Cancer Statistics for African Americans, 1996

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Introduction
Cancer is a major public health concern for African Americans in the United States. To provide an up-to-date perspective regarding the occurrence of cancer in the African-American population, we provide information about African Americans concerning the leading causes of death in 1992, the number of reported deaths from cancer according to gender and age in 1992, estimates of the number of new cases and deaths from cancer that are expected to occur in 1996, cancer incidence and mortality rates, probabilities of developing cancer at specific ages, black-white differences regarding stage at diagnosis, and tobacco use.

Methods
In this report, we present information derived from vital statistics data as reported to the National Center for Health Statistics (NCHS); cancer incidence data collected by the Surveillance, Epidemiology, and End Results (SEER) program of the National Cancer Institute; population data from the Bureau of the Census; and tobacco-use data from special surveys, including the annual National Health Interview Surveys from the Centers for Disease Control and Prevention and the Monitoring the Future Study from the University of Michigan.1-6 The reported number of deaths for 1992 in Tables 1 to 4 are compiled from NCHS Vital Statistics data.1 The mortality rates in Tables 1, 2, and 7 are calculated using the number of deaths reported to the NCHS and US population data. The rates are standardized to the age distribution of the 1970 census population to remove the effects of age differences between populations.7

We use data on the underlying cause of death as reported to the NCHS to estimate the number of deaths from cancer in the upcoming year.1 We determine the number of deaths from cancer that we expect to occur among African Americans in 1996 by fitting the number of cancer deaths in each year for 1979 to 1992 to a quadratic function that is used to forecast the estimated number of cancer deaths for the years 1993 to 1996 (Table 5).8,9

We use cancer incidence data collected by the SEER program along with
US population data to estimate the number of new cancer cases that are expected to be diagnosed among African Americans in the upcoming year (Table 6).\textsuperscript{2-4} In the current SEER program, cancer statistics are tabulated for nine population-based cancer registries covering about 10 percent of the US population: the states of Connecticut, Hawaii, Iowa, New Mexico, and Utah and the metropolitan areas of San Francisco-Oakland, Detroit, Seattle, and Atlanta.\textsuperscript{2} We use a two-step procedure to estimate the number of new cancer cases expected to occur among African Americans in 1996. First, we apply annual incidence rates from the SEER program to annual US Census Bureau population projections to estimate the number of cancer cases diagnosed each year from 1979 to 1992.\textsuperscript{2-4} Next we fit these annual estimates to a quadratic function that is used to forecast the estimates of the number of new cancer cases for the years 1993 to 1996.\textsuperscript{8,9}

The cancer incidence rates for African Americans and whites that are presented in Table 8 are reported by the SEER program for the years 1988 to 1992.\textsuperscript{2} These rates are standardized to the age distribution of the 1970 US population.\textsuperscript{7}

The estimated probabilities of developing invasive cancers at certain ages among African Americans are presented in Table 9. These probabilities are calculated by applying age-specific incidence and mortality rates from the SEER program for the years 1990 to 1992 to a hypothetical group of 10 million people.\textsuperscript{2,10} For each five-year age interval from 0-4 through 95 and older, the number of people developing a specific cancer and the number of people dying from other causes are calculated. The probability of being diagnosed with a specific cancer during a given age interval is estimated by dividing the number of people developing cancer in that age interval by the number of people alive and free of that cancer at the beginning of the interval. The lifetime probability of developing a specific cancer is estimated by summing all cancer cases that occur in the hypothetical group and dividing by 10 million. This procedure for estimating interval and lifetime cancer risk does not assume that all people live to the end of an age interval or to any fixed age.

**Mortality**

Among African Americans, cancer is the second leading cause of death, responsible for 58,401 deaths in 1992; only heart diseases exceed cancer as a cause of mortality (Table 1). This is similar to the major causes of death profile for all Americans.\textsuperscript{11} In 1992, the five leading causes of cancer death in African Americans were cancers of the lung (15,472), colon-rectum (6,073), prostate (5,485), female breast (4,779), and pancreas (3,180) (Tables 3 and 4). The mortality rates for these cancers among African Americans in 1992 were 61.5 per 100,000 for lung, 23.1 per 100,000 for colon-rectum, 55.6 per 100,000 for prostate, 30.9 per 100,000 for female breast, and 12.3 per 100,000 for pancreas. Among African-American children younger than 15 years, death from cancer ranks seventh among the leading causes of death (Table 2). The five leading causes of death among African-American children are diseases of infancy, congenital anomalies, accidents, homicide, and heart disease, which account for more than two thirds of the deaths.

We estimate that about 62,670 African Americans will die from cancer during 1996—33,830 men and 28,840 women (Table 5). Lung cancer accounts for the largest proportion of the deaths from cancer among both African-American men (32 percent) and women (20 percent), followed by prostate cancer in men (19 percent) and breast cancer in women (18 percent), with colorectal cancers and cancer of the pancreas ranked third and fourth.
Although cancer accounts for a lower percentage of all deaths among African Americans (21.7 percent, Table 1) than among all races combined (23.9 percent), the age-adjusted mortality rate in 1992 is 32 percent higher for African Americans (224.8 per 100,000) than for all races combined (172.2 per 100,000). The rate for all races combined is similar to the rate of 168.7 per 100,000 for whites. Several reasons, including higher incidence rates, later stage at diagnosis, and a generally poorer survival experience, have been offered to explain the higher cancer mortality in African Americans than in any other racial or ethnic population in the United States.

To examine the magnitude of the differences in cancer mortality rates between African Americans and whites, we computed the ratio of the mortality rate for African Americans to the mortality rate for whites for a number of cancer sites (Table 7). Among males, the sites with the largest ratios are cancers of the esophagus and larynx. Among females, the largest ratios are for multiple myeloma and cancers of the esophagus and uterine cervix.

Between 1960-1962 and 1990-1992, cancer mortality rates in African Americans have increased 62 percent for males and 16 percent for females. This compares to 19 percent and five percent, respectively, for all races combined. Large increases occurred for cancers of the lung (170 percent for males and 464 percent for females) and larynx (77 percent for males and 210 percent for females) and are associated with increased smoking during the period from 1930 through 1960. For both genders, mortality for multiple myeloma increased about 153 percent and mortality related to non-Hodgkin’s lymphoma increased about 80 percent. In contrast to these increases for both African-American men and women, mortality related to Hodgkin’s disease decreased more than 50 percent, and stomach cancer mortality decreased nearly 50 percent. Among African-American males, cancer mortality rates increased more than 50 percent for oral cancers and nonmelanoma skin cancers and cancers of the colon, prostate, and kidney. Among African-American females, kidney and esophageal cancer mortality increased 56 percent, and large decreases occurred for nonmelanoma skin cancers and for rectal, cervical, and other uterine cancers.

Incidence

During 1996, about 136,480 cancers are expected to be newly diagnosed in African Americans in the United States. Of these, 58 percent are expected to occur in males and 42 percent in females (Table 6). The most commonly diagnosed cancer in African-American males is prostate cancer (34,400), followed by cancers of the lung (11,600) and of the colon-rectum (6,800). The most common cancer in African-American females is breast cancer (16,600), followed by the same two cancers as in African-American males: lung (8,800) and colon-rectum (7,700).

We used ratios of cancer incidence rates in African Americans to cancer incidence rates in whites to examine the magnitude of racial differences in incidence (Table 8). Cancer incidence rates among African Americans are nearly twice as high or higher for several cancer sites (Table 8). Among African-American men, cancer incidence rates are at least two times higher than among whites for multiple myeloma and cancers of the esophagus, larynx, and liver. Among African-American women, rates are at least twice as high for cancer of the esophagus and multiple myeloma.

Based on SEER data from 1986 to 1991, African Americans are more likely than whites to have their cancers diagnosed at a late stage (Fig. 1). This relationship persists regardless of site, and the largest differences occur for melano-
mas and cancers of the oral cavity and uterine corpus.

Similar to the data for all Americans, African-American men have a one-in-two lifetime risk of developing cancer, and for African-American women, the probability is one in three (Table 9). Before age 60 years, African Americans have a higher probability of developing any of the four major cancers than all races combined; this relationship does not persist for probabilities of developing cancer at older ages. The probabilities presented in Table 9 should be interpreted with caution because the probability of developing cancer does not take into account individual behaviors and risk factors. For example, the estimated 5.02 percent of African-American females likely to develop lung cancer during their lifetimes is a low estimate for smokers and a high estimate for people who do not smoke or who have exposure only to environmental tobacco smoke.

Cigarette Use Among African Americans

About 30 percent of all cancer deaths can be attributed to smoking. Although cigarette smoking has dropped off impressively in adults since the mid-1960s, the decline has slowed in the 1990s (Fig. 2). Nevertheless, as noted previously with the large increases in lung cancer mortality over the last several decades, cigarette smoking habits from the past continue to impact on current cancer morbidity and mortality. According to most recent data from the National Health Interview Survey in 1993, about 46 million adults in the United States were smokers, and about five million of these were African Americans. Overall, there were no significant differences between the percentage of African Americans who smoke (26.0 percent; 95-percent confidence limits [CL], 24.0 percent-28.0 percent) and the percentage of whites who smoke (25.4 percent; 95-percent CL, 24.6 percent-26.2 percent). However, significantly more African-American males (32.4 percent; 95-percent CL, 29.0 percent-35.8 percent) than African-American females (21.0 percent; 95-percent CL, 18.8 percent-23.2 percent) were smoking in 1993. Among African Americans 25 years and older, those who had less than a high school education were more likely to smoke than those who were better educated.

A promising trend can be found in the smoking behaviors of young African Americans. According to data from the Monitoring the Future Study conducted by the University of Michigan, African-American high school seniors are less likely to smoke than white high school seniors, particularly since the 1980s (Fig. 3). While the decline in cigarette smoking has leveled off during the 1980s for white youths, cigarette smoking among African-American youths has continued to decline. In 1977, the gap between African-American and white youths who were smoking cigarettes daily was about four percent; in 1994, the difference had increased to about 18 percent. According to 1993 data on young adults aged 18 to 24 years from the National Health Interview Survey, young white males had the highest smoking levels (30.4 percent), followed by young white females (26.8 percent), young African-American males (19.9 percent), and young African-American females (8.2 percent).

Summary

Although cancer remains a major public health burden for African Americans, progress is being achieved. For both genders, stomach cancer mortality and mortality related to Hodgkin’s disease showed large decreases over the past 30 years. Among African-American females, large decreases in cancer mortality occurred for nonmelanoma skin cancers, rectal cancers, and cervical and other uterine cancers. Tobacco use continues to decline among African Americans and, at pre-
sent, is significantly lower among African-American youths than among their white counterparts.

Despite these successes, additional work remains. Increased patient education regarding self-examinations and improved access to cancer screening are necessary to reduce the high percentage of cancers diagnosed at late stages among African Americans. Improved screening ultimately would increase survival and decrease cancer mortality. Some research has suggested that the increased morbidity and mortality in African Americans are related to poverty, lower education, and inadequate access to care as opposed to inherent racial characteristics. A recent study of black-white differences according to stage at diagnosis of breast cancer confirms some of these factors but also suggests that multiple factors may explain these differences, including mammograms, having a breast examination by a physician, and a history of patient delay. Such observations point to the importance of enacting broad social policies and establishing support mechanisms to diminish the impact of cancer in the African-American community.

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Table 1
Mortality for Leading Causes of Death Among African Americans, United States, 1992

| Rank | Cause of Death                  | Number of Deaths | Death Rate per 100,000 Population* | Percent of Total Deaths |
|------|--------------------------------|------------------|------------------------------------|-------------------------|
|      | All Causes                      | 269,219          | 959.6                              | 100.0                   |
| 1    | Heart Diseases                  | 75,600           | 281.8                              | 28.1                    |
| 2    | Cancer                          | 58,401           | 224.8                              | 21.7                    |
| 3    | Cerebrovascular Diseases        | 17,044           | 62.8                               | 6.3                     |
| 4    | Homicide                        | 12,318           | 35.5                               | 4.6                     |
| 5    | Accidents                       | 11,820           | 37.6                               | 4.4                     |
| 6    | HIV Infection                   | 11,378           | 31.0                               | 4.2                     |
| 7    | Diabetes                        | 8,653            | 33.0                               | 3.2                     |
| 8    | Pneumonia & Influenza           | 7,074            | 24.8                               | 2.6                     |
| 9    | Diseases of Infancy             | 6,176            | 16.6                               | 2.3                     |
| 10   | Chronic Obstructive Lung Disease| 5,857            | 22.1                               | 2.2                     |
| 11   | Nephritis                       | 3,889            | 14.2                               | 1.4                     |
| 12   | Septicemia                      | 3,607            | 13.0                               | 1.3                     |
| 13   | Cirrhosis of Liver              | 3,315            | 12.1                               | 1.2                     |
| 14   | Hypertensive Disease            | 2,327            | 8.7                                | 0.9                     |
| 15   | Congenital Anomalies            | 2,167            | 6.1                                | 0.8                     |

*Age-adjusted to the 1970 US standard population.

Table 2
Mortality for Leading Causes of Death Among African-American Children Under Age 15, United States, 1992

| Rank | Cause of Death                  | Number of Deaths | Death Rate per 100,000 Population* | Percent of Total Deaths |
|------|--------------------------------|------------------|------------------------------------|-------------------------|
|      | All Causes                      | 15,023           | 42.1                               | 100.0                   |
| 1    | Diseases of Infancy             | 6,172            | 16.6                               | 41.1                    |
| 2    | Congenital Anomalies            | 1,776            | 4.9                                | 11.8                    |
| 3    | Accidents                       | 1,563            | 4.9                                | 10.4                    |
| 4    | Homicide                        | 573              | 1.8                                | 3.8                     |
| 5    | Heart Diseases                  | 392              | 1.1                                | 2.6                     |
| 6    | Pneumonia & Influenza           | 291              | 0.8                                | 1.9                     |
| 7    | Cancer                          | 233              | 0.8                                | 1.6                     |
| 8    | HIV Infection                   | 220              | 0.6                                | 1.5                     |
| 9    | Septicemia                      | 130              | 0.4                                | 0.9                     |
| 10   | Chronic Obstructive Lung Disease| 96               | 0.3                                | 0.6                     |
| 11   | Anemias                         | 94               | 0.3                                | 0.6                     |
| 12   | Cerebral Palsy                  | 90               | 0.3                                | 0.6                     |
| 13   | Cerebrovascular Diseases        | 81               | 0.2                                | 0.5                     |
| 14   | Intestinal Infections           | 73               | 0.2                                | 0.5                     |
| 15   | Diseases of the Upper Respiratory Tract | 71         | 0.2                                | 0.5                     |

*Age-adjusted to the 1970 US standard population.
Table 3
Reported Deaths for the Five Leading Cancer Sites Among African-American Males by Age, United States, 1992

| All Ages         | Under 15 | 15-34 | 35-54 | 55-74 | 75+ |
|------------------|----------|-------|-------|-------|-----|
| All Cancer*      | 32,155   | 117   | 547   | 4,904 | 17,299 | 9,286 |
| Lung             | 10,530   |       |       |       |       |       |
| Leukemia         |          | 37    | 96    | 1,693 | 6,554 | 3,001 |
| Prostate         | 5,485    |       |       |       |       |       |
| Brain & CNS      |          | 11    | 44    | 318   | 1,450 | 1,015 |
| Colon & Rectum  | 2,887    |       |       |       |       |       |
| Pancreas         | 1,503    |       |       |       |       |       |
| Esophagus        | 1,373    |       |       |       |       |       |

*Includes two men with unknown age.
CNS = central nervous system

Table 4
Reported Deaths for the Five Leading Cancer Sites Among African-American Females by Age, United States, 1992

| All Ages         | Under 15 | 15-34 | 35-54 | 55-74 | 75+ |
|------------------|----------|-------|-------|-------|-----|
| All Cancer*      | 26,246   | 116   | 641   | 4,887 | 12,607 | 7,992 |
| Lung             | 4,942    |       |       |       |       |       |
| Brain & CNS      |          | 34    | 148   | 1,594 | 2,984 | 1,349 |
| Breast           | 4,779    | 29    | 83    | 811   | 2,035 | 1,121 |
| Colon & Rectum  | 3,186    | 16    | 75    | 388   | 1,422 | 998  |
| Pancreas         | 1,677    | 9     | 75    | 380   |       |       |
| Uterine Cervix   | 1,068    | 6     | 35    | 170   | 549   | 444  |

*Includes three women with unknown age.
CNS = central nervous system
### Table 5
Estimated Cancer Deaths Among African Americans by Sex for All Sites, United States, 1996*

| Group                                      | Total | Male | Female |
|--------------------------------------------|-------|------|--------|
| All Sites                                  | 62,670| 33,830| 28,840 |
| Buccal Cavity & Pharynx (ORAL)             | 1,270 | 940  | 330    |
| Tongue                                     | 310   | 220  | 80     |
| Mouth                                      | 220   | 140  | 80     |
| Pharynx                                    | 740   | 570  | 170    |
| Digestive Organs                           | 15,900| 8,290| 7,610  |
| Esophagus                                  | 1,810 | 1,300| 510    |
| Stomach                                    | 2,500 | 1,400| 1,100  |
| Small Intestine                            | 150   | 80   | 70     |
| Large Intestine (COLORECTUM)               | 5,400 | 2,500| 2,900  |
| Rectum                                     | 910   | 510  | 400    |
| Liver and Biliary Passages                 | 1,710 | 950  | 760    |
| Pancreas                                   | 3,300 | 1,500| 1,800  |
| Other and Unspecified Digestive            | 120   | 50   | 70     |
| Respiratory System                         | 17,510| 11,370| 6,140 |
| Larynx                                     | 790   | 620  | 170    |
| LUNG                                       | 16,600| 10,700| 5,900 |
| Other & Unspecified Respiratory            | 120   | 50   | 70     |
| Bone                                       | 140   | 70   | 70     |
| Connective Tissue                          | 440   | 180  | 260    |
| Melanoma of Skin                           | 130   | 60   | 70     |
| BREAST                                     | 5,240 | 40   | 5,200  |
| Genital Organs                             | 9,820 | 6,460| 3,360  |
| Cervix                                     | 1,100 | 1,100| 1,100  |
| Corpus & Unspecified (UTERUS)              | 940   |      | 940    |
| Ovary                                      | 1,200 |      | 1,200  |
| Other & Unspecified Genital, Female        | 120   |      | 120    |
| Prostate                                   | 6,400 | 6,400| 600    |
| Testis                                     | 20    | 20   | 20     |
| Other & Unspecified Genital, Male          | 40    | 40   | 40     |
| Urinary Organs                             | 1,970 | 1,130| 840    |
| Bladder                                    | 920   | 510  | 410    |
| Kidney & Other Urinary                     | 1,050 | 620  | 430    |
| Brain & Central Nervous System             | 780   | 380  | 400    |
| Endocrine Glands                           | 160   | 60   | 100    |
| Thyroid                                    | 90    | 30   | 60     |
| Other Endocrine                            | 70    | 30   | 40     |
| Leukemia                                   | 1,730 | 930  | 800    |
| Lymphocytic Leukemia                       | 580   | 330  | 250    |
| Myelocytic Leukemia                        | 710   | 360  | 350    |
| Other & Unspecified Leukemia               | 440   | 240  | 200    |
| Other Blood & Lymph Tissues                | 3,460 | 1,760| 1,700  |
| Hodgkin’s Disease                          | 170   | 100  | 70     |
| Non-Hodgkin’s Lymphoma                     | 1,580 | 850  | 730    |
| Multiple Myeloma                           | 1,710 | 810  | 900    |
| All Other & Unspecified Sites†             | 4,120 | 2,160| 1,960  |

*Excludes basal and squamous cell skin cancers and in situ carcinomas except bladder.
† Includes about 2,200 nonmelanoma skin cancer deaths.
### Table 6
Estimated New Cancer Cases Among African Americans by Sex for All Sites, United States, 1996*

| All Sites                        | Total  | Male  | Female |
|---------------------------------|--------|-------|--------|
| Total                           | 136,480| 78,750| 57,730 |
| Buccal Cavity & Pharynx (ORAL)  | 3,510  | 2,440 | 1,070  |
| Tongue                          | 790    | 650   | 140    |
| Mouth                           | 1,520  | 940   | 580    |
| Pharynx                         | 1,200  | 850   | 350    |
| Digestive Organs                | 26,490 | 13,750| 12,740 |
| Esophagus                       | 2,230  | 1,600 | 630    |
| Stomach                         | 3,000  | 1,900 | 1,100  |
| Small Intestine (COLON-RECTUM)  | 630    | 420   | 210    |
| Large Intestine                 | 11,000 | 4,900 | 6,100  |
| Rectum                          | 3,500  | 1,900 | 1,600  |
| Liver and Biliary Passages      | 2,250  | 1,300 | 950    |
| Pancreas                         | 3,500  | 1,600 | 1,900  |
| Other and Unspecified Digestive | 380    | 130   | 250    |
| Respiratory System              | 22,580 | 13,240| 9,340  |
| Larynx                          | 1,780  | 1,400 | 380    |
| LUNG                            | 20,400 | 11,600| 8,800  |
| Other & Unspecified Respiratory | 400    | 240   | 160    |
| Bone                            | 200    | 70    | 130    |
| Connective Tissue               | 710    | 380   | 330    |
| Melanoma of Skin                | 240    | 180   | 60     |
| BREAST                          | 16,760 | 160   | 16,600 |
| Genital Organs                  | 41,190 | 34,600| 6,590  |
| Cervix                          | 2,300  | 2,300 | 0      |
| Corpus & Unspecified (UTERUS)   | 2,100  | 2,100 | 0      |
| Ovary                           | 1,700  | 1,700 | 0      |
| Other & Unspecified Genital, Female | 490 | 490 | 0      |
| Prostate                        | 34,400 | 34,400| 0      |
| Testis                          | 80     | 80    | 0      |
| Other & Unspecified Genital, Male | 120 | 120 | 0      |
| Urinary Organs                  | 5,700  | 3,400 | 2,300  |
| Bladder                         | 2,700  | 1,500 | 1,200  |
| Kidney & Other Urinary          | 3,000  | 1,900 | 1,100  |
| Brain & Central Nervous System  | 840    | 420   | 420    |
| Endocrine Glands                | 1,280  | 330   | 950    |
| Thyroid                         | 1,150  | 260   | 890    |
| Other Endocrine                 | 130    | 70    | 60     |
| Leukemia                        | 2,280  | 1,180 | 1,100  |
| Lymphocytic Leukemia            | 870    | 350   | 520    |
| Myelocytic Leukemia             | 1,070  | 560   | 510    |
| Other & Unspecified Leukemia    | 340    | 270   | 70     |
| Other Blood & Lymph Tissues     | 7,900  | 4,500 | 3,400  |
| Hodgkin’s Disease               | 900    | 400   | 500    |
| Non-Hodgkin’s Lymphoma          | 4,500  | 3,000 | 1,500  |
| Multiple Myeloma                | 2,500  | 1,100 | 1,400  |
| All Other & Unspecified Sites   | 6,800  | 4,100 | 2,700  |

*Excludes basal and squamous cell skin cancers and in situ carcinomas except bladder.
### Table 7
Cancer Sites for Which Mortality Rates* Among African Americans Exceed Mortality Rates Among Whites, by Sex, United States, 1988-1992

| Site                   | Male | Female |
|------------------------|------|--------|
|                        | African American | White | Ratio of African American to White | African American | White | Ratio of African American to White |
| All Sites              | 317.5 | 212.8 | 1.5 | 168.2 | 140.0 | 1.2 |
| Lung                   | 105.3 | 72.5  | 1.4 | –     | –     | –   |
| Breast                 | –     | –     | –   | 31.3  | 27.0  | 1.1 |
| Prostate               | 53.5  | 24.0  | 2.2 | –     | –     | –   |
| Colon and Rectum       | 28.1  | 22.9  | 1.2 | 20.4  | 15.3  | 1.3 |
| Esophagus              | 14.8  | 5.3   | 2.8 | 3.7   | 1.2   | 3.1 |
| Pancreas               | 14.3  | 9.7   | 1.5 | 10.4  | 6.9   | 1.5 |
| Stomach                | 13.6  | 6.1   | 2.2 | 5.7   | 2.7   | 2.1 |
| Oral                   | 9.2   | 4.1   | 2.2 | 2.2   | 1.6   | 1.4 |
| Multiple Myeloma       | 7.3   | 3.4   | 2.1 | 5.0   | 2.2   | 2.3 |
| Uterine Cervix         | –     | –     | –   | 6.7   | 2.5   | 2.7 |
| Liver                  | 6.6   | 3.8   | 1.7 | 2.7   | 1.8   | 1.5 |
| Larynx                 | 5.5   | 2.3   | 2.4 | –     | –     | –   |
| Corpus and Unspecified Uterus | –     | –     | –   | 6.0   | 3.2   | 1.9 |

* Rates per 100,000 age-adjusted to the 1970 US standard population.

### Table 8
Cancer Sites for Which Incidence Rates* Among African Americans Exceed Incidence Rates Among Whites, by Sex, United States, 1988-1992

| Site                   | Male | Female |
|------------------------|------|--------|
|                        | African American | White | Ratio of African American to White | African American | White | Ratio of African American to White |
| All Sites              | 430.5 | 462.9 | 1.1 | 168.2 | 140.0 | 1.2 |
| Prostate               | 187.6 | 139.4 | 1.3 | –     | –     | –   |
| Lung                   | 124.3 | 80.2  | 1.5 | 46.8  | 42.5  | 1.1 |
| Colon and Rectum       | 62.7  | 55.7  | 1.1 | 45.5  | 38.0  | 1.2 |
| Oral                   | 23.2  | 15.6  | 1.5 | 6.6   | 6.3   | 1.0 |
| Stomach                | 18.7  | 9.9   | 1.9 | 7.8   | 4.1   | 1.9 |
| Esophagus              | 16.7  | 5.7   | 2.9 | 4.7   | 1.6   | 2.9 |
| Pancreas               | 15.2  | 10.2  | 1.5 | 12.2  | 7.6   | 1.6 |
| Kidney                 | 13.9  | 12.5  | 1.1 | 6.5   | 6.3   | 1.0 |
| Multiple Myeloma       | 11.0  | 5.2   | 2.1 | 7.9   | 3.3   | 2.4 |
| Uterine Cervix         | –     | –     | –   | 13.4  | 8.0   | 1.7 |
| Larynx                 | 8.5   | 4.2   | 2.0 | 2.7   | 1.6   | 1.7 |
| Liver                  | 7.9   | 3.8   | 2.1 | 2.5   | 1.5   | 1.7 |

* Rates per 100,000 age-adjusted to the 1970 US standard population.
| Table 9 | Percentage of African-American Population (Probability) Developing Invasive Cancers at Certain Ages, United States, 1990–1992 |
|---------|-------------------------------------------------|
|         | Birth to 39 Years | 40 to 59 Years | 60 to 79 Years | Birth to Death (Ever) |
| All sites | Male | 1.37 (1 in 73) | 10.48 (1 in 10) | 38.53 (1 in 3) | 40.51 (1 in 2) |
|          | Female | 1.66 (1 in 60) | 8.99 (1 in 11) | 20.25 (1 in 5) | 32.42 (1 in 3) |

|          | Male | 0.06 (1 in 1,667) | 1.06 (1 in 94) | 3.93 (1 in 25) | 4.47 (1 in 22) |
|          | Female | 0.08 (1 in 1,250) | 0.94 (1 in 106) | 3.45 (1 in 29) | 5.42 (1 in 18) |

|          | Male | 0.0027 (1 in 37,000) | 1.83 (1 in 55) | 17.45 (1 in 6) | 16.28 (1 in 6) |

|          | Male | 0.10 (1 in 1,000) | 2.81 (1 in 36) | 8.54 (1 in 12) | 9.15 (1 in 11) |
|          | Female | 0.06 (1 in 1,667) | 1.30 (1 in 77) | 3.76 (1 in 27) | 5.02 (1 in 20) |

Source: National Cancer Institute, Applied Research Branch, 1995.
Figure 1
Percent of Cancer Cases Among Whites and African Americans Diagnosed at Local and Distant Stage, United States, 1986-1991

Source: Surveillance, Epidemiology, and End Results Program, 1995.
**Figure 2**
Trends in Current Cigarette Smokers, Adults 18 and Older by Race and Sex, United States, 1965-1993*

*Trend-adjusted to the 1970 US population.
Source: National Health Interview Surveys.

**Figure 3**
Trends in Daily Cigarette Smoking Among 12th Graders by Race, United States, 1977-1994

Source: Monitoring the Future Study, The University of Michigan.