

Cancer Statistics, 1999

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Introduction

Cancer is an important public health concern in the United States and around the world. To provide an up-to-date perspective on the occurrence of cancer, the American Cancer Society presents an overview of cancer frequency, incidence, mortality, and survival statistics for 1999.

Methods

ESTIMATED NEW CANCER CASES

Because the United States does not have a nationwide cancer registry, exactly how many new cases of cancer are diagnosed in the total United States and individual states each year is not known. Consequently, we estimated the number of new cancer cases occurring annually in the United States from 1979 through 1995 using population data reported by the US Bureau of the Census and age-specific cancer incidence rates collected by the

National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) program.¹ We fitted these annual cancer case estimates to an autoregressive quadratic model to forecast the number of cancer cases expected to be diagnosed in the total United States in 1999. This method has been described in detail elsewhere.²

Between 1987 and 1992, the incidence rate of prostate cancer increased 85%, followed by a decline of 28% between 1992 and 1995.³ The sharp increase in incidence followed by the decline in recent years probably reflects extensive use of prostate-specific antigen (PSA) screening in a previously unscreened population and the subsequent increase in diagnoses at an early stage.⁴ We assumed that the number of prostate cancer cases would approach the pattern of rates in effect before widespread use of PSA screening, and we estimated new cases of prostate cancer for 1999 using a linear projection based on data from 1979 to 1989.

Because cancer incidence rates and case counts for 1979 through 1995 were not available for many states, we could not use the methods mentioned earlier to estimate new cases for individual states. To derive these estimates, we assumed that the ratio of cancer deaths to cancer cases for each state was the same as the ratio for the United States. This method has been described in detail elsewhere.²

ESTIMATED CANCER DEATHS

We estimated the number of cancer deaths expected to occur in the United

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States in 1999 using underlying cause of death data from death certificates as reported to the National Center for Health Statistics.⁵ The numbers of cancer deaths occurring annually from 1979 to 1995 were fitted to an autoregressive quadratic model to forecast the number of cancer deaths expected to occur in the total United States in 1999. The estimated number of cancer deaths for each state was calculated with the same modeling procedure used for the total United States. These methods have been described in detail elsewhere.²

OTHER STATISTICS

Mortality statistics for the leading causes of death and the leading causes of cancer death and cancer mortality rates for 1930 to 1995 were obtained from the National Center for Health Statistics.⁵ Incidence rates, the probability of developing cancer, and 5-year relative survival rates were obtained from SEER.^{3,6}

Selected Findings

EXPECTED NUMBERS OF NEW CANCER CASES

In 1999, we estimate that about 1,221,800 new cases of invasive cancer will be diagnosed in the United States (Table 1). This estimate does not include carcinoma in situ of any site except the urinary bladder, and it does not include basal and squamous cell cancers of the skin. Approximately 1 million cases of basal and squamous cell skin cancers, 39,900 cases of breast carcinoma in situ, and 23,200 cases of melanoma carcinoma in situ are expected to be newly diagnosed in 1999.

Among men, the most common cancers in 1999 are expected to be cancers of the prostate, lung and bronchus, and colon and rectum (Fig. 1). Prostate is the leading site for cancer incidence, accounting for 29% of new cancer cases in men. This year, 179,300 new cases of prostate cancer are expected to be diagnosed.

Among women, the three most com-

monly diagnosed cancers are expected to be cancers of the breast, lung and bronchus, and colon and rectum (Fig. 1). Cancers occurring at these sites are expected to account for more than 50% of new cancer cases in women. Breast cancer alone is expected to account for 175,000 new cancer cases (29%) in 1999.

TRENDS IN CANCER INCIDENCE

For all sites combined, cancer incidence rates declined an average of -0.7% per year from 1990 to 1995, in contrast to increasing trends in earlier years.⁷ Similar recent declines are seen among many leading cancer sites (Figs. 3 and 4).

Breast cancer incidence rates have been approximately level during the 1990s; however, they appear to be decreasing in younger women. Decreases in colon and rectum cancer incidence began in the mid-1980s, and today these rates continue to decline significantly, on average -2.3% per year.⁷ A downturn in the incidence of lung and bronchus cancer in males began in the late 1980s, and during 1990 to 1995, incidence rates decreased significantly, -2.3% per year. Rates of incidence of lung and bronchus cancer among females are stabilizing. During 1990 to 1995, prostate cancer incidence rates declined significantly, on average -1.0% per year.

EXPECTED NUMBERS OF CANCER DEATHS

In 1999, an estimated 563,100 Americans are expected to die of cancer—more than 1,500 people a day (Table 2). Although most 1999 cancer deaths in men (54%) are expected to be from cancers of the lung and bronchus, prostate, and colon and rectum (Fig. 2), the number of deaths from these three sites appears to be leveling off and may be beginning to decline.

Among women, cancers of the lung and bronchus, breast, and colon and rectum are expected to account for more than half of all cancer deaths in 1999 (Fig. 2). In 1987, lung cancer surpassed breast cancer as the leading cause of

cancer death in women and is expected to account for 25% of all cancer deaths in females in 1999. Breast and colon and rectum cancers will account for 16% and 11% of cancer deaths in females, respectively.

TRENDS IN CANCER MORTALITY

After significant increases over the past 70 years, cancer mortality rates for all cancers combined began to decline in the 1990s (Figs. 5 and 6).⁷ Significant decreases have been seen among males and females, persons younger than 65 years of age, and among whites, African Americans, and Hispanics.

Breast cancer mortality rates in females decreased an average of -1.7% per year during 1990 to 1995; decreases were more pronounced among white women and among younger women. During 1990 to 1995, mortality from cancers of the colon and rectum decreased significantly, on average -1.5% per year.⁷

Similar to what was seen with trends in incidence, significant decreases in mortality from lung and bronchus cancer have occurred only among males (on average -1.6% per year during 1990 to 1995); rates among females recently have begun to slow and appear to be stabilizing. Prostate cancer mortality decreased an average of -1.1% per year during 1990 to 1995.⁷

TRENDS IN CANCER BY RACE AND ETHNICITY

Overall rates of cancer incidence vary considerably among racial and ethnic groups (Table 10). African Americans have the highest incidence rates of cancer; they are 60% more likely to develop cancer than are Hispanics and Asian/Pacific Islanders and more than two times more likely to develop cancer than are American Indians. During 1990 to 1995, incidence rates decreased about -1.0% per year among whites and Hispanics, remained relatively stable among African Americans and Asian/Pacific Islanders,

and appear to be increasing slightly among American Indians.³

White women are more likely to develop breast cancer than are women of other racial and ethnic groups, and African-American women are more likely to develop cancers of the colon and rectum.³ African-American men have the highest incidence rates of colon and rectum, lung and bronchus, and prostate cancers; they are at least 50% more likely to develop prostate cancer than are men of other racial and ethnic groups.

African Americans are about 34% more likely to die of cancer than are whites and more than two times more likely to die of cancer than are Asian/Pacific Islanders, American Indians, and Hispanics. During 1990 to 1995, mortality rates decreased significantly among African Americans (-0.8% per year), Hispanics (-0.6% per year), and whites (-0.4% per year); remained stable among Asian/Pacific Islanders; and appear to be increasing slightly among American Indians.³

African-American women are more likely to die of breast and colon and rectum cancers than are women of any other racial and ethnic group, and they have approximately the same lung and bronchus cancer mortality rate as white women. Similar to the pattern seen with incidence rates, African-American men have the highest mortality rates of colon and rectum, lung and bronchus, and prostate cancer.³

CANCER IN CHILDREN

Cancer is the second leading cause of death among children aged 1 to 14 years in the United States. Accidents are the most frequent cause of death (Table 12). The most common cancers found in children are leukemias (in particular, acute lymphocytic leukemia), brain and other nervous system cancers, non-Hodgkin's lymphoma, and soft tissue cancers.³ Over the past 20 years, significant improvements have occurred in the 5-year rela-

tive survival rate for many childhood cancers. Between 1974–1976 and 1989–1994, survival rates improved by at least 20% for acute lymphocytic and myeloid leukemias, neuroblastoma, non-Hodgkin's lymphoma, soft tissue cancer, and Wilms' tumor (Table 13).

Limitations and Future Challenges

Our estimated numbers of new cancer cases and cancer deaths should be interpreted with caution when used to study trends in cancer incidence and mortality. These estimates may vary considerably from year to year, particularly for rare cancers and for states with smaller populations. We therefore discourage the use of these estimates to track year-to-year changes in cancer occurrence and death.

National Center for Health Statistics mortality rates and SEER cancer incidence rates are generally more informative statistics to use for tracking cancer trends. For example, breast cancer incidence rates increased about 1% per year between 1979 and 1982, increased 4% per

year between 1982 and 1987, and were approximately constant between 1987 and 1995. Despite the stabilization of rates during the latter period, the estimates of new breast cancer cases increased between 1988 and 1996.

Our estimates are based on the most currently available cancer incidence and mortality data; however, these data are 4 years old at the time that the estimates are calculated. As such, the effects of large changes occurring in the 4-year interval between 1995 and 1999 cannot be captured by our modeling efforts. Finally, our estimates of new cancer cases are based on incidence rates for the geographic locations that participate in the SEER program and, therefore, may not be representative of the total United States.

Despite these limitations, our estimates do provide an indication of current patterns of cancer in the United States. Such estimates will assist our continuing efforts to reduce the burden of cancer in the United States as the 21st century approaches. ■

References

1. National Cancer Institute: SEER Cancer Incidence Public-Use Database CD-ROM, 1973-1995. Bethesda, MD, US Department of Health and Human Services, Public Health Service, 1998.
2. Wingo PA, Landis S, Parker S, et al: Using cancer registry and vital statistics data to estimate the number of new cancer cases and deaths in the United States for the upcoming year. *J Reg Management* 1998;25:43-51.
3. Ries LAG, Kosary CL, Hankey BF, et al: SEER Cancer Statistics Review, 1973-1995: Bethesda, MD, National Cancer Institute, 1998. <http://www-seer.ims.nci.nih.gov/Publications/CSR7395>
4. Wingo PA, Landis S, Ries LA: An adjustment to the 1997 estimate for new prostate cancer cases. *CA Cancer J Clin* 1997;47:239-242.
5. National Center for Health Statistics: Public use data file documentation: Mortality detail for ICD-9, 1995. Hyattsville, MD, Public Health Service, 1997.
6. Feuer EJ, Wun LM: DEVCAN: Probability of developing or dying of cancer [computer program], version 4. Bethesda, MD, National Cancer Institute, 1998.
7. Wingo PA, Ries LA, Rosenberg HM, et al: Cancer incidence and mortality, 1973-1995: A report card for the US. *Cancer* 1998;82:1197-1207.

Table 1
Estimated New Cancer Cases by Sex, United States, 1999*

| | Total | Male | Female |
|--|------------------|----------------|----------------|
| All Sites | 1,221,800 | 623,800 | 598,000 |
| Oral cavity & pharynx | 29,800 | 20,000 | 9,800 |
| Tongue | 6,600 | 4,300 | 2,300 |
| Mouth | 10,800 | 6,400 | 4,400 |
| Pharynx | 8,300 | 6,100 | 2,200 |
| Other oral cavity | 4,100 | 3,200 | 900 |
| Digestive system | 226,300 | 117,200 | 109,100 |
| Esophagus | 12,500 | 9,400 | 3,100 |
| Stomach | 21,900 | 13,700 | 8,200 |
| Small intestine | 4,800 | 2,500 | 2,300 |
| Colon | 94,700 | 43,000 | 51,700 |
| Rectum | 34,700 | 19,400 | 15,300 |
| Anus, anal canal, & anorectum | 3,300 | 1,400 | 1,900 |
| Liver & intrahepatic bile duct | 14,500 | 9,600 | 4,900 |
| Gallbladder & other biliary | 7,200 | 3,000 | 4,200 |
| Pancreas | 28,600 | 14,000 | 14,600 |
| Other digestive organs | 4,100 | 1,200 | 2,900 |
| Respiratory system | 187,600 | 106,800 | 80,800 |
| Larynx | 10,600 | 8,600 | 2,000 |
| Lung & bronchus | 171,600 | 94,000 | 77,600 |
| Other respiratory organs | 5,400 | 4,200 | 1,200 |
| Bones & joints | 2,600 | 1,400 | 1,200 |
| Soft tissue (including heart) | 7,800 | 4,200 | 3,600 |
| Skin (excluding basal & squamous) | 54,000 | 33,400 | 20,600 |
| Melanoma of skin | 44,200 | 25,800 | 18,400 |
| Other non-epithelial skin | 9,800 | 7,600 | 2,200 |
| Breast | 176,300 | 1,300 | 175,000 |
| Genital system | 269,100 | 188,100 | 81,000 |
| Uterine cervix | 12,800 | | 12,800 |
| Uterine corpus | 37,400 | | 37,400 |
| Ovary | 25,200 | | 25,200 |
| Vulva | 3,300 | | 3,300 |
| Vagina & other genital organs, female | 2,300 | | 2,300 |
| Prostate | 179,300 | 179,300 | |
| Testis | 7,400 | 7,400 | |
| Penis & other genital organs, male | 1,400 | 1,400 | |
| Urinary system | 86,500 | 58,400 | 28,100 |
| Urinary bladder | 54,200 | 39,100 | 15,100 |
| Kidney & renal pelvis | 30,000 | 17,800 | 12,200 |
| Ureter & other urinary organs | 2,300 | 1,500 | 800 |
| Eye & orbit | 2,200 | 1,200 | 1,000 |
| Brain & other nervous system | 16,800 | 9,500 | 7,300 |
| Endocrine system | 19,800 | 5,400 | 14,400 |
| Thyroid | 18,100 | 4,600 | 13,500 |
| Other endocrine | 1,700 | 800 | 900 |
| Lymphoma | 64,000 | 36,400 | 27,600 |
| Hodgkin's disease | 7,200 | 3,800 | 3,400 |
| Non-Hodgkin's lymphoma | 56,800 | 32,600 | 24,200 |
| Multiple myeloma | 13,700 | 7,300 | 6,400 |
| Leukemia | 30,200 | 16,800 | 13,400 |
| Acute lymphocytic leukemia | 3,100 | 1,800 | 1,300 |
| Chronic lymphocytic leukemia | 7,800 | 4,500 | 3,300 |
| Acute myeloid leukemia | 10,100 | 4,900 | 5,200 |
| Chronic myeloid leukemia | 4,500 | 2,700 | 1,800 |
| Other leukemia | 4,700 | 2,900 | 1,800 |
| Other & unspecified primary sites | 35,100 | 16,400 | 18,700 |

*Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.

Table 2
Estimated Cancer Deaths by Sex, United States, 1999*

| | Total | Male | Female |
|--|----------------|----------------|----------------|
| All Sites | 563,100 | 291,100 | 272,000 |
| Oral cavity & pharynx | 8,100 | 5,400 | 2,700 |
| Tongue | 1,800 | 1,200 | 600 |
| Mouth | 2,300 | 1,300 | 1,000 |
| Pharynx | 2,100 | 1,500 | 600 |
| Other oral cavity | 1,900 | 1,400 | 500 |
| Digestive system | 131,000 | 69,900 | 61,100 |
| Esophagus | 12,200 | 9,400 | 2,800 |
| Stomach | 13,500 | 7,900 | 5,600 |
| Small intestine | 1,200 | 600 | 600 |
| Colon | 47,900 | 23,000 | 24,900 |
| Rectum | 8,700 | 4,800 | 3,900 |
| Anus, anal canal, & anorectum | 500 | 200 | 300 |
| Liver & intrahepatic bile duct | 13,600 | 8,400 | 5,200 |
| Gallbladder & other biliary | 3,600 | 1,300 | 2,300 |
| Pancreas | 28,600 | 13,900 | 14,700 |
| Other digestive organs | 1,200 | 400 | 800 |
| Respiratory system | 164,200 | 94,900 | 69,300 |
| Larynx | 4,200 | 3,300 | 900 |
| Lung & bronchus | 158,900 | 90,900 | 68,000 |
| Other respiratory organs | 1,100 | 700 | 400 |
| Bones & joints | 1,400 | 800 | 600 |
| Soft tissue (including heart) | 4,400 | 2,100 | 2,300 |
| Skin (excluding basal & squamous) | 9,200 | 5,800 | 3,400 |
| Melanoma of skin | 7,300 | 4,600 | 2,700 |
| Other non-epithelial skin | 1,900 | 1,200 | 700 |
| Breast | 43,700 | 400 | 43,300 |
| Genital system | 64,700 | 37,500 | 27,200 |
| Uterine cervix | 4,800 | | 4,800 |
| Uterine corpus | 6,400 | | 6,400 |
| Ovary | 14,500 | | 14,500 |
| Vulva | 900 | | 900 |
| Vagina & other genital organs, female | 600 | | 600 |
| Prostate | 37,000 | 37,000 | |
| Testis | 300 | 300 | |
| Penis & other genital organs, male | 200 | 200 | |
| Urinary system | 24,500 | 15,600 | 8,900 |
| Urinary bladder | 12,100 | 8,100 | 4,000 |
| Kidney & renal pelvis | 11,900 | 7,200 | 4,700 |
| Ureter & other urinary organs | 500 | 300 | 200 |
| Eye & orbit | 200 | 100 | 100 |
| Brain & other nervous system | 13,100 | 7,200 | 5,900 |
| Endocrine system | 2,000 | 900 | 1,100 |
| Thyroid | 1,200 | 500 | 700 |
| Other endocrine | 800 | 400 | 400 |
| Lymphoma | 27,000 | 14,100 | 12,900 |
| Hodgkin's disease | 1,300 | 700 | 600 |
| Non-Hodgkin's lymphoma | 25,700 | 13,400 | 12,300 |
| Multiple myeloma | 11,400 | 5,800 | 5,600 |
| Leukemia | 22,100 | 12,400 | 9,700 |
| Acute lymphocytic leukemia | 1,400 | 800 | 600 |
| Chronic lymphocytic leukemia | 5,100 | 3,000 | 2,100 |
| Acute myeloid leukemia | 6,900 | 3,700 | 3,200 |
| Chronic myeloid leukemia | 2,300 | 1,300 | 1,000 |
| Other leukemia | 6,400 | 3,600 | 2,800 |
| Other & unspecified primary sites | 36,100 | 18,200 | 17,900 |

*Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.

Table 3
Estimated New Cancer Cases by Site and State, US, 1999*

| State | All Sites | Female Breast | Colon & Rectum | Lung & Bronchus | Melanoma of Skin | Non-Hodgkin's Lymphoma | Ovary | Prostate | Urinary Bladder | Uterine Cervix | Uterine Corpus |
|----------------|-----------|---------------|----------------|-----------------|------------------|------------------------|--------|----------|-----------------|----------------|----------------|
| Alabama | 21,100 | 2,500 | 1,600 | 2,900 | 700 | 900 | 400 | 3,100 | 800 | 200 | 500 |
| Alaska | 1,400 | 200 | 200 | 200 | — | — | — | 200 | — | — | — |
| Arizona | 20,000 | 2,600 | 2,000 | 2,800 | 1,000 | 900 | 500 | 3,300 | 800 | 200 | 600 |
| Arkansas | 13,800 | 1,700 | 1,400 | 2,300 | 400 | 600 | 300 | 2,400 | 500 | 200 | 400 |
| California | 112,300 | 16,900 | 11,200 | 14,600 | 4,800 | 5,000 | 2,600 | 16,300 | 5,200 | 1,300 | 3,500 |
| Colorado | 13,300 | 2,000 | 1,300 | 1,600 | 600 | 700 | 200 | 2,000 | 600 | 200 | 500 |
| Connecticut | 15,100 | 2,100 | 1,500 | 2,000 | 600 | 800 | 300 | 2,200 | 800 | 100 | 400 |
| Delaware | 3,800 | 500 | 400 | 600 | 100 | 200 | 100 | 500 | 300 | 100 | 100 |
| Dist. of Col. | 3,000 | 500 | 300 | 400 | — | 100 | 100 | 600 | 100 | — | 200 |
| Florida | 88,000 | 11,900 | 8,900 | 13,000 | 3,000 | 4,000 | 1,800 | 13,600 | 4,300 | 800 | 2,500 |
| Georgia | 29,100 | 4,000 | 2,700 | 4,400 | 1,000 | 1,000 | 600 | 4,300 | 900 | 300 | 1,000 |
| Hawaii | 4,300 | 500 | 400 | 600 | 100 | 200 | 100 | 700 | 100 | — | 100 |
| Idaho | 4,600 | 700 | 400 | 600 | 200 | 200 | 100 | 900 | 300 | — | — |
| Illinois | 56,800 | 8,500 | 6,200 | 7,800 | 1,900 | 2,700 | 1,100 | 7,700 | 2,500 | 600 | 1,700 |
| Indiana | 27,900 | 3,900 | 3,000 | 4,300 | 1,100 | 1,300 | 600 | 3,700 | 1,200 | 300 | 700 |
| Iowa | 14,300 | 2,100 | 1,700 | 2,000 | 500 | 800 | 300 | 2,100 | 700 | 100 | 600 |
| Kansas | 12,000 | 1,700 | 1,200 | 1,600 | 600 | 600 | 300 | 1,900 | 500 | 100 | 400 |
| Kentucky | 20,500 | 2,700 | 2,200 | 3,500 | 800 | 800 | 400 | 2,600 | 700 | 300 | 600 |
| Louisiana | 20,300 | 3,100 | 2,200 | 3,000 | 700 | 800 | 300 | 3,000 | 700 | 200 | 400 |
| Maine | 7,000 | 1,000 | 700 | 1,100 | 200 | 300 | 100 | 1,000 | 300 | 100 | 100 |
| Maryland | 22,600 | 3,500 | 2,600 | 3,200 | 700 | 900 | 400 | 3,200 | 1,000 | 300 | 600 |
| Massachusetts | 30,700 | 4,400 | 3,600 | 4,100 | 1,200 | 1,500 | 500 | 4,000 | 1,700 | 200 | 800 |
| Michigan | 44,200 | 6,500 | 4,800 | 6,400 | 1,300 | 2,100 | 800 | 6,400 | 2,100 | 500 | 1,600 |
| Minnesota | 19,400 | 2,800 | 2,000 | 2,400 | 600 | 1,200 | 400 | 3,200 | 800 | 100 | 500 |
| Mississippi | 13,000 | 1,700 | 1,300 | 1,800 | 300 | 500 | 200 | 2,300 | 400 | 200 | 100 |
| Missouri | 27,900 | 3,600 | 3,000 | 4,400 | 1,000 | 1,200 | 600 | 3,900 | 1,100 | 300 | 1,000 |
| Montana | 4,100 | 600 | 400 | 600 | 100 | 200 | 100 | 600 | 200 | — | 100 |
| Nebraska | 7,400 | 1,000 | 1,000 | 1,000 | 200 | 300 | 100 | 1,100 | 300 | 100 | 200 |
| Nevada | 8,100 | 1,000 | 800 | 1,200 | 400 | 300 | 100 | 1,100 | 300 | 100 | 100 |
| New Hampshire | 5,400 | 700 | 600 | 800 | 200 | 300 | 100 | 700 | 200 | 100 | 200 |
| New Jersey | 40,000 | 5,900 | 4,700 | 4,900 | 1,500 | 2,000 | 900 | 5,600 | 2,100 | 400 | 1,500 |
| New Mexico | 6,500 | 1,000 | 600 | 800 | 300 | 300 | 100 | 1,000 | 200 | 100 | 200 |
| New York | 83,100 | 13,000 | 9,400 | 10,700 | 2,400 | 4,100 | 1,800 | 11,500 | 4,200 | 900 | 3,500 |
| North Carolina | 35,500 | 4,700 | 3,900 | 5,300 | 1,200 | 1,400 | 700 | 5,400 | 1,400 | 300 | 1,100 |
| North Dakota | 3,100 | 400 | 400 | 400 | 100 | 200 | 100 | 600 | 200 | — | 100 |
| Ohio | 56,500 | 8,400 | 6,100 | 8,300 | 1,600 | 2,800 | 1,000 | 7,900 | 2,700 | 600 | 2,100 |
| Oklahoma | 15,800 | 2,300 | 1,600 | 2,500 | 600 | 800 | 300 | 2,000 | 700 | 200 | 200 |
| Oregon | 15,900 | 2,100 | 1,500 | 2,200 | 700 | 800 | 400 | 2,400 | 700 | 100 | 500 |
| Pennsylvania | 66,600 | 10,000 | 7,700 | 9,000 | 2,300 | 3,200 | 1,400 | 9,900 | 3,100 | 600 | 2,000 |
| Rhode Island | 5,200 | 700 | 600 | 800 | 200 | 300 | 100 | 600 | 300 | 100 | 200 |
| South Carolina | 17,900 | 2,600 | 1,900 | 2,500 | 700 | 600 | 400 | 2,900 | 800 | 200 | 500 |
| South Dakota | 3,400 | 500 | 300 | 400 | 200 | 200 | 100 | 700 | 200 | — | 100 |
| Tennessee | 26,800 | 3,900 | 2,800 | 4,300 | 1,200 | 1,200 | 600 | 3,400 | 1,000 | 400 | 700 |
| Texas | 77,400 | 11,300 | 8,400 | 11,500 | 2,900 | 3,900 | 1,500 | 11,600 | 2,800 | 1,100 | 2,500 |
| Utah | 5,200 | 800 | 600 | 400 | 400 | 400 | 100 | 1,100 | 200 | 100 | 200 |
| Vermont | 2,600 | 300 | 300 | 400 | 200 | 100 | 100 | 300 | 100 | 100 | 100 |
| Virginia | 29,000 | 4,200 | 3,000 | 4,100 | 1,100 | 1,200 | 500 | 4,300 | 1,100 | 300 | 1,100 |
| Washington | 23,800 | 3,300 | 2,300 | 3,400 | 800 | 1,100 | 600 | 3,200 | 1,200 | 200 | 500 |
| West Virginia | 10,600 | 1,200 | 1,100 | 1,700 | 400 | 400 | 200 | 1,500 | 500 | 100 | 300 |
| Wisconsin | 23,700 | 3,400 | 2,500 | 2,800 | 900 | 1,300 | 600 | 4,100 | 1,200 | 200 | 900 |
| Wyoming | 2,000 | 300 | 200 | 300 | 100 | 100 | — | 300 | 100 | — | 100 |
| United States† | 1,221,800 | 175,000 | 129,400 | 171,600 | 44,200 | 56,800 | 25,200 | 179,300 | 54,200 | 12,800 | 37,400 |

*Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.

†State estimates may not add up to United States total because of rounding.

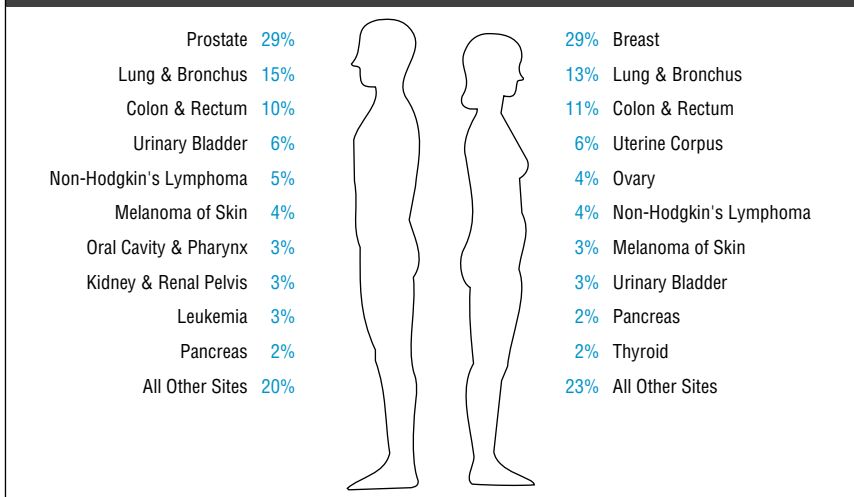
— Estimate is 50 or fewer cases. State case estimates between 51 and 99 were rounded to 100.

Table 4
Estimated Cancer Mortality by Site and State, US, 1999*

| State | Reported Death Rate per 100,000† | Estimated Number of Deaths | | | | | | | | | | |
|----------------|----------------------------------|----------------------------|---------------|----------------|-----------|----------|-----------------|------------------------|--------|----------|----------|---------|
| | | All Sites | Female Breast | Colon & Rectum | Esophagus | Leukemia | Lung & Bronchus | Non-Hodgkin's Lymphoma | Ovary | Pancreas | Prostate | Stomach |
| Alabama | 180 | 9,700 | 600 | 700 | 200 | 400 | 2,700 | 400 | 200 | 500 | 600 | 200 |
| Alaska | 167 | 600 | 100 | 100 | — | — | 200 | — | — | — | — | — |
| Arizona | 158 | 9,200 | 700 | 900 | 200 | 400 | 2,600 | 400 | 300 | 500 | 700 | 200 |
| Arkansas | 181 | 6,400 | 400 | 600 | 100 | 300 | 2,200 | 200 | 200 | 300 | 500 | 100 |
| California | 159 | 51,700 | 4,200 | 4,900 | 1,100 | 2,100 | 13,500 | 2,300 | 1,500 | 2,700 | 3,400 | 1,600 |
| Colorado | 145 | 6,200 | 500 | 600 | 100 | 300 | 1,500 | 300 | 100 | 300 | 400 | 100 |
| Connecticut | 164 | 7,000 | 500 | 700 | 200 | 300 | 1,800 | 300 | 200 | 400 | 400 | 200 |
| Delaware | 195 | 1,800 | 100 | 200 | 100 | 100 | 600 | 100 | — | 100 | 100 | — |
| Dist. of Col. | 216 | 1,400 | 100 | 100 | — | — | 300 | — | — | 100 | 100 | 100 |
| Florida | 167 | 40,600 | 2,900 | 3,900 | 900 | 1,500 | 12,100 | 1,800 | 1,000 | 2,200 | 2,800 | 900 |
| Georgia | 177 | 13,400 | 1,000 | 1,200 | 200 | 600 | 4,100 | 500 | 400 | 700 | 900 | 300 |
| Hawaii | 134 | 2,000 | 100 | 200 | — | 100 | 500 | 100 | — | 100 | 100 | 100 |
| Idaho | 148 | 2,100 | 200 | 200 | 100 | 100 | 500 | 100 | 100 | 100 | 200 | 100 |
| Illinois | 179 | 26,200 | 2,100 | 2,700 | 700 | 1,100 | 7,300 | 1,200 | 600 | 1,200 | 1,600 | 600 |
| Indiana | 178 | 12,900 | 1,000 | 1,300 | 300 | 500 | 4,000 | 600 | 400 | 700 | 800 | 200 |
| Iowa | 160 | 6,600 | 500 | 800 | 100 | 300 | 1,800 | 300 | 100 | 300 | 400 | 100 |
| Kansas | 160 | 5,600 | 400 | 500 | 100 | 200 | 1,500 | 300 | 200 | 300 | 400 | 100 |
| Kentucky | 192 | 9,500 | 700 | 900 | 200 | 300 | 3,300 | 400 | 200 | 400 | 500 | 200 |
| Louisiana | 194 | 9,400 | 800 | 1,000 | 100 | 400 | 2,700 | 400 | 200 | 500 | 600 | 300 |
| Maine | 187 | 3,200 | 200 | 300 | 100 | 100 | 1,000 | 200 | 100 | 200 | 200 | 100 |
| Maryland | 186 | 10,400 | 900 | 1,100 | 200 | 300 | 3,000 | 400 | 200 | 500 | 700 | 300 |
| Massachusetts | 179 | 14,200 | 1,100 | 1,600 | 300 | 500 | 3,800 | 700 | 300 | 700 | 800 | 300 |
| Michigan | 176 | 20,400 | 1,600 | 2,100 | 500 | 700 | 5,900 | 900 | 500 | 1,000 | 1,300 | 400 |
| Minnesota | 156 | 9,000 | 700 | 900 | 200 | 500 | 2,200 | 500 | 200 | 500 | 700 | 200 |
| Mississippi | 182 | 6,000 | 400 | 600 | 100 | 200 | 1,700 | 200 | 100 | 300 | 500 | 100 |
| Missouri | 177 | 12,900 | 900 | 1,300 | 300 | 500 | 4,000 | 500 | 300 | 600 | 800 | 300 |
| Montana | 161 | 1,900 | 200 | 200 | — | 100 | 500 | 100 | 100 | 100 | 100 | — |
| Nebraska | 155 | 3,400 | 300 | 400 | 100 | 200 | 900 | 100 | 100 | 200 | 200 | 100 |
| Nevada | 183 | 3,800 | 300 | 300 | 100 | 100 | 1,100 | 200 | 100 | 200 | 200 | 100 |
| New Hampshire | 182 | 2,500 | 200 | 300 | 100 | 100 | 700 | 100 | 100 | 100 | 100 | — |
| New Jersey | 181 | 18,400 | 1,500 | 2,000 | 400 | 800 | 4,500 | 900 | 500 | 1,100 | 1,200 | 500 |
| New Mexico | 146 | 3,000 | 200 | 300 | 100 | 100 | 700 | 100 | 100 | 200 | 200 | 100 |
| New York | 171 | 38,300 | 3,200 | 4,100 | 900 | 1,400 | 9,900 | 1,800 | 1,000 | 2,200 | 2,400 | 1,300 |
| North Carolina | 174 | 16,300 | 1,200 | 1,700 | 300 | 600 | 4,900 | 700 | 400 | 800 | 1,100 | 400 |
| North Dakota | 156 | 1,400 | 100 | 200 | — | — | 300 | 100 | 100 | 100 | 100 | — |
| Ohio | 181 | 26,000 | 2,100 | 2,700 | 600 | 1,000 | 7,700 | 1,300 | 600 | 1,300 | 1,600 | 500 |
| Oklahoma | 170 | 7,300 | 600 | 700 | 100 | 300 | 2,300 | 400 | 200 | 300 | 400 | 100 |
| Oregon | 167 | 7,300 | 500 | 700 | 200 | 300 | 2,100 | 400 | 200 | 400 | 500 | 100 |
| Pennsylvania | 177 | 30,700 | 2,500 | 3,400 | 700 | 1,200 | 8,400 | 1,500 | 800 | 1,500 | 2,000 | 700 |
| Rhode Island | 177 | 2,400 | 200 | 300 | — | 100 | 700 | 100 | — | 100 | 100 | 100 |
| South Carolina | 178 | 8,200 | 600 | 900 | 200 | 300 | 2,300 | 300 | 200 | 400 | 600 | 200 |
| South Dakota | 156 | 1,600 | 100 | 100 | — | 100 | 400 | 100 | — | 100 | 100 | — |
| Tennessee | 181 | 12,300 | 1,000 | 1,200 | 200 | 500 | 3,900 | 500 | 300 | 500 | 700 | 200 |
| Texas | 169 | 35,700 | 2,800 | 3,700 | 700 | 1,400 | 10,600 | 1,700 | 900 | 1,900 | 2,400 | 1,000 |
| Utah | 126 | 2,400 | 200 | 300 | — | 100 | 400 | 200 | 100 | 100 | 200 | — |
| Vermont | 172 | 1,200 | 100 | 100 | — | — | 300 | 100 | — | — | 100 | — |
| Virginia | 178 | 13,300 | 1,000 | 1,300 | 300 | 500 | 3,800 | 600 | 300 | 600 | 900 | 300 |
| Washington | 163 | 11,000 | 800 | 1,000 | 300 | 500 | 3,100 | 500 | 300 | 500 | 700 | 200 |
| West Virginia | 186 | 4,900 | 300 | 500 | 100 | 200 | 1,600 | 200 | 100 | 200 | 300 | 100 |
| Wisconsin | 164 | 10,900 | 800 | 1,100 | 300 | 500 | 2,600 | 600 | 300 | 600 | 800 | 200 |
| Wyoming | 154 | 900 | 100 | 100 | — | — | 300 | — | — | 100 | 100 | — |
| United States‡ | 171 | 563,100 | 43,300 | 56,600 | 12,200 | 22,100 | 158,900 | 25,700 | 14,500 | 28,600 | 37,000 | 13,500 |

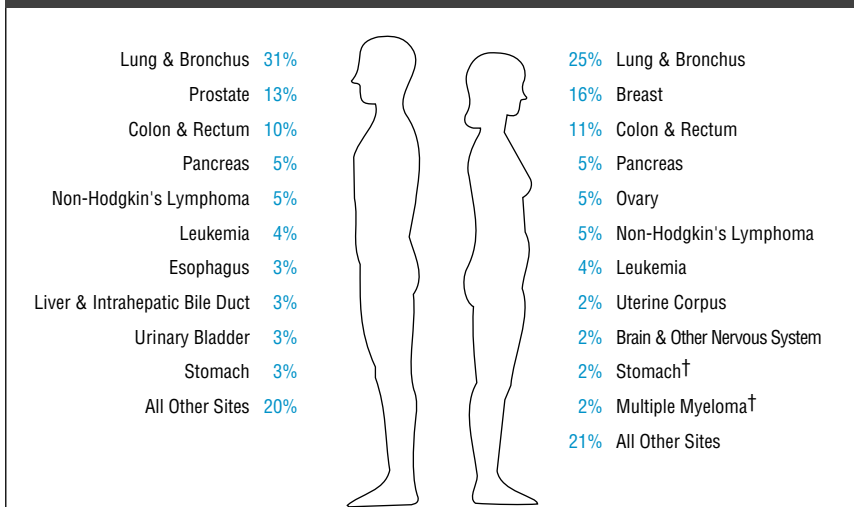
*Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.
 †NCHS average annual mortality rate for 1991–1995, age-adjusted to the 1970 US standard population.
 ‡ State estimates may not add up to United States total because of rounding.
 — Estimate is 50 or fewer deaths. State death estimates between 51 and 99 were rounded to 100.

Figure 1
Estimated New Cancer Cases*
10 Leading Sites by Sex, United States, 1999



*Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.

Figure 2
Estimated Cancer Deaths*
10 Leading Sites by Sex, United States, 1999



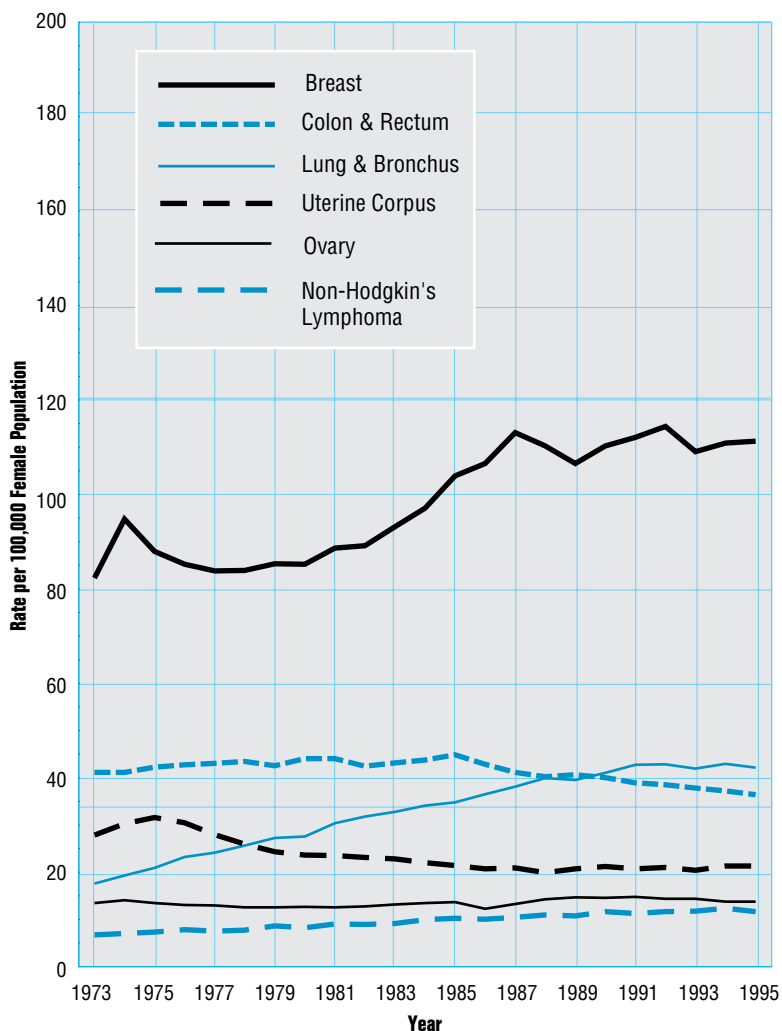
*Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.†These two cancers both received a ranking of 10; they have the same number of deaths and contribute the same percentage.

Table 5
Percentage of Population Developing Invasive Cancers
at Certain Ages by Sex, United States, 1993-1995

| | | Birth to 39 Years | 40 to 59 Years | 60 to 79 Years | Birth to Death |
|-----------------|--------|-----------------------|-----------------|----------------|----------------|
| All sites* | Male | 1.65 (1 in 61) | 8.25 (1 in 12) | 34.94 (1 in 3) | 44.66 (1 in 2) |
| | Female | 1.95 (1 in 51) | 9.14 (1 in 11) | 22.33 (1 in 5) | 38.03 (1 in 3) |
| Breast | Female | 0.43 (1 in 231) | 4.00 (1 in 25) | 6.88 (1 in 15) | 12.50 (1 in 8) |
| Colon & Rectum | Male | 0.06 (1 in 1,708) | 0.87 (1 in 115) | 4.05 (1 in 25) | 5.69 (1 in 18) |
| | Female | 0.05 (1 in 1,871) | 0.67 (1 in 150) | 3.14 (1 in 32) | 5.62 (1 in 18) |
| Lung & Bronchus | Male | 0.04 (1 in 2,495) | 1.34 (1 in 75) | 6.55 (1 in 15) | 8.27 (1 in 12) |
| | Female | 0.03 (1 in 2,936) | 0.97 (1 in 103) | 3.95 (1 in 25) | 5.64 (1 in 18) |
| Prostate | Male | Less than 1 in 10,000 | 1.83 (1 in 55) | 14.79 (1 in 7) | 17.00 (1 in 6) |

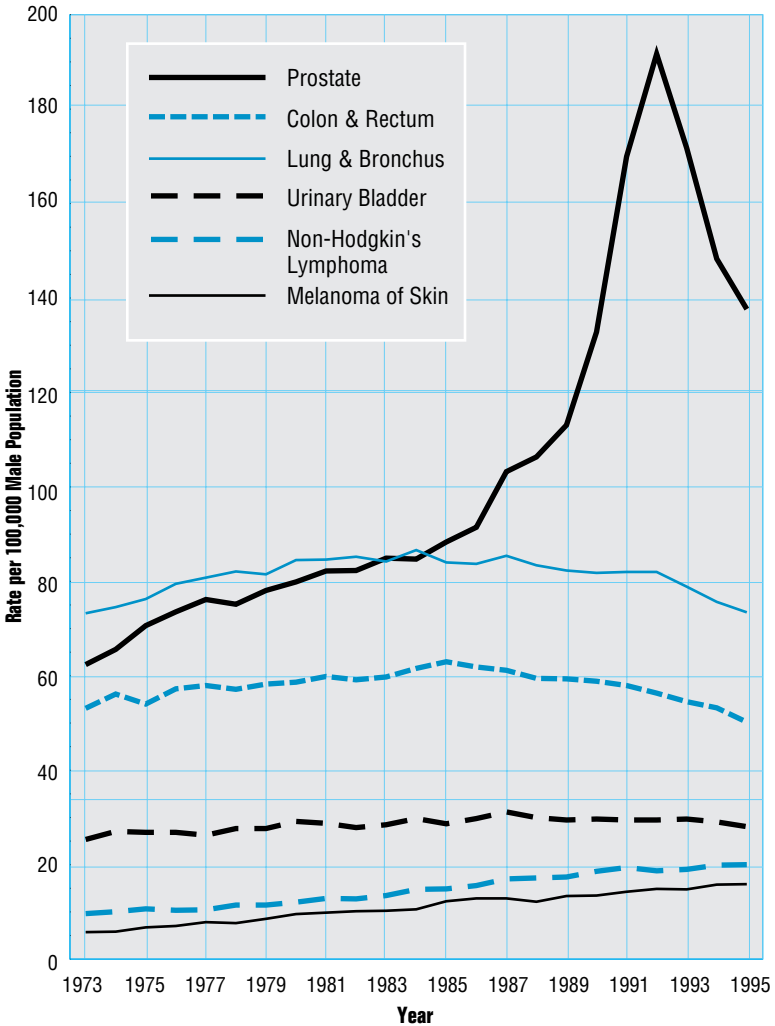
* Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.
 Data source: NCI Surveillance, Epidemiology, and End Results Program, 1998.

Figure 3
Age-Adjusted Cancer Incidence Rates*
for Females by Site, United States, 1973–1995



*Rates are per 100,000 population and are age-adjusted to the 1970 US standard population.
 Data source: NCI Surveillance, Epidemiology, and End Results Program, 1998.

Figure 4
Age-Adjusted Cancer Incidence Rates*
for Males by Site, United States, 1973-1995



*Rates are per 100,000 population and are age-adjusted to the 1970 US standard population.
 Data source: NCI Surveillance, Epidemiology, and End Results Program, 1998.

Table 6
Reported Deaths for the 10 Leading Causes of Death
by Age and Sex, United States, 1995

| | All Ages | | Ages 1–19 | | Ages 20–39 | |
|----|---|---|--|--|------------------------------------|----------------------------------|
| | Male | Female | Male | Female | Male | Female |
| | All Causes 1,172,959 | All Causes 1,139,173 | All Causes 19,896 | All Causes 10,182 | All Causes 88,874 | All Causes 34,513 |
| 1 | Heart Diseases 362,714 | Heart Diseases 374,849 | Accidents 8,282 | Accidents 4,165 | Accidents 21,688 | Accidents 6,467 |
| 2 | Cancer 281,611 | Cancer 256,844 | Homicide 3,403 | Homicide 903 | HIV Infection 18,589 | Cancer 6,452 |
| 3 | Cerebro-vascular Diseases 61,563 | Cerebro-vascular Diseases 96,428 | Suicide 1,876 | Cancer 900 | Suicide 10,397 | HIV Infection 4,075 |
| 4 | Accidents 61,401 | Chronic Obstructive Pulmonary Disease 48,961 | Cancer 1,305 | Congenital Anomalies 648 | Homicide 10,003 | Heart Diseases 2,789 |
| 5 | Chronic Obstructive Pulmonary Disease 53,938 | Pneumonia & Influenza 45,136 | Congenital Anomalies 747 | Heart Diseases 390 | Heart Diseases 6,215 | Homicide 2,464 |
| 6 | Pneumonia & Influenza 37,787 | Diabetes Mellitus 33,130 | Heart Diseases 554 | Suicide 351 | Cancer 5,683 | Suicide 2,121 |
| 7 | HIV Infection 35,950 | Accidents 31,919 | Cerebral Palsy 246 | HIV Infection 223 | Cirrhosis of Liver 1,360 | Cerebro-vascular Diseases 928 |
| 8 | Diabetes Mellitus 26,124 | Alzheimer's Disease 13,607 | HIV Infection 232 | Cerebral Palsy 205 | Cerebro-vascular Diseases 1,008 | Diabetes Mellitus 628 |
| 9 | Suicide 25,369 | Nephritis 12,287 | Chronic Obstructive Pulmonary Disease 187 | Pneumonia & Influenza 186 | Pneumonia & Influenza 859 | Cirrhosis of Liver 610 |
| 10 | Homicide 17,740 | Septicemia 11,974 | Pneumonia & Influenza 181 | Chronic Obstructive Pulmonary Disease 125 | Diabetes Mellitus 829 | Pneumonia & Influenza 551 |

Data source: Vital Statistics of the United States, 1998.

Table 6 (Continued)
Reported Deaths for the 10 Leading Causes of Death
by Age and Sex, United States, 1995

| | Ages 40-59 | | Ages 60-79 | | Ages 80+ | |
|----|--|--|---|---|---|---|
| | Male | Female | Male | Female | Male | Female |
| | All Causes 187,562 | All Causes 107,862 | All Causes 521,815 | All Causes 413,462 | All Causes 337,859 | All Causes 560,061 |
| 1 | Heart Diseases 51,087 | Cancer 44,963 | Heart Diseases 176,730 | Cancer 133,588 | Heart Diseases 127,733 | Heart Diseases 230,869 |
| 2 | Cancer 46,081 | Heart Diseases 19,152 | Cancer 164,794 | Heart Diseases 121,293 | Cancer 63,705 | Cancer 70,896 |
| 3 | HIV Infection 15,765 | Accidents 5,057 | Chronic Obstructive Pulmonary Disease 31,058 | Cerebrovascular Diseases 27,952 | Cerebrovascular Diseases 27,574 | Cerebrovascular Diseases 62,385 |
| 4 | Accidents 14,238 | Cerebrovascular Diseases 4,993 | Cerebrovascular Diseases 26,648 | Chronic Obstructive Pulmonary Disease 26,107 | Pneumonia & Influenza 20,497 | Pneumonia & Influenza 32,340 |
| 5 | Cirrhosis of Liver 7,398 | Diabetes Mellitus 3,727 | Diabetes Mellitus 14,180 | Diabetes Mellitus 16,310 | Chronic Obstructive Pulmonary Disease 18,913 | Chronic Obstructive Pulmonary Disease 18,949 |
| 6 | Suicide 7,025 | Chronic Obstructive Pulmonary Disease 3,377 | Pneumonia & Influenza 13,367 | Pneumonia & Influenza 10,237 | Accidents 6,551 | Diabetes Mellitus 12,437 |
| 7 | Cerebrovascular Diseases 6,092 | Cirrhosis of Liver 2,712 | Accidents 10,120 | Accidents 7,012 | Diabetes Mellitus 6,358 | Alzheimer's Disease 10,524 |
| 8 | Diabetes Mellitus 4,714 | HIV Infection 2,554 | Diseases of Arteries 8,462 | Diseases of Arteries 4,929 | Nephritis 5,012 | Accidents 8,849 |
| 9 | Chronic Obstructive Pulmonary Disease 3,337 | Suicide 2,077 | Cirrhosis of Liver 6,730 | Nephritis 4,453 | Diseases of Arteries 4,597 | Atherosclerosis 8,249 |
| 10 | Homicide 3,228 | Pneumonia & Influenza 1,608 | Nephritis 4,992 | Cirrhosis of Liver 4,180 | Alzheimer's Disease 4,488 | Nephritis 6,833 |

Data source: Vital Statistics of the United States, 1998.

**Table 7
Fifteen Leading Causes of Death,
United States, 1995**

| Rank | Cause of Death | Number of Deaths | Death Rate per 100,000 Population* | Percent of Total Deaths |
|------|---------------------------------------|------------------|------------------------------------|-------------------------|
| | All Causes | 2,312,132 | 678.7 | 100.0 |
| 1 | Heart Diseases | 737,563 | 205.4 | 31.9 |
| 2 | Cancer | 538,455 | 169.1 | 23.3 |
| 3 | Cerebrovascular Diseases | 157,991 | 42.0 | 6.8 |
| 4 | Chronic Obstructive Pulmonary Disease | 102,899 | 30.0 | 4.5 |
| 5 | Accidents | 93,320 | 31.6 | 4.0 |
| 6 | Pneumonia & Influenza | 82,923 | 21.2 | 3.6 |
| 7 | Diabetes Mellitus | 59,254 | 17.9 | 2.6 |
| 8 | HIV Infection | 43,115 | 13.1 | 1.9 |
| 9 | Suicide | 31,284 | 10.7 | 1.4 |
| 10 | Diseases of Arteries | 26,646 | 7.7 | 1.2 |
| 11 | Cirrhosis of Liver | 25,222 | 8.5 | 1.1 |
| 12 | Nephritis | 23,676 | 6.5 | 1.0 |
| 13 | Homicide | 22,895 | 8.5 | 1.0 |
| 14 | Septicemia | 20,965 | 5.9 | 0.9 |
| 15 | Alzheimer's Disease | 20,606 | 5.0 | 0.9 |
| | Other & Ill-Defined | 325,318 | | 14.1 |

*Age-adjusted to the 1970 US standard population.
Data source: Vital Statistics of the United States, 1998.

Table 8
Reported Deaths for the Five Leading Cancer Sites
for Males by Age, United States, 1995

| All Ages | Under 19 | 20-39 | 40-59 | 60-79 | 80+ |
|-------------------------------------|----------------------------------|----------------------------------|------------------------------------|------------------------------------|----------------------------|
| All Sites 281,611 | All Sites 1,341 | All Sites 5,683 | All Sites 46,081 | All Sites 164,794 | All Sites 63,705 |
| Lung & Bronchus 91,800 | Leukemia 465 | Non-Hodgkin's Lymphoma 800 | Lung & Bronchus 15,606 | Lung & Bronchus 60,721 | Prostate 15,657 |
| Prostate 34,475 | Brain & ONS 300 | Leukemia 686 | Colon & Rectum 4,275 | Prostate 17,773 | Lung & Bronchus 14,892 |
| Colon & Rectum 28,409 | Bones & Joints 104 | Brain & ONS 643 | Non-Hodgkin's Lymphoma 2,370 | Colon & Rectum 16,306 | Colon & Rectum 7,416 |
| Pancreas 12,826 | Endocrine System 102 | Lung & Bronchus 563 | Pancreas 2,347 | Pancreas 7,715 | Urinary Bladder 2,752 |
| Non-Hodgkin's Lymphoma 11,597 | Non-Hodgkin's Lymphoma 102 | Colon & Rectum 399 | Brain & ONS 1,949 | Non-Hodgkin's Lymphoma 6,012 | Leukemia 2,725 |

Note: All sites excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.
 ONS = other nervous system.
 Data source: Vital Statistics of the United States, 1998.

Table 9
Reported Deaths for the Five Leading Cancer Sites
for Females by Age, United States, 1995

| All Ages | Under 19 | 20-39 | 40-59 | 60-79 | 80+ |
|-----------------------------|-------------------------|---------------------------|----------------------------|-----------------------------|------------------------------------|
| All Sites 256,844 | All Sites 934 | All Sites 6,452 | All Sites 44,963 | All Sites 133,588 | All Sites 70,896 |
| Lung & Bronchus 59,304 | Leukemia 305 | Breast 1,764 | Breast 12,202 | Lung & Bronchus 37,426 | Colon & Rectum 11,720 |
| Breast 43,844 | Brain & ONS 220 | Uterine Cervix 637 | Lung & Bronchus 9,937 | Breast 20,083 | Lung & Bronchus 11,463 |
| Colon & Rectum 29,237 | Endocrine System 77 | Leukemia 500 | Colon & Rectum 3,297 | Colon & Rectum 13,855 | Breast 9,793 |
| Pancreas 13,940 | Bones & Joints 70 | Lung & Bronchus 467 | Ovary 2,757 | Pancreas 7,595 | Pancreas 4,730 |
| Ovary 13,342 | Soft Tissue 50 | Brain & ONS 401 | Uterine Cervix 1,720 | Ovary 7,237 | Non-Hodgkin's Lymphoma 3,501 |

Note: All sites excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.
 ONS = other nervous system.
 Data source: Vital Statistics of the United States, 1998.

Table 10
Incidence and Mortality Rates* by Site,
Race, and Ethnicity, United States, 1990–1995

| Site | White | African American | Asian/Pacific Islander | American Indian | Hispanic† |
|--|--------------|------------------|------------------------|-----------------|--------------|
| INCIDENCE | | | | | |
| All Sites | | | | | |
| Total | 405.2 | 445.8 | 277.9 | 153.8 | 278.1 |
| Male | 485.6 | 605.1 | 324.1 | 180.1 | 331.2 |
| Female | 352.0 | 336.1 | 243.4 | 135.9 | 244.9 |
| Breast (Female) | 113.2 | 99.0 | 71.4 | 31.9 | 69.3 |
| Colon & Rectum | | | | | |
| Total | 44.3 | 51.2 | 38.3 | 16.4 | 29.1 |
| Male | 53.8 | 59.4 | 47.2 | 21.9 | 35.6 |
| Female | 37.2 | 45.5 | 31.2 | — | 24.3 |
| Lung & Bronchus | | | | | |
| Total | 56.4 | 75.0 | 35.8 | 18.8 | 28.2 |
| Male | 74.3 | 114.4 | 52.4 | 25.1 | 40.0 |
| Female | 43.3 | 46.4 | 22.4 | 14.1 | 19.8 |
| Prostate | 150.3 | 224.3 | 82.2 | 46.4 | 104.4 |
| MORTALITY | | | | | |
| All Sites | | | | | |
| Total | 168.2 | 224.8 | 104.0 | 103.0 | 105.3 |
| Male | 210.1 | 311.4 | 129.9 | 122.8 | 132.6 |
| Female | 140.1 | 168.8 | 83.9 | 88.8 | 86.5 |
| Breast (Female) | 26.0 | 31.5 | 11.6 | 11.7 | 15.3 |
| Colon & Rectum | | | | | |
| Total | 17.6 | 23.3 | 11.0 | 9.6 | 10.5 |
| Male | 21.8 | 28.0 | 13.6 | 10.5 | 13.2 |
| Female | 14.6 | 20.1 | 9.0 | 8.7 | 8.5 |
| Lung & Bronchus | | | | | |
| Total | 49.4 | 61.0 | 23.9 | 28.5 | 20.1 |
| Male | 70.7 | 102.0 | 35.1 | 40.0 | 32.4 |
| Female | 33.6 | 32.7 | 15.0 | 19.6 | 11.0 |
| Prostate | 24.1 | 55.0 | 10.9 | 14.2 | 16.8 |
| <p>Note: Incidence data are from the 11 SEER areas; mortality data are from all states except Connecticut, Oklahoma, Louisiana, and New Hampshire.</p> <p>*Rates are per 100,000 population and are age-adjusted to the 1970 US standard population.</p> <p>†Hispanic is not mutually exclusive of white, African American, Asian/Pacific Islander, or American Indian.</p> <p>— Statistic not calculated. Rate based on fewer than 10 cases per year within the time interval.</p> <p>Data sources: NCI Surveillance, Epidemiology, and End Results Program, 1998 (incidence); Vital Statistics of the United States, 1998 (mortality).</p> | | | | | |

Table 11
Trends in 5-Year Relative Cancer Survival Rates* (%)
by Race and Year of Diagnosis, United States, 1974-1994

| | 1974- 1976 | 1980- 1982 | 1989- 1994 | 1974- 1976 | 1980- 1982 | 1989- 1994 | 1974- 1976 | 1980- 1982 | 1989- 1994 |
|------------------------|---------------|---------------|-----------------------|------------------|-----------------|-----------------------|---------------|---------------|-----------------------|
| Site | White | | | African American | | | All Races | | |
| All Sites | 50 | 52 | 62[†] | 39 | 40 | 47[†] | 49 | 51 | 60[†] |
| Brain | 22 | 25 | 30 [†] | 27 | 31 | 38 [†] | 22 | 25 | 30 [†] |
| Breast (Female) | 75 | 77 | 87 [†] | 63 | 66 | 71 [†] | 75 | 76 | 85 [†] |
| Colon | 50 | 56 | 64 [†] | 46 | 49 | 52 [†] | 50 | 55 | 63 [†] |
| Esophagus | 5 | 7 | 13 [†] | 4 | 5 | 9 [†] | 5 | 7 | 12 [†] |
| Hodgkin's Disease | 71 | 75 | 83 [†] | 69 | 72 | 76 | 71 | 74 | 82 [†] |
| Kidney | 52 | 51 | 62 [†] | 49 | 55 | 58 [†] | 52 | 52 | 61 [†] |
| Larynx | 66 | 69 | 67 | 59 | 58 | 56 | 66 | 68 | 66 |
| Leukemia | 35 | 39 | 44 [†] | 31 | 33 | 31 | 34 | 38 | 43 [†] |
| Liver | 4 | 4 | 6 [†] | 1 | 2 | 2 [†] | 4 | 3 | 5 [†] |
| Lung & Bronchus | 13 | 14 | 15 [†] | 11 | 12 | 11 | 12 | 13 | 14 [†] |
| Melanoma of Skin | 80 | 83 | 88 [†] | 66 [‡] | 60 [§] | 69 [‡] | 80 | 83 | 88 [†] |
| Multiple Myeloma | 24 | 28 | 28 [†] | 27 | 29 | 30 | 24 | 28 | 29 [†] |
| Non-Hodgkin's Lymphoma | 48 | 52 | 52 [†] | 48 | 50 | 41 [†] | 47 | 51 | 51 [†] |
| Oral Cavity & Pharynx | 55 | 55 | 55 | 36 | 31 | 32 | 53 | 53 | 53 |
| Ovary | 37 | 39 | 50 [†] | 41 | 39 | 46 [†] | 37 | 39 | 50 [†] |
| Pancreas | 3 | 3 | 4 [†] | 3 | 5 | 4 [†] | 3 | 3 | 4 [†] |
| Prostate | 68 | 75 | 95 [†] | 58 | 65 | 81 [†] | 67 | 73 | 93 [†] |
| Rectum | 49 | 53 | 61 [†] | 42 | 38 | 53 [†] | 48 | 52 | 61 [†] |
| Stomach | 15 | 16 | 19 [†] | 17 | 19 | 21 | 15 | 18 | 21 [†] |
| Testis | 79 | 92 | 96 [†] | 76 [‡] | 90 [‡] | 90 | 79 | 92 | 95 [†] |
| Thyroid | 92 | 94 | 96 [†] | 88 | 94 | 88 | 92 | 94 | 95 [†] |
| Urinary Bladder | 74 | 79 | 84 [†] | 47 | 58 | 62 [†] | 72 | 78 | 82 [†] |
| Uterine Cervix | 70 | 68 | 72 [†] | 64 | 61 | 59 | 69 | 67 | 70 |
| Uterine Corpus | 89 | 83 | 87 [†] | 61 | 54 | 54 | 88 | 82 | 84 [†] |

*Survival rates are adjusted for normal life expectancy and are based on follow-up of patients through 1995.

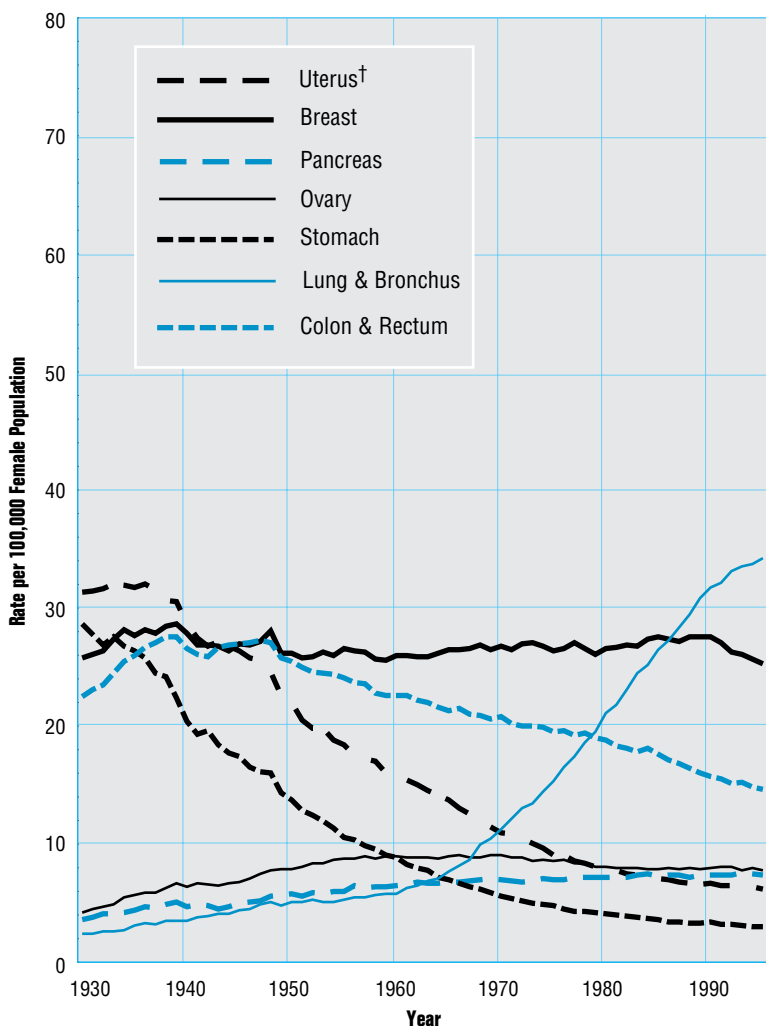
†The difference in rates between 1974-1976 and 1989-1994 is statistically significant ($P < 0.05$).

‡The standard error of the survival rate is between 5 and 10 percentage points.

§The standard error of the survival rate is greater than 10 percentage points.

Data source: NCI Surveillance, Epidemiology, and End Results Program, 1998.

Figure 5
Age-Adjusted Cancer Death Rates*
for Females by Site, United States, 1930–1995



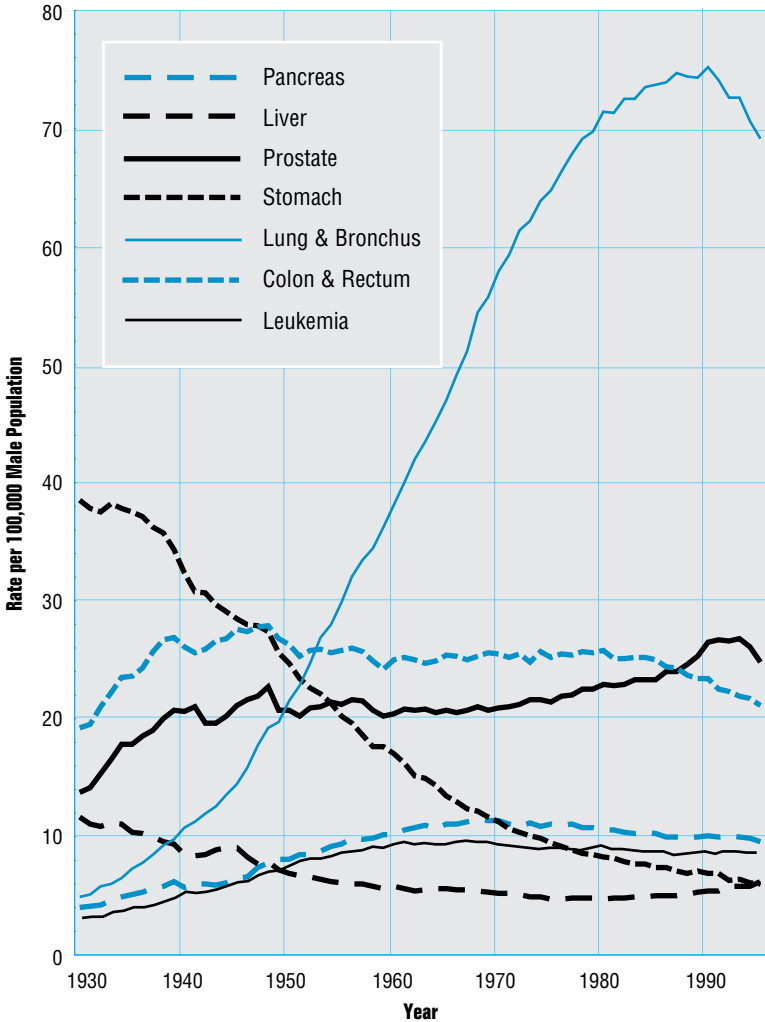
Note: Due to changes in the ICD coding, numerator information has changed over time. Rates for cancer of the uterus, ovary, lung & bronchus, and colon & rectum are affected by these coding changes.

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

†Uterine cancer death rates are for uterine cervix and uterine corpus combined.

Data source: Vital Statistics of the United States, 1998.

Figure 6
Age-Adjusted Cancer Death Rates*
for Males by Site, United States, 1930-1995

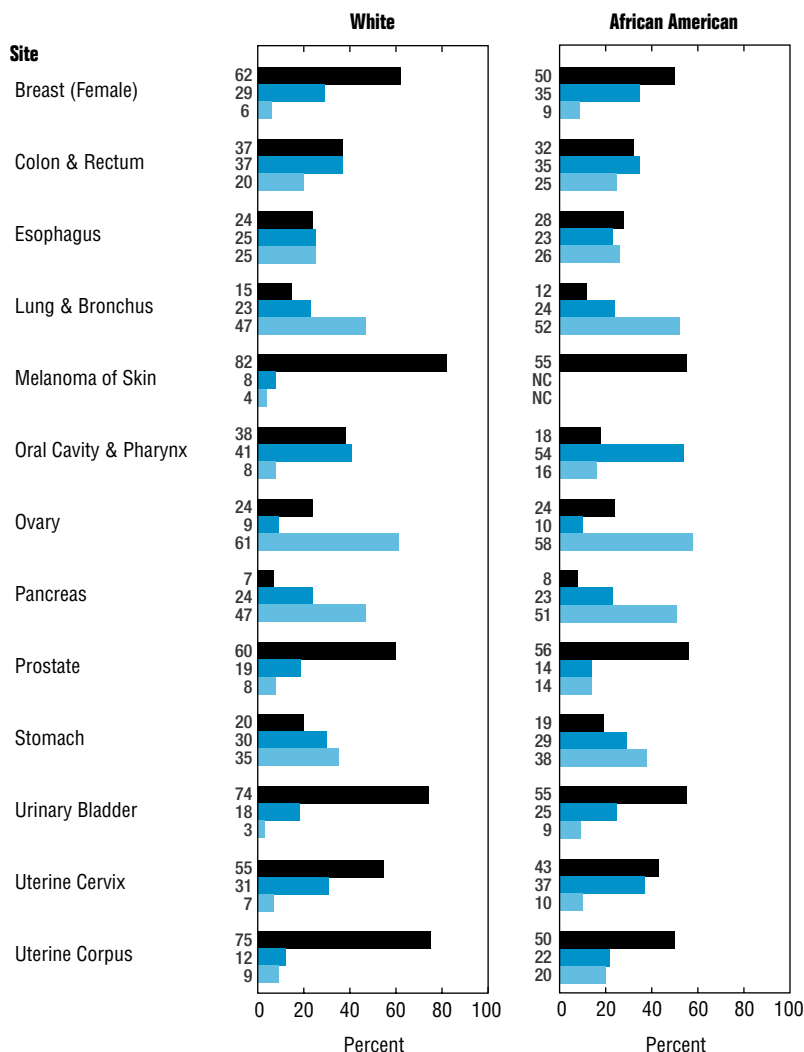


Note: Due to changes in the ICD coding, numerator information has changed over time. Rates for cancer of the liver, lung & bronchus, and colon & rectum are affected by these coding changes.

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

Data source: Vital Statistics of the United States, 1998.

Figure 7
Percent Distribution of Cancer Cases
by Race and Stage at Diagnosis, United States, 1989–1994



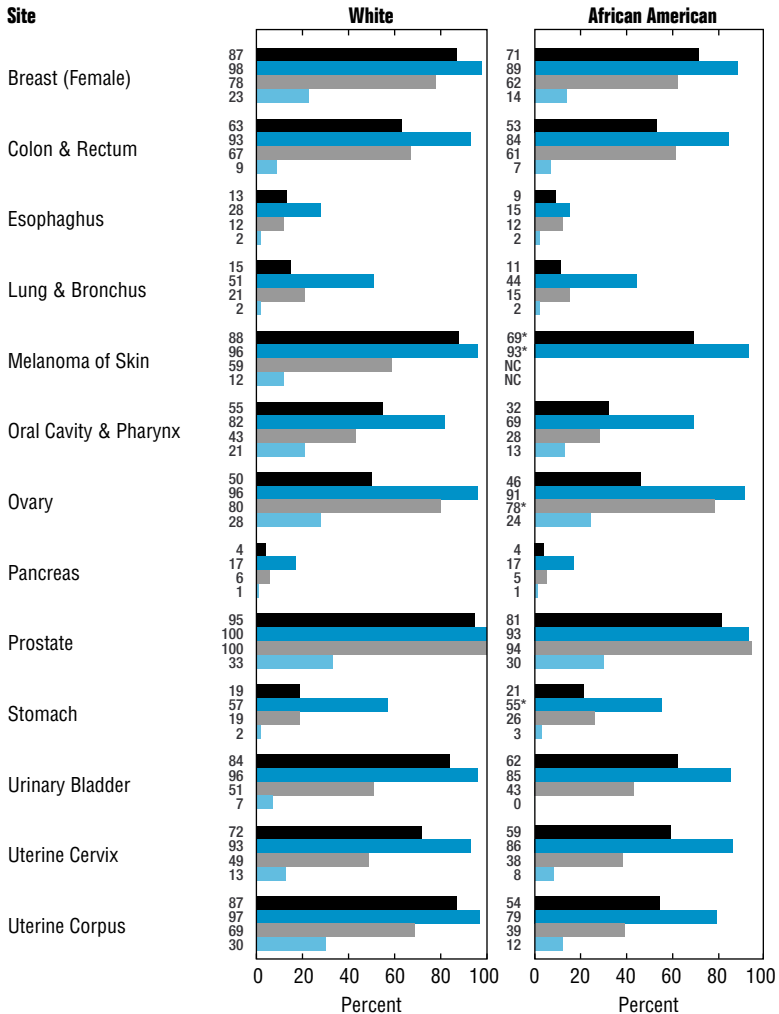
Note: Staging according to SEER summary stage categories rather than the American Joint Committee on Cancer (AJCC) staging system. For each site and race, stage categories do not total 100% because sufficient information is not available to assign a stage to all cancer cases.

NC = Statistic could not be calculated.

Data source: NCI Surveillance, Epidemiology, and End Results Program, 1998.

Localized 
 Regional 
 Distant 

Figure 8
Five-Year Relative Survival Rates
by Race and Stage at Diagnosis, United States, 1989-1994



Note: Staging according to SEER summary stage categories rather than the American Joint Committee on Cancer (AJCC) staging system.

*The standard error is between 5 and 10 percentage points.

NC = Statistic could not be calculated.

Data source: NCI Surveillance, Epidemiology, and End Results Program, 1998.

All Stages
 Localized
 Regional
 Distant

Table 12
Fifteen Leading Causes of Death Among Children
Aged 1–14 Years, United States, 1995

| Rank | Cause of Death | Number of Deaths | Death Rate per 100,000 Population* | Percent of Total Deaths |
|------|---------------------------------------|------------------|------------------------------------|-------------------------|
| | All Causes | 14,989 | 27.3 | 100.0 |
| 1 | Accidents | 5,824 | 10.7 | 38.9 |
| 2 | Cancer | 1,514 | 2.8 | 10.1 |
| 3 | Congenital Anomalies | 1,144 | 2.0 | 7.6 |
| 4 | Homicide | 1,014 | 1.8 | 6.8 |
| 5 | Heart Diseases | 545 | 1.0 | 3.6 |
| 6 | HIV Infection | 399 | 0.7 | 2.7 |
| 7 | Cerebral Palsy | 338 | 0.6 | 2.3 |
| 8 | Suicide | 337 | 0.7 | 2.2 |
| 9 | Pneumonia & Influenza | 284 | 0.5 | 1.9 |
| 10 | Chronic Obstructive Pulmonary Disease | 180 | 0.3 | 1.2 |
| 11 | Benign Neoplasms | 159 | 0.3 | 1.1 |
| 12 | Septicemia | 137 | 0.2 | 0.9 |
| 13 | Viral Diseases | 131 | 0.2 | 0.9 |
| 14 | Cerebrovascular Diseases | 127 | 0.2 | 0.8 |
| 15 | Anemias | 122 | 0.2 | 0.8 |
| | All Others | 2,734 | | 18.2 |

*Age-adjusted to the 1970 US standard population.
 Data source: Vital Statistics of the United States, 1998.

Table 13
Trends in Cancer Survival for Children Under Age 15
United States, 1974–1994

| Site | Five-Year Relative Survival Rates (%) | | | | | |
|------------------------------|---------------------------------------|---------------|---------------|---------------|---------------|---------------|
| | Year of Diagnosis | | | | | |
| | 1974– 1976 | 1977– 1979 | 1980– 1982 | 1983– 1985 | 1986– 1988 | 1989– 1994 |
| All Sites | 56 | 62 | 65 | 68 | 70 | 74* |
| Acute Lymphocytic Leukemia | 53 | 67 | 70 | 70 | 78 | 80* |
| Acute Myeloid Leukemia | 14 | 26† | 21† | 32† | 28† | 43* |
| Bones & Joints | 54† | 53† | 54† | 59† | 62† | 64* |
| Brain & Other Nervous System | 55 | 56 | 55 | 62 | 62 | 63* |
| Hodgkin's Disease | 79 | 83 | 91 | 90 | 90 | 92* |
| Neuroblastoma | 52 | 54 | 53 | 54 | 60 | 69* |
| Non-Hodgkin's Lymphoma | 45 | 51 | 62 | 70 | 69 | 78* |
| Soft Tissue | 61 | 69 | 65 | 76 | 66 | 76* |
| Wilms' Tumor | 74 | 77 | 87 | 86 | 91 | 93* |

Note: All sites excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.

*The difference in rates between 1974–1976 and 1989–1994 is statistically significant ($P < 0.05$).

†The standard error of the survival rate is between 5 and 10 percentage points.

Data source: NCI Surveillance, Epidemiology, and End Results Program, 1998.