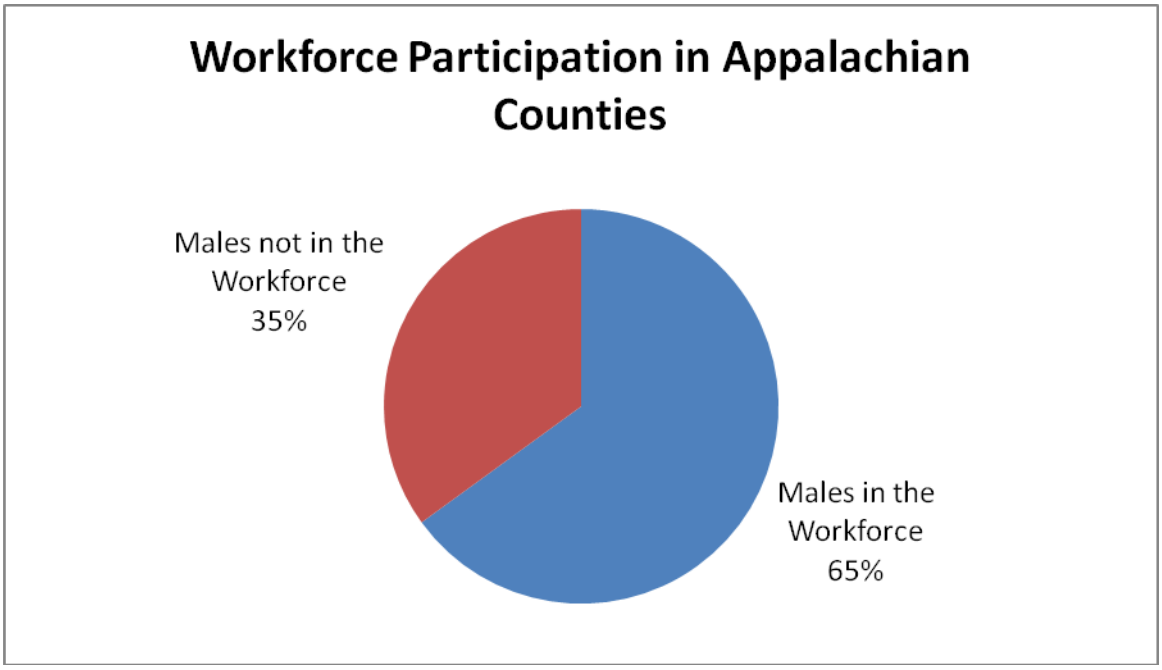
More than one-third of males aged 16-64 in Appalachian counties was not in the workforce, meaning they were not employed or seeking work. In non-Appalachian counties, only 20% of males in this age group are not in the workforce. See figure

Table 1.3: Persons Aged 16-64 in the Workforce by Sex by Race, Ethnicity and Geographic Region, 2000

	State				Region	
	Total	White, non-Hispanic	Black or African American	Hispanic (any race)	Appalachian Counties	Non-Appalachian Counties
Total	2,657,874	2,851,060	215,138	40,290	764,966	1,892,908
Male	1,319,896	1,368,661	102,492	25,273	379,322	940,574
In labor force	1,000,673	934,751	61,884	19,128	245,670	755,003
Armed forces	17,475	11,820	3,167	1,649	447	17,028
Civilian	983,198	922,931	58,717	17,479	245,223	737,975
Employed	926,194	875,399	51,159	15,948	225,008	701,186
Unemployed	57,004	47,532	7,558	1,531	20,215	36,789
Not in labor force	319,223	433,910	40,608	6,145	133,652	185,571
Female	1,337,978	1,482,399	112,646	15,017	385,644	952,334
In labor force	866,222	801,080	66,833	7,963	208,906	657,316
Armed forces	1,642	857	615	103	28	1,614
Civilian	864,580	800,223	66,218	7,860	208,878	655,702
Employed	814,094	758,227	58,936	7,012	192,725	621,369
Unemployed	50,486	41,996	7,282	848	16,153	34,333
Not in labor force	471,756	681,319	45,813	7,054	176,738	295,018

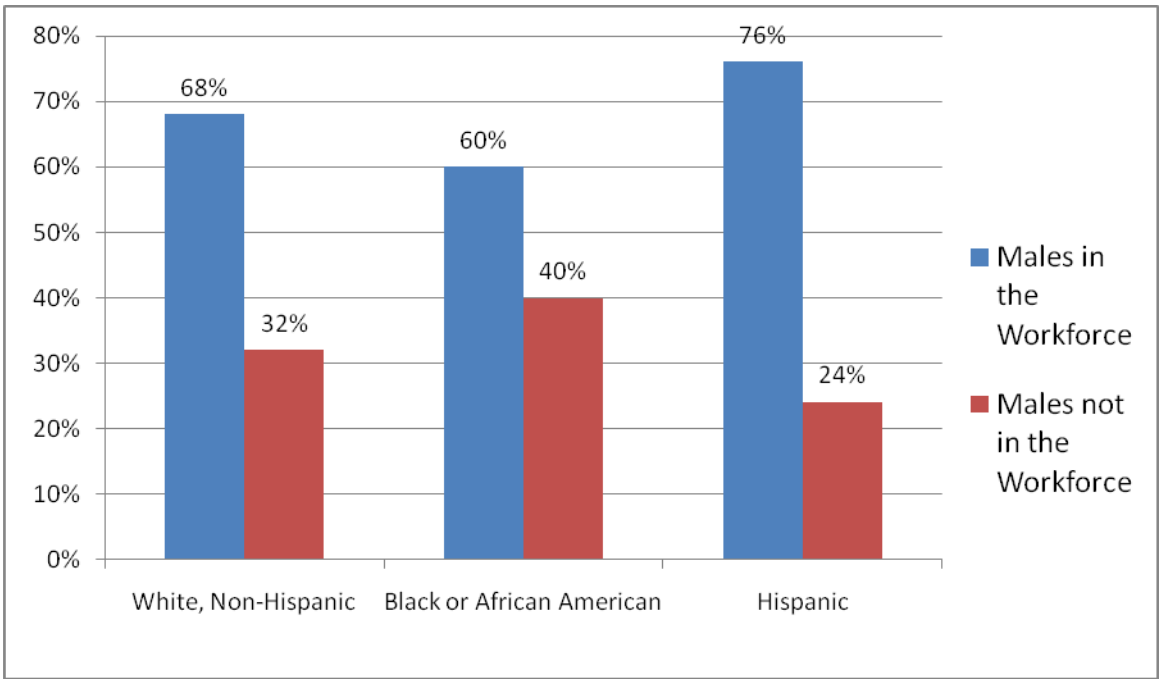
Source: U.S. Census Bureau, Census 2000 Summary File 3 as analyzed by the Kentucky State Data Center

Figure 1.7: Males Ages 16-64 in the Workforce by Geographic Region, 2000



Source: U.S. Census Bureau, Census 2000 Summary File 3 as analyzed by the Kentucky State Data Center

Figure 1.8: Males Ages 16-64 in the Workforce by Race and Ethnicity, 2000

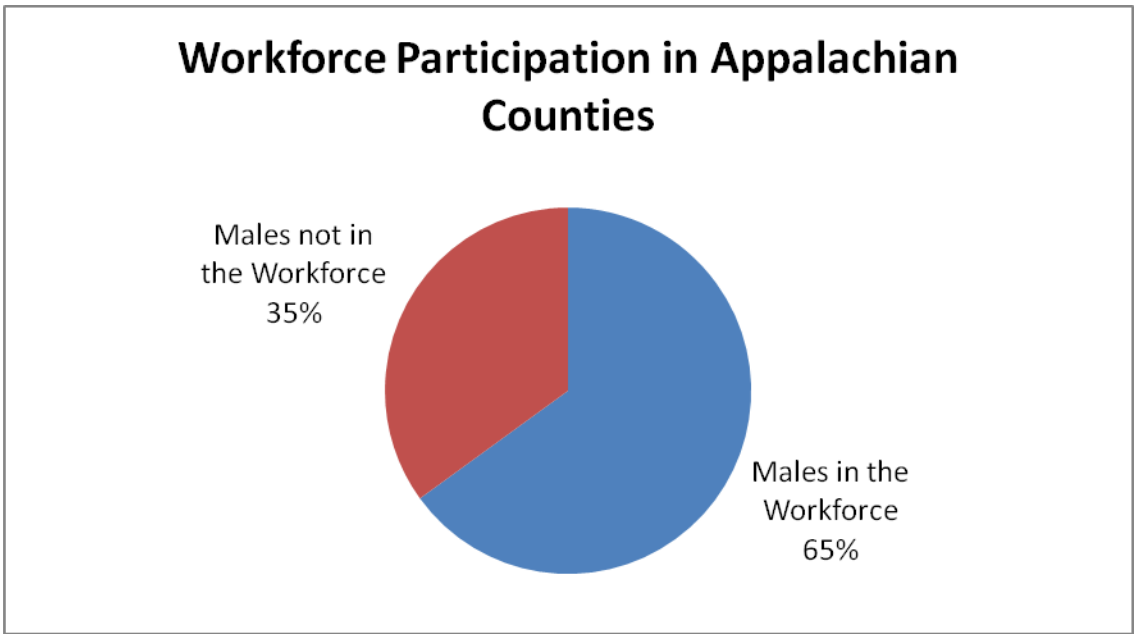


Source: U.S. Census Bureau, Census 2000 Summary File 3 as analyzed by the Kentucky State Data Center

African American men are less likely to be in the workforce (meaning not employed and not seeking work) in Kentucky than non-Hispanic white or Hispanic men. Of those who are in the workforce, African American men were also more likely to be unemployed (12%) than non-Hispanic white (5%) or Hispanic men (8%).

People of color enlist in the military at a disproportionate rate relative to non-Hispanic whites. Five percent of all African American men and 9% of all Hispanic men in the workforce are in the armed forces, whereas only 1% of non-Hispanic white men in the workforce are in the armed forces.

Figure 1.9: Males Ages 16-64 in the Workforce by Geographic Region, 2000



Source: U.S. Census Bureau, Census 2000 Summary File 3 as analyzed by the Kentucky State Data Center

More than one-third of males aged 16-64 in Appalachian counties was not in the workforce, meaning they were not employed or seeking work. In non-Appalachian counties, only 20% of males in this age group are not in the workforce.

Poverty

According to the 2000 Census, 24.4% of Kentuckians in Appalachian counties were living in poverty, compared to only 12.4% in non-Appalachian counties.

African Americans are twice as likely to live in poverty as non-Hispanic whites in Kentucky. Nearly one in four young children in Kentucky lives in poverty, but children of color are much more likely to be in poverty than non-Hispanic whites. More than 44% of African American children under 5 live in poverty.

On average, African American households earn $10,000 less per year than their white counterparts and $,5000 less than Hispanics. These economic disparities profoundly influence the health status of African American families in Kentucky.

Table 1.4: Income and Poverty Status by Race, and Ethnicity, 2000

	State			
	Total	White, non-Hispanic	Black or African American	Hispanic (any race)
Below Poverty Level	15.8%	14.6%	28.2%	25.0%
Children Under 5 Below Poverty Level	23.0%	20.4%	44.1%	29.0%
Children Under 17 Below Poverty Level	16.8%	15.4%	30.8%	25.6%
Median Household Income	$33,672	$34,665	$24,278	$29,541
Per Capita Income	$18,093	$18,629	$13,235	$11,962

Source: U.S. Census Bureau, Census 2000 Summary File 3 as analyzed by the Kentucky State Data Center

Of the 54 Appalachian counties in Kentucky, 38 have been classified as economically distressed by the Appalachian Regional Commission, placing them in the worst 10% of the nation's counties. Ten additional counties are designated as "at-risk," ranking between the worst 10% and 25% of the nation's counties.

Appalachian Region: Fifty-four counties in Kentucky have been designated as Appalachian by the Appalachian Regional Commission (www.arc.gov). The counties included in the Appalachian region are Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe.

Note: Metcalfe, Nicholas and Robertson counties were added in October 2008.

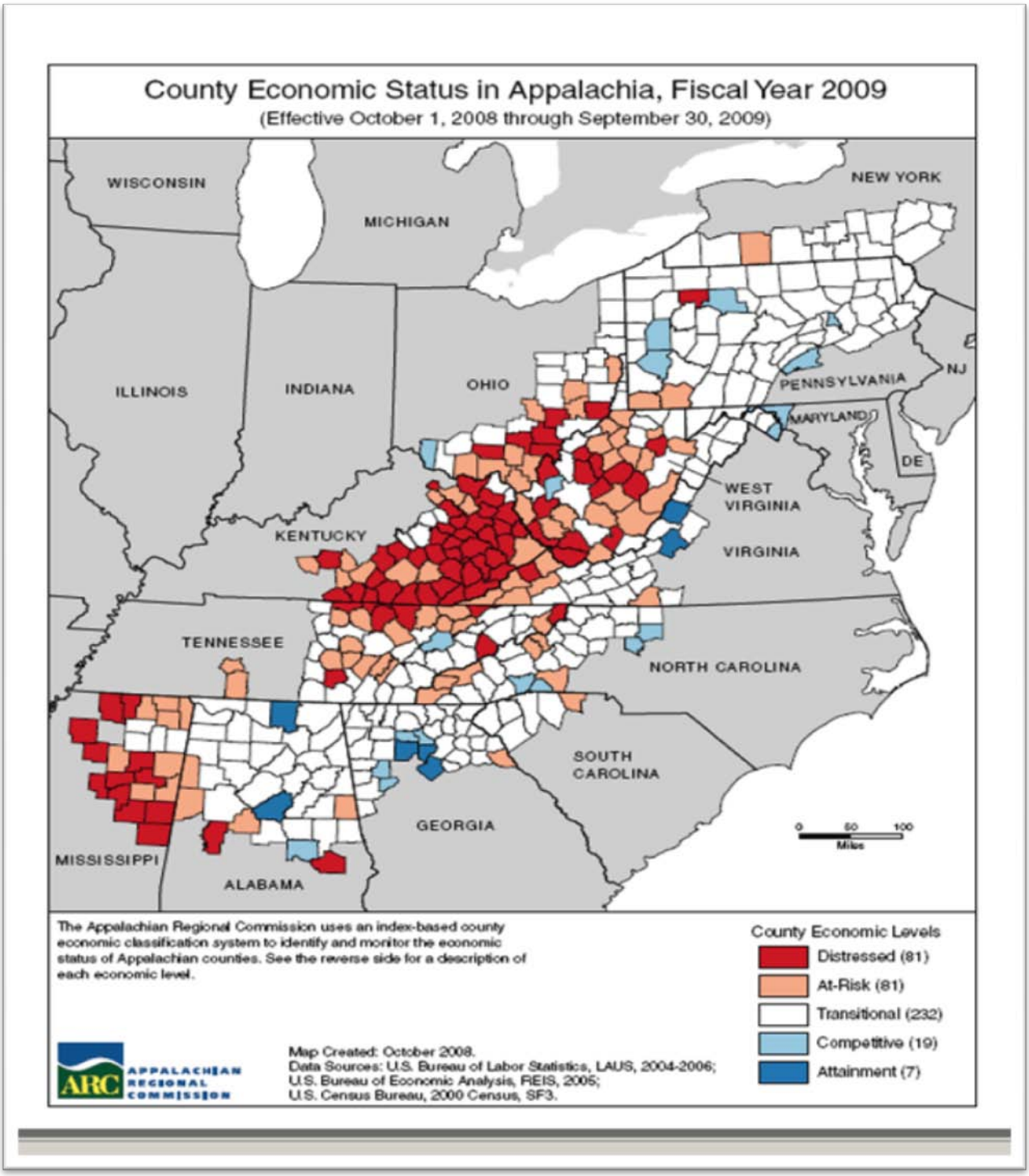


Figure 1.9: County Economic Status in Appalachia, Fiscal Year 2009

County Economic Status Classification System, FY 2009

The Appalachian Regional Commission (ARC) uses an index-based county economic classification system to identify and monitor the economic status of Appalachian counties. The system involves the creation of a national index of county economic status through a comparison of each county's averages for three economic indicators—three-year average unemployment rate, per capita market income, and poverty rate—with national averages. The resulting values are summed and averaged to create a composite index value for each county. Each county in the nation is then ranked, based on its composite index value, with higher values indicating higher levels of distress.

County Economic Levels

Each Appalachian county is classified into one of five economic status designations, based on its position in the national ranking.

Distressed
Distressed counties are the most economically depressed counties. They rank in the worst 10 percent of the nation's counties.

At-Risk
At-Risk counties are those at risk of becoming economically distressed. They rank between the worst 10 percent and 25 percent of the nation's counties.

Transitional
Transitional counties are those transitioning between strong and weak economies. They make up the largest economic status designation. Transitional counties rank between the worst 25 percent and the best 25 percent of the nation's counties.

Competitive
Competitive counties are those that are able to compete in the national economy but are not in the highest 10 percent of the nation's counties. Counties ranking between the best 10 percent and 25 percent of the nation's counties are classified competitive.

Attainment
Attainment counties are the economically strongest counties. Counties ranking in the best 10 percent of the nation's counties are classified attainment.

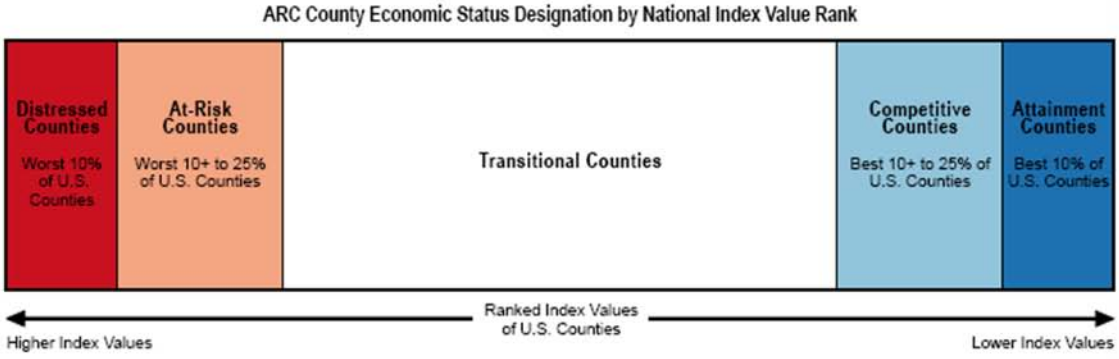


Figure 1.10: Economic Status Classification System, FY 2009

Nativity and Limited English Proficiency

Only 2% of Kentucky's population is foreign born (this excludes those who were born abroad to American parents). Of those individuals, approximately 1/3 have become naturalized citizens of the United States. Foreign-born Hispanics are less likely to naturalize than non-Hispanic whites or African Americans, suggesting that there are more barriers in the pathway to citizenship for some immigrants than others.

Table 1.5: Place of Birth and Citizenship, 2000

	State			
	Total	**White, non-Hispanic**	**Black or African American**	**Hispanic (any race)**
Total	4,041,769	3,610,112	293,915	56,414
Native Born	3,961,498	3,583,634	289,430	32,864
Born in Kentucky	2,980,272	2,710,067	221,430	13,699
Foreign Born	80,271	26,478	4,485	23,550
Naturalized Citizen	27,569	11,422	1,430	4,419
Not a Citizen	52,702	15,056	3,055	19,131

Source: U.S. Census Bureau, Census 2000 Summary File 3 as analyzed by the Kentucky State Data Center

Table 1.6: Language Spoken in the Home by Ability to Speak English and Nativity, Ages 5 years and older, 2000

	Total	Native	Foreign Born
Total Population(Age 5 and Over)	3,776,230	3,697,798	78,432
Speak only English at home	3,627,757	3,610,343	17,414
Speak Spanish at home	70,061	47,942	22,119
Speak English "not well" or "not at all"	18,103	7,298	10,805
Speak other Indo-European languages at home	51,025	32,390	18,635
Speak English "not well" or "not at all"	5,935	3,363	2,572
Speak Asian or Pacific Island languages at home	21,031	4,807	16,224
Speak English "not well" or "not at all"	4,388	414	3,974
Speak other languages at home	6,356	2,316	4,040
Speak English "not well" or "not at all"	615	122	493

Source: U.S. Census Bureau, Census 2000 Summary File 3 as analyzed by the Kentucky State Data Center

About 4% of Kentuckians over the age of 5 speak a language other than English at home. More than 29,000 Kentuckians had limited English proficiency at the time of the 2000 Census, and this number has likely increased since then. Although the United States has no official language, it is difficult to obtain health care if one does not speak English fluently. This underscores the need for interpreter and translation services in the state.

PART II

HEALTH INDICATORS

- ALL-CAUSE MORTALITY
- CHRONIC DISEASE
- CANCER
- INFECTIOUS AND SEXUALLY TRANSMITTED DISEASE
- INJURY
- MATERNAL AND CHILD HEALTH
- ORAL HEALTH
- ACCESS TO HEALTH CARE

All Causes Mortality

Table 2.1: All-Causes Mortality and Mortality Rates per 100,000 Population by Race, Ethnicity and Geographic Region, 2003-2007

	State				Region	
	Total	White, non-Hispanic	Black or African American	Hispanic (any race)	Appalachian Counties	Non-Appalachian Counties
Age-Adjusted Total Mortality Rate	903.4	899.0	1051.8	710.6	994.5	866.1
Crude Death Rate	942.8	979.7	804.4	321.3	1061.7	896.0
Age-Specific Crude Death Rates						
0 to 4 years	167.3	151.0	269.6	252.1	184.0	161.3
5 to 9 years	14.5	14.0	18.6	21.7	18.7	12.9
10 to 14 years	20.3	20.2	20.7	21.3	27.0	17.7
15 to 19 years	79.1	79.5	72.7	127.5	107.5	68.0
20 to 24 years	113.5	111.7	130.1	136.8	149.8	99.7
25 to 29 years	127.2	126.2	157.3	135.0	170.9	108.8
30 to 34 years	149.0	149.1	176.6	152.7	205.4	127.1
35 to 39 years	196.9	198.6	231.0	151.1	265.5	170.3
40 to 44 years	291.2	288.8	378.1	224.8	378.1	258.6
45 to 49 years	417.7	408.7	612.9	223.9	490.7	390.1
50 to 54 years	592.8	573.0	942.2	480.3	693.7	553.2
55 to 59 years	864.6	850.5	1,221.6	781.7	1,019.9	800.4
60 to 64 years	1,380.1	1,362.6	1,941.6	938.6	1,598.9	1,286.0
65 to 69 years	2,123.9	2,102.1	2,742.6	1,986.4	2,399.9	1,998.2
70 to 74 years	3,208.8	3,185.3	3,992.6	2,433.5	3,508.3	3,076.0
75 to 79 years	4,867.1	4,840.9	5,802.7	3,657.7	5,237.6	4,714.6
80 to 84 years	7,485.5	7,501.2	7,667.5	5,631.6	7,859.8	7,337.0
85 years and older	14,827.4	14,968.5	13,424.8	10,796.5	15,003.6	14,760.1

Source: Kentucky Vital Statistics Death Certificate Data (2003-2007) as analyzed by the Kentucky State Data Center

Age-adjusted mortality rates for African Americans in Kentucky are markedly higher than for non-Hispanic whites or Hispanics. The crude age-specific mortality rates indicate that this increased risk of death continues throughout the lifespan, but is most pronounced in early childhood and middle age.

Though Hispanics have a lower overall mortality rate than non-Hispanics, early childhood mortality is elevated for this population indicating a potential target for intervention. (Note: the crude death rate for Hispanics is considerably lower than for other racial and ethnic groups due to the relatively young population in Kentucky). While the age-adjusted rate is still lower than

for other groups it is more representative. Geographic disparities are also evident in the age-adjusted mortality rates, with considerably higher death rates observed in Appalachian counties as opposed to non-Appalachian counties.

Heart Disease

Table 2.2: Angina and Coronary Heart Disease in KY

Race	% Reporting Yes to Angina or Coronary Heart Disease
White	6.0% (5.2-6.8)
Black	4.5% (1.7-7.3)
Hispanic	2.4% (0-4.8)
Other	10.8% (2-19.8)

Source: 2008 Behavioral Risk Factor Surveillance Survey Data, Centers for Disease Control and Prevention

Table 2.3: Myocardial Infarction in KY (BRFSS, 2008)

Race	% Reporting Yes to Myocardial Infarction
White	5.4% (4.9-6.0)
Black	5.4% (2.1-8.7)
Hispanic	4.0% (0.4-7.6)
Other	5.2% (0.3-10.0)
Multiracial	6.3% (0.8-11.7)

Source: 2008 Behavioral Risk Factor Surveillance Survey Data, Centers for Disease Control and Prevention

Table 2.4: Heart Disease Mortality Rates per 100,000 by Race

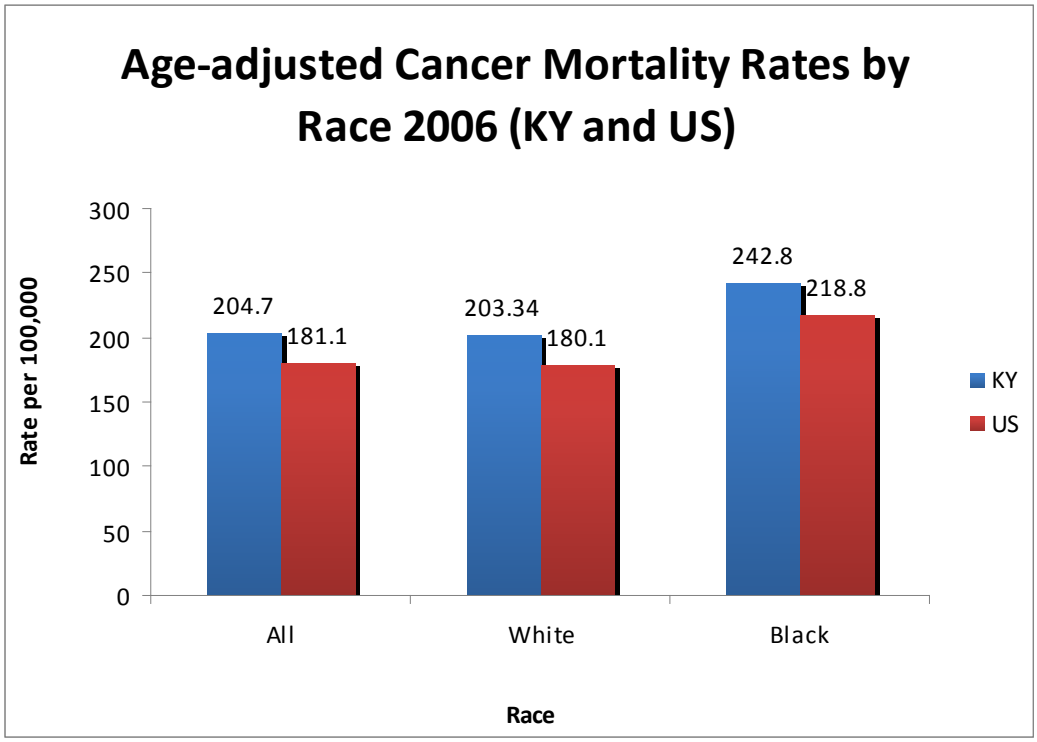
Race	KY	US
White	235.1	197.0
Black	261.1	257.9
Other	87.8	114.0

Source: 2006 Kaiser Family Foundation Data

The rate of heart disease deaths is higher in KY than the national rate for all races.

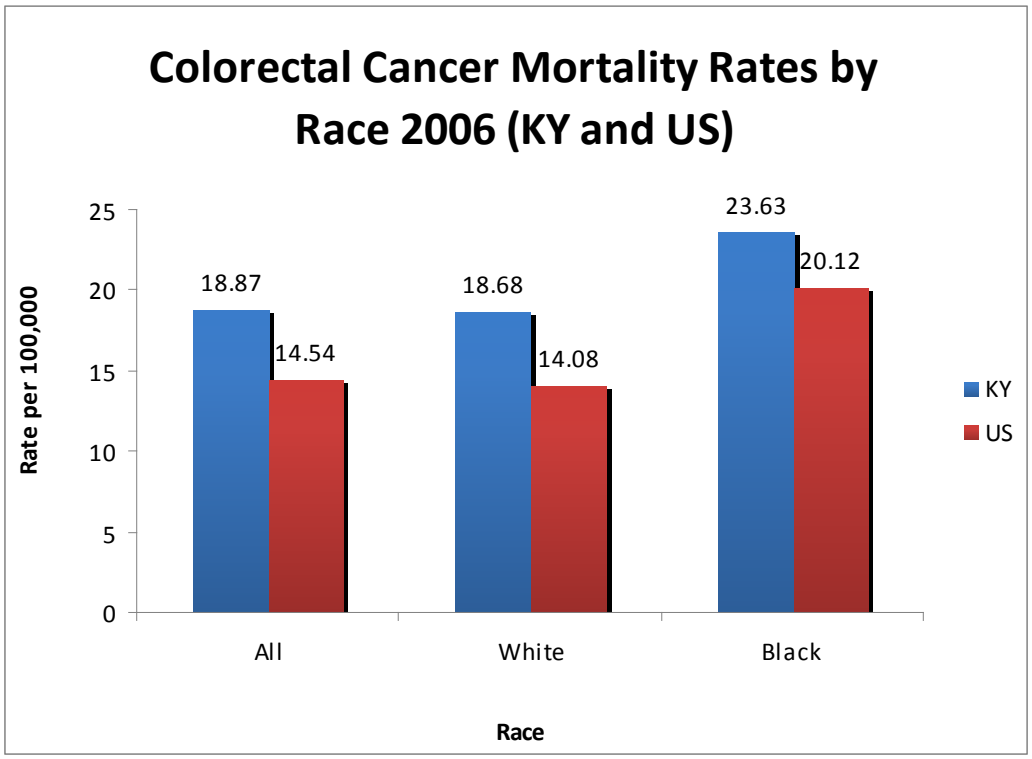
Cancer

Figure: 2.1: Age Adjusted Cancer Mortality Rates by Race 2006 (KY and US)



The graph above illustrates the age-adjusted mortality rates for all cancers by race in Kentucky and the United States. According to the Kentucky Cancer Registry and the National Center for Health Statistics (NCHS), the cancer mortality rate is higher among blacks than whites in both Kentucky and the US.

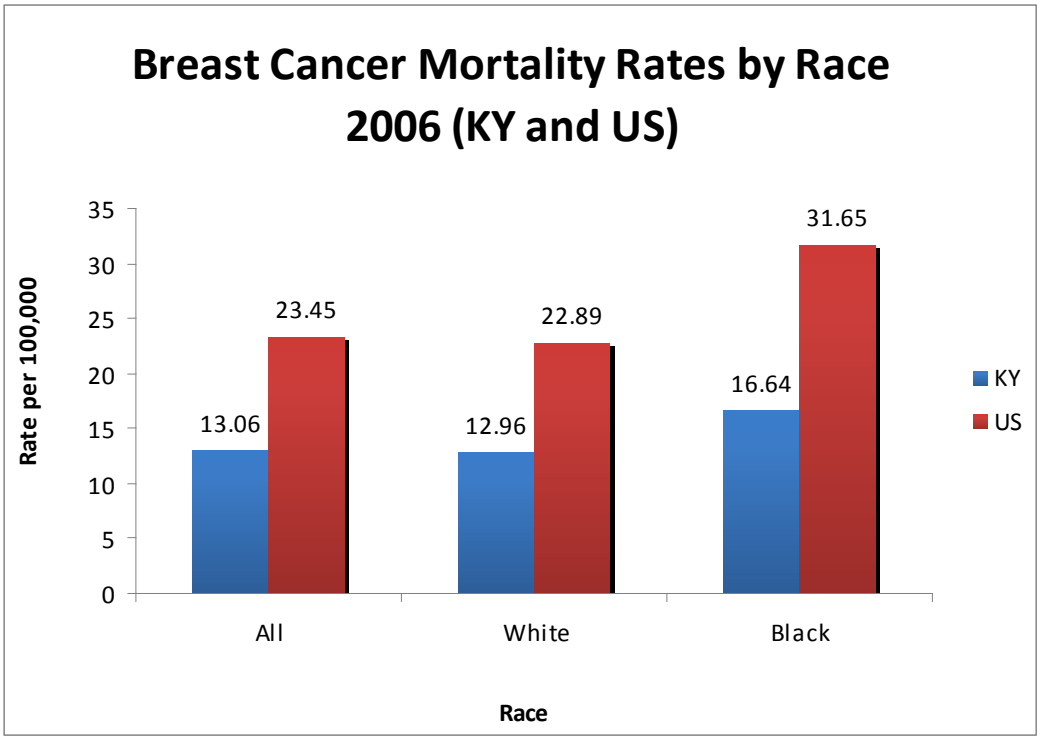
Figure 2.2: Colorectal Cancer Mortality Rates by Race 2006 (KY and US)



The graph above illustrates the age-adjusted mortality rates for colorectal cancer by race in Kentucky and the United States. According to the Kentucky Cancer Registry and the National Center for Health Statistics (NCHS), the colorectal cancer mortality rate is higher among blacks than whites in both Kentucky and the US.

Breast Cancer

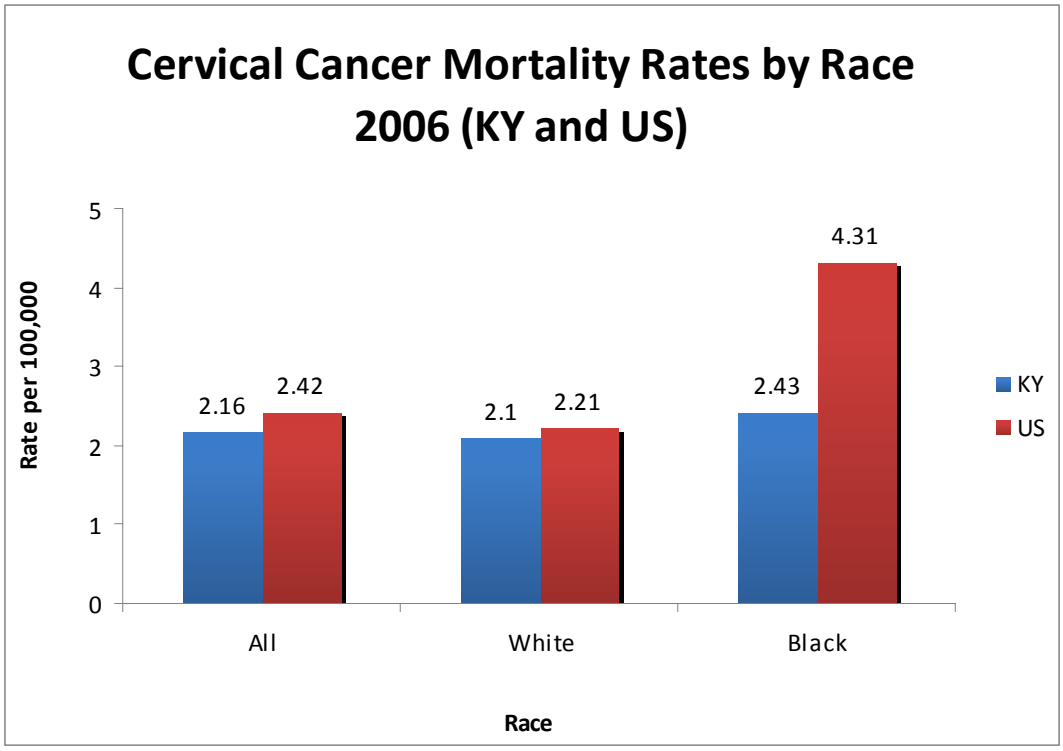
Figure 2.3: Breast Cancer Mortality Rates by Race 2006 (KY and US)



The graph above illustrates the age-adjusted mortality rates for breast cancer by race in Kentucky and the United States. According to the Kentucky Cancer Registry and the National Center for Health Statistics (NCHS), the breast cancer mortality rate is higher among blacks than whites in both Kentucky and the US.

Cervical Cancer

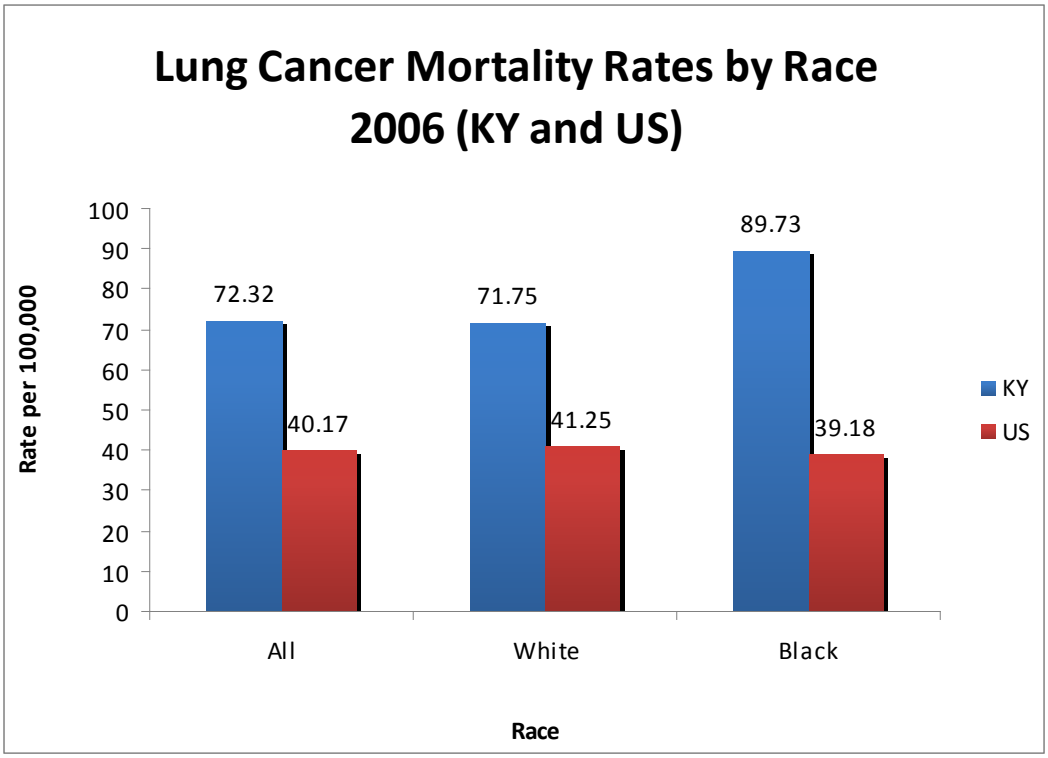
Figure 2.4: Cervical Cancer Mortality Rates by Race 2006 (KY and US)



The graph above illustrates the age-adjusted mortality rates for cervical cancer by race in Kentucky and the United States. According to the Kentucky Cancer Registry and the National Center for Health Statistics (NCHS), though the disparity is not as great in Kentucky as it is the United States the cervical cancer mortality rate is somewhat higher among blacks than whites in Kentucky

.

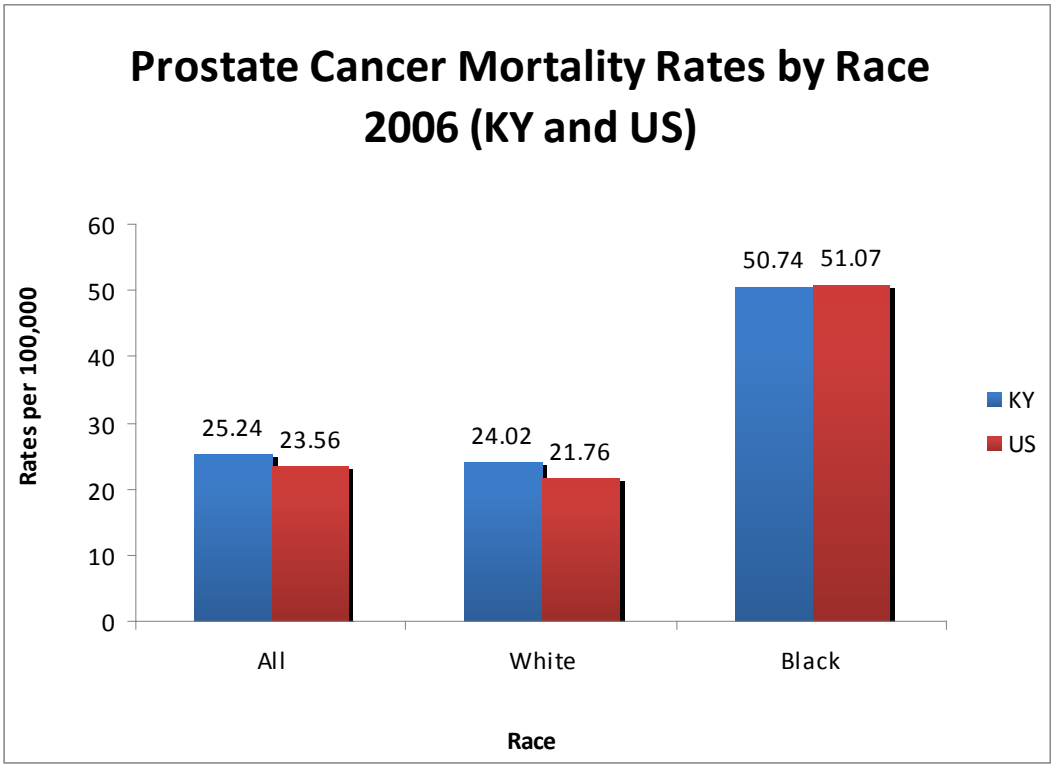
Figure 2.5: Lung Cancer Mortality Rates by Race 2006 (KY and US)



The graph above illustrates the age-adjusted mortality rates for lung cancer by race in Kentucky and the United States. According to the Kentucky Cancer Registry and the National Center for Health Statistics (NCHS), the lung cancer mortality rate is much higher, overall, in Kentucky than the United States. Unlike the nation as a whole, Kentucky has a higher lung cancer mortality rate among blacks compared to whites.

Prostate Cancer

Figure 2.6: Prostate Cancer Mortality Rates by Race 2006 (KY and US)



The graph above illustrates the age-adjusted mortality rates for prostate cancer by race in Kentucky and the United States. According to the Kentucky Cancer Registry and the National Center for Health Statistics (NCHS), the prostate cancer mortality rate is higher among blacks than whites in both Kentucky and the US.

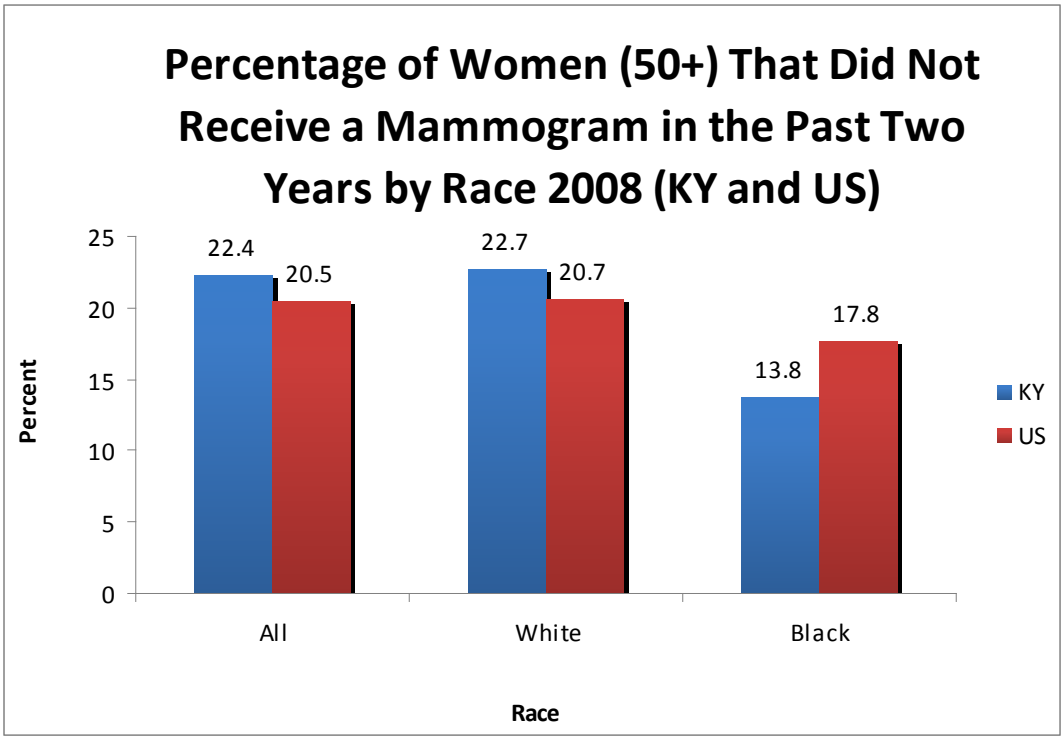
Limitations

Limitations to the Kentucky Cancer Registry Data include: incompleteness of treatment data and timeliness. There is incompleteness of treatment data (i.e. patients are often treated with multi-modality therapy in a variety of settings over time. Due to the confidential nature of the data being collected, it is often difficult to capture complete information on all treatments received. Additionally, hospitals are allowed six months from the date of initial contact with a patient before the cancer report is required to be sent to the registry. There is currently a delay of two years in establishing a "complete" annual database. Finally, the registry must rely on outside agencies to provide population estimates, contributing to the delay in data availability.

Cancer Screening/Prevention

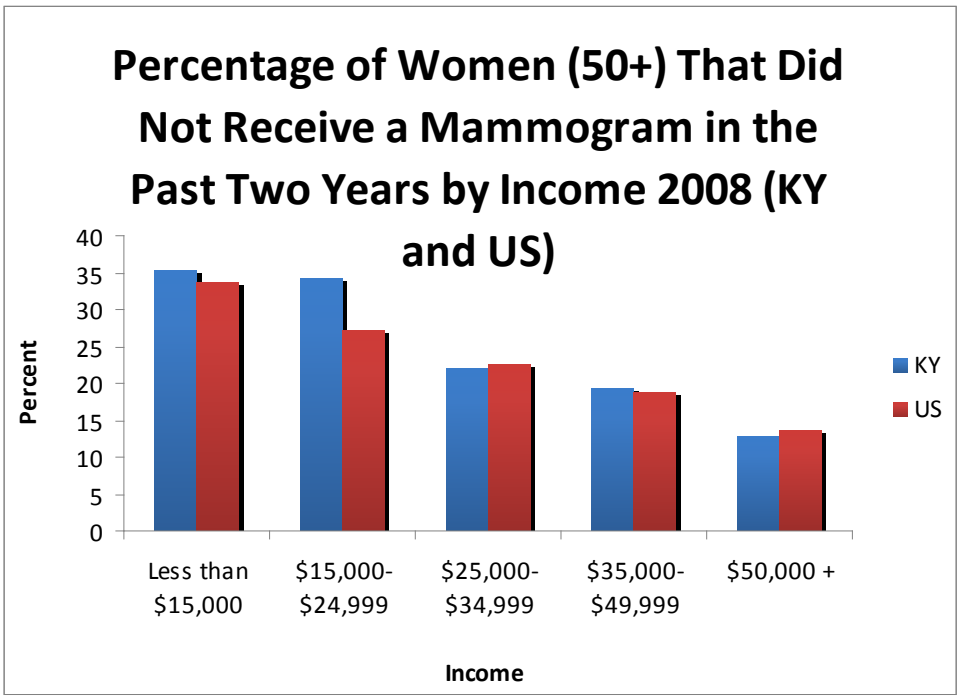
Mammograms

Figure 2.7: Percentage of Women (50+) That Did Not Receive a Mammogram in the Past Two Years by Race 2008 (KY and US)



The graph above illustrates the percentage of women, over 50, in Kentucky and the United States that did NOT receive a mammogram in the past two years by race. According to the 2008 Behavioral Risk Factor Surveillance System (BRFSS), 22.7% of white women in Kentucky did not receive a mammogram while 13.8% of black women in Kentucky did not receive the service.

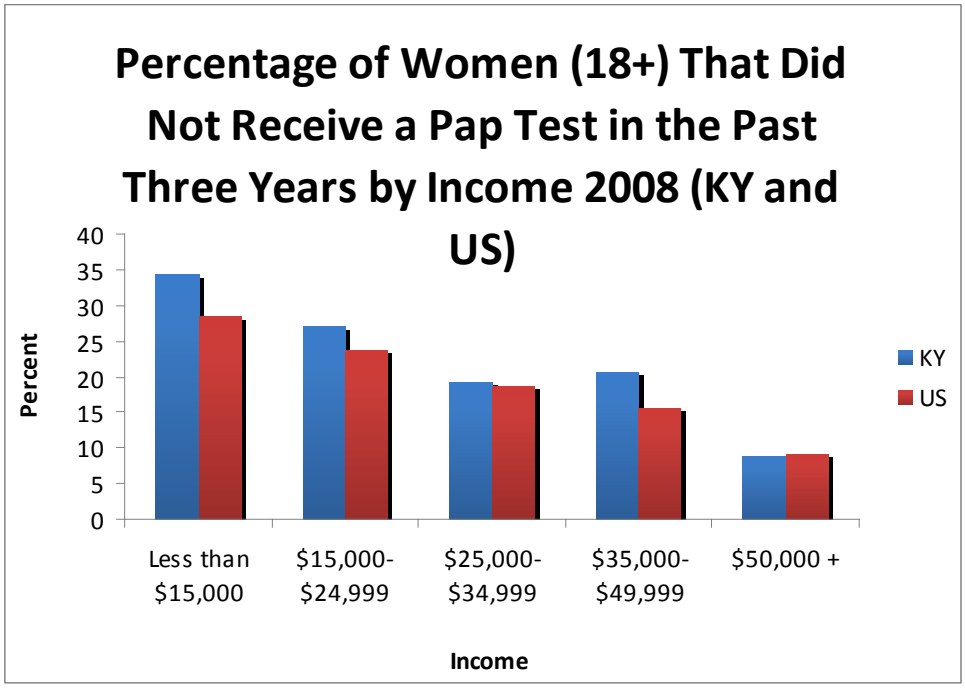
Figure 2.8: Percentage of Women (50+) That Did Not Receive a Mammogram in the Past Two Years by Income 2008 (KY and US)



The graph above illustrates the percentage of women, over 50, in Kentucky and the United States that did NOT receive a mammogram in the past two years by income level. According to the 2008 Behavioral Risk Factor Surveillance System (BRFSS), rates of NOT receiving the service declines with increasing income for both women in Kentucky as well as nationally.

Pap smear

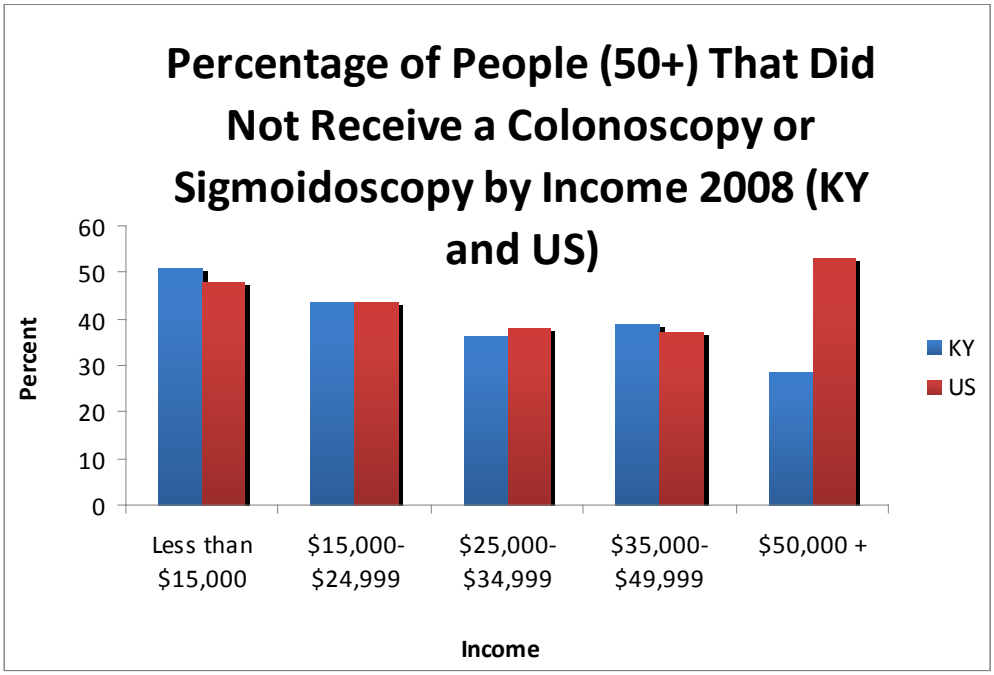
Figure 2.9: Percentage of Women (18+) That Did Not Receive a Pap Test in the Past Three Years by Income 2008 (KY and US)



The graph above illustrates the percentage of women, 18 and over, in Kentucky and the United States that did NOT receive a Pap test in the past three years by income level. Data on receipt of the service by race was not available for Kentucky. According to the 2008 Behavioral Risk Factor Surveillance System (BRFSS), rates of NOT receiving the service declines with increasing income for both women in Kentucky as well as nationally.

Colonoscopy or Sigmoidoscopy

Figure 2.10: Percentage of People (50+) That Did Not Receive a Colonoscopy or Sigmoidoscopy by Income 2008 (KY and US)



The graph above illustrates the percentage of people, over 50, in Kentucky and the United States that have never received a colonoscopy or sigmoidoscopy by income. Data on receipt of the service by race was not available for Kentucky. According to the 2008 Behavioral Risk Factor Surveillance System (BRFSS), rates of NOT receiving the service declines with increasing income for both women in Kentucky as well as nationally.

Limitations

There are two limitations to BRFSS data: non-coverage bias and self-report bias. According to the 2001 Census Population Estimate, 6.5% of Kentuckians were without telephones. This population is not reached and, therefore, not included in the survey. Those living in group settings (i.e. nursing homes, college dormitories, the military or prison) are not surveyed. Additionally, the BRFSS survey relies on self-report. This means prevalence estimates are strictly based on each respondent's answers which could potentially reflect a healthier lifestyle than what actually exists.

Sources

Kentucky Cancer Registry. Cancer Mortality Rates in Kentucky. Retreived September 17, 2009, from http://cancer-rates.info/ky/kymort.html.

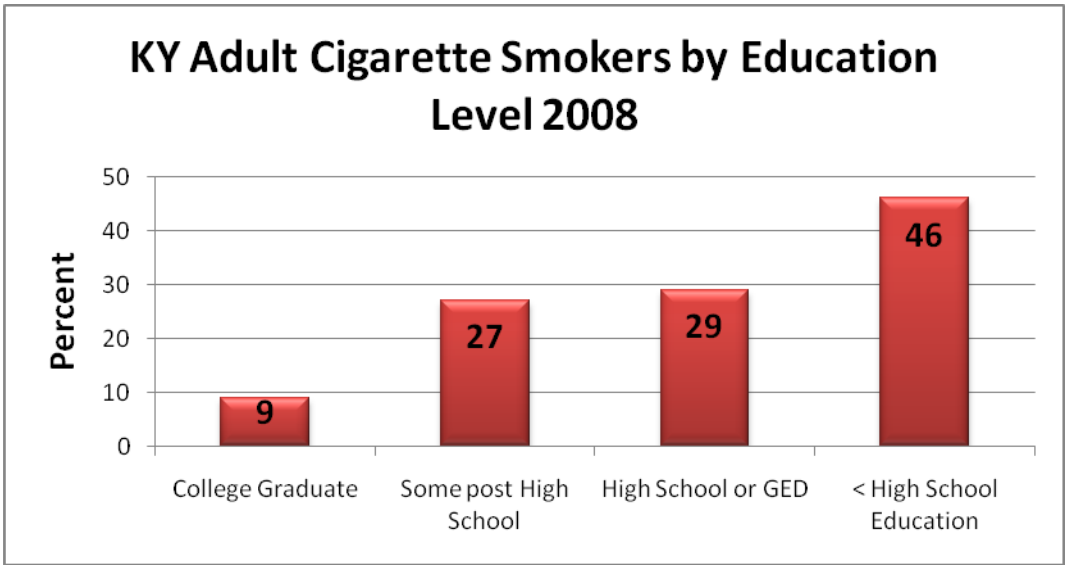
National Cancer Institute SEER. Underlying mortality data provided by National Center for Health Statistics.(n.d).Retrieved September 17, 2009, from http://seer.cancer.gov/faststats/index.php.Centers for Disease Control and Prevention. Behavioral

Risk Factor Surveillance System [Data file]. Retrieved September 16, 2009, from http://apps.nccd.cdc.gov/brfss/.

Behavioral Risk Factors

Smoking

Figure 2.11 : KY Adult Cigarette Smokers by Education Level 2008



The graph above illustrates the education level of adults in Kentucky who smoke cigarettes. According to the 2008 Behavioral Risk Factor Surveillance System (BRFSS), 46% of KY smokers have less than a high school education. In comparison, only 9% of smokers have a college degree.

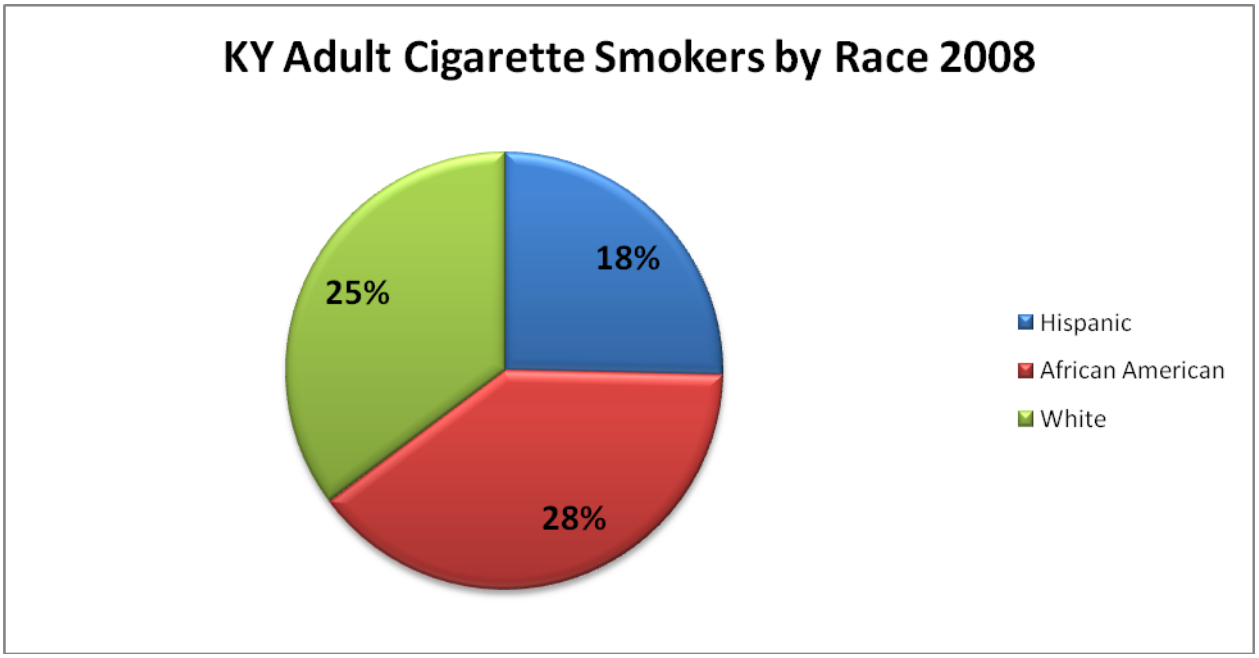
Limitations

There are some limitations to BRFSS data. The first limitation is non-coverage bias. This type of bias occurs when certain groups of people cannot be reached and thus are not included in the survey. The BRFSS survey is conducted using telephones, and therefore excludes individuals who do not have landline telephones in their homes. It also does not include those individuals who only have cell phones. The issue of excluding cell phones is presently being addressed. The exclusion of individuals without phones creates bias, because individuals without phones may have socio-economic differences from the survey population.

Another limitation of the BRFSS data is that of self-report bias. This type of bias occurs when individuals being surveyed over-estimate or under-estimate their risk behaviors. Individuals may report a healthier lifestyle than they actually have, which could influence prevalence estimates.

These limitations should not hinder the use of BRFSS data, but should be considered.

Figure 2.12: KY Adult Cigarette Smokers by Race 2008



Source: Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System [Data file]. Retrieved from http://apps.nccd.cdc.gov/brfss/education.asp?cat=TU&yr=2008&qkey=4396&state=KY

The graph above illustrates the percentage of adult smokers in Kentucky by race. According to the 2008 BRFSS survey, 28% of adult smokers in Kentucky are African-American, followed by whites (25%), and Hispanics (18%).

Overweight and Obesity

Table 2.4: Overweight and Obesity Rates for KY 2008 by Race

Race	KY %	US %
White	64.7%	59.6%
Black	73.7%	69.9%
Hispanic	48.7%	62.1%
Other	69.8%	59.5%

Note: Percentages are weighted to reflect population characteristics
Source: 2008 Kaiser Family Foundation Data

According to the 2008 Behavioral Risk Factor Surveillance System, Blacks had the highest rate of obesity and overweight (defined as having a Body Mass Index [BMI] greater than or equal to 25 kg/meters squared) followed by Whites and Hispanics. The rates of overweight and obesity

combined for both Blacks and Whites in Kentucky exceeded national trends, while the rates for Hispanics were well below the national rates. Blacks were almost 14% more likely to be either obese or overweight than Whites.

High Blood Pressure

Table 2.5: Adults who have had their blood pressure checked and told it was high, by Race/Ethnicity in KY

Race	% Adults Reporting YES to Hypertension	% of Adults Reporting NO to Hypertension
White	29.7% (CI: 28.1-31.3) n=2586	70.3% (CI: 68.7-71.9) n=3861
Black	32.4% (CI: 23.8-41.0) n=101	67.6% (CI: 59.0-76.2) n=129
Hispanic	N/A	N/A
Other	N/A	N/A

Source: 2007 Behavioral Risk Factor Surveillance Survey Data

According to the 2007 Behavioral Risk Factor Surveillance System, the estimated prevalence of hypertension is 2.7% higher among Blacks than it is among Whites in Kentucky.

High blood cholesterol

Table 2.6: Adult who have had their blood cholesterol checked and told it was high, by Race/Ethnicity in KY

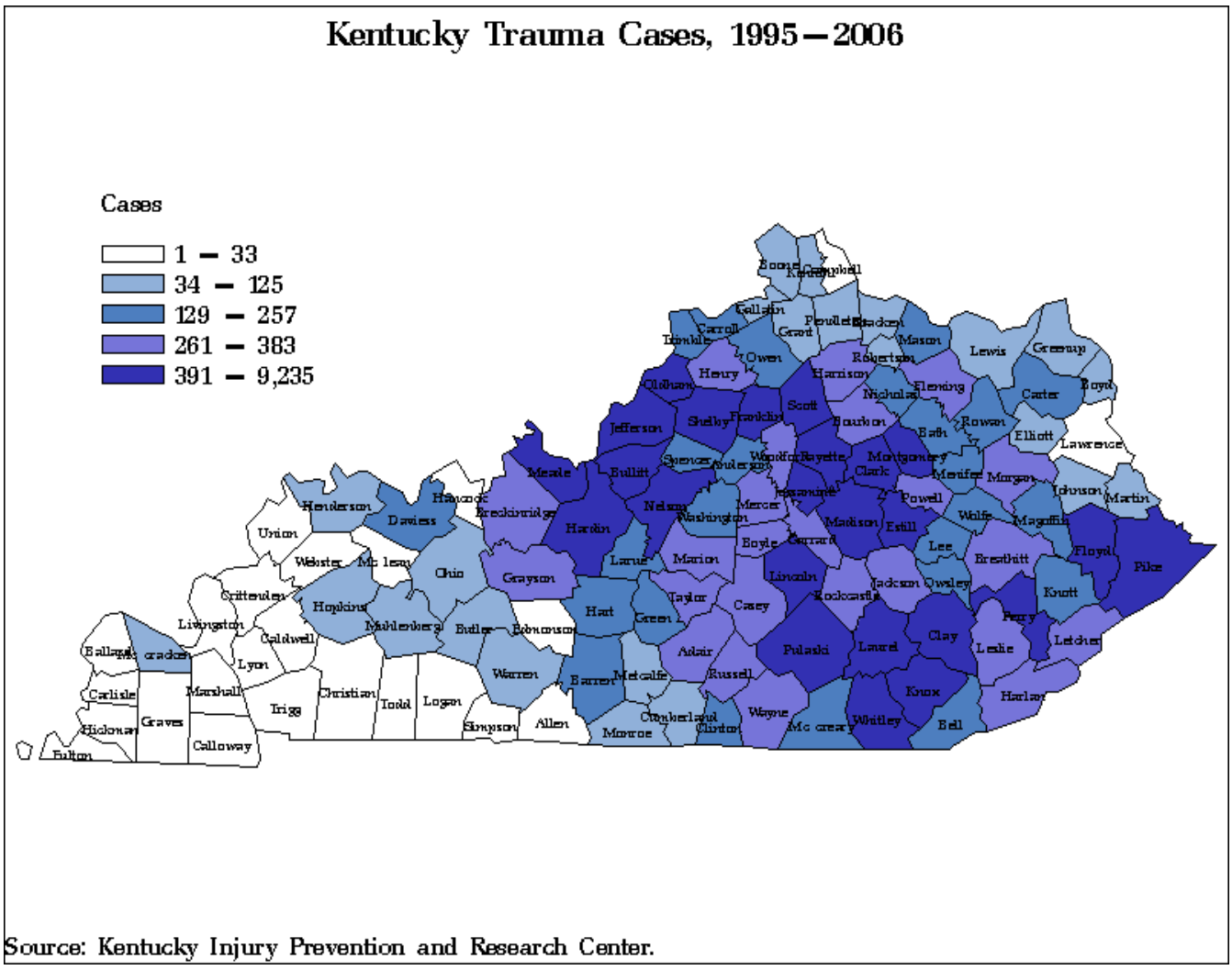
Race	% Adults Reporting YES to High Cholesterol	% Adults Reporting NO to High Cholesterol
White	39.3% (37.3-41.3) n=2468	60.7% (58.7-62.7) n=2935
Black	29.7% (20.9-38.5) n=75	70.3% (61.5-79.1) n=117
Hispanic	N/A	N/A
Other	N/A	N/A

Source: 2007 Behavioral Risk Factor Surveillance Survey Data

According to the 2007 Behavioral Risk Factor Surveillance System, the estimated prevalence of high cholesterol was 9.6% higher among Whites than it is among Blacks in Kentucky.

Injury

Figure 2.13. Trauma cases by county, 12 year period, 1995-2006.



Source: Kentucky Injury Prevention and Research Center.

Figure 2.14: Crude trauma rates by county, 12 year period, 1995-2006.

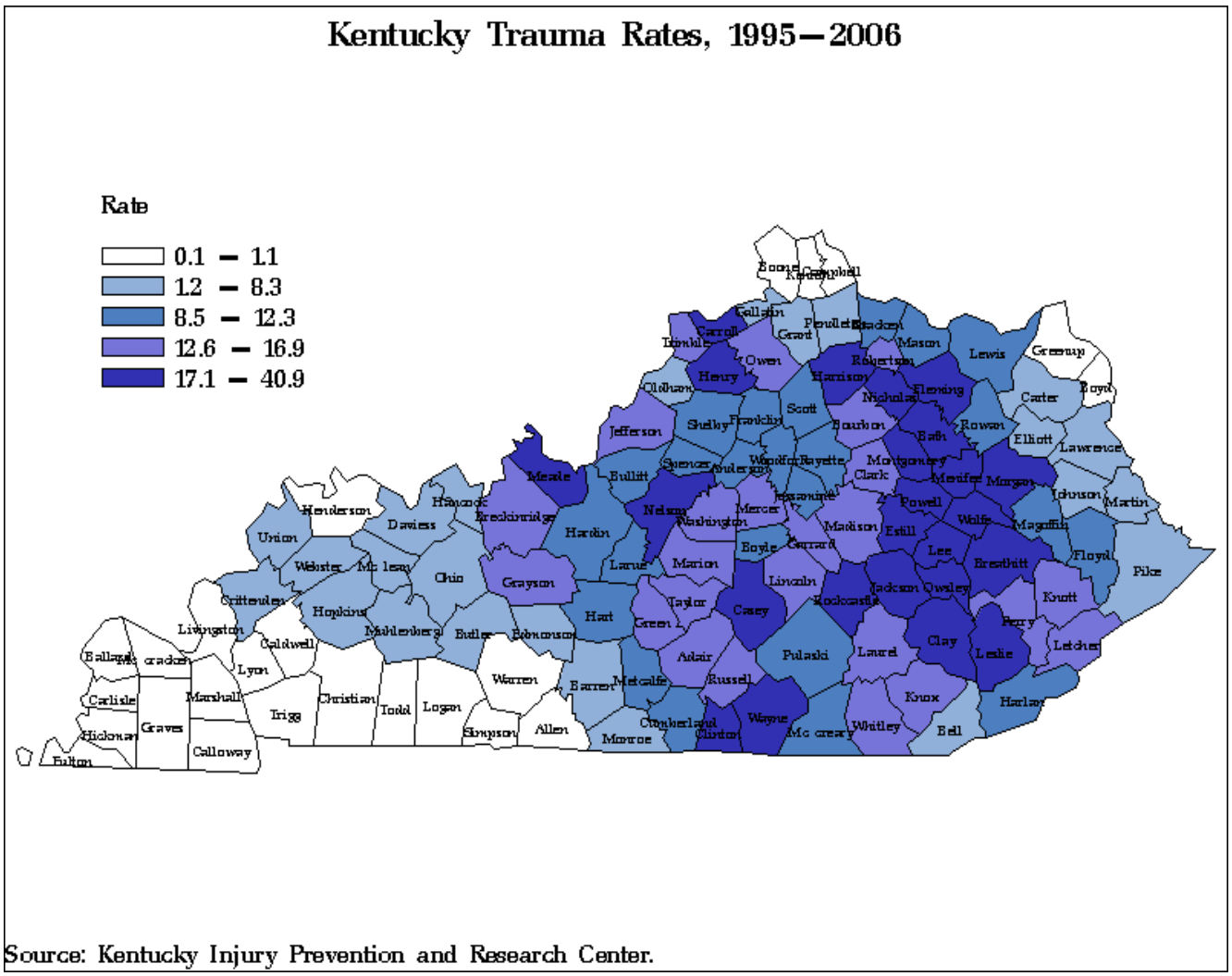


Table 2.7. Race (percent) by hospital for Trauma Patients.

Source: Kentucky Injury Prevention and Research Center

University of Kentucky

	Caucasian	African-American	Hispanic	Other	Missing
1995	94.3	4.3	0.8	0.5	0.0
1996	93.0	5.0	1.5	0.4	0.0
1997	93.2	5.3	1.4	0.1	0.0
1998	93.8	3.6	2.4	0.2	0.0
1999	93.7	3.9	2.3	0.2	0.0
2000	94.1	3.1	2.5	0.2	0.0
2001	94.0	3.2	2.7	0.2	0.0
2002	94.1	2.8	2.9	0.2	0.0
2003	93.3	3.9	2.7	0.2	0.0
2004	93.5	3.0	3.0	0.4	0.0
2005	93.4	3.1	2.8	0.3	0.4
2006	93.3	3.2	2.7	0.2	0.7
Average	93.6	3.7	2.3	0.3	0.1

University of Louisville

	Caucasian	African-American	Hispanic	Other	Missing
1995	80.6	17.4	1.2	0.7	0.1
1996	80.2	17.7	1.2	0.5	0.4
1997	80.3	16.8	2.0	0.7	0.2
1998	84.1	13.6	0.7	1.7	0.0
1999	81.8	14.9	1.1	2.2	0.0
2000	81.9	14.0	1.5	2.6	0.1
2001	82.1	12.9	1.1	3.9	0.0
2002	83.9	11.9	1.2	2.9	0.1
2003	83.6	12.2	1.7	2.6	0.0
2004	80.8	14.2	1.8	3.2	0.0
2005	79.6	14.8	2.2	3.2	0.1
2006	81.1	14.0	2.3	2.7	0.0
Average	81.7	14.5	1.5	2.2	0.1

Kosair Children's Hospital

	Caucasian	African-American	Hispanic	Other	Missing
1995	77.1	20.4	0.0	2.6	0.0
1996	82.5	17.0	0.0	0.5	0.0
1997	77.0	21.6	0.0	1.4	0.0
1998	75.4	21.8	0.0	2.8	0.0
1999	79.3	17.6	0.0	3.1	0.0
2000	77.7	18.8	0.0	3.5	0.0
2001	82.6	13.7	2.0	1.5	0.2
2002	81.2	15.3	1.6	1.9	0.0
2003	83.3	14.1	1.9	0.6	0.2
2004	81.5	13.6	2.6	2.3	0.0
2005	81.1	13.8	2.7	2.5	0.0
2006	84.4	12.1	2.5	0.9	0.0
Average	80.3	16.6	1.1	2.0	0.0

Table2.7 (continued.) Race (percent) for all reporting facilities

Combined Hospitals

	Caucasian	African-American	Hispanic	Other	Missing
1995	87.1	11.2	0.9	0.8	0.0
1996	87.0	11.2	1.3	0.4	0.2
1997	86.9	11.1	1.5	0.5	0.1
1998	88.4	9.0	1.5	1.0	0.0
1999	87.7	9.4	1.6	1.3	0.0
2000	87.2	9.4	1.8	1.6	0.0
2001	87.9	8.2	2.0	1.8	0.0
2002	88.3	8.2	2.0	1.5	0.0
2003	87.8	8.8	2.1	1.3	0.0
2004	87.3	8.5	2.5	1.7	0.0
2005	87.6	8.0	2.6	1.4	0.3
2006	88.1	7.9	2.5	1.1	0.3
Average	87.6	9.3	1.9	1.2	0.1

The combined data for all hospitals and all years shows that a large majority (87.6%) of all trauma patients were Caucasian, 9.3% of all patients were African-American, and 1.9% of patients were Hispanic. The average percentage of Hispanic patients in all trauma centers is 1.9%, but UKH sees a larger percentage at 2.3%. KCH and ULH see a much higher percentage of African-American trauma patients in their hospitals (16.6% and 14.5%) than does UKH (3.7%), reflecting the much higher proportion of African-Americans in the Metro Louisville population.

The Caucasian proportion of trauma cases has remained relatively stable across the eight years of data, and the African-American proportion has steadily decreased. While the numbers are not large, an increase in the Hispanic population can be seen across the twelve years of data, a trend that should be recognized for translation and other resource planning. Totals may not add to 100% in tables 5 and 6 due to rounding.

The 2000 Census reports that 90% of all Kentuckians identify themselves as Caucasian, slightly higher than the trauma registry average of 87.6%. Conversely, the proportion of African-

Americans in the trauma registry, 9.3%, is substantially higher than the 7.3% African-Americans in the census data. Census data on the Hispanic population, widely judged to be a significant undercount, indicates that they represent 1.4% of the state's population, while the trauma registry shows an average of 1.9%. A disproportionate burden of trauma on racial and ethnic minorities appears in Kentucky as well as nationally. For this reason, additional information is included on the following page.

Race

African-American Data Summary

A total of 4,570 African-American patients received care at the three level one trauma hospitals. Their mean age was 29.3 years with a median age of 27 which shows a somewhat younger population than the entire trauma database (mean age 33.6 with a median age of 31). 27.7% of African-American trauma registry patients were under the age of 18 vs 23.3% trauma registry patients as a whole.

The leading cause of injury for African-American trauma registry patients (as for all registry patients) was motor vehicle crashes, though at a lower rate than the trauma database as a whole (44.1% vs 59.4%, respectively). Assault/homicide was the second leading cause of trauma injury for African-Americans with a significantly higher rate (28.1%) than for the entire trauma database (8.3%). Falls, though still one of the leading causes of injury, were slightly lower for this population (8.9%) than the population as a whole (13.3%).

Deaths for African American trauma patients (9.7%) were slightly higher than the database as a whole (7.7%). This also appeared to be a younger population with African-American trauma patients who died having a mean age of 33.4 and a median age of 30 while overall the mean age for deaths in the trauma database was 43.4 with a median age of 41. Just under one third (32.7%) of these deaths were assault/homicide related. This number was much higher than the trauma population as a whole with only 9.4% of deaths being assault/homicide related.

Hispanic Data Summary

A total of 943 Hispanic trauma registry patients received care at the three level one trauma hospitals. Their mean age was 28 years with a median age of 27, and this was also a younger population than the trauma patients as a whole. Conversely, only 14.7% of Hispanic trauma registry patients were under the age of 18 vs 23.3% of the registry overall. Males comprised an even higher percentage of the Hispanic population (87.9%) than the already high rate of males in the entire trauma population.

The leading causes of injury for Hispanics were motor vehicle crashes (49.7%), followed by assault/homicide (19.2%) and falls (14.4%). Both assault/homicide and fall rates were higher than the trauma population as a whole (8.3% and 13.3%, respectively).

Trauma registry cases resulted in death for 7.6% of Hispanic patients. While closer to the overall death rate, these deaths are occurring even younger than the African-American population with a

mean age of 27.7 and a median age of 27. Occupants in car crashes are the leading cause of death for the Hispanic trauma patients with homicide being the second leading cause of death with 15.3%. As with the African-American trauma patients, this rate is higher than the trauma population as a whole.

Infections and Sexually Transmitted Diseases

HIV/AIDS

Table 2.9: Cumulative AIDS Cases by Age at Diagnosis, Race/Ethnicity, and Sex through December 31, 2008

Cumulative[1] AIDS Cases By Age at Diagnosis, Race/Ethnicity, and Sex through December 31, 2008

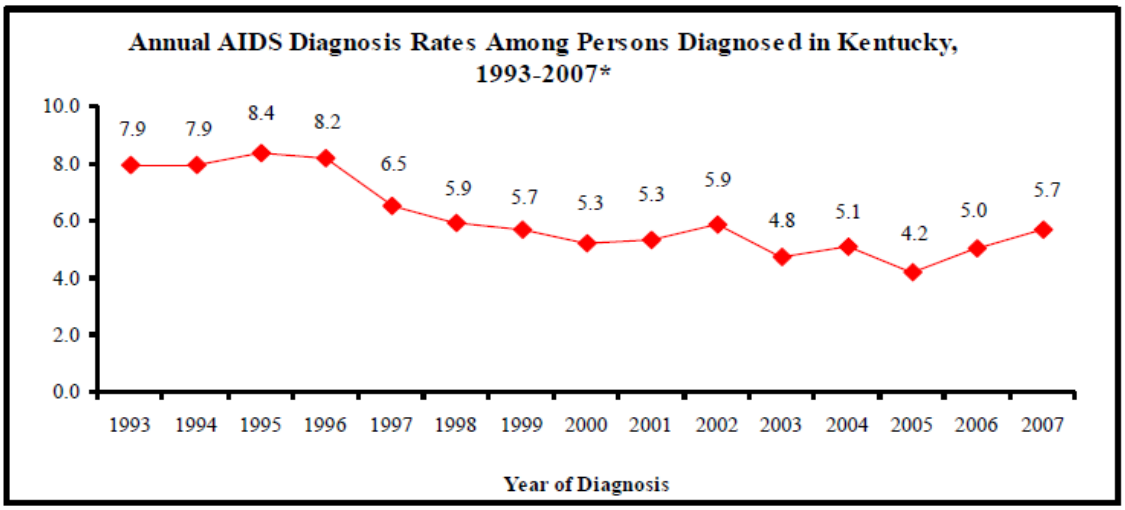
		White, Not Hispanic		Black, Not Hispanic		Hispanic		Other/ Unknown		TOTAL	
	Age Group	No.	%	No.	%	No.	%	No.	%	No.	%[2]
MALE	<13	7	≤1%	14	1%	0	0%	0	0%	21	0%
	13-19	17	1%	10	1%	2	1%	0	0%	29	1%
	20-29	473	16%	212	18%	39	29%	2	11%	726	17%
	30-39	1251	44%	484	41%	63	47%	6	33%	1804	43%
	40-49	801	28%	349	29%	21	16%	9	50%	1180	28%
	50+	326	11%	124	10%	9	7%	1	6%	460	11%
	TOTAL[2]	**2875**	**100%**	**1193**	**100%**	**134**	**100%**	**18**	**100%**	**4220**	**100%**
FEMALE	<13	7	2%	6	2%	0	0%	0	0%	13	2%
	13-19	4	1%	2	1%	1	3%	0	0%	7	1%
	20-29	76	21%	75	19%	16	47%	3	33%	170	21%
	30-39	145	40%	164	42%	8	24%	3	33%	320	40%
	40-49	84	23%	102	26%	6	18%	3	33%	195	25%
	50+	47	13%	40	10%	3	9%	0	0%	90	11%
	TOTAL[2]	**363**	**100%**	**389**	**100%**	**34**	**100%**	**9**	**100%**	**795**	**100%**

(1) Includes both Adult/Adolescent and Pediatric AIDS cases.

(2) Percentages may not total 100 due to rounding.

Since the start of the epidemic in the early 80's more cases have been reported among males (84%) than females. Sex specific prevalence indicates that a higher number of cases among females living in Kentucky at the time of diagnosis have been reported in black women (n=389) in comparison to other races.

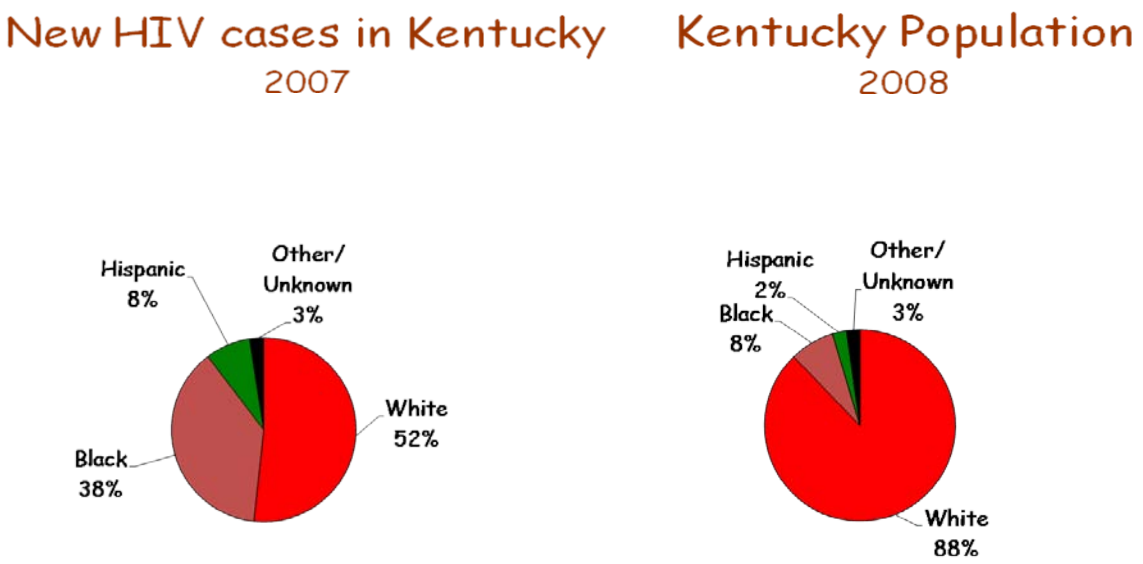
Figure 2.15: Annual AIDS Diagnosis Rates Among Persons Diagnosed in Kentucky 1993-2007



*Data are current as of December 31, 2008. However, data for 2008 are considered provisional due to reporting delays and are not presented in trend analysis.

The annual AIDS diagnosis rate among persons in Kentucky shows a trend by year of diagnosis. The annual AIDS diagnosis rate has remained fairly steady from 2000 to 2007, with slight fluctuations. In 2007, there were 5.7 persons per 100,000 populations in Kentucky that were diagnosed with AIDS.

Figure 2.16: HIV Incidence by Race vs. Kentucky Population-2007



On average from 2003-2007, the AIDS Diagnosis rates per 100,000 population for Blacks was approximately eight times higher than for Whites and five times higher for Hispanics than for Whites in Kentucky. This further highlights the disproportionate impact of AIDS on minorities in Kentucky.

Figure 2.17: Kentucky AIDS Diagnosis Rates by Race/Ethnicity and Year of Diagnosis, 2003-2007

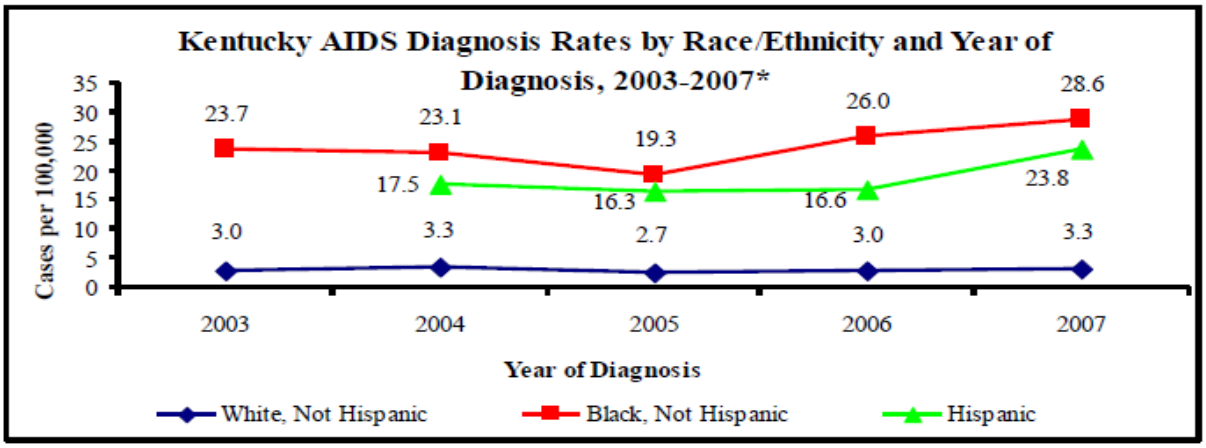
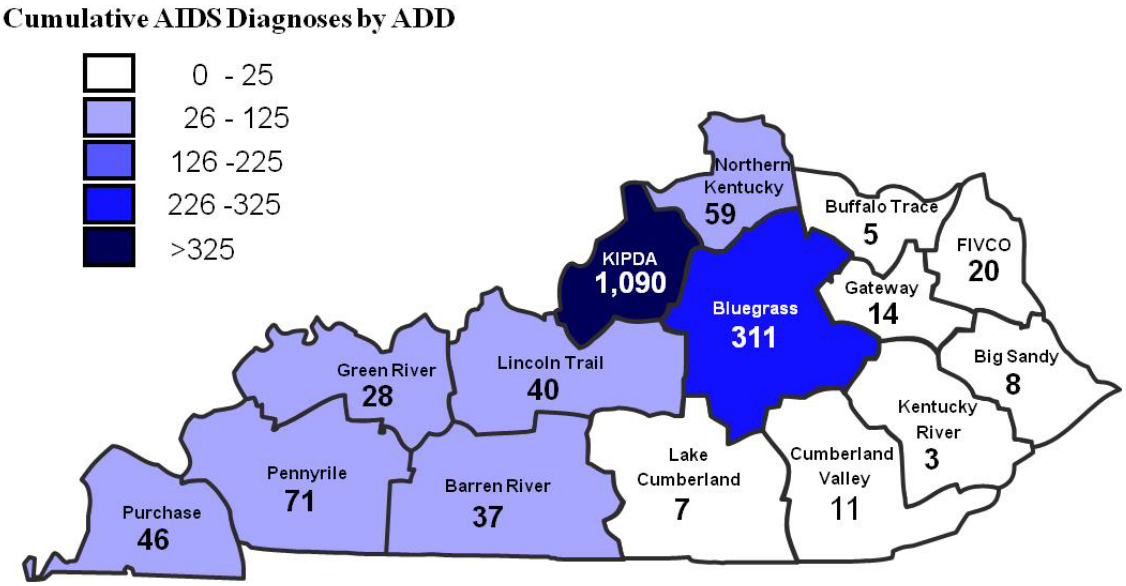


Figure 2.18: Cumulate AIDS Cases among Black non-Hispanic and Hispanics by ADD

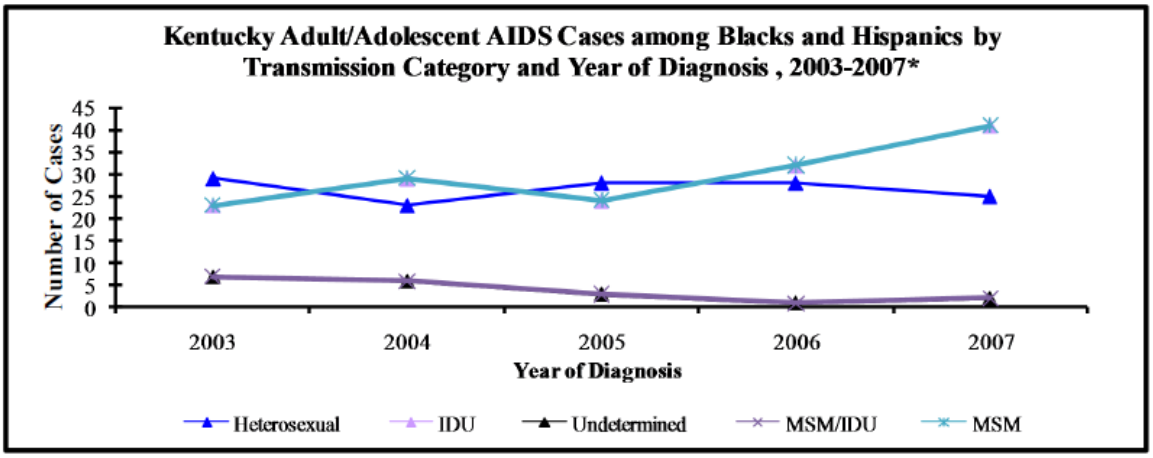
Cumulative AIDS Cases among Black non- Hispanic and Hispanics by Area Development District (ADD) of Residence at Time of Diagnosis through December 31, 2008



Cumulatively, the majority of AIDS cases diagnosed in Kentucky among minorities (Blacks and Hispanics) were living in KIPDA ADD at the time of diagnosis (n=1,090), which includes the city of Louisville. The area with the second largest number of AIDS cases is the Bluegrass ADD (n=311), which includes Lexington city.

The trend from 2003-2007 shows that the mode of transmission of HIV among minorities (Blacks and Hispanics) in Kentucky is through having sex with other men (MSM) and heterosexually, with a partner who has HIV or is at high risk for HIV infection.

Figure 2.19: Kentucky Adult/Adolescent AIDS Cases among Blacks and Hispanics by Transmission Category and Year of Diagnosis, 2003-2007



*Data for 2008 are not included in trend analyses since they are considered provisional due to reporting delays; all data are subject to change due to reporting delays.

Sexually Transmitted Diseases

Chlamydia

Chlamydia impacts youth ages 15-24 years greater than other populations in the state of Kentucky. African Americans are also at higher risk of Chlamydia when comparing incidence case by case.

In 2008 there were a total of 12,162 Chlamydia cases reported in Kentucky. The were 8,623 females, and 3,506 males identified with the disease. The following accounts the % of cases reported based on race/ethnicity:

Asian n= 33, (0%)

African Americans n= 3508, (29%)

Hispanics n = 260, (2%)

American Indian n = 16, (0%)

Whites n = 4042, (33%)

Unknown/Other n = 4303, (35%)

Total n = 12, 162, (100%)

Gonorrhea

Gonorrhea disproportionately impacts African Americans in Kentucky when comparing case rates.

In 2008 there were a total of 4,548 Gonorrhea cases reported in Kentucky. There were a total of 2, 510 females and 2,031 males identified with the disease. The following accounts the % of cases reported based on race/ethnicity:

Asian n= 16, (0%)

African Americans n= 2179, (48%)

Hispanics n = 48, (1%)

American Indian n = 3, (0%)

Whites n = 1002, (22%)

Unknown/Other n = 1300, (29%)

Total n = 4,548, (100%)

Syphilis

Syphilis is found more among males than females and disproportionately impacts African Americans in Kentucky.

In 2008 there were a total of 218 Syphilis cases reported in Kentucky. There were a total of 52 females and 166 males identified with the disease. The following account for the % of cases reported based on race/ethnicity:

Asian n= 1, (0%)

African Americans n= 64, (29%)

Hispanics n = 15, (7%)

American Indian n = 0, (0%)

Whites n = 117, (54%)

Unknown/Other n = 21, (10%)

Total n = 218, (100%)

Figure 2.20: Kentucky Sexually Transmitted Disease Rate/ 100,000 for 2006

State	Disease	Count	Population	Rate Per 100,000
Kentucky (21)	Chlamydia	8,940	4,206,074	212.55
	Gonorrhea	3,277	4,206,074	77.91
	Total Syphilis	188	4,206,074	4.47

Source: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for HIV, STD and TB Prevention (NCHSTP), Division of STD/HIV Prevention, Sexually Transmitted Disease Morbidity 1984 - 2006, CDC WONDER On-line Database, November 2008. Accessed at http://wonder.cdc.gov/std-v2006.html on Sep 29, 2009 12:01:09 PM

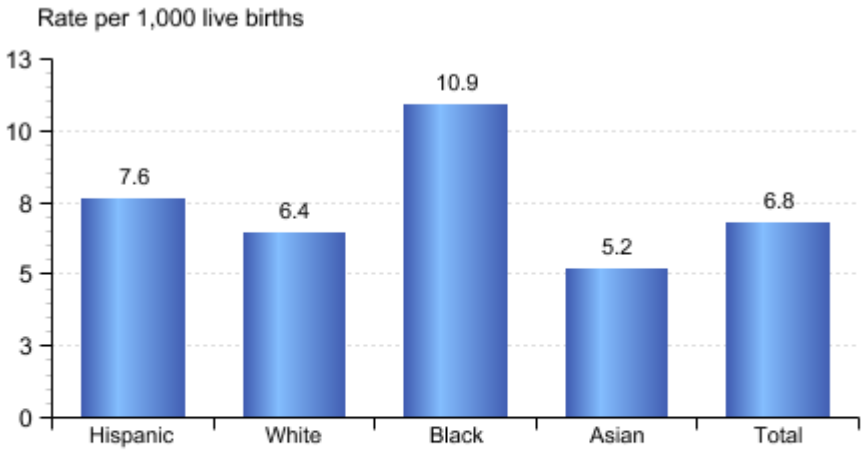
Maternal and Child Health

During 2004-2006 (average) in Kentucky, preterm birth rates were highest for black infants (19.5%), followed by whites (14.5%), Native Americans (13.4%) and Asians (11.7%).

Black infants (19.5%) were about 2 times as likely as Asian infants (11.7%) to be born preterm during 2004-2006 (average).

In the United States, prematurity/low birthweight is the second leading cause of all infant deaths (during the first year of life) and the leading cause of infant death among black infants.

Figure 2.21: Infant Mortality Rates by Race/Ethnicity: Kentucky, 2003-2005 Average



Oral Health

Figure 2.22 : Adults aged 18+ who have visited a dentist or dental clinic in the past year 2004

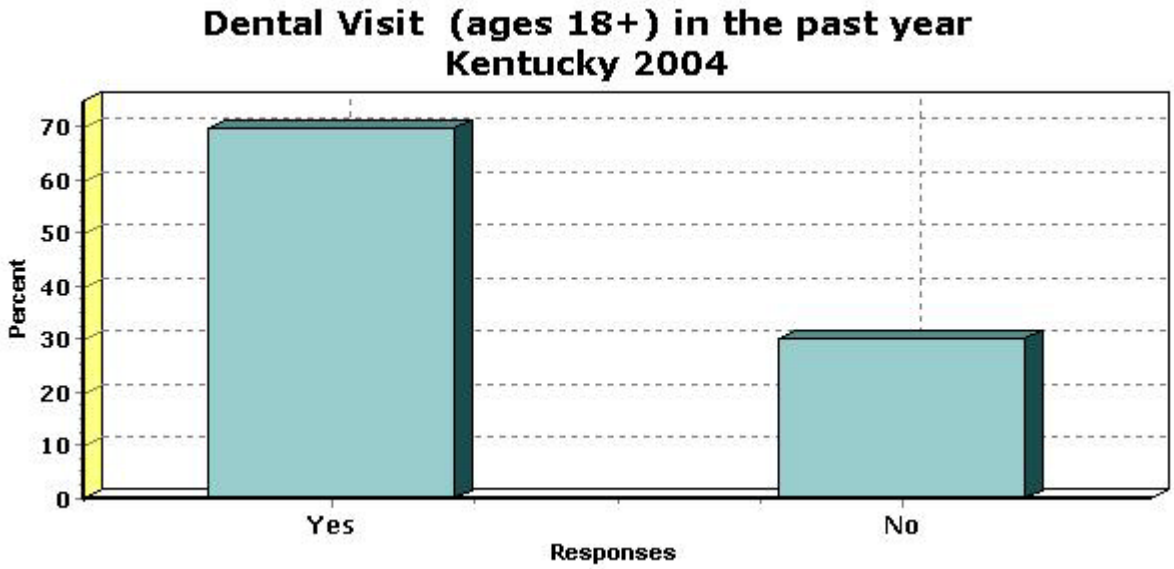


Figure 2.23: Dentist Visit and Age

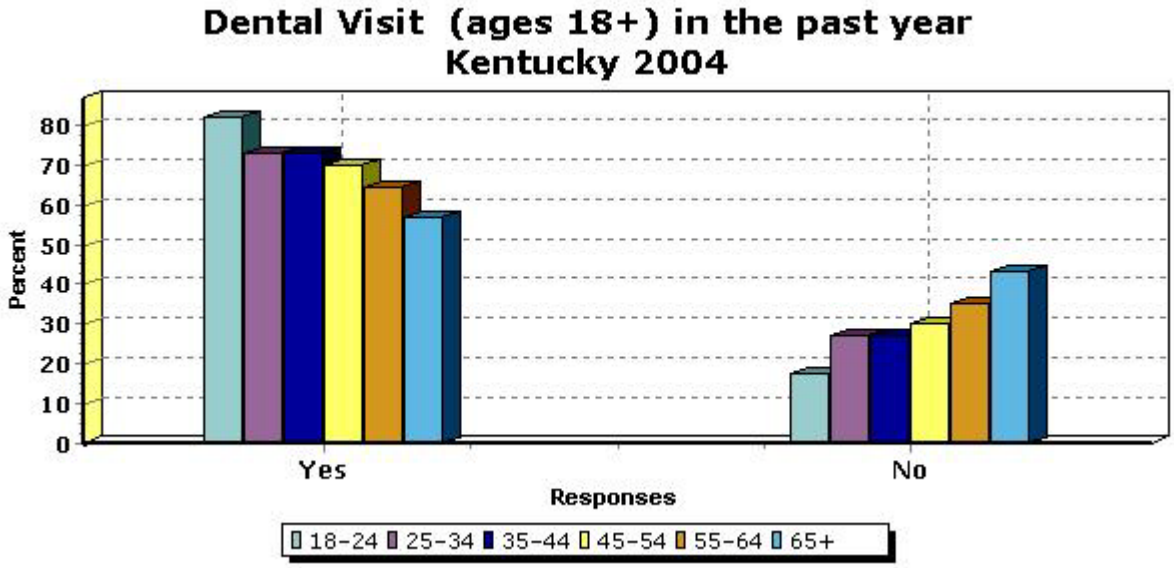


Figure 2.24: Dental Visit and Education

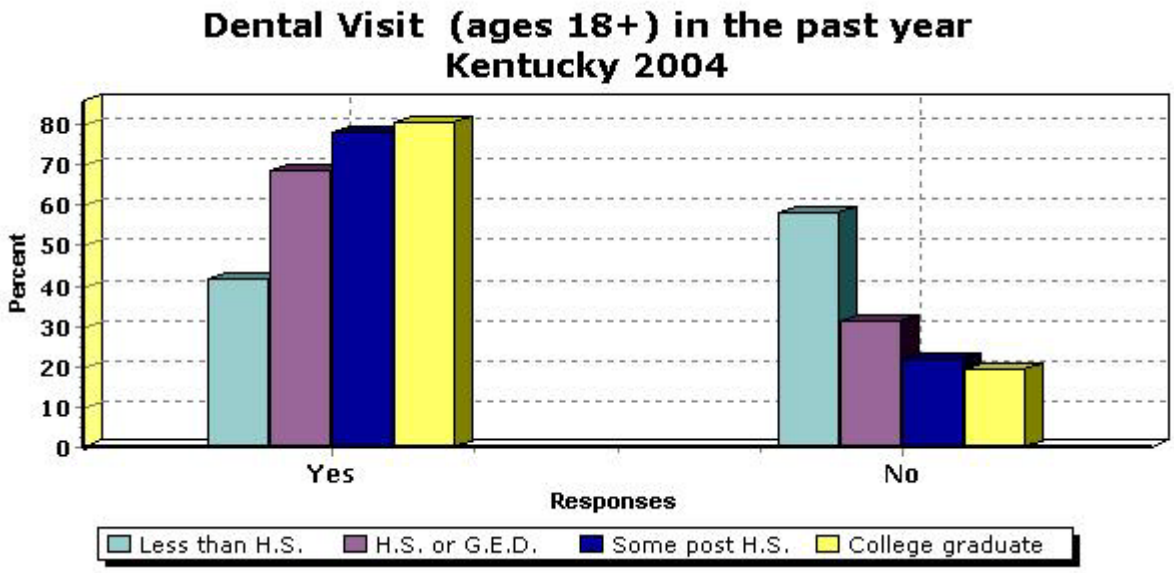


Figure 2.25: Dentist Visit and Gender

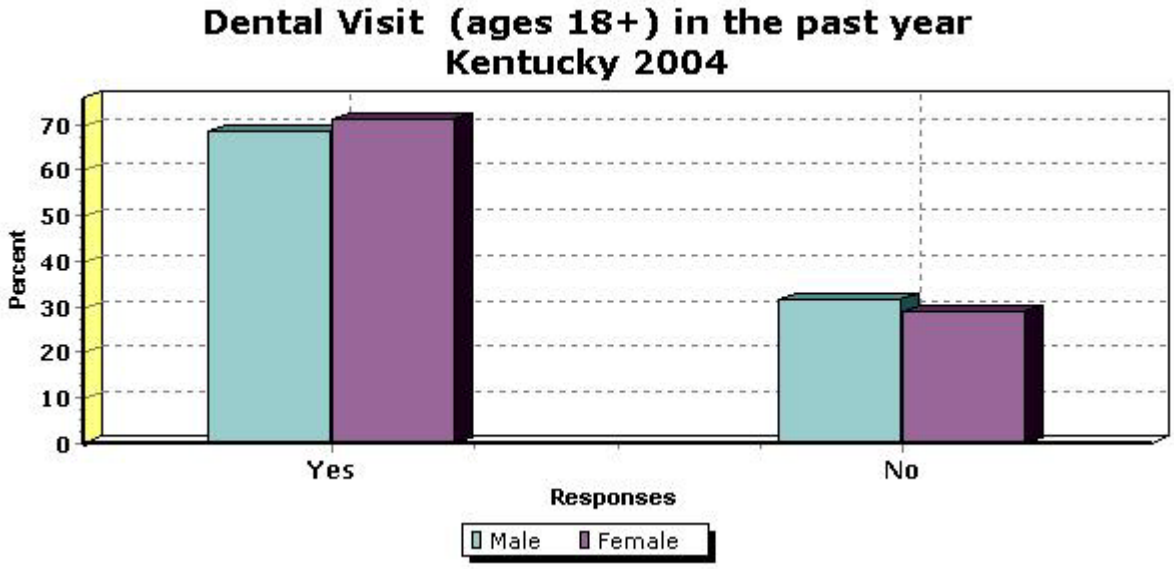


Figure 2.26: Dental Visit and Income

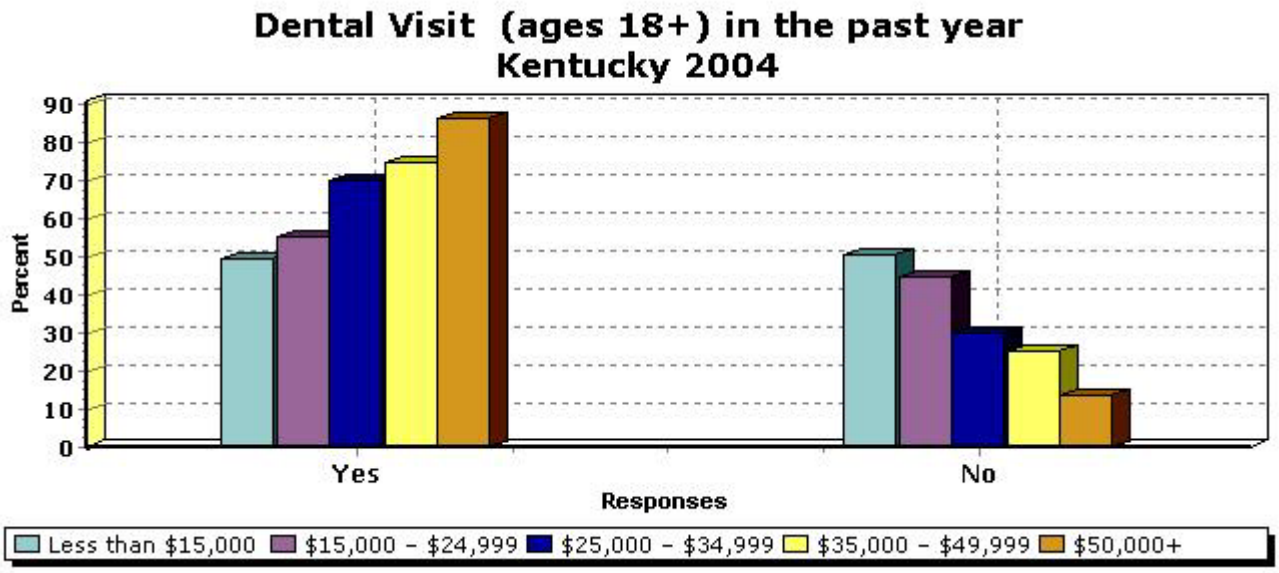
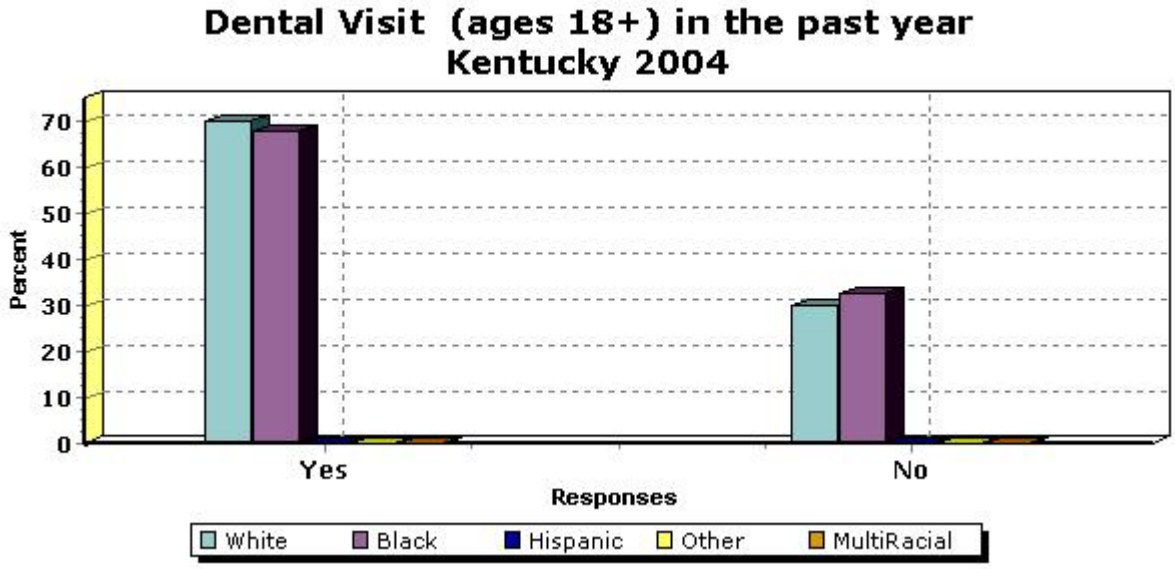


Figure 2.27: Dental Visit and Race



Source: Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion, National Oral Health Surveillance System. Accessed at http://www.cdc.gov/nohss/DSMain.htm on September 29, 2009.

Uninsured

Table 2.19: Uninsured Rates for the Nonelderly by Race/Ethnicity in KY (2006-2007) compared to US (2007)

Race	KY (#)	KY (%)	US (#)	US (%)
White	485,240	15.2%	20,264,170	12.2%
Black	62,930	22.6%	6,941,040	20.9%
Hispanic	35,150	39.4%	14,558,420	33.5%
Other	N/A	N/A	3,207,150	17.7%
Total	597,950	16.4%	44,970,780	17.2%

According to the Kaiser Family Foundation in 2007, nonelderly (individual aged 0-64 years of age) Hispanics had the highest rates of being with out insurance coverage and were almost 2.6 times more likely than nonelderly whites to be without insurance in Kentucky. Nonelderly Blacks were almost 1.5 times more likely than elderly whites to be uninsured. The uninsured rate in Kentucky was higher than the national trends for each demographic.

Table 2.20 (%) Individuals under 65 years of age that are uninsured by Race and Income Level in KY (US Census Bureau, 2006)

	Number Uninsured	Percent Uninsured in Demographic Group	Margin of Error
All income levels:	570,294	15.6%	0.8
White	465,437	14.6%	0.8
Black	58,313	20.6%	1.9
Hispanic	30,978	35.1%	2.9
At or below 200% poverty level	352,477	27.8%	1.6
White	281,888	27.3%	1.8
Black	39,004	26.3%	2.8
Hispanic	21,987	42.4%	3.9
At or below 250% poverty level	410,284	25.6%	1.5
White	329,585	24.8%	1.6
Black	44,403	25.4%	2.5
Hispanic	24,960	41.6%	3.6

According to estimates from the US Census Bureau in 2006, among individuals of all income levels in Kentucky combined, Hispanics had the highest proportion of uninsured individuals at

35%, followed by Blacks at 20.6% and Whites at 14.6%. Among individuals at or below 200% poverty level in Kentucky, Hispanics had a much higher proportion of uninsured individuals at 42.4% than did Blacks or Whites. Among the individuals at or below 250% poverty level, Hispanics had a much higher proportion of uninsured individuals in this subgroup than the proportion of Black or Whites.

Table 2.21: (%) Individuals under 19 years of age all races combined that are uninsured by Income Level in KY (US Census Bureau, 2006)

	Number Uninsured	Percent Uninsured in Demographic Group	Margin of Error
All income levels	94,741	9.0%	1.1
At or below 200% poverty level	60,209	13.4%	1.8

KCHIP

Table 2.22: Number of children enrolled in KCHIP at the end of the calendar year (KY Dept of Medicaid Services, 2009)

Year	Number of Children Enrolled in KCHIP
2008	53,836
2007	52,319
2006	51,138
2005	50,785
2004	49,638
2003	51, 381
2002	50,340

Note: The number of children measured in December for the specified calendar year.

PART III

Hospital Inpatient Discharge and Outpatient Services Administrative Claims Data.

Provided by Office of Health Policy

- INPATIENT HOSPITAL DISCHARGES AND OUTPATIENT SERVICES
- INPATIENT QUALITY INDICATOR FOR CESAREAN DELIVERY RATE
- HOSPITAL DISCHARGE AND UTILIZATION OF EMERGENCY DEPARTMENT FOR SPECIFIC CONDITIONS

Hospital Inpatient Discharge Administrative Claims Data and Outpatient Services Administrative Claims Data

All data presented in this section was gathered using administrative claims data for Inpatient Hospital Discharges and Outpatient Services with dates of service between January 1, 2008 through December 31, 2008. Data was gathered by the Office of Health Policy.

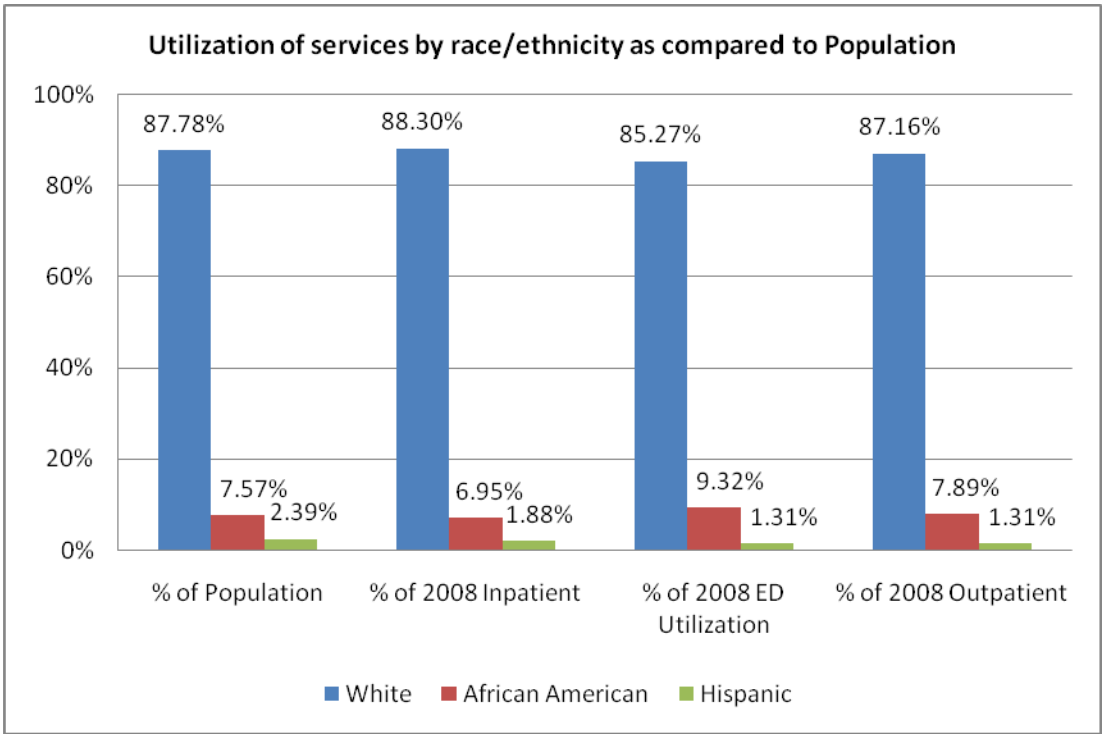
Inpatient Hospital Discharges and Outpatient Services

Effective with inpatient hospital discharges occurring on or after January 1, 2008 and outpatient services performed by hospitals or ambulatory surgery centers on or after January 1, 2008, facilities began submitting data on the race and ethnicity of patients served. For the first time, analysis can be conducted in these areas. During 2008, there were a total of 587,659 inpatient hospital discharges and 2,879,357 outpatient services visits which include 1,652,618 emergency department visits[1]. (Note that an emergency department visit means a patient is seen in an emergency department and released or held for an observation stay only. This count will not include patients that are admitted to the hospital via an emergency room, admitted for outpatient surgery via an emergency room, registered via an emergency for a mammogram, etc.)

[1] 2008 Inpatient Hospital Discharge, Outpatient Services, and Emergency Department data provided by the Office of Health Policy, Cabinet for Health and Family Services.

The 2008 population estimates for Kentucky[2]indicate total population of 4,269,245, of which 87.78% are white, 7.57% are African American, 2.39% are Hispanic, and 2.26% are Asian or other. Due to the small numbers of Asian and other, this analysis will focus on the white, African American, and Hispanic population. The following chart compares the percentage of Inpatient Hospitalization, Emergency Department Utilization, and Outpatient Services Utilization by race/ethnicity as compared to the population.

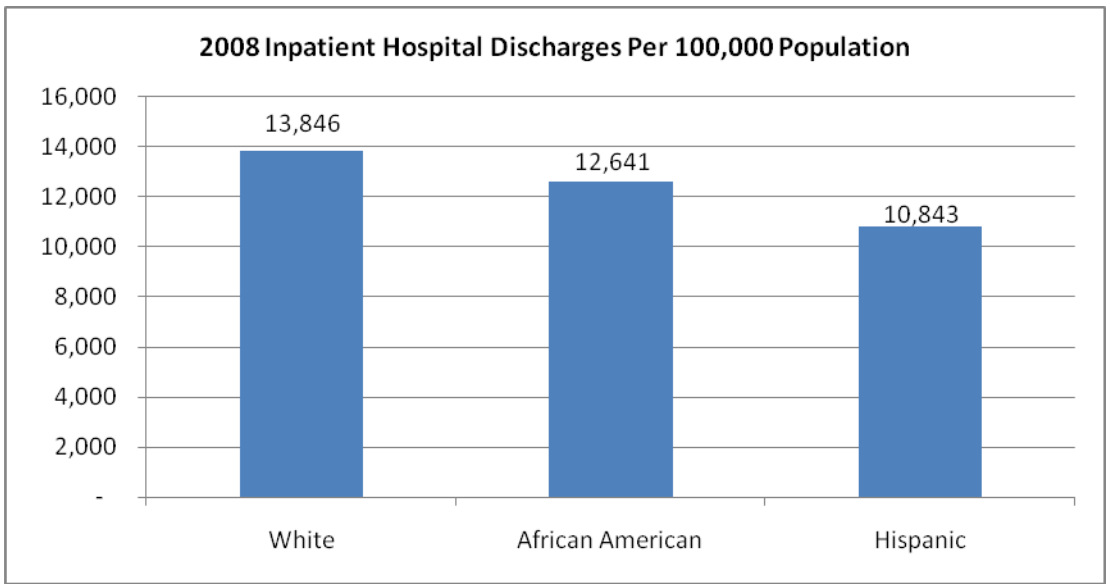
Figure 3.1: Utilization of services by race/ethnicity as compared to Population



[2] 2008 Population estimates obtained from the Kentucky State Data Center at http://ksdc.louisville.edu/ .

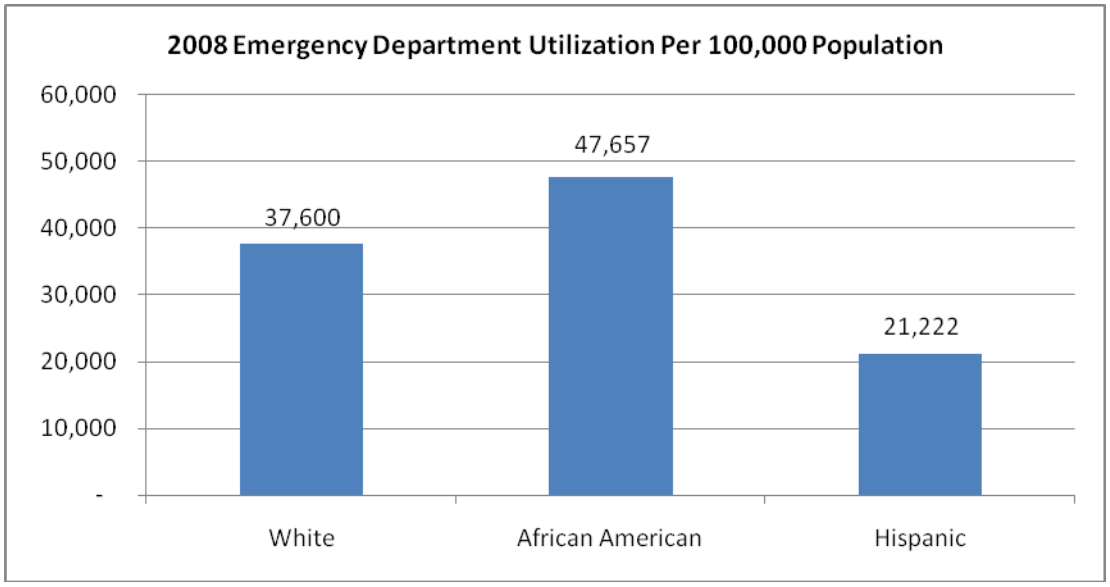
The following provides a per 100,000 population inpatient hospital discharge comparison of whites, African Americans, and Hispanics. Whites utilize inpatient hospital services the most at 13,846 per 100,000 population. Hispanics are hospitalized 22% less often than whites, and African Americans are hospitalized 8% less often than whites.

Figure 3.2: 2008 Inpatient Hospital Discharges Per 100,000 Population



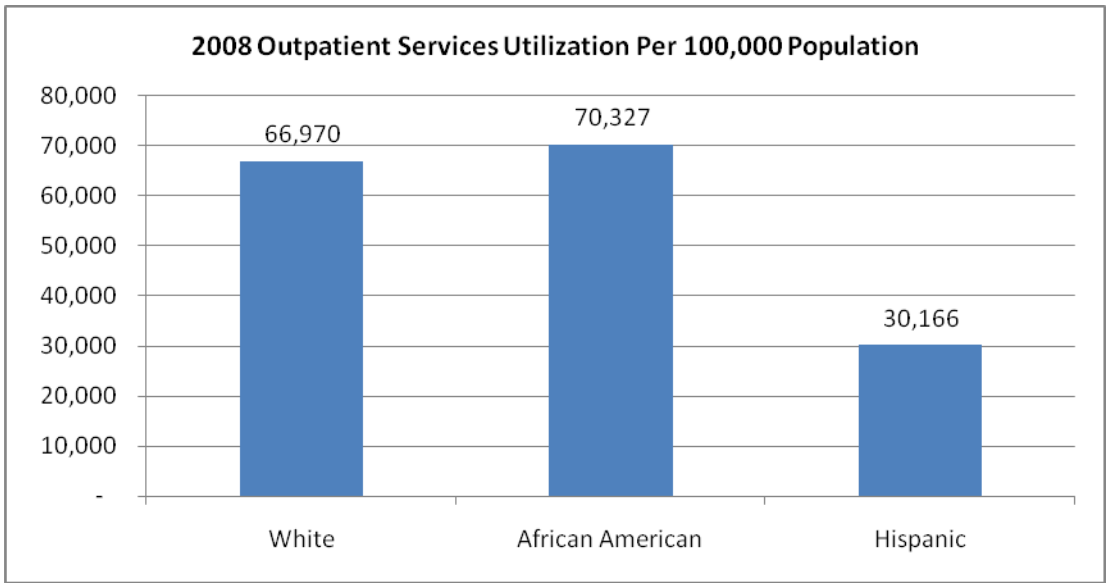
The following provides a per 100,000 population emergency department utilization comparison of whites, African Americans, and Hispanics. African Americans utilize emergency department services the most at 47,657 per 100,000 population. Hispanics utilize emergency departments 55% less often than African Americans, and whites utilize emergency departments 21% less often than African Americans.

Figure 3.2: 2008 Emergency Department Utilization Per 100,000 Population



The following provides a per 100,000 population outpatient services utilization comparison of whites, African American, and Hispanics. African Americans utilize outpatient services the most at 70,327 per 100,000 population. Hispanics utilize outpatient services 57% less often than African Americans, and whites utilize outpatient services 5% less often than African Americans.

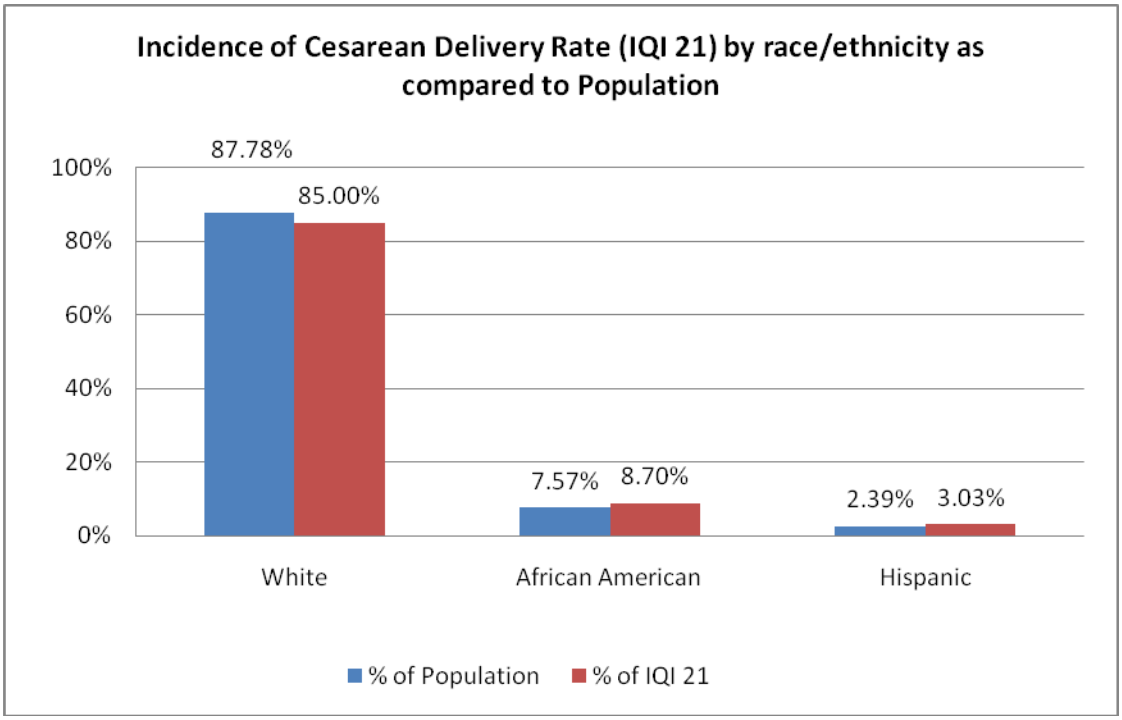
Figure 3.3: 2008 Outpatient Services Utilization Per 100,000 Population



Inpatient Quality Indicator for Cesarean Delivery Rate

Inpatient quality indicator reports are created using Inpatient Quality Indicator (IQI) software developed by the Agency for Health Care Research and Quality and the Department for Health and Human Services. The data used to develop the IQI reports are standardized administrative information routinely submitted by Kentucky hospitals to bill for their services. Reports provide a measure of the quality for specific medical conditions, quality for specific surgical procedures, and utilization of procedures for which there are questions of overuse, underuse or misuse. IQI21 – Cesarean Delivery Rate was examined due to the potential for overuse, underuse, or misuse. The following chart compares the incidence of cesarean delivery by race/ethnicity as compared to the population.

Figure 3.4: Incidence of Cesarean Delivery Rate (IQI 21) by race/ethnicity as compared to Population

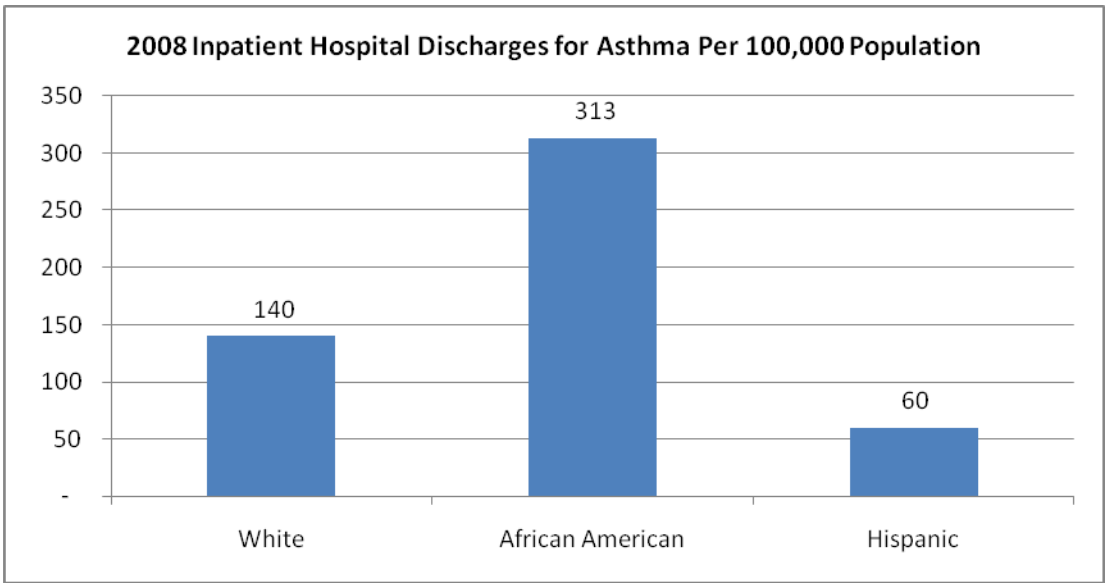


Inpatient Hospital Discharges and Utilization of Emergency Department for Specific Conditions

Asthma

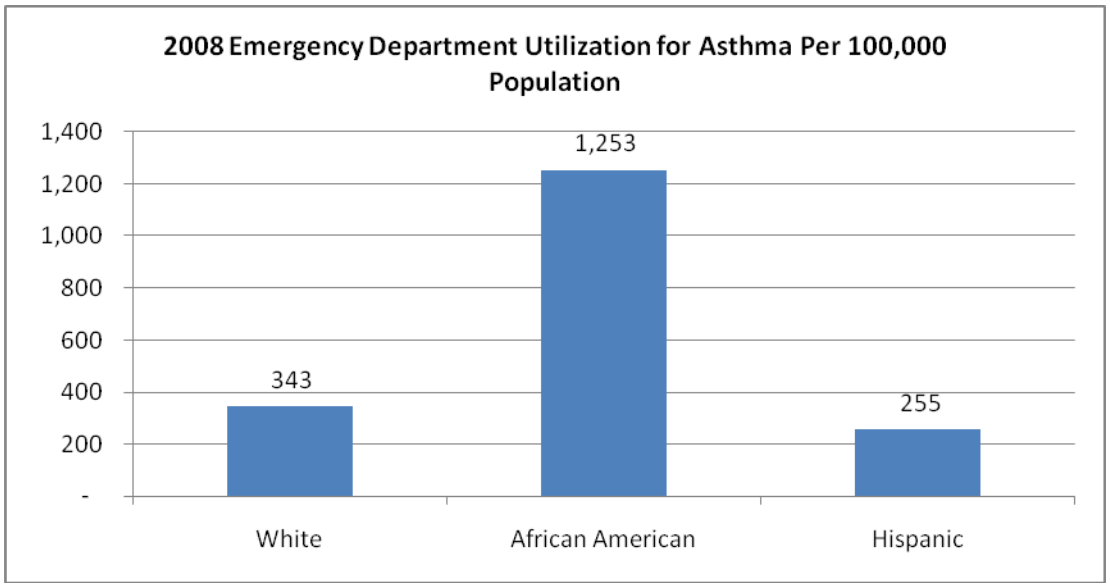
Asthma is identified on administrative billing records by a primary ICD-9 diagnosis code of 493.00 through 493.92. During 2008 there were 6,648 inpatient hospital discharges for asthma, which represents 1.13% of all discharges. The following provides a per 100,000 population inpatient hospital discharge for asthma comparison of whites, African Americans, and Hispanics. African American utilize inpatient hospital services for asthma the most at 313 per 100,000 population. Hispanics utilize inpatient hospital services for asthma 81% less often than African American, and whites utilize inpatient hospital services for asthma 55% less often than African American

Figure 3.5: 2008 Inpatient Hospital Discharges for Asthma Per 100,000 Population



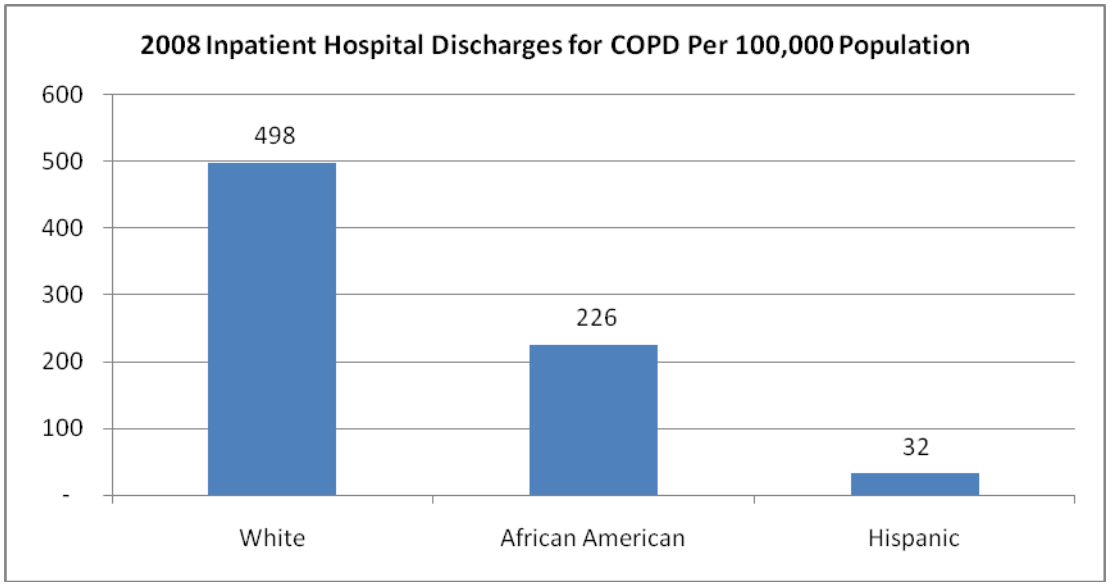
During 2008 there were 17,931 emergency department visits for asthma, which represents 1.09% of all emergency department visits. The following provides a per 100,000 population emergency department utilization for asthma comparison of whites, African Americans, and Hispanics. African Americans utilize emergency department services for asthma the most at 1,253 per 100,000 population. Hispanics utilize emergency department services for asthma 80% less often than African Americans, and whites utilize emergency department services for asthma 73% less often than African American.

Figure 3.6: 2008 Emergency Department Utilization for Asthma Per 100,000 Population



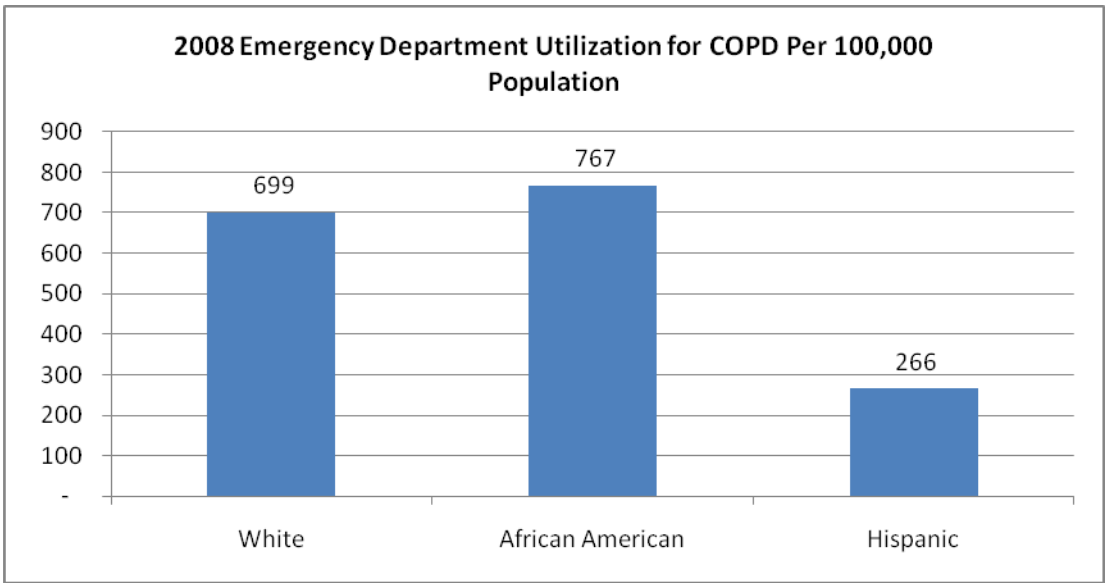
Chronic Obstructive Pulmonary Disease (COPD)

COPD is identified on administrative billing records by a primary ICD-9 diagnosis code of 490 through 492.9 or 494 through 496. During 2008 there were 20,597 inpatient hospital discharges for COPD, which represents 3.5% of all discharges. The following provides a per 100,000 population inpatient hospital discharge for COPD comparison of whites, African Americans, and Hispanics. Whites utilize inpatient hospital services for COPD the most at 498 per 100,000 population. African Americans utilize inpatient hospital services for COPD 55% less often than whites, and Hispanics utilize inpatient hospital services for COPD 94% less often than whites.



During 2008 there were 30,188 emergency department visits for COPD, which represents 1.83% of all emergency department visits. The following provides a per 100,000 population emergency department utilization for COPD comparison of whites, African American, and Hispanics. African Americans utilize emergency department services for COPD the most at 767 per 100,000 population. Hispanics utilize emergency department services for COPD 65% less often than African Americans, and whites utilize emergency department services for COPD 9% less often than African Americans.

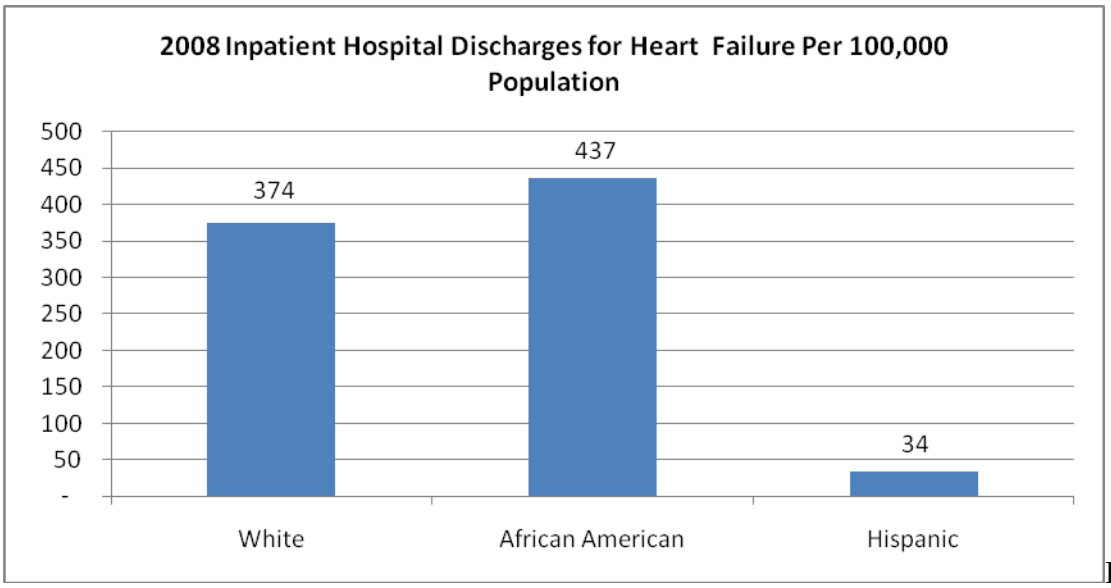
Figure 3.7: 2000 Emergency Department Utilization for COPD Per 100,000 Population



Heart Failure

Heart Failure is identified on administrative billing records by a primary ICD-9 diagnosis code of 4280 through 4289. During 2008 there were 16,064 inpatient hospital discharges for Heart Failure, which represents 2.73% of all discharges. The following provides a per 100,000 population inpatient hospital discharge for Heart Failure comparison of whites, African Americans, and Hispanics. African Americans utilize inpatient hospital services for Heart Failure the most at 437 per 100,000 population. Whites utilize inpatient hospital services for Heart Failure 14% less often than African Americans, and Hispanics utilize inpatient hospital services for Heart Failure 92% less often than African Americans.

Figure 3.8: 2008 Inpatient Hospital Discharges for Heart Failure Per 100,000 Population



During 2008 there were only 3,201 emergency department visits for Heart Failure, which represents 0.19% of all emergency department visits. Due to the small numbers utilizing emergency department services for Heart Failure, an analysis by race/ethnicity was not performed.

Limitation

This data only represents data for one year, the first year of data collection. Therefore, specific conclusions cannot be drawn to delineate the causes of racial/ethnic disparities.

PART IV

RECOMMENDATIONS

Policy Recommendations from the Office of Minority Health's 2006 National Leadership Summit on Eliminating Racial and Ethnic Disparities in Health

- Increase education and training opportunities for minority healthcare providers and researchers
- Stabilize the funding for programs supporting minorities (Title VII)
- Increase the amount of minorities in the health professions, including medical, nursing, dental and social work professions [In 2006, African Americans, Latinos and American Indians comprise 25% of the national population, but these groups represent only 9% of the nursing profession and 6% of the medical profession and 5% of dental profession.]
- Implement more evidenced-based health disparity interventions in communities with large populations of racial and ethnic minorities
- Improve the social conditions and environments in which racial and ethnic minorities live
- Promote public policies that truly ensure non-discrimination and privacy—especially concerning translation genomics research, healthcare access and quality issues
- Promote economic development initiatives in under privileged communities
- Increase the number of sustainable communities
- Increase the availability of affordable housing
- Increase educational opportunities for minorities within communities, including better access to post secondary education and the of design programs that decrease the secondary education attrition
- Promote work force development by increasing the representation of minorities in organized labor parties
- Promote policies that target poverty prevention
- Encourage initiatives that increase social capital and resource availability within communities and reduce physical and social barriers to healthy lifestyles, e.g. increase pedestrian friendly design of neighborhoods, access to and subsidization of healthy food options
- Strengthen relationships between state and federal agencies that safeguard minority health
- Develop minority leadership and increase representation in state agencies
- Improve data collection methods and surveillance of health disparities, including methods of data aggregation, analysis and disaggregation, to elucidate the specific parameters of each health or health-related problem.
- Complement demographic and statistical data analysis with research targeting the cultural, sociological and generational implications of health disparities.
- Expand funding for and improve federally funded community health centers
- Build bridges for communication, avenues for interaction and consensus for action among policy makers, researchers, healthcare workers and community leaders.
- Prioritize the elimination of health disparities on the national and state legislative agenda and where appropriate, allocate and sustain the necessary resources for successful program implementation

Executive Orders for Eliminating Health Disparities and Improving the Cultural Competency in the Public and Private Sectors

- **Executive Order No. 13256: President's Board of Advisors on Historically Black Colleges and Universities (February, 2002)-** In order to advance the development of the Nation's full human potential and to advance equal opportunity in higher education, to strengthen the capacity of historically black colleges and universities to provide the highest quality education and to increase opportunities for these institutions to participate in and benefit from Federal programs, as do other colleges and universities; a presidential advisory committee was established in the Office of the Secretary of Education in order to ensure the long-term viability and enhancement of these institutions
- **Executive Order No. 13270**: **Tribal Colleges and Universities (July, 2002) -** In order to extend the Nation's commitment to education excellence and equal opportunity to the tribal colleges and universities that serve Indian tribes and Alaska Native entities, a board of advisors was established to ensure that this national policy regarding the tribal colleges is carried out with direct accountability at the levels of the Federal Government.
- **Executive Order No. 13171: Hispanic Employment in the Federal Government (October, 2000) -** In order to improve representation of Hispanics in Federal employment, within merit system principles and consistent with the application veteran's preference criteria, to achieve a Federal workforce drawn from all segments of society, additional policies are recommended to eliminate the under representation of Hispanics in the Federal workforce. These include policies that provide a plan for recruitment, eliminate of systemic barriers, ensure selection factors are appropriate, improve outreach, and reflect a continuing priority for eliminating Hispanic under representation in the Federal workforce.
- **Executive Order No. 13166: Improving access to Services for Persons with Limited English Proficiency (August 2000)**- Ensuring individuals with limited proficiency in English (LEP) access to appropriate language assistance services among recipients of federally funded programs and services has been identified as a critical element in healthcare, welfare, transportation and immigration reforms. All entities receiving federal funds, such as schools, local police departments, doctors and hospitals are required to ensure consistent and uniform language assistance, especially among Spanish speaking LEP individuals. Under the Executive Order, "each Federal agency shall prepare a plan to improve access to its federally conducted programs and activities by eligible LEP persons." In addition, "each agency providing Federal assistance [to hospitals, universities or a myriad of other state and other entities] shall draft Title VI guidance."
- **Executive Order No. 13339: Increasing Economic Opportunity and Business Participation of Asian Americans and Pacific Islanders (May, 2004)-**For the purpose of providing equal economic opportunities for full protection of Asian American and Pacific Islanders, a Presidential Advisory Commission on Asian Americans and Pacific Islanders was established in the Department of Commerce. The Commission provides advice to the President on the development, monitoring, and development of Asian American and Pacific Islander businesses as well as ways to increase business diversification and community development.

- **Executive Order No. 13125: Increasing Participation of Asian Americans and Pacific Islanders in Federal Programs (June 2007)-** In order to improve the quality of life of Asian Americans and Pacific Islanders through increased participation in Federal programs where they may be underserved (e.g. health, human services, education, housing, labor, transportation, and economic and community development) the President's Advisory Commission was established in the Department of Health and Human Services. The Commission is charged with advising the President concerning the development, monitoring and coordination of federal efforts to improve the quality of life of Asian Americans and Pacific Islanders.
- **Executive Order No. 13230: President's Advisory Commission on Educational Excellence for Hispanic Americans Proclamation (October, 2001)-** In order to advance the development of human potential, strengthen the Nation's capacity to provide high-quality education, and increase opportunities for Hispanic Americans to participate in and benefit from Federal education programs, a Presidential Advisory Commission on Educational Excellence for Hispanic Americans was established in the Department of Education. The Commission is charged with advising the President on the development, monitoring and coordination of Federal efforts to promote high quality education for Hispanic Americans as well as ways to increase parental, State and local, private sector and community involvement in improving education.

(Centers for Disease Control and Prevention Department of Minority Health, 2009)

Policy Recommendations by the Office of Minority Health (OHM)

- **Office of Management and Budget and the Office of Regulatory Affairs-**Adoption and compliance with directives set forth by the Office of Management and Budget and the Office of Regulatory Affair's Interagency Committee for the surveillance of minority health. Based on the Interagency Committee's review on racial and ethnic standards, recommendations were provided in a detailed report regarding the classification of federal data on race and ethnicity and the logistics for census data collection, measurements and analysis.
- **Title VI Policy Guidance on the Prohibition Against National Origin Discrimination as It Affects Persons With Limited English Proficiency-** The Office of Civil Rights (OCR) issued internal guidance to its constituents relating to compliance with the law as it applies to US Department of Health and Human Services [HHS] funded programs. Under Title VI of the Civil Rights Act of 1964, hospitals, HMOs, social service agencies and other entities that receive federal financial assistance from the HHS are required to take the steps necessary to ensure that individuals with LEP can meaningfully access the programs and services. This guidance enhances our ability to reach our national goal of eliminating racial and ethnic disparities in health, and will assist in increasing opportunities for persons with LEP to improve their socioeconomic status.

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