

Cancer Facts & Figures for African Americans

2011-2012



Contents

Cancer Statistics	1
Selected Cancers	8
Risk Factor Statistics	14
Use of Screening Tests	18
How the American Cancer Society Helps Save Lives and Helps Reduce Cancer Disparities	19
What Other Programs/Organizations Support the Elimination of Health Disparities among African Americans?	22
Sources of Statistics	24
Screening Guidelines for the Early Detection of Cancer in Average-risk Asymptomatic People	25
References	26

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For more information, contact:

Carol DeSantis, MPH
Rebecca Siegel, MPH
Ahmedin Jemal, PhD
Surveillance Research

National Home Office: American Cancer Society Inc.
250 Williams Street, NW, Atlanta, GA 30303-1002
(404) 320-3333

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Cancer Statistics

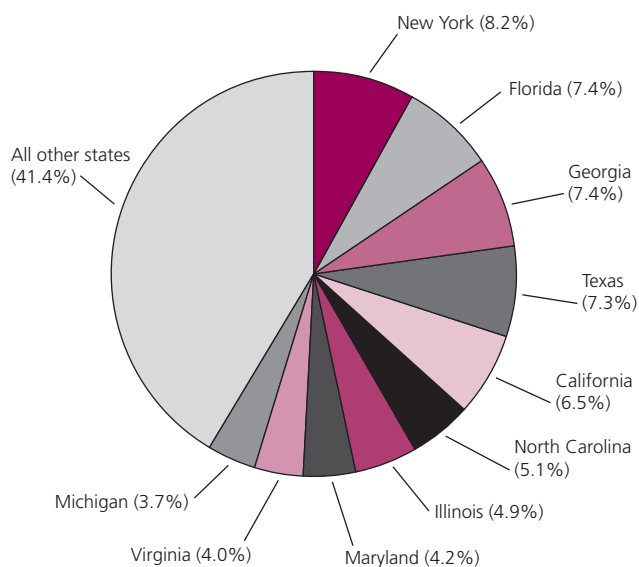
Introduction

The Census Bureau estimates that in 2011 there are approximately 40.9 million African Americans living in the US, comprising 13 percent of the total population.¹ The African American population is not homogenous and includes individuals whose ancestors were brought to the US as slaves, as well as more recent immigrants born in other countries. Of the approximately 3 million foreign-born African Americans, the majority were born in the Caribbean (54%) or Africa (34%). The African American population is not equally dispersed throughout the US, but is concentrated in New York, California, and the South (Figure 1). In 2008, 1 out of every 4 African Americans resided in New York, Florida, or Georgia.²

African Americans have the highest death rate and shortest survival of any racial and ethnic group in the US for most cancers. The causes of these inequalities are complex and are thought to reflect social and economic disparities more than biologic differences associated with race. These include inequities in work, wealth, income, education, housing and overall standard of living, as well as barriers to high-quality cancer prevention, early detection, and treatment services.

Although the overall racial disparity in cancer death rates is decreasing, in 2007, the death rate for all cancers combined

Figure 1. African American Population* (%) in the US by State, 2008



* Data limited to household population and exclude those living in institutions, dormitories, and other group quarters. Percentages do not total 100 due to rounding.

Source: 2008 American Community Survey.²

Table 1. Leading Causes of Death among African Americans and Whites, 2007

Cause of Death	No. of Deaths (%)		Death Rate*	
	African American	White	African American	White
All Ages				
Heart diseases	71,202 (24.6)	531,617 (25.6)	247.7	186.4
Cancer	64,045 (22.1)	483,935 (23.3)	216.3	177.1
Cerebrovascular diseases	17,083 (5.9)	114,691 (5.5)	60.4	40.1
Accidents (unintentional injuries)	13,555 (4.7)	106,223 (5.1)	36.7	41.4
Diabetes	12,459 (4.3)	56,388 (2.7)	43.0	20.4
All causes	289,540	2,074,003	959.9	745.2
Children Ages 1-14				
Accidents	784 (31.4)	2,794 (36.0)	8.6	6.3
Homicide	308 (12.3)	413 (5.3)	3.3	0.9
Cancer	198 (7.9)	1,063 (13.7)	2.2	2.4
Congenital anomalies (birth defects)	196 (7.8)	670 (8.6)	2.1	1.5
Heart diseases	106 (4.2)	278 (3.6)	1.2	0.6
All causes	2,500	7,767	27.2	17.5

*Rates are per 100,000 and age adjusted to the 2000 US standard population.

Source: National Center for Health Statistics, Centers for Disease Control and Prevention, provided by the Surveillance, Epidemiology, and End Results Program.⁹⁶

Table 2. Death Rates* for Selected Cancers in African American Males and Females by State, 2003-2007

	All Cancers		Lung & Bronchus		Colon & Rectum		Prostate	Breast	Uterine Cervix
	Male	Female	Male	Female	Male	Female	Male	Female	Female
Alabama	330.9	173.7	97.2	32.5	33.3	21.0	68.0	32.3	5.4
Alaska	258.5	124.5	†	†	†	†	†	†	†
Arizona	213.3	153.6	62.1	37.6	23.8	15.6	32.9	27.3	†
Arkansas	344.3	186.7	113.2	35.7	34.3	24.4	64.2	33.4	5.7
California	277.3	187.0	76.7	41.9	28.1	21.6	52.3	33.4	2.9
Colorado	246.8	146.0	63.7	34.4	24.8	16.1	45.1	20.7	†
Connecticut	248.2	159.8	64.9	30.1	24.3	18.6	43.9	27.4	†
Delaware	279.7	184.2	83.9	52.1	26.8	19.3	50.1	25.4	†
District of Columbia	314.7	185.6	85.7	40.8	32.2	21.2	52.0	31.8	4.9
Florida	261.0	158.4	70.5	28.1	26.8	18.9	54.2	29.7	4.6
Georgia	296.3	166.9	84.6	32.2	29.4	20.6	61.2	30.4	4.4
Hawaii	125.5	†	†	†	†	†	†	†	†
Illinois	323.7	206.3	96.1	50.3	36.2	24.6	58.9	36.9	5.6
Indiana	321.1	200.1	102.0	52.5	32.7	22.0	53.0	35.1	3.9
Iowa	331.8	188.4	116.2	49.0	38.4	†	60.5	30.9	†
Kansas	307.5	195.9	89.2	46.4	34.1	23.1	59.2	33.3	†
Kentucky	329.1	206.3	115.2	59.5	30.8	26.3	56.5	33.0	4.8
Louisiana	350.0	199.7	111.2	41.4	34.8	23.8	54.8	37.7	5.6
Maryland	281.6	178.8	81.3	40.7	30.8	21.1	51.2	31.8	3.7
Massachusetts	259.1	161.3	70.5	35.0	22.0	16.3	47.5	27.3	†
Michigan	296.1	195.3	92.2	48.2	31.1	20.8	45.0	33.8	4.2
Minnesota	300.5	179.1	78.5	48.0	24.5	16.1	56.1	28.0	†
Mississippi	343.8	185.5	111.7	36.9	34.0	23.8	66.1	34.6	7.7
Missouri	341.5	199.9	105.8	50.5	32.3	22.1	52.5	35.3	5.5
Nebraska	287.0	207.0	108.2	53.2	35.3	27.0	35.0	29.9	†
Nevada	227.5	162.5	60.8	37.2	27.0	19.0	37.2	27.4	†
New Jersey	273.4	182.9	73.2	39.5	29.2	22.0	51.8	32.4	5.3
New Mexico	194.7	117.3	53.6	†	†	†	†	†	†
New York	222.6	149.5	55.7	29.4	24.7	17.5	44.7	27.7	4.5
North Carolina	313.3	177.3	94.2	34.1	29.5	19.7	61.4	33.7	3.9
Ohio	323.9	201.0	102.1	52.3	33.3	21.7	52.5	34.5	3.4
Oklahoma	308.3	185.7	98.8	46.0	35.5	17.8	52.3	32.7	†
Oregon	255.4	152.9	86.3	38.4	†	†	42.3	19.9	†
Pennsylvania	317.2	203.5	95.5	54.2	31.4	20.2	56.0	32.4	4.1
Rhode Island	261.5	151.6	76.4	43.2	†	†	44.3	†	†
South Carolina	321.0	173.8	93.9	30.7	31.9	20.4	60.7	31.2	5.0
Tennessee	342.7	203.2	109.7	47.6	36.2	24.9	63.3	38.0	5.3
Texas	314.1	187.4	100.7	41.9	34.7	22.4	49.5	35.3	4.7
Utah	199.5	111.4	†	†	†	†	†	†	†
Virginia	317.4	185.7	95.7	41.4	31.6	21.2	57.0	34.7	3.6
Washington	244.8	178.3	67.7	43.6	26.6	21.3	40.6	25.7	†
West Virginia	283.5	186.2	78.3	38.7	34.9	27.6	55.3	33.9	†
Wisconsin	340.5	198.5	117.8	52.5	28.6	19.6	48.4	26.5	5.2
United States	296.5	180.6	87.5	39.6	30.5	21.0	54.2	32.4	4.4

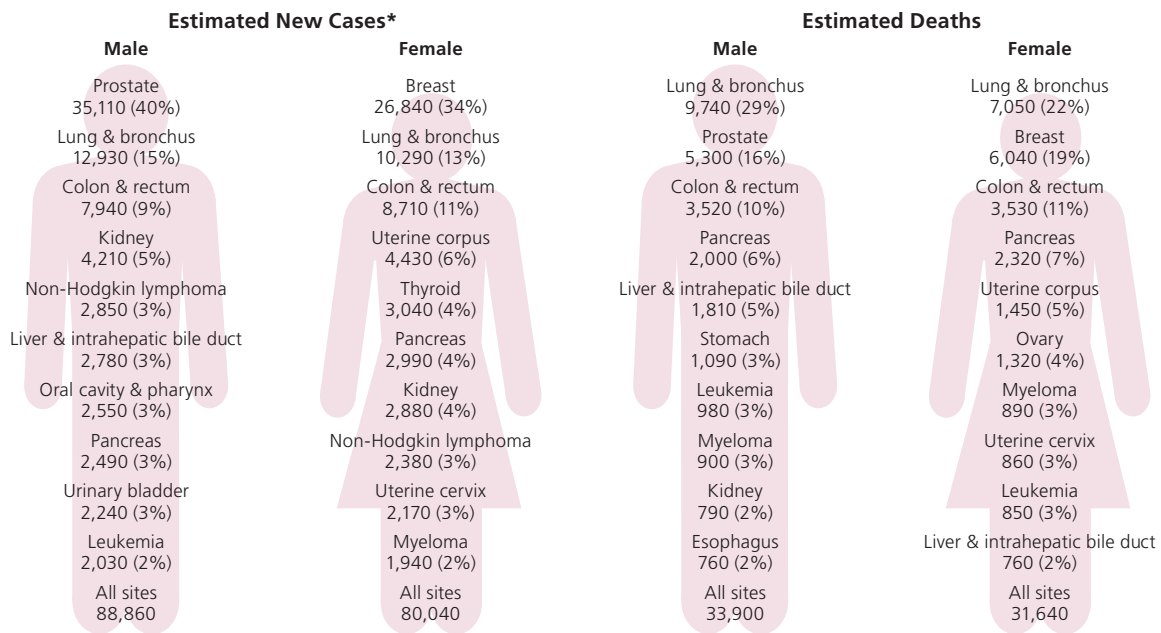
* Rates are per 100,000 and age adjusted to the 2000 US standard population.

† Rates are suppressed when they are based on fewer than 25 deaths.

Note: Idaho, Maine, Montana, New Hampshire, North Dakota, South Dakota, Vermont, and Wyoming are not included in the table because fewer than 25 total cancer deaths occurred in these states among both African American men and women during 2003-2007.

Source: National Center for Health Statistics, Centers for Disease Control and Prevention, provided by the Surveillance, Epidemiology, and End Results Program.⁹⁶

Figure 2. Leading Sites of New Cancer Cases and Deaths among African Americans, 2011 Estimates



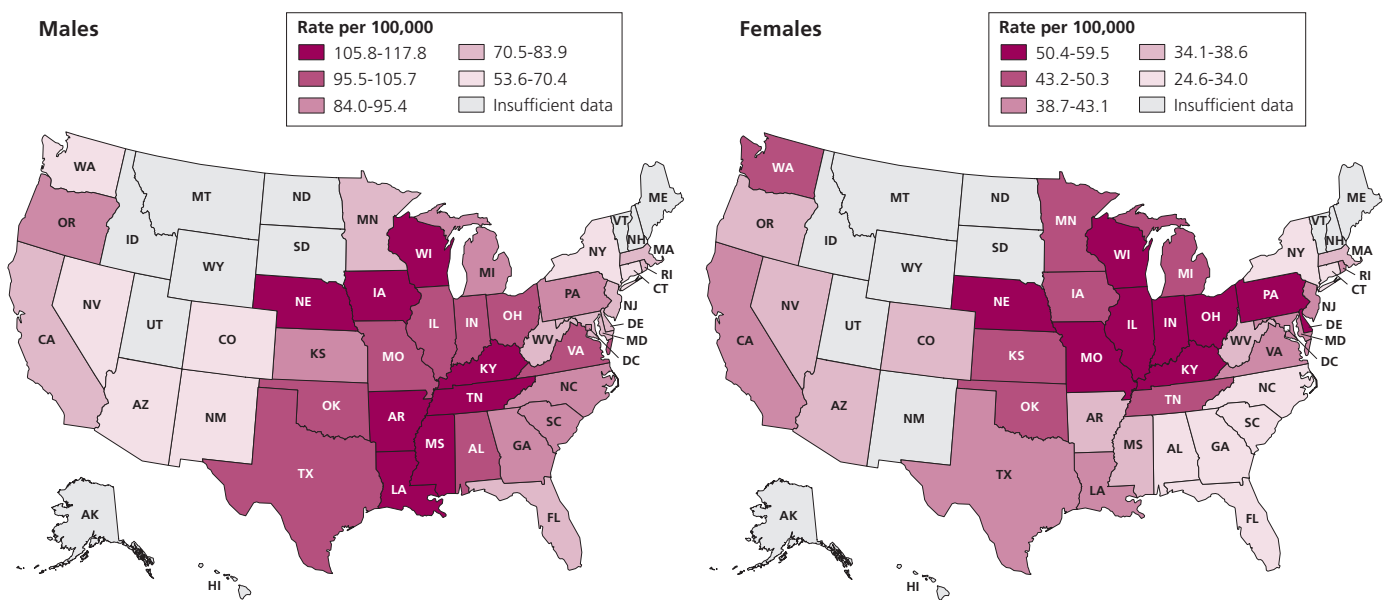
*Excludes basal and squamous cell skin cancers and in situ carcinoma except urinary bladder.
Note: Percentages may not total 100% due to rounding.

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continued to be 32% higher in African American men and 16% higher in African American women than in white men and women, respectively. Similarly, African Americans bear a disproportionately high burden from other diseases. For example, the

death rate for heart diseases is 33% higher in African Americans than in whites. (Table 1, page 1). Consequently, life expectancy is lower for African Americans than whites among men (69.7 vs. 75.7 years) and women (76.5 vs. 80.6 years).³

Figure 3. Lung Cancer Death Rates* among African American Males and Females, 2003-2007



*Age adjusted to the 2000 US standard population. Note: Rates are suppressed when they are based on fewer than 25 deaths.

Source: National Center for Health Statistics, Centers for Disease Control and Prevention, provided by the Surveillance, Epidemiology, and End Results Program.⁹⁶

How Many African Americans Alive Today Have Ever Had Cancer?

The National Cancer Institute estimates that approximately 942,400 African Americans with a history of cancer were alive in January 2007.⁴ Some of these individuals were cancer-free, while others still had evidence of cancer and may have been undergoing treatment.

How Many New Cases and Deaths Are Expected to Occur among African Americans in 2011?

About 168,900 new cancer cases are expected to be diagnosed among African Americans in 2011. The most commonly diagnosed cancers among African American men are prostate (40%), lung (15%), and colon and rectum (9%). Among African American women, the most common cancers are breast (34%), lung (13%), and colorectum (11%) (Figure 2, page 3).

Figure 4. Trends in Death Rates* for Selected Cancer Sites among African Americans and Whites, US, 1975 to 2007



*Rates are per 100,000 and age adjusted to the 2000 US standard population and are 2-year moving averages.

Source: National Center for Health Statistics, Centers for Disease Control and Prevention, provided by the Surveillance, Epidemiology, and End Results Program.⁹⁶

About 65,540 African Americans are expected to die from cancer in 2011. Lung cancer accounts for the largest number of cancer deaths among both men (29%) and women (22%), followed by prostate cancer in men (16%) and breast cancer in women (19%) (Figure 2, page 3). For both men and women, cancers of the colorectum and pancreas are expected to rank third and fourth, respectively, as the leading sites for cancer deaths.

How Do Death Rates Vary by State?

Table 2 (page 2) shows variations by state in the death rates for all cancers combined and selected cancer sites. For all cancers combined, the highest death rates among African American men are found in Louisiana, Arkansas, and Mississippi. Among African American women, the highest death rates are reported in Nebraska, Kentucky, and Illinois. Death rates for lung cancer, the leading cause of cancer death, are highest in Southern states (men) and the Midwest (women) (Figure 3, page 3).

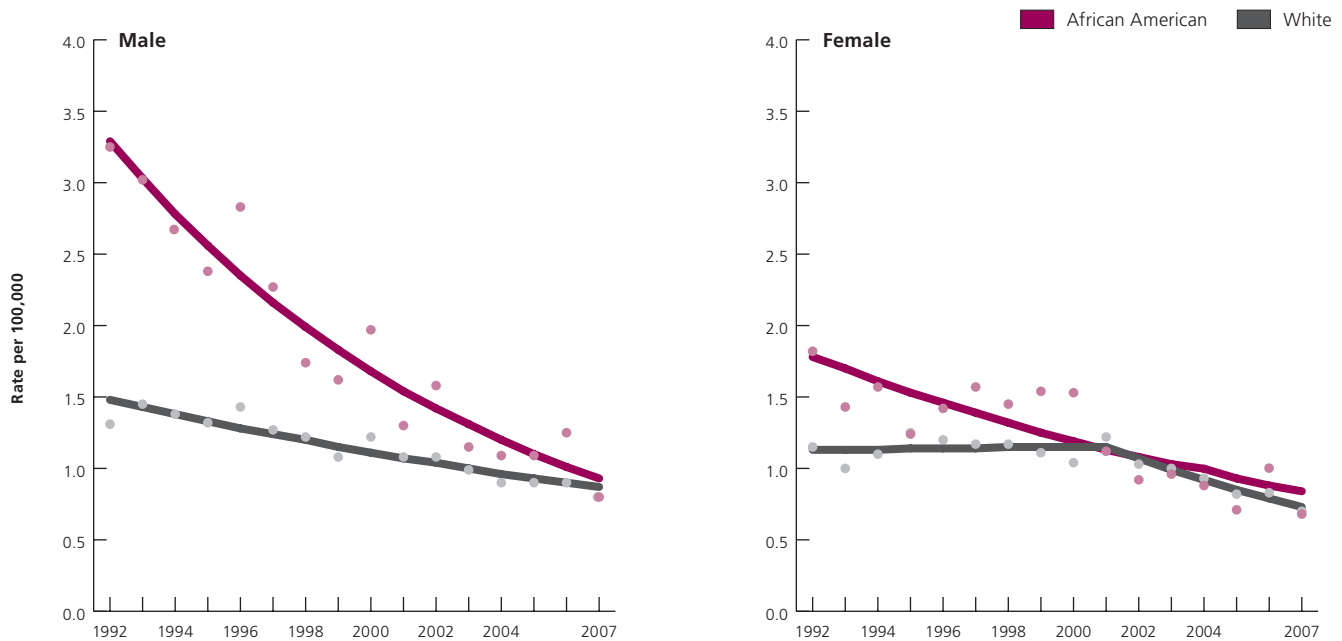
How Has the Occurrence of Cancer Changed over Time?

In African Americans, incidence rates for all cancers combined increased from the mid-1970s to the early 1990s, with a larger increase in men than in women. Since then, the rates have decreased in African American men (1.6% per year) and stabilized in African American women.⁴

Death rates among African Americans for all cancers combined have been decreasing since the early 1990s (Figure 4). The decline has been larger in men (2.5% per year since 1995) than in women (1.5% per year since 1999).⁴ A similar decline in death rates has been observed among whites since the early 1990s, with a greater reduction in the rate among men than women.

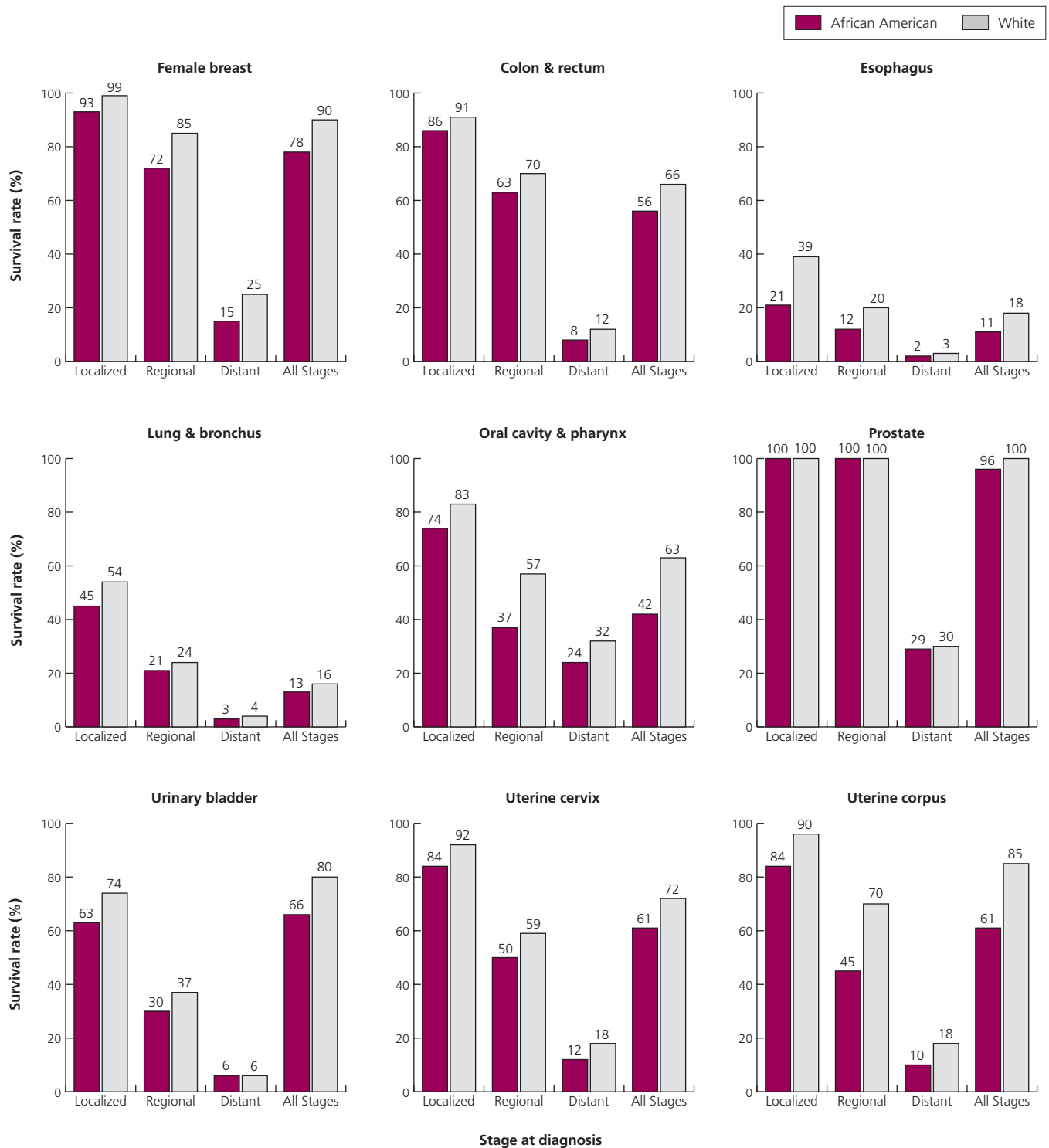
Despite these declines, the death rates for all cancers combined continued to be substantially higher among African Americans than whites during 1975-2007, although the gap is much smaller among women (Figure 4). The racial difference in overall cancer death rates is due largely to cancers of the breast and colorectum in women and cancers of the prostate, lung and bronchus, and colorectum in men. However, in recent years, death rates for lung and other smoking-related cancers and for prostate cancer have decreased faster in African American men than white men, which has contributed to the recent narrowing of the racial disparity in overall cancer death rates.⁵ Notably, lung cancer death rates for young African Americans and whites have converged in both men and women (Figure 5).⁶ In contrast to the trends for prostate and smoking-related cancers, the racial disparity has widened for colorectal cancer in both men and women and for breast cancer in women (Figure 4).

Figure 5. Trends in Lung Cancer Death Rates* among Non-Hispanic White and Non-Hispanic African American Males and Females Aged 20-39, 1992-2007



*Rates are per 100,000 and age adjusted to the 2000 US standard population. Note: Dots represent observed data and straight lines represent fitted data.
Source: Adapted from Jemal et al.⁶

Figure 6. Five-year Relative Survival Rates* for Selected Cancers by Race and Stage at Diagnosis, 1999-2006



*Survival rates are based on patients diagnosed between 1999-2006 and followed through 2007. **Local:** An invasive cancer confined entirely to the organ of origin. **Regional:** A malignant cancer that either 1) has extended beyond the limits of the organ of origin directly into surrounding organs or tissues; 2) involves regional lymph nodes by way of lymphatic system; or 3) has both regional extension and involvement of regional lymph nodes. **Distant:** A malignant cancer that has spread to parts of the body remote from the primary tumor either by direct extension or by discontinuous metastasis to distant organs, tissues, or via the lymphatic system to distant lymph nodes. **Source:** Altekruse et al, 2010.⁴

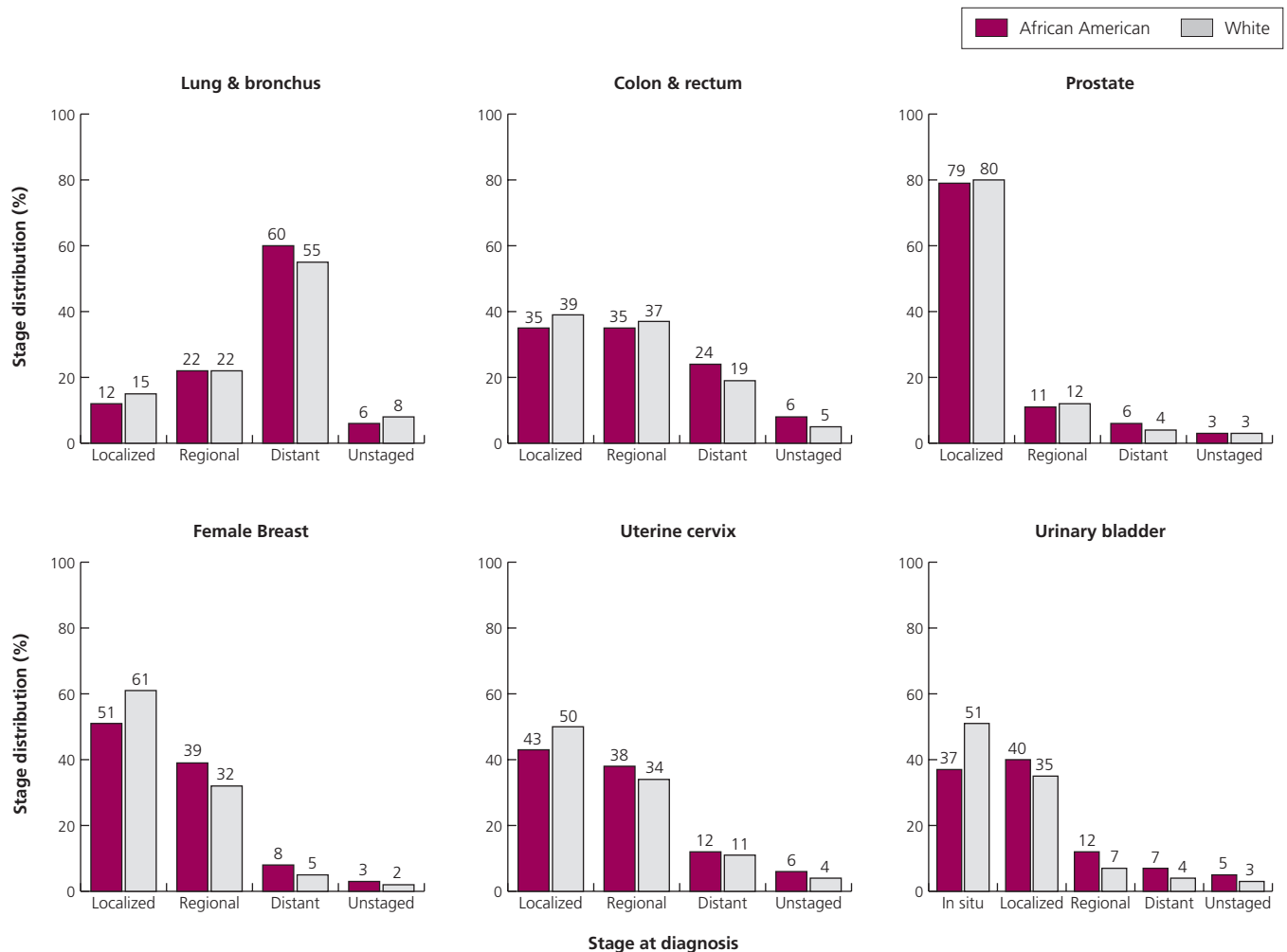
Cancer Survival and Stage Distribution

Five-year relative survival rates indicate the likelihood of surviving 5 years from the time of diagnosis, taking into account deaths from other causes. Survival rates are commonly used to monitor progress in the early detection and treatment of cancer. The overall 5-year relative survival rate among African Americans has improved from approximately 27% during 1960-1963 to 59% during 1999-2006.⁴ However, African Americans continue to be less likely than whites to survive 5 years at each stage of diagnosis for most cancer sites (Figure 6). Much of the difference in survival is believed to be due to barriers that prevent timely and high-

quality medical care, which results in later stage at diagnosis (Figure 7), as well as disparities in treatment.⁷⁻¹¹ Identifying and understanding these and other factors has become an active and important area of research.

Although 5-year relative survival rates for all cancers combined are useful in monitoring trends over time and survival differences between groups, they are not useful for predicting individual prognosis because many important factors that influence individual survival are not reflected in the estimate. Five-year relative survival rates for specific cancers and factors that influence survival are discussed in the next section.

Figure 7. Stage Distribution for Selected Cancers in African Americans and Whites, 1999-2006



Percentages may not total 100% due to rounding.

Source: Altekruse et al, 2010.⁴

Selected Cancers

Female Breast

New Cases

Breast cancer is the most commonly diagnosed cancer among African American women. An estimated 26,840 new cases of breast cancer are expected to occur among African American women in 2011. Breast cancer incidence rates increased rapidly among African American women during the 1980s (Figure 8), largely due to increased detection as the use of mammography screening increased. Incidence rates stabilized among African American women aged 50 and older during 1994-2007, while rates decreased by 0.6% per year from 1991-2007 among women under age 50.⁴

Between 2003-2007, the average annual breast cancer incidence rate in African American women was 114.7 cases per 100,000 women, which was 6% lower than in white women (Table 3, page 10). However, among younger women (under age 45), incidence rates are higher among African Americans than whites. Breast cancers diagnosed in African American women are more likely to have factors associated with poor prognosis, such as higher grade, distal stage, and negative hormone receptor status.¹²⁻¹⁴ Furthermore, premenopausal African American women appear to be at particular risk for basal-like breast cancer (i.e., triple-negative cancers), an aggressive subtype of breast cancer associated with shorter survival.^{12, 15}

A woman's best overall preventive health strategy is to reduce her known risk factors as much as possible by avoiding weight gain and obesity (for postmenopausal breast cancer), engaging in regular physical activity, and minimizing alcohol intake. Women should consider the increased risk of breast cancer associated with combined estrogen and progestin menopausal hormone therapy use when evaluating treatment options for menopausal symptoms.

Deaths

Breast cancer is the second most common cause of cancer death among African American women, surpassed only by lung cancer. An estimated 6,040 deaths from breast cancer are expected to occur among African American women in 2011. Breast cancer death rates among African American women increased 1.5% annually from 1975-1992 and declined thereafter (Figure 9, page 11). This decrease was larger in women under 50 (2.0% per year) than in women aged 50 and older (1.2% per year).⁴

The steady decline in overall female breast cancer mortality since the early 1990s has been attributed to improvements in both early detection and treatment. However, breast cancer death rates have declined more slowly in African American women

compared to white women, which has resulted in a growing disparity (Figure 4, page 4). During the early 1980s, breast cancer death rates for white and African American women were similar; yet in the period 2003-2007, African American women had a 39% higher death rate than white women, despite a lower incidence rate (Table 4, page 12). This difference accounts for more than one-third (37%) of the overall cancer mortality disparity between African American and white women. Factors that contribute to higher death rates among African American women include differences in access to and utilization of early detection and treatment, as well as differences in tumor characteristics.¹⁶⁻¹⁸

Survival and Stage Distribution

The 5-year relative survival rate for breast cancer diagnosed in 1999-2006 among African American women was 78%, compared to 90% among white women. This difference can be attributed to both later stage at detection and poorer stage-specific survival among African American women (Figure 6, page 6). Only about half (51%) of breast cancers diagnosed among African American women are at a local stage, compared to 61% among white women (Figure 7, page 7).

Later stage at diagnosis among African American women has been largely attributed to lower frequency of and longer intervals between mammograms, and lack of timely follow-up of suspicious results.¹⁹⁻²¹ Lower stage-specific survival has been explained in part by unequal receipt of prompt, high-quality treatment for African American women compared to white women.^{9, 22-24} There is also evidence that aggressive tumor characteristics are more common in African American than white women.^{12, 15, 25-26} Other studies suggest factors associated with socioeconomic status may influence the biologic behavior of breast cancer.^{14, 27-28} Thomson and colleagues found that among an all-white Scottish population, poor women were more likely than non-poor women to be diagnosed with estrogen receptor-negative breast tumors.²⁹ Poverty likely influences disease pathology and genetic markers of disease through lifelong dietary and environmental exposures and reproductive habits.

For more information about breast cancer, see the American Cancer Society publication *Breast Cancer Facts & Figures*, available online at cancer.org.

Cervix

New Cases

An estimated 2,170 cases of invasive cervical cancer are expected to be diagnosed among African American women in 2011. Incidence rates have decreased steadily over the past several decades in both African American and white women; however, the incidence rate of cervical cancer remains 39% higher in African American women (Figure 8; Table 3, page 10). Cervical cancer is one of only two cancers (colorectal is the other) that

can actually be prevented through screening. As Pap screening has become more common, most cervical abnormalities are detected at a preinvasive stage rather than as invasive cancer. For more information on cervical cancer screening, see pages 18 and 24.

The primary cause of cervical cancer is infection with certain types of human papillomavirus (HPV). The FDA has approved 2 vaccines (Gardasil and Cevaxix) for the prevention of the most common HPV infections, which cause about 70% of cervical cancers. The American Cancer Society recommends routine HPV vaccination for girls aged 11 to 12 years and as early as age 9 years at the discretion of doctors.³⁰ Vaccination is also recommended for females aged 13-18 years to catch up on missed vaccine or to complete the 3-dose series. Vaccinated women need to continue getting Pap tests because these vaccines target only the most common strains of HPV and do not provide protection for those who are already infected with HPV.

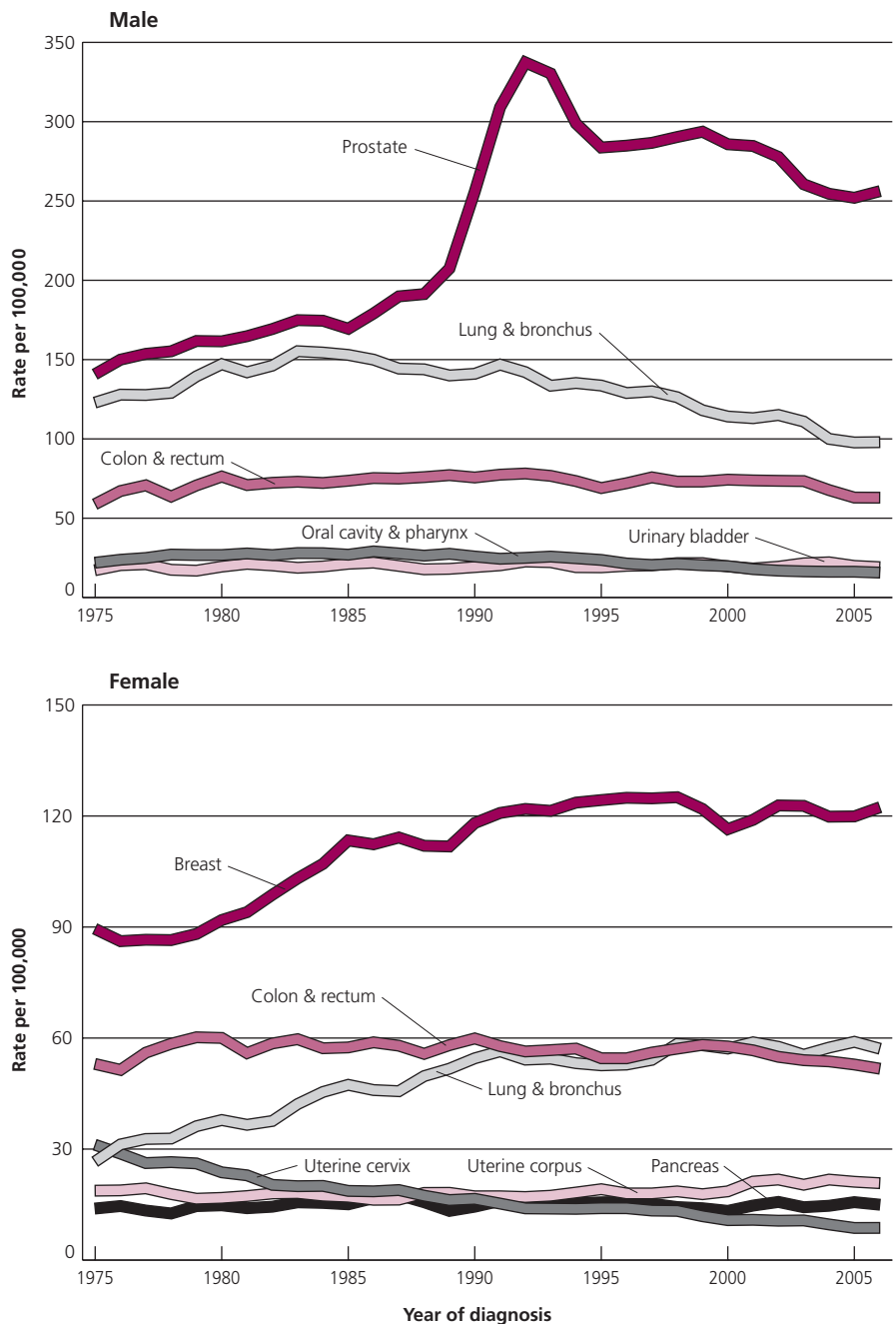
Deaths

An estimated 860 deaths from cervical cancer are expected in 2011. Although mortality rates have declined steadily over the past several decades due to the prevention and early detection of cervical cancer as a result of screening (Figure 9, page 11), African American women remain twice as likely to die from cervical cancer as white women (Table 4, page 12).

Survival and Stage Distribution

The overall 5-year relative survival rate for cervical cancer among African American women is 61%, compared to 72% among white women (Figure 6, page 6). African American women are also more likely to be diagnosed with regional- or distant-stage disease (Figure 7, page 7) despite similar screening rates reported in national surveys (Table 7, page 18). Racial difference in stage at diagnosis may be due to differences in the quality of screening and follow-up after abnormal results.³¹⁻³³

Figure 8. Age-adjusted Cancer Incidence Rates* for African Americans by Site and Sex, US, 1975 to 2007



*Rates are delay adjusted and age adjusted to the 2000 US standard population and are 2-year moving averages. **Source:** Surveillance, Epidemiology, and End Results (SEER) Program, 9 SEER Registries, Division of Cancer Control and Population Sciences, National Cancer Institute.

Colon and Rectum

New Cases

An estimated 16,650 cases of colorectal cancer are expected to occur among African Americans in 2011. Colorectal cancer is the third most common cancer in both African American men

Table 3. Comparison of Cancer Incidence Rates between African Americans and Whites, US, 2003-2007

Male					Female				
Cancer	African American Rate*	White Rate*	Absolute Difference†	Rate Ratio‡	Cancer	African American Rate*	White Rate*	Absolute Difference†	Rate Ratio‡
Kaposi sarcoma	1.9	0.7	1.2	2.64	Kaposi sarcoma	0.2	0.1	0.1	3.43
Myeloma	13.3	6.5	6.8	2.06	Myeloma	9.6	4.0	5.6	2.38
Stomach	16.4	8.7	7.7	1.89	Stomach	8.3	4.1	4.2	2.02
Larynx	11.1	6.8	4.3	1.63	Esophagus	3.1	1.9	1.2	1.62
Liver & intrahepatic bile duct	13.4	8.2	5.2	1.62	Uterine cervix	10.8	7.7	3.1	1.39
Prostate	229.4	143.5	85.9	1.60	Liver & intrahepatic bile duct	3.9	2.8	1.1	1.37
Breast	1.8	1.3	0.5	1.35	Pancreas	13.5	9.9	3.6	1.36
Pancreas	16.4	13.0	3.4	1.26	Larynx	2.0	1.5	0.5	1.32
Lung & bronchus	104.0	84.8	19.2	1.23	Colon & rectum	50.9	41.4	9.5	1.23
Colon & rectum	67.2	56.1	11.1	1.20	Soft tissue (including heart)	3.2	2.7	0.5	1.19
Esophagus	10.1	8.7	1.4	1.16	Kidney & renal pelvis	11.1	10.7	0.4	1.04
Kidney & renal pelvis	21.6	20.2	1.4	1.07	Breast	114.7	121.7	-7.0	0.94
Oral cavity & pharynx	16.7	16.1	0.6	1.04	Lung & bronchus	51.8	57.1	-5.3	0.91
Soft tissue (including heart)	3.5	3.7	-0.2	0.93	Oral cavity & pharynx	5.4	6.1	-0.7	0.89
Hodgkin lymphoma	2.9	3.3	-0.4	0.90	Uterine corpus	21.3	24.3	-3.0	0.88
Leukemia	12.1	16.3	-4.2	0.74	Hodgkin lymphoma	2.2	2.6	-0.4	0.83
Non-Hodgkin lymphoma	16.8	23.7	-6.9	0.71	Leukemia	7.6	9.9	-2.3	0.77
Brain & other nervous system	4.7	8.4	-3.7	0.56	Ovary	9.7	13.3	-3.6	0.73
Thyroid	2.7	5.4	-2.7	0.51	Non-Hodgkin lymphoma	11.6	16.7	-5.1	0.69
Urinary bladder	18.7	39.6	-20.9	0.47	Urinary bladder	6.7	10.0	-3.3	0.67
Testis	1.3	6.2	-4.9	0.21	Thyroid	9.3	15.8	-6.5	0.59
Melanoma of the skin	1.1	25.4	-24.3	0.04	Brain & other nervous system	3.6	6.1	-2.5	0.59
					Melanoma of the skin	1.0	16.9	-15.9	0.06
All Sites	616.8	536.5	80.3	1.15	All Sites	388.3	413.2	-24.8	0.94

* Rates are per 100,000 and age adjusted to the 2000 US standard population.

† Absolute difference is the rate in African Americans minus the rate in whites.

‡ Rate ratio is the rate in African Americans divided by the rate in whites based on two decimal places.

Source: North American Association of Central Cancer Registries.⁹⁵

and women. Incidence rates have been slowly decreasing among African American women since 1980 (0.4% per year), while a more rapid decline (4.8% per year) occurred among men during the most recent time period (2003-2007) (Figure 8, page 9).⁴

Prior to 1989, incidence rates were predominantly higher in white men than in African American men and were similar for women of both races. Since 1989, however, incidence rates have been higher for African Americans than whites in both men and women. This crossover may reflect racial differences in the trends in the prevalence of risk factors for colorectal cancer and/or greater access to and utilization of recommended screening tests by whites that detect and remove precancerous polyps.

Major modifiable factors that increase risk for colorectal cancer include physical inactivity, obesity, high consumption of red or processed meats, and smoking. Studies consistently report that regular physical activity (occupational or recreational) is associated with a lower risk of colon cancer.³⁴⁻³⁶ In November 2009, the

International Agency for Research on Cancer reported that there is now sufficient evidence to conclude that tobacco smoking causes colorectal cancer.³⁷ Non-modifiable risk factors for colorectal cancer include a personal or family history of adenomatous polyps or colorectal cancer and a personal history of chronic inflammatory bowel disease. Colorectal cancer risk is also increased by certain inherited genetic conditions (Lynch syndrome, formerly known as hereditary non-polyposis colorectal cancer [HNPCC], and familial adenomatous polyposis [FAP]).

Screening tests that detect and remove adenomatous polyps are the most reliable method of preventing colorectal cancer; however, colorectal cancer screening rates remain suboptimal among African Americans. The American Cancer Society has identified increasing colorectal screening as a priority for cancer prevention and control. For more information on colorectal cancer screening, see page 18.

Deaths

An estimated 7,050 deaths from colorectal cancer are expected to occur among African Americans in 2011. Colorectal cancer is the third leading cause of cancer death in both African American men and women. Death rates for colorectal cancer began to decline gradually in 1985 among African American women, with a steeper decline occurring from 2001 to 2007 (3.4% per year).⁴ Among African American men, the decline began slowly in 1990; more recently (2000-2007), the decrease averaged 2.2% per year.⁴ The decrease in both men and women reflects declining incidence rates and improvements in early detection and treatment.

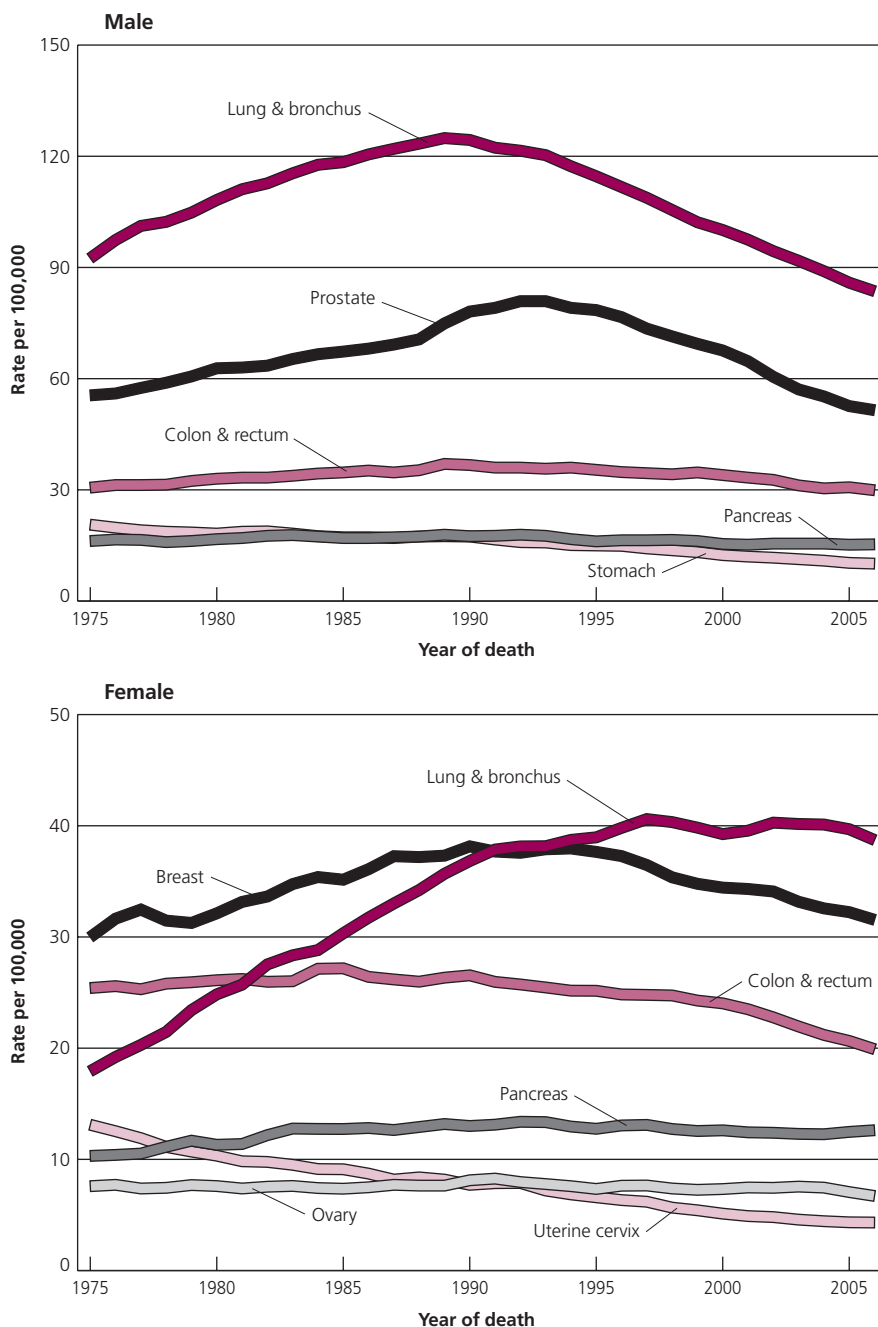
Since the early 1980s, there has been an increasing divergence in colorectal cancer mortality rates between whites and African Americans due to slower declines in African Americans. Before 1980, colorectal cancer mortality rates were lower in African American men than white men and similar among women of both races; however, since that time, mortality rates have been higher in African Americans (Figure 4, page 4). Higher death rates from colorectal cancer account for about one-fourth (24%) of the current disparity in overall cancer death rates between African American and white women and 14% of the disparity between African American and white men.

Survival and Stage Distribution

The 5-year relative survival rate for colorectal cancer among African Americans improved from 46% in 1975-1977 to 57% in 1999-2006; however, this improvement was smaller than that in whites (51% to 68% over the same period).⁴ Some of the disparity in survival is due to later stage at diagnosis among African Americans – 35% of colorectal cancers in African Americans are diagnosed at a localized stage, compared to 39% in whites (Figure 7, page 7). However, lower 5-year relative survival rates are also seen in African Americans within each stage at diagnosis (Figure 6, page 6), presumably reflecting disparities in access to and receipt of high-quality

treatment and possibly differences in tumor biology.³⁸⁻³⁹ Several studies document that African Americans with colorectal cancer are less likely than white patients to receive recommended surgical treatment and adjuvant therapy;⁴⁰⁻⁴¹ however, a recent national study suggests the disparity is decreasing.⁴²

Figure 9. Age-adjusted Cancer Death Rates* for African Americans by Site and Sex, US, 1975 to 2007



*Rates are age adjusted to the 2000 US standard population and are 2-year moving averages.

Source: National Center for Health Statistics, Centers for Disease Control and Prevention, provided by the Surveillance, Epidemiology, and End Results Program.⁹⁶

Table 4. Comparison of Cancer Death Rates between African Americans and Whites, US, 2003-2007

Male					Female				
Cancer	African American Rate*	White Rate*	Absolute Difference†	Rate Ratio‡	Cancer	African American Rate*	White Rate*	Absolute Difference†	Rate Ratio‡
Prostate	54.2	22.8	31.4	2.38	Myeloma	5.8	2.7	3.1	2.19
Stomach	10.7	4.6	6.1	2.31	Stomach	5.0	2.4	2.6	2.11
Larynx	4.6	2.0	2.6	2.24	Uterine cervix	4.4	2.2	2.2	2.01
Myeloma	8.1	4.2	3.9	1.94	Uterine corpus	7.2	3.9	3.3	1.87
Oral cavity & pharynx	6.3	3.7	2.6	1.72	Small intestine	0.5	0.3	0.2	1.75
Breast	0.5	0.3	0.2	1.71	Esophagus	2.5	1.6	0.9	1.58
Liver & intrahepatic bile duct	11.1	7.0	4.1	1.59	Larynx	0.7	0.5	0.2	1.56
Colon & rectum	30.5	20.6	9.9	1.48	Colon & rectum	21.0	14.4	6.6	1.46
Lung & bronchus	87.5	68.3	19.2	1.28	Breast	32.4	23.4	9.0	1.39
Pancreas	15.4	12.2	3.2	1.26	Pancreas	12.4	9.1	3.3	1.36
Esophagus	8.9	7.9	1.0	1.13	Liver & intrahepatic bile duct	3.9	3.0	0.9	1.32
Kidney & renal pelvis	6.0	6.0	0.0	1.00	Urinary bladder	2.7	2.2	0.5	1.22
Soft tissue (including heart)	1.4	1.5	-0.1	0.94	Soft tissue (including heart)	1.4	1.1	0.3	1.21
Hodgkin lymphoma	0.5	0.6	-0.1	0.93	Thyroid	0.5	0.5	0.0	1.17
Leukemia	8.4	10.0	-1.6	0.84	Oral cavity & pharynx	1.6	1.4	0.2	1.09
Urinary bladder	5.4	7.9	-2.5	0.69	Kidney & renal pelvis	2.7	2.7	0.0	0.97
Thyroid	0.3	0.5	-0.2	0.69	Lung & bronchus	39.6	41.6	-2.0	0.95
Non-Hodgkin lymphoma	6.0	9.1	-3.1	0.67	Leukemia	5.0	5.6	-0.6	0.90
Testis	0.2	0.3	-0.1	0.58	Hodgkin lymphoma	0.3	0.4	-0.1	0.86
Brain & other nervous system	3.1	5.6	-2.5	0.55	Ovary	7.2	8.9	-1.8	0.80
Melanoma of the skin	0.5	4.5	-4.0	0.12	Non-Hodgkin lymphoma	3.9	5.7	-1.8	0.68
					Brain & other nervous system	2.0	3.8	-1.8	0.54
					Melanoma of the skin	0.4	2.0	-1.6	0.21
All sites	296.5	222.5	74.0	1.33	All sites	180.6	155.0	25.6	1.17

* Rates are per 100,000 and age adjusted to the 2000 US standard population.

† Absolute difference is the rate in African Americans minus the rate in whites.

‡ Rate ratio is the rate in African Americans divided by the rate in whites based on two decimal places.

Source: National Center for Health Statistics, Centers for Disease Control and Prevention, provided by the Surveillance, Epidemiology, and End Results Program.⁹⁶

For more information on colorectal cancer, see the American Cancer Society publication *Colorectal Cancer Facts & Figures*, available online at cancer.org.

Lung and Bronchus

New Cases

An estimated 23,220 cases of lung cancer are expected to occur among African Americans in 2011, accounting for about 14% of the cancer diagnoses in this group. Cancer of the lung is the second most common cancer in both African American men and women. The average incidence rate for cancers of the lung and bronchus during 2003-2007 was 23% higher in African American men than in white men; however, it was 9% lower in African American women than white women (Table 3, page 10). After increasing for many decades, the rate of lung cancer among African American men has been decreasing since the mid-1980s (Figure 8, page 9). The incidence rate of lung cancer among African American women has been stable since 1990.

Deaths

An estimated 16,790 deaths from lung cancer are expected to occur among African Americans in 2011. Lung cancer kills more African Americans than any other cancer. Lung cancer death rates in men began to decline in 1990, with an acceleration in the decline beginning in 1995 (2.8% per year during 1995-2007).⁴ The death rate in women has been relatively stable since 1998. The decline in lung cancer death rates in men and leveling off of rates in women are the result of decreases in smoking prevalence over the previous 40 years.

The disparity in lung cancer death rates between African American and white men has been substantially reduced overall (from an excess of 50% in 1990-1992 to 28% in 2003-2007) and has been eliminated in younger adults (under age 40). The convergence of lung cancer death rates between young African American and white adults is the result of faster declines in African Americans (Figure 5, page 5), likely reflecting the greater decrease in smoking initiation among African Americans since the late 1970s,

Table 5. Lifetime Probability of Developing or Dying from Invasive Cancers by Race and Sex, US, 2005-2007

		Developing		Dying	
		African American (%)	White (%)	African American (%)	White (%)
All Sites*	Male	40.35 (1 in 2)	44.35 (1 in 2)	23.49 (1 in 4)	23.32 (1 in 4)
	Female	33.01 (1 in 3)	38.59 (1 in 3)	19.26 (1 in 5)	19.80 (1 in 5)
Prostate	Male	18.52 (1 in 5)	15.67 (1 in 6)	4.45 (1 in 22)	2.62 (1 in 38)
Breast	Female	10.21 (1 in 10)	12.57 (1 in 8)	3.23 (1 in 31)	2.79 (1 in 36)
Lung & bronchus	Male	7.65 (1 in 13)	7.76 (1 in 13)	6.83 (1 in 15)	7.04 (1 in 14)
	Female	5.55 (1 in 18)	6.66 (1 in 15)	4.20 (1 in 24)	5.24 (1 in 19)
Colon & rectum	Male	4.91 (1 in 20)	5.30 (1 in 19)	2.44 (1 in 41)	2.14 (1 in 47)
	Female	5.19 (1 in 19)	4.90 (1 in 20)	2.34 (1 in 43)	1.97 (1 in 51)
Uterine corpus	Female	2.06 (1 in 49)	2.69 (1 in 37)	0.81 (1 in 124)	0.50 (1 in 200)
Kidney	Male	1.64 (1 in 61)	1.95 (1 in 51)	0.48 (1 in 209)	0.62 (1 in 162)
	Female	1.07 (1 in 93)	1.17 (1 in 85)	0.30 (1 in 337)	0.36 (1 in 278)
Urinary bladder	Male	1.59 (1 in 63)	4.13 (1 in 24)	0.47 (1 in 213)	0.90 (1 in 111)
	Female	0.82 (1 in 123)	1.22 (1 in 82)	0.34 (1 in 298)	0.33 (1 in 299)
Pancreas	Male	1.33 (1 in 75)	1.42 (1 in 71)	1.23 (1 in 81)	1.29 (1 in 77)
	Female	1.64 (1 in 61)	1.39 (1 in 72)	1.44 (1 in 69)	1.25 (1 in 80)
Non-Hodgkin lymphoma	Male	1.25 (1 in 80)	2.43 (1 in 41)	0.47 (1 in 212)	0.93 (1 in 107)
	Female	1.16 (1 in 87)	2.03 (1 in 49)	0.41 (1 in 245)	0.78 (1 in 129)
Uterine cervix	Female	0.79 (1 in 127)	0.66 (1 in 152)	0.41 (1 in 247)	0.21 (1 in 467)

*All sites excludes basal and squamous cell skin cancers and in situ cancers except urinary bladder.

Note: Percentages and "1 in" numbers may not be equivalent due to rounding.

Source: DevCan: Probability of Developing or Dying of Cancer Software, Version 6.5.0.⁹⁷

which resulted in a more rapid decrease in smoking prevalence in African Americans aged 25-34 years compared to whites.^{6, 43-44}

If young African Americans continue to have low smoking prevalence as they get older, racial differences in lung cancer death rates should be eliminated among men in the next 40 to 50 years.

Survival and Stage Distribution

The 5-year relative survival rate for lung cancer is lower in African Americans than in whites: 13% and 16%, respectively (Figure 6, page 6). When lung cancer is detected at a localized stage, the 5-year relative survival rate among African Americans is 45%; however, only 12% of lung cancer cases are detected at this early stage because symptoms generally do not appear until the disease is advanced. Studies have shown that when lung cancer is diagnosed early, African Americans are less likely than whites to receive surgery, the treatment with the best chance for cure, even after accounting for socioeconomic factors.⁸ However, a study within the military health care system, where access to medical care is universal, found no disparity in lung cancer treatment or survival between African Americans and whites.⁴⁵

Prostate

New Cases

An estimated 35,110 cases of prostate cancer are expected to occur among African American men in 2011, accounting for 40% of all cancers diagnosed in African American men. It is estimated that 1 in 5 African American men will be diagnosed with prostate cancer in their lifetime (Table 5). Between 2003-2007, the average annual prostate cancer incidence rate among African American men was 229.4 cases per 100,000 men, which was 60% higher than the rate in white men (Table 3, page 10). Similar to the pattern in whites, incidence rates of prostate cancer in African American men increased sharply between 1989 and 1992, but have since been declining (Figure 8, page 9). The dramatic rise in prostate cancer incidence rates was likely due to increased use of the prostate-specific antigen (PSA) blood test.

The only well-established risk factors for prostate cancer are age, race, and family history of the disease. African American men and Jamaican men of African descent have the highest prostate cancer incidence rates worldwide. The reasons for this are not clear, but may in part reflect genetic factors that vary in populations originating in different parts of the world.⁴⁶⁻⁴⁷

Risk Factor Statistics

Deaths

Prostate cancer is the second leading cause of cancer death in African American men. It is estimated that 5,300 deaths from prostate cancer will occur in African American men in 2011. African American men have the highest mortality rate for prostate cancer of any racial or ethnic group in the US. The death rate for prostate cancer is 2.4 times higher in African American men than in white men (Table 4, page 12). This difference accounts for 44% of the overall cancer mortality disparity between African American and white men. Prostate cancer death rates also vary by years of education. In a study of death rates among men aged 25 to 64 by level of education, American Cancer Society researchers found that the prostate cancer death rate for African American men with 12 or fewer years of education was twice that of men with more than 12 years of education.⁴⁸

After a long period of increase, prostate cancer death rates in African American men peaked in 1993 and declined steadily thereafter.⁴ Some of the decrease in prostate cancer mortality may be due to improved surgical and radiologic treatment, dissemination of hormonal therapy for advanced-stage disease, and early detection by PSA.⁴⁹⁻⁵⁵ However, the contribution of PSA testing is not clear. A recent US-based randomized trial failed to show any benefit of PSA testing in reducing deaths from prostate cancer, while two European trials showed a modest benefit.⁵⁶⁻⁵⁸

Survival and Stage Distribution

The overall 5-year relative survival rate for prostate cancer among African Americans is 96%, compared to nearly 100% among whites (Figure 6, page 6). Ninety percent of all prostate cancers among African Americans are diagnosed at the local and regional stages, compared to 92% in whites (Figure 7, page 7); the 5-year relative survival rate for African Americans whose tumors are diagnosed at these early stages approaches 100%. Among African American men, 5-year survival rates drop to 29% when the cancer has spread to distant sites.

For more information on prostate cancer, see the Special Section of the American Cancer Society publication *Cancer Facts & Figures 2010*, available online at cancer.org.

Socioeconomic Status

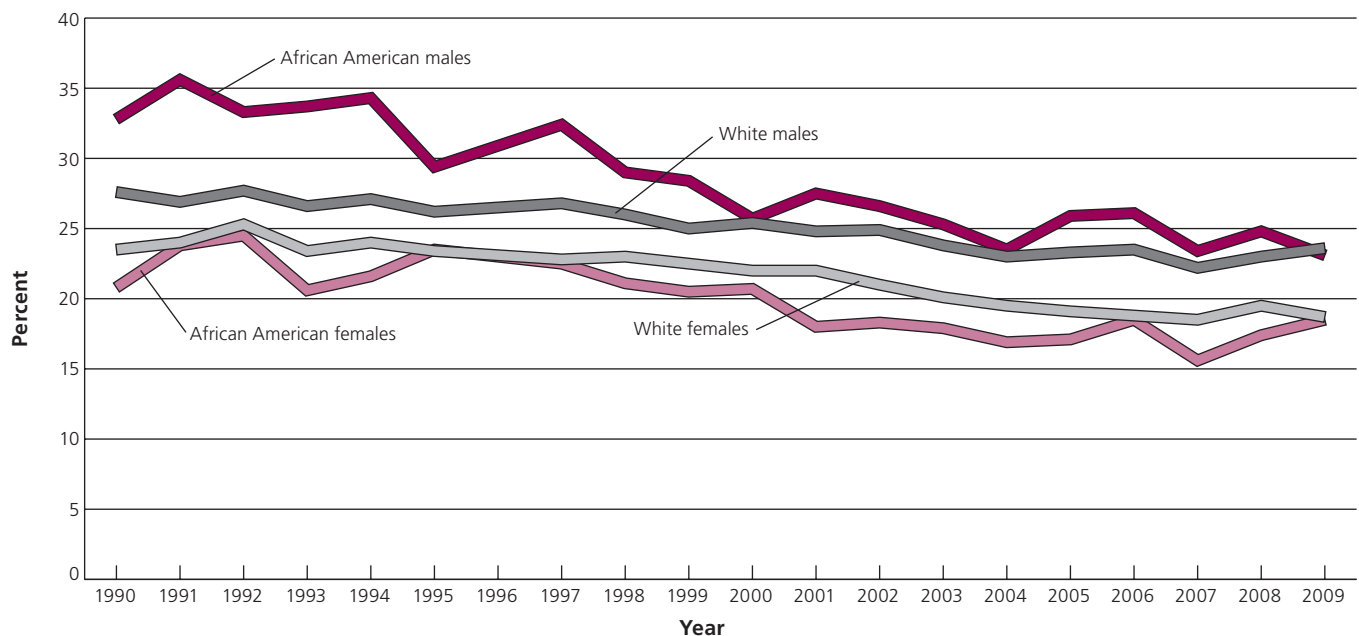
Socioeconomic status (SES) is highly correlated with cancer risk and outcomes across the continuum from prevention to palliative care. Persons with lower SES are more likely to engage in behaviors that increase cancer risk, such as tobacco use and physical inactivity, in part because of marketing strategies that target these populations and in part because of environmental and community factors, such as fewer opportunities for physical activity and less access to fresh fruits and vegetables. Lower SES is also associated with financial, structural, and personal barriers to health care, including lack of or inadequate health insurance, reduced access to recommended preventive care and treatment services, and lower literacy levels. Individuals with no health insurance and those with Medicaid insurance are more likely to be diagnosed with advanced cancer.⁷ These factors disproportionately impact African Americans because compared with 9% of whites, 25% of African Americans live below the federal poverty threshold.⁵⁹ In addition, 19% of African Americans are uninsured, while only 11% of whites lack health insurance.⁵⁹

No single factor (such as education or income) fully captures all of the important characteristics that may influence the association between SES and health, but for most cancers, risk is inversely related to SES, regardless of which measure is used. Moreover, factors associated with SES contribute to substantial differences in cancer incidence and mortality within, as well as among, racial and ethnic groups.⁶⁰ Persons with lower SES have higher cancer death rates than those with higher SES, regardless of demographic factors such as race/ethnicity. For example, for all cancer sites combined, mortality rates among both African American and white men with 12 or fewer years of education are more than twice those in men with higher levels of education.⁴⁸ Similarly, death rates for each of the 4 major cancer sites are higher in African American men and women with fewer years of education than in those with more years of education. Furthermore, progress in reducing cancer death rates has been slower among persons with lower SES.⁶¹

Tobacco Use

Smoking is the most preventable cause of premature death in the US and is responsible for about 30% of all cancer deaths.⁶²⁻⁶³ Smoking is associated with increased risk of at least 16 types of cancer: nasopharynx, nasal cavity and paranasal sinuses, lip, oral cavity, pharynx, larynx, lung, esophagus, pancreas, uterine cervix, kidney, bladder, stomach, colorectal, and acute myeloid

Figure 10. Trends in Cigarette Smoking (%), Adults 18 and Older, US, 1990-2009



Data for 1996 not available.

Source: 1990-2007: *Health, United States, 2009* (Spreadsheet Version). 2008-2009: National Health Interview Survey Public Use Data Files 2008 and 2009.

leukemia.^{37,64} Both incidence and death rates for lung cancer are higher among African American men than among white men, due in part to differences in historical smoking behaviors. For most of the past 4 decades, the rate of adult smoking has been higher in African American men than in white men, though in recent years rates have converged.

Adult Cigarette Smoking

In 2009, the prevalence of current cigarette smoking among African American adults was higher in men (23.1%) than women (18.5%) (Figure 10). In both groups, the prevalence is much higher than the Healthy People 2020 goal of 12%.

Youth Tobacco Use

For more than a decade, African American high school students have had a lower prevalence of cigarette smoking than other racial and ethnic groups. According to the Youth Risk Behavior Surveillance Survey, the prevalence of current cigarette smoking among African American high school students peaked in 1997 in boys and 1999 in girls and has since been generally decreasing (Figure 11, page 16). As of 2009, 10.7% of African American boys and 8.4% of African American girls smoke cigarettes, compared to 22.3% of white boys and 22.8% of white girls.⁶⁵

Overweight, Obesity, and Physical Activity

Overweight and Obesity

Obesity is a major health problem in the US. In addition to diabetes, heart disease, and stroke, obesity increases the risk of many cancers, including cancers of the breast (in postmenopausal women), colon, endometrium, kidney, and adenocarcinoma of the esophagus.⁶⁶⁻⁶⁸ Evidence is highly suggestive that obesity also increases the risk for cancers of the pancreas, gallbladder, thyroid, ovary, and cervix, as well as for myeloma, Hodgkin lymphoma, and aggressive forms of prostate cancer.⁶⁸⁻⁷¹ Increasing evidence also suggests that being overweight increases the risk of cancer recurrence, decreases the likelihood of survival for many cancers, and increases the risk of developing other illnesses following a cancer diagnosis.^{69,72-74}

According to the definition of obesity (BMI ≥ 30 kg/m²), 44% of African American adults are considered obese and 74% of African American adults are considered overweight (BMI 25.0-29.9 kg/m²) or obese.⁷⁶ Overweight and obesity are more common among African American women and girls than white women and girls, while there is little racial difference among men and boys (Figure 12, page 17). The proportion of African American women who are obese has increased from 31% in 1976-1980 to 50% in 2007-2008.

Nutrition and Diet

The American Cancer Society recommends choosing food and beverages in amounts that help achieve and maintain a healthy weight. Specifically, the guidelines suggest eating 5 or more servings of a variety of vegetables and fruits each day, choosing whole grains in preference to processed (refined) grains, and limiting consumption of processed and red meats.⁷⁷

There is strong scientific evidence that healthy dietary patterns, in combination with regular physical activity, are needed to maintain a healthy body weight and to reduce cancer risk. Many epidemiologic studies have shown that populations that eat diets high in vegetables and fruits and low in animal fat, meat, and/or calories have reduced risk of the most common cancers.⁶⁸ Moreover, evidence that a diet high in red and processed meat is associated with a higher risk of developing gastrointestinal cancers has increased over the years.⁷⁸⁻⁸⁰ Despite the known benefits of a healthy diet, many Americans are not following these recommendations. The Society, in partnership with the National Cancer Institute and the Centers for Disease Control and Prevention, is working with churches to encourage healthy eating in the African American community through the Body & Soul – A Celebration of Healthy Eating and Living program.

Table 6. Leisure-time Physical Activity in Adults (18+ years) by Race and Sex, US, 2008

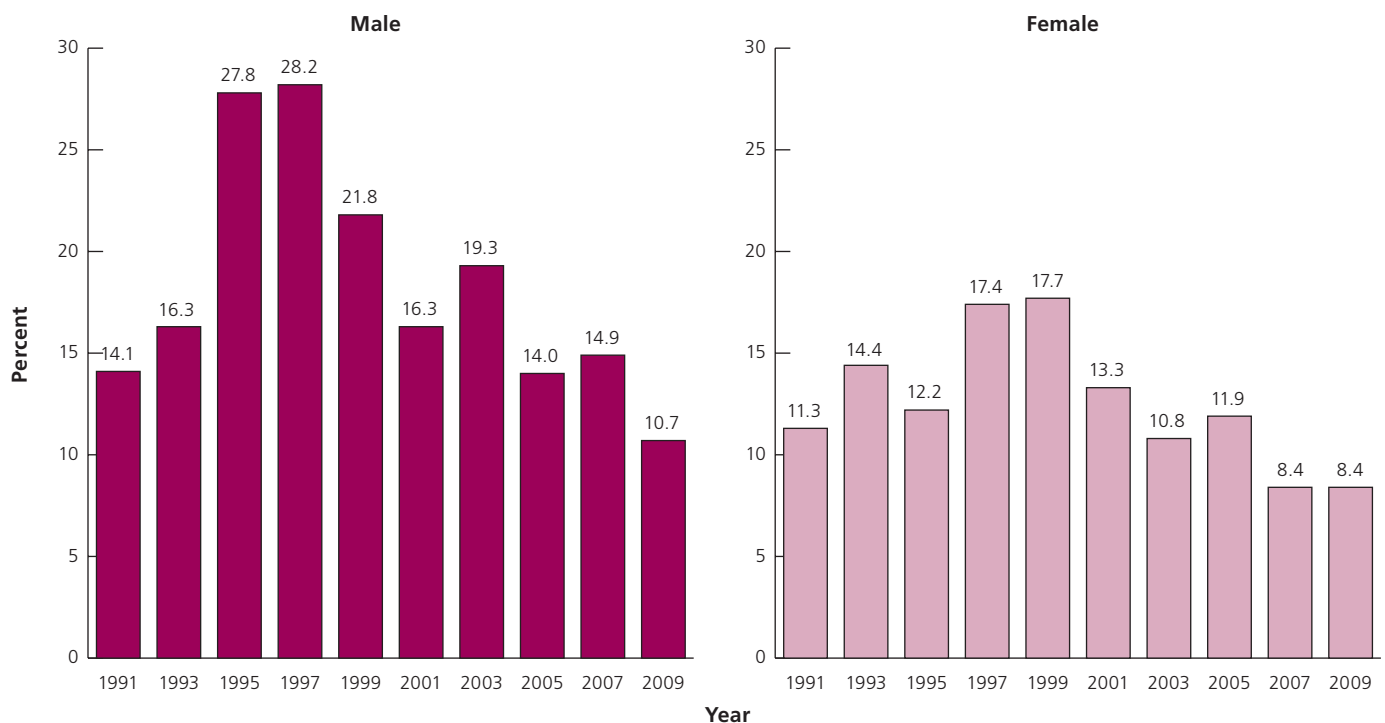
	Non-Hispanic African American (%)	Non-Hispanic White (%)
Inactive*		
Both sexes	47.7	32.1
Male	41.8	30.4
Female	52.6	33.5
Some leisure-time physical activity[†]		
Both sexes	27.5	32.0
Male	27.0	31.6
Female	27.6	32.5
Regular leisure-time physical activity[‡]		
Both sexes	24.8	35.9
Male	31.1	38.0
Female	19.8	34.0

Note: Leisure-time physical activity does not include physical activity that occurs at the workplace. Estimates are age adjusted to the 2000 US standard population.

* No physical activity of at least 10 minutes per week; † At least one session per week of light/moderate or vigorous physical activity of at least 10 minutes duration. ‡ Three or more sessions per week of vigorous activity lasting at least 20 minutes, or 5 or more sessions per week of light/moderate activity lasting at least 30 minutes.

Source: National Health Interview Survey, 2008.⁸²

Figure 11. Trends in the Percentage of Current Cigarette Smokers, Non-Hispanic African American High School Students, US, 1991-2009



Source: Cigarette use among high school students - United States, 1991-2009.⁶⁵

Physical Activity

Studies have shown that regular physical activity is associated with lower risk of several types of cancer, including cancers of the breast, colon, prostate, and endometrium.^{66,81} The American Cancer Society recommends that adults engage in at least 30 minutes of moderate-to-vigorous physical activity, above usual activities, on 5 or more days of the week and 45 to 60 minutes of intentional physical activity is preferable.⁷⁷

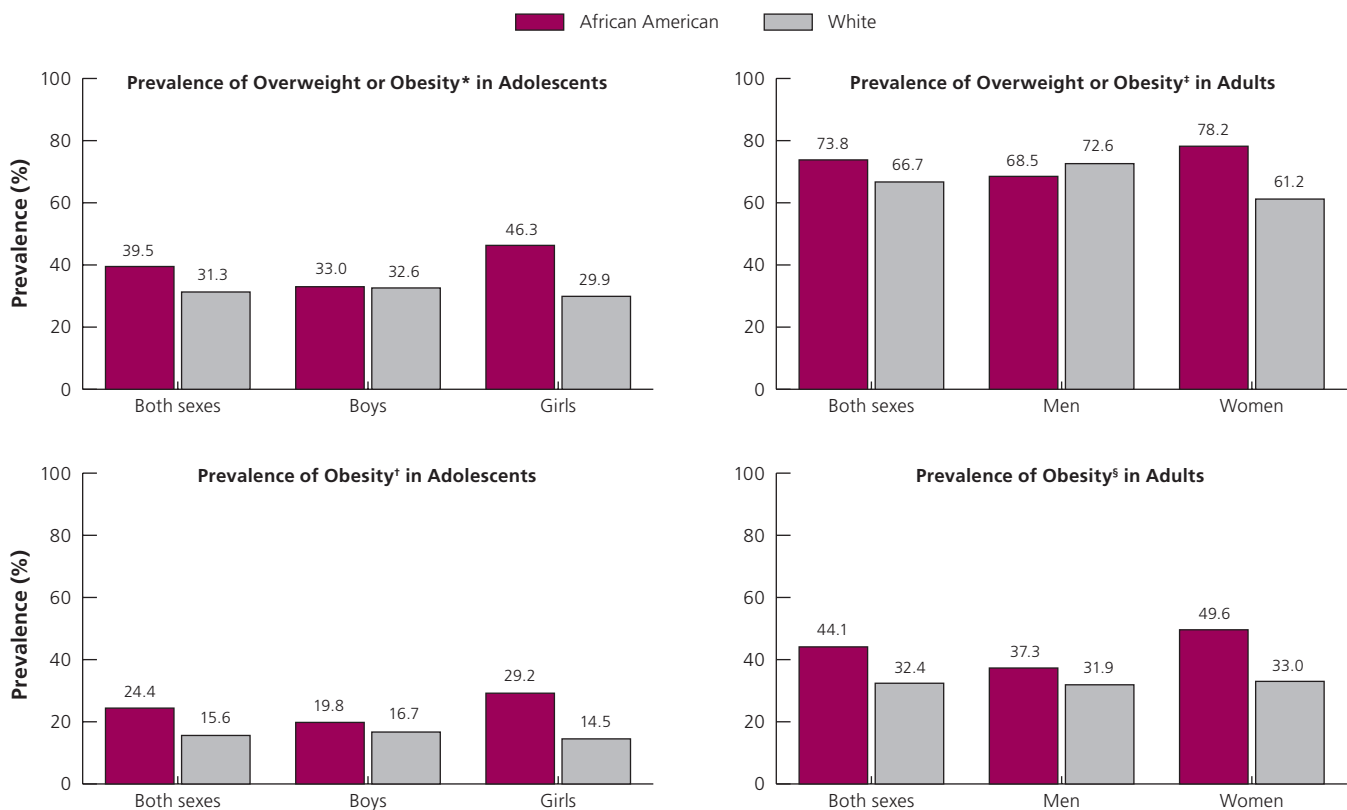
Data from the 2008 National Health Interview Survey (NHIS) shows that just under one-half of African American adults report no leisure-time physical activity, with African American women more likely than men to be physically inactive (52.6% vs. 41.8%, respectively) (Table 6).⁸² While the level is low for both sexes, African American men were more likely than African American women to report regular, leisure-time physical activity (31.1% vs. 19.8%, respectively). It is important to note that these estimates do not include physical activity that occurs at the workplace.

Community Strategies

There is growing recognition that multiple aspects of social environments where people live, work, and play appear to be

linked to overweight and obesity.^{77, 83-85} Although healthy eating and physical activity are a matter of individual choice, the local food environment (e.g., fast-food outlet density versus supermarkets) and built-environment features (e.g., accessibility to parks, gyms, or other recreational settings) can influence individuals' choice and ability to adopt a healthy lifestyle.⁸³⁻⁸⁷ Therefore, the American Cancer Society nutrition and physical activity guidelines include recommendations for community-level actions. They suggest the need for public, private, and community organizations to work together to facilitate and promote policies to effect changes in social and physical environments in order to enable people to adopt and maintain healthy nutrition and physical activity behaviors.⁷⁷ Specifically, community-level actions are needed to: (1) increase access to healthy foods in schools, worksites, and communities; (2) provide safe, enjoyable spaces for physical activity in schools; (3) provide safe, physically active transportation (such as biking and walking) and recreation in communities.

Figure 12. Prevalence of Overweight and Obesity in Adolescents and Adults by Sex and Race, US, 2007-2008



Note: Adolescents are ages 12-19 years, and adults are ages 20 and over. *BMI for Age > 85th percentile.

†BMI for Age > 95th percentile. ‡BMI > 25. §BMI > 30.

Source: Data for adolescents were previously published in Ogden et al, 2010.⁷⁵ Data for adults were previously published in Flegal et al, 2010.⁷⁶

Use of Screening Tests

Screening tests are used to detect some cancers at stages when they are still highly curable. In fact, for cancers of the cervix and colorectum, early detection tests can lead to the prevention of the disease through the identification and removal of precancerous lesions. Screening can also detect cancer at an earlier stage, which can reduce the extent of treatment, improve the chances of cure, extend life, and thereby improve the quality of life for cancer survivors.

Breast and Cervical Cancer Screening

The American Cancer Society recommends that average-risk women aged 40 and older get annual mammograms, as well as regular clinical breast exams.⁸⁸ (See screening guidelines, page 25.) For women at high risk for breast cancer, the Society recommends annual screening using magnetic resonance imaging (MRI) in addition to mammograms beginning at age 30; the high-risk status of these women (lifetime risk approximately 20%-25% or greater) is based on the presence of mutations in the breast cancer susceptibility genes, BRCA1 and BRCA2, strong family history of breast and/or ovarian cancer suggesting a high probability of being a mutation carrier, or prior chest radiation therapy (e.g., for Hodgkin disease).⁸⁸

Since 1987, mammography use has been increasing in all racial and ethnic groups.⁸⁹ In 2008, the proportion of African American women aged 40 and older who reported receiving a mammogram within the past 2 years was 67.7%; however, only 52.2% of African American women reported having a mammogram within the past year (Table 7). Despite generally similar screening rates, breast cancer is detected at an advanced stage more often in African American than in white women (Figure 7, page 7). This difference has been largely attributed to lower frequency of and longer intervals between mammograms, and lack of timely follow-up of suspicious results.^{19-21, 90}

The American Cancer Society recommends that all women begin cervical cancer screening about three years after they begin having vaginal intercourse, but no later than age 21. (See screening guidelines, page 25.) In 2008, the rate of Pap testing within the previous 3 years was similar among African American (81.5%) and white women (79.6%). However, among women of all races, screening rates are lower in older women, women with no health insurance, and recent immigrants.⁹¹

The Centers for Disease Control and Prevention's (CDC) National Breast and Cervical Cancer Early Detection Program (NBCCEDP) was begun in 1990 to improve access to breast cancer screening

Table 7. Use of Cancer Screening Tests, 2008

	Non-Hispanic African American (%)	Non-Hispanic White (%)
Breast cancer (women 40 and older)		
Mammogram		
within past year	52.2	54.2
within past 2 years	67.7	68.0
Cervical cancer (women 18 and older)		
Pap test*	81.5	79.6
Colon & rectum (adults 50 and older)		
Endoscopy†	47.3	52.7
Fecal occult blood test (FOBT)‡	8.9	10.3
FOBT or endoscopy§	48.9	56.0
Prostate cancer		
Prostate specific antigen (PSA) test¶	38.6	46.6

Percentages are age adjusted to the 2000 US standard population.

* Pap test within the past 3 years. † Flexible sigmoidoscopy within 5 years or colonoscopy within 10 years. ‡ Home FOBT within past year. § Home FOBT within past year, or flexible sigmoidoscopy within 5 years, or colonoscopy within 10 years. ¶ PSA test within past year for men 50 and older who had not been diagnosed with prostate cancer.

Source: National Health Interview Survey, Public Use Data File, 2008.

and diagnostic services for low-income women. This program, now available in all 50 states, the District of Columbia, 5 US territories, and 12 American Indian/Alaska Native tribal organizations, helps low-income, uninsured, and underinsured women gain access to breast and cervical cancer screening and diagnostic services. However, according to a 2006 study, only 15% of women eligible through the program received a screening mammogram, and only 6% of eligible women were screened for cervical cancer.⁹² The American Cancer Society is committed to helping increase funding for NBCCEDP in order to reach more eligible women. (See page 22 for more information on the NBCCEDP.)

Colorectal Cancer Screening

The American Cancer Society recommends that both men and women at average risk of developing colorectal cancer should choose one of the several available screening methods beginning at age 50. (See screening guidelines, page 25.) Individuals at increased or high risk of developing the disease (e.g. those with a personal or family history of colorectal cancer or polyps, chronic inflammatory bowel disease, or inherited genetic mutations) should discuss their risk status with their physician to determine whether earlier and/or more intensive screening is indicated.

The use of colorectal screening tests among African Americans has increased over the past several years. In 1987, only 18% of African American women and 15% of African American men reported having had a recent colorectal screening test.⁹³ By 2008, the prevalence of a recent screening for colorectal cancer among African Americans had increased to 49%, compared to 56% in whites (Table 7).

Prostate Testing

The American Cancer Society recommends that asymptomatic men who have at least a 10-year life expectancy have an opportunity to make an informed decision with their health care provider about whether to be screened for prostate cancer, after receiving information about the uncertainties, risks, and potential benefits associated with prostate cancer screening.⁹⁴ This screening should not occur without an informed decision-making process. Men at average risk should receive this information at age 50; however, African American and other men at higher risk (men who have a father or brother diagnosed with prostate cancer before age 65) should receive this information beginning at age 45. Men at even higher risk (because they have several close relatives diagnosed with prostate cancer at an early age) should have this discussion with their provider at age 40.

The use of the prostate-specific antigen (PSA) blood test to test for prostate cancer is lower in African American males, compared to white males aged 50 and older (38.6% vs. 46.6%, respectively) (Table 7).

For more information on prostate cancer testing, see the Special Section of the American Cancer Society *Cancer Facts & Figures 2010*, available online at cancer.org.

How the American Cancer Society Helps Save Lives and Helps Reduce Cancer Disparities

In 2006, the American Cancer Society embarked on an ambitious journey to define its role in the fight against inequities in cancer prevention services, access to care, incidence, and mortality. This effort built on a long history of research and programs designed to understand the causes and effects of cancer disparities, to describe the impact they have on US populations, and to implement and advocate for evidence-based strategies to reduce or eliminate these inequities. The Office of Health Disparities was formed in 2007 to lead the Society's strategic focus with four overarching goals:

1. Increase trust and credibility of the American Cancer Society among the underserved segment of the population.
2. Ensure effective evidence-based, disparities-reducing practices through the provision of strategic guidance and resources.
3. Enhance and strengthen the Society's capacity to enable community-based outreach in diverse and low-income communities.
4. Diversify the Society's volunteer, staff, leadership, and donor base through all levels of the organization.

The American Cancer Society continues to work toward the 2015 goal of saving lives and eliminating disparities in cancer morbidity and mortality by helping people stay well and get well, by finding cures, and by fighting back against the disease. This section provides highlights and information on some of these efforts.

Stay Well and Get Well

The American Cancer Society helps people everywhere stay well by preventing cancer or detecting it early, when it is most treatable. For people who are diagnosed with cancer, the Society provides the information, day-to-day help, and emotional support to guide them through every step of their experience and to help them get well.

Cancer Information

The American Cancer Society provides accurate, up-to-date information spanning the cancer continuum from prevention to palliative care in English and Spanish, 24 hours a day, 7 days a week, via 1-800-227-2345 and through its Web site, cancer.org.

The Society's Office of Health Disparities staff is helping in the development of "Welcome to the Fight," a guide to the American Cancer Society and a cookbook specifically designed for the African American community. The Society has also collaborated with health communications researchers at Morehouse School of Medicine to engage hip-hop artists Mike-E and AfroFlow to promote tobacco and cancer awareness among African American youth on college campuses. World-renowned comedian, actor, and radio personality Steve Harvey partnered with the Society for a video in which he narrated his personal journey of colorectal cancer screening. The video, *All Jokes Aside Featuring Steve Harvey*, won a Telly Award for best health video, and has been used nationwide to build awareness of the importance of colorectal cancer screening among African American men. The video is available on the American Cancer Society YouTube Channel at tinyurl.com/oh3syq. Other collaborations with the National Medical Association, 100 Black Men of America, Inc., faith-based organizations, and Greek letter fraternities and sororities help the Society achieve its goals of increased cancer screening and awareness in the communities that these partners serve.

Programs and Services

Several American Cancer Society programs and services have been developed or tailored to be culturally appropriate for African American audiences. Examples include the following:

- **Body & Soul – A Celebration of Healthy Eating and Living:** This wellness program was developed for African Americans in collaboration with the National Cancer Institute and churches and is currently being supported by the CDC. The program encourages participants to eat 5 to 9 servings of fruits and vegetables every day for better health. Body & Soul works by combining pastoral leadership, educational activities, and peer counseling in a church environment that supports healthy eating.
- **Let's Talk About It®:** This is a free community-based program developed by the American Cancer Society and 100 Black Men of America, Inc., to increase awareness and knowledge about prostate health among African American men and their loved ones. This program provides communities easy, step-by-step ways to organize prostate cancer awareness events to empower African American men to reduce their risk of prostate cancer and to make informed decisions about detecting and treating the disease.
- **Patient Navigator Program:** This hospital-based service provides a "navigator," a non-medical professional who can help guide patients through the maze of the health care system – helping patients with a range of tasks, including transportation to appointments, finding ways to pay for care, connecting patients with community support services and other resources, and facilitating communication with physicians and other providers.

Visit cancer.org to learn more about these programs and other support services in your area.

Find Cures

Since 1999, the American Cancer Society has funded 117 studies totaling \$99 million devoted to the poor and medically underserved. Thirty-five percent of this research focuses on the African American population, encompassing the cancer continuum from prevention to palliative care. The Society is committed to reducing cancer health disparities and has set as a nationwide objective the goal of eliminating disparities in the cancer burden by 2015. Toward this goal, the Society has made the reduction of cancer health disparities a priority area of focus for research funding. In addition, the Society's internal research departments focus substantial resources on community-based interventions and disparities research. To learn more, visit cancer.org/research.

Specific examples of ongoing intramural and extramural research include:

- Assessing the specific needs of African American breast cancer survivors through focus groups and surveys and using this information to develop programs and resources to educate and support African American breast cancer survivors
- Investigating whether African Americans and whites who are diagnosed with colon cancer make changes in health behaviors (e.g., diet, physical activity, and dietary supplement use) and what effect these changes may have on colorectal recurrence
- Researching treatment delays and the types of treatment received among African American breast cancer patients and exploring reasons for the less frequent treatment among African American women in an effort to improve breast cancer outcomes
- Monitoring racial and socioeconomic disparities in the cancer burden, including differences in screening, stage at diagnosis, treatment, survival, and mortality
- Examining the role of segregated neighborhoods in cancer screening and physical activity among national samples of African Americans and Latinos
- Evaluating the usage and effectiveness of smoking cessation help lines in low socioeconomic and segregated African American communities in order for the Society to target and increase use of cessation treatments within these communities
- Developing a mapping tool to identify and target underserved populations and assist the Society in more effectively allocating its programs and services

Fight Back

The American Cancer Society and the American Cancer Society Cancer Action NetworkSM (ACS CAN), the Society's nonprofit, nonpartisan advocacy affiliate, are dedicated to reducing cancer incidence and mortality rates among minority and medically underserved populations. This goal can be achieved by instituting effective policies and public health programs that promote overall wellness and help save lives. Listed below are some of the efforts at both the state and federal levels that the American Cancer Society and ACS CAN have been involved with in the past few years:

Families affected by cancer will face fewer financial barriers to care as a result of the passage of the Patient Protection and Affordable Care Act (Affordable Care Act) in 2010. The law improves the affordability of coverage by increasing insurance subsidies and eliminating arbitrary annual and lifetime caps on coverage for all insurance plans. ACS CAN analyzed the Affordable Care Act through the eyes of cancer patients, survivors, and their families. The analysis showed that the law focuses more on prevention and early detection by requiring all insurance plans to provide coverage for essential, evidence-based preventive measures with no additional co-pays. The law also eliminates discrimination based on health status and preexisting conditions. ACS CAN will continue to look for ways to strengthen the legislation throughout the implementation process.

A high priority for the Society and ACS CAN, at both the state and federal level, is fighting to increase funding for the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). This successful program, which recently celebrated its 20th anniversary, provides community-based breast and cervical cancer screening to low-income, uninsured, and underinsured women. More than 50% of the women screened are from racial/ethnic minority groups. ACS CAN is asking Congress to increase funding to \$275 million for fiscal year 2012. While the Affordable Care Act will greatly improve insurance coverage, the NBCCEDP will remain an essential program for improving access to breast and cervical cancer screening and treatment in our nation's most vulnerable populations.

The Society and ACS CAN are also advocating for a national screening, treatment, and outreach program to increase colorectal cancer screening rates in low-income, medically underserved populations. The Colorectal Cancer Prevention, Early Detection, and Treatment Act would have a direct impact on reducing colon cancer deaths by focusing on screening more uninsured and underinsured individuals for colorectal cancer and providing them with treatment when needed. ACS CAN strongly supports the Affordable Care Act provision requiring that all private health plans cover colorectal cancer screening tests without any cost-sharing. By 2011, co-payments will be eliminated for preventive services like colonoscopies, and preventive services will be exempted from deductibles under the Medicare program.

The Society and ACS CAN continue to work with Congress to secure additional funding for Patient Navigator Programs, which helps patients in medically underserved communities work their way through the health care system, provides outreach and education for patients to encourage preventive screenings, and addresses needs that may impact compliance with screening and treatment. ACS CAN supports the Affordable Care Act's reauthorization of the Health Resources and Services Administration Patient Navigator Program until 2015.

The Society and ACS CAN also are leading the fight to increase the investment the nation has made in biomedical and cancer research at the National Institutes of Health. These efforts include increased funding for cancer research at the National Center on Minority Health and Health Disparities and the National Cancer Institute, which houses the Center to Reduce Cancer Health Disparities.

Additionally, the Society and ACS CAN support the Affordable Care Act's increased funding for Community Health Centers; required enhanced collection and reporting of data on race, ethnicity, and primary language; and expanded funding for scholarship and loan repayment for physicians working in underserved areas. ACS CAN also advocates for cultural competence and reducing disparities by promoting language translation. In addition, ACS CAN supports the Affordable Care Act's requirement for qualified health plans to provide materials in appropriate languages, and development of a strategy for increasing access to language translation services.

To learn more, to get involved, and to make a difference in the fight against cancer, visit cancer.org/involved/advocate.

What Other Programs/Organizations Support the Elimination of Health Disparities among African Americans?

Center to Reduce Cancer Health Disparities (CRCHD)

In 2001, the National Cancer Institute (NCI) established the Center to Reduce Cancer Health Disparities (CRCHD) to serve as the cornerstone of NCI's efforts to reduce the unequal burden of cancer in our nation. CRCHD is working to strengthen and integrate NCI's studies in basic, clinical, translational, and community-based research that offer opportunities to advance our understanding of cancer-related health disparities and ways to effectively address them. The center manages specific programs and grants aimed at examining the diverse aspects of cancer-related disparities. It is also leading NCI's efforts to train students and investigators from diverse populations to pursue research in cancer, as well as research examining factors that contribute to cancer health disparities. For additional information, visit crchd.cancer.gov.

National Breast and Cervical Cancer Early Detection Program (NBCCEDP)

Run by the CDC, this program helps low-income, uninsured, and underinsured women gain access to breast and cervical cancer screening and diagnostic services. Medical assistance and treatment for women who are diagnosed with cancer through the NBCCEDP are available through Medicaid. The program is currently implemented in all 50 states, the District of Columbia, 5 US territories, and 12 American Indian/Alaska Native organizations. Each state Department of Health will have information about how to contact the nearest screening center. For additional information, visit cdc.gov/cancer/nbccedp.

Colorectal Cancer Control Program (CRCCP)

Thanks in part to many years of advocating for increased funding by ACS CAN volunteers, the CDC in 2009 had sufficient resources to launch a robust colorectal cancer screening program. With \$39 million granted to 26 states and tribes nationwide, the CRCCP supports population-based screening efforts and provides early detection tests to low-income adults aged 50 to 64 years who are underinsured or uninsured. For additional information, visit cdc.gov/cancer/crccp.

Project Brotherhood Colorectal Cancer Prevention

Funded by the American Cancer Society, Project Brotherhood developed a 12-hour culturally specific curriculum to train barbers about colorectal cancer in order to increase screening rates among African American men. To learn more about this program, visit projectbrotherhood.net.

Deep South Network for Cancer Control

The purpose of the Deep South Network for Cancer Control is to eliminate the disparity in cancer death rates between African Americans and whites in the Deep South. This initiative has increased mammography screening in Mississippi and Alabama and is working toward reducing racial disparities in breast and cervical cancer mortality by encouraging coalition development, community empowerment, and the utilization of community health advisors. To learn more about this program, visit mhrc.dopm.uab.edu/research/deepsouth.

Cancer Prevention and Control Research Network (CPCRN)

The CPCRN is a subgroup of the CDC's Prevention Research Centers and is currently comprised of 10 funded academic research institutions. The network provides an infrastructure for applying relevant research to local cancer prevention and control needs, particularly in underserved and minority communities. Its members conduct community-based participatory cancer research across its 10 network centers, crossing academic affiliations and geographic boundaries. For additional information, visit cpcrn.org.

Intercultural Cancer Council (ICC)

The ICC promotes policies, programs, partnerships, and research to eliminate the unequal burden of cancer among racial and ethnic minorities and medically underserved populations in the US and its associated territories. For additional information, visit iccnetwork.org.

National Medical Association (NMA)

The NMA is the largest and oldest national organization representing African American physicians and their patients in the US and is committed to the elimination of health disparities and the promotion of healthy lifestyles among African Americans and other underserved populations. The American Cancer Society and the NMA have joined together to develop and distribute culturally relevant consumer and professional materials that focus on the prevention, early detection, and treatment of breast, prostate, and colorectal cancers, as well as nutrition and physical activity. For additional information, visit nmanet.org.

National African American Tobacco Education Network (NAATEN)

NAATEN is a collaboration of national, state, and community-based organizations serving the African American community. The network's goal is to eliminate tobacco use in the African American community by serving as a leader and unified voice on a national level and by engaging African American organizations in the prevention and reduction of tobacco use. For additional information, visit healthedcouncil.org/naaten.

African American Collaborative Obesity Research Network (AACORN)

AACORN is a collaboration of US researchers, scholars-in-training, and community-based research partners dedicated to improving the quality and quantity of research to address weight-related health issues in African American communities. For additional information, visit aacorn.org.

Sources of Statistics

New Cancer Cases. The estimated numbers of new US cancer cases among African Americans in 2011 were calculated by fitting the estimated numbers of cancer cases that occurred each year in the US from 1995 through 2007 to a statistical forecasting model. The estimated numbers of US cases from 1995 through 2007 were calculated using incidence data for these years from 44 states that met the North American Association of Central Cancer Registries' (NAACCR) high-quality data standard for incidence and population data collected by the US Census Bureau.

Incidence Rates. Incidence rates are defined as the number of people per 100,000 who are diagnosed with a disease during a given period of time. Incidence data for this publication were collected either by the Surveillance, Epidemiology, and End Results (SEER) program or the National Program of Cancer Registries as reported by NAACCR, as stated.⁹⁵ Where noted, incidence rates adjusted for reporting delay are used. All incidence rates in this publication are age adjusted to the 2000 US standard population.

Cancer Deaths. The estimated number of US cancer deaths among African Americans in 2011 is calculated by fitting the numbers of cancer deaths from 1969 through 2007 to a statistical forecasting model. Data on the number of deaths are obtained from the National Center for Health Statistics (NCHS) at the Centers for Disease Control and Prevention (CDC).

Mortality Rates. Mortality rates or death rates are defined as the number of people per 100,000 who die from a disease during a given year. Death rates were reported by the SEER program using data on cancer deaths from the National Center for Health Statistics along with population data from the US Census Bureau.⁹⁶ All death rates in this publication were age adjusted to the 2000 US standard population.

Survival. Five-year relative survival rates are presented in this report for cancer patients diagnosed between 1999-2006 and followed through 2007. Relative survival rates are used to adjust for normal life expectancy (and events such as death from heart disease, accidents, and diseases of old age). These rates are calculated by dividing observed 5-year survival rates for cancer patients by observed 5-year survival rates for people in the general population who are similar to the patient group with respect to age, gender, race, and calendar year of observation. Five-year survival statistics presented in this publication were originally published in the *SEER Cancer Statistics Review, 1975-2007*.⁴

Probability of Developing or Dying of Cancer. Probabilities of developing or dying of cancer were calculated using DevCan 6.5.0, developed by the National Cancer Institute.⁹⁷ These probabilities reflect the average experience of people in the US and do not take into account individual behaviors and risk factors. For example, the estimate of 1 African American man in 13 developing lung cancer in a lifetime underestimates the risk for smokers and overestimates the risk for nonsmokers.

National Health Interview Survey (NHIS). The NHIS is a survey of the NCHS. The survey is designed to provide national prevalence estimates on personal, socioeconomic, demographic, and health characteristics, such as cigarette smoking and physical activity. Data are gathered through a computer-assisted personal interview of adults aged 18 and older. The NHIS is an annual survey that has been conducted by NCHS since 1957. For more information, visit cdc.gov/nchs/nhis.htm.

Screening Guidelines for the Early Detection of Cancer in Average-risk Asymptomatic People

Cancer Site	Population	Test or Procedure	Frequency
Breast	Women, age 20+	Breast self-examination	Beginning in their early 20s, women should be told about the benefits and limitations of breast self-examination (BSE). The importance of prompt reporting of any new breast symptoms to a health professional should be emphasized. Women who choose to do BSE should receive instruction and have their technique reviewed on the occasion of a periodic health examination. It is acceptable for women to choose not to do BSE or to do BSE irregularly.
		Clinical breast examination	For women in their 20s and 30s, it is recommended that clinical breast examination (CBE) be part of a periodic health examination, preferably at least every three years. Asymptomatic women aged 40 and over should continue to receive a clinical breast examination as part of a periodic health examination, preferably annually.
		Mammography	Begin annual mammography at age 40.*
Colorectal[†]	Men and women, age 50+	Tests that find polyps and cancer:	
		Flexible sigmoidoscopy, [§] or	Every five years, starting at age 50
		Colonoscopy, or	Every 10 years, starting at age 50
		Double-contrast barium enema (DCBE), [§] or	Every five years, starting at age 50
		CT colonography (virtual colonoscopy) [§]	Every five years, starting at age 50
Tests that mainly find cancer:	Annual, starting at age 50		
	Fecal occult blood test (FOBT) with at least 50% test sensitivity for cancer, or fecal immunochemical test (FIT) with at least 50% test sensitivity for cancer [‡] ; or		
	Stool DNA test (sDNA) [§]	Interval uncertain, starting at age 50	
Prostate	Men, age 50+	Prostate-specific antigen test (PSA) with or without digital rectal exam (DRE).	Asymptomatic men who have at least a 10-year life expectancy should have an opportunity to make an informed decision with their health care provider about screening for prostate cancer after receiving information about the uncertainties, risks, and potential benefits associated with screening. Men at average risk should receive this information beginning at age 50. Men at higher risk, including African American men and men with a first degree relative (father or brother) diagnosed with prostate cancer before age 65, should receive this information beginning at age 45. Men at appreciably higher risk (multiple family members diagnosed with prostate cancer before age 65) should receive this information beginning at age 40.
Cervix	Women, age 18+	Pap test	Cervical cancer screening should begin approximately three years after a woman begins having vaginal intercourse, but no later than 21 years of age. Screening should be done every year with conventional Pap tests or every two years using liquid-based Pap tests. At or after age 30, women who have had three normal test results in a row may get screened every two to three years with cervical cytology (either conventional or liquid-based Pap test) alone, or every three years with an HPV DNA test plus cervical cytology. Women 70 years of age and older who have had three or more normal Pap tests and no abnormal Pap tests in the past 10 years and women who have had a total hysterectomy may choose to stop cervical cancer screening.
Endometrial	Women, at menopause	At the time of menopause, women at average risk should be informed about risks and symptoms of endometrial cancer and strongly encouraged to report any unexpected bleeding or spotting to their physicians.	
Cancer-related checkup	Men and women, age 20+	On the occasion of a periodic health examination, the cancer-related checkup should include examination for cancers of the thyroid, testicles, ovaries, lymph nodes, oral cavity, and skin, as well as health counseling about tobacco, sun exposure, diet and nutrition, risk factors, sexual practices, and environmental and occupational exposures.	

*Beginning at age 40, annual clinical breast examination should be performed prior to mammography.

† Individuals with a personal or family history of colorectal cancer or adenomas, inflammatory bowel disease, or high-risk genetic syndromes should continue to follow the most recent recommendations for individuals at increased or high risk.

‡ For FOBT or FIT used as a screening test, the take-home multiple sample method should be used. A FOBT or FIT done during a digital rectal exam in the doctor's office is not adequate for screening.

§ Colonoscopy should be done if test results are positive.

¶ Information should be provided to men about the benefits and limitations of testing so that an informed decision about testing can be made with the clinician's assistance.

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