INTRODUCTION

In 2003, approximately 1.3 million Americans will be diagnosed with invasive cancer. Racial/ethnic minorities are expected to account for a disproportionate number of these cancers. African Americans, in particular, have a 10 percent higher incidence rate and a 30 percent higher death rate from all cancers combined than whites. In this paper, we provide updated data on cancer incidence, mortality, survival rates, and several lifestyle behaviors relevant to cancer in African Americans.

MATERIALS AND METHODS

Data Sources

Incidence and five-year relative survival data were obtained from the Surveillance, Epidemiology, and End Results program of the National Cancer Institute, which covers about 10 percent of the US population. Population data were obtained from the US Census Bureau. Mortality data were obtained from the National Center for Health Statistics. For
1999 mortality data, causes of death were coded and classified according to the Tenth Revision of the International Classification of Diseases (ICD-10) replacing ICD-9 coding used in the United States for deaths occurring during 1979 to 1998. Cancer cases were classified according to the International Classification of Diseases for Oncology. Data on behavioral risk factors were obtained from state and national population-based surveillance systems (the Behavioral Risk Factor Surveillance System, Youth Risk Behavior Surveillance Survey, and National Health Interview Survey).

Estimated New Cancer Cases

New cancer cases are estimated because the United States has no nationwide cancer registry. Therefore, exactly how many new cases of cancer are diagnosed each year in the United States and in each individual state is unknown. Consequently, we first estimated the number of new cancer cases occurring annually in the United States from 1979 through 1999 using the age-specific cancer incidence data collected by NCI’s SEER program coupled with population data reported by the US Census Bureau. Using an autoregressive quadratic model based on cases from those previous years, we forecast the number of cases expected to be diagnosed in the United States in the year 2003.

The autoregressive model used to estimate incident cases for other cancers was not compatible with the trends observed in prostate cancer incidence rates, however, because rates increased quickly between 1988 and 1992 and then declined just as sharply from 1992 to 1995, and then eventually leveled off from 1995 to 1999. This trend likely reflects the widespread use of prostate-specific antigen (PSA) screening and the subsequent increase in early-stage cancer diagnoses in a previously unscreened population. Because the temporal trends in prostate cancer incidence now approximate that observed prior to the widespread use of PSA screening, we estimated the number of incident cases using a linear model based on data from 1979 to 1989 and 1995 to 1999 only.

The above-mentioned method cannot be used to estimate the number of cases for individual states, since many have incomplete data.
registration of new cases. To derive the estimates, we relied on mortality data from each state, and assumed that the ratio of cancer deaths to cancer cases was the same for individual states as for the United States as a whole.

**Estimated Cancer Deaths**

To estimate the number of cancer deaths expected to occur in the United States and in each state in the year 2003, we used the underlying cause-of-death data from death certificates as reported to the National Center for Health Statistics. Using the aforementioned regression model on recorded number of cancer deaths occurring annually from 1979 to 1999, we forecast the number of cancer deaths expected to occur in 2003.

**Other Statistics**

Trends in cancer incidence, mortality, and five-year relative survival rates for selected cancers are provided based on data from 1973 through 1999. Cancer incidence and death rates are standardized to the 2000 US standard population and expressed per 100,000 person-years. We also provide mortality statistics for the leading causes of death (Table 1) and rate ratios for African Americans relative to whites (Tables 2 and 3). This report also provides recent prevalence estimates of behavioral factors related to cancer (i.e., tobacco use, physical activity, use of cancer screening); these estimates are derived from national and state population-based surveys of adults and youths. The Youth Risk Behavior Surveillance System, a survey of high school students, is routinely administered in all randomly-selected schools in participating states (or large metropolitan cities); consenting students self-report their behavioral information. The Behavioral Risk Factor Surveillance System and the National Health Interview Survey are administered annually to adults by telephone and in-person, respectively. The methodological sampling techniques used in these surveys assure the random selection of participants. Therefore, appropriately-weighted estimates are considered representative of the adult (aged 18 and older) civilian population. The weighted estimates are calculated in SUDAAN, a specialized program that adjusts for varying sampling selection, non-response, non-coverage, and other post-stratification factors in calculating point estimates and standard errors.

**SELECTED FINDINGS**

**Expected Numbers of New Cancer Cases**

In the year 2003, about 132,700 new cancer cases are expected to be diagnosed among African Americans (Figure 1). The most commonly diagnosed cancers among African-American men will be prostate cancer (39 percent), followed by cancer of the lung (16 percent), and colon and rectum (9 percent). The most common cancers among African-American women will be breast (31 percent), followed by lung (13 percent), and colon and rectum cancers (13 percent).

**Expected Numbers of Cancer Deaths**

About 63,100 African Americans are expected to die from cancer in 2003 (Figure 1). Lung cancer accounts for the largest number of cancer deaths among both men (29 percent) and women (21 percent), followed by prostate cancer in men (16 percent), and breast cancer in women (19 percent). For both men and women, cancer of the colon and rectum and cancer of the pancreas are expected to rank third and fourth, respectively, as the leading causes of cancer death.

**Comparative Cancer Rates in African Americans and Whites**

Tables 2 and 3 show rate ratios in descending order for selected cancers in which incidence and death rates are greater or smaller in African Americans compared with whites. In African-
American males, the incidence rate ratios range from 2.0 for myeloma to 0.5 for urinary bladder. In general, the pattern seen in males is similar to that observed in females; however, incidence rate ratios are greater for African-American females. Similar disparities exist for death rates between African Americans and whites. In males, death rate ratios range from 2.4 for laryngeal cancers to 0.1 for melanoma. Among females, death rate ratios range from 2.3 for stomach cancers to 0.2 for melanoma.

**Trends in Cancer Incidence and Mortality**

In African Americans, incidence rates for all cancers combined increased from the early 1970s to early 1990s in both males and females, although the incidence rates were higher and increased faster in males than in females (Figure 2). During the 1990s, however, rates decreased in African-American males while stabilizing in African-American females. The decrease in incidence rates in men largely involved cancers of the lung and prostate. The mortality rate for all cancers combined increased among African Americans from 1973 to 1992, but decreased after 1992, by 1.2 percent per year on average (Figure 2). The decline for African-American males (2.1 percent per year since 1993) was larger than the decline for African-American females (0.4 percent per year since 1991).

**Female Breast**

Breast cancer is the most common cancer among African-American women; however, the incidence rate of newly-diagnosed cases is about 13 percent lower than in white women.
Breast cancer incidence has increased since the late 1970s, although there has been little change during the 1990s (Figure 3A). The increase may be attributable to earlier and greater diagnosis through increased use of breast cancer screening methods, particularly mammography. Breast cancer death rates also increased from 1973 to 1993 (Figure 4A) but declined thereafter, especially in younger women. The breast cancer death rate is 28 percent higher in African-American women than in white women, even though incidence for all ages combined is lower in African-American women. This racial differential may be due, in part, to latter stage at diagnosis, to differences in access to treatment, or to a greater likelihood of being diagnosed with estrogen-receptor-negative or more aggressive tumors that are less responsive to therapy.

**TABLE 2**

| Cancer Type† | African American | White | African American/White |
|--------------|------------------|-------|------------------------|
| Myeloma      | 13.1             | 6.5   | 2.0                    |
| Stomach      | 19.3             | 10.7  | 1.8                    |
| Esophagus    | 12.8             | 7.6   | 1.7                    |
| Larynx       | 12.2             | 7.1   | 1.7                    |
| Prostate     | 266.8            | 163.2 | 1.6                    |
| Liver and Intrahepatic Bile Duct | 10.3 | 6.4 | 1.6 |
| Lung and Bronchus | 125.6 | 84.4 | 1.5 |
| Pancreas     | 18.2             | 12.3  | 1.5                    |
| Oral Cavity and Pharynx | 21.8 | 16.5 | 1.3 |
| Kidney and Renal Pelvis | 18.4 | 15.6 | 1.2 |
| Colon and Rectum | 69.0 | 65.0 | 1.1 |
| Acute Myeloid Leukemia | 3.4 | 4.5 | 0.8 |
| Non-Hodgkin’s Lymphoma | 19.9 | 24.5 | 0.8 |
| Leukemia     | 12.6             | 16.7  | 0.8                    |
| Hodgkin’s Lymphoma | 2.7 | 3.4 | 0.8 |
| Myeloid Leukemia | 5.7 | 6.9 | 0.8 |
| Lymphomycytic Leukemia | 5.3 | 7.4 | 0.7 |
| Chronic Leukemia | 4.1 | 5.5 | 0.7 |
| Brain        | 4.6              | 8.3   | 0.6                    |
| Urinary Bladder | 19.3 | 39.8 | 0.5 |

| Cancer Type† | African American | White | African American/White |
|--------------|------------------|-------|------------------------|
| Myeloma      | 10.3             | 4.2   | 2.5                    |
| Stomach      | 10.3             | 4.6   | 2.2                    |
| Esophagus    | 4.4              | 2.0   | 2.2                    |
| Small Intestine | 2.9 | 1.5 | 1.9 |
| Larynx       | 2.9              | 1.6   | 1.8                    |
| Uterine Cervix | 13.6 | 8.1 | 1.7 |
| Pancreas     | 15.2             | 9.5   | 1.6                    |
| Intrahepatic Bile Duct | 4.0 | 2.5 | 1.6 |
| Liver and | 1.5 |
| Kidney and Renal Pelvis | 9.8 | 7.8 | 1.3 |
| Colon and Rectum | 56.1 | 47.1 | 1.2 |
| Soft Tissue (including heart) | 2.6 | 2.4 | 1.1 |
| Lung and Bronchus | 54.4 | 53.3 | 1.0 |
| Breast       | 123.7            | 140.9 | 0.9                   |
| Urinary Bladder | 7.7 | 10.2 | 0.8 |
| Leukemia     | 7.6              | 9.8   | 0.8                    |
| Uterine Corpus | 17.3 | 26.1 | 0.7 |
| Hodgkin’s Lymphoma | 13.3 | 19.3 | 0.7 |
| Ovary        | 12.0             | 18.1  | 0.7                    |
| Non-Hodgkin’s Lymphoma | 11.2 | 16.5 | 0.7 |
| Thyroid      | 5.6              | 10.0  | 0.6                    |

*Rates are per 100,000 and age adjusted to the 2000 US standard population.
†Site selected if cases greater than 100.
Source: Surveillance, Epidemiology, and End Results program, Division of Cancer Control and Population Sciences, National Cancer Institute, 2002.
Prostate cancer accounts for about 39 percent of all cancer cases diagnosed in African-American males (Figure 1). In 1999, the prostate cancer incidence rate was 58 percent higher in African-American men than in white men. From 1989 to 1992, prostate cancer incidence rates increased by 20.6 percent per year, but between 1992 and 1996, the incidence rate declined by approximately 5.7 percent per year. Incidence rates stabilized in the time period between 1996 and 1999 (Figure 3B). The dramatic short-term increase in prostate cancer incidence rates between 1989 and 1992 was likely due to earlier and more complete diagnosis through increased use of prostate-specific antigen (PSA) blood screening. Prostate cancer ranks as the second most common cause of cancer deaths among African-American males.

### Table 3

| Cancer Type† | African American | White | African American/White | Cancer Type† | African American | White | African American/White |
|--------------|------------------|-------|------------------------|--------------|------------------|-------|------------------------|
| Larynx       | 5.8              | 2.4   | 2.4                    | Stomach      | 6.8              | 3.0   | 2.3                    |
| Prostate     | 72.8             | 31.2  | 2.3                    | Myeloma      | 6.8              | 3.0   | 2.3                    |
| Stomach      | 14.2             | 6.3   | 2.3                    | Uterine Cervix | 6.2           | 2.8   | 2.2                    |
| Myeloma      | 9.2              | 4.5   | 2.0                    | Esophagus    | 3.5              | 1.7   | 2.1                    |
| Oral Cavity and Pharynx | 8.3    | 4.2   | 2.0                    | Uterine Corpus | 6.9          | 3.9   | 1.8                    |
| Esophagus    | 12.9             | 7.2   | 1.8                    | Larynx       | 0.9              | 0.5   | 1.8                    |
| Liver and    |                 |       |                        |              |                  |       |                        |
| Intrahepatic Bile Duct | 9.2    | 5.9   | 1.6                    | (including heart) | 1.9 | 1.3 | 1.5 |
| Lung and Bronchus | 109.1      | 79.7  | 1.4                    | Colon and Rectum | 25.4      | 18.0  | 1.4 |
| Pancreas     | 16.2             | 12.0  | 1.4                    | Pancreas     | 13.0             | 9.0   | 1.4                    |
| Small Intestine | 0.5            | 0.7   | 1.4                    | Liver and    |                  |       |                        |
| Colon and Rectum | 34.4           | 25.8  | 1.3                    | Intrahepatic Bile Duct | 3.9 | 2.8 | 1.4 |
| Kidney and   |                 |       |                        |              |                  |       |                        |
| Renal Pelvis | 6.2              | 6.2   | 1.0                    | Urinary Bladder | 3.1         | 2.3   | 1.3                    |
| Leukemia     | 9.3              | 10.6  | 0.9                    | Lung and Bronchus | 40.2      | 41.7  | 1.0                    |
| Lymphomycytic Leukemia | 3.0    | 3.3   | 0.9                    | Leukemia     | 5.6              | 6.1   | 0.9                    |
| Myeloid Leukemia | 3.7            | 4.5   | 0.8                    | Myeloid Leukemia | 2.5        | 2.8   | 0.9                    |
| Hodgkin’s Lymphoma | 8.5            | 11.8  | 0.7                    | Ovary        | 7.6              | 9.3   | 0.8                    |
| Non-Hodgkin’s Lymphoma | 7.8          | 11.2  | 0.7                    | Hodgkin’s Lymphoma | 5.1       | 7.9   | 0.6                    |
| Urinary Bladder | 5.7            | 8.0   | 0.7                    | Non-Hodgkin’s Lymphoma | 4.7       | 7.5   | 0.6                    |
| Brain        | 5.5              | 6.0   | 0.5                    | Brain        | 2.3              | 4.1   | 0.6                    |
| Melanoma     | 0.5              | 4.4   | 0.1                    | Melanoma     | 0.5              | 2.1   | 0.2                    |

All Cancers 359.2 253.0 1.4 All Cancers 203.5 169.8 1.2

*Rates are per 100,000 and age adjusted to the 2000 US standard population.
†Site selected if number of deaths is greater than 100.
Source: Underlying mortality data provided by the National Center for Health Statistics. Available at: http://www.cdc.gov/nchs.
Among ethnic and racial groups, African-American males have the highest mortality rate. The death rate from prostate cancer in African-American men has been decreasing by 2.5 percent per year since 1993, after a long-term increasing trend (Figure 4B). Some of the decrease in mortality appears likely to be due to screening; however, the relative contribution of screening versus treatment is unknown. The decline in prostate cancer mortality began later in African-American men than in white men and has occurred more gradually.

### Lung and Bronchus

More African Americans die from lung cancer than from any other cancer, and lung cancer mortality rate is higher among African Americans than in any other racial or ethnic group. However, lung cancer incidence rates have decreased by 1.6 percent per year since 1984 among African-American males, while rates have remained stable since 1990 in African-American females (Figures 3A and 3B). Death rates among African-American males have also decreased substantially beginning in 1993 while continuing to increase in African-American females (Figures 4A and 4B). The decline in death rates among men is a result of decreases in the prevalence of smoking over the previous 30 years.

### Colon and Rectum

Colorectal cancer is the third most common cancer among both African-American men and women (Figure 1), and the second most...
common for both sexes combined. The incidence rate of colorectal cancer in African Americans increased rapidly in the 1970s, but has stabilized since the 1980s (Figures 3A and 3B). By comparison, the colorectal cancer incidence rate in whites increased through the mid-1980s, decreased significantly until 1995, and stabilized thereafter. Factors that may affect colorectal cancer incidence rates include screening, increased polyp removal (which prevents progression to invasive cancers), estrogen and progesterone replacement therapy in women, and patterns of diet, obesity, and physical activity or inactivity. Colorectal cancer is the third leading cause of cancer death among both African-American males and females (Figure 1). Overall, colorectal cancer death rates declined in African Americans from 1985 to 1999; however, the average annual reduction in death rates has been smaller among African Americans than in whites, 0.3 percent versus 1.8 percent, respectively (Figures 4A and 4B).

Cancer Survival

Five-year relative survival rates are commonly used to monitor progress in the early detection and treatment of cancer. In general, African Americans with cancer have a lower five-year relative survival rate than whites for each of the eleven selected cancers sites (Figure 5) and at all stages of diagnosis (Figure 6). These differences are believed to reflect a
combination of factors such as poverty and less access to medical care. The latter may result in delayed diagnosis of disease (so the cancer spreads to regional or distant sites) (Figure 7) and/or suboptimal treatment. Several studies have shown that survival rates are comparable between African Americans and whites when patients receive equal treatment.\textsuperscript{13,21}

The five-year relative survival rate for all cancers combined improved from approximately 27 percent during 1960 to 1963 to 53 percent during 1992 to 1998. The corresponding survival rates in whites increased from 39 percent to 64 percent during the same period.\textsuperscript{2}

**LIFESTYLE AND SOCIAL RISK FACTORS**

**Socioeconomic Status**

Socioeconomic inequalities strongly influence many aspects of health and chronic diseases, including cancer. Poverty affects nutrition, social support networks, risk-promoting lifestyles, and access to health care. African Americans constitute only 12 percent of the total US
population, yet comprise one-third of the nation’s poor. Racial disparities exist across the entire spectrum of cancer prevention, early detection, diagnosis, treatment, care, and social support.

**Tobacco**

Cigarette smoking causes approximately 30 percent of all cancer deaths in the United States. In addition to lung cancer, tobacco use causes cancers of the lip, oral cavity, larynx, esophagus, stomach, pancreas, liver, kidney, urinary bladder, uterine cervix, and myeloid leukemia.

African-American men aged 18 and above, have a higher prevalence of current cigarette smoking than white men, whereas the opposite is true in women (Figure 8A). In general, African Americans begin smoking regularly at an older age and smoke fewer cigarettes per day than do whites. However, African Americans have higher blood levels of cotinine, the major metabolite of nicotine, even when smoking the same number of cigarettes than whites, perhaps because each cigarette is smoked more intensively. The use of cigarettes with higher machine-measured yields of tar and nicotine is more common in African Americans than in...
whites. These brands are heavily marketed to African-American communities by the tobacco industry.

Current cigarette smoking by African-American high school students increased during much of 1990s, especially in African-American females. In African-American males, the prevalence of current smoking peaked by 1999 and declined significantly by 2001 (Figure 8B). These trends parallel the changes in adolescent smoking in other racial and ethnic groups. The recent decrease in youth smoking has been greatest in states that have substantially expanded tobacco control measures by increasing tobacco price (through higher taxes) and using counter-advertising directed at adolescents.

**Physical Activity**

Regular physical activity is critical for
maintaining a healthy body weight and is associated with lower risk of cancers of the colon and breast. Despite this compelling evidence, in 1999 only one-third of all adults participated in moderate and/or vigorous physical activity, five or more times per week (Table 4). In particular, one-third (33.2 percent) of African-American adults reported no leisure-time physical activity, with African-American females more likely to be physically inactive (38.8 percent) than African-American males (29.1 percent). The percentage of adults reporting either moderate or vigorous physical activity was also lower in African Americans than in whites (Table 4).

Use of Screening Tests

Screening tests are used to detect cancer early, at a stage when the disease is still highly
curable. Generally, screening-test utilization is similar between African Americans and whites (Table 5). Since 1987, mammography use among African-American females has greatly increased, from 29 percent to 66.7 percent. In contrast, cervical screening (Pap test) has remained unchanged since the early 1990s, although there has been a slight decrease in the percentage of older African-American females receiving a Pap test. The use of colorectal screening tests among African Americans has increased over the past several years, although the percentage of people being screened still remains low. Less than one-quarter of African-American and white adults had a fecal occult blood test within the past year (21.6 percent and 24.1 percent, respectively) and less than one-half had a flexible sigmoidoscopy within the past five years (Table 5). Prostate cancer screening prevalence (specifically PSA) is similar between African-American and white males, but the use of the digital rectal exam remains low in African-American males.

**DATA LIMITATIONS AND FUTURE CHALLENGES**

The estimates of new cancer cases and cancer deaths in this report should be interpreted with caution, since these estimates may vary year to year, especially for rare cancers and in states with smaller populations. For this
Persons who reported having smoked more than 100 cigarettes and who reported now smoking every day or on some days.

Sources: National Health Interview Survey (NHIS), 1990, 1992, 1994, 1995, 1997, 1998, 1999. National Center for Health Statistics, Centers for Disease Control and Prevention. NHIS, 2000. Morb Mortal Wkly Rep 2000;51(29). National Center for Health Statistics, Centers for Disease Control and Prevention.

**FIGURE 7**

Stage Distribution* for Selected Cancer Types for African Americans and Whites

*Stage distribution based on patients diagnosed between 1992 to 1998 and followed through 1999.

Source: Surveillance, Epidemiology, and End Results program, 1973 to 1999, Division of Cancer Control and Population Sciences, National Cancer Institute, 2002.

**FIGURE 8A**

Trends in the Percentage of Current Cigarette Smokers,* Adults 18+, US, 1990 to 1999

*Persons who reported having smoked more than 100 cigarettes and who reported now smoking every day or on some days.

Sources: National Health Interview Survey (NHIS), 1990, 1992, 1994, 1995, 1997, 1998, 1999. National Center for Health Statistics, Centers for Disease Control and Prevention. NHIS, 2000. Morb Mortal Wkly Rep 2000;51(29). National Center for Health Statistics, Centers for Disease Control and Prevention.
TABLE 4

| Participation in Physical Activity Among Adults by Race and Gender, US, * 2001 | Percent African American† | Percent White† |
|---|---|---|
| No Leisure-time Physical Activity | | |
| Total | 33.2 | 22.9 |
| Male | 29.1 | 20.5 |
| Female | 38.8 | 24.9 |
| Moderate Physical Activity‡ | | |
| Total | 38.8 | 47.9 |
| Male | 41.4 | 50.9 |
| Female | 33.1 | 45.2 |
| Vigorous Physical Activity§ | | |
| Total | 21.2 | 25.0 |
| Male | 27.2 | 30.6 |
| Female | 15.1 | 20.5 |

*Based on median value of participating states (50 US states and District of Columbia) with 50 or more respondents in a racial or ethnic group. Estimates exclude missing, don’t know/not sure, or refused responses.
†Non-Hispanic.
‡Activity (such as brisk walking, bicycling, vacuuming, or gardening) that causes small increases in breathing or heart rate at least five times a week, 30 minutes or more per session OR activity (such as running, aerobicics, or heavy yard work) that causes large increases in breathing or heart rate at least three times a week, 20 minutes or more per session.
§Activity (such as running, aerobicics, or heavy yard work) that causes large increases in breathing or heart rate at least three times a week, 20 minutes or more per session.

Source: Behavioral Risk Factor Surveillance System Public Use Data Tape 2001, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2002.

TABLE 5

| Cancer Screening Examinations, 2000 and 2001 | Non-Hispanic African Americans | Non-Hispanic Whites |
|---|---|---|
| Breast Cancer, 2000 | | |
| Mammogram* | 66.7 | 62.9 |
| Clinical Breast Exam (CBE)† | 69.9 | 68.8 |
| Mammogram and CBE‡ | 54.8 | 56.0 |
| Cervical Cancer, 2000 | | |
| Pap Test§ | 88.8 | 87.2 |
| Colon and Rectum Cancer, 2001 | | |
| Fecal Occult Blood Test (FOBT)# | 21.6 | 24.1 |
| Flexible Sigmoidoscopy** | 35.3 | 39.2 |
| Prostate Cancer, 2001 | | |
| Prostate-Specific Antigen (PSA) Test†† | 57.6 | 58.2 |
| Digital Rectal Exam (DRE)‡‡ | 49.5 | 57.4 |

*A mammogram within the past year for women 40 years and older.
†A clinical breast exam within the past year for women 40 and older.
‡Both a mammogram and clinical breast exam within the past year for women 40 and older.
§A Pap test within the past three years for women 18 and older.
#A fecal occult blood test using a home kit within the past year for adults 50 and older.
**A flexible sigmoidoscopy or colonoscopy within the past five years for adults 50 and older.
††A prostate-specific antigen test within the past year for men 50 and older.
‡‡A digital rectal exam within the past year for men 50 and older.

Source: Behavioral Risk Factor Surveillance System Public Use Data 2000 and 2001, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2001 and 2002, American Cancer Society Surveillance Research.

reason, the estimates should not be used to track year-to-year progress in reducing cancer incidence and mortality changes in cancer occurrence and deaths. The NCHS data on cancer deaths and death rates and the SEER data on cancer incidence rates are more informative in tracking trends.

Our estimates are projected from the most recent data available on incidence and mortality; however, available data are three- to four-years old. Unanticipated changes that may have occurred during the last three to four years are not captured by our modeling efforts. Finally, our estimates on cancer incidence rates are based on locations participating in the SEER program, which may not represent the entire United States.

The behavior data used in this report were derived from the BRFSS, YRBSS, and NHIS. These are state and national sources for behavioral data from population-based surveys. Participants’ self-reported information was used to derive estimates of behavior. No attempts were made to validate the self-reports. Adjustments for sample selection and non-response were made in the calculation of the estimates.

Despite these limitations, our estimates highlight the disproportionate burden of cancer in African Americans, which may, in part, be related to unequal access to medical care and differences in the receipt of treatment. Increased efforts to alleviate economic disparities and increase access to high-quality medical care along with culturally appropriate community-based interventions that affect healthy behavioral changes can help lessen the burden of cancer in African Americans.
Trends in the Percentage of Current Cigarette Smokers,* Non-Hispanic African-American High School Students, US, 1991 to 2001

*Smoked cigarette on one or more of the 30 days preceding the survey.

Sources: Youth Risk Behavior Surveillance Survey (YRBSS), 1991, 1993, 1995, 1997, 1999. National Center for Chronic Disease and Health Promotion, Centers for Disease Control and Prevention, YRBSS, 2001. Morb Mort Wkly Rep, 2001;51(19). Centers for Disease Control and Prevention.