O-1. BACKGROUND AND DATA SOURCES

There are four measures that are commonly used to assess the impact of a cancer in the general population. The **incidence rate** is the number of new cases per year per 100,000 persons. The **death** (or **mortality**) **rate** is the number of deaths per year per 100,000 persons. The **survival rate** is the proportion of patients alive at some point subsequent to the diagnosis of their cancer. The **prevalence count** is the number of people alive that have ever been diagnosed with a cancer. All four measures are employed in this report. The Surveillance, Epidemiology, and End Results (**SEER**) Program (*http://seer.cancer.gov*) (based within the Surveillance Research Program (**SRP**) at the National Cancer Institute (**NCI**)) collects incidence and survival data for all areas that participate in the Program. The National Center for Health Statistics (**NCHS**) provides mortality data for the entire United States (**US**). All incidence and mortality rates in this report are age-adjusted (see below) to the 2000 US standard population (see Appendix) unless otherwise specified. Age-adjustment minimizes the effect of a difference in age distributions when comparing rates. Data are presented for a wide spectrum of cancers.

The annual *SEER Cancer Statistics Review* (***CSR***), containing the most recent incidence, mortality, prevalence, and survival statistics, is published by the Cancer Statistics Branch of the NCI. The scope and purpose of the *CSR* follow a report to the Senate Appropriations Committee (Breslow, 1988), which recommended that a broad profile of cancer be presented regularly to the American public. This *CSR* includes incidence, mortality, prevalence, and survival data from 1975 through 2004, the most recent year for which data are available. Observed incidence data for the most recent years may not be complete. Therefore, delay adjusted rates are presented to compensate for this problem (see Reporting Delay).

While most of the rates in this publication have been age-adjusted to the 2000 US standard population, some previous SEER publications have used the 1970 US standard million population. Therefore, rates given in this publication cannot be compared to rates given in those publications. This change conforms to a new federal policy for reporting disease rates and it allows for the age-adjusted rate to more accurately reflect the current age distribution and burden of cancer.

Since 1996, the *CSR* has been available (in .pdf format) at *http://seer.cancer.gov*. This edition can be found at *http://seer.cancer.gov/Publications/CSR1975_2004/*. The website allows timely distribution of the *CSR*. Additional SEER data can be obtained via ***FastStats*** (*http://seer.cancer.gov*) or ***Cancer Query Systems***, an interactive system at *http://seer.cancer.gov/canques*, which allows the user to access over 10,000,000 cancer statistics. The SEER limited-use file with ***SEER*Stat*** software can be used over the internet, or the user can order a CD-ROM version at *http://seer.cancer.gov/publicdata/options.html*. (This URL will soon change to *http://seer.cancer.gov/data/options.html*.) *SEER*Stat* provides a user-friendly PC desktop system for the production of a myriad of cancer statistics, such as incidence rates and survival rates, for various demographic and medical input variables.

Excluded cancers: Some cancers were excluded from most of the analyses. Myelodysplastic syndromes (MDS), for example, was reclassified in ICD-O-3 (effective diagnosis year 2001) from nonmalignant to malignant; other cancers so reclassified include papillary ependymoma, papillary meningioma, polycythemia vera, chronic myeloproliferative disease (NOS), myelosclerosis with myeloid metaplasia, essential thrombocythemia, refractory anemia, refractory anemia with sideroblasts, refractory anemia with excess blasts, and refractory anemia with excess blasts in transformation. In contrast, borderline tumors of the ovary were reclassified from malignant to nonmalignant at the same time. In addition, benign brain/CNS tumors were collected beginning for 2004 diagnoses. All of these cancers were excluded from most of the analyses, especially time trends. Pilocytic astrocytoma, although reclassified in ICD-O-3, was not excluded. Separate tables for MDS and benign brain/CNS are shown.

O-2. THE SEER PROGRAM

The National Cancer Act of 1971 mandated the collection, analysis, and dissemination of data useful in the prevention, diagnosis, and treatment of cancer. This mandate led to the establishment of the SEER Program. The population-based cancer registries participating in NCI's SEER Program routinely collect data on all cancers occurring in residents of the participating areas. Trends in cancer incidence and patient survival in the US are derived from this database.

The SEER Program is a sequel to two earlier NCI programs—the End Results Program and the Third National Cancer Survey. The initial SEER reporting areas were the States of **Connecticut**, **Iowa**, **New Mexico**, **Utah**, and **Hawaii**; the metropolitan areas of **Detroit**, Michigan, and **San Francisco-Oakland**, California; and the Commonwealth of Puerto Rico. Case ascertainment began with January 1, 1973, diagnoses.

In 1974-1975, the program was expanded to include the metropolitan area of New Orleans, Louisiana, the thirteen-county **Seattle-Puget Sound** area in the State of Washington, and the metropolitan area of **Atlanta**, Georgia. New Orleans participated in the program only through the 1977 data collection year. In 1978, ten predominantly African-American counties in **rural Georgia** were added. **American Indian residents of Arizona** were added in 1980. In 1983, four counties in New Jersey were added with coverage retrospective to 1979. New Jersey and Puerto Rico participated in the program until the end of the 1989 reporting year. The National Cancer Institute also began funding a cancer registry that, with technical assistance from SEER, collects information on cancer cases among **Alaska Native** populations residing in Alaska. In 1992, the SEER Program was expanded to increase coverage of minority populations, especially Hispanics, by adding **Los Angeles County** and four counties in the **San Jose-Monterey** area south of San Francisco. In 2001, the SEER Program expanded coverage to include **Kentucky, Greater California** (the counties of California that were not already covered by SEER), **New Jersey,** and **Louisiana**.

The long-term incidence trends and survival data for this report are from five states (Connecticut, Hawaii, Iowa, New Mexico, and Utah) and four metropolitan areas (Detroit, Atlanta, San Francisco-Oakland, and Seattle-Puget Sound) (Fig. I-1); this set of registries is called the **SEER 9**. Additional tables show more recent incidence trends for the **SEER 13** areas (the 9 areas above plus Los Angeles, San Jose-Monterey, Alaska Native Registry, and rural Georgia) since 1992. Other tables give statistics for the **SEER 17** areas; these are the SEER 13 plus Kentucky, Greater California, New Jersey, and Louisiana.

The participating regions were selected principally for their ability to operate and maintain a population-based cancer reporting system and for their epidemiologically significant population subgroups. With respect to selected demographic and epidemiologic factors, they are when combined a reasonably representative subset of the US population. Data from the 9, 13, or 17 SEER geographic areas are used in this report; the given areas contain, respectively, approximately 9,14, or 26 percent of the US population. By the end of the 2004 diagnosis year, the database of 13 SEER and 4 expansion registries (plus Arizona Indians) contained information on **7,032,878** cases diagnosed since 1973. New cases added in the most recent data year (not including Arizona Indians) numbered **374,022**.

The goals of the SEER Program are:

(1) to assemble and report, on a periodic basis, estimates of cancer incidence, mortality, survival, and prevalence in the US;
(2) to monitor annual cancer incidence trends to identify unusual changes in specific forms of cancer occurring in population subgroups defined by geographic and demographic characteristics;
(3) to provide continuing information on trends over time in the extent of disease at diagnosis, trends in therapy, and associated changes in patient survival; and
(4) to promote studies designed to identify factors amenable to cancer control interventions, such as: (a) environmental, occupational, socioeconomic, dietary, and health-related exposures; (b) screening practices, early detection and treatment; and (c) determinants of the length and quality of patient survival.

Incidence and survival data: The SEER Program contracts with nonprofit, medically-oriented organizations having statutory responsibility for registering diagnoses of cancer among residents of their respective geographic coverage areas. Each SEER contractor:

(1) maintains a cancer information reporting system;
(2) abstracts records for *resident* cancer patients seen in every hospital both inside and outside the coverage area;
(3) abstracts all death certificates of *residents* (dying both inside and outside the coverage area) on which cancer is listed as a cause of death;
(4) strives for complete ascertainment of cases by searching records of private laboratories, radiotherapy units, nursing homes, and other health services units that provide diagnostic service;
(5) registers all in situ and malignant neoplasms (with the exceptions of certain histologies

for cancer of the skin and—beginning in 1996—in situ neoplasms of the cervix uteri);

(6) records data on all newly diagnosed cancers, including selected patient demographics, primary site, morphology, diagnostic confirmation, extent of disease, and first course of cancer-directed therapy;

(7) provides active follow-up on all living patients (except for those with in situ cancer of the cervix uteri);

(8) maintains confidentiality of patient records;

(9) semiannually submits electronically to NCI data on all reportable diagnoses of cancer made in residents of the coverage area.

For 1992 to 2000 diagnoses, the SEER program codes site and histology by the *International Classification of Diseases for Oncology*, second edition (**ICD-O-2**) (Percy, Van Holten, & Muir, 1990). All cases before 1992 were machine-converted to ICD-O-2. Beginning with 2001 diagnoses, cases have been coded according to the third edition (**ICD-O-3**) (Fritz et al., 2000). The primary site groupings used for incidence are found in the Appendix. Changes were made to the site recode for ICD-O-2 for comparability with cases coded to ICD-O-3. Follow-up rates are also in the Appendix.

Mortality data: The SEER Program annually obtains from the NCHS a public-use file containing information on all deaths occurring in the US by calendar year. Information on each death includes age at death, sex, geographic area of residence, and underlying and contributing causes of death. For this publication, only the underlying cause of death is used in the calculation of mortality rates. Cause of death for 1969-1978 was coded according to ICD-8; for 1979-1998, ICD-9 was used; beginning with deaths in 1999, ICD-10 was used. Mortality rates for the SEER geographic areas, for each state, and for the entire US are obtained from these data. A list of the mortality site groupings used in this publication is in the Appendix and reflects updates made in 2004.

Numbers of estimated cancers and deaths in 2007: The SEER Program has obtained from the American Cancer Society (**ACS**) projections of the numbers of cancer cases and cancer deaths in the US in 2007 (American Cancer Society, 2007). The ACS projects incidence in 2007 based on incidence rates for 1995-2003 from 41 states, representing about 86% of the US population, that belong to the National Program of Cancer Registries to the 2007 estimated US population (Jemal et al., 2007).

Population data: The population estimates used in the SEER*Stat software to calculate cancer incidence and mortality rates for this report are a modified version of the annual time series of July 1 county population estimates by age, sex, race, and Hispanic origin that are produced by the Population Estimates Program of the US Census Bureau (*http://www.census.gov/popest/estimates.php*) with support from the NCI through an interagency agreement. Descriptions of the methodologies employed by the Census Bureau for various sets of estimates may be found on the same website. County population estimates for 2000 and later years must be bridged from 31 race categories used in Census 2000 to the four

race categories specified under earlier OMB standards in order to report long-term cancer trends. The bridging methodology was developed by the National Center for Health Statistics and is described in a report (Ingram et al., 2003) and on their website *http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm*.

Modifications made by the NCI to the population estimates are documented in "Population Estimates Used in NCI's SEER*Stat Software" (*http://seer.cancer.gov/popdata/methods.html*) and the population data files are available for download (see "Download US Population Data" from *http://seer.cancer.gov/popdata/download.html*). Several of the modifications pertaining to the grouping of specific counties were needed to assure the compatibility of all incidence, mortality and population datasets. Another modification affects only population estimates for the State of Hawaii. Based on concerns that the native Hawaiian population has been vastly undercounted in previous censuses, the Epidmiology Program of the Hawaii Cancer Research Center has recommended an adjustment to the populations for their state. The "Hawaii-adjustment" to the Census Bureau's estimates has the net result of reducing the estimated white population and increasing the estimated Asian and Pacific Islander population for the state. The estimates for the total population, black population, and American Indian and Alaska Native populations in Hawaii are not modified.

Starting this year, the 2000-2004 cancer incidence and mortality rates for American Indians and Alaska Natives (AI/AN) are based on the geographic areas (counties) included in the Indian Health Service's Contract Health Service Delivery Area (CHSDA). This reflects a concern that previously reported AI/AN rates were underestimated due to racial/ethnic misclassification of American Indian cases in geographic areas outside of CHSDA. This change has the net effect of higher, and more accurate, incidence and mortality rates for this population.

2000 US standard population: Starting with the November 2004 SEER submission of data (diagnoses through 2002), the SEER Program age-adjusts using the 2000 US standard population based on single years of age from the Census P25-1130 series estimates of the 2000 US population (Day, 1996). For the *CSR*, 19 age groupings were used for age-adjustment: <1, 1–4, 5–9, … , 80–84, 85+.

O-3. SUMMARY TABLES

While there are detailed tables in separate sections for each of the major cancer sites, information on some rare cancers can be found in the summary tables of section I. For a detailed list of primary sites, the summary tables provide incidence and death rates for the most recent 5-year period, trends (percent change (PC) and annual percent change (APC)) from 1975 to the most recent year, median age at diagnosis, median age at death, and survival rates. The information is provided by race (all races, whites, blacks) and by sex.

O-4. LONG-TERM TRENDS, 1950-2004

Trends in cancer mortality from 1950 to 2004 are summarized by age both for all cancers combined and for lung cancer (Table I-2). These mortality data are based on experience in the entire US. Summaries of long-term trends back to 1950 in cancer incidence and survival are currently not shown.

Use caution when interpreting these statistics. Evaluating trends over a long period of time may hide recent changes in the trends.

O-5. YEARS OF LIFE LOST DUE TO PREMATURE DEATH FROM VARIOUS CAUSES

Death rates alone give an incomplete picture of the burden that deaths impose on the population. Another measure, which adds a different dimension, is the years of life lost due to premature death. This shows the extent to which life is cut short by a particular cause or disease.

This measure is estimated by linking life table data to each death of a person of given age and sex. The life table permits a determination of the number of additional years an average person of that age, race, and sex would be expected to live. In this report, the age groups used in the calculation were 1-year intervals. These remaining years of life left are summed over all deaths due to a particular cause, yielding the estimate of the number of person-years of life lost (**PYLL**). The average years of life lost (**AYLL**) is obtained by dividing the PYLL by the number of deaths. Both of these measures can be calculated for any cause of death.

O-6. CANCER PREVALENCE

Methods: In this report prevalence is calculated at 1/1/2004. **Limited-duration prevalence** is calculated using the counting method implemented in the SEER*Stat software. This method calculates the number or proportion of people alive at the prevalence date who had a diagnosis of the disease within the past *x* years (e.g., *x* = 5, 10, 20, or the full history of the registry). This method includes a correction for people lost to follow-up. For each individual lost to follow-up, a probability of being alive at the prevalence date is estimated from an appropriate survival function stratified by age at diagnosis (0–59, 60–69, 70+), sex, cancer site, year of diagnosis, and race, conditional on being alive at the time of loss to follow-up. Year of diagnosis is stratified into 5-year groups from the prevalence date, with the least recent interval being of varying length (4-8 years), depending on the length of years used to calculate prevalence. Race is stratified into white, black, other (American Indian/Alaska Native, Asian/Pacific Islander), and unknown/other-unspecified. When we use the SEER 11 registries, the same stratification as before is used, with American Indian/Alaska Native separated from Asian/Pacific Islander. Prevalence calculations for Hispanics use race stratified into: white, non-white, and unknown.

Because SEER has available information for the various racial/ethnic groups for different

numbers of years, different years and registries were used to estimate prevalence. Prevalence estimates for all races combined, for whites, and for blacks use cases from 1975 through 2003 from the SEER 9 registries; prevalence estimates for Asian Pacific Islanders and Hispanics use cases diagnosed from 1990 through 2003 from the SEER 11 areas and rural Georgia.

Different methods can be used to determine which tumors are to be included for people diagnosed with multiple tumors. Unless otherwise specified, prevalence calculations included only the *first malignant tumor per person*; that is, in situ cancers and second-or-later primary cancers were not included. Thus, if a woman had a melanoma prior to a breast cancer diagnosis, her melanoma would contribute to the prevalence of melanoma and to the prevalence of all sites, but the breast cancer would not contribute to the prevalence of breast cancer. Counting only one cancer per individual avoids some ambiguity in prevalence counts, and allows the counts for individual sites to sum to the all sites total. Prevalence using different selection criteria is compared in a table in the overview chapter. For more information on tumor selection criteria refer to *http://srab.cancer.gov/prevalence/methods.html*.

Complete prevalence is an estimate of the number of persons (or the proportion of population) alive on a specified date who had been diagnosed with the given cancer, no matter how long ago that diagnosis was. It was estimated for all races, whites, and blacks by applying the *completeness index method* (Capocaccia & De Angelis, 1997; Merrill et al., 2000; Mariotto et al., 2002) to limited-duration prevalence. The completeness index method is implemented in the COMPREV software (*http://srab.cancer.gov/comprev/*). Validation of the completeness index for all races and for whites was made by using data from the Connecticut Tumor Registry (CTR) beginning with 1940; for blacks, SEER 9 data beginning with 1975 were used. Identification of blacks is not possible in the CTR data prior to 1970. To validate the completeness index for blacks, we have compared the performance of the method to obtain 24-year prevalence from 10-year limited-duration prevalence. For all races combined and for whites, in cases where the validation indicated some lack of fit of the model, an approximation to the completeness index was derived from the CTR data. If there was a lack of fit for blacks, no estimate of complete prevalence was reported. Complete prevalence for Asian/Pacific Islanders and Hispanics is not available at this time. Complete prevalence by age for all races combined was validated by comparing estimated 10-year complete prevalence with observed prevalence from the CTR data. Prevalence by age is reported for the sites that validated well.

The US cancer prevalence counts at 1/1/2004 *were estimated* by multiplying the SEER age- and race-specific prevalence proportions by the corresponding US population estimates based on the average of 2003 and 2004 population estimates from the US Bureau of the Census. US cancer prevalence counts for all races were estimated by summing the US estimated counts for whites/unknown, blacks, and other races. For Hispanics, the estimates for Hispanics of white or unknown race and for Hispanics of other races were summed.

Limited-duration prevalence proportions by age at prevalence are not shown for childhood cancers (diagnosis before age 20) since many of these estimates are not informative. (For

example, the number of people diagnosed with childhood cancers in the last 25 years and who are currently age 50-59 is zero by definition.) While it is of interest to estimate the total number of Americans currently alive who were diagnosed with a childhood cancer, the limitations of the duration of the SEER cancer registries requires that this be estimated using statistical modeling. (This work is in progress.)

For more details on available prevalence estimates, see *http://srab.cancer.gov/prevalence/index.html*.

Results and Table Description: The total number of persons alive on January 1, 2004, in the US who had had a diagnosis of invasive cancer is now estimated to be **10,762,214**. Compared with last year's 2003 prevalence estimate of **10,495,985** persons, this year's 2004 estimate represents an increase of **266,229** cases. This increase is due to increases in incidence, improvements in survival, and the increase and aging of the US population. The overview chapter contains two prevalence tables. The first table reports US complete prevalence counts by age at prevalence and sex for some cancer sites. The second table reports US prevalence counts for people diagnosed in the 5 years and 29 years prior to the prevalence date using different tumor inclusion criteria. Each site-specific chapter contains a prevalence table that reports limited-duration US prevalence counts by time since diagnosis for different racial/ethnic groups. US complete prevalence estimates are also reported when available. The second part of the table displays the percent of the population in the SEER 11 areas diagnosed in the previous 10 years with the specific cancer by 10-year age groups for the different racial/ethnic groups.

O-7. PROBABILITY OF BEING DIAGNOSED WITH OR DYING FROM CANCER

Each site-specific section contains a table showing the probability (expressed as a percent) of a person of a specified race, sex, and age (0, 10, 20, 30, 40, 50, or 60) being diagnosed with the specified invasive cancer within the next 10, 20, or 30 years, or within their remaining lifetime. Lifetime risks of being diagnosed with invasive cancer and lifetime risks of dying from cancer also appear (as percents) in each table. There are summary tables of lifetime risk in the overview.

Lifetime and interval risks of being diagnosed with cancer: The probability of being diagnosed with cancer is computed by applying cross-sectional age-specific 2002-2004 incidence rates from the SEER 17 areas and death rates from the entire US to a hypothetical cohort of 10,000,000 live births. This cohort is considered to be at risk for two mutually exclusive events: (1) developing the specified cancer, and (2) dying of other causes without developing the specified cancer. Using these two types of events, a standard **multiple decrement life table** (with 20 age groups from 0-4 to 90-94 and 95+) is derived. For each age interval, the number alive and free of the specified cancer at the beginning of the interval is decremented by the number who develop the specified cancer and the number who die of other causes. The lifetime risk of being diagnosed with the specified cancer is derived by summing all

cancer cases from age 0-4 through age 95+ and dividing by 10,000,000. This calculation does not assume that an individual lives to any particular age; rather, it is the sum over all age intervals of the probability of living to the beginning of that interval without developing the given cancer times the probability of developing the cancer in that interval. The probability of developing cancer during any time period (e.g., between age 50 and age 60) is calculated by adding up all the cancers in the life table over the specified age range and dividing by the number of individuals alive and free of the specified cancer at the beginning of the period. The methodology is described in detail in Fay (2003, 2004). To improve the precision of the calculations, rates were calculated beyond the usual last open ended age interval (i.e. 85+) for the age groups 85-89, 90-94, and 95+.

Lifetime risk of dying from cancer: The lifetime risk of dying from a specified cancer is derived using a standard multiple decrement life table (Elandt-Johnson & Johnson, 1980). For each age, the risks of dying of the specified cancer and of all other causes are calculated, based on mortality data from the entire United States. The estimates of developing and dying from cancer are implemented in DevCan (Probablity of DEVeloping or dying from CANcer software). More details on the software, various databases, and the methodology can be found at *http://srab.cancer.gov/devcan/*.

O-8. U.S. CANCER DEATH RATES BY STATE

Each cancer-site-specific section presents the death rate for the given cancer for each state and the District of Columbia, specifying the five highest and the five lowest death rates by state for the most recent 5-year period for all persons, males only, and females only. The rates are per 100,000 persons; they are age-adjusted to the US 2000 standard million population. (In some previous editions of the CSR, the 1970 US standard million population was used; therefore, *death rates in this edition cannot be compared to the rates in those editions.*)

The **percent difference (PD)** between a state rate and the rate for the total US is given by the formula:

$$PD = \frac{(\text{State Rate} - \text{Total US Rate})}{\text{Total US Rate}} * 100$$

The **standard error** for each age-adjusted state rate is calculated, based on the assumptions that (1) for each age-specific rate, the number of deaths is a Poisson random variable (Keyfitz, 1966) and (2) the variance of the age-adjusted rate is a linear combination of the variances of the age-specific rates (Snedecor & Cochran, 1980; pp. 188-9).

The **standard error of the difference** (SE_d) between a state rate and the total US rate is given by the formula

$$SE_d = \sqrt{SE_S^2 + SE_U^2 - 2Cov_{S,U}}$$

where SE_S and SE_U are the standard errors of a state rate and of the total US rate, respectively, and $Cov_{S,U}$ is the covariance between the two rates. The variance of each rate (i.e., the square of the standard error) and the covariance between the two rates are based on the Poisson assumption. The standard error does not represent the total error that may be present in the age-adjusted rate; it is merely the square root of the variance associated with the rates. In addition to this variance, there also exist potential biases and errors in the measurement of the rate that are difficult to assess accurately and probably impact differently on the error calculations for different states.

The difference between each age-adjusted state rate and the age-adjusted US rate is tested for statistical significance (see below) by calculating a *Z* (standard normal) statistic from the formula:

$$Z = (\text{State rate} - \text{Total US rate}) / SE_d$$

Although the rates being compared are not independent because each state is part of the US, the statistical test may not be substantially affected if the state represents a small proportion of the total US. There is also an adjustment for multiple comparisons; see below under *Statistical Significance*.

O-9. JOINPOINT REGRESSION ANALYSIS OF CANCER TRENDS

A recent advance in the presentation of cancer trends is the use of joinpoint models (Kim et al., 2000). In some past issues of the *Cancer Statistics Review*, certain time intervals (e.g., 1973–1996) were specified and the annual percent changes (APC) were computed over those intervals. The choices of where to start and where to end an interval were arbitrary and sometimes did not give an accurate picture of the trend for a given cancer site. For example, the rates might be increasing and decreasing in different parts of the same interval. For some sites, increases occurred in the earlier years, followed by declines in more recent years.

To achieve greater descriptive accuracy, a statistical algorithm the finds the optimal number and location of places where a trend changes. The point (in time) where a trend changes is called a **joinpoint**. Trends may change in different ways at a joinpoint: from up to down, from down to up, from up to up at a different rate, or from down to down at a different rate. A **joinpoint regression model** describes the trends by a sequence of connected segments where each segment is connected by a straight line on a log scale. Adjacent segments are connected at a joinpoint. The segments are connected because we assume that rates generally change smoothly, rather than "jump" abruptly. The rates are assumed to grow or decay exponentially, i.e., to change by a constant percentage each year. Thus the slope in each segment can be associated with a fixed annual percent change (**APC**).

Joinpoint analysis first assumes no joinpoints are needed to describe the data accurately, i.e., the trend over the entire interval 1975-2004 does not change. Joinpoints are added in turn if they are statistically significant. Thus, in the final model, each joinpoint represents a significant change in trend. Computational considerations currently limit the maximum possible number of

segments to be no larger than four, with three joinpoints. Smoother polynomial models may provide a good fit overall, but are less sensitive to what is occurring at the ends of the data .

In running the Joinpoint program, we set the program parameters as follows: maximum number of joinpoints 3, minimum interval between joinpoints 2 years, minimum interval between a joinpoint and an endpoint 2 years, joinpoints occurring only at exact years. These restrictions provide some added stability to the resultant models. Different values for these parameters may yield a different joinpoint model. Since the test statistic to determine if additional joinpoints are necessary cannot be compared against any known standard distribution to determine significance, (e.g., the normal, t, or f) a permutation test is used which simulates the distribution of the test statistic under the null hypothesis. Thus an element of randomness is introduced by the random number stream used. However, for greater consistency in the p-values obtained if one were to change the random seed for each run, we run the program for 4499 permutations.

A Windows-based program, *Joinpoint*, is freely available at *http://srab.cancer.gov/joinpoint/*; it accepts data from the *SEER*Stat* program, as well as user defined data. Further details on joinpoint regression may be found at the web site.

O-10. REPORTING DELAY

Timely and accurate calculation of cancer incidence rates is hampered by **reporting delay**, the time lapse before a diagnosed cancer case is reported to the NCI or the delay in receiving updated information for an existing case. Currently, the NCI allows a standard delay of 22 months between the end of the diagnosis year and the time the cancers are first reported to the NCI in November, almost two years later. The data are released to the public in the spring of the following year. For example, cases diagnosed in 2004 were first reported to the NCI in November 2006 and released to the public in April 2007. However, in each subsequent release of the SEER data, *records from all prior diagnosis years* (e.g., diagnosis years 2003 and earlier in the 2006 submission to the NCI) *are updated* as either new cases are found or new information is received about previously submitted cases. The submissions for the most recent diagnosis year are, in general, about two percent below the total number of cancers that will eventually be submitted for that year, although this varies by cancer site and other factors. The idea behind modeling reporting delay is *to adjust the current case count to account for anticipated future corrections (both additions and deletions) to the data*. These adjusted counts and the associated delay model are valuable in more precisely determining current cancer trends, as well as in monitoring the timeliness of data collection—an important aspect of quality control (Clegg et al., 2002). Reporting delay models have been previously used in the reporting of AIDS cases (Brookmeyer & Damiano, 1989; Pagano et al., 1994; Harris, 1990).

In this report, we show SEER age-adjusted incidence rates and trends, along with their calculated delay adjustments for all cancers combined (malignant only except for urinary bladder), for female breast in situ, for urinary bladder (in situ and malignant), and for 22 malignant cancer sites: melanoma (for all races combined and whites only), lung/bronchus,

colon/rectum, prostate, female breast, liver and intrahepatic bile duct, pancreas, cervix uteri, corpus and uterus, ovary, testis, kidney and renal pelvis, brain and other nervous system, Hodgkin lymphoma, non-Hodgkin lymphoma, all leukemias, esophagus, larynx, myeloma, oral cavity and pharynx, thyroid, and stomach.

Cancer data from diagnosis years of 1981 to 2004 were used to model reporting delay distribution. A delay distribution models the probability of a cancer being reported after a delay of d years (d = 2, 3, ...,25). The number of cancers reported at each delay year is assumed to follow a Poisson distribution. Cases are removed as corrections to the data are made, and the probability of removing cases is modeled as a binomial distribution. To reduce the number of parameters that have to be estimated and to achieve stability in the tails of the delay distributions, an assumption is made that all cancer cases will be reported within 25 years of diagnosis.

The delay distributions were modeled as a function of covariates using a discrete-time proportional hazards model. For the models presented here the following potential covariates are included: age at diagnosis, sex, diagnosis year, delay time, and race. Age at diagnosis was modeled as a 3-category variable with levels 0–49, 50–64, and 65+. Diagnosis year was modeled either as a continuous covariate or as categorized variables: 1981–1985, 1986–1990, and 1991–2004. Delay time d was modeled as a categorical variable in one of three ways:
(1) $d > 2$ or $d > 3$,
(2) $d > 2$, $d > 3$, $d > 4$, or $d > 5$, and
(3) $d > 2$, $d > 3$, ... , or $d > 10$.
For each cancer site, a delay distribution was calculated for all races combined and separate delay distributions were calculated for whites and for blacks. When modeling delay distributions for all races combined, if a patient's race value changed between two submission years the change of value does not contribute to the delay distribution. For melanoma, only all races combined and whites were analyzed because melanoma is rare for blacks.

Maximum likelihood estimates of delay probabilities were obtained using the Newton-Raphson algorithm. Details of the estimation can be found in Midthune et al. (2005). For each of the cancer sites, up to 72 models of pre-determined combinations of covariates were considered. We evaluated these models by fitting the models using data of diagnosis years between 1981 and 2003 and then predicting the cancer counts for 2004. For each cancer site, the model that minimized the sum of squared prediction errors was chosen as the default model. An algorithm was then used to compare the default model with competing models in order to select a model that best balanced prediction and simplicity. The chosen model was then refitted using all data (1981–2004 diagnosis years) to estimate delay distributions and calculate delay-adjusted estimates of the cancer counts.

Age-adjusted (using the 2000 US standard population) cancer incidence rates were then calculated with and without adjusting for reporting delay. Joinpoint linear regression (Harris, 1990) was used to obtain the annual percentage changes for the 1975–2004 incidence rates for

the data series with and without delay adjustment. Because the delay distribution was assumed complete after 25 years, incidence rates for diagnosis years prior to 1981 are not adjusted. In these joinpoint regression analyses, up to three joinpoints (i.e, four trend-line segments) were allowed, and these were modeled to fall at either whole years or midway between diagnosis years. Joinpoints were constrained to be at least two years away from both the beginning and the end of the data series and at least two years apart. Joinpoint regressions were fitted using the weighted-least-squares (weighted by appropriate variances of age-adjusted incidence rates) option in the *Joinpoint* regression software.

Results show that adjusting for delay tends to raise cancer incidence rates in more current reporting years. While this adjustment increases the rate of change over the most recent diagnosis years, it probably will only rarely cause the detection of a new joinpoint, although this is possible. See Clegg et al. (2002) for details on the impact of reporting-delay adjustment to SEER cancer incidence rates.

For estimates of delay-adjusted rates, delay-adjustment factors, description of the covariates included in each cancer site model, and other details of delay adjustment, see *http://srab.cancer.gov/delay/*. The estimates of the delay-adjusted rates are in the Cancer Query Systems (*http://seer.cancer.gov/canques/*).

O-11. STATISTICAL SIGNIFICANCE

Errors may be made in the estimation of a given statistic. In order to test whether two groups (such as the populations of a state and the entire US) have the same or different *actual* rates, the *observed* rates for the groups are compared. Statisticians consider that a difference in observed rates can be explained by one of two hypotheses: (H_0) The actual rates are really the same, but the observed rates are different because of some combination of error-causing factors, or (H_1) the actual rates of the groups are really different. H_0 is called the **null hypothesis** (because it says there is *no* real difference); H_1 is called the **alternate hypothesis**. Typically, H_0 is rejected only if there is strong evidence in favor of H_1. (Thus, if the observed rates are equal, we cannot reject H_0.)

Using statistical theory, one can determine the distribution of the rate difference under the assumption that H_0 is true. Then values of the rate difference that are very unlikely to occur if H_0 is true are identified. More specifically, a small positive number, called **alpha** (α), is chosen; usually, α is 0.05 or 0.01. (Alpha is called the **significance level** of the hypothesis test.) One can then identify limits for the difference in rates such that, if H_0 is true, the probability of the difference being outside of those limits is α. If the observed difference is *outside* of these limits, then the observed result is *very unlikely* to happen if H_0 is true, so H_0 is rejected.

Another way of looking at the same process is to calculate, assuming H_0 is true, the probability that the observed difference or any greater observed difference would occur; this number is called the ***P*-value** of the observed result. If the *P*-value of a comparison is less than α (that is,

the observed difference is *very unlikely* to happen if the null hypothesis is true), H_0 will be rejected. If the *P*-value of a test is greater than the significance level α, H_0 will not be rejected. When a difference in rates is sufficiently large to cause the null hypothesis to be rejected for a given value of α (usually 0.05), it is called a **statistically significant** difference.

When a null hypothesis is rejected, there remains a small chance that a wrong decision has been made. If many statistical comparisons are done, even with $\alpha = 0.01$, the chance of making at least one wrong decision becomes a concern. In testing the differences between the total US rate and the rate for each state (or for the District of Columbia) for a given cancer, 51 statistical comparisons of the type described above are performed. Based on one of Bonferroni's inequalities (if there are *n* events and p_i is the probability of success in event *i*, then *P*(at least 1 success) < p_1 + ... + p_n) (Snedecor & Cochran,1980; p. 115-117), the significance level α for each individual comparison was set equal to $0.01/51 \approx 0.0002$. Thus, only individual-state-to-total-US comparisons with an associated *P*-value less than 0.0002 are considered to be statistically significant. That is, a *very small* significance level α (0.0002) is used in order to minimize the total risk (0.01) of falsely deciding that some pair of equal rates are unequal.

Use caution in assessing statistically significant differences. Population size has an important role in any calculation of statistical significance. Some states may have estimated rates that are very close to the estimated total US rate, but because of their large population, the difference between their estimated rate and the estimated total US rate is found to be statistically significant. In this case, the true state rate and the true US rate are almost certainly different, because the observed difference, though small, is nearly impossible if the null hypothesis (equal rates) is true. A small difference in rates, however, may have no practical importance. On the other hand, some smaller states may have estimated rates that differ substantially from the estimated total US rate, but because of their relatively small population, the differences are found to be statistically nonsignificant. When this happens, if the true state rate and the true US rate were equal, the probability of obtaining a difference at least as large as what has been observed is greater than $\alpha \approx 0.0002$. Therefore, *because the evidence against it isn't strong enough, the null hypothesis (equal rates) is not rejected.*

If the percent difference (PD) between the two rates is small, there may be some question about the importance of the difference. It is difficult to specify a minimally significant absolute PD, below which the difference would always be unimportant, because the observed PD will depend on the populations of the areas involved. It may be of value to consider the size of the PD between a state rate and the US rate in assessing the importance of a statistically significant difference.

Comparing individual state rates with the US rate and assessing statistical significance is not an appropriate procedure for assessing geographic clustering of state rates. Identification of states which may represent regional clusters of high or low rates would require additional statistical and graphical analyses.

For a number of cancers, the District of Columbia has the highest death rates. *Use caution when comparing cancer rates for the District with those from the 50 states.* The District is an entirely urban area, whereas a state includes urban, suburban, and rural areas. Mortality rates for many cancers are higher in urban areas. Also, the District has a higher percentage of blacks (about two-thirds) than any state; their higher mortality rates for several types of cancer elevate the overall rate for the District.

O-12. INTERPRETATION OF CANCER STATISTICS

When reviewing the various cancer incidence, mortality, and survival statistics provided in this report, be aware that a number of factors may affect the interpretation of many of these statistics.

Survival rates for all cancers combined: The mix of cancers changes over time as the incidence of some cancers increases and the incidence of others decreases. Thus, in calculating the survival rate for all cancers combined, the proportions corresponding to the specific cancers will also change over time. Therefore, the overall cancer survival rate can fluctuate even when the survival rates for site-specific cancers remain unchanged. (While it is possible to adjust the survival rate for all cancers combined on the basis of the relative frequency of each specific cancer in some specified reference period, rates adjusted in this manner differ by only a small amount from unadjusted rates. In the future, such an adjustment may become more important if there are substantial changes in the incidence of various cancers.)

Early detection/screening: The improved earlier detection and diagnosis of cancers may produce an *increase* in both incidence rates and survival rates. These increases can occur as a result of the introduction of a new procedure to screen subgroups of the population for a specific cancer; they need not be related to whether use of the screening test results in a decrease in mortality from that cancer. As the proportion of cancers detected at screening increases, presumably as a result of increased screening of the population, patient survival rates will *increase*, because they are based on survival time *after diagnosis*. The interval between the time a cancer is diagnosed by a screening procedure and the time when the cancer would have been diagnosed in the absence of screening is called **lead-time** (Zelen, 1976). (Screening for breast cancer has been demonstrated to result in increased survival over and above that resulting from lead-time alone and to reduce breast cancer mortality. The benefit of screening is being studied for some other cancers.)

If a new screening procedure consistently detects cancer in a preinvasive phase, this may result in a *decrease* in survival rates for *invasive* cancer. In this case, **length-biased sampling** (Zelen, 1976) may be operating. Length-biased sampling would result in the preferential detection—in a *preinvasive* phase—of those cancers that would have had a relatively good prognosis had they progressed to invasive disease; these potentially invasive cancers would be systematically eliminated. If this occurs, the mix of cancers that are not detected at screening

and progress to invasive may become less prognostically favorable, resulting in a *decrease* in survival rates for patients with invasive cancers. (Length-biased sampling may at least partially explain survival trends for cervical cancer. Other cancers possibly affected include breast, colon, rectum, and prostate.)

Changes in diagnostic criteria: Early detection of cancer resulting from either screening or earlier response to symptoms may result in the increasing diagnosis of small tumors that are not yet life-threatening. This may have the effect of raising the incidence and survival rates with little or no change in mortality rates. Breast, colon, prostate, cervix uteri, bladder, and skin (melanoma) are the cancer sites most likely to be affected.

Technological advances in diagnostic procedures: In this report, trends in survival by stage at diagnosis are not presented for specific cancers; trends in stage distributions are presented rarely. However, it is possible to compare survival rates by stage and stage distributions given here with those for earlier time periods (as provided in previous reports or available from the SEER public-use data file). Thus, it is necessary to comment on the effect of technological advances on the diagnosis and staging of cancer.

The assignment of a given stage to a particular cancer may change over time due to advances in diagnostic technology. Introduction of new technology can give rise to a phenomenon known as **stage migration**. Stage migration occurs when diagnostic procedures change over time, resulting in an increase in the probability that a given cancer will be diagnosed in a *more advanced* stage. For example, certain distant metastases that would have been undetectable a few years ago can now be diagnosed by a computer tomography (CT) scan or by magnetic resonance imaging (MRI). Therefore, some patients who would have been diagnosed previously as having cancer in a *localized* or *regional* stage are now diagnosed as having cancer in a *distant* stage. The likely result would be to remove the worst survivors—those with previously undetected distant metastases—from the localized and regional categories and put them into the distant category. As a result, the stage-at-diagnosis distribution for a cancer may become less favorable over time, but the survival rates for each stage may improve: the early stage will *lose* cases that will survive *shorter* than those remaining in that category, while the advanced stage will *gain* cases that will survive *longer* than those already in that category. However, *overall survival would not change* (Feinstein et al., 1985). Stage migration is an important concept to understand when examining temporal trends in survival by stage at diagnosis as well as temporal trends in stage distributions; it could affect the analysis of virtually all solid tumors.

Evolution of stage classifications: Every few years, the American Joint Committee on Cancer produces a new cancer-staging manual (Beahrs, 1988). The evolution of such classifications reflects the identification of new prognostic factors that may influence choice of treatment. The SEER Program collects data on **extent of disease** (**EOD**) rather than stage; EOD is *more specific* than stage and usually determines stage, even when stage definitions

change. Thus, SEER easily adapts to changes in stage definitions; moreover, trends in a newly redefined stage can usually be calculated.

For those cancers for which new prognostic variables are introduced into staging, so that previously collected EOD data cannot determine new stage categories, there can be problems in assessing trends in stage of disease. Only by reviewing the evolution of staging for a given cancer is it possible to determine what effect changes in stage definitions have had on stage-specific survival and on stage-at-diagnosis distributions. Stage migration (mentioned above) and EOD migration need also be taken into account. One reason for using the historical categories of *localized*, *regional*, and *distant* is that these categories have been fairly consistent over time.

Interpreting relative survival rates: The relative survival rate is the ratio of the observed survival rate to the expected survival rate for a given patient cohort. The expected survival rate is based on mortality rates for the entire population, taking into account, as appropriate, the age, sex, race, and year of diagnosis of the patients. Assuming that the presence of cancer is the only factor that distinguishes the cancer patient cohort from the general population, the relative survival rate approximates the probability that a patient will *not* die of the diagnosed cancer within the given time interval.

A factor related to the risk of a cancer may also be related to the risk of dying from causes unrelated to the cancer. An example of such a factor is *smoking*. Smoking is a major risk factor for lung cancer; therefore, a cohort of lung cancer patients will contain a much higher proportion of smokers than does the general population. However, smoking is also a risk factor for other diseases, resulting in smokers having a shorter life expectancy than nonsmokers. Expected survival rates for lung cancer patients based on the general population will be unduly optimistic for this reason; they will result in relative rates that are *lower* than they should be. The problem cannot be easily corrected because separate life tables for smokers and nonsmokers are not available. Amount of smoking (usually measured in pack-years) is clearly an important variable. The possibility that expected rates may not be appropriate for a given patient cohort should also be considered when examining relative survival rates for patients with cancers of the cervix uteri or breast, because the risk of these cancers has been associated with socioeconomic status (Baquet et al., 1991), which may be related to life expectancy.

Previous to the *CSR* for 1973–1996, the expected rate tables used were for 1970 and 1980; there were separate tables for whites, blacks, American Indians, Chinese, Japanese, Filipinos, white Hispanics, and Hawaiians. In updating the tables for 1990, several problems emerged. The US life tables are based on age, race, and sex information from death certificates. The information on race on the death certificate may not be accurate (Rosenberg et al., 1999). One reason is that funeral directors may inaccurately report race on a death certificate. Also, reported age at death, especially for those older than 85, may not be accurate because birth certificates were not issued with as much regularity in the early 1900s as they are today. Although race misclassification and age-at-death misreporting exist across all races, they may

be more problematic for races other than white or black because of those races' smaller population sizes. Therefore, life tables were generated for 1970, 1980, 1990, and 2000 only for white, black, and other; these life tables were used to produce the relative survival rates in this book. There may be small variations among survival rates calculated in this *CSR* and those in *CSR*s prior to 1973–1996 due to the addition of the 1990 rate table and those in *CSR*s prior to *CSR1975-2004* due to the addition of the 2000 rate table.

Comparison with other databases: The SEER data are obtained from population-based cancer registries covering about 26 percent of the US population. It is sometimes of interest to compare cancer statistics for SEER areas with those from other registries both in the US and worldwide. In making such comparisons, one must carefully consider the factors considered above for both data sources. In addition, one should assess all of the following: (1) completeness of case ascertainment, (2) rules used to determine multiple primaries, (3) follow-up, (4) rules used in assigning and coding cause of death, and (5) the sources and procedures used in obtaining population estimates. Depending on the rates being compared, there could be other confounding factors which should be considered. The same standard or standard million population should be used for the age-adjustment of each group being compared. Examples of other databases are USCS (US Cancer Statistics Working Group, 2005) and CINA+ Online (*http://www.naaccr.org/cinap/index.htm*).

It is sometimes interesting to compare survival data for cancer patients in SEER areas with data from clinical trials. *This must be done with great caution.* Survival data from clinical trials may have been obtained from a patient population that differs from that of SEER patients in prognostic factors for the given cancer; any survival comparisons would have to adjust for such differences. Also, it is necessary to verify that the methodology used in computing survival rates is the same for both data sources. Furthermore, clinical-trials patients may differ from SEER patients in characteristics that may be related to survival but are not recorded in either database. If this were true for a given cancer, it would not be possible to make valid comparisons of this type.

Errors in data collection: In the process of registering cancer patients, errors may be made in abstracting and coding the data, which includes demographic information, cancer site, histology, extent of disease, treatment, and patient survival. Quality control studies are periodically carried out to detect and correct this type of error, but no attempt is made to incorporate this source of error into the variance estimates of cancer rates reported here.

Comparison of this report with previous reports: It is important to note that most rates in this CSR were age-adjusted to the 2000 standard US population; in some previous SEER reports, the 1970 standard million population was used. Therefore, *rates in this report can not be compared to rates and trends in those reports*.

The cancer registries that participate in the SEER Program submit data on all cancers diagnosed in their coverage areas to the NCI each year. Because of the dynamic nature of the

registries' databases, *the reported number of new cancer cases in a particular race-sex-age-cancer category in a given calendar year may change from that which has been reported in a previous publication.* Additional cancer cases that were previously overlooked for a given diagnosis year may have been found and reported to the central registry. There may have been follow-back of cancers diagnosed by death certificate only; successful efforts to establish the dates of diagnosis for such patients will change the number of patients reported for a given diagnosis year. Code changes may occur when a patient dies; for example, information on race is generally available on the death certificate and may be used to update a previously unknown value. There may have been elimination of duplicate records for the same patient, often due to name changes or misspellings.

Thus, a recent report may have a different number of cases for a given diagnosis year than an earlier report, with resulting effects on incidence and possibly survival rates. Population estimates may also change from one report to another for some calendar years. This occurs because the NCI receives population estimates that are regularly updated by the Bureau of the Census (**BOC**); for example, previous population estimates for years beginning with 1990 were replaced with new estimates from the BOC. Such changes may result in some differences between incidence and mortality rates for a given calendar period as published in different reports.

O-13. STANDARD ERRORS OF RATES

Survival rates: In the tables presenting survival rates, the magnitude of the standard error is given as a clue to the reliability of a given rate: the greater the standard error, the less reliable the rate. In addition, if there were fewer than 25 diagnoses in the first interval of the life table constructed to calculate survival, or if all cases became lost to follow-up within an interval, a valid survival rate could not be calculated, as is noted in the table footnotes.

The **standard error** (**SE**) of a relative survival rate is obtained as follows (Ederer et al., 1961):

$$SE(CR_t) = CR_t \cdot \sqrt{\frac{q_1}{e_1 - d_1} + \frac{q_2}{e_2 - d_2} + \ldots + \frac{q_t}{e_t - d_t}}$$

where CR_t is the t-year relative survival rate, and for i = 1, ... , t,
q_i is the probability of dying in year i after diagnosis,
e_i is the effective number of patients at risk in year i after diagnosis, and
d_i is the number of deaths in year i after diagnosis.

Incidence and mortality rates: The standard errors of age-adjusted incidence and mortality rates are often not specified. However, the reader can approximate the SE of a particular

incidence or mortality rate by the following formula for the SE of a crude incidence or mortality rate (Keyfitz, 1966):

$$SE(\text{rate}) \approx \text{rate} / \sqrt{\text{number of cancer cases or deaths}}$$

Appendix tables provide numbers of cancer diagnoses within SEER areas and numbers of deaths in the entire US, respectively, by race and sex for the most recent 5-year period. These can be used to obtain approximations of the standard errors for associated age-adjusted rates for the same time period using the above formula. To approximate the standard error of a rate for a single year, use the formula but replace the number of cancer cases or deaths with the number of cancer cases or deaths divided by 5.

O-14. DEFINITIONS

Several technical terms are used in presenting the data in this report. Their definitions are presented here to clarify them for the reader.

Incidence rate: The cancer incidence rate is the number of new cancers of a specific site/type occurring in a specified population during a year, usually expressed as the number of cancers per 100,000 persons at risk. That is,

Incidence rate = (New cancers / Population) * 100,000.

The *numerator* of the incidence rate is the number of new cancers; the *denominator* of the incidence rate is the size of the population. The number of new cancers may include multiple primary cancers occurring in one patient. The primary site reported is the site of origin and not the metastatic site. In general, the incidence rate would not include recurrences. *The population used depends on the rate to be calculated.* For cancer sites that occur in only one sex, the sex-specific population (e.g., females for cervical cancer) is used.

The incidence rate can be computed for a given type of cancer or for all cancers combined. Except for 5-year age-specific rates, all incidence rates in this report are *age-adjusted* (see below) to the 2000 US standard population (or, where appropriate, to the world standard million population). (In some previous editions of the *CSR*, the 1970 US standard million population was used; therefore, *incidence rates in this edition cannot be compared to rates published in those editions.*) Incidence rates are for *invasive cancer only*, unless otherwise specified. (Exceptions are the incidence rate for cancer of the urinary bladder (where both in situ and invasive cancers are counted) and breast cancer in situ, which is shown separately.)

Death rate: The cancer death (or mortality) rate is the number of deaths with cancer given as the underlying cause of death occurring in a specified population during a year, usually expressed as the number of deaths due to cancer per 100,000 persons. That is,

Death Rate = (Cancer Deaths / Population) * 100,000.

The *numerator* of the death rate is the number of deaths; the *denominator* of the death rate is the size of the population. As with the incidence rate, *the population used depends on the rate*

to be calculated. The death rate can be computed for a given cancer site or for all cancers combined. Except for 5-year age-specific rates, all death rates in this report are *age-adjusted* (see below) to the 2000 US standard million population (or, where appropriate, to the world standard million population). (In some previous editions of the *CSR*, the 1970 US standard million population was used; therefore, *death rates in this edition cannot be compared to rates published in those editions.*)

Age distribution: A table showing a partition of the entire lifespan into disjoint age intervals, along with the proportion of the population in each interval.

Median age: The age at which half of a population is younger and half is older.

Standard population: A **standard population** for a geographic area, such as the US or the world, is a table giving the proportions of the population falling into the age groups 0, 1-4, 5-9, ..., 80-84, and 85+. A **standard million population** for a geographic area is a table giving the number of persons in each age group 0, 1-4, ... , 85+ out of a theoretical cohort of 1,000,000 persons that is distributed by age in the same proportions as the standard population. Table A-7 shows the US 2000 standard population and the world standard million population. (Some World Health Organization mortality publications use a different world standard million population.)

Age-adjusted rate: An age-adjusted incidence or mortality rate is a weighted average of the age-specific incidence or mortality rates, where the weights are the counts of persons in the corresponding age groups of a standard million population. The potential confounding effect of age is reduced when comparing age-adjusted rates based on the same standard million population. For this report, the 2000 US standard million population (or, where appropriate, the world standard million population) is used in computing age-adjusted rates, unless otherwise noted.

Percent change: The percent change (**PC**) in a statistic over a given time interval is

Percent change = (Final value – Initial value) / Initial value * 100.

A positive PC corresponds to an increasing trend, a negative PC to a decreasing trend.

Annual percent change: The annual percent change (**APC**) is calculated by first fitting a regression line to the natural logarithms of the rates (*r*) using calendar year (*x*) as a regressor variable. In this report the method of *weighted least squares* is used to calculate the regression equation. If $\ln(r) = mx + b$ is the resulting regression equation (with slope *m*), then $APC = 100(e^{m} - 1)$ A positive APC corresponds to an increasing trend, a negative APC to a decreasing trend.

Because the methods used in their calculation are mathematically different, *the signs of the PC and the APC for a given statistic and time interval may differ*, as occurs in a few of the tables presented. That is, one of these statistics may show an increasing trend, the other a decreasing

trend.

Testing the hypothesis that the actual mean annual percent change is 0 is equivalent to testing the hypothesis that the theoretical slope estimated by the slope *m* of the line representing the equation $\ln(r) = mx + b$ is 0. The latter hypothesis is tested using the *t* distribution of m / SE_m with $n - 2$ degrees of freedom. The standard error of *m*, called SE_m, is obtained from the fit of the regression (Kleinbaum et al., 1988). (This calculation assumes that the rates increased or decreased at a constant rate over the entire calendar year interval; the validity of this assumption was not assessed.) In those few instances where at least one of the rates was 0, the linear regression was not calculated.

Life table: A table for a given population listing, for each sex and each age from 0 to 120, how many members die at that age and how many survive one more year.

Observed survival rate: The observed survival rate represents the proportion of cancer patients surviving for a specified time interval after diagnosis. Note that some of those not surviving died of the given cancer and some died of other causes.

Relative survival rate: The relative survival rate is calculated using a procedure (Ederer et al., 1961) whereby the observed survival rate is adjusted for expected mortality. The relative survival rate approximates the likelihood that a patient cohort will not die from causes associated specifically with the given cancer before some specified time after diagnosis. It is always larger than the observed survival rate for the same group of patients.

Standard error: The standard error of a rate is a measure of the sampling variability of the rate.

Person-years of life lost: The person-years of life lost (**PYLL**) is calculated as follows: For each individual who dies of the cancer of interest, the number of years of expected additional life for an average person of that age, race, and sex is obtained from life tables for the US population (available from the NCHS). The PYLL in the general population associated with a particular cancer for a given year is simply the sum of this expectation over all those individuals who died of that cancer in that year.

Average years of life lost: The average years of life lost (**AYLL**) associated with a particular cancer for a given year is the PYLL associated with that cancer in the general population divided by the number of deaths from that cancer in the general population in that year.

Prevalence: Prevalence is defined as the number or percent of people alive on a certain date in a population who previously had a diagnosis of the disease. It includes new (incident) and pre-existing cases and is a function of past incidence, past survival, and the size and age structure of the population**.** *Limited-Duration Prevalence* represents the proportion of people alive on a certain day who had a diagnosis of the disease within the past *x* years (e.g. *x* = 5, 10,

or 20 years). *Complete prevalence* is an estimate of the number of persons (or the proportion of the population) alive on a specified date who had been diagnosed with the given disease, no matter how long ago that diagnosis was. For more details on cancer prevalence definitions and methods, refer to *http://srab.cancer.gov/prevalence/*.

Stage of disease at diagnosis: Extent-of-disease information determines stage of disease at diagnosis. The **SEER historic stage** presented has four levels. An invasive neoplasm confined entirely to the organ of origin is said to be **localized**. A neoplasm that has extended beyond the limits of the organ of origin, either directly into surrounding organs or tissues or into regional lymph nodes, is said to be **regional**. A neoplasm that has spread to parts of the body remote from the primary tumor, either by direct extension or by discontinuous metastasis, is said to be **distant**. When information is not sufficient to assign a stage, a neoplasm is said to be **unstaged**. In situ tumors (except those of the cervix uteri) are also collected by SEER but generally are not published in this series. For some cancers and diagnosis years, the extent of disease information can also be converted to Stages 0-IV as defined by the American Joint Committee on Cancer (Beahrs et al., 1988).

O-15. REFERENCES

American Cancer Society. Cancer Facts and Figures 2007. Atlanta: American Cancer Society; 2007.

Baquet CR, Horm JW, Gibbs T, Greenwald P. Socioeconomic factors and cancer incidence among blacks and whites. J Natl Cancer Inst 1991; 83:551-557.

Beahrs OH, Henson DE, Hutter RV, Myers MH, editors. Manual for Staging of Cancer, 3rd ed. Philadelphia (PA): Lippincott; 1988.

Breslow L (Chairman, Extramural Committee to Assess Measures of Progress Against Cancer). Measurement of progress against cancer: Final report to the Senate Appropriations Committee. Bethesda: National Cancer Institute; 1988.

Brookmeyer R, Damiano A. Statistical methods for short-term projections of AIDS incidence. Statistics in Medicine 1989;8:23-34.

Byrne J, Kessler LG, Devesa SS. The prevalence of cancer among adults in the United States: 1987. Cancer 1992;68:2154-9.

Capocaccia R, De Angelis R. Estimating the completeness of prevalence based on cancer registry data. Statistics in Medicine 1997;16:425-40.

Clegg LX, Feuer EJ, Midthune D, Fay MP, Hankey BF. Impact of reporting delay and reporting error on cancer incidence rates and trends. J Natl Cancer Inst 2002;94:1537-1545.

Clegg LX, Mitchell GH, Feuer EJ. Estimating the variance of disease prevalence estimates from population-based registries. Technical report 2001. For a copy contact prevalence@ims.nci.nih.gov.

Day, Jennifer Cheeseman, *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995 to 2050*, U.S. Bureau of the Census, Current Population Reports, P25-1130, U.S. Government Printing Office, Washington, DC, 1996. (*http://www.census.gov/prod/1/pop/p25-1130/p251130.pdf*)

Ederer F, Axtell LM, Cutler SJ. The relative survival rate: A statistical methodology. J Natl Cancer Inst Monogr 1961;6:101-121.

Elandt-Johnson RC, Johnson NL. Survival Models and Data Analysis. New York (NY): Wiley; 1980.

Fay MP. Estimating age conditional probability of developing disease from surveillance data. Popul Health Metr 2004 Jul 27;2(1):6. [http://www.pophealthmetrics.com/content/2/1/6]

Fay MP, Pfeiffer R, Cronin KA, Le C, Feuer EJ. Age-conditional probabilities of developing cancer. Stat Med 2003;22(11):1837-48.

Feinstein AR, Sosin DM, Wells CK. The Will Rogers phenomenon: Stage migration and new diagnostic techniques as a source of misleading statistics for survival of cancer. New Engl J Med 1985;312:1604-1608.

Feldman AR, Kessler L, Myers M, Naughton MD. The prevalence of cancer: Estimates based on the Connecticut Tumor Registry. New Engl J Med 1986; 315:1394-1397.

Feuer EJ, Wun L-M, Boring CC. Probability of developing cancer. In: Miller BA, Ries LAG, Hankey BF, Kosary CL, Edwards BK, editors. Cancer Statistics Review: 1973-1989, National Cancer Institute, NIH Pub. No. 92-2789, 1992. p. XXX.1-8.

Feuer EJ, Wun L-M, Boring CC, Flanders WD, Timmel MJ, Tong T. The lifetime risk of developing breast cancer. J Natl Cancer Inst 1993;85:892-897.

Fritz A, Percy C, Jack A, Shanmugaratnam K, Sobin L, Parkin DM, Whelan S, editors. International Classification of Diseases for Oncology, 3rd ed. Geneva: World Health Organization; 2000.

Gail MH, Kessler L, Midthune D, Scoppa S. Two approaches for estimating disease prevalence from population-based registries of incidence and total mortality. Biometrics 1999;55:1137-44.

Hahn RA, Mulinare J, Teutsch SM. Inconsistencies in coding of race and ethnicity between birth and death in U.S. infants. JAMA 1992;267:259-263.

Harris JE. Reporting delays and the incidence of AIDS. Journal of the American Statistical Association 1990;85:915-924.

Ingram DD, Parker JD, Schenker N, Weed JA, Hamilton B, Arias E, Madans JH. United States Census 2000 population with bridged race categories. Vital Health Stat 2. 2003 Sep;(135):1-55.

Jemal A, Siegel R, Ward E, Murray T, Xu J, Thun MJ. Cancer statistics, 2007. CA Cancer J Clin. 2007 Jan-Feb;57(1):43-66.

Keyfitz N. Sampling variance of standardized mortality rates. Hum Biol 1966;38:309-317.

Kim H-J, Fay MP, Feuer EJ, Midthune DN. Permutation tests for joinpoint regression with applications to cancer rates. Stat Med 2000;19:335-351.

Kleinbaum DG, Kupper LL, Muller KE. Applied Regression Analysis and Other Multivariable Methods, 2nd ed. Mariotto A, Gigli A, Capocaccia R, Clegg L, Scoppa S, Ries LA, Tesauro GS, Rowland JS, Feuer EJ. Complete and limited duration prevalence estimates. *SEER Cancer Statistics Review, 1973-1999* 2002;19.

Merrill RM, Feuer EJ, Capocaccia R, Mariotto A. Cancer prevalence estimates based on tumor registry data in the SEER Program. Int J Epidemiol 2000;29:197-207.

Midthune DN, Fay MP, Clegg LX, Feuer EJ. Modeling reporting delays and reporting corrections in cancer registry data. J Am Stat Assoc 2005;100(469):61-70.

Pagano M, Tu XM, De Gruttola V, & MaWhinney S. Regression analysis of censored and truncated data: estimating reporting-delay distributions and AIDS incidence from surveillance data. Biometrics 1994;50:1203-1214.

Percy C, Ries LAG, Van Holten VD. The accuracy of liver cancer as the underlying cause of death on death certificates. Public Health Rep 1990;105:361-368.

Percy C, Van Holten V, Muir C, editors. International Classification of Diseases for Oncology, 2nd ed. Geneva: World Health Organization;1990.

Ries LAG, Eisner MP, Kosary CL, Hankey BF, Miller BA, Clegg LX, Edwards BK (eds). SEER Cancer Statistics Review, 1973-1997, National Cancer Institute. NIH Pub. No. 00-2789. Bethesda, MD, 2000.

Robinson JG, West KK, Adlakha A. Coverage of the population in Census 2000: Results from demographic analysis. Population Res Policy Rev 2002;21:19-38.

Rosenberg HM, Maurer JD, Sorlie PD, Johnson NJ, MacDorman MF, Hoyert DL, Spitler JF, Scott C. Quality of death rates by race and Hispanic origin: A summary of current research. Hyattsville (MD): National Center for Health Statistics; Vital and Health Statistics, Series 2, No. 128, 1999.

Snedecor GW, Cochran WG. Statistical Methods, 7th ed. Ames (IA): Iowa State University Press; 1980.

US Cancer Statistics Working Group. *United States Cancer Statistics: 1999-2002 Incidence and Mortality Web–based Report Version*. Atlanta: Department of Health and Human Services, Centers for Disease Control and Prevention, *and* National Cancer Institute; 2005. Available at: www.cdc.gov/cancer/npcr/uscs.

US Bureau of the Census. Current Population Reports; Series P-25 No. 985. Washington (DC): US Government Printing Office; 1986.

Zelen M. Theory of early detection of breast cancer in the general population. In: Heuson J-C, Mattheiem WH, Rozencweig M, editors. Breast Cancer: Trends in Research and Treatment. New York (NY): Raven Press; 1976. p. 287-299.

Table I-1

ESTIMATED NEW CANCER CASES AND DEATHS FOR 2007

All Races, By Sex

Primary Site	Estimated New Cases			Estimated Deaths		
	Total	Males	Females	Total	Males	Females
All Sites	1,444,920	766,860	678,060	559,650	289,550	270,100
Oral Cavity and Pharynx	34,360	24,180	10,180	7,550	5,180	2,370
Tongue	9,800	6,930	2,870	1,830	1,180	650
Mouth	10,660	6,480	4,180	1,860	1,110	750
Pharynx	11,800	9,310	2,490	2,180	1,620	560
Other Oral Cavity	2,100	1,460	640	1,680	1,270	410
Digestive System	271,250	147,390	123,860	134,710	74,500	60,210
Esophagus	15,560	12,130	3,430	13,940	10,900	3,040
Stomach	21,260	13,000	8,260	11,210	6,610	4,600
Small Intestine	5,640	2,940	2,700	1,090	570	520
Colon[a]	112,340	55,290	57,050	52,180	26,000	26,180
Rectum	41,420	23,840	17,580			
Anus, Anal Canal, and Anorectum	4,650	1,900	2,750	690	260	430
Liver and Intrahepatic Bile Duct	19,160	13,650	5,510	16,780	11,280	5,500
Gallbladder and Other Biliary	9,250	4,380	4,870	3,250	1,260	1,990
Pancreas	37,170	18,830	18,340	33,370	16,840	16,530
Other Digestive	4,800	1,430	3,370	2,200	780	1,420
Respiratory System	229,400	127,090	102,310	164,840	92,910	71,930
Larynx	11,300	8,960	2,340	3,660	2,900	760
Lung and Bronchus	213,380	114,760	98,620	160,390	89,510	70,880
Other Respiratory	4,720	3,370	1,350	790	500	290
Bones and Joints	2,370	1,330	1,040	1,330	740	590
Soft Tissue	9,220	5,050	4,170	3,560	1,840	1,720
Skin (excl. basal & squamous)	65,050	37,070	27,980	10,850	7,140	3,710
Melanoma of the Skin[b]	59,940	33,910	26,030	8,110	5,220	2,890
Other non-epithelial skin	5,110	3,160	1,950	2,740	1,920	820
Breast[b]	180,510	2,030	178,480	40,910	450	40,460
Genital Organs	306,380	228,090	78,290	55,740	27,720	28,020
Cervix (uterus)	11,150		11,150	3,670		3,670
Endometrium (uterus)	39,080		39,080	7,400		7,400
Ovary	22,430		22,430	15,280		15,280
Vulva	3,490		3,490	880		880
Vagina and other genital organs, female	2,140		2,140	790		790
Prostate	218,890	218,890		27,050	27,050	
Testis	7,920	7,920		380	380	
Penis and other genital organs, male	1,280	1,280		290	290	
Urinary System	120,400	82,960	37,440	27,340	18,100	9,240
Urinary Bladder	67,160	50,040	17,120	13,750	9,630	4,120
Kidney and Renal Pelvis	51,190	31,590	19,600	12,890	8,080	4,810
Ureter and other urinary organs	2,050	1,330	720	700	390	310
Eye and Orbit	2,340	1,310	1,030	220	110	110
Brain and Other Nervous System	20,500	11,170	9,330	12,740	7,150	5,590
Endocrine System	35,520	9,040	26,480	2,320	1,030	1,290
Thyroid	33,550	8,070	25,480	1,530	650	880
Other Endocrine	1,970	970	1,000	790	380	410
Lymphoma	71,380	38,670	32,710	19,730	10,370	9,360
Hodgkin Lymphoma	8,190	4,470	3,720	1,070	770	300
Non-Hodgkin Lymphoma	63,190	34,200	28,990	18,660	9,600	9,060
Myeloma	19,900	10,960	8,940	10,790	5,550	5,240
Leukemia	44,240	24,800	19,440	21,790	12,320	9,470
Lymphocytic Leukemias	20,540	12,020	8,520	5,920	3,380	2,540
Myeloid Leukemias	17,980	9,630	8,350	9,480	5,260	4,220
Other leukemia	5,720	3,150	2,570	6,390	3,680	2,710
All Other Sites[c]	32,100	15,720	16,380	45,230	24,440	20,790

Cancer Facts & Figures – 2007, American Cancer Society (ACS), Atlanta, Georgia, 2007.
Excludes basal and squamous cell skin and *in situ* carcinomas except urinary bladder.
Incidence projections are based on rates from the North American Association of Central Cancer Registries(NAACCR) from 1995-2003, representing about 86% of the US population.

[a] Estimated deaths for colon & rectum cancers are combined.

[b] Carcinoma *in situ* of the breast accounts for about 62,030 new cases annually, and melanoma *in situ* accounts for about 48,290 new cases annually.

[c] More deaths than cases suggests lack of specificity in recording underlying causes of death on death certificate.

Table I-2

55-YEAR TRENDS IN U.S. CANCER DEATH RATES[a]

All Races, Males and Females

All Primary Cancer Sites Combined

Age Group	1950	1977	2004	Annual Percent Change 1950-1977	Annual Percent Change 1977-2004	Total Percent Change 1950-2004
0-4	11.1	4.8	2.4	-2.9	-2.8	-78.8
5-14	6.7	4.7	2.5	-1.2	-2.4	-62.3
15-24	8.6	6.4	4.1	-0.9	-1.6	-52.5
25-34	20.4	14.6	9.1	-1.3	-1.5	-55.3
35-44	63.6	51.6	32.9	-0.6	-1.5	-48.2
45-54	174.2	177.9	118.8	0.1	-1.6	-31.8
55-64	391.3	428.9	335.4	0.3	-0.9	-14.3
65-74	710.0	793.5	759.6	0.4	-0.1	7.0
75-84	1,167.2	1,192.2	1,271.1	0.1	0.3	8.9
85+	1,450.7	1,513.6	1,650.7	0.0	0.5	13.8
All Ages	195.4	203.0	185.7	0.1	-0.3	-5.0

Lung and Bronchus Cancer[b]

Age Group	1950	1977	2004	Annual Percent Change 1950-1977	Annual Percent Change 1977-2004	Total Percent Change 1950-2004
0-4	-	-	-	-	-	-
5-14	-	-	-	-	-	-
15-24	0.2	0.1	0.1	-2.5	-0.5	-65.1
25-34	0.8	0.9	0.4	0.2	-2.0	-54.3
35-44	4.6	10.5	5.4	3.4	-2.3	17.9
45-54	20.2	51.2	29.9	3.5	-2.4	47.6
55-64	48.9	127.9	107.9	3.5	-0.7	120.8
65-74	59.4	210.3	267.4	4.4	0.8	350.0
75-84	55.4	213.8	373.8	5.2	2.0	575.0
85+	42.3	152.5	297.6	5.2	2.5	603.6
All Ages	14.9	45.7	53.4	4.1	0.5	257.4

Source: NCHS public use data file for the total US.

- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

[a] Rates are per 100,000 and age-adjusted to the 2000 US Std Population (18 age groups - Census P25-1130).

[b] Due to coding changes throughout the years, Lung and Bronchus includes trachea and pleura.

Table I-3

SUMMARY OF CHANGES IN CANCER MORTALITY, 1950-2004 AND

5-YEAR RELATIVE SURVIVAL RATES, 1950-2003

Males and Females, By Primary Cancer Site

Primary Site	All Races		Whites			
	Estimated Cancer Cases in 2004[a]	Actual Cancer Deaths in 2004[b]	U.S. Mortality Percent Change 1950-2004[b]		5-Year Relative Survival Rates (Percent)[c]	
			Total	APC	1950-1954	1996-2003
Oral cavity and Pharynx	28,260	7,826	-50.8	-1.3	46	62.0
Esophagus	14,250	13,023	28.4	0.7	4	17.5
Stomach	22,710	11,859	-85.4	-3.5	12	22.2
Colon and Rectum	146,940	53,772	-47.1	-1.1	37	65.9
Colon	106,370	44,591	-37.0	-0.7	41	65.6
Rectum	40,570	9,181	-69.9	-2.5	40	66.4
Liver and Intrahep	18,920	18,718	32.1	0.6	1	9.9
Pancreas	31,860	31,771	22.2	0.1	1	4.9
Larynx	10,270	3,668	-30.8	-0.6	52	66.0
Lung and Bronchus	173,770	158,342	253.2	2.0	6	15.7
Males	93,110	89,832	179.3	1.3	5	13.6
Females	80,660	68,510	606.2	3.9	9	18.1
Melanoma of the skin	55,100	7,952	167.1	1.6	49	91.7
Breast(females)	215,990	40,954	-27.0	-0.4	60	90.3
Cervix uteri	10,520	3,850	-81.6	-3.4	59	74.3
Corpus and Uterus, NOS	40,320	6,990	-68.5	-1.9	72	86.2
Ovary	25,580	14,967	0.1	-0.2	30	44.7
Prostate	230,110	29,002	-19.6	0.1	43	99.0
Testis	8,980	357	-72.3	-3.0	57	96.3
Urinary bladder	60,240	13,281	-30.7	-0.9	53	81.3
Kidney and Renal pelvis	35,710	12,647	39.6	0.6	34	65.5
Brain and Other nervous	18,400	12,829	50.2	0.7	21	33.9
Thyroid	23,600	1,409	-44.5	-1.4	80	97.2
Hodgkin lymphoma	7,880	1,276	-77.3	-3.3	30	87.1
Non-Hodgkin lymphoma	54,370	20,723	115.0	1.5	33	64.8
Myeloma	15,270	10,655	230.6	1.7	6	33.6
Leukemia	33,440	21,395	2.4	-0.2	10	50.8
Childhood(0-14 yrs)	9,200	1,492	-70.5	-2.7	20	81.0
All Sites	1,368,030	553,880	-6.2	0.0	35	67.0

The APC is the Annual Percent Change over the time interval. Rates used in the calculation of the APC are age-adjusted to the 2000 U.S. standard population (18 age groups - Census P25-1130).

[a] Facts and Figures, 2004. American Cancer Society, Atlanta, Georgia, 2004.

[b] NCHS public use data file for the total US. Due to coding changes throughout the years: Colon excludes other digestive tract; Rectum includes anal canal; Liver & Intrahep includes gallbladder & biliary tract, NOS; Lung & Bronchus includes trachea & pleura; Ovary includes fallopian tube; Urinary bladder includes other urinary organs; Kidney & Renal pelvis includes ureter; NHL and myeloma each include a small number of leukemias; NHL includes a small number of ill-defined sites.

[c] Rates for 1950-54 are from NCI Survival Report 5 with the exception of All Sites, Oral cavity & Pharynx, Colon & Rectum, Non-Hodgkin lymphomas and Childhood cancers which come from historical Connecticut data. Rates for 1996-2003 are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are based on follow-up of patients into 2004.

Table I-4
AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES AND 5-YEAR RELATIVE SURVIVAL RATES
By Primary Cancer Site, Sex and Time Period

All Races

Site	Incidence[a] (2000-2004) Total	Males	Females	US Mortality[b] (2000-2004) Total	Males	Females	Survival[c] (1996-2003) Total	Males	Females
All Sites	470.1	555.8	411.3	192.7	238.7	162.2	64.9	64.6	65.2
Oral Cavity & Pharynx:	10.5	15.6	6.1	2.7	4.1	1.5	59.1	57.6	62.6
Lip	0.9	1.5	0.4	0.0	0.0	0.0	89.9	90.3	87.6
Tongue	2.7	4.1	1.6	0.6	0.9	0.4	56.9	56.2	58.1
Salivary gland	1.2	1.6	0.9	0.2	0.4	0.2	74.3	69.1	80.7
Floor of mouth	0.7	1.0	0.4	0.0	0.1	0.0	51.8	49.0	57.8
Gum & other oral cavity	1.6	1.9	1.3	0.4	0.5	0.3	59.1	54.9	63.9
Nasopharynx	0.7	1.0	0.4	0.2	0.3	0.1	58.5	57.2	61.5
Tonsil	1.5	2.5	0.6	0.2	0.3	0.1	61.0	61.9	57.4
Oropharynx	0.3	0.5	0.2	0.2	0.3	0.1	36.9	35.6	40.0
Hypopharynx	0.7	1.3	0.3	0.1	0.2	0.0	29.6	29.3	30.3
Other oral cavity & pharynx	0.2	0.4	0.1	0.6	0.9	0.3	30.8	29.6	33.2
Digestive System:	89.5	109.9	73.5	45.9	58.8	36.0	44.6	42.6	46.8
Esophagus	4.6	7.9	2.0	4.4	7.8	1.8	15.6	15.3	16.8
Stomach	8.1	11.4	5.6	4.2	5.9	3.0	24.3	22.6	26.9
Small intestine	1.8	2.2	1.5	0.4	0.5	0.3	56.6	55.4	57.8
Colon & Rectum:	51.6	60.8	44.6	19.4	23.5	16.4	64.0	64.0	64.0
Colon	37.4	42.5	33.5	-	-	-	63.5	64.0	63.1
Rectum	14.3	18.3	11.1	-	-	-	65.0	64.1	66.2
Anus, anal canal & anorectum	1.5	1.3	1.6	0.2	0.2	0.2	67.1	60.2	72.1
Liver & Intrahep:	6.2	9.5	3.4	4.9	7.1	3.1	10.8	10.4	11.7
Liver	5.6	8.8	2.9	3.8	5.9	2.1	11.4	10.7	13.0
Intrahep bile duct	0.6	0.7	0.5	1.1	1.2	0.9	6.0	6.4	5.5
Gallbladder	1.2	0.8	1.5	0.7	0.5	0.8	15.1	14.0	15.5
Other biliary	1.7	2.1	1.4	0.5	0.6	0.5	18.6	19.5	17.7
Pancreas	11.4	12.9	10.1	10.6	12.2	9.2	5.0	4.9	5.1
Retroperitoneum	0.4	0.4	0.4	0.1	0.1	0.1	51.9	49.5	54.3
Peritoneum, omentum & mesentery	0.6	0.1	1.1	0.2	0.1	0.4	30.2	42.7	29.3
Other digestive system	0.5	0.5	0.4	0.3	0.4	0.3	8.0	6.4	9.4
Respiratory System:	69.1	89.0	54.3	56.3	76.3	41.8	18.5	18.0	19.1
Nose, nasal cavity & middle ear	0.7	0.9	0.5	0.2	0.2	0.1	54.4	52.0	57.8
Larynx	3.7	6.6	1.4	1.3	2.4	0.5	62.9	64.1	58.3
Lung & bronchus	64.5	81.2	52.3	54.7	73.4	41.1	15.0	13.0	17.4
Pleura[d]	0.0	0.1	0.0	0.1	0.2	0.0	27.8	28.4	17.7
Trachea & other respiratory organs	0.2	0.3	0.1	0.1	0.1	0.1	46.4	45.5	47.3
Bones & joints	0.9	1.0	0.8	0.4	0.5	0.3	67.9	64.4	72.4
Soft tissue (incl heart)	3.1	3.7	2.6	1.3	1.4	1.1	66.3	66.6	66.0
Skin (ex basal & squam):	20.3	26.0	16.3	3.5	5.3	2.2	90.8	88.8	93.3
Melanoma of the skin	18.5	23.6	14.9	2.6	3.9	1.7	91.1	89.1	93.5
Other non-epithelial skin	1.8	2.4	1.3	0.8	1.4	0.4	87.8	85.1	91.0
Breast	69.6	1.1	127.8	14.5	0.3	25.5	88.6	85.0	88.6
Breast (*in situ*)	15.7	0.1	29.4	-	-	-	100.0	100.0	100.0

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[b] NCHS public use data file for the total US.

[c] SEER 17 areas. California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2003. The remaining 13 SEER Areas contribute cases for the entire period 1996-2003.

[d] Mesotheliomas of the Pleura are included in the separate group Mesothelioma for incidence but are included in the Pleura grouping for mortality.

\- Statistic could not be calculated due to less than 16 cases in the time interval.

Table I-4 - continued
AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES AND 5-YEAR RELATIVE SURVIVAL RATES
By Primary Cancer Site, Sex and Time Period

All Races

Site	Incidence[a] (2000-2004) Total	Males	Females	US Mortality[b] (2000-2004) Total	Males	Females	Survival[c] (1996-2003) Total	Males	Females
Female Genital System:	26.5	-	49.1	9.3	-	16.5	69.7	-	69.7
Cervix uteri	4.5	-	8.7	1.4	-	2.6	71.6	-	71.6
Corpus uteri	12.3	-	22.7	1.1	-	2.0	83.9	-	83.9
Uterus, NOS	0.3	-	0.6	1.3	-	2.2	30.0	-	30.0
Ovary[d]	7.4	-	13.5	5.0	-	8.9	44.9	-	44.9
Vagina	0.4	-	0.7	0.1	-	0.2	50.3	-	50.3
Vulva	1.2	-	2.2	0.3	-	0.5	77.8	-	77.8
Other female genital system	0.4	-	0.7	0.1	-	0.2	64.4	-	64.4
Male Genital System:	77.0	174.4	-	10.7	28.3	-	98.1	98.1	-
Prostate	73.9	168.0	-	10.5	27.9	-	98.4	98.4	-
Testis	2.7	5.3	-	0.1	0.3	-	95.4	95.4	-
Penis	0.4	0.9	-	0.1	0.2	-	68.7	68.7	-
Other male genital system	0.1	0.3	-	0.0	0.0	-	83.6	83.6	-
Urinary System:	34.8	56.4	18.7	8.7	13.9	5.2	73.5	75.0	70.2
Urinary bladder	21.1	37.3	9.4	4.3	7.5	2.3	79.5	80.9	75.3
Kidney & renal pelvis	12.8	17.8	8.8	4.2	6.1	2.8	65.5	65.1	66.3
Ureter	0.6	0.8	0.4	0.1	0.1	0.1	51.6	55.3	46.1
Other urinary system	0.3	0.5	0.1	0.1	0.1	0.1	57.5	62.9	48.6
Eye & Orbit	0.8	1.0	0.7	0.1	0.1	0.1	83.7	83.7	83.8
Brain & Nervous System:[e]	6.4	7.7	5.4	4.4	5.4	3.6	33.9	32.2	36.0
Brain	6.0	7.2	5.0	-	-	-	30.8	29.5	32.4
Cranial nerves & other nervous system	0.4	0.4	0.4	-	-	-	77.1	75.2	78.6
Endocrine System:	9.1	5.1	13.1	0.8	0.8	0.8	93.9	88.3	95.8
Thyroid	8.5	4.3	12.5	0.5	0.5	0.5	96.7	93.9	97.5
Other endocrine & thymus	0.7	0.8	0.6	0.3	0.3	0.3	60.8	61.0	60.5
Lymphoma:	22.0	26.2	18.7	8.1	10.1	6.5	66.8	64.4	69.7
Hodgkin lymphoma	2.7	3.0	2.4	0.5	0.6	0.4	84.9	83.0	87.0
Non-Hodgkin lymphoma	19.3	23.2	16.3	7.6	9.6	6.2	63.4	60.8	66.4
Myeloma	5.6	7.0	4.5	3.7	4.6	3.1	33.7	35.5	31.7
Leukemia:	12.3	16.0	9.5	7.5	10.0	5.7	49.6	49.7	49.4
Lymphocytic:	5.9	7.9	4.3	2.1	3.0	1.5	71.2	70.4	72.4
Acute lymphocytic	1.6	1.8	1.4	0.5	0.6	0.4	64.0	62.5	66.1
Chronic lymphocytic	3.9	5.5	2.8	1.5	2.2	1.0	74.2	72.8	76.4
Other lymphocytic	0.4	0.7	0.2	0.1	0.2	0.1	81.0	83.1	73.5
Myeloid & Monocytic:	5.6	7.1	4.5	3.5	4.6	2.8	29.0	28.3	29.8
Acute myeloid	3.6	4.5	3.0	2.7	3.5	2.2	21.2	20.0	22.6
Chronic myeloid	1.5	2.0	1.2	0.5	0.7	0.4	47.5	46.7	48.6
Acute monocytic	0.3	0.4	0.2	0.0	0.1	0.0	23.4	23.2	23.0
Other myeloid & monocytic	0.2	0.2	0.1	0.2	0.3	0.2	27.6	27.2	27.5
Other:	0.8	1.0	0.6	1.8	2.4	1.4	19.2	17.9	20.3
Other acute	0.3	0.4	0.3	0.8	1.1	0.6	10.3	7.4	13.0
Aleukemic, subleuk & NOS	0.4	0.6	0.3	1.0	1.3	0.8	28.9	28.8	28.6
Kaposi Sarcoma[f]	0.7	1.3	0.1	-	-	-	56.3	55.8	63.7
Mesothelioma[f]	1.1	2.1	0.4	-	-	-	8.4	6.8	13.8
Ill-defined & unspecified	10.8	12.3	9.6	14.9	18.7	12.1	15.4	18.4	12.6

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[b] NCHS public use data file for the total US.

[c] SEER 17 areas. California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2003. The remaining 13 SEER Areas contribute cases for the entire period 1996-2003.

[d] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

[e] Due to coding changes, Brain & Nervous System mortality are no longer shown separately.

[f] Rate not shown for mortality. Category did not exist in mortality coding until 1999.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Table I-5
AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES AND 5-YEAR RELATIVE SURVIVAL RATES
By Primary Cancer Site, Sex and Time Period

Whites

Site	Incidence[a] (2000-2004)			US Mortality[b] (2000-2004)			Survival[c] (1996-2003)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Sites	477.5	556.7	423.9	190.7	234.7	161.4	65.8	65.5	66.2
Oral Cavity & Pharynx:	10.6	15.7	6.1	2.5	3.8	1.5	61.0	60.2	62.8
Lip	1.0	1.7	0.4	0.0	0.1	0.0	89.7	90.1	87.6
Tongue	2.9	4.3	1.7	0.6	0.9	0.4	59.0	58.7	59.5
Salivary gland	1.2	1.7	0.9	0.2	0.4	0.2	73.9	69.2	80.1
Floor of mouth	0.7	1.1	0.4	0.0	0.1	0.0	53.6	51.7	57.5
Gum & other oral cavity	1.6	1.9	1.3	0.4	0.5	0.3	59.9	56.7	63.5
Nasopharynx	0.4	0.6	0.2	0.2	0.2	0.1	52.9	53.0	51.9
Tonsil	1.5	2.5	0.6	0.2	0.3	0.1	64.2	65.5	58.9
Oropharynx	0.3	0.5	0.2	0.2	0.3	0.1	40.2	39.0	43.4
Hypopharynx	0.7	1.2	0.3	0.1	0.2	0.0	31.2	31.2	31.1
Other oral cavity & pharynx	0.2	0.4	0.1	0.5	0.8	0.2	34.4	33.9	35.0
Digestive System:	87.0	106.6	71.4	44.1	56.6	34.5	45.8	44.0	48.0
Esophagus	4.6	8.0	1.9	4.3	7.7	1.7	16.6	16.3	17.8
Stomach	7.1	10.2	4.7	3.7	5.2	2.6	22.3	20.6	25.1
Small intestine	1.7	2.1	1.4	0.4	0.4	0.3	57.8	56.7	59.0
Colon & Rectum:	51.2	60.4	44.0	18.9	22.9	15.9	64.9	64.9	64.9
Colon	37.0	42.2	33.0	-	-	-	64.6	64.9	64.4
Rectum	14.2	18.3	11.0	-	-	-	65.6	64.9	66.4
Anus, anal canal & anorectum	1.6	1.3	1.8	0.2	0.2	0.2	68.3	61.2	73.2
Liver & Intrahep:	5.2	7.9	2.9	4.5	6.5	2.8	10.4	9.8	11.7
Liver	4.6	7.2	2.4	3.4	5.3	1.9	11.2	10.2	13.4
Intrahep bile duct	0.6	0.7	0.5	1.1	1.2	0.9	5.9	5.9	5.6
Gallbladder	1.1	0.8	1.4	0.7	0.5	0.8	14.8	12.9	15.4
Other biliary	1.6	2.0	1.3	0.6	0.6	0.5	18.8	20.3	17.0
Pancreas	11.2	12.8	9.9	10.4	12.0	9.0	4.9	5.1	4.7
Retroperitoneum	0.4	0.5	0.4	0.1	0.1	0.1	54.1	50.9	57.3
Peritoneum, omentum & mesentery	0.7	0.1	1.2	0.2	0.1	0.4	30.0	38.5	29.4
Other digestive system	0.5	0.5	0.4	0.3	0.4	0.2	7.9	6.4	9.2
Respiratory System:	70.3	88.7	56.7	56.5	75.3	42.8	18.8	18.4	19.3
Nose, nasal cavity & middle ear	0.7	0.9	0.5	0.2	0.2	0.1	55.8	53.1	59.7
Larynx	3.7	6.5	1.4	1.2	2.2	0.5	64.4	65.4	60.7
Lung & bronchus	65.7	81.0	54.6	55.0	72.6	42.1	15.3	13.2	17.6
Pleura[d]	0.0	0.1	0.0	0.1	0.2	0.0	26.7	27.0	18.9
Trachea & other respiratory organs	0.2	0.3	0.1	0.1	0.1	0.1	48.0	48.6	46.0
Bones & joints	0.9	1.1	0.8	0.4	0.5	0.4	68.0	64.4	72.5
Soft tissue (incl heart)	3.1	3.7	2.6	1.3	1.5	1.1	66.8	67.4	66.0
Skin (ex basal & squam):	23.4	29.7	18.9	3.9	5.8	2.4	90.5	88.3	93.1
Melanoma of the skin	21.6	27.2	17.6	3.0	4.3	2.0	90.8	88.7	93.3
Other non-epithelial skin	1.8	2.5	1.4	0.9	1.5	0.5	86.1	83.5	89.4
Breast	71.5	1.2	132.5	14.1	0.3	25.0	89.7	86.1	89.7
Breast (*in situ*)	16.0	0.1	30.2	-	-	-	100.0	99.7	100.0

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[b] NCHS public use data file for the total US.

[c] SEER 17 areas. California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2003. The remaining 13 SEER Areas contribute cases for the entire period 1996-2003.

[d] Mesotheliomas of the Pleura are included in the separate group Mesothelioma for incidence but are included in the Pleura grouping for mortality.

\- Statistic could not be calculated due to less than 16 cases in the time interval.

Table I-5 - continued
AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES AND 5-YEAR RELATIVE SURVIVAL RATES
By Primary Cancer Site, Sex and Time Period

Whites

Site	Incidence[a] (2000-2004) Total	Males	Females	US Mortality[b] (2000-2004) Total	Males	Females	Survival[c] (1996-2003) Total	Males	Females
Female Genital System:	27.2	-	50.8	9.2	-	16.3	70.7	-	70.7
Cervix uteri	4.3	-	8.5	1.2	-	2.3	72.9	-	72.9
Corpus uteri	12.8	-	23.7	1.1	-	1.9	85.6	-	85.6
Uterus, NOS	0.3	-	0.5	1.2	-	2.0	31.3	-	31.3
Ovary[d]	7.7	-	14.3	5.2	-	9.2	44.6	-	44.6
Vagina	0.4	-	0.7	0.1	-	0.2	52.3	-	52.3
Vulva	1.3	-	2.3	0.3	-	0.5	77.8	-	77.8
Other female genital system	0.4	-	0.7	0.1	-	0.2	63.2	-	63.2
Male Genital System:	75.3	168.8	-	9.8	26.1	-	98.6	98.6	-
Prostate	71.6	161.4	-	9.6	25.6	-	98.9	98.9	-
Testis	3.2	6.3	-	0.1	0.3	-	95.7	95.7	-
Penis	0.4	0.9	-	0.1	0.2	-	68.0	68.0	-
Other male genital system	0.1	0.3	-	0.0	0.0	-	87.3	87.3	-
Urinary System:	37.1	60.1	19.7	9.0	14.4	5.2	74.2	75.6	70.9
Urinary bladder	23.0	40.5	10.1	4.5	7.9	2.3	80.2	81.4	76.6
Kidney & renal pelvis	13.3	18.3	9.1	4.3	6.2	2.8	65.5	65.3	66.0
Ureter	0.6	0.9	0.4	0.1	0.2	0.1	53.2	57.1	47.5
Other urinary system	0.3	0.5	0.1	0.1	0.1	0.1	57.6	61.7	48.9
Eye & Orbit	0.9	1.1	0.8	0.1	0.1	0.1	83.2	83.5	82.9
Brain & Nervous System:[e]	7.0	8.3	5.9	4.8	5.8	3.9	33.2	31.8	35.0
Brain	6.6	7.9	5.5	-	-	-	30.1	29.0	31.6
Cranial nerves & other nervous system	0.4	0.4	0.4	-	-	-	78.6	78.0	78.9
Endocrine System:	9.5	5.4	13.8	0.8	0.8	0.7	94.3	89.1	96.1
Thyroid	8.9	4.6	13.2	0.5	0.5	0.5	97.0	94.3	97.8
Other endocrine & thymus	0.7	0.8	0.6	0.3	0.3	0.3	60.2	61.0	59.0
Lymphoma:	23.1	27.3	19.6	8.4	10.5	6.8	67.5	65.2	70.2
Hodgkin lymphoma	2.9	3.2	2.6	0.5	0.6	0.4	85.3	83.6	87.2
Non-Hodgkin lymphoma	20.2	24.1	17.0	7.9	9.9	6.4	64.1	61.7	66.9
Myeloma	5.2	6.6	4.1	3.5	4.4	2.8	33.4	35.3	31.2
Leukemia:	12.8	16.7	9.9	7.7	10.3	5.8	50.2	50.1	50.2
Lymphocytic:	6.3	8.4	4.6	2.2	3.1	1.6	71.9	71.1	72.9
Acute lymphocytic	1.7	1.9	1.5	0.5	0.6	0.4	64.5	63.1	66.4
Chronic lymphocytic	4.1	5.8	2.9	1.6	2.3	1.1	74.8	73.5	76.8
Other lymphocytic	0.5	0.7	0.2	0.1	0.2	0.1	81.2	83.3	73.8
Myeloid & Monocytic:	5.7	7.2	4.6	3.6	4.7	2.8	28.3	27.2	29.7
Acute myeloid	3.7	4.7	3.1	2.8	3.7	2.3	20.5	19.2	22.0
Chronic myeloid	1.5	2.0	1.2	0.5	0.6	0.4	46.8	45.1	49.3
Acute monocytic	0.3	0.4	0.3	0.0	0.1	0.0	24.3	23.0	25.3
Other myeloid & monocytic	0.2	0.2	0.1	0.2	0.3	0.2	27.9	26.4	29.5
Other:	0.8	1.0	0.6	1.9	2.5	1.4	18.5	17.3	19.4
Other acute	0.3	0.4	0.3	0.8	1.1	0.7	9.2	5.1	13.0
Aleukemic, subleuk & NOS	0.4	0.5	0.3	1.0	1.3	0.8	28.8	30.0	26.9
Kaposi Sarcoma[f]	0.6	1.1	0.1	-	-	-	59.2	58.1	76.8
Mesothelioma[f]	1.2	2.3	0.5	-	-	-	8.0	6.5	13.5
Ill-defined & unspecified	10.8	12.3	9.7	14.7	18.5	12.0	15.9	19.4	12.7

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[b] NCHS public use data file for the total US.

[c] SEER 17 areas. California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2003. The remaining 13 SEER Areas contribute cases for the entire period 1996-2003.

[d] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

[e] Due to coding changes, Brain & Nervous System mortality are no longer shown separately.

[f] Rate not shown for mortality. Category did not exist in mortality coding until 1999.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Table I-6
AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES AND 5-YEAR RELATIVE SURVIVAL RATES
By Primary Cancer Site, Sex and Time Period

Blacks

Site	Incidence[a] (2000-2004)			US Mortality[b] (2000-2004)			Survival[c] (1996-2003)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Sites	504.1	663.7	396.9	238.8	321.8	189.3	56.4	58.6	53.8
Oral Cavity & Pharynx:	11.1	18.1	5.7	3.9	6.8	1.7	40.1	35.5	51.3
Lip	0.1	0.2	-	-	-	-	89.9	94.8	85.0
Tongue	2.5	4.1	1.2	0.7	1.3	0.3	36.2	34.4	40.4
Salivary gland	1.0	1.2	0.9	0.2	0.2	0.1	69.5	63.5	73.7
Floor of mouth	0.9	1.5	0.4	0.1	0.1	0.0	37.9	31.8	53.3
Gum & other oral cavity	1.9	2.5	1.3	0.5	0.8	0.3	52.5	45.8	61.9
Nasopharynx	0.7	1.2	0.4	0.3	0.5	0.2	47.4	46.2	49.2
Tonsil	1.7	3.0	0.6	0.3	0.6	0.1	36.2	34.0	44.4
Oropharynx	0.6	1.1	0.3	0.4	0.7	0.2	22.7	23.2	20.0
Hypopharynx	1.3	2.4	0.4	0.2	0.4	0.1	18.8	17.9	22.6
Other oral cavity & pharynx	0.5	0.8	0.2	1.1	2.1	0.4	17.8	15.6	21.2
Digestive System:	112.2	138.7	93.4	63.8	82.9	50.7	37.3	34.7	39.8
Esophagus	6.2	10.4	3.2	6.0	10.2	3.0	10.1	9.3	11.7
Stomach	12.5	17.5	9.1	8.2	11.9	5.8	23.6	20.9	27.1
Small intestine	3.1	3.9	2.6	0.6	0.7	0.5	51.5	50.2	52.4
Colon & Rectum:	62.1	72.6	55.0	26.7	32.7	22.9	54.9	55.2	54.7
Colon	47.8	54.9	43.1	-	-	-	54.3	55.4	53.4
Rectum	14.3	17.6	11.9	-	-	-	56.6	54.5	58.7
Anus, anal canal & anorectum	1.6	1.7	1.4	0.2	0.2	0.2	60.8	53.4	68.6
Liver & Intrahep:	7.6	12.7	3.8	6.5	10.0	3.9	7.0	7.6	5.5
Liver	7.1	12.1	3.3	5.5	8.9	3.0	7.0	7.6	5.1
Intrahep bile duct	0.5	0.6	0.4	0.9	1.1	0.8	6.0	5.2	6.9
Gallbladder	1.3	0.8	1.7	0.8	0.5	1.0	12.8	20.3	10.9
Other biliary	1.5	1.9	1.2	0.4	0.5	0.4	13.3	11.4	14.5
Pancreas	15.0	16.2	13.9	13.8	15.5	12.4	4.5	3.2	5.6
Retroperitoneum	0.4	0.3	0.5	0.1	0.1	0.1	39.1	50.7	29.4
Peritoneum, omentum & mesentery	0.3	0.1	0.5	0.2	0.1	0.2	28.0	-	25.7
Other digestive system	0.6	0.6	0.6	0.4	0.6	0.4	0.0	0.0	0.0
Respiratory System:	83.5	123.4	56.3	64.8	101.3	40.8	15.7	15.1	16.5
Nose, nasal cavity & middle ear	0.6	0.9	0.4	0.2	0.3	0.1	46.5	41.2	53.5
Larynx	6.0	11.6	2.0	2.5	5.0	0.8	51.8	53.8	45.2
Lung & bronchus	76.6	110.6	53.7	62.0	95.8	39.8	12.0	10.2	14.6
Pleura[d]	-	-	-	0.0	0.1	0.0	-	-	-
Trachea & other respiratory organs	0.2	0.2	0.1	0.1	0.2	0.1	29.6	22.3	37.7
Bones & joints	0.7	0.8	0.7	0.5	0.6	0.4	62.6	60.3	65.1
Soft tissue (incl heart)	3.3	3.6	3.0	1.4	1.5	1.4	60.6	59.4	61.6
Skin (ex basal & squam):	2.1	2.3	1.9	1.0	1.4	0.7	86.8	83.0	90.1
Melanoma of the skin	1.0	1.1	0.9	0.4	0.5	0.4	74.4	69.9	77.4
Other non-epithelial skin	1.1	1.1	1.0	0.6	0.9	0.3	94.7	91.3	97.5
Breast	68.0	1.7	118.3	20.1	0.6	33.8	77.3	78.2	77.3
Breast (*in situ*)	14.4	0.2	25.4	-	-	-	100.0	95.8	100.0

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[b] NCHS public use data file for the total US.

[c] SEER 17 areas. California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2003. The remaining 13 SEER Areas contribute cases for the entire period 1996-2003.

[d] Mesotheliomas of the Pleura are included in the separate group Mesothelioma for incidence but are included in the Pleura grouping for mortality.

\- Statistic could not be calculated due to less than 16 cases in the time interval.

Table I-6 - continued
AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES AND 5-YEAR RELATIVE SURVIVAL RATES
By Primary Cancer Site, Sex and Time Period

Blacks

Site	Incidence[a] (2000-2004) Total	Males	Females	US Mortality[b] (2000-2004) Total	Males	Females	Survival[c] (1996-2003) Total	Males	Females
Female Genital System:	25.6	-	44.7	12.1	-	20.3	56.8	-	56.8
Cervix uteri	6.3	-	11.4	2.8	-	4.9	62.2	-	62.2
Corpus uteri	10.7	-	18.6	1.9	-	3.1	62.3	-	62.3
Uterus, NOS	0.6	-	1.0	2.4	-	4.0	25.1	-	25.1
Ovary[d]	5.9	-	10.1	4.5	-	7.4	38.2	-	38.2
Vagina	0.6	-	1.1	0.2	-	0.4	40.8	-	40.8
Vulva	1.1	-	1.9	0.2	-	0.3	75.1	-	75.1
Other female genital system	0.4	-	0.7	0.2	-	0.3	68.4	-	68.4
Male Genital System:	106.7	258.2	-	22.1	62.7	-	94.7	94.7	-
Prostate	105.5	255.5	-	21.9	62.3	-	94.9	94.9	-
Testis	0.7	1.4	-	0.1	0.2	-	88.2	88.2	-
Penis	0.4	1.1	-	0.1	0.2	-	69.3	69.3	-
Other male genital system	0.1	0.2	-	0.0	0.0	-	75.4	75.4	-
Urinary System:	27.6	41.6	17.9	8.0	11.6	5.8	63.5	64.3	61.5
Urinary bladder	12.6	20.3	7.6	3.7	5.3	2.8	63.9	68.2	55.5
Kidney & renal pelvis	14.3	20.4	9.7	4.1	6.1	2.8	64.2	62.0	66.3
Ureter	0.3	0.4	0.2	0.0	0.0	0.0	37.0	39.3	37.2
Other urinary system	0.4	0.5	0.4	0.2	0.2	0.2	45.5	56.2	36.4
Eye & Orbit	0.2	0.3	0.2	0.0	0.0	0.0	83.1	75.6	91.2
Brain & Nervous System:[e]	4.1	4.9	3.5	2.6	3.2	2.2	35.3	31.6	39.5
Brain	3.7	4.4	3.1	-	-	-	32.1	29.6	35.1
Cranial nerves & other nervous system	0.4	0.4	0.4	-	-	-	63.9	56.6	68.5
Endocrine System:	5.8	3.2	8.0	0.8	0.7	0.9	90.0	80.7	92.5
Thyroid	5.1	2.4	7.3	0.5	0.4	0.5	94.6	89.9	95.4
Other endocrine & thymus	0.7	0.8	0.6	0.3	0.3	0.3	58.6	58.7	58.1
Lymphoma:	17.0	20.9	14.0	5.6	7.0	4.6	59.7	55.4	65.1
Hodgkin lymphoma	2.4	2.8	2.1	0.4	0.5	0.3	81.5	77.0	86.6
Non-Hodgkin lymphoma	14.6	18.1	11.9	5.2	6.5	4.3	54.3	50.3	59.6
Myeloma	11.3	14.0	9.5	7.1	8.5	6.3	33.3	35.1	31.7
Leukemia:	10.2	13.2	8.1	6.7	8.8	5.3	41.1	41.2	40.8
Lymphocytic:	4.1	5.7	3.1	1.9	2.8	1.4	58.1	53.7	63.7
Acute lymphocytic	0.8	0.9	0.8	0.4	0.4	0.3	56.0	51.7	61.3
Chronic lymphocytic	3.0	4.4	2.1	1.4	2.1	1.0	58.5	52.9	65.8
Other lymphocytic	0.3	0.4	0.2	0.1	0.2	0.1	67.5	70.9	61.7
Myeloid & Monocytic:	5.0	6.3	4.1	3.0	3.7	2.5	29.5	32.5	25.7
Acute myeloid	3.2	3.9	2.7	2.2	2.7	1.9	22.6	25.2	19.1
Chronic myeloid	1.5	1.9	1.1	0.6	0.7	0.5	44.5	45.9	42.6
Acute monocytic	0.2	0.2	0.1	0.0	-	0.0	14.7	18.0	0.0
Other myeloid & monocytic	0.2	0.3	0.2	0.2	0.2	0.1	30.2	35.7	22.4
Other:	1.0	1.2	0.9	1.8	2.3	1.5	21.2	18.8	23.3
Other acute	0.4	0.5	0.3	0.6	0.9	0.5	16.1	16.5	15.3
Aleukemic, subleuk & NOS	0.6	0.7	0.5	1.2	1.5	0.9	24.7	18.8	28.8
Kaposi Sarcoma[f]	1.3	2.6	0.2	-	-	-	42.7	43.3	35.7
Mesothelioma[f]	0.6	1.1	0.2	-	-	-	15.3	9.6	27.1
Ill-defined & unspecified	12.9	15.0	11.3	18.3	24.2	14.5	9.8	10.4	9.2

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[b] NCHS public use data file for the total US.

[c] SEER 17 areas. California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2003. The remaining 13 SEER Areas contribute cases for the entire period 1996-2003.

[d] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

[e] Due to coding changes, Brain & Nervous System mortality are no longer shown separately.

[f] Rate not shown for mortality. Category did not exist in mortality coding until 1999.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Table I-7
SEER INCIDENCE AND U.S. MORTALITY TRENDS BY PRIMARY CANCER SITE AND SEX
All Races, 1995-2004

	Incidence[a]			US Mortality[b]		
	Total	Males	Females	Total	Males	Females
Site	APC	APC	APC	APC	APC	APC
All Sites	-0.6*	-0.7*	-0.5*	-1.2*	-1.7*	-1.0*
Oral Cavity & Pharynx:	-1.5*	-1.6*	-1.8*	-2.1*	-2.1*	-2.5*
Lip	-5.2*	-6.0*	-2.9*	-4.2*	-5.4*	-3.0
Tongue	1.2*	1.4*	0.4	-1.1*	-1.5*	-0.9*
Salivary gland	-0.6	-1.0	-0.4	-0.9*	-0.7	-1.8*
Floor of mouth	-5.5*	-4.9*	-6.7*	-9.1*	-8.7*	-10.1*
Gum & other oral cavity	-2.8*	-3.4*	-2.5*	-4.3*	-5.0*	-3.6*
Nasopharynx	-1.5	-1.4	-1.9*	-3.1*	-3.3*	-2.7*
Tonsil	2.1*	2.6*	-0.4	-0.7	-0.1	-3.0*
Oropharynx	-1.3	-0.8	-1.8	-0.1	0.5	-1.7
Hypopharynx	-4.7*	-4.5*	-5.8*	-4.2*	-4.4*	-4.5*
Other oral cavity & pharynx	-7.3*	-8.2*	-5.4*	-1.5*	-1.4*	-2.6*
Digestive System:	-0.7*	-0.9*	-0.6	-1.1*	-1.2*	-1.2*
Esophagus	0.2	0.5	-0.8	0.3*	0.4*	-0.5
Stomach	-1.5*	-2.1*	-0.8	-3.2*	-3.7*	-2.7*
Small intestine	2.1*	2.7*	1.2	-1.6*	-2.4*	-0.8
Colon & Rectum:	-1.5*	-1.8*	-1.3*	-2.2*	-2.4*	-2.2*
Colon	-1.4*	-1.7*	-1.3*	-	-	-
Rectum	-1.6*	-1.9*	-1.3	-	-	-
Anus, anal canal & anorectum	2.2*	2.1*	2.6*	2.4*	2.1*	2.9*
Liver & Intrahep:	2.2*	2.4*	1.1	1.7*	1.8*	0.9*
Liver	3.3*	3.4*	2.5*	1.2*	1.5*	-0.3
Intrahep bile duct	-5.1*	-5.8*	-4.7*	3.8*	3.4*	4.0*
Gallbladder	-1.3*	-2.7	-0.6	-2.6*	-2.1*	-2.8*
Other biliary	3.0*	2.8*	3.1*	-2.9*	-3.3*	-2.7*
Pancreas	0.0	-0.1	0.0	0.1*	0.0	0.1
Retroperitoneum	-0.1	-0.6	0.4	-5.2*	-5.2*	-5.4*
Peritoneum, omentum & mesentery	5.9*	1.6	6.3*	6.9*	2.1	8.1*
Other digestive system	6.0*	4.3*	6.9*	5.3	5.3	5.1
Respiratory System:	-1.5*	-2.3*	-0.6*	-1.0*	-2.0*	0.2
Nose, nasal cavity & middle ear	-2.0*	-2.7*	-1.1	-2.2*	-2.4*	-2.3
Larynx	-3.6*	-3.5*	-3.9*	-2.2*	-2.4*	-2.3*
Lung & bronchus	-1.4*	-2.2*	-0.5*	-1.0*	-2.0*	0.2*
Pleura	-	-	-	-8.0*	-8.2*	-7.4*
Trachea & other respiratory organs	-1.3	0.3	-4.8	-4.1*	-3.7*	-4.8*
Bones & joints	-0.6	-1.3	0.3	-0.9*	-1.4*	-0.7
Soft tissue (incl heart)	1.0*	1.2*	0.6	-2.7*	-2.4*	-3.1*
Skin (ex basal & squam):	1.2*	1.2*	1.2*	-0.3*	-0.1	-0.8*
Melanoma of the skin	1.2*	1.2*	1.3*	-0.5*	-0.3	-0.9*
Other non-epithelial skin	0.4	0.7	-0.2	0.4	0.5	-0.3
Breast	-1.1*	0.4	-1.0	-2.4*	-1.5	-2.3*
Breast (*in situ*)	2.5*	-2.4	2.6*	-	-	-

The APC is the Annual Percent Change over the time interval.

[a] SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

* The APC is significantly different from zero ($p<.05$).

\- Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval.

Table I-7 - continued
SEER INCIDENCE AND U.S. MORTALITY TRENDS BY PRIMARY CANCER SITE AND SEX
All Races, 1995-2004

	Incidence[a]			US Mortality[b]		
	Total	Males	Females	Total	Males	Females
Site	APC	APC	APC	APC	APC	APC
Female Genital System:	-1.5*	-	-1.3*	-0.9*	-	-0.6*
Cervix uteri	-3.4*	-	-3.3*	-3.7*	-	-3.5*
Corpus uteri	-1.1*	-	-0.8*	-1.2*	-	-0.9*
Uterus, NOS	0.6	-	1.1	0.6*	-	1.1*
Ovary[c]	-1.3*	-	-1.2*	-0.3	-	-0.1
Vagina	0.2	-	0.4	-2.1*	-	-1.9*
Vulva	-0.9	-	-0.6	-0.4	-	0.1
Other female genital system	0.0	-	0.1	2.1	-	2.2
Male Genital System:	0.3	-0.2	-	-3.5*	-4.0*	-
Prostate	0.3	-0.2	-	-3.6*	-4.1*	-
Testis	1.2*	1.1*	-	0.2	0.1	-
Penis	0.9	0.5	-	-0.3	-0.9	-
Other male genital system	-1.8	-2.0	-	-1.1	-1.8	-
Urinary System:	0.7*	0.5*	0.7*	-0.2*	-0.4*	-0.6*
Urinary bladder	0.0	0.0	-0.4*	-0.2	-0.4*	-0.5
Kidney & renal pelvis	2.1*	1.9*	2.2*	-0.4	-0.3	-0.8*
Ureter	0.4	-0.2	1.5	-1.6*	-2.8*	-0.1
Other urinary system	-3.7*	-2.4	-6.1*	6.6*	8.7*	4.1
Eye & Orbit	-1.3*	-1.7	-1.1	-4.1*	-4.1*	-4.7*
Brain & Nervous System:[d]	-0.4	-0.5	-0.2	-1.0*	-0.9*	-1.2*
Brain	-0.4	-0.4	-0.4	-	-	-
Cranial nerves & other nervous system	-0.4	-2.4	1.4	-	-	-
Endocrine System:	4.9*	3.9*	5.3*	-0.2	-0.1	-0.2
Thyroid	5.3*	4.5*	5.6*	0.6	1.1	0.4
Other endocrine & thymus	0.5	1.1	-0.2	-1.3*	-1.6*	-1.0*
Lymphoma:	0.1	-0.4	0.9*	-2.5*	-2.3*	-2.7*
Hodgkin lymphoma	0.1	-0.2	0.6	-2.4*	-2.2*	-2.5*
Non-Hodgkin lymphoma	0.1	-0.4	1.0*	-2.5*	-2.3*	-2.7*
Myeloma	-0.5	-0.4	-0.8*	-0.9*	-1.1*	-1.0*
Leukemia:	-1.0*	-1.2*	-0.9*	-0.8*	-0.9*	-0.9*
Lymphocytic:	-0.7	-0.9	-0.4	-1.4*	-1.7*	-1.5*
Acute lymphocytic	0.2	-0.1	0.7	-1.1*	-1.2*	-1.2*
Chronic lymphocytic	-0.7	-0.9	-0.6	-1.3*	-1.7*	-1.3*
Other lymphocytic	-3.2*	-3.0*	-3.9*	-3.8*	-3.7*	-4.4*
Myeloid & Monocytic:	-1.1	-1.3*	-1.2	0.0	0.1	-0.2
Acute myeloid	-0.5	-0.4	-0.8	2.0*	2.2*	1.7*
Chronic myeloid	-3.0*	-3.3*	-2.9*	-9.2*	-9.5*	-9.0*
Acute monocytic	3.0	2.8	2.8	-6.5*	-5.0*	-7.9*
Other myeloid & monocytic	-2.8	-4.7*	-0.4	8.3*	8.7*	7.3*
Other:	-2.8*	-3.5*	-2.6*	-1.6*	-1.8*	-1.6*
Other acute	-6.9*	-7.4*	-6.7*	-4.1*	-3.9*	-4.4*
Aleukemic, subleuk & NOS	1.3	0.2	1.2	0.7*	0.2	1.1*
Kaposi Sarcoma[e]	-17.4*	-17.8*	-7.6*	-	-	-
Mesothelioma[e]	-1.3*	-1.5*	-0.9	-	-	-
Ill-defined & unspecified	-3.0*	-3.5*	-2.8*	0.2	0.5	-0.1

The APC is the Annual Percent Change over the time interval.

[a] SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[c] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

[d] Due to coding changes, Brain & Nervous System mortality are no longer shown separately.

[e] Trend not shown for mortality. Category did not exist in mortality coding until 1999.

* The APC is significantly different from zero ($p<.05$).

\- Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval.

Table I-8
SEER INCIDENCE AND U.S. MORTALITY TRENDS BY PRIMARY CANCER SITE AND SEX
Whites, 1995-2004

	Incidence[a]			US Mortality[b]		
	Total	Males	Females	Total	Males	Females
Site	APC	APC	APC	APC	APC	APC
All Sites	-0.5	-0.6*	-0.4	-1.1*	-1.5*	-0.9*
Oral Cavity & Pharynx:	-1.3*	-1.2*	-2.0*	-1.8*	-1.8*	-2.3*
Lip	-5.0*	-5.8*	-2.8*	-4.0*	-5.1*	-2.7
Tongue	1.8*	2.1*	0.7	-0.6	-0.9	-0.4
Salivary gland	-0.9	-1.3	-0.7	-0.7	-0.5	-1.7*
Floor of mouth	-5.3*	-4.4*	-7.3*	-8.7*	-8.4*	-9.5*
Gum & other oral cavity	-2.6*	-2.9*	-2.7*	-3.9*	-4.7*	-3.2*
Nasopharynx	-2.5*	-2.1	-3.6*	-3.8*	-3.9*	-3.8*
Tonsil	3.3*	3.7*	0.9	0.3	1.0	-1.9
Oropharynx	-1.5	-0.7	-3.4	0.4	1.1	-1.6
Hypopharynx	-4.5*	-4.1*	-6.1*	-4.2*	-4.5*	-3.9*
Other oral cavity & pharynx	-7.3*	-7.9*	-6.5*	-1.4*	-1.2	-2.5*
Digestive System:	-0.7*	-0.9*	-0.6	-1.0*	-1.1*	-1.2*
Esophagus	1.3*	1.7*	0.0	1.2*	1.3*	0.2
Stomach	-1.4*	-2.1*	-0.7	-3.2*	-3.8*	-2.8*
Small intestine	2.1*	2.7*	1.3*	-1.9*	-2.9*	-0.9
Colon & Rectum:	-1.6*	-2.0*	-1.4*	-2.3*	-2.4*	-2.3*
Colon	-1.5*	-1.9*	-1.3*	-	-	-
Rectum	-1.8*	-2.0*	-1.7*	-	-	-
Anus, anal canal & anorectum	2.5*	2.1*	3.0*	2.8*	2.2*	3.4*
Liver & Intrahep:	2.1*	2.3*	0.9	1.7*	1.9*	0.8*
Liver	3.6*	3.6*	2.7*	1.1*	1.5*	-0.5
Intrahep bile duct	-5.7*	-6.5*	-5.2*	3.8*	3.5*	3.8*
Gallbladder	-1.3	-2.6	-0.5	-2.8*	-2.2*	-3.0*
Other biliary	2.8*	2.6*	2.8*	-2.8*	-3.4*	-2.7*
Pancreas	0.3	0.2	0.2	0.3*	0.2	0.2
Retroperitoneum	0.0	-0.1	-0.1	-5.2*	-5.0*	-5.5*
Peritoneum, omentum & mesentery	6.1*	-	6.6*	7.2*	2.2	8.5*
Other digestive system	5.9*	3.9*	7.0*	5.2	5.3	4.8
Respiratory System:	-1.5*	-2.2*	-0.7*	-0.9*	-1.9*	0.3*
Nose, nasal cavity & middle ear	-1.6	-2.4	-0.7	-1.6*	-2.0*	-1.5
Larynx	-3.5*	-3.5*	-3.7*	-1.8*	-2.1*	-2.0*
Lung & bronchus	-1.3*	-2.1*	-0.6*	-0.8*	-1.9*	0.3*
Pleura	-	-	-	-7.8*	-8.0*	-7.2*
Trachea & other respiratory organs	-0.8	0.8	-5.2	-3.4*	-3.3	-4.0
Bones & joints	-0.5	-1.2	0.6	-0.7*	-1.1*	-0.5
Soft tissue (incl heart)	1.2*	1.4*	0.8	-2.4*	-2.2*	-2.8*
Skin (ex basal & squam):	1.7*	1.7*	1.7*	-0.1	0.1	-0.5
Melanoma of the skin	1.8*	1.7*	1.9*	-0.3	-0.2	-0.7*
Other non-epithelial skin	0.6	1.2	-0.4	0.8	0.9	0.2
Breast	-1.1	1.1	-0.9	-2.5*	-1.1	-2.4*
Breast (*in situ*)	2.4*	-2.3	2.5*	-	-	-

The APC is the Annual Percent Change over the time interval.

[a] SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

* The APC is significantly different from zero ($p<.05$).

\- Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval.

Table I-8 - continued
SEER INCIDENCE AND U.S. MORTALITY TRENDS BY PRIMARY CANCER SITE AND SEX
Whites, 1995-2004

	Incidence[a]			US Mortality[b]		
	Total	Males	Females	Total	Males	Females
Site	APC	APC	APC	APC	APC	APC
Female Genital System:	-1.5*	-	-1.2*	-0.8*	-	-0.5*
Cervix uteri	-2.7*	-	-2.6*	-3.4*	-	-3.2*
Corpus uteri	-1.3*	-	-1.0*	-1.4*	-	-1.0*
Uterus, NOS	0.4	-	1.0	0.5	-	1.0*
Ovary[c]	-1.4*	-	-1.2*	-0.3	-	-0.1
Vagina	0.2	-	0.3	-1.8*	-	-1.5*
Vulva	-0.6	-	-0.2	-0.3	-	0.2
Other female genital system	0.1	-	0.3	2.6	-	2.8
Male Genital System:	0.5	-0.1	-	-3.4*	-4.0*	-
Prostate	0.4	-0.1	-	-3.5*	-4.1*	-
Testis	1.6*	1.5*	-	0.2	0.1	-
Penis	1.2	0.7	-	0.1	-0.5	-
Other male genital system	-1.1	-1.4	-	-1.5	-2.4	-
Urinary System:	0.9*	0.6*	1.0*	-0.1	-0.2	-0.4*
Urinary bladder	0.1	0.1	-0.2	0.0	-0.3	-0.3
Kidney & renal pelvis	2.3*	2.1*	2.5*	-0.3	-0.2	-0.7*
Ureter	0.4	-0.5	1.9	-1.4	-2.6*	0.0
Other urinary system	-3.2*	-2.0	-6.3*	7.6*	9.4*	5.1
Eye & Orbit	-1.1	-1.7	-0.7	-3.7*	-3.7*	-4.2*
Brain & Nervous System:[d]	-0.2	-0.3	-0.1	-0.9*	-0.9*	-1.0*
Brain	-0.2	-0.2	-0.2	-	-	-
Cranial nerves & other nervous system	-0.3	-2.9	2.3	-	-	-
Endocrine System:	5.3*	4.2*	5.8*	-0.2	-0.1	-0.2
Thyroid	5.7*	4.6*	6.1*	0.7*	1.1	0.5
Other endocrine & thymus	0.8	1.6	-0.1	-1.4*	-1.5*	-1.2*
Lymphoma:	0.1	-0.4	0.9*	-2.5*	-2.2*	-2.8*
Hodgkin lymphoma	-0.2	-0.4	0.1	-2.2*	-2.0*	-2.4*
Non-Hodgkin lymphoma	0.2	-0.3	1.0*	-2.5*	-2.3*	-2.8*
Myeloma	-0.6	-0.5	-0.8	-0.8*	-0.9*	-0.9*
Leukemia:	-1.1*	-1.3*	-1.0*	-0.7*	-0.8*	-0.8*
Lymphocytic:	-0.7	-0.9	-0.7	-1.2*	-1.6*	-1.2*
Acute lymphocytic	0.2	0.3	0.0	-0.9*	-1.1*	-0.8
Chronic lymphocytic	-0.7	-0.8	-0.7	-1.1*	-1.5*	-1.1*
Other lymphocytic	-3.7*	-3.7*	-4.1	-3.8*	-3.7*	-4.7*
Myeloid & Monocytic:	-1.1	-1.4*	-1.0	0.2	0.3	-0.1
Acute myeloid	-0.6	-0.5	-0.8	2.1*	2.3*	1.8*
Chronic myeloid	-2.9*	-3.3*	-2.6*	-9.3*	-9.7*	-9.1*
Acute monocytic	3.3*	1.7	5.1*	-6.1*	-4.7*	-7.6*
Other myeloid & monocytic	-2.8	-5.4	0.0	8.4*	8.9*	7.1*
Other:	-3.4*	-4.3*	-3.2*	-1.6*	-1.7*	-1.7*
Other acute	-6.8*	-7.6*	-6.3*	-4.0*	-3.9*	-4.4*
Aleukemic, subleuk & NOS	0.0	-1.0	-0.2	0.8*	0.4	1.1*
Kaposi Sarcoma[e]	-18.7*	-19.2*	-5.6*	-	-	-
Mesothelioma[e]	-0.8	-1.1	-0.3	-	-	-
Ill-defined & unspecified	-2.6*	-3.3*	-2.3*	0.5	0.8	0.1

The APC is the Annual Percent Change over the time interval.

[a] SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[c] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

[d] Due to coding changes, Brain & Nervous System mortality are no longer shown separately.

[e] Trend not shown for mortality. Category did not exist in mortality coding until 1999.

* The APC is significantly different from zero ($p<.05$).

\- Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval.

Table I-9
SEER INCIDENCE AND U.S. MORTALITY TRENDS BY PRIMARY CANCER SITE AND SEX
Blacks, 1995-2004

	Incidence[a]			US Mortality[b]		
	Total	Males	Females	Total	Males	Females
Site	APC	APC	APC	APC	APC	APC
All Sites	-1.0*	-1.6*	-0.4	-1.8*	-2.4*	-1.1*
Oral Cavity & Pharynx:	-3.0*	-3.6*	-1.5	-3.8*	-3.6*	-4.5*
Lip	-	-	-	-	-	-
Tongue	-1.1	-1.4	-0.2	-4.9*	-4.9*	-5.3*
Salivary gland	-1.2	-2.4	-0.8	-2.3*	-3.0	-1.4
Floor of mouth	-6.3	-6.1	-	-10.7*	-9.4*	-
Gum & other oral cavity	-3.5*	-4.8*	-0.9	-6.1*	-5.6*	-7.4*
Nasopharynx	-2.7	-	-	-1.1	-1.5	0.1
Tonsil	-3.8*	-3.6	-	-5.5*	-4.5*	-9.2*
Oropharynx	0.3	-0.5	-	-2.2*	-2.1*	-1.9
Hypopharynx	-4.5	-5.6*	-	-4.8*	-4.0	-
Other oral cavity & pharynx	-	-	-	-2.1*	-2.0	-2.7
Digestive System:	-0.7*	-0.7*	-0.8*	-1.5*	-1.7*	-1.5*
Esophagus	-4.6*	-4.9*	-3.7*	-4.2*	-4.7*	-2.9*
Stomach	-2.9*	-3.3*	-2.4	-3.3*	-3.6*	-3.2*
Small intestine	2.6*	3.1	1.9	-0.1	-0.2	0.2
Colon & Rectum:	-0.4	-0.2	-0.6	-1.5*	-1.5*	-1.7*
Colon	-0.4	-0.1	-0.8	-	-	-
Rectum	-0.6	-0.7	-0.2	-	-	-
Anus, anal canal & anorectum	3.7	2.4	4.9*	0.0	1.7	-1.1
Liver & Intrahep:	3.3*	4.5*	0.5	1.3*	1.7*	0.3
Liver	3.8*	5.3*	0.6	0.8	1.4	-0.8
Intrahep bile duct	-2.4	-	-	4.6*	4.1*	5.0*
Gallbladder	-4.0	-	-2.1	-1.5	-2.7	-1.2
Other biliary	4.9*	6.0	3.2*	-3.1*	-3.8	-2.2*
Pancreas	-1.6*	-2.1*	-1.3	-0.6*	-0.7*	-0.6*
Retroperitoneum	-	-	-	-5.9	-	-
Peritoneum, omentum & mesentery	-	-	-	3.4*	-	4.8*
Other digestive system	-	-	-	6.2	6.4	6.3
Respiratory System:	-1.8*	-3.1*	0.4	-1.7*	-2.8*	0.0
Nose, nasal cavity & middle ear	-5.3*	-	-	-6.5*	-4.0	-10.3*
Larynx	-3.2*	-3.3*	-3.0	-3.2*	-3.1*	-3.5*
Lung & bronchus	-1.6*	-3.1*	0.6	-1.6*	-2.7*	0.2
Pleura	-	-	-	-9.1*	-	-
Trachea & other respiratory organs	-	-	-	-8.5*	-7.1*	-
Bones & joints	0.0	-2.9	3.4	-2.4	-3.8*	-1.4
Soft tissue (incl heart)	0.2	1.6	-1.0	-4.1*	-2.5*	-4.9*
Skin (ex basal & squam):	-2.7	-5.5*	-0.7	-2.7*	-2.3*	-3.2
Melanoma of the skin	-6.1*	-9.8*	-	-1.5	-0.4	-2.2
Other non-epithelial skin	0.1	-1.2	0.4	-3.7*	-3.2*	-4.9*
Breast	-0.6*	-	-0.5*	-1.7*	-3.7*	-1.6*
Breast (*in situ*)	2.7*	-	2.7*	-	-	-

The APC is the Annual Percent Change over the time interval.

[a] SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

* The APC is significantly different from zero ($p<.05$).

\- Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval.

Table I-9 - continued
SEER INCIDENCE AND U.S. MORTALITY TRENDS BY PRIMARY CANCER SITE AND SEX
Blacks, 1995-2004

	Incidence[a]			US Mortality[b]		
	Total	Males	Females	Total	Males	Females
Site	APC	APC	APC	APC	APC	APC
Female Genital System:	-1.0*	-	-0.8*	-1.2*	-	-1.1*
Cervix uteri	-5.0*	-	-4.9*	-4.8*	-	-4.7*
Corpus uteri	1.0	-	1.1	-0.3	-	-0.2
Uterus, NOS	-	-	-	0.9	-	1.3*
Ovary[c]	0.0	-	0.0	0.0	-	0.1
Vagina	-1.3	-	-0.6	-3.2*	-	-3.1*
Vulva	-2.4	-	-2.1	-0.1	-	0.1
Other female genital system	-1.6	-	-1.5	-0.6	-	-0.6
Male Genital System:	-1.1	-1.4*	-	-3.5*	-3.7*	-
Prostate	-1.1	-1.4*	-	-3.6*	-3.7*	-
Testis	-1.5	-1.7	-	3.5	3.9	-
Penis	-	-	-	-2.5	-2.8	-
Other male genital system	-	-	-	-	-	-
Urinary System:	0.9*	1.0*	0.6	-1.0*	-1.0*	-1.1*
Urinary bladder	0.7	0.7	0.6	-1.3*	-1.5*	-1.3*
Kidney & renal pelvis	1.4	1.6	0.8	-0.7*	-0.6	-0.9
Ureter	-	-	-	-	-	-
Other urinary system	-	-	-	0.5	-	0.2
Eye & Orbit	-	-	-	-	-	-
Brain & Nervous System:[d]	-0.2	-1.1	0.5	-1.0*	-0.7	-1.4*
Brain	-0.2	-1.1	0.7	-	-	-
Cranial nerves & other nervous system	-	-	-	-	-	-
Endocrine System:	5.1*	5.5*	5.0*	-0.6	-0.6	-0.2
Thyroid	6.2*	7.5*	5.7*	0.2	2.2	-0.3
Other endocrine & thymus	-1.2	-	-	-1.6*	-3.2*	-0.3
Lymphoma:	0.4	-0.6	1.8*	-2.5*	-3.4*	-1.5*
Hodgkin lymphoma	1.5	0.1	3.4	-3.8*	-4.6*	-2.6
Non-Hodgkin lymphoma	0.2	-0.7	1.5*	-2.4*	-3.3*	-1.4*
Myeloma	-0.5	0.9	-1.8*	-1.4*	-1.8*	-1.3*
Leukemia:	-0.2	-0.6	-0.1	-1.1*	-1.6*	-0.7
Lymphocytic:	-1.0	-1.2	-0.6	-2.3*	-2.3*	-2.5*
Acute lymphocytic	-0.2	-4.2	4.2	-3.1*	-2.0	-4.8*
Chronic lymphocytic	-1.7	-1.4	-2.1*	-2.1*	-2.2*	-2.1*
Other lymphocytic	-	-	-	-1.7	-3.0	-
Myeloid & Monocytic:	0.0	-0.6	-0.1	-0.5	-0.7	-0.3
Acute myeloid	1.8	1.4	1.5	1.9*	1.9*	1.8*
Chronic myeloid	-3.8*	-4.5	-4.3	-8.3*	-8.4*	-8.3*
Acute monocytic	-	-	-	-	-	-
Other myeloid & monocytic	-	-	-	9.1*	-	-
Other:	3.0	-	-	-0.7	-2.0*	0.3
Other acute	-	-	-	-3.2*	-3.6*	-2.8
Aleukemic, subleuk & NOS	-	-	-	0.8	-1.0	2.5*
Kaposi Sarcoma[e]	-14.2*	-14.2*	-	-	-	-
Mesothelioma[e]	-5.0	-	-	-	-	-
Ill-defined & unspecified	-4.2*	-3.7*	-4.7*	-1.0	-0.7	-1.2

The APC is the Annual Percent Change over the time interval.

[a] SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[c] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

[d] Due to coding changes, Brain & Nervous System mortality are no longer shown separately.

[e] Trend not shown for mortality. Category did not exist in mortality coding until 1999.

* The APC is significantly different from zero ($p<.05$).

\- Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval.

Table I-10

AGE DISTRIBUTION (%) OF INCIDENCE CASES BY SITE, 2000-2004

All Races, Both Sexes

Site	Age <20	20-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages	Cases
All Sites	1.1	2.7	5.9	13.6	20.9	25.8	22.6	7.4	100.0%	1,671,579
Oral Cavity & Pharynx:	0.5	2.4	7.1	20.6	24.7	22.3	16.7	5.7	100.0%	37,724
Lip	0.1	1.8	7.9	12.6	18.0	23.6	25.4	10.8	100.0%	3,069
Tongue	0.1	2.2	7.1	22.9	26.5	21.9	15.0	4.3	100.0%	9,928
Salivary gland	1.7	6.7	8.8	15.4	17.9	20.2	19.9	9.4	100.0%	4,276
Floor of mouth	0.1	0.4	3.9	20.5	29.6	25.5	15.2	4.9	100.0%	2,490
Gum & other oral cavity	0.6	1.9	5.6	14.3	21.4	23.4	23.4	9.4	100.0%	5,564
Nasopharynx	3.0	7.0	14.0	24.0	22.5	18.3	8.7	2.5	100.0%	2,408
Tonsil	0.0	0.8	8.5	32.3	30.4	18.1	8.6	1.3	100.0%	5,356
Oropharynx	0.1	0.3	3.6	20.5	31.0	24.0	15.5	5.0	100.0%	1,151
Hypopharynx	0.0	0.2	2.9	16.9	26.4	30.7	19.2	3.8	100.0%	2,622
Other oral cavity & pharynx	0.6	0.7	3.7	17.1	27.0	26.7	18.1	6.0	100.0%	860
Digestive System:	0.2	1.0	3.7	11.8	18.5	25.9	27.6	11.4	100.0%	315,879
Esophagus	0.0	0.4	2.6	12.3	23.0	29.2	24.5	8.0	100.0%	16,225
Stomach	0.1	1.6	4.6	10.9	17.3	25.4	28.1	12.0	100.0%	28,578
Small intestine	0.2	1.8	6.4	14.8	21.7	25.2	22.5	7.4	100.0%	6,354
Colon & Rectum:	0.0	1.0	3.6	11.1	17.8	25.7	28.6	12.2	100.0%	182,037
Colon	0.1	0.9	3.0	9.6	16.3	25.9	30.6	13.7	100.0%	131,311
Rectum	0.0	1.2	5.0	15.2	21.5	25.2	23.3	8.5	100.0%	50,726
Colon & Rectum (Male)	0.0	1.0	3.7	12.0	20.2	27.8	26.5	8.6	100.0%	92,291
Colon & Rectum (Female)	0.0	0.9	3.4	10.2	15.2	23.5	30.7	16.0	100.0%	89,746
Anus, anal canal & anorectum	0.0	1.7	11.5	22.8	20.9	19.8	16.8	6.6	100.0%	5,330
Liver & Intrahep:	1.2	1.1	4.0	19.5	22.3	24.9	20.7	6.4	100.0%	22,077
Liver	1.3	1.1	4.1	20.5	22.8	24.7	19.8	5.7	100.0%	19,944
Intrahep bile duct	0.0	1.2	3.2	10.3	17.3	26.4	28.6	13.1	100.0%	2,133
Gallbladder	0.0	0.5	2.7	8.6	16.7	26.1	32.3	13.2	100.0%	4,124
Other biliary	0.1	0.6	3.0	8.4	16.2	26.2	30.4	15.1	100.0%	5,924
Pancreas	0.1	0.4	2.5	9.6	18.1	27.2	29.7	12.3	100.0%	39,883
Retroperitoneum	9.0	5.4	8.4	16.2	18.0	21.3	17.0	4.7	100.0%	1,458
Peritoneum, omentum & mesentery	0.5	0.9	4.3	11.1	23.8	30.9	24.0	4.5	100.0%	2,185
Other digestive system	0.1	1.4	2.8	10.7	16.1	24.5	28.9	15.5	100.0%	1,704
Respiratory System:	0.1	0.4	2.2	9.3	21.4	32.1	27.7	6.9	100.0%	241,947
Nose, nasal cavity & middle ear	2.9	4.0	8.4	16.3	19.3	20.8	21.2	7.1	100.0%	2,391
Larynx	0.0	0.5	3.9	15.6	28.5	29.7	17.8	4.0	100.0%	13,225
Lung & bronchus	0.0	0.2	2.0	8.8	21.0	32.4	28.4	7.0	100.0%	225,459
Lung & bronchus (Male)	0.0	0.2	1.8	8.9	21.7	33.1	28.0	6.3	100.0%	122,851
Lung & bronchus (Female)	0.0	0.3	2.3	8.7	20.3	31.5	29.0	8.0	100.0%	102,608
Pleura	2.9	4.4	5.1	7.4	21.3	21.3	26.5	11.0	100.0%	136
Trachea & other respiratory organs	17.4	18.3	9.6	12.1	11.8	13.7	12.0	5.0	100.0%	736
Bones & joints	28.7	16.5	11.5	13.0	10.1	8.6	7.8	3.8	100.0%	3,368
Soft tissue (incl heart)	10.4	10.8	11.5	15.1	15.1	15.4	15.8	5.9	100.0%	11,229
Skin (ex basal & squam):	1.0	8.2	13.1	18.4	18.3	18.2	16.9	6.0	100.0%	73,577
Melanoma of the skin	1.0	8.3	13.5	19.0	18.7	18.1	16.0	5.4	100.0%	67,273
Other non-epithelial skin	1.5	7.0	8.0	11.8	13.8	19.4	26.0	12.6	100.0%	6,304
Breast (Female)	0.0	1.9	10.6	22.2	22.9	20.2	16.7	5.4	100.0%	249,269
Breast (Female -*in situ*)	0.0	0.8	11.5	27.9	25.1	19.9	12.5	2.3	100.0%	56,858

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

Table I-10 - continued

AGE DISTRIBUTION (%) OF INCIDENCE CASES BY SITE, 2000-2004

All Races, Both Sexes

Site	<20	20-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages	Cases
Female Genital System:	0.4	4.6	10.4	19.3	23.1	19.9	16.4	5.7	100.0%	95,736
Cervix uteri	0.1	15.5	26.2	23.3	15.1	10.3	7.0	2.5	100.0%	16,674
Corpus uteri	0.0	1.5	6.4	18.8	28.1	23.3	17.1	4.9	100.0%	44,191
Uterus, NOS	0.5	3.2	6.5	15.5	19.0	19.0	20.5	15.8	100.0%	1,155
Ovary[a]	1.2	3.4	7.9	18.8	21.5	20.6	19.4	7.0	100.0%	26,546
Vagina	1.3	1.0	5.7	15.7	19.0	22.2	22.0	13.1	100.0%	1,431
Vulva	0.2	2.6	9.2	15.6	15.7	18.3	24.9	13.5	100.0%	4,375
Other female genital system	1.3	9.4	8.7	17.1	21.5	20.7	16.9	4.5	100.0%	1,364
Male Genital System:	0.2	1.8	1.7	8.6	26.3	35.3	21.6	4.6	100.0%	270,722
Prostate	0.0	0.0	0.5	8.4	27.3	36.7	22.4	4.7	100.0%	258,707
Testis	5.5	46.2	30.3	13.1	3.1	1.1	0.7	0.2	100.0%	10,301
Penis	0.1	1.8	7.2	12.0	20.3	25.1	24.0	9.5	100.0%	1,305
Other male genital system	3.7	2.4	4.9	13.4	17.6	25.2	24.9	7.8	100.0%	409
Urinary System:	0.6	0.9	3.7	10.9	19.5	27.2	27.7	9.4	100.0%	122,645
Urinary bladder	0.1	0.6	2.1	7.8	17.2	28.5	31.9	11.8	100.0%	73,919
Kidney & renal pelvis	1.5	1.5	6.4	16.3	23.5	25.1	20.3	5.5	100.0%	45,794
Ureter	0.0	0.2	0.8	4.8	14.2	31.2	37.5	11.3	100.0%	1,942
Other urinary system	0.3	1.0	3.4	9.9	16.6	24.6	29.3	14.8	100.0%	990
Eye & Orbit	14.1	3.4	7.6	14.6	18.2	19.2	17.3	5.7	100.0%	2,948
Brain & Nervous System:	13.6	9.4	10.6	15.1	16.6	16.5	14.3	3.9	100.0%	23,509
Brain	13.2	9.2	10.4	15.0	16.7	16.9	14.6	4.0	100.0%	21,949
Cranial nerves & other nervous system	20.6	11.5	12.2	17.1	14.3	11.4	9.8	3.1	100.0%	1,560
Endocrine System:	3.7	17.4	22.1	22.4	15.5	11.2	6.3	1.4	100.0%	34,012
Thyroid	2.1	18.2	23.0	23.1	15.5	10.8	6.0	1.4	100.0%	31,505
Other endocrine & thymus	23.5	8.1	10.5	14.4	16.2	15.6	9.3	2.3	100.0%	2,507
Lymphoma:	3.1	7.8	9.0	13.9	16.9	20.8	21.3	7.4	100.0%	79,164
Hodgkin lymphoma	12.1	32.3	18.1	12.3	8.5	8.5	6.3	1.8	100.0%	10,117
Non-Hodgkin lymphoma	1.7	4.2	7.7	14.1	18.1	22.6	23.5	8.2	100.0%	69,047
Myeloma	0.0	0.6	3.4	11.6	19.6	27.3	28.1	9.3	100.0%	19,652
Leukemia:	10.9	4.8	5.7	9.9	14.5	20.4	23.7	10.2	100.0%	44,047
Lymphocytic:	17.1	3.2	3.9	9.0	15.2	20.2	22.0	9.4	100.0%	21,209
Acute lymphocytic	61.2	9.9	6.5	6.2	5.5	5.1	3.8	1.8	100.0%	5,917
Chronic lymphocytic	0.0	0.3	1.9	8.9	19.0	27.0	30.1	12.8	100.0%	13,757
Other lymphocytic	0.7	3.0	11.2	21.0	19.2	17.6	19.5	7.9	100.0%	1,535
Myeloid & Monocytic:	5.2	6.6	7.8	11.3	14.5	20.8	24.6	9.3	100.0%	20,083
Acute myeloid	6.0	6.4	6.9	10.6	14.8	21.6	24.9	9.0	100.0%	12,999
Chronic myeloid	2.6	7.3	10.1	12.9	13.8	19.5	23.9	9.9	100.0%	5,451
Acute monocytic	10.0	6.8	8.3	13.7	14.8	18.0	20.4	8.0	100.0%	1,039
Other myeloid & monocytic	2.7	5.2	5.6	8.1	12.8	21.2	32.7	11.8	100.0%	594
Other:	4.6	3.7	3.8	6.1	9.8	18.4	30.7	23.0	100.0%	2,755
Other acute	6.9	4.6	3.4	5.8	8.3	19.1	30.7	21.3	100.0%	1,222
Aleukemic, subleuk & NOS	2.8	2.9	4.2	6.3	11.1	17.7	30.7	24.3	100.0%	1,533
Kaposi Sarcoma	0.1	19.5	36.3	17.5	6.0	6.4	8.5	5.6	100.0%	2,529
Mesothelioma	0.1	0.7	2.2	6.6	16.2	28.2	37.2	8.9	100.0%	3,830
Ill-defined & unspecified	0.5	1.0	3.0	9.9	16.3	23.5	29.9	15.9	100.0%	38,021

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[a] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Table I-11
MEDIAN AGE OF CANCER PATIENTS AT DIAGNOSIS[a], 2000-2004
By Primary Cancer Site, Race and Sex

Site	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Sites	67.0	68.0	66.0	67.0	68.0	67.0	63.0	64.0	62.0
Oral Cavity & Pharynx:	62.0	61.0	66.0	63.0	62.0	68.0	58.0	58.0	57.0
Lip	69.0	67.0	75.0	70.0	68.0	75.0	59.0	62.5	-
Tongue	61.0	60.0	65.0	61.0	60.0	66.0	58.0	58.0	55.0
Salivary gland	64.0	66.0	61.0	66.0	68.0	64.0	55.0	56.0	53.0
Floor of mouth	63.0	61.0	68.0	64.0	62.0	69.0	58.0	57.0	61.0
Gum & other oral cavity	67.0	64.0	72.0	69.0	65.0	73.0	59.0	59.0	61.0
Nasopharynx	55.0	55.0	56.0	59.0	58.0	63.0	50.0	51.0	48.0
Tonsil	57.0	56.0	61.0	57.0	56.0	61.0	55.0	55.0	56.0
Oropharynx	63.0	61.0	67.0	63.0	62.0	68.0	60.0	60.0	64.0
Hypopharynx	66.0	65.0	67.0	66.0	66.0	68.0	61.0	61.0	59.0
Other oral cavity & pharynx	65.0	64.0	69.0	66.0	64.0	70.0	62.0	62.0	61.0
Digestive System:	71.0	69.0	73.0	71.0	69.0	74.0	66.0	64.0	68.0
Esophagus	69.0	67.0	73.0	69.0	68.0	74.0	64.0	63.0	65.0
Stomach	71.0	70.0	73.0	72.0	70.0	74.0	69.0	67.0	72.0
Small intestine	67.0	65.0	68.0	67.0	66.0	69.0	63.0	63.5	63.0
Colon & Rectum:	71.0	70.0	73.0	72.0	70.0	74.0	67.0	65.0	68.0
Colon	73.0	71.0	74.0	73.0	72.0	75.0	68.0	67.0	69.0
Rectum	67.0	66.0	69.0	68.0	67.0	70.0	63.0	62.5	64.0
Anus, anal canal & anorectum	61.0	58.0	63.0	62.0	59.0	63.0	54.0	50.0	58.0
Liver & Intrahep:	65.0	63.0	71.0	67.0	64.0	72.0	59.0	57.0	65.0
Liver	65.0	62.0	70.0	66.0	63.0	72.0	59.0	57.0	65.0
Intrahep bile duct	72.0	70.0	74.0	72.0	71.0	74.0	66.0	65.0	69.0
Gallbladder	73.0	73.0	73.0	74.0	74.0	74.0	69.0	69.0	69.0
Other biliary	73.0	71.0	75.0	74.0	72.0	75.0	68.0	67.0	69.0
Pancreas	72.0	70.0	74.0	73.0	70.0	75.0	68.0	66.0	71.0
Retroperitoneum	60.0	61.0	60.0	61.0	62.0	61.0	56.0	56.0	54.5
Peritoneum, omentum & mesentery	68.0	61.0	68.0	68.0	62.0	69.0	64.0	52.0	66.0
Other digestive system	73.0	71.0	74.0	73.0	72.0	75.0	68.0	64.0	69.0
Respiratory System:	70.0	70.0	71.0	71.0	70.0	71.0	66.0	65.0	66.0
Nose, nasal cavity & middle ear	64.0	62.0	66.0	65.0	63.0	67.0	56.0	56.0	58.0
Larynx	65.0	65.0	65.0	65.0	65.0	66.0	61.0	62.0	60.0
Lung & bronchus	70.0	70.0	71.0	71.0	71.0	71.0	66.0	66.0	67.0
Pleura	68.0	72.0	65.5	68.0	72.0	66.0	-	-	-
Trachea & other respiratory organs	49.0	41.0	60.0	49.0	42.0	63.0	48.5	43.0	53.5
Bones & joints	39.0	37.0	41.0	40.0	38.0	42.5	32.0	32.0	31.5
Soft tissue (incl heart)	56.0	56.0	56.0	57.0	58.0	57.0	48.0	45.0	50.0
Skin (ex basal & squam):	59.0	62.0	55.0	60.0	63.0	55.0	53.0	53.0	53.0
Melanoma of the skin	59.0	62.0	54.0	59.0	62.0	54.0	62.0	61.0	62.5
Other non-epithelial skin	69.0	70.0	68.0	71.0	71.0	69.0	47.0	46.5	48.0
Breast	61.0	67.0	61.0	62.0	69.0	62.0	57.0	62.0	57.0
Breast (*in situ*)	58.0	58.0	58.0	58.0	59.0	58.0	58.0	56.0	58.0

[a] SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

\- Statistic could not be calculated. Less than 16 cases were diagnosed during the time interval.

Table I-11 - continued
MEDIAN AGE OF CANCER PATIENTS AT DIAGNOSIS[a], 2000-2004
By Primary Cancer Site, Race and Sex

Site	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Female Genital System:	61.0	-	61.0	62.0	-	62.0	60.0	-	60.0
Cervix uteri	48.0	-	48.0	47.0	-	47.0	49.0	-	49.0
Corpus uteri	63.0	-	63.0	63.0	-	63.0	64.0	-	64.0
Uterus, NOS	67.0	-	67.0	69.0	-	69.0	64.0	-	64.0
Ovary[b]	63.0	-	63.0	64.0	-	64.0	61.0	-	61.0
Vagina	68.0	-	68.0	69.0	-	69.0	62.5	-	62.5
Vulva	68.0	-	68.0	70.0	-	70.0	54.0	-	54.0
Other female genital system	61.0	-	61.0	63.0	-	63.0	48.0	-	48.0
Male Genital System:	68.0	68.0	-	68.0	68.0	-	65.0	65.0	-
Prostate	68.0	68.0	-	68.0	68.0	-	65.0	65.0	-
Testis	34.0	34.0	-	34.0	34.0	-	33.0	33.0	-
Penis	68.0	68.0	-	69.0	69.0	-	65.0	65.0	-
Other male genital system	68.0	68.0	-	69.0	69.0	-	54.0	54.0	-
Urinary System:	70.0	70.0	71.0	71.0	70.0	71.0	65.0	64.0	67.0
Urinary bladder	73.0	72.0	74.0	73.0	72.0	74.0	70.0	68.0	73.0
Kidney & renal pelvis	65.0	64.0	66.0	65.0	65.0	67.0	61.0	60.0	62.0
Ureter	74.0	73.0	75.5	74.0	74.0	76.0	72.0	72.0	73.5
Other urinary system	73.0	73.0	71.0	74.0	74.0	74.0	64.0	68.5	62.0
Eye & Orbit	60.0	59.0	61.0	61.0	61.0	62.0	3.0	8.0	2.0
Brain & Nervous System:	55.0	55.0	56.0	56.0	55.0	58.0	49.0	48.0	50.0
Brain	56.0	55.0	57.0	57.0	56.0	58.0	49.0	48.0	51.0
Cranial nerves & other nervous system	48.0	46.0	49.0	48.0	46.0	49.0	48.0	47.5	49.0
Endocrine System:	47.0	52.0	46.0	47.0	52.0	46.0	48.0	52.0	47.0
Thyroid	47.0	52.0	46.0	47.0	53.0	46.0	48.0	52.0	47.0
Other endocrine & thymus	50.0	48.0	52.0	52.0	49.0	54.0	45.0	44.0	46.0
Lymphomas:	64.0	62.0	67.0	65.0	63.0	68.0	52.0	51.0	55.0
Hodgkin lymphoma	38.0	39.0	35.5	38.0	39.0	36.0	37.0	38.0	34.0
Non-Hodgkin lymphoma	67.0	64.0	69.0	68.0	65.0	70.0	55.0	53.0	58.0
Myeloma	70.0	69.0	72.0	71.0	70.0	73.0	67.0	66.0	68.0
Leukemia:	67.0	66.0	68.0	68.0	67.0	69.0	61.0	59.0	63.0
Lymphocytic:	65.0	64.0	68.0	66.0	65.0	69.0	62.0	61.0	64.0
Acute lymphocytic	13.0	13.0	12.0	13.0	13.0	12.0	14.0	13.0	14.0
Chronic lymphocytic	72.0	71.0	74.0	73.0	71.0	75.0	69.0	68.0	71.0
Other lymphocytic	61.0	59.0	70.0	62.0	59.0	70.0	61.5	60.0	66.0
Myeloid & Monocytic:	67.0	67.0	68.0	69.0	68.0	69.0	59.0	57.0	61.0
Acute myeloid	67.0	67.0	68.0	69.0	69.0	69.0	59.0	57.0	61.0
Chronic myeloid	66.0	65.0	68.0	68.0	67.0	70.0	58.0	56.0	61.0
Acute monocytic	62.0	63.0	61.0	63.5	64.5	63.0	47.0	42.0	49.0
Other myeloid & monocytic	72.0	71.0	74.0	73.0	72.0	75.0	65.0	64.0	69.0
Other:	76.0	74.0	78.0	77.0	75.0	79.0	65.0	61.0	71.0
Other acute	75.0	74.0	77.0	76.0	75.0	78.0	68.0	65.5	72.5
Aleukemic, subleuk & NOS	76.0	74.0	79.0	77.0	75.0	80.0	65.0	58.0	69.0
Kaposi Sarcoma	42.0	41.0	79.0	44.0	43.0	80.0	38.0	37.0	43.0
Mesothelioma	74.0	74.0	72.0	74.0	74.0	73.0	70.0	70.5	66.0
Ill-defined & unspecified	73.0	71.0	75.0	74.0	71.0	76.0	67.0	64.0	70.0

[a] SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[b] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

- Statistic could not be calculated. Less than 16 cases were diagnosed during the time interval.

Table I-12

AGE DISTRIBUTION (%) OF DEATHS BY SITE, 2000-2004

All Races, Both Sexes

Site	Age <20	20-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages	Cases
All Sites	0.4	0.9	2.9	8.9	16.8	26.0	30.0	14.2	100.0%	2,774,874
Oral Cavity & Pharynx:	0.2	0.9	3.5	14.5	22.8	24.7	22.3	11.0	100.0%	38,533
Lip	0.3	1.1	3.8	7.1	13.2	17.6	32.1	24.7	100.0%	364
Tongue	0.1	1.4	4.4	15.6	23.6	23.9	21.3	9.7	100.0%	9,228
Salivary gland	0.1	1.0	3.6	9.7	16.2	22.4	28.7	18.2	100.0%	3,463
Floor of mouth	0.0	0.0	3.1	16.4	26.2	27.9	17.8	8.5	100.0%	706
Gum & other oral cavity	0.7	0.5	2.1	10.1	17.3	23.5	26.3	19.5	100.0%	5,888
Nasopharynx	1.1	3.3	7.7	19.2	23.6	21.3	17.2	6.5	100.0%	3,134
Tonsil	0.0	0.4	4.4	22.3	28.3	23.5	16.3	4.8	100.0%	2,968
Oropharynx	0.0	0.2	2.5	16.2	25.7	26.0	20.9	8.5	100.0%	3,029
Hypopharynx	0.0	0.2	2.2	14.2	27.5	30.1	20.3	5.7	100.0%	1,716
Other oral cavity & pharynx	0.0	0.2	2.3	13.2	24.6	27.7	23.0	9.0	100.0%	8,037
Digestive System:	0.1	0.5	2.5	9.0	16.3	25.1	30.2	16.3	100.0%	661,360
Esophagus	0.0	0.3	2.4	11.0	21.9	28.9	26.4	9.2	100.0%	63,344
Stomach	0.0	1.2	3.8	9.3	15.0	23.6	29.8	17.2	100.0%	61,131
Small intestine	0.0	0.9	4.1	10.9	18.1	24.5	28.7	12.8	100.0%	5,341
Colon & Rectum:	0.0	0.6	2.4	7.7	14.5	23.6	31.1	20.1	100.0%	280,208
Colon & Rectum (Male)	0.0	0.6	2.6	8.7	17.0	26.7	30.4	13.9	100.0%	140,055
Colon & Rectum (Female)	0.0	0.5	2.2	6.7	11.9	20.4	31.9	26.3	100.0%	140,153
Anus, anal canal & anorectum	0.0	1.0	8.2	18.4	20.3	20.0	21.2	10.8	100.0%	2,686
Liver & Intrahep:	0.4	0.8	2.9	14.4	18.6	25.2	26.9	10.9	100.0%	70,341
Liver	0.5	0.8	2.9	15.8	18.9	25.2	25.9	9.9	100.0%	54,983
Intrahep bile duct	0.0	0.7	2.7	9.1	17.4	25.2	30.6	14.2	100.0%	15,358
Gallbladder	0.0	0.2	1.7	7.3	15.0	26.0	33.5	16.3	100.0%	9,678
Other biliary	0.1	0.2	1.5	5.6	11.8	23.4	34.7	22.8	100.0%	7,800
Pancreas	0.0	0.2	1.8	8.2	17.0	26.8	31.5	14.5	100.0%	151,944
Retroperitoneum	0.6	1.9	5.0	9.3	17.8	24.7	29.6	11.2	100.0%	1,111
Peritoneum, omentum & mesentery	0.1	0.7	2.7	7.6	20.0	31.8	29.4	7.6	100.0%	3,363
Other digestive system	0.0	0.6	1.9	5.9	13.2	22.2	31.9	24.3	100.0%	4,413
Respiratory System:	0.0	0.1	1.7	7.9	19.5	32.0	30.1	8.7	100.0%	808,802
Nose, nasal cavity & middle ear	0.3	1.4	6.5	12.9	18.3	22.1	25.3	13.3	100.0%	2,263
Larynx	0.0	0.1	1.9	11.3	24.3	30.0	24.5	7.7	100.0%	18,839
Lung & bronchus	0.0	0.1	1.7	7.8	19.4	32.1	30.3	8.7	100.0%	785,021
Lung & bronchus (Male)	0.0	0.1	1.6	8.0	20.2	33.1	29.6	7.5	100.0%	450,375
Lung & bronchus (Female)	0.0	0.1	1.8	7.4	18.3	30.8	31.2	10.4	100.0%	334,646
Pleura	0.1	0.1	1.5	4.4	15.4	28.3	38.1	12.2	100.0%	1,399
Trachea & other respiratory organs	1.3	5.3	5.9	11.9	15.9	23.7	25.8	10.2	100.0%	1,280
Bones & joints	14.7	14.0	7.2	9.0	11.6	13.9	18.5	11.1	100.0%	6,267
Soft tissue (incl heart)	4.1	6.7	7.9	13.4	16.9	19.7	21.5	9.8	100.0%	18,283
Skin (ex basal & squam):	0.1	2.4	6.4	13.7	17.7	21.4	24.3	14.1	100.0%	50,342
Melanoma of the skin	0.1	2.9	7.7	15.4	18.5	21.6	23.1	10.7	100.0%	38,245
Other non-epithelial skin	0.1	0.6	2.2	8.3	15.1	20.9	28.0	24.8	100.0%	12,097
Breast (Female)	0.0	1.1	6.5	15.3	19.0	20.4	23.0	14.6	100.0%	207,353

Source: NCHS public use data file for the total US.

Table I-12 - continued

AGE DISTRIBUTION (%) OF DEATHS BY SITE, 2000-2004

All Races, Both Sexes

Site	Age <20	20-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages	Cases
Female Genital System:	0.0	1.4	4.9	11.9	18.0	23.7	26.8	13.1	100.0%	134,400
Cervix uteri	0.0	5.7	16.6	22.5	19.0	15.3	13.7	7.1	100.0%	20,013
Corpus uteri	0.0	0.3	1.7	6.9	17.9	28.9	29.6	14.6	100.0%	16,044
Uterus, NOS	0.0	0.5	2.6	9.0	17.4	24.7	28.7	17.1	100.0%	18,066
Ovary	0.1	0.8	3.2	11.3	18.6	25.0	28.8	12.2	100.0%	72,529
Vagina	0.0	0.5	4.0	9.3	12.5	20.2	27.0	26.5	100.0%	1,972
Vulva	0.0	0.7	2.5	6.0	9.4	17.4	34.3	29.6	100.0%	3,892
Other female genital system	0.0	2.0	3.8	10.6	17.7	24.0	28.2	13.5	100.0%	1,884
Male Genital System:	0.0	0.4	0.4	1.6	6.7	20.7	41.3	28.9	100.0%	153,862
Prostate	0.0	0.0	0.1	1.3	6.6	20.8	41.8	29.3	100.0%	150,799
Testis	2.8	32.4	27.3	17.8	7.2	5.5	4.6	2.3	100.0%	1,767
Penis	0.0	0.9	5.4	12.1	19.2	25.4	25.1	12.0	100.0%	1,112
Other male genital system	0.0	3.3	4.3	9.8	12.5	16.3	38.6	15.2	100.0%	184
Urinary System:	0.2	0.3	1.7	7.1	15.0	24.3	32.7	18.7	100.0%	126,047
Urinary bladder	0.0	0.1	0.9	4.0	10.6	22.6	37.1	24.7	100.0%	62,367
Kidney & renal pelvis	0.5	0.5	2.6	10.4	19.6	26.0	27.9	12.4	100.0%	60,578
Ureter	0.0	0.1	0.5	4.5	9.8	27.6	37.4	20.1	100.0%	1,550
Other urinary system	0.0	0.2	1.7	6.4	11.5	22.7	37.4	20.1	100.0%	1,552
Eye & Orbit	5.3	1.5	4.3	11.6	18.8	21.0	24.5	13.1	100.0%	1,141
Brain & Nervous System:	4.3	4.0	8.0	15.4	20.1	22.8	19.6	5.8	100.0%	63,824
Endocrine System:	8.4	2.6	4.7	10.5	16.0	21.8	24.3	11.8	100.0%	11,167
Thyroid	0.1	0.8	2.9	8.3	16.9	24.2	30.7	16.2	100.0%	6,770
Other endocrine & thymus	21.2	5.5	7.4	13.7	14.6	18.1	14.5	5.0	100.0%	4,397
Lymphoma:	0.6	2.5	3.5	7.8	13.9	23.3	32.6	15.8	100.0%	115,942
Hodgkin lymphoma	2.1	15.6	11.3	12.8	13.2	16.9	19.8	8.3	100.0%	6,585
Non-Hodgkin lymphoma	0.5	1.7	3.1	7.4	13.9	23.7	33.4	16.3	100.0%	109,357
Myeloma	0.0	0.1	1.3	6.3	14.9	27.8	35.2	14.4	100.0%	53,653
Leukemia:	3.2	3.2	3.6	6.6	12.0	22.5	31.6	17.2	100.0%	107,590
Lymphocytic:	5.2	3.6	2.7	5.1	10.3	20.1	30.7	22.3	100.0%	30,937
Acute lymphocytic	22.5	15.4	9.6	11.1	11.6	12.5	11.6	5.7	100.0%	7,060
Chronic lymphocytic	0.0	0.1	0.5	3.1	9.9	22.6	36.4	27.4	100.0%	21,970
Other lymphocytic	1.5	0.8	1.9	5.5	9.8	19.8	35.5	25.3	100.0%	1,907
Myeloid & Monocytic:	2.4	3.4	4.6	8.3	14.0	24.6	30.7	11.9	100.0%	50,325
Acute myeloid	2.7	3.4	4.5	8.3	14.4	25.4	30.5	10.7	100.0%	39,416
Chronic myeloid	1.2	4.5	6.7	10.6	14.3	20.6	27.1	15.0	100.0%	7,215
Acute monocytic	2.3	2.3	3.9	4.6	11.8	20.7	35.6	18.9	100.0%	570
Other myeloid & monocytic	1.2	1.1	1.6	3.9	9.7	24.6	39.6	18.3	100.0%	3,124
Other:	2.5	2.3	2.7	5.2	10.2	21.3	34.5	21.2	100.0%	26,328
Other acute	1.4	2.6	3.1	5.4	10.6	23.2	35.6	18.1	100.0%	11,778
Aleukemic, subleuk & NOS	3.4	2.2	2.4	5.0	9.8	19.9	33.7	23.7	100.0%	14,550
Ill-defined & unspecified	0.3	0.7	2.5	8.3	15.6	24.5	31.2	16.9	100.0%	214,355

Source: NCHS public use data file for the total US.

Table I-13
MEDIAN AGE OF CANCER PATIENTS AT DEATH[a], 2000-2004
By Primary Cancer Site, Race and Sex

Site	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Sites	73.0	72.0	73.0	73.0	73.0	74.0	68.0	68.0	69.0
Oral Cavity & Pharynx:	68.0	65.0	74.0	70.0	67.0	75.0	61.0	60.0	64.0
Lip	76.5	74.5	83.0	77.0	75.0	83.5	-	-	-
Tongue	67.0	64.0	73.0	67.0	64.0	74.0	60.0	60.0	61.5
Salivary gland	73.0	72.0	75.0	74.0	73.0	76.0	63.0	63.0	64.5
Floor of mouth	66.0	63.0	74.0	67.0	63.5	74.0	61.0	60.5	67.0
Gum & other oral cavity	73.0	68.0	79.0	74.0	69.0	80.0	63.0	60.0	70.0
Nasopharynx	62.0	61.0	66.0	66.0	64.0	70.0	56.0	56.0	60.0
Tonsil	62.0	60.0	70.0	63.0	61.0	71.0	59.0	58.0	65.0
Oropharynx	67.0	64.0	73.0	68.0	65.0	74.0	61.0	60.0	64.0
Hypopharynx	66.0	66.0	71.0	68.0	67.0	71.5	61.0	60.0	62.0
Other oral cavity & pharynx	68.0	67.0	72.0	70.0	68.0	73.0	62.0	62.0	65.0
Digestive System:	73.0	71.0	76.0	74.0	72.0	77.0	69.0	66.0	72.0
Esophagus	70.0	68.0	74.0	71.0	69.0	75.0	65.0	64.0	68.0
Stomach	74.0	72.0	76.0	74.0	72.0	77.0	71.0	68.0	75.0
Small intestine	71.0	70.0	73.0	72.0	71.0	74.5	65.0	64.0	65.0
Colon & Rectum	75.0	73.0	77.0	76.0	73.0	78.0	70.0	68.0	72.0
Anus, anal canal & anorectum	66.0	62.0	68.0	66.0	63.0	69.0	59.0	53.0	64.0
Liver & Intrahep:	70.0	67.0	75.0	71.0	69.0	75.0	63.0	59.0	70.0
Liver	69.0	66.0	75.0	71.0	68.0	76.0	62.0	58.0	70.0
Intrahep bile duct	73.0	72.0	74.0	73.0	72.0	75.0	68.0	67.0	70.0
Gallbladder	74.0	74.0	75.0	75.0	74.0	75.0	70.0	70.0	70.0
Other biliary	77.0	75.0	78.0	77.0	76.0	79.0	73.0	72.0	73.5
Pancreas	73.0	71.0	76.0	74.0	71.0	76.0	70.0	67.0	73.0
Retroperitoneum	71.0	70.0	73.0	72.0	70.0	74.0	62.0	64.0	61.0
Peritoneum, omentum & mesentery	71.0	68.0	71.0	71.0	69.0	72.0	67.0	59.0	68.0
Other digestive system	76.0	74.0	80.0	77.0	74.0	80.0	71.0	70.0	73.0
Respiratory System:	71.0	71.0	72.0	72.0	71.0	72.0	67.0	67.0	68.0
Nose, nasal cavity & middle ear	70.0	66.0	75.0	71.0	68.0	75.0	63.0	63.0	63.0
Larynx	69.0	68.0	70.0	70.0	69.0	71.0	64.0	64.0	66.0
Lung & bronchus	71.0	71.0	72.0	72.0	71.0	72.0	68.0	67.0	69.0
Pleura	75.0	74.0	75.0	75.0	75.0	75.0	69.0	68.0	73.0
Trachea & other respiratory organs	69.0	66.0	73.0	69.0	67.0	74.0	64.0	63.0	64.0
Bones & joints	59.0	54.0	66.0	61.0	56.0	68.0	51.0	46.0	57.0
Soft tissue (incl heart)	65.0	64.0	66.0	66.0	66.0	67.0	56.0	53.0	58.0
Skin (ex basal & squam):	70.0	69.0	72.0	70.0	69.0	72.0	64.0	61.0	71.0
Melanoma of the skin	67.0	67.0	68.0	67.0	67.0	68.0	69.0	66.0	72.0
Other non-epithelial skin	76.0	73.0	80.0	76.0	74.0	81.0	62.0	60.0	67.5
Breast	69.0	71.0	69.0	70.0	72.0	70.0	61.0	66.0	61.0

[a] NCHS public use data file for the total US.
- Statistic could not be calculated. Less than 16 deaths occurred during the time interval.

Table I-13 - continued
MEDIAN AGE OF CANCER PATIENTS AT DEATH[a], 2000-2004
By Primary Cancer Site, Race and Sex

Site	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Female Genital System:	71.0	-	71.0	71.0	-	71.0	67.0	-	67.0
Cervix uteri	57.0	-	57.0	57.0	-	57.0	57.0	-	57.0
Corpus uteri	73.0	-	73.0	73.0	-	73.0	70.0	-	70.0
Uterus, NOS	73.0	-	73.0	74.0	-	74.0	70.0	-	70.0
Ovary	71.0	-	71.0	72.0	-	72.0	68.0	-	68.0
Vagina	76.0	-	76.0	76.0	-	76.0	72.0	-	72.0
Vulva	79.0	-	79.0	79.0	-	79.0	71.0	-	71.0
Other female genital system	72.0	-	72.0	73.0	-	73.0	64.0	-	64.0
Male Genital System:	80.0	80.0	-	80.0	80.0	-	77.0	77.0	-
Prostate	80.0	80.0	-	80.0	80.0	-	77.0	77.0	-
Testis	40.0	40.0	-	40.0	40.0	-	40.5	40.5	-
Penis	70.0	70.0	-	70.0	70.0	-	68.0	68.0	-
Other male genital system	75.0	75.0	-	76.0	76.0	-	66.5	66.5	-
Urinary System:	75.0	74.0	77.0	75.0	74.0	77.0	71.0	69.0	74.0
Urinary bladder	78.0	77.0	80.0	78.0	77.0	80.0	76.0	75.0	77.0
Kidney & renal pelvis	71.0	69.0	74.0	72.0	70.0	75.0	67.0	65.0	70.0
Ureter	77.0	75.0	78.0	77.0	76.0	79.0	73.0	75.0	70.0
Other urinary system	77.0	76.0	78.0	78.0	76.0	79.0	66.5	70.5	65.0
Eye & Orbit	69.0	66.0	72.0	70.0	67.0	72.0	45.0	49.5	32.0
Brain & Nervous System:	64.0	62.0	66.0	64.0	62.0	67.0	57.0	55.0	60.0
Endocrine System:	69.0	65.0	72.0	69.0	66.0	72.0	61.0	56.0	66.0
Thyroid	74.0	71.0	76.0	74.0	71.0	76.0	70.0	65.0	73.0
Other endocrine & thymus	56.0	55.0	57.0	58.0	57.0	59.0	46.0	39.5	49.0
Lymphoma:	74.0	72.0	76.0	75.0	72.0	77.0	64.0	61.0	67.0
Hodgkin lymphoma	61.0	59.0	63.0	63.0	61.0	65.0	45.0	48.0	41.0
Non-Hodgkin lymphoma	74.0	72.0	77.0	75.0	73.0	77.0	65.0	62.0	68.0
Myeloma	74.0	73.0	76.0	75.0	74.0	76.0	71.0	69.0	73.0
Leukemia:	74.0	73.0	76.0	75.0	73.0	76.0	67.0	66.0	70.0
Lymphocytic:	76.0	73.0	79.0	76.0	74.0	79.0	70.0	67.0	73.0
Acute lymphocytic	47.0	42.0	53.0	49.0	44.0	54.0	36.0	32.0	42.0
Chronic lymphocytic	78.0	76.0	81.0	79.0	77.0	82.0	74.0	72.0	76.0
Other lymphocytic	78.0	76.0	81.0	78.0	76.0	81.0	73.5	71.0	77.0
Myeloid & Monocytic:	72.0	71.0	73.0	73.0	72.0	74.0	64.0	62.5	65.0
Acute myeloid	72.0	71.0	72.0	72.0	72.0	73.0	64.0	64.0	65.0
Chronic myeloid	71.0	69.0	74.0	73.0	71.0	75.0	60.0	56.5	64.0
Acute monocytic	76.0	75.0	77.0	77.0	76.0	78.0	57.0	-	58.5
Other myeloid & monocytic	76.0	76.0	77.0	77.0	76.0	78.0	73.0	72.0	74.0
Other:	76.0	75.0	78.0	77.0	75.0	79.0	71.0	69.0	74.0
Other acute	76.0	75.0	77.0	76.0	75.0	77.0	70.0	70.0	71.0
Aleukemic, subleuk & NOS	77.0	75.0	79.0	78.0	76.0	80.0	71.0	69.0	74.5
Ill-defined & unspecified	74.0	72.0	76.0	75.0	73.0	76.0	69.0	66.0	71.0

[a] NCHS public use data file for the total US.
- Statistic could not be calculated. Less than 16 deaths occurred during the time interval.

Table I-14

Lifetime Risk (Percent) of Being Diagnosed with Cancer by Site and Race/Ethnicity

Both Sexes, 17 SEER Areas, 2002-2004

Site	All Races Percent (95% C.I.)	Whites Percent (95% C.I.)	Blacks Percent (95% C.I.)
All Sites	40.93 (40.83, 41.02)	41.39 (41.29, 41.50)	37.22 (36.93, 37.51)
Invasive and In Situ	43.24 (43.14, 43.34)	43.79 (43.68, 43.90)	38.51 (38.22, 38.81)
Oral Cavity and Pharynx	1.02 (1.00, 1.03)	1.03 (1.02, 1.05)	0.89 (0.85, 0.93)
Esophagus	0.50 (0.49, 0.51)	0.51 (0.50, 0.53)	0.52 (0.49, 0.56)
Stomach	0.90 (0.89, 0.91)	0.79 (0.78, 0.81)	1.12 (1.07, 1.17)
Colon and Rectum	5.42 (5.39, 5.46)	5.41 (5.37, 5.45)	5.24 (5.13, 5.35)
Invasive and In Situ	5.73 (5.70, 5.77)	5.71 (5.67, 5.75)	5.58 (5.47, 5.70)
Liver and Intrahepatic Bile Duct	0.66 (0.64, 0.67)	0.55 (0.54, 0.57)	0.68 (0.64, 0.71)
Pancreas	1.31 (1.29, 1.33)	1.30 (1.28, 1.32)	1.40 (1.34, 1.46)
Larynx	0.37 (0.36, 0.38)	0.37 (0.36, 0.38)	0.51 (0.48, 0.54)
Invasive and In Situ	0.40 (0.39, 0.41)	0.40 (0.39, 0.41)	0.53 (0.50, 0.56)
Lung and Bronchus	6.98 (6.94, 7.02)	7.17 (7.12, 7.21)	6.64 (6.52, 6.76)
Melanoma of the Skin	1.72 (1.70, 1.74)	1.99 (1.97, 2.01)	0.09 (0.08, 0.11)
Invasive and In Situ	2.76 (2.73, 2.78)	3.15 (3.12, 3.18)	0.11 (0.09, 0.13)
Breast	6.37 (6.34, 6.41)	6.59 (6.55, 6.63)	5.33 (5.23, 5.44)
Invasive and In Situ	7.62 (7.58, 7.66)	7.86 (7.82, 7.91)	6.34 (6.23, 6.45)
Urinary Bladder(Invasive and In Situ)	2.35 (2.33, 2.37)	2.55 (2.53, 2.58)	1.13 (1.08, 1.19)
Kidney and Renal Pelvis	1.34 (1.33, 1.36)	1.40 (1.38, 1.42)	1.20 (1.15, 1.25)
Brain and Other Nervous System	0.60 (0.59, 0.61)	0.66 (0.65, 0.67)	0.32 (0.30, 0.35)
Thyroid	0.73 (0.72, 0.74)	0.77 (0.76, 0.78)	0.40 (0.37, 0.42)
Hodgkin Lymphoma	0.22 (0.21, 0.23)	0.24 (0.23, 0.25)	0.18 (0.16, 0.19)
Non-Hodgkin Lymphoma	2.02 (2.00, 2.04)	2.12 (2.10, 2.15)	1.21 (1.16, 1.26)
Myeloma	0.61 (0.60, 0.62)	0.56 (0.55, 0.57)	1.02 (0.98, 1.07)
Leukemia	1.26 (1.25, 1.28)	1.31 (1.30, 1.33)	0.86 (0.82, 0.91)
Acute Lymphocytic Leukemia	0.12 (0.12, 0.12)	0.13 (0.12, 0.13)	0.06 (0.05, 0.07)
Chronic Lymphocytic Leukemia	0.45 (0.44, 0.46)	0.48 (0.47, 0.49)	0.27 (0.25, 0.30)
Acute Myeloid Leukemia	0.37 (0.36, 0.38)	0.38 (0.37, 0.39)	0.27 (0.24, 0.29)
Chronic Myeloid Leukemia	0.15 (0.14, 0.16)	0.15 (0.15, 0.16)	0.11 (0.10, 0.13)
Kaposi Sarcoma	0.05 (0.05, 0.06)	0.05 (0.05, 0.05)	0.08 (0.07, 0.09)
Mesothelioma	0.12 (0.12, 0.13)	0.14 (0.13, 0.14)	0.05 (0.04, 0.07)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).
Note: Invasive cancer only unless specified otherwise.

Table I-14 - continued

Lifetime Risk (Percent) of Being Diagnosed with Cancer by Site and Race/Ethnicity

Both Sexes, 17 SEER Areas, 2002-2004

Site	Asian/Pacific Islanders Percent (95% C.I.)	American Indian/ Alaska Natives[a] Percent (95% C.I.)	Hispanics[b] Percent (95% C.I.)
All Sites	35.73 (35.31, 36.15)	26.34 (25.16, 27.63)	37.25 (36.88, 37.62)
Invasive and In Situ	37.19 (36.77, 37.61)	27.44 (26.24, 28.75)	38.57 (38.19, 38.95)
Oral Cavity and Pharynx	0.88 (0.82, 0.95)	0.61 (0.47, 0.91)	0.68 (0.64, 0.74)
Esophagus	0.36 (0.32, 0.41)	0.41 (0.28, 0.71)	0.41 (0.37, 0.47)
Stomach	2.06 (1.95, 2.17)	1.30 (1.04, 1.70)	1.62 (1.54, 1.72)
Colon and Rectum	5.58 (5.41, 5.76)	4.27 (3.80, 4.86)	4.82 (4.69, 4.97)
Invasive and In Situ	5.83 (5.66, 6.02)	4.45 (3.97, 5.05)	5.08 (4.94, 5.23)
Liver and Intrahepatic Bile Duct	1.78 (1.70, 1.88)	1.08 (0.81, 1.51)	1.11 (1.05, 1.17)
Pancreas	1.34 (1.26, 1.44)	0.96 (0.75, 1.32)	1.46 (1.38, 1.55)
Larynx	0.22 (0.18, 0.27)	0.14 (0.08, 0.41)	0.30 (0.27, 0.34)
Invasive and In Situ	0.22 (0.19, 0.27)	0.14 (0.08, 0.42)	0.31 (0.28, 0.35)
Lung and Bronchus	5.55 (5.39, 5.73)	4.66 (4.18, 5.27)	4.38 (4.25, 4.52)
Melanoma of the Skin	0.18 (0.15, 0.22)	0.31 (0.15, 0.65)	0.50 (0.46, 0.56)
Invasive and In Situ	0.25 (0.21, 0.29)	0.43 (0.26, 0.78)	0.72 (0.67, 0.77)
Breast	4.90 (4.78, 5.03)	3.31 (2.96, 3.79)	4.82 (4.70, 4.95)
Invasive and In Situ	6.11 (5.98, 6.26)	4.03 (3.64, 4.54)	5.66 (5.54, 5.80)
Urinary Bladder(Invasive and In Situ)	1.43 (1.34, 1.53)	0.69 (0.52, 1.02)	1.53 (1.45, 1.62)
Kidney and Renal Pelvis	0.83 (0.77, 0.90)	1.53 (1.28, 1.92)	1.42 (1.36, 1.49)
Brain and Other Nervous System	0.35 (0.32, 0.39)	0.22 (0.14, 0.49)	0.54 (0.50, 0.58)
Thyroid	0.79 (0.75, 0.85)	0.44 (0.34, 0.72)	0.69 (0.65, 0.73)
Hodgkin Lymphoma	0.11 (0.10, 0.14)	0.08 (0.04, 0.35)	0.22 (0.20, 0.25)
Non-Hodgkin Lymphoma	1.73 (1.64, 1.83)	0.91 (0.71, 1.26)	1.94 (1.86, 2.03)
Myeloma	0.43 (0.39, 0.49)	0.55 (0.40, 0.87)	0.70 (0.65, 0.76)
Leukemia	0.88 (0.82, 0.95)	0.69 (0.48, 1.07)	1.12 (1.05, 1.19)
Acute Lymphocytic Leukemia	0.12 (0.11, 0.15)	0.09 (0.06, 0.35)	0.17 (0.16, 0.19)
Chronic Lymphocytic Leukemia	0.13 (0.11, 0.17)	0.29 (0.13, 0.65)	0.28 (0.25, 0.33)
Acute Myeloid Leukemia	0.36 (0.32, 0.41)	0.13 (0.07, 0.41)	0.36 (0.32, 0.40)
Chronic Myeloid Leukemia	0.11 (0.10, 0.15)	0.07 (0.03, 0.35)	0.15 (0.13, 0.19)
Kaposi Sarcoma	0.02 (0.01, 0.04)	0.03 (0.01, 0.30)	0.10 (0.08, 0.12)
Mesothelioma	0.05 (0.03, 0.08)	0.08 (0.03, 0.36)	0.13 (0.11, 0.15)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[a] Underlying incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry and Kentucky.

Note: Invasive cancer only unless specified otherwise.

Table I-15

Lifetime Risk (Percent) of Being Diagnosed with Cancer by Site and Race/Ethnicity

Males, 17 SEER Areas, 2002-2004

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	44.94 (44.79, 45.09)	44.89 (44.73, 45.06)	42.33 (41.87, 42.79)
Invasive and In Situ	46.26 (46.10, 46.41)	46.28 (46.12, 46.45)	42.65 (42.19, 43.12)
Oral Cavity and Pharynx	1.40 (1.38, 1.43)	1.43 (1.40, 1.46)	1.30 (1.23, 1.37)
Esophagus	0.78 (0.76, 0.80)	0.80 (0.78, 0.82)	0.76 (0.70, 0.82)
Stomach	1.13 (1.11, 1.15)	1.01 (0.99, 1.04)	1.30 (1.22, 1.38)
Colon and Rectum	5.65 (5.60, 5.70)	5.65 (5.60, 5.71)	5.20 (5.04, 5.36)
Invasive and In Situ	6.00 (5.95, 6.05)	6.00 (5.94, 6.06)	5.53 (5.37, 5.70)
Liver and Intrahepatic Bile Duct	0.91 (0.89, 0.93)	0.77 (0.75, 0.79)	0.98 (0.92, 1.05)
Pancreas	1.30 (1.27, 1.32)	1.30 (1.28, 1.33)	1.25 (1.17, 1.33)
Larynx	0.62 (0.60, 0.64)	0.61 (0.59, 0.63)	0.85 (0.79, 0.91)
Invasive and In Situ	0.66 (0.65, 0.68)	0.66 (0.64, 0.68)	0.89 (0.83, 0.96)
Lung and Bronchus	7.91 (7.85, 7.98)	7.98 (7.92, 8.05)	8.09 (7.90, 8.29)
Melanoma of the Skin	2.10 (2.07, 2.13)	2.42 (2.38, 2.45)	0.07 (0.06, 0.10)
Invasive and In Situ	3.33 (3.29, 3.37)	3.79 (3.75, 3.84)	0.09 (0.07, 0.12)
Breast	0.11 (0.10, 0.12)	0.11 (0.10, 0.12)	0.12 (0.10, 0.15)
Invasive and In Situ	0.12 (0.11, 0.13)	0.12 (0.11, 0.13)	0.14 (0.11, 0.17)
Prostate	16.72 (16.63, 16.81)	16.15 (16.06, 16.25)	19.43 (19.13, 19.74)
Testis	0.36 (0.35, 0.37)	0.43 (0.42, 0.44)	0.09 (0.07, 0.11)
Urinary Bladder(Invasive and In Situ)	3.70 (3.65, 3.74)	4.03 (3.99, 4.08)	1.48 (1.40, 1.57)
Kidney and Renal Pelvis	1.71 (1.68, 1.73)	1.78 (1.75, 1.81)	1.49 (1.42, 1.58)
Brain and Other Nervous System	0.67 (0.65, 0.68)	0.74 (0.72, 0.75)	0.35 (0.31, 0.39)
Thyroid	0.39 (0.37, 0.40)	0.41 (0.40, 0.43)	0.17 (0.15, 0.20)
Hodgkin Lymphoma	0.24 (0.23, 0.25)	0.26 (0.25, 0.27)	0.19 (0.16, 0.21)
Non-Hodgkin Lymphoma	2.19 (2.16, 2.22)	2.30 (2.26, 2.33)	1.31 (1.24, 1.39)
Myeloma	0.69 (0.67, 0.71)	0.65 (0.64, 0.67)	1.09 (1.02, 1.17)
Leukemia	1.50 (1.47, 1.52)	1.56 (1.54, 1.59)	0.98 (0.92, 1.05)
Acute Lymphocytic Leukemia	0.13 (0.13, 0.14)	0.14 (0.14, 0.15)	0.07 (0.06, 0.09)
Chronic Lymphocytic Leukemia	0.56 (0.54, 0.57)	0.59 (0.57, 0.61)	0.34 (0.30, 0.38)
Acute Myeloid Leukemia	0.42 (0.41, 0.44)	0.44 (0.43, 0.46)	0.28 (0.25, 0.32)
Chronic Myeloid Leukemia	0.18 (0.17, 0.19)	0.18 (0.17, 0.19)	0.13 (0.11, 0.16)
Kaposi Sarcoma	0.09 (0.09, 0.10)	0.08 (0.08, 0.09)	0.15 (0.13, 0.18)
Mesothelioma	0.21 (0.20, 0.22)	0.23 (0.22, 0.24)	0.08 (0.06, 0.11)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).
Note: Invasive cancer only unless specified otherwise.

Table I-15 - continued

Lifetime Risk (Percent) of Being Diagnosed with Cancer by Site and Race/Ethnicity

Males, 17 SEER Areas, 2002-2004

Site	Asian/Pacific Islanders Percent (95% C.I.)	American Indian/ Alaska Natives[a] Percent (95% C.I.)	Hispanics[b] Percent (95% C.I.)
All Sites	39.83 (39.21, 40.48)	26.35 (24.64, 28.34)	41.57 (40.99, 42.18)
Invasive and In Situ	40.27 (39.64, 40.92)	26.83 (25.10, 28.84)	42.14 (41.55, 42.76)
Oral Cavity and Pharynx	1.12 (1.03, 1.23)	0.84 (0.59, 1.53)	0.97 (0.88, 1.08)
Esophagus	0.54 (0.47, 0.63)	0.61 (0.40, 1.29)	0.66 (0.58, 0.76)
Stomach	2.47 (2.31, 2.65)	1.65 (1.22, 2.47)	1.85 (1.73, 1.99)
Colon and Rectum	5.96 (5.72, 6.22)	3.74 (3.17, 4.66)	5.08 (4.88, 5.30)
Invasive and In Situ	6.29 (6.04, 6.55)	3.91 (3.32, 4.83)	5.38 (5.18, 5.61)
Liver and Intrahepatic Bile Duct	2.47 (2.33, 2.62)	1.46 (1.01, 2.32)	1.47 (1.38, 1.58)
Pancreas	1.33 (1.21, 1.46)	0.93 (0.66, 1.64)	1.26 (1.16, 1.38)
Larynx	0.41 (0.34, 0.50)	0.26 (0.14, 0.91)	0.56 (0.50, 0.64)
Invasive and In Situ	0.42 (0.35, 0.51)	0.28 (0.15, 0.93)	0.58 (0.52, 0.66)
Lung and Bronchus	7.06 (6.80, 7.34)	5.01 (4.25, 6.10)	5.32 (5.11, 5.56)
Melanoma of the Skin	0.19 (0.15, 0.26)	0.34 (0.18, 1.01)	0.49 (0.43, 0.58)
Invasive and In Situ	0.25 (0.21, 0.32)	0.47 (0.28, 1.14)	0.69 (0.61, 0.79)
Breast	0.06 (0.04, 0.10)	0.02 (0.00, 0.70)	0.06 (0.04, 0.11)
Invasive and In Situ	0.06 (0.05, 0.11)	0.02 (0.00, 0.70)	0.07 (0.05, 0.12)
Prostate	12.52 (12.18, 12.88)	6.99 (6.14, 8.15)	16.25 (15.90, 16.62)
Testis	0.11 (0.09, 0.15)	0.28 (0.18, 0.91)	0.27 (0.25, 0.31)
Urinary Bladder(Invasive and In Situ)	2.29 (2.13, 2.48)	1.07 (0.77, 1.80)	2.37 (2.22, 2.55)
Kidney and Renal Pelvis	1.11 (1.01, 1.22)	1.78 (1.41, 2.54)	1.77 (1.67, 1.89)
Brain and Other Nervous System	0.37 (0.32, 0.44)	0.30 (0.17, 0.95)	0.60 (0.54, 0.69)
Thyroid	0.41 (0.36, 0.48)	0.26 (0.16, 0.91)	0.31 (0.27, 0.37)
Hodgkin Lymphoma	0.13 (0.10, 0.18)	0.09 (0.05, 0.75)	0.27 (0.23, 0.34)
Non-Hodgkin Lymphoma	1.92 (1.79, 2.08)	0.85 (0.57, 1.57)	2.06 (1.93, 2.20)
Myeloma	0.47 (0.41, 0.56)	0.41 (0.22, 1.09)	0.78 (0.70, 0.87)
Leukemia	1.03 (0.94, 1.14)	0.49 (0.33, 1.14)	1.29 (1.18, 1.42)
Acute Lymphocytic Leukemia	0.14 (0.11, 0.19)	0.11 (0.06, 0.77)	0.17 (0.15, 0.21)
Chronic Lymphocytic Leukemia	0.16 (0.12, 0.22)	0.16 (0.06, 0.83)	0.37 (0.30, 0.46)
Acute Myeloid Leukemia	0.41 (0.36, 0.49)	0.11 (0.05, 0.77)	0.40 (0.34, 0.48)
Chronic Myeloid Leukemia	0.14 (0.11, 0.20)	0.05 (0.01, 0.72)	0.20 (0.14, 0.27)
Kaposi Sarcoma	0.04 (0.03, 0.08)	0.05 (0.02, 0.72)	0.16 (0.13, 0.21)
Mesothelioma	0.08 (0.05, 0.14)	0.06 (0.01, 0.73)	0.20 (0.17, 0.26)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[a] Underlying incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry and Kentucky.

Note: Invasive cancer only unless specified otherwise.

Table I-16

Lifetime Risk (Percent) of Being Diagnosed with Cancer by Site and Race/Ethnicity

Females, 17 SEER Areas, 2002-2004

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	37.52 (37.40, 37.65)	38.46 (38.32, 38.60)	32.66 (32.29, 33.03)
Invasive and In Situ	40.82 (40.69, 40.95)	41.86 (41.72, 42.01)	34.86 (34.48, 35.24)
Oral Cavity and Pharynx	0.65 (0.64, 0.67)	0.66 (0.64, 0.68)	0.52 (0.48, 0.57)
Esophagus	0.25 (0.24, 0.26)	0.25 (0.24, 0.26)	0.31 (0.28, 0.35)
Stomach	0.69 (0.68, 0.71)	0.59 (0.58, 0.61)	0.96 (0.90, 1.03)
Colon and Rectum	5.23 (5.18, 5.27)	5.19 (5.14, 5.24)	5.31 (5.16, 5.46)
Invasive and In Situ	5.50 (5.45, 5.55)	5.45 (5.40, 5.51)	5.66 (5.50, 5.81)
Liver and Intrahepatic Bile Duct	0.41 (0.40, 0.43)	0.35 (0.34, 0.36)	0.40 (0.36, 0.44)
Pancreas	1.32 (1.29, 1.34)	1.29 (1.27, 1.32)	1.53 (1.45, 1.62)
Larynx	0.14 (0.14, 0.15)	0.15 (0.14, 0.16)	0.20 (0.17, 0.23)
Invasive and In Situ	0.16 (0.15, 0.16)	0.16 (0.15, 0.17)	0.20 (0.18, 0.23)
Lung and Bronchus	6.18 (6.13, 6.23)	6.49 (6.43, 6.54)	5.35 (5.20, 5.50)
Melanoma of the Skin	1.40 (1.38, 1.42)	1.63 (1.60, 1.66)	0.10 (0.08, 0.13)
Invasive and In Situ	2.26 (2.23, 2.29)	2.60 (2.57, 2.64)	0.13 (0.10, 0.15)
Breast	12.28 (12.22, 12.35)	12.80 (12.72, 12.87)	10.10 (9.91, 10.29)
Invasive and In Situ	14.72 (14.65, 14.80)	15.30 (15.22, 15.39)	12.02 (11.82, 12.24)
Cervix Uteri	0.70 (0.69, 0.72)	0.67 (0.66, 0.69)	0.92 (0.86, 0.97)
Corpus and Uterus, NOS	2.45 (2.42, 2.48)	2.56 (2.53, 2.60)	1.95 (1.86, 2.03)
Invasive and In Situ	2.49 (2.46, 2.52)	2.60 (2.56, 2.63)	1.97 (1.88, 2.06)
Ovary[a]	1.42 (1.39, 1.44)	1.50 (1.47, 1.52)	0.99 (0.92, 1.05)
Urinary Bladder(Invasive and In Situ)	1.17 (1.15, 1.19)	1.25 (1.22, 1.27)	0.82 (0.76, 0.89)
Kidney and Renal Pelvis	1.01 (0.99, 1.03)	1.05 (1.03, 1.08)	0.93 (0.88, 1.00)
Brain and Other Nervous System	0.53 (0.52, 0.55)	0.59 (0.57, 0.60)	0.30 (0.27, 0.34)
Thyroid	1.08 (1.07, 1.10)	1.14 (1.12, 1.17)	0.61 (0.57, 0.66)
Hodgkin Lymphoma	0.20 (0.20, 0.21)	0.22 (0.21, 0.23)	0.17 (0.15, 0.19)
Non-Hodgkin Lymphoma	1.87 (1.85, 1.90)	1.97 (1.94, 2.00)	1.11 (1.05, 1.18)
Myeloma	0.53 (0.52, 0.55)	0.48 (0.47, 0.50)	0.97 (0.90, 1.03)
Leukemia	1.06 (1.04, 1.08)	1.09 (1.07, 1.12)	0.76 (0.70, 0.82)
Acute Lymphocytic Leukemia	0.11 (0.10, 0.11)	0.11 (0.11, 0.12)	0.06 (0.05, 0.07)
Chronic Lymphocytic Leukemia	0.36 (0.35, 0.37)	0.38 (0.36, 0.39)	0.22 (0.19, 0.25)
Acute Myeloid Leukemia	0.32 (0.31, 0.33)	0.33 (0.32, 0.34)	0.26 (0.23, 0.29)
Chronic Myeloid Leukemia	0.12 (0.12, 0.13)	0.13 (0.12, 0.13)	0.10 (0.08, 0.12)
Kaposi Sarcoma	0.01 (0.01, 0.02)	0.01 (0.01, 0.02)	0.01 (0.01, 0.02)
Mesothelioma	0.05 (0.05, 0.05)	0.05 (0.05, 0.06)	0.03 (0.02, 0.04)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[a] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Note: Invasive cancer only unless specified otherwise.

Table I-16 - continued

Lifetime Risk (Percent) of Being Diagnosed with Cancer by Site and Race/Ethnicity

Females, 17 SEER Areas, 2002-2004

Site	Asian/Pacific Islanders Percent (95% C.I.)	American Indian/ Alaska Natives[a] Percent (95% C.I.)	Hispanics[b] Percent (95% C.I.)
All Sites	32.32 (31.78, 32.88)	26.45 (24.82, 28.29)	33.95 (33.47, 34.43)
Invasive and In Situ	34.69 (34.14, 35.27)	28.14 (26.47, 30.02)	35.99 (35.50, 36.49)
Oral Cavity and Pharynx	0.66 (0.59, 0.76)	0.39 (0.24, 0.89)	0.43 (0.38, 0.50)
Esophagus	0.20 (0.16, 0.28)	0.22 (0.10, 0.71)	0.21 (0.17, 0.27)
Stomach	1.69 (1.55, 1.85)	0.99 (0.69, 1.59)	1.43 (1.32, 1.56)
Colon and Rectum	5.27 (5.03, 5.54)	4.74 (4.03, 5.68)	4.60 (4.41, 4.80)
Invasive and In Situ	5.46 (5.21, 5.73)	4.93 (4.22, 5.88)	4.82 (4.63, 5.03)
Liver and Intrahepatic Bile Duct	1.19 (1.09, 1.32)	0.73 (0.43, 1.37)	0.77 (0.71, 0.85)
Pancreas	1.35 (1.23, 1.50)	0.97 (0.67, 1.57)	1.63 (1.51, 1.76)
Larynx	0.05 (0.03, 0.10)	0.02 (0.00, 0.52)	0.08 (0.06, 0.12)
Invasive and In Situ	0.05 (0.03, 0.10)	0.02 (0.00, 0.52)	0.09 (0.06, 0.12)
Lung and Bronchus	4.26 (4.05, 4.48)	4.37 (3.75, 5.23)	3.61 (3.45, 3.79)
Melanoma of the Skin	0.17 (0.13, 0.23)	0.27 (0.06, 0.88)	0.53 (0.48, 0.61)
Invasive and In Situ	0.24 (0.19, 0.32)	0.39 (0.15, 0.99)	0.76 (0.70, 0.84)
Breast	9.18 (8.95, 9.43)	6.49 (5.81, 7.40)	9.23 (9.01, 9.46)
Invasive and In Situ	11.45 (11.20, 11.72)	7.89 (7.14, 8.87)	10.86 (10.63, 11.10)
Cervix Uteri	0.76 (0.69, 0.84)	0.57 (0.39, 1.08)	1.19 (1.13, 1.26)
Corpus and Uterus, NOS	1.77 (1.67, 1.88)	1.46 (1.14, 2.05)	1.97 (1.88, 2.08)
Invasive and In Situ	1.79 (1.69, 1.91)	1.47 (1.16, 2.07)	1.99 (1.90, 2.10)
Ovary[c]	1.13 (1.04, 1.23)	0.94 (0.69, 1.49)	1.34 (1.25, 1.43)
Urinary Bladder(Invasive and In Situ)	0.66 (0.58, 0.76)	0.34 (0.19, 0.84)	0.83 (0.75, 0.94)
Kidney and Renal Pelvis	0.58 (0.52, 0.67)	1.28 (0.97, 1.88)	1.12 (1.05, 1.21)
Brain and Other Nervous System	0.34 (0.29, 0.40)	0.14 (0.07, 0.62)	0.49 (0.45, 0.55)
Thyroid	1.14 (1.08, 1.23)	0.62 (0.46, 1.11)	1.07 (1.01, 1.15)
Hodgkin Lymphoma	0.09 (0.08, 0.14)	0.06 (0.01, 0.55)	0.17 (0.15, 0.21)
Non-Hodgkin Lymphoma	1.56 (1.44, 1.70)	0.98 (0.70, 1.55)	1.84 (1.74, 1.97)
Myeloma	0.40 (0.34, 0.48)	0.69 (0.46, 1.24)	0.64 (0.58, 0.72)
Leukemia	0.75 (0.67, 0.85)	0.85 (0.50, 1.52)	0.98 (0.90, 1.08)
Acute Lymphocytic Leukemia	0.11 (0.09, 0.16)	0.07 (0.03, 0.55)	0.17 (0.15, 0.21)
Chronic Lymphocytic Leukemia	0.11 (0.08, 0.17)	0.39 (0.13, 1.03)	0.21 (0.18, 0.27)
Acute Myeloid Leukemia	0.32 (0.26, 0.40)	0.15 (0.05, 0.65)	0.33 (0.28, 0.39)
Chronic Myeloid Leukemia	0.09 (0.07, 0.14)	0.10 (0.04, 0.59)	0.12 (0.09, 0.17)
Kaposi Sarcoma	0.00 (0.00, 0.05)	0.00 (0.00, 0.50)	0.04 (0.02, 0.08)
Mesothelioma	0.02 (0.01, 0.07)	0.10 (0.02, 0.61)	0.06 (0.05, 0.10)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

[a] Underlying incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry and Kentucky.

[c] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Note: Invasive cancer only unless specified otherwise.

Table I-17

Lifetime Risk (Percent) of Dying from Cancer by Site and Race/Ethnicity

Both Sexes, Total U.S., 2002-2004

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	21.29 (21.26, 21.32)	21.45 (21.42, 21.49)	21.31 (21.22, 21.40)
Oral Cavity and Pharynx	0.28 (0.28, 0.29)	0.28 (0.27, 0.28)	0.33 (0.32, 0.34)
Esophagus	0.48 (0.47, 0.48)	0.48 (0.47, 0.49)	0.51 (0.49, 0.52)
Stomach	0.46 (0.46, 0.47)	0.41 (0.41, 0.42)	0.74 (0.72, 0.76)
Colon and Rectum	2.20 (2.19, 2.21)	2.18 (2.17, 2.19)	2.42 (2.39, 2.46)
Liver and Intrahepatic Bile Duct	0.54 (0.53, 0.54)	0.50 (0.50, 0.51)	0.58 (0.57, 0.60)
Pancreas	1.20 (1.19, 1.21)	1.20 (1.19, 1.20)	1.26 (1.24, 1.29)
Larynx	0.14 (0.13, 0.14)	0.13 (0.13, 0.13)	0.21 (0.20, 0.22)
Lung and Bronchus	5.99 (5.97, 6.00)	6.13 (6.11, 6.15)	5.50 (5.45, 5.55)
Melanoma of the Skin	0.28 (0.27, 0.28)	0.31 (0.31, 0.32)	0.04 (0.03, 0.04)
Breast	1.53 (1.52, 1.54)	1.52 (1.51, 1.53)	1.73 (1.70, 1.76)
Urinary Bladder	0.53 (0.52, 0.53)	0.56 (0.55, 0.56)	0.36 (0.35, 0.38)
Kidney and Renal Pelvis	0.46 (0.46, 0.47)	0.48 (0.47, 0.49)	0.36 (0.35, 0.38)
Brain and Other Nervous System	0.43 (0.43, 0.44)	0.47 (0.46, 0.47)	0.22 (0.21, 0.23)
Thyroid	0.05 (0.05, 0.05)	0.05 (0.05, 0.06)	0.04 (0.04, 0.04)
Hodgkin Lymphoma	0.04 (0.04, 0.05)	0.05 (0.04, 0.05)	0.03 (0.03, 0.03)
Non-Hodgkin Lymphoma	0.83 (0.83, 0.84)	0.88 (0.88, 0.89)	0.45 (0.44, 0.47)
Myeloma	0.42 (0.42, 0.43)	0.40 (0.40, 0.41)	0.64 (0.62, 0.66)
Leukemia	0.83 (0.83, 0.84)	0.87 (0.86, 0.88)	0.60 (0.58, 0.62)
Acute Lymphocytic Leukemia	0.04 (0.04, 0.04)	0.04 (0.04, 0.05)	0.03 (0.02, 0.03)
Chronic Lymphocytic Leukemia	0.19 (0.18, 0.19)	0.20 (0.19, 0.20)	0.14 (0.13, 0.15)
Acute Myeloid Leukemia	0.30 (0.30, 0.30)	0.31 (0.31, 0.32)	0.19 (0.18, 0.20)
Chronic Myeloid Leukemia	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	0.04 (0.04, 0.05)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: NCHS public use data file for the total US.

Table I-17 - continued

Lifetime Risk (Percent) of Dying from Cancer by Site and Race/Ethnicity

Both Sexes, Total U.S., 2002-2004

Site	Asian/Pacific Islanders Percent (95% C.I.)	American Indian/ Alaska Natives[a] Percent (95% C.I.)	Hispanics[b] Percent (95% C.I.)
All Sites	18.32 (18.04, 18.61)	16.87 (16.34, 17.43)	17.39 (17.23, 17.55)
Oral Cavity and Pharynx	0.32 (0.28, 0.37)	0.24 (0.18, 0.34)	0.22 (0.20, 0.24)
Esophagus	0.30 (0.26, 0.35)	0.40 (0.32, 0.52)	0.31 (0.29, 0.33)
Stomach	1.32 (1.24, 1.42)	0.73 (0.62, 0.89)	0.91 (0.87, 0.95)
Colon and Rectum	2.17 (2.05, 2.29)	1.86 (1.66, 2.09)	1.92 (1.86, 1.98)
Liver and Intrahepatic Bile Duct	1.54 (1.46, 1.63)	0.88 (0.75, 1.05)	0.99 (0.95, 1.03)
Pancreas	1.21 (1.14, 1.29)	0.80 (0.68, 0.96)	1.13 (1.09, 1.18)
Larynx	0.07 (0.05, 0.10)	0.09 (0.06, 0.17)	0.12 (0.11, 0.14)
Lung and Bronchus	4.12 (3.99, 4.25)	4.13 (3.88, 4.42)	3.17 (3.10, 3.24)
Melanoma of the Skin	0.06 (0.04, 0.09)	0.13 (0.08, 0.24)	0.10 (0.08, 0.11)
Breast	0.94 (0.87, 1.00)	1.01 (0.88, 1.19)	1.11 (1.07, 1.16)
Urinary Bladder	0.36 (0.31, 0.42)	0.23 (0.15, 0.35)	0.39 (0.36, 0.42)
Kidney and Renal Pelvis	0.26 (0.22, 0.30)	0.68 (0.58, 0.82)	0.48 (0.45, 0.51)
Brain and Other Nervous System	0.25 (0.22, 0.29)	0.18 (0.14, 0.27)	0.32 (0.30, 0.34)
Thyroid	0.09 (0.07, 0.12)	0.06 (0.03, 0.14)	0.07 (0.06, 0.08)
Hodgkin Lymphoma	0.04 (0.03, 0.06)	0.04 (0.02, 0.12)	0.05 (0.04, 0.06)
Non-Hodgkin Lymphoma	0.79 (0.72, 0.86)	0.52 (0.41, 0.66)	0.74 (0.71, 0.78)
Myeloma	0.25 (0.22, 0.29)	0.41 (0.32, 0.53)	0.40 (0.38, 0.43)
Leukemia	0.56 (0.51, 0.62)	0.49 (0.40, 0.62)	0.63 (0.60, 0.66)
Acute Lymphocytic Leukemia	0.04 (0.03, 0.06)	0.05 (0.03, 0.13)	0.06 (0.06, 0.07)
Chronic Lymphocytic Leukemia	0.05 (0.03, 0.08)	0.07 (0.04, 0.16)	0.09 (0.07, 0.10)
Acute Myeloid Leukemia	0.24 (0.21, 0.28)	0.18 (0.13, 0.27)	0.21 (0.20, 0.23)
Chronic Myeloid Leukemia	0.04 (0.02, 0.06)	0.04 (0.02, 0.11)	0.04 (0.04, 0.05)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: NCHS public use data file for the total US.

[a] Underlying mortality data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Underlying mortality data for Hispanics exclude deaths from Minnesota, New Hampshire and North Dakota.

Table I-18

Lifetime Risk (Percent) of Dying from Cancer by Site and Race/Ethnicity

Males, Total U.S., 2002-2004

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	23.31 (23.27, 23.36)	23.41 (23.36, 23.46)	23.70 (23.56, 23.84)
Oral Cavity and Pharynx	0.39 (0.38, 0.39)	0.37 (0.36, 0.38)	0.51 (0.49, 0.53)
Esophagus	0.75 (0.74, 0.76)	0.77 (0.76, 0.78)	0.74 (0.72, 0.77)
Stomach	0.56 (0.56, 0.57)	0.51 (0.50, 0.52)	0.87 (0.84, 0.90)
Colon and Rectum	2.29 (2.27, 2.30)	2.28 (2.26, 2.29)	2.41 (2.36, 2.47)
Liver and Intrahepatic Bile Duct	0.69 (0.69, 0.70)	0.65 (0.64, 0.66)	0.78 (0.75, 0.80)
Pancreas	1.20 (1.19, 1.21)	1.21 (1.20, 1.22)	1.18 (1.15, 1.21)
Larynx	0.23 (0.22, 0.23)	0.21 (0.21, 0.22)	0.37 (0.35, 0.39)
Lung and Bronchus	7.12 (7.09, 7.14)	7.20 (7.17, 7.23)	7.09 (7.01, 7.17)
Melanoma of the Skin	0.37 (0.36, 0.37)	0.42 (0.41, 0.42)	0.04 (0.03, 0.04)
Breast	0.03 (0.03, 0.03)	0.03 (0.03, 0.03)	0.04 (0.03, 0.05)
Prostate	2.87 (2.85, 2.89)	2.70 (2.68, 2.72)	4.50 (4.43, 4.58)
Testis	0.02 (0.02, 0.02)	0.02 (0.02, 0.02)	0.01 (0.01, 0.02)
Urinary Bladder	0.78 (0.77, 0.79)	0.83 (0.82, 0.84)	0.40 (0.38, 0.42)
Kidney and Renal Pelvis	0.59 (0.58, 0.60)	0.62 (0.61, 0.63)	0.45 (0.43, 0.47)
Brain and Other Nervous System	0.48 (0.47, 0.49)	0.52 (0.51, 0.53)	0.23 (0.22, 0.25)
Thyroid	0.04 (0.04, 0.05)	0.05 (0.04, 0.05)	0.03 (0.02, 0.03)
Hodgkin Lymphoma	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	0.04 (0.03, 0.04)
Non-Hodgkin Lymphoma	0.91 (0.90, 0.92)	0.97 (0.96, 0.98)	0.47 (0.45, 0.49)
Myeloma	0.46 (0.45, 0.47)	0.44 (0.44, 0.45)	0.63 (0.60, 0.65)
Leukemia	0.98 (0.97, 0.99)	1.03 (1.01, 1.04)	0.65 (0.62, 0.68)
Acute Lymphocytic Leukemia	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	0.03 (0.03, 0.04)
Chronic Lymphocytic Leukemia	0.23 (0.22, 0.24)	0.24 (0.24, 0.25)	0.16 (0.15, 0.18)
Acute Myeloid Leukemia	0.35 (0.34, 0.35)	0.37 (0.36, 0.37)	0.20 (0.19, 0.22)
Chronic Myeloid Leukemia	0.05 (0.05, 0.06)	0.05 (0.05, 0.06)	0.05 (0.04, 0.06)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: NCHS public use data file for the total US.

Table I-18 - continued

Lifetime Risk (Percent) of Dying from Cancer by Site and Race/Ethnicity

Males, Total U.S., 2002-2004

Site	Asian/Pacific Islanders Percent (95% C.I.)	American Indian/ Alaska Natives[a] Percent (95% C.I.)	Hispanics[b] Percent (95% C.I.)
All Sites	20.73 (20.32, 21.16)	17.20 (16.42, 18.05)	19.80 (19.55, 20.06)
Oral Cavity and Pharynx	0.43 (0.37, 0.51)	0.32 (0.22, 0.53)	0.32 (0.29, 0.36)
Esophagus	0.47 (0.40, 0.55)	0.62 (0.48, 0.86)	0.48 (0.44, 0.52)
Stomach	1.54 (1.42, 1.69)	0.85 (0.68, 1.10)	1.07 (1.01, 1.14)
Colon and Rectum	2.30 (2.14, 2.48)	1.94 (1.66, 2.31)	2.10 (2.01, 2.20)
Liver and Intrahepatic Bile Duct	1.97 (1.86, 2.10)	0.86 (0.71, 1.12)	1.24 (1.18, 1.31)
Pancreas	1.14 (1.05, 1.25)	0.79 (0.60, 1.07)	1.06 (1.00, 1.12)
Larynx	0.13 (0.09, 0.19)	0.14 (0.08, 0.33)	0.24 (0.21, 0.27)
Lung and Bronchus	5.34 (5.14, 5.55)	4.58 (4.18, 5.06)	4.29 (4.17, 4.41)
Melanoma of the Skin	0.06 (0.04, 0.11)	0.10 (0.05, 0.28)	0.10 (0.08, 0.13)
Breast	0.01 (0.00, 0.05)	0.01 (0.00, 0.20)	0.02 (0.01, 0.04)
Prostate	2.29 (2.10, 2.50)	2.18 (1.82, 2.62)	3.19 (3.05, 3.33)
Testis	0.01 (0.00, 0.05)	0.01 (0.00, 0.19)	0.02 (0.02, 0.04)
Urinary Bladder	0.53 (0.45, 0.64)	0.30 (0.17, 0.54)	0.56 (0.51, 0.62)
Kidney and Renal Pelvis	0.34 (0.28, 0.43)	0.84 (0.69, 1.08)	0.63 (0.59, 0.69)
Brain and Other Nervous System	0.31 (0.26, 0.37)	0.22 (0.16, 0.41)	0.34 (0.31, 0.38)
Thyroid	0.06 (0.04, 0.11)	0.02 (0.00, 0.20)	0.06 (0.05, 0.08)
Hodgkin Lymphoma	0.04 (0.02, 0.08)	0.02 (0.00, 0.20)	0.05 (0.04, 0.07)
Non-Hodgkin Lymphoma	0.86 (0.77, 0.97)	0.44 (0.34, 0.65)	0.76 (0.71, 0.82)
Myeloma	0.26 (0.22, 0.32)	0.45 (0.30, 0.70)	0.42 (0.39, 0.46)
Leukemia	0.66 (0.59, 0.75)	0.49 (0.37, 0.72)	0.70 (0.66, 0.76)
Acute Lymphocytic Leukemia	0.04 (0.03, 0.08)	0.06 (0.03, 0.23)	0.06 (0.06, 0.08)
Chronic Lymphocytic Leukemia	0.08 (0.05, 0.14)	0.07 (0.03, 0.26)	0.11 (0.08, 0.14)
Acute Myeloid Leukemia	0.28 (0.24, 0.33)	0.17 (0.10, 0.36)	0.26 (0.23, 0.29)
Chronic Myeloid Leukemia	0.03 (0.02, 0.07)	0.04 (0.01, 0.22)	0.04 (0.03, 0.06)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: NCHS public use data file for the total US.

[a] Underlying mortality data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Underlying mortality data for Hispanics exclude deaths from Minnesota, New Hampshire and North Dakota.

Table I-19

Lifetime Risk (Percent) of Dying from Cancer by Site and Race/Ethnicity

Females, Total U.S., 2002-2004

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	19.74 (19.70, 19.78)	19.96 (19.91, 20.00)	19.39 (19.27, 19.51)
Oral Cavity and Pharynx	0.19 (0.18, 0.19)	0.19 (0.18, 0.19)	0.16 (0.15, 0.18)
Esophagus	0.22 (0.22, 0.23)	0.21 (0.21, 0.22)	0.30 (0.28, 0.31)
Stomach	0.38 (0.37, 0.38)	0.33 (0.33, 0.34)	0.62 (0.60, 0.65)
Colon and Rectum	2.13 (2.12, 2.14)	2.10 (2.09, 2.12)	2.44 (2.39, 2.49)
Liver and Intrahepatic Bile Duct	0.39 (0.39, 0.40)	0.37 (0.36, 0.38)	0.41 (0.39, 0.43)
Pancreas	1.19 (1.18, 1.20)	1.18 (1.17, 1.19)	1.33 (1.30, 1.37)
Larynx	0.06 (0.05, 0.06)	0.05 (0.05, 0.06)	0.07 (0.07, 0.08)
Lung and Bronchus	5.00 (4.98, 5.02)	5.20 (5.17, 5.22)	4.12 (4.06, 4.18)
Melanoma of the Skin	0.20 (0.19, 0.20)	0.22 (0.22, 0.23)	0.04 (0.03, 0.05)
Breast	2.89 (2.88, 2.91)	2.89 (2.87, 2.90)	3.23 (3.18, 3.28)
Cervix Uteri	0.24 (0.24, 0.24)	0.21 (0.21, 0.22)	0.43 (0.41, 0.45)
Corpus and Uterus, NOS	0.51 (0.51, 0.52)	0.49 (0.48, 0.50)	0.75 (0.73, 0.78)
Ovary	1.05 (1.04, 1.06)	1.10 (1.09, 1.11)	0.77 (0.74, 0.80)
Urinary Bladder	0.32 (0.32, 0.33)	0.33 (0.32, 0.33)	0.33 (0.32, 0.35)
Kidney and Renal Pelvis	0.35 (0.34, 0.35)	0.36 (0.35, 0.36)	0.29 (0.28, 0.31)
Brain and Other Nervous System	0.39 (0.38, 0.39)	0.42 (0.41, 0.43)	0.20 (0.19, 0.21)
Thyroid	0.06 (0.06, 0.06)	0.06 (0.06, 0.06)	0.05 (0.05, 0.06)
Hodgkin Lymphoma	0.04 (0.04, 0.04)	0.04 (0.04, 0.04)	0.03 (0.02, 0.03)
Non-Hodgkin Lymphoma	0.77 (0.76, 0.78)	0.81 (0.80, 0.82)	0.44 (0.42, 0.46)
Myeloma	0.39 (0.39, 0.40)	0.37 (0.36, 0.37)	0.66 (0.63, 0.68)
Leukemia	0.71 (0.70, 0.72)	0.74 (0.73, 0.74)	0.56 (0.54, 0.58)
Acute Lymphocytic Leukemia	0.04 (0.03, 0.04)	0.04 (0.04, 0.04)	0.02 (0.02, 0.03)
Chronic Lymphocytic Leukemia	0.15 (0.15, 0.16)	0.16 (0.15, 0.16)	0.12 (0.11, 0.13)
Acute Myeloid Leukemia	0.26 (0.25, 0.26)	0.27 (0.26, 0.27)	0.19 (0.17, 0.20)
Chronic Myeloid Leukemia	0.04 (0.04, 0.04)	0.04 (0.04, 0.04)	0.04 (0.03, 0.05)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: NCHS public use data file for the total US.

Table I-19 - continued

Lifetime Risk (Percent) of Dying from Cancer by Site and Race/Ethnicity

Females, Total U.S., 2002-2004

Site	Asian/Pacific Islanders Percent (95% C.I.)	American Indian/ Alaska Natives[a] Percent (95% C.I.)	Hispanics[b] Percent (95% C.I.)
All Sites	16.26 (15.88, 16.65)	16.71 (15.98, 17.50)	15.62 (15.42, 15.82)
Oral Cavity and Pharynx	0.23 (0.18, 0.30)	0.18 (0.12, 0.33)	0.13 (0.11, 0.15)
Esophagus	0.16 (0.12, 0.22)	0.20 (0.11, 0.37)	0.16 (0.14, 0.19)
Stomach	1.13 (1.02, 1.27)	0.63 (0.48, 0.86)	0.78 (0.73, 0.83)
Colon and Rectum	2.06 (1.89, 2.24)	1.80 (1.53, 2.13)	1.77 (1.70, 1.85)
Liver and Intrahepatic Bile Duct	1.17 (1.06, 1.30)	0.89 (0.70, 1.16)	0.77 (0.72, 0.82)
Pancreas	1.27 (1.16, 1.40)	0.83 (0.66, 1.06)	1.19 (1.13, 1.26)
Larynx	0.02 (0.01, 0.06)	0.04 (0.01, 0.17)	0.03 (0.02, 0.04)
Lung and Bronchus	3.10 (2.94, 3.27)	3.75 (3.42, 4.14)	2.25 (2.17, 2.33)
Melanoma of the Skin	0.06 (0.03, 0.12)	0.16 (0.07, 0.35)	0.09 (0.07, 0.11)
Breast	1.74 (1.63, 1.87)	1.94 (1.69, 2.26)	2.08 (2.01, 2.16)
Cervix Uteri	0.32 (0.28, 0.39)	0.38 (0.29, 0.56)	0.35 (0.33, 0.39)
Corpus and Uterus, NOS	0.34 (0.30, 0.41)	0.29 (0.21, 0.45)	0.45 (0.41, 0.48)
Ovary	0.68 (0.62, 0.76)	0.77 (0.60, 1.00)	0.82 (0.77, 0.86)
Urinary Bladder	0.21 (0.17, 0.28)	0.17 (0.09, 0.35)	0.26 (0.23, 0.30)
Kidney and Renal Pelvis	0.18 (0.15, 0.24)	0.52 (0.39, 0.73)	0.35 (0.32, 0.38)
Brain and Other Nervous System	0.20 (0.17, 0.26)	0.14 (0.09, 0.28)	0.29 (0.27, 0.32)
Thyroid	0.11 (0.08, 0.16)	0.09 (0.04, 0.24)	0.08 (0.07, 0.10)
Hodgkin Lymphoma	0.04 (0.02, 0.08)	0.06 (0.02, 0.20)	0.05 (0.04, 0.06)
Non-Hodgkin Lymphoma	0.73 (0.64, 0.83)	0.57 (0.41, 0.81)	0.72 (0.68, 0.77)
Myeloma	0.24 (0.20, 0.30)	0.39 (0.29, 0.57)	0.39 (0.36, 0.43)
Leukemia	0.47 (0.41, 0.56)	0.49 (0.37, 0.69)	0.57 (0.53, 0.61)
Acute Lymphocytic Leukemia	0.03 (0.02, 0.07)	0.04 (0.02, 0.18)	0.06 (0.05, 0.07)
Chronic Lymphocytic Leukemia	0.03 (0.02, 0.07)	0.07 (0.03, 0.22)	0.07 (0.06, 0.09)
Acute Myeloid Leukemia	0.22 (0.17, 0.29)	0.18 (0.12, 0.33)	0.18 (0.16, 0.21)
Chronic Myeloid Leukemia	0.04 (0.02, 0.09)	0.03 (0.01, 0.17)	0.04 (0.03, 0.06)

Devcan Version 6.2.0, April 2007, National Cancer Institute (http://srab.cancer.gov/devcan/).

Source: NCHS public use data file for the total US.

[a] Underlying mortality data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Underlying mortality data for Hispanics exclude deaths from Minnesota, New Hampshire and North Dakota.

Table I-20
US AND SEER DEATH RATES BY PRIMARY CANCER SITE AND RACE/ETHNICITY, 2000-2004

		Total United States[a]							SEER 17 Areas[ab]						
Site		Total	White	Black	AI/AN[c]	API[d]	Hisp[e]	W-NHisp[e]	Total	White	Black	AI/AN[c]	API[d]	Hisp[e]	W-NHisp[e]
All Sites	Both Sexes	192.7	190.7	238.8	160.4	115.5	129.1	194.7	186.1	187.0	240.0	143.7	122.9	127.9	193.3
	Male	238.7	234.7	321.8	187.9	141.7	162.2	239.2	226.7	226.2	316.0	168.6	152.4	157.3	233.2
	Female	162.2	161.4	189.3	141.2	96.7	106.7	165.1	159.2	161.2	193.8	125.8	101.6	108.1	167.0
Oral Cavity & Pharynx	Both Sexes	2.7	2.5	3.9	2.5	2.3	1.7	2.6	2.7	2.6	3.9	3.0	2.5	1.6	2.7
	Male	4.1	3.8	6.8	3.8	3.4	2.8	3.9	4.0	3.8	6.6	3.8	3.7	2.6	3.9
	Female	1.5	1.5	1.7	1.5	1.3	0.8	1.5	1.6	1.6	1.9	2.4	1.4	0.9	1.6
Esophagus	Both Sexes	4.4	4.3	6.0	3.8	1.8	2.4	4.5	4.1	4.2	5.2	4.1	1.9	2.3	4.4
	Male	7.8	7.7	10.2	6.7	3.1	4.2	7.9	7.2	7.4	9.0	7.2	3.3	4.2	7.8
	Female	1.8	1.7	3.0	1.5	0.8	1.0	1.7	1.7	1.6	2.5	-	0.9	0.9	1.7
Stomach	Both Sexes	4.2	3.7	8.2	7.2	8.0	6.8	3.5	4.7	4.1	8.5	7.8	8.3	7.3	3.6
	Male	5.9	5.2	11.9	9.6	10.5	9.1	4.9	6.6	5.7	12.2	11.0	11.1	9.9	5.1
	Female	3.0	2.6	5.8	5.5	6.2	5.1	2.4	3.4	2.9	6.0	5.7	6.2	5.6	2.5
Colon & Rectum	Both Sexes	19.4	18.9	26.7	17.0	12.3	13.6	19.2	18.7	18.4	26.9	16.6	13.2	12.7	18.9
	Male	23.5	22.9	32.7	20.6	15.0	17.0	23.3	22.3	22.0	32.0	19.7	16.5	16.0	22.6
	Female	16.4	15.9	22.9	14.3	10.3	11.1	16.2	15.9	15.6	23.6	14.5	10.8	10.2	16.1
Liver & Intrahepatic Bile Duct	Both Sexes	4.9	4.5	6.5	8.4	10.6	7.6	4.2	5.4	4.8	6.8	8.7	10.8	7.6	4.4
	Male	7.1	6.5	10.0	10.7	15.5	10.8	6.1	7.9	6.8	10.8	11.0	15.7	10.6	6.3
	Female	3.1	2.8	3.9	6.4	6.7	5.0	2.7	3.4	3.1	3.8	6.9	6.8	5.1	2.8
Pancreas	Both Sexes	10.6	10.4	13.8	7.5	7.4	8.3	10.5	10.5	10.5	14.1	7.2	7.8	8.4	10.7
	Male	12.2	12.0	15.5	7.6	7.9	9.1	12.2	11.9	12.0	15.2	7.6	8.5	8.6	12.3
	Female	9.2	9.0	12.4	7.3	6.9	7.5	9.1	9.4	9.2	13.0	6.9	7.3	8.1	9.3
Larynx	Both Sexes	1.3	1.2	2.5	1.1	0.4	0.9	1.2	1.2	1.1	2.6	-	0.4	0.8	1.2
	Male	2.4	2.2	5.0	1.9	0.8	1.9	2.2	2.2	2.0	5.3	-	0.9	1.7	2.1
	Female	0.5	0.5	0.8	-	0.1	0.2	0.5	0.4	0.4	0.8	-	-	0.1	0.5
Lung & Bronchus	Both Sexes	54.7	55.0	62.0	39.9	26.9	23.6	57.4	50.5	51.4	62.8	30.9	28.7	22.2	54.9
	Male	73.4	72.6	95.8	49.6	38.3	36.0	75.4	65.9	65.8	93.7	39.9	41.5	32.8	69.6
	Female	41.1	42.1	39.8	32.7	18.5	14.6	44.3	39.3	41.1	42.3	24.1	19.2	14.7	44.4
Melanoma of the Skin	Both Sexes	2.6	3.0	0.4	1.0	0.3	0.7	3.2	2.5	3.0	0.4	-	0.4	0.7	3.3
	Male	3.9	4.3	0.5	1.3	0.4	0.9	4.7	3.7	4.4	0.5	-	0.5	0.9	4.9
	Female	1.7	2.0	0.4	0.7	0.3	0.6	2.1	1.6	1.9	0.4	-	0.3	0.6	2.1
Breast	Female	25.5	25.0	33.8	16.1	12.6	16.1	25.5	25.3	25.3	34.9	13.6	13.9	15.7	26.4

[a] NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] The SEER 17 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

[c] Rates for American Indian/Alaska Native (AI/AN) are based on the CHSDA(Contract Health Service Delivery Area) counties.

[d] Asian/Pacific Islander.

[e] Hispanic (Hisp) and White Non-Hispanic (W-NHisp) are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Mortality data for Hispanics and White Non-Hispanics do not include cases from Minnesota, New Hampshire, and North Dakota.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Table I-20 - continued
US AND SEER DEATH RATES BY PRIMARY CANCER SITE AND RACE/ETHNICITY, 2000-2004

		Total United States[a]							SEER 17 Areas[ab]						
Site		Total	White	Black	AI/AN[c]	API[d]	Hisp[e]	W-NHisp[e]	Total	White	Black	AI/AN[c]	API[d]	Hisp[e]	W-NHisp[e]
Cervix	Female	2.6	2.3	4.9	4.0	2.4	3.3	2.2	2.5	2.3	4.3	2.6	2.5	3.4	2.1
Corpus & Uterus, NOS	Female	4.1	3.9	7.1	2.9	2.4	3.1	3.9	4.1	4.0	7.0	2.6	2.6	3.0	4.0
Ovary	Female	8.9	9.2	7.4	7.1	4.8	6.1	9.5	9.1	9.6	7.6	7.3	5.2	6.6	10.0
Prostate	Male	27.9	25.6	62.3	21.5	11.3	21.2	25.6	26.9	25.8	57.9	16.4	12.3	21.0	26.1
Testis	Male	0.3	0.3	0.2	-	0.1	0.2	0.3	0.2	0.3	0.1	-	0.1	0.2	0.3
Urinary	Both Sexes	4.3	4.5	3.7	1.9	1.8	2.4	4.6	4.2	4.4	3.9	1.6	1.9	2.3	4.6
Bladder	Male	7.5	7.9	5.3	3.1	2.9	3.9	8.1	7.1	7.6	5.6	-	3.1	3.7	8.0
	Female	2.3	2.3	2.8	1.1	1.0	1.4	2.3	2.2	2.3	2.9	-	1.0	1.4	2.3
Kidney &	Both Sexes	4.2	4.3	4.1	6.5	1.7	3.6	4.3	4.0	4.2	4.1	5.0	1.9	3.6	4.2
Renal	Male	6.1	6.2	6.1	9.3	2.4	5.4	6.2	5.9	6.1	6.2	7.6	2.7	5.1	6.2
Pelvis	Female	2.8	2.8	2.8	4.3	1.1	2.3	2.8	2.6	2.7	2.7	3.0	1.2	2.5	2.7
Brain &	Both Sexes	4.4	4.8	2.6	2.1	2.0	2.8	4.9	4.3	4.8	2.7	1.8	2.0	2.9	5.0
Nervous	Male	5.4	5.8	3.2	2.6	2.5	3.4	6.0	5.3	5.8	3.2	2.4	2.7	3.5	6.2
System	Female	3.6	3.9	2.2	1.8	1.5	2.4	4.0	3.5	3.9	2.2	-	1.5	2.5	4.1
Thyroid	Both Sexes	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	-	0.6	0.6	0.5
	Male	0.5	0.5	0.4	-	0.4	0.5	0.5	0.5	0.5	0.4	-	0.4	0.5	0.5
	Female	0.5	0.5	0.5	0.7	0.7	0.6	0.4	0.5	0.5	0.5	-	0.7	0.7	0.5
Hodgkin	Both Sexes	0.5	0.5	0.4	0.3	0.2	0.4	0.5	0.5	0.5	0.4	-	0.2	0.4	0.5
Lymphoma	Male	0.6	0.6	0.5	-	0.3	0.6	0.6	0.6	0.6	0.5	-	0.3	0.5	0.6
	Female	0.4	0.4	0.3	-	0.2	0.3	0.4	0.4	0.4	0.3	-	0.2	0.3	0.4
Non-Hodgkin	Both Sexes	7.6	7.9	5.2	5.5	4.8	5.7	8.0	7.4	7.8	5.3	5.4	5.2	5.7	8.0
Lymphoma	Male	9.6	9.9	6.5	6.1	5.8	6.9	10.1	9.4	9.9	6.8	5.3	6.4	7.0	10.2
	Female	6.2	6.4	4.3	5.0	3.9	4.8	6.5	5.9	6.2	4.2	5.2	4.3	4.6	6.4
Myeloma	Both Sexes	3.7	3.5	7.1	3.8	1.6	3.1	3.5	3.7	3.5	7.2	3.3	1.7	3.3	3.5
	Male	4.6	4.4	8.5	4.2	1.9	3.7	4.4	4.5	4.4	8.8	3.2	2.0	4.0	4.4
	Female	3.1	2.8	6.3	3.5	1.5	2.6	2.8	3.0	2.9	6.2	3.5	1.5	2.9	2.9
Leukemia	Both Sexes	7.5	7.7	6.7	4.8	3.9	5.1	7.8	7.3	7.6	6.9	3.9	4.1	5.0	7.8
	Male	10.0	10.3	8.8	5.6	5.0	6.4	10.4	9.7	10.2	9.2	4.9	5.3	6.3	10.4
	Female	5.7	5.8	5.3	4.1	3.0	4.1	5.9	5.6	5.8	5.4	2.8	3.2	4.0	5.9

[a] NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] The SEER 17 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

[c] Rates for American Indian/Alaska Native (AI/AN) are based on the CHSDA(Contract Health Service Delivery Area) counties.

[d] Asian/Pacific Islander.

[e] Hispanic (Hisp) and White Non-Hispanic (W-NHisp) are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Mortality data for Hispanics and White Non-Hispanics do not include cases from Minnesota, New Hampshire, and North Dakota.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Table I-21
US PREVALENCE COUNTS, INVASIVE CANCERS ONLY, JANUARY 1, 2004[a]
USING DIFFERENT TUMOR INCLUSION CRITERIA[b]

	5-Year Limited Duration			29-year Limited Duration	
Site/Sex	1st Invasive Tumor Ever[c]	1st Per Site in Previous 29 Years[d]	1st Per Site in Previous 5 Years[e]	1st Invasive Tumor Ever[c]	1st Per Site in Previous 29 Years[d]
All Sites	4,000,969	4,077,054	4,404,865	10,133,875	10,325,806
Male	2,045,700	2,073,736	2,232,399	4,719,465	4,775,763
Female	1,955,269	2,003,318	2,172,466	5,414,410	5,550,043
Oral Cavity & Pharynx	84,371	96,606	99,624	217,906	238,970
Male	56,621	64,295	65,983	140,286	152,405
Female	27,750	32,311	33,641	77,620	86,565
Esophagus	17,196	20,284	20,296	24,565	28,664
Male	13,312	15,498	15,510	18,653	21,473
Female	3,884	4,786	4,786	5,912	7,191
Stomach	29,647	35,113	35,259	57,826	65,836
Male	17,872	21,205	21,244	33,280	37,946
Female	11,775	13,908	14,015	24,546	27,890
Colon & Rectum	413,172	475,209	483,080	1,026,682	1,141,407
Male	208,481	240,519	244,040	503,545	556,381
Female	204,691	234,690	239,040	523,137	585,026
Liver & Intrahep	14,336	16,338	16,338	19,061	21,427
Male	9,723	11,009	11,009	12,344	13,826
Female	4,613	5,329	5,329	6,717	7,601
Pancreas	21,231	25,021	25,021	27,987	32,353
Male	10,156	12,184	12,184	13,235	15,435
Female	11,075	12,837	12,837	14,752	16,918
Larynx	31,966	36,772	37,057	90,186	98,875
Male	25,659	29,412	29,650	72,417	79,020
Female	6,307	7,360	7,407	17,769	19,855
Lung & Bronchus	206,480	254,806	259,381	345,236	412,115
Male	101,519	126,137	128,221	167,413	199,420
Female	104,961	128,669	131,160	177,823	212,695
Melanoma of the Skin	214,760	238,166	246,012	642,642	686,025
Male	113,145	127,550	132,610	317,120	341,495
Female	101,615	110,616	113,402	325,522	344,530
Breast					
Female	813,699	871,649	910,855	2,299,047	2,438,866
Cervix					
Female	41,612	43,636	43,691	186,488	191,924
Corpus & Uterus					
Female	144,321	161,682	161,696	500,188	540,981
Ovary[f]					
Female	54,533	63,083	63,116	148,412	166,361

[a] US 2004 cancer prevalence counts are based on 2004 cancer prevalence proportions from the SEER 9 registries and 1/1/2004 US population estimates based on the average of 2003 and 2004 population estimates from the US Bureau of the Census.

[bcde] (b) Prevalence estimates are ambiguous for those with multiple cancers, unless the tumor inclusion criteria are understood. Depending on the application, different inclusion criteria may be appropriate. This table provides three different methods of tumor inclusion: (c) First invasive tumor ever; (d) First invasive tumor for each cancer site diagnosed during the previous 29 years (1975-2003); (e) First invasive tumor for each cancer site diagnosed during the previous 5 years (1999-2003).
For definitions (d) and (e) all sites is treated as a separate cancer "site".

Consider a woman who had three invasive cancers: Melanoma in 1981; Breast cancer in 1999; Melanoma in 2000.

In method (c) the melanoma is the woman's first cancer, and is counted for the melanoma and all sites 29-year limited duration prevalence. For 5-year limited duration prevalence, the woman is not counted at all since her first cancer occurred more than 5 years prior to 1/1/2004.
In method (d) the 1981 melanoma is counted for the melanoma and all sites 29-year limited duration prevalence. The 1999 breast cancer is counted for the breast 5-year and 29-year limited duration prevalence.
In method (e) the 1999 breast cancer is counted for the breast cancer and all sites 5-year limited duration prevalence. The 2000 melanoma is counted for 5-year limited duration prevalence for melanoma.

[f] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Table I-21 - continued
US PREVALENCE COUNTS, INVASIVE CANCERS ONLY, JANUARY 1, 2004[a]
USING DIFFERENT TUMOR INCLUSION CRITERIA[b]

Site/Sex	5-Year Limited Duration: 1st Invasive Tumor Ever[c]	5-Year Limited Duration: 1st Per Site in Previous 29 Years[d]	5-Year Limited Duration: 1st Per Site in Previous 5 Years[e]	29-year Limited Duration: 1st Invasive Tumor Ever[c]	29-year Limited Duration: 1st Per Site in Previous 29 Years[d]
Prostate					
Male	942,369	1,015,465	1,015,501	2,020,336	2,155,814
Testis					
Male	38,541	39,085	39,519	158,516	160,522
Urinary Bladder	185,870	226,468	229,260	489,252	560,822
Male	139,001	169,421	171,644	362,809	414,423
Female	46,869	57,047	57,616	126,443	146,399
Kidney & Renal Pelvis	98,835	119,954	120,885	228,714	264,104
Male	59,318	72,826	73,444	135,506	157,273
Female	39,517	47,128	47,441	93,208	106,831
Brain & Nervous System	38,349	40,291	40,487	100,542	103,478
Male	20,364	21,337	21,448	53,857	55,282
Female	17,985	18,954	19,039	46,685	48,196
Thyroid	103,273	111,414	111,642	321,227	337,609
Male	23,545	26,152	26,179	72,214	76,826
Female	79,728	85,262	85,463	249,013	260,783
Hodgkin Lymphoma	33,763	35,330	35,354	135,338	138,313
Male	17,936	18,787	18,798	70,330	71,915
Female	15,827	16,543	16,556	65,008	66,398
Non-Hodgkin Lymphoma	165,166	188,724	189,721	368,283	405,953
Male	86,010	98,988	99,481	190,649	209,512
Female	79,156	89,736	90,240	177,634	196,441
Myeloma	36,315	41,836	41,906	53,382	60,424
Male	20,046	23,478	23,548	29,616	33,879
Female	16,269	18,358	18,358	23,766	26,545
Leukemia	86,548	97,217	97,309	202,266	218,659
Male	50,266	56,859	56,917	114,783	124,335
Female	36,282	40,358	40,392	87,483	94,324
Acute Lymphocytic Leuk	13,978	14,185	14,185	49,880	50,189
Male	7,914	7,981	7,981	27,421	27,513
Female	6,064	6,204	6,204	22,459	22,676
Childhood (0-19)	58,085	58,205	58,498	237,628	238,095
Male	30,670	30,716	30,847	122,159	122,351
Female	27,415	27,489	27,651	115,469	115,744
Kaposi Sarcoma	6,370	6,864	6,864	20,160	21,169
Male	5,838	6,252	6,252	18,784	19,642
Female	532	612	612	1,376	1,527
Mesothelioma	2,668	3,333	3,333	4,161	4,920
Male	1,880	2,386	2,386	2,501	3,078
Female	788	947	947	1,660	1,842

[a] US 2004 cancer prevalence counts are based on 2004 cancer prevalence proportions from the SEER 9 registries and 1/1/2004 US population estimates based on the average of 2003 and 2004 population estimates from the US Bureau of the Census.

[bcde] (b) Prevalence estimates are ambiguous for those with multiple cancers, unless the tumor inclusion criteria are understood. Depending on the application, different inclusion criteria may be appropriate. This table provides three different methods of tumor inclusion: (c) First invasive tumor ever; (d) First invasive tumor for each cancer site diagnosed during the previous 29 years (1975-2003); (e) First invasive tumor for each cancer site diagnosed during the previous 5 years (1999-2003).
For definitions (d) and (e) all sites is treated as a separate cancer "site".

Consider a woman who had three invasive cancers: Melanoma in 1981; Breast cancer in 1999; Melanoma in 2000.

In method (c) the melanoma is the woman's first cancer, and is counted for the melanoma and all sites 29-year limited duration prevalence. For 5-year limited duration prevalence, the woman is not counted at all since her first cancer occurred more than 5 years prior to 1/1/2004.
In method (d) the 1981 melanoma is counted for the melanoma and all sites 29-year limited duration prevalence. The 1999 breast cancer is counted for the breast 5-year and 29-year limited duration prevalence.
In method (e) the 1999 breast cancer is counted for the breast cancer and all sites 5-year limited duration prevalence. The 2000 melanoma is counted for 5-year limited duration prevalence for melanoma.

Table I-22

US COMPLETE PREVALENCE COUNTS, INVASIVE CANCERS ONLY, January 1, 2004[a]

BY AGE AT PREVALENCE

Age at Prevalence	Age Specific								
	All Ages[c]	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+
Site/Sex									
All Sites									
Males	4,848,429	16,120	38,774	67,794	144,693	318,859	645,699	1,116,039	2,500,451
Females	5,913,785	14,522	31,876	73,689	212,191	581,836	1,039,847	1,258,340	2,701,485
Oral Cavity & Pharynx									
Males	150,946	46	527	1,324	3,270	14,521	32,689	37,725	60,844
Females	84,910	85	511	1,519	3,268	8,168	14,433	18,310	38,616
Esophagus									
Males	18,763	0	0	32	255	973	3,750	5,978	7,775
Females	6,022	0	12	23	33	226	854	1,378	3,497
Stomach									
Males	34,708	0	17	119	607	2,209	4,775	8,337	18,643
Females	25,592	33	23	105	446	1,708	3,234	4,649	15,394
Colon & Rectum									
Males	521,676	0	46	822	4,958	20,770	62,456	115,774	316,850
Females	554,659	11	75	819	4,801	19,051	52,318	94,583	383,002
Liver & Intrahep									
Males	12,411	263	389	319	267	1,237	4,028	2,656	3,252
Females	7,018	389	369	267	359	624	1,127	1,435	2,448
Pancreas									
Males	13,423	0	47	46	250	1,182	2,659	3,674	5,567
Females	15,024	0	63	147	356	1,206	2,256	3,699	7,297
Larynx									
Males	76,247	0	0	45	244	2,757	10,911	21,016	41,274
Females	18,600	0	0	46	230	1,255	2,655	5,229	9,185
Lung & Bronchus									
Males	174,880	23	73	268	1,109	6,906	24,315	50,502	91,686
Females	183,248	0	33	329	1,478	8,138	24,765	50,219	98,287
Melanoma of the Skin									
Males	333,330	55	769	4,499	16,117	46,145	75,025	76,142	114,578
Females	356,691	68	870	9,662	30,498	66,872	82,644	64,932	101,145

[a] US 2004 cancer prevalence counts are based on 2004 cancer prevalence proportions from the SEER 9 registries (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta) and 1/1/2004 US population estimates based on the average of 2003 and 2004 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

[b] Cases diagnosed more than 29 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

[c] Due to rounding, the sum of the age specific estimates may not equal the all ages estimate.

Table I-22 - continued

US COMPLETE PREVALENCE COUNTS, INVASIVE CANCERS ONLY, January 1, 2004[a]

BY AGE AT PREVALENCE

Age at Prevalence	All Ages[c]	Age Specific 0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+
Site/Sex									
Breast									
Males	12,270	0	12	0	91	532	1,950	3,278	6,407
Females	2,407,943	0	82	2,097	35,151	203,932	471,756	578,108	1,116,817
Cervix									
Females	250,726	0	23	2,300	19,359	45,393	54,883	49,076	79,691
Corpus & Uterus, NOS									
Females	568,407	0	33	550	4,497	22,806	71,239	117,700	351,581
Ovary[d]									
Females	172,765	57	990	3,128	7,443	21,361	35,354	39,174	65,259
Prostate									
Males	2,024,489	34	58	103	282	15,786	167,564	509,996	1,330,665
Urinary Bladder									
Males	377,523	39	109	680	2,499	12,816	40,436	84,367	236,576
Females	134,267	22	45	375	1,333	4,592	12,214	26,715	88,970
Kidney & Renal Pelvis									
Males	141,899	1,550	2,415	2,125	3,869	12,865	26,944	36,480	55,651
Females	98,367	1,636	2,499	2,462	3,637	9,204	15,277	21,466	42,186
Hodgkin Lymphoma									
Males	78,455	175	2,171	8,440	16,776	21,227	16,175	8,444	5,048
Females	72,752	78	1,567	8,936	17,183	20,266	13,657	6,072	4,995
Non-Hodgkin Lymphoma									
Males	197,416	704	3,407	6,025	11,723	24,843	38,664	44,245	67,805
Females	183,713	308	1,403	3,404	8,069	17,550	30,736	39,111	83,133
Myeloma									
Males	29,745	0	5	12	574	2,166	6,246	8,590	12,152
Females	23,967	0	0	33	248	1,346	4,192	6,198	11,950
Leukemia									
Males	117,771	5,715	10,976	9,236	8,274	10,308	15,154	21,104	37,003
Females	90,849	4,882	9,186	8,526	6,528	6,998	9,832	13,426	31,471
Acute Lymphocytic Leuk									
Males	29,334	4,841	9,521	7,192	4,745	1,602	640	513	279
Females	24,073	4,257	7,787	6,202	3,388	1,218	725	253	242

[a] US 2004 cancer prevalence counts are based on 2004 cancer prevalence proportions from the SEER 9 registries (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta) and 1/1/2004 US population estimates based on the average of 2003 and 2004 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

[b] Cases diagnosed more than 29 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

[c] Due to rounding, the sum of the age specific estimates may not equal the all ages estimate.

[d] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Table I-23
AGE-ADJUSTED SEER INCIDENCE RATES AND TRENDS FOR THE TOP 15 CANCER SITES[a] BY RACE/ETHNICITY

Both Sexes

All Races

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	470.1	-0.6*
Prostate[f]	73.9	0.3
Breast	69.6	-1.1*
Lung and Bronchus	64.5	-1.4*
Colon and Rectum	51.6	-1.5*
Urinary Bladder	21.1	0.0
Non-Hodgkin Lymphoma	19.3	0.1
Melanoma of the Skin	18.5	1.2*
Kidney and Renal Pelvis	12.8	2.1*
Corpus and Uterus, NOS[f]	12.6	-1.0*
Leukemia	12.3	-1.0*
Pancreas	11.4	0.0
Oral Cavity and Pharynx	10.5	-1.5*
Thyroid	8.5	5.3*
Stomach	8.1	-1.5*
Ovary[fh]	7.4	-1.3*

White

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	477.5	-0.5
Prostate[f]	71.6	0.4
Breast	71.5	-1.1
Lung and Bronchus	65.7	-1.3*
Colon and Rectum	51.2	-1.6*
Urinary Bladder	23.0	0.1
Melanoma of the Skin	21.6	1.8*
Non-Hodgkin Lymphoma	20.2	0.2
Kidney and Renal Pelvis	13.3	2.3*
Corpus and Uterus, NOS[f]	13.1	-1.2*
Leukemia	12.8	-1.1*
Pancreas	11.2	0.3
Oral Cavity and Pharynx	10.6	-1.3*
Thyroid	8.9	5.7*
Ovary[fh]	7.7	-1.4*
Stomach	7.1	-1.4*

Black

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	504.1	-1.0*
Prostate[f]	105.5	-1.1
Lung and Bronchus	76.6	-1.6*
Breast	68.0	-0.6*
Colon and Rectum	62.1	-0.4
Pancreas	15.0	-1.6*
Non-Hodgkin Lymphoma	14.6	0.2
Kidney and Renal Pelvis	14.3	1.4
Urinary Bladder	12.6	0.7
Stomach	12.5	-2.9*
Corpus and Uterus, NOS[f]	11.3	1.3
Myeloma	11.3	-0.5
Oral Cavity and Pharynx	11.1	-3.0*
Leukemia	10.2	-0.2
Liver & IBD[g]	7.6	3.3*
Cervix Uteri[f]	6.3	-5.0*

Asian/Pacific Islander

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	314.9	-0.6*
Breast	48.6	0.1
Prostate[f]	41.6	-0.1
Colon and Rectum	41.6	-1.2*
Lung and Bronchus	39.4	-0.7*
Stomach	14.3	-3.0*
Liver & IBD[g]	13.9	0.0
Non-Hodgkin Lymphoma	13.2	0.2
Urinary Bladder	9.2	0.2
Pancreas	9.0	0.0
Corpus and Uterus, NOS[f]	8.8	0.2
Thyroid	8.5	2.3*
Oral Cavity and Pharynx	7.9	-1.8
Leukemia	7.4	-1.1
Kidney and Renal Pelvis	6.3	1.1
Ovary[fh]	5.3	-0.2

American Indian/Alaska Native[d]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	297.6	-1.0
Lung and Bronchus	44.0	-1.2
Colon and Rectum	40.8	-0.5
Breast	37.6	-2.0
Prostate[f]	30.1	-2.7
Kidney and Renal Pelvis	14.7	1.4
Stomach	11.5	-0.2
Non-Hodgkin Lymphoma	10.4	0.4
Liver & IBD[g]	9.7	0.2
Pancreas	9.2	-1.1
Corpus and Uterus, NOS[f]	8.1	-
Oral Cavity and Pharynx	7.1	-3.5
Urinary Bladder	7.0	-
Leukemia	6.4	1.1
Ovary[fh]	6.0	-3.4
Thyroid	5.3	0.5

Hispanic[e]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	356.0	-0.7*
Prostate[f]	60.8	0.0
Breast	48.1	-1.0
Colon and Rectum	39.3	-0.9
Lung and Bronchus	33.3	-2.1*
Non-Hodgkin Lymphoma	16.5	-0.4
Kidney and Renal Pelvis	12.4	2.0*
Stomach	12.3	-1.9*
Urinary Bladder	11.6	0.1
Pancreas	10.5	-1.1
Liver & IBD[g]	9.7	1.0
Leukemia	9.6	-1.6*
Corpus and Uterus, NOS[f]	9.4	0.6
Thyroid	7.5	4.4*
Cervix Uteri[f]	7.1	-3.8*
Ovary[fh]	6.2	-0.6

- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

[a] Top 15 cancer sites selected based on 2000-2004 age-adjusted rates for the race/ethnic group.

[b] Incidence data used in calculating the rates are from the 17 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[c] The APC is the Annual Percent Change over the time interval. Incidence data used in calculating the trends are from the 13 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[d] Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[e] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry and Kentucky.

[f] The rates for sex-specific cancer sites are calculated using the population for both sexes combined.

[g] IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

[h] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

* The APC is significantly different from zero (p<.05).

Table I-24
AGE-ADJUSTED SEER INCIDENCE RATES AND TRENDS FOR THE TOP 15 CANCER SITES[a] BY RACE/ETHNICITY

Males

All Races

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	555.8	-0.7*
Prostate	168.0	-0.2
Lung and Bronchus	81.2	-2.2*
Colon and Rectum	60.8	-1.8*
Urinary Bladder	37.3	0.0
Melanoma of the Skin	23.6	1.2*
Non-Hodgkin Lymphoma	23.2	-0.4
Kidney and Renal Pelvis	17.8	1.9*
Leukemia	16.0	-1.2*
Oral Cavity and Pharynx	15.6	-1.6*
Pancreas	12.9	-0.1
Stomach	11.4	-2.1*
Liver & IBD[f]	9.5	2.4*
Esophagus	7.9	0.5
Brain and ONS[f]	7.7	-0.5
Myeloma	7.0	-0.4

White

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	556.7	-0.6*
Prostate	161.4	-0.1
Lung and Bronchus	81.0	-2.1*
Colon and Rectum	60.4	-2.0*
Urinary Bladder	40.5	0.1
Melanoma of the Skin	27.2	1.7*
Non-Hodgkin Lymphoma	24.1	-0.3
Kidney and Renal Pelvis	18.3	2.1*
Leukemia	16.7	-1.3*
Oral Cavity and Pharynx	15.7	-1.2*
Pancreas	12.8	0.2
Stomach	10.2	-2.1*
Brain and ONS[f]	8.3	-0.3
Esophagus	8.0	1.7*
Liver & IBD[f]	7.9	2.3*
Myeloma	6.6	-0.5

Black

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	663.7	-1.6*
Prostate	255.5	-1.4*
Lung and Bronchus	110.6	-3.1*
Colon and Rectum	72.6	-0.2
Kidney and Renal Pelvis	20.4	1.6
Urinary Bladder	20.3	0.7
Oral Cavity and Pharynx	18.1	-3.6*
Non-Hodgkin Lymphoma	18.1	-0.7
Stomach	17.5	-3.3*
Pancreas	16.2	-2.1*
Myeloma	14.0	0.9
Leukemia	13.2	-0.6
Liver & IBD[f]	12.7	4.5*
Larynx	11.6	-3.3*
Esophagus	10.4	-4.9*
Brain and ONS[f]	4.9	-1.1

Asian/Pacific Islander

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	359.9	-0.8*
Prostate	96.5	0.2
Lung and Bronchus	55.1	-1.0*
Colon and Rectum	49.7	-1.6*
Liver & IBD[f]	21.3	0.2
Stomach	18.9	-3.1*
Urinary Bladder	16.4	1.2
Non-Hodgkin Lymphoma	15.7	-0.6
Oral Cavity and Pharynx	10.8	-2.3
Pancreas	10.0	-0.4
Leukemia	9.2	-1.1
Kidney and Renal Pelvis	8.9	0.9
Esophagus	4.2	-2.4
Thyroid	3.9	1.5
Brain and ONS[f]	3.9	-0.6
Myeloma	3.7	-2.5

American Indian/Alaska Native[d]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	321.2	-1.7
Prostate	68.2	-2.9
Lung and Bronchus	53.7	-3.4
Colon and Rectum	42.1	-2.2
Kidney and Renal Pelvis	18.5	0.0
Stomach	16.3	-
Liver & IBD[f]	14.8	-
Urinary Bladder	11.9	-
Non-Hodgkin Lymphoma	11.6	-
Oral Cavity and Pharynx	10.0	-
Pancreas	9.5	-
Esophagus	7.0	-
Leukemia	6.5	-
Myeloma	4.8	-
Melanoma of the Skin	4.1	-
Testis	3.8	-

Hispanic[e]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	421.3	-1.0*
Prostate	140.8	-0.4
Colon and Rectum	47.5	-1.2
Lung and Bronchus	44.7	-2.6*
Urinary Bladder	20.2	0.4
Non-Hodgkin Lymphoma	19.2	-0.9
Kidney and Renal Pelvis	16.5	2.7*
Stomach	16.0	-2.7*
Liver & IBD[f]	14.4	1.0
Leukemia	11.8	-2.1*
Pancreas	11.0	-1.6
Oral Cavity and Pharynx	9.3	-3.2*
Myeloma	6.9	-0.7
Brain and ONS[f]	6.0	2.5*
Esophagus	5.4	-0.9
Larynx	5.2	-3.5*

- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

[a] Top 15 cancer sites selected based on 2000-2004 age-adjusted rates for the race/ethnic group.

[b] Incidence data used in calculating the rates are from the 17 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[c] The APC is the Annual Percent Change over the time interval. Incidence data used in calculating the trends are from the 13 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[d] Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[e] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry and Kentucky.

[f] IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

* The APC is significantly different from zero (p<.05).

Table I-25
AGE-ADJUSTED SEER INCIDENCE RATES AND TRENDS FOR THE TOP 15 CANCER SITES[a] BY RACE/ETHNICITY

Females

All Races

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	411.3	-0.5*
Breast	127.8	-1.0
Lung and Bronchus	52.3	-0.5*
Colon and Rectum	44.6	-1.3*
Corpus and Uterus, NOS	23.2	-0.8*
Non-Hodgkin Lymphoma	16.3	1.0*
Melanoma of the Skin	14.9	1.3*
Ovary[g]	13.5	-1.2*
Thyroid	12.5	5.6*
Pancreas	10.1	0.0
Leukemia	9.5	-0.9*
Urinary Bladder	9.4	-0.4*
Kidney and Renal Pelvis	8.8	2.2*
Cervix Uteri	8.7	-3.3*
Oral Cavity and Pharynx	6.1	-1.8*
Stomach	5.6	-0.8

White

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	423.9	-0.4
Breast	132.5	-0.9
Lung and Bronchus	54.6	-0.6*
Colon and Rectum	44.0	-1.4*
Corpus and Uterus, NOS	24.3	-1.0*
Melanoma of the Skin	17.6	1.9*
Non-Hodgkin Lymphoma	17.0	1.0*
Ovary[g]	14.3	-1.2*
Thyroid	13.2	6.1*
Urinary Bladder	10.1	-0.2
Pancreas	9.9	0.2
Leukemia	9.9	-1.0*
Kidney and Renal Pelvis	9.1	2.5*
Cervix Uteri	8.5	-2.6*
Oral Cavity and Pharynx	6.1	-2.0*
Brain and ONS[f]	5.9	-0.1

Black

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	396.9	-0.4
Breast	118.3	-0.5*
Colon and Rectum	55.0	-0.6
Lung and Bronchus	53.7	0.6
Corpus and Uterus, NOS	19.6	1.4
Pancreas	13.9	-1.3
Non-Hodgkin Lymphoma	11.9	1.5*
Cervix Uteri	11.4	-4.9*
Ovary[g]	10.1	0.0
Kidney and Renal Pelvis	9.7	0.8
Myeloma	9.5	-1.8*
Stomach	9.1	-2.4
Leukemia	8.1	-0.1
Urinary Bladder	7.6	0.6
Thyroid	7.3	5.7*
Oral Cavity and Pharynx	5.7	-1.5

Asian/Pacific Islander

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	285.8	-0.2
Breast	89.0	0.0
Colon and Rectum	35.3	-0.7
Lung and Bronchus	27.7	0.3
Corpus and Uterus, NOS	16.2	0.2
Thyroid	12.6	2.6*
Non-Hodgkin Lymphoma	11.2	1.4
Stomach	10.8	-2.5*
Ovary[g]	9.7	-0.4
Pancreas	8.3	0.5
Cervix Uteri	8.0	-5.9*
Liver & IBD[f]	7.9	-0.1
Leukemia	5.9	-0.7
Oral Cavity and Pharynx	5.4	-0.7
Kidney and Renal Pelvis	4.3	1.7
Urinary Bladder	3.9	-1.4

American Indian/Alaska Native[d]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	282.4	-0.3
Breast	69.8	-1.9
Colon and Rectum	39.6	1.4
Lung and Bronchus	36.7	2.1
Corpus and Uterus, NOS	15.1	-
Kidney and Renal Pelvis	11.5	-
Ovary[g]	11.2	-3.2
Non-Hodgkin Lymphoma	9.5	-
Pancreas	8.9	-
Stomach	7.9	-
Thyroid	7.8	-0.9
Cervix Uteri	6.6	-
Leukemia	6.1	-
Myeloma	5.7	-
Liver & IBD[f]	5.5	-
Oral Cavity and Pharynx	4.6	-

Hispanic[e]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	314.2	-0.5
Breast	89.3	-0.7
Colon and Rectum	32.9	-0.7
Lung and Bronchus	25.2	-1.4*
Corpus and Uterus, NOS	17.4	0.8
Non-Hodgkin Lymphoma	14.2	0.5
Cervix Uteri	13.8	-3.6*
Thyroid	11.6	4.8*
Ovary[g]	11.5	-0.4
Pancreas	10.0	-1.0
Stomach	9.6	-1.0
Kidney and Renal Pelvis	9.1	0.9
Leukemia	8.0	-1.2
Liver & IBD[f]	5.7	0.4
Urinary Bladder	5.5	-0.6
Myeloma	4.8	0.6

\- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

[a] Top 15 cancer sites selected based on 2000-2004 age-adjusted rates for the race/ethnic group.

[b] Incidence data used in calculating the rates are from the 17 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[c] The APC is the Annual Percent Change over the time interval. Incidence data used in calculating the trends are from the 13 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[d] Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[e] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry and Kentucky.

[f] IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

[g] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

* The APC is significantly different from zero (p<.05).

Table I-26
AGE-ADJUSTED U.S. DEATH RATES AND TRENDS FOR THE TOP 15 CANCER SITES[a] BY RACE/ETHNICITY

Both Sexes

All Races

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	192.7	-1.2*
Lung and Bronchus	54.7	-1.0*
Colon and Rectum	19.4	-2.2*
Breast	14.5	-2.4*
Pancreas	10.6	0.1*
Prostate[f]	10.5	-3.6*
Non-Hodgkin Lymphoma	7.6	-2.5*
Leukemia	7.5	-0.8*
Ovary[f]	5.0	-0.3
Liver & IBD[g]	4.9	1.7*
Brain and ONS[g]	4.4	-1.0*
Esophagus	4.4	0.3*
Urinary Bladder	4.3	-0.2
Stomach	4.2	-3.2*
Kidney and Renal Pelvis	4.2	-0.4
Myeloma	3.7	-0.9*

White

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	190.7	-1.1*
Lung and Bronchus	55.0	-0.8*
Colon and Rectum	18.9	-2.3*
Breast	14.1	-2.5*
Pancreas	10.4	0.3*
Prostate[f]	9.6	-3.5*
Non-Hodgkin Lymphoma	7.9	-2.5*
Leukemia	7.7	-0.7*
Ovary[f]	5.2	-0.3
Brain and ONS[g]	4.8	-0.9*
Urinary Bladder	4.5	0.0
Liver & IBD[g]	4.5	1.7*
Esophagus	4.3	1.2*
Kidney and Renal Pelvis	4.3	-0.3
Stomach	3.7	-3.2*
Myeloma	3.5	-0.8*

Black

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	238.8	-1.8*
Lung and Bronchus	62.0	-1.6*
Colon and Rectum	26.7	-1.5*
Prostate[f]	21.9	-3.6*
Breast	20.1	-1.7*
Pancreas	13.8	-0.6*
Stomach	8.2	-3.3*
Myeloma	7.1	-1.4*
Leukemia	6.7	-1.1*
Liver & IBD[g]	6.5	1.3*
Esophagus	6.0	-4.2*
Non-Hodgkin Lymphoma	5.2	-2.4*
Ovary[f]	4.5	0.0
Corpus and Uterus, NOS[f]	4.3	0.4
Kidney and Renal Pelvis	4.1	-0.7*
Oral Cavity and Pharynx	3.9	-3.8*

Asian/Pacific Islander

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	115.5	-1.8*
Lung and Bronchus	26.9	-1.4*
Colon and Rectum	12.3	-2.0*
Liver & IBD[g]	10.6	-0.6
Stomach	8.0	-4.6*
Pancreas	7.4	-0.2
Breast	7.0	-0.2
Non-Hodgkin Lymphoma	4.8	-2.1*
Prostate[f]	4.6	-5.6*
Leukemia	3.9	-1.9*
Ovary[f]	2.7	0.8
Oral Cavity and Pharynx	2.3	-2.6*
Brain and ONS[g]	2.0	0.5
Esophagus	1.8	-2.6
Urinary Bladder	1.8	-0.1
Kidney and Renal Pelvis	1.7	-3.0*

American Indian/Alaska Native[d]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	160.4	-0.3
Lung and Bronchus	39.9	-0.1
Colon and Rectum	17.0	-1.4
Breast	9.0	0.1
Liver & IBD[g]	8.4	2.2
Prostate[f]	8.4	-2.2
Pancreas	7.5	1.0
Stomach	7.2	-0.6
Kidney and Renal Pelvis	6.5	0.6
Non-Hodgkin Lymphoma	5.5	0.5
Leukemia	4.8	0.3
Ovary[f]	4.0	2.0
Myeloma	3.8	-2.0
Esophagus	3.8	4.5*
Oral Cavity and Pharynx	2.5	-0.3
Cervix Uteri[f]	2.2	-2.0

Hispanic[e]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	129.1	-1.3*
Lung and Bronchus	23.6	-1.6*
Colon and Rectum	13.6	-0.9*
Breast	9.0	-2.6*
Prostate[f]	8.3	-3.1*
Pancreas	8.3	0.2
Liver & IBD[g]	7.6	1.4*
Stomach	6.8	-2.1*
Non-Hodgkin Lymphoma	5.7	-3.1*
Leukemia	5.1	-1.2*
Kidney and Renal Pelvis	3.6	0.5
Ovary[f]	3.4	0.3
Myeloma	3.1	-0.7
Brain and ONS[g]	2.8	-0.3
Urinary Bladder	2.4	0.2
Esophagus	2.4	-2.2*

\- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

[a] Top 15 cancer sites selected based on 2000-2004 age-adjusted rates for the race/ethnic group.

[b] Mortality data used in calculating the rates are analyzed from a public use file provided by the National Center for Health Statistics (NCHS). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). The rates shown for sex-specific cancer sites are calculated using the population for both sexes combined.

[c] The APC is the Annual Percent Change over the time interval. Mortality data used in calculating the trends are analyzed from a public use file provided by the National Center for Health Statistics (NCHS). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[d] Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[e] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. The 2000-2004 Hispanic death rates do not include deaths from Minnesota, New Hampshire and North Dakota. The 1995-2004 Hispanic mortality trends do not include deaths from Maine, Minnesota, New Hampshire, North Dakota, and Oklahoma.

[f] The rates for sex-specific cancer sites are calculated using the population for both sexes combined.

[g] IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

* The APC is significantly different from zero ($p<.05$).

Table I-27
AGE-ADJUSTED U.S. DEATH RATES AND TRENDS FOR THE TOP 15 CANCER SITES[a] BY RACE/ETHNICITY

Males

All Races

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	238.7	-1.7*
Lung and Bronchus	73.4	-2.0*
Prostate	27.9	-4.1*
Colon and Rectum	23.5	-2.4*
Pancreas	12.2	0.0
Leukemia	10.0	-0.9*
Non-Hodgkin Lymphoma	9.6	-2.3*
Esophagus	7.8	0.4*
Urinary Bladder	7.5	-0.4*
Liver & IBD[f]	7.1	1.8*
Kidney and Renal Pelvis	6.1	-0.3
Stomach	5.9	-3.7*
Brain and ONS[f]	5.4	-0.9*
Myeloma	4.6	-1.1*
Oral Cavity and Pharynx	4.1	-2.1*
Melanoma of the Skin	3.9	-0.3

White

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	234.7	-1.5*
Lung and Bronchus	72.6	-1.9*
Prostate	25.6	-4.1*
Colon and Rectum	22.9	-2.4*
Pancreas	12.0	0.2
Leukemia	10.3	-0.8*
Non-Hodgkin Lymphoma	9.9	-2.3*
Urinary Bladder	7.9	-0.3
Esophagus	7.7	1.3*
Liver & IBD[f]	6.5	1.9*
Kidney and Renal Pelvis	6.2	-0.2
Brain and ONS[f]	5.8	-0.9*
Stomach	5.2	-3.8*
Myeloma	4.4	-0.9*
Melanoma of the Skin	4.3	-0.2
Oral Cavity and Pharynx	3.8	-1.8*

Black

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	321.8	-2.4*
Lung and Bronchus	95.8	-2.7*
Prostate	62.3	-3.7*
Colon and Rectum	32.7	-1.5*
Pancreas	15.5	-0.7*
Stomach	11.9	-3.6*
Esophagus	10.2	-4.7*
Liver & IBD[f]	10.0	1.7*
Leukemia	8.8	-1.6*
Myeloma	8.5	-1.8*
Oral Cavity and Pharynx	6.8	-3.6*
Non-Hodgkin Lymphoma	6.5	-3.3*
Kidney and Renal Pelvis	6.1	-0.6
Urinary Bladder	5.3	-1.5*
Larynx	5.0	-3.1*
Brain and ONS[f]	3.2	-0.7

Asian/Pacific Islander

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	141.7	-2.1*
Lung and Bronchus	38.3	-1.3*
Liver & IBD[f]	15.5	-1.1*
Colon and Rectum	15.0	-1.9*
Prostate	11.3	-5.0*
Stomach	10.5	-4.3*
Pancreas	7.9	-1.0
Non-Hodgkin Lymphoma	5.8	-2.4*
Leukemia	5.0	-0.9
Oral Cavity and Pharynx	3.4	-2.6*
Esophagus	3.1	-2.1
Urinary Bladder	2.9	0.8
Brain and ONS[f]	2.5	2.4
Kidney and Renal Pelvis	2.4	-3.8*
Myeloma	1.9	-4.2*
Larynx	0.8	-4.0

American Indian/Alaska Native[d]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	187.9	-0.8
Lung and Bronchus	49.6	-2.4*
Prostate	21.5	-2.3
Colon and Rectum	20.6	-0.2
Liver & IBD[f]	10.7	1.5
Stomach	9.6	0.0
Kidney and Renal Pelvis	9.3	1.9
Pancreas	7.6	1.2
Esophagus	6.7	4.6*
Non-Hodgkin Lymphoma	6.1	-2.2
Leukemia	5.6	0.7
Myeloma	4.2	0.7
Oral Cavity and Pharynx	3.8	-
Urinary Bladder	3.1	-
Brain and ONS[f]	2.6	-1.3
Larynx	1.9	-

Hispanic[e]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	162.2	-1.9*
Lung and Bronchus	36.0	-2.5*
Prostate	21.2	-3.5*
Colon and Rectum	17.0	-1.4*
Liver & IBD[f]	10.8	1.1*
Pancreas	9.1	-0.4
Stomach	9.1	-2.4*
Non-Hodgkin Lymphoma	6.9	-4.0*
Leukemia	6.4	-1.5*
Kidney and Renal Pelvis	5.4	0.7
Esophagus	4.2	-2.5*
Urinary Bladder	3.9	-1.2
Myeloma	3.7	-0.8
Brain and ONS[f]	3.4	-0.8
Oral Cavity and Pharynx	2.8	-4.0*
Larynx	1.9	-4.5*

- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

[a] Top 15 cancer sites selected based on 2000-2004 age-adjusted rates for the race/ethnic group.

[b] Mortality data used in calculating the rates are analyzed from a public use file provided by the National Center for Health Statistics (NCHS). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[c] The APC is the Annual Percent Change over the time interval. Mortality data used in calculating the trends are analyzed from a public use file provided by the National Center for Health Statistics (NCHS). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[d] Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[e] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. The 2000-2004 Hispanic death rates do not include deaths from Minnesota, New Hampshire and North Dakota. The 1995-2004 Hispanic mortality trends do not include deaths from Maine, Minnesota, New Hampshire, North Dakota, and Oklahoma.

[f] IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

* The APC is significantly different from zero (p<.05).

Table I-28
AGE-ADJUSTED U.S. DEATH RATES AND TRENDS FOR THE TOP 15 CANCER SITES[a] BY RACE/ETHNICITY

Females

All Races

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	162.2	-1.0*
Lung and Bronchus	41.1	0.2*
Breast	25.5	-2.3*
Colon and Rectum	16.4	-2.2*
Pancreas	9.2	0.1
Ovary	8.9	-0.1
Non-Hodgkin Lymphoma	6.2	-2.7*
Leukemia	5.7	-0.9*
Corpus and Uterus, NOS	4.1	0.1
Brain and ONS[f]	3.6	-1.2*
Myeloma	3.1	-1.0*
Liver & IBD[f]	3.1	0.9*
Stomach	3.0	-2.7*
Kidney and Renal Pelvis	2.8	-0.8*
Cervix Uteri	2.6	-3.5*
Urinary Bladder	2.3	-0.5

White

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	161.4	-0.9*
Lung and Bronchus	42.1	0.3*
Breast	25.0	-2.4*
Colon and Rectum	15.9	-2.3*
Ovary	9.2	-0.1
Pancreas	9.0	0.2
Non-Hodgkin Lymphoma	6.4	-2.8*
Leukemia	5.8	-0.8*
Brain and ONS[f]	3.9	-1.0*
Corpus and Uterus, NOS	3.9	0.0
Myeloma	2.8	-0.9*
Liver & IBD[f]	2.8	0.8*
Kidney and Renal Pelvis	2.8	-0.7*
Stomach	2.6	-2.8*
Cervix Uteri	2.3	-3.2*
Urinary Bladder	2.3	-0.3

Black

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	189.3	-1.1*
Lung and Bronchus	39.8	0.2
Breast	33.8	-1.6*
Colon and Rectum	22.9	-1.7*
Pancreas	12.4	-0.6*
Ovary	7.4	0.1
Corpus and Uterus, NOS	7.1	0.6
Myeloma	6.3	-1.3*
Stomach	5.8	-3.2*
Leukemia	5.3	-0.7
Cervix Uteri	4.9	-4.7*
Non-Hodgkin Lymphoma	4.3	-1.4*
Liver & IBD[f]	3.9	0.3
Esophagus	3.0	-2.9*
Urinary Bladder	2.8	-1.3*
Kidney and Renal Pelvis	2.8	-0.9

Asian/Pacific Islander

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	96.7	-1.4*
Lung and Bronchus	18.5	-1.2*
Breast	12.6	-0.3
Colon and Rectum	10.3	-1.9*
Pancreas	6.9	0.6
Liver & IBD[f]	6.7	0.4
Stomach	6.2	-4.6*
Ovary	4.8	0.7
Non-Hodgkin Lymphoma	3.9	-1.6
Leukemia	3.0	-2.9*
Cervix Uteri	2.4	-4.5*
Corpus and Uterus, NOS	2.4	1.1
Brain and ONS[f]	1.5	-1.6
Myeloma	1.5	-1.4
Oral Cavity and Pharynx	1.3	-2.3
Kidney and Renal Pelvis	1.1	-1.5

American Indian/Alaska Native[d]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	141.2	0.1
Lung and Bronchus	32.7	3.1*
Breast	16.1	0.2
Colon and Rectum	14.3	-2.4
Pancreas	7.3	0.7
Ovary	7.1	2.2
Liver & IBD[f]	6.4	2.7
Stomach	5.5	-1.2
Non-Hodgkin Lymphoma	5.0	2.2
Kidney and Renal Pelvis	4.3	-1.7
Leukemia	4.1	-
Cervix Uteri	4.0	-1.6
Myeloma	3.5	-4.1
Corpus and Uterus, NOS	2.9	-
Gallbladder	2.3	-
Brain and ONS[f]	1.8	-

Hispanic[e]

	Rate[b] 2000-2004	APC[c] 1995-2004
All Sites	106.7	-0.9*
Breast	16.1	-2.4*
Lung and Bronchus	14.6	-0.3
Colon and Rectum	11.1	-0.6
Pancreas	7.5	0.6
Ovary	6.1	0.5
Stomach	5.1	-1.8*
Liver & IBD[f]	5.0	1.2
Non-Hodgkin Lymphoma	4.8	-2.4*
Leukemia	4.1	-1.1
Cervix Uteri	3.3	-3.3*
Corpus and Uterus, NOS	3.1	-0.5
Myeloma	2.6	-0.6
Brain and ONS[f]	2.4	0.3
Kidney and Renal Pelvis	2.3	-0.3
Gallbladder	1.4	-5.2*

\- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

[a] Top 15 cancer sites selected based on 2000-2004 age-adjusted rates for the race/ethnic group.

[b] Mortality data used in calculating the rates are analyzed from a public use file provided by the National Center for Health Statistics (NCHS). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[c] The APC is the Annual Percent Change over the time interval. Mortality data used in calculating the trends are analyzed from a public use file provided by the National Center for Health Statistics (NCHS). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[d] Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

[e] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. The 2000-2004 Hispanic death rates do not include deaths from Minnesota, New Hampshire and North Dakota. The 1995-2004 Hispanic mortality trends do not include deaths from Maine, Minnesota, New Hampshire, North Dakota, and Oklahoma.

[f] IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

* The APC is significantly different from zero (p<.05).

Surveillance, Epidemiology, and End Results (SEER) Program: SEER 9, 13, & 17 Geographic Areas National Cancer Institute, USA

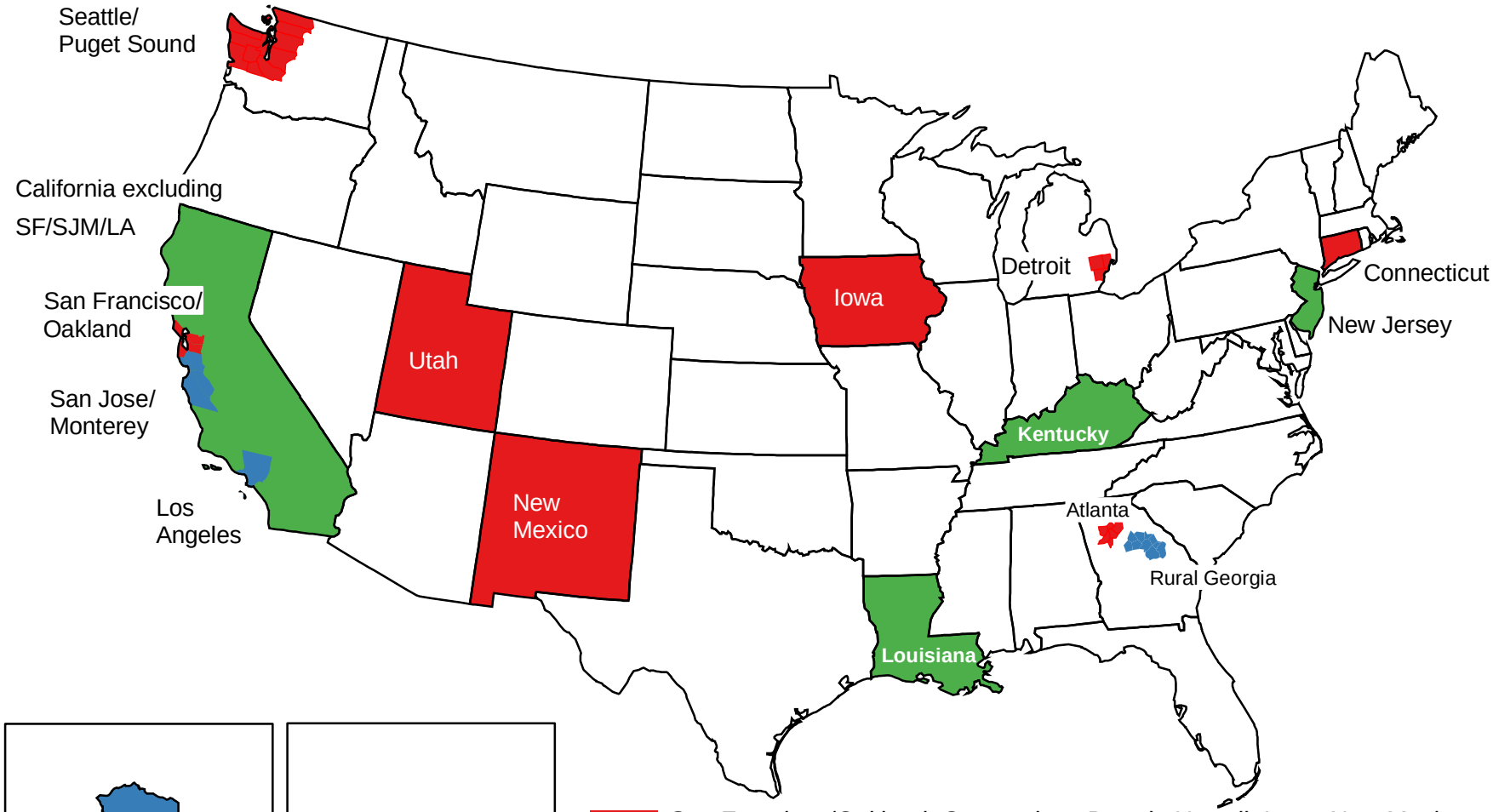
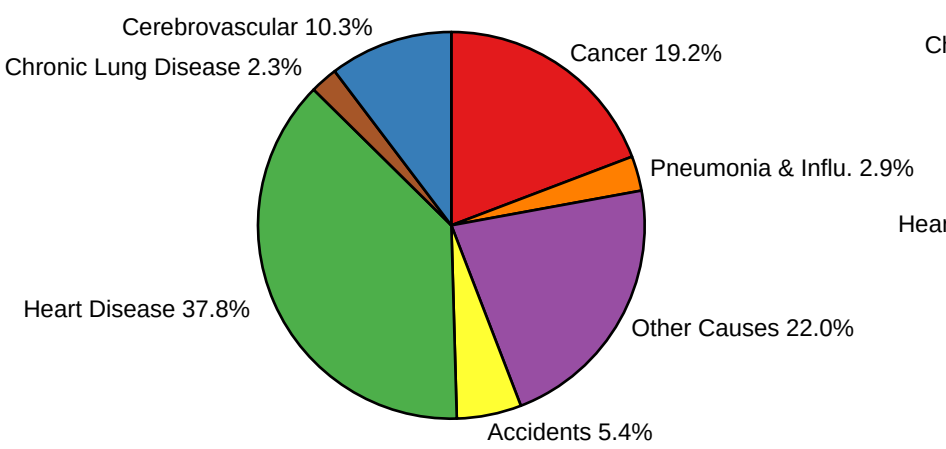
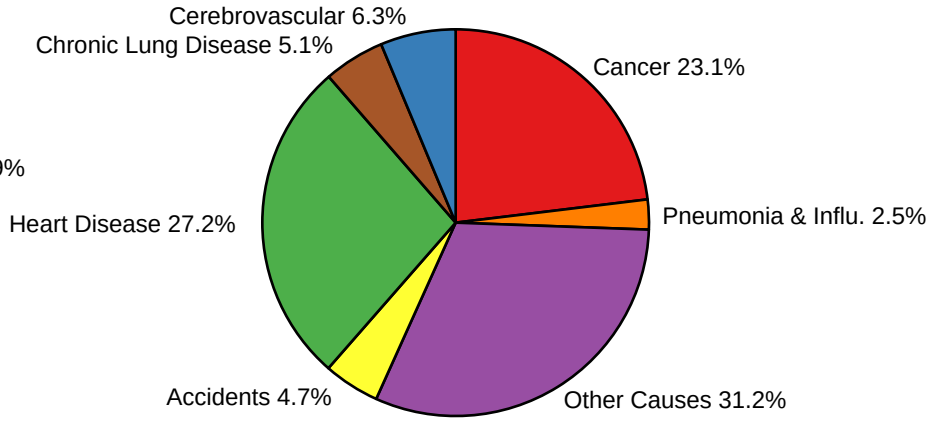


Figure I-1

Leading Causes of Death in US
Percent of All Causes of Death
1975 vs 2004



1975

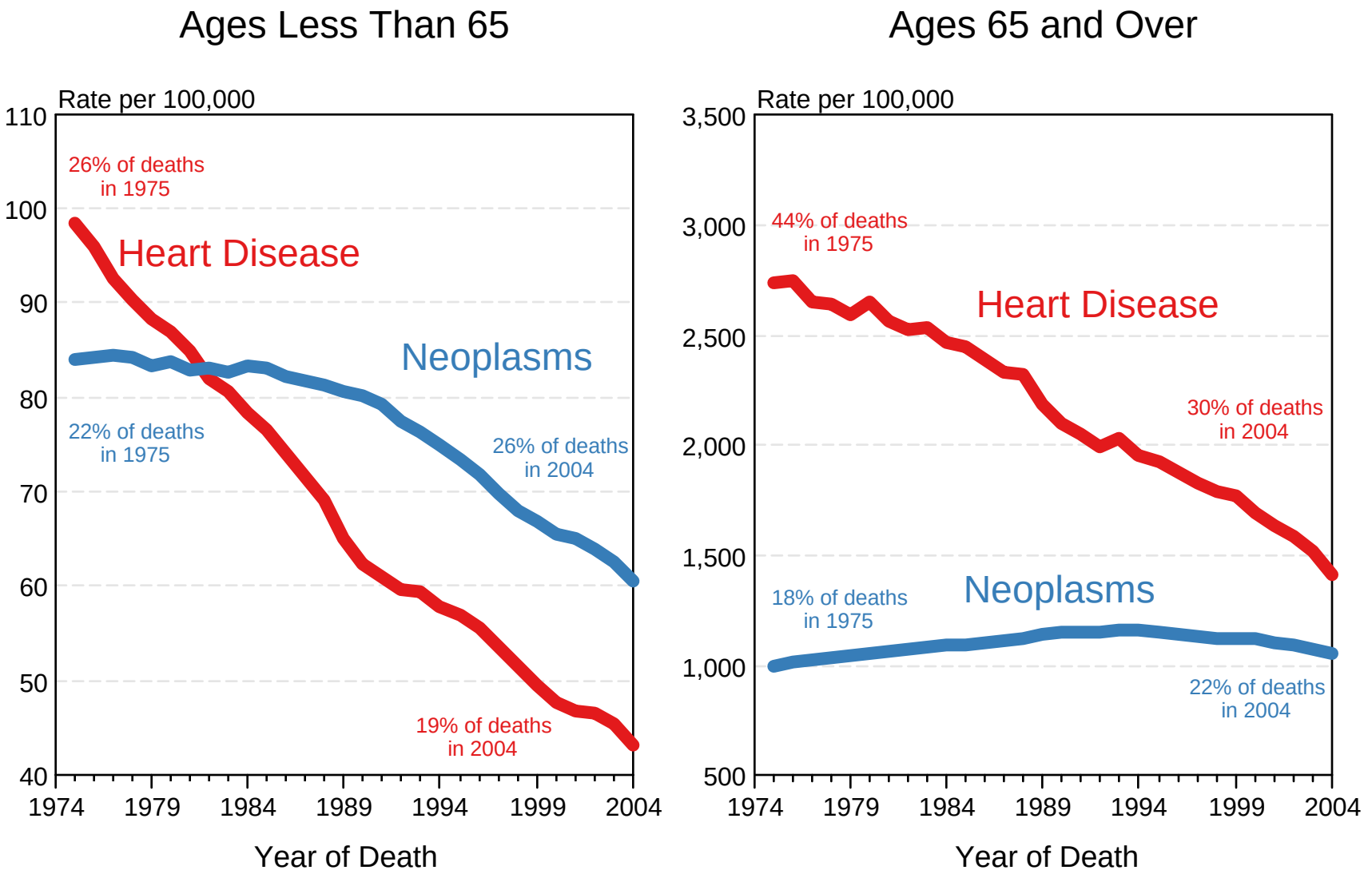


2004

Source: NCHS public use data file for the total US.

Figure I-2

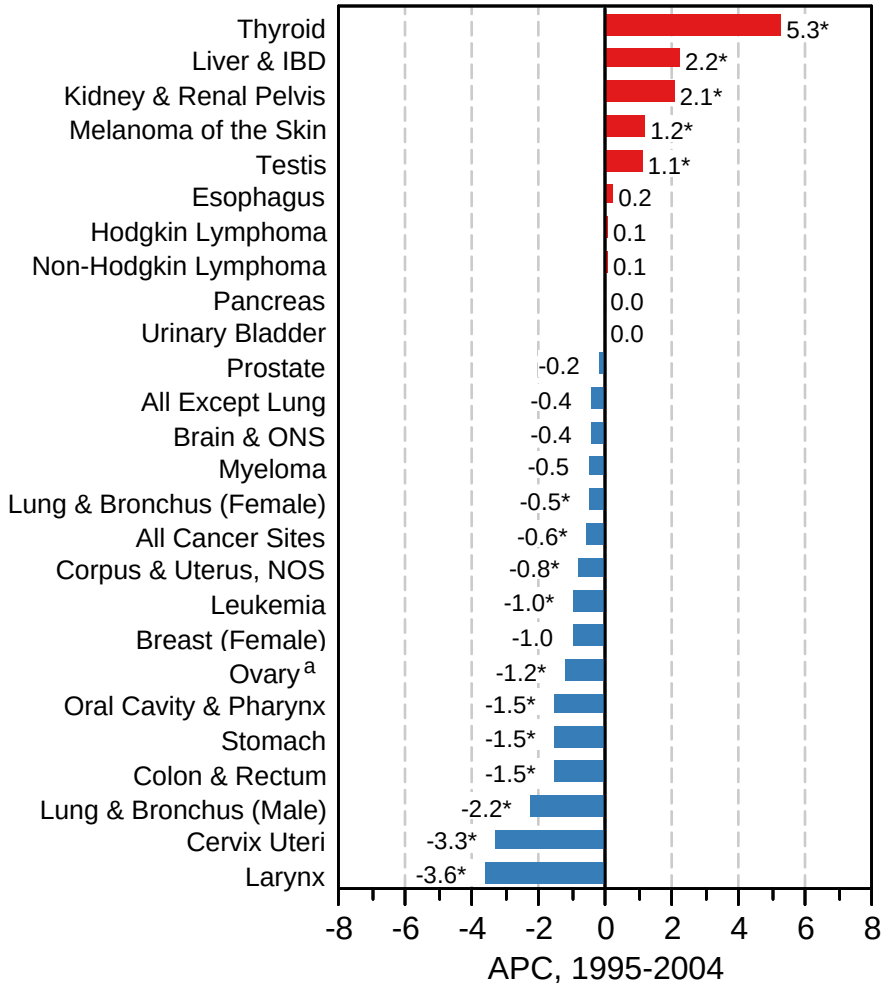
US Death Rates
1975-2004



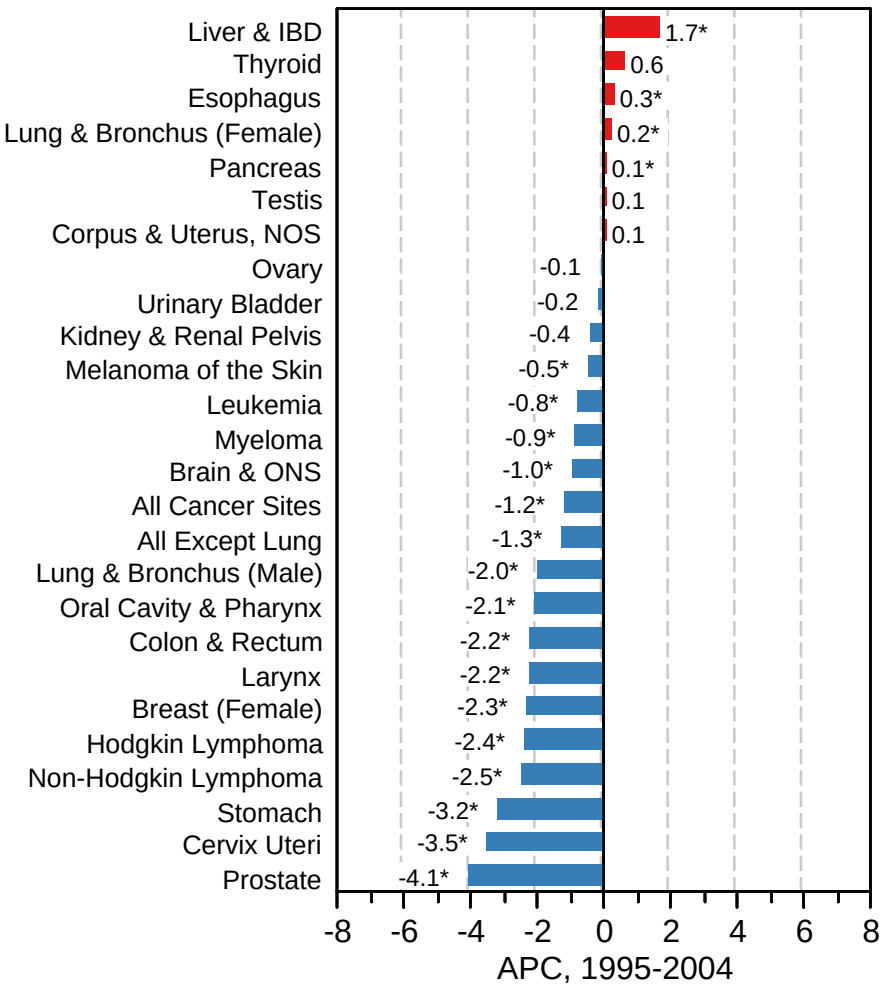
Source: NCHS public use data file for the total US. Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Trends in SEER Incidence & US Death Rates by Primary Cancer Site 1995-2004

Trends in SEER Incidence Rates

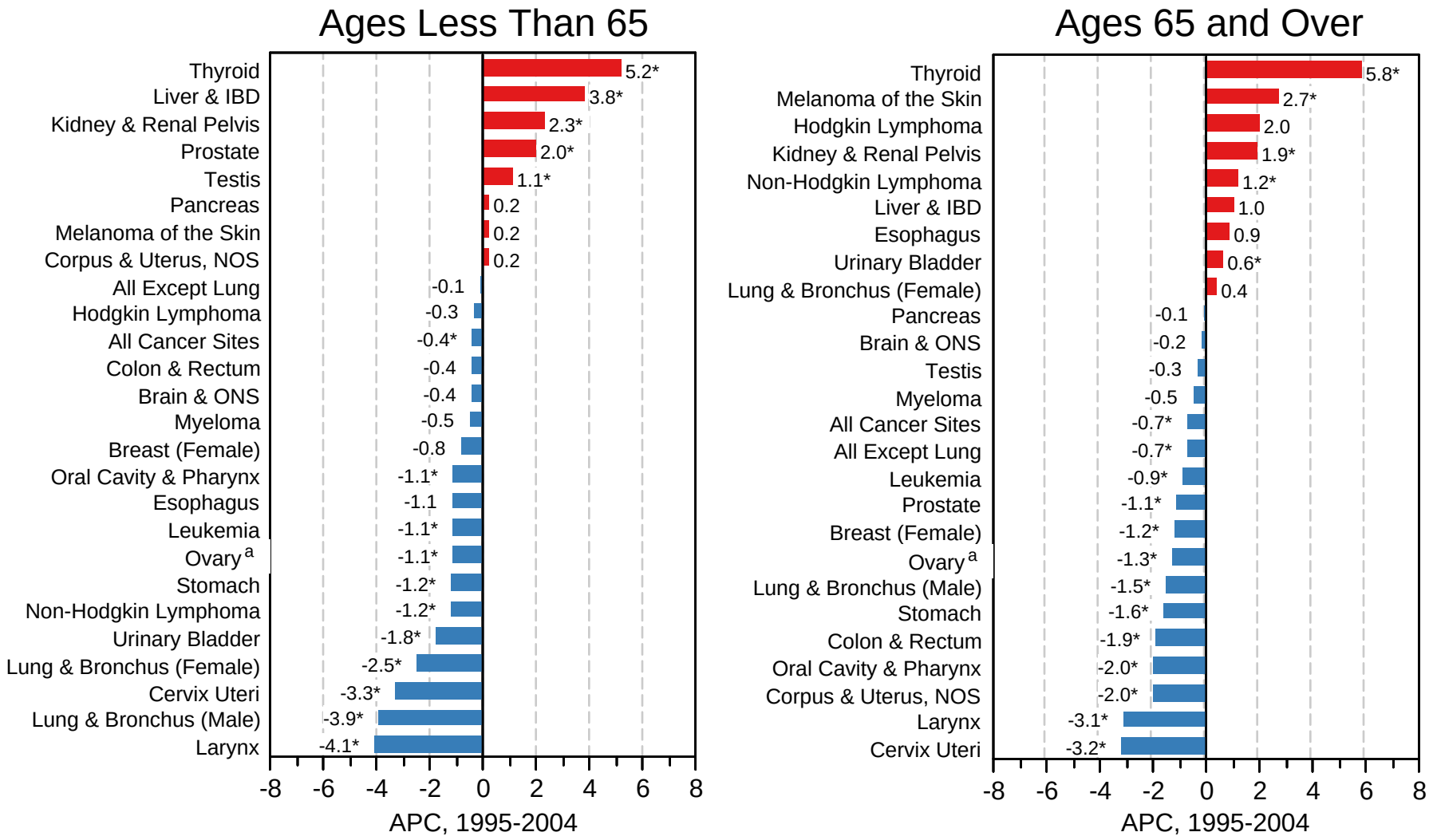


Trends in US Cancer Death Rates



Source: SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia) and NCHS public use file for the total US. For sex-specific cancer sites, the population was limited to the population of the appropriate sex. Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
The APC is the Annual Percent Change over the time interval.
* The APC is significantly different from zero (p<.05).
[a] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Trends in SEER Incidence Rates by Primary Cancer Site 1995-2004

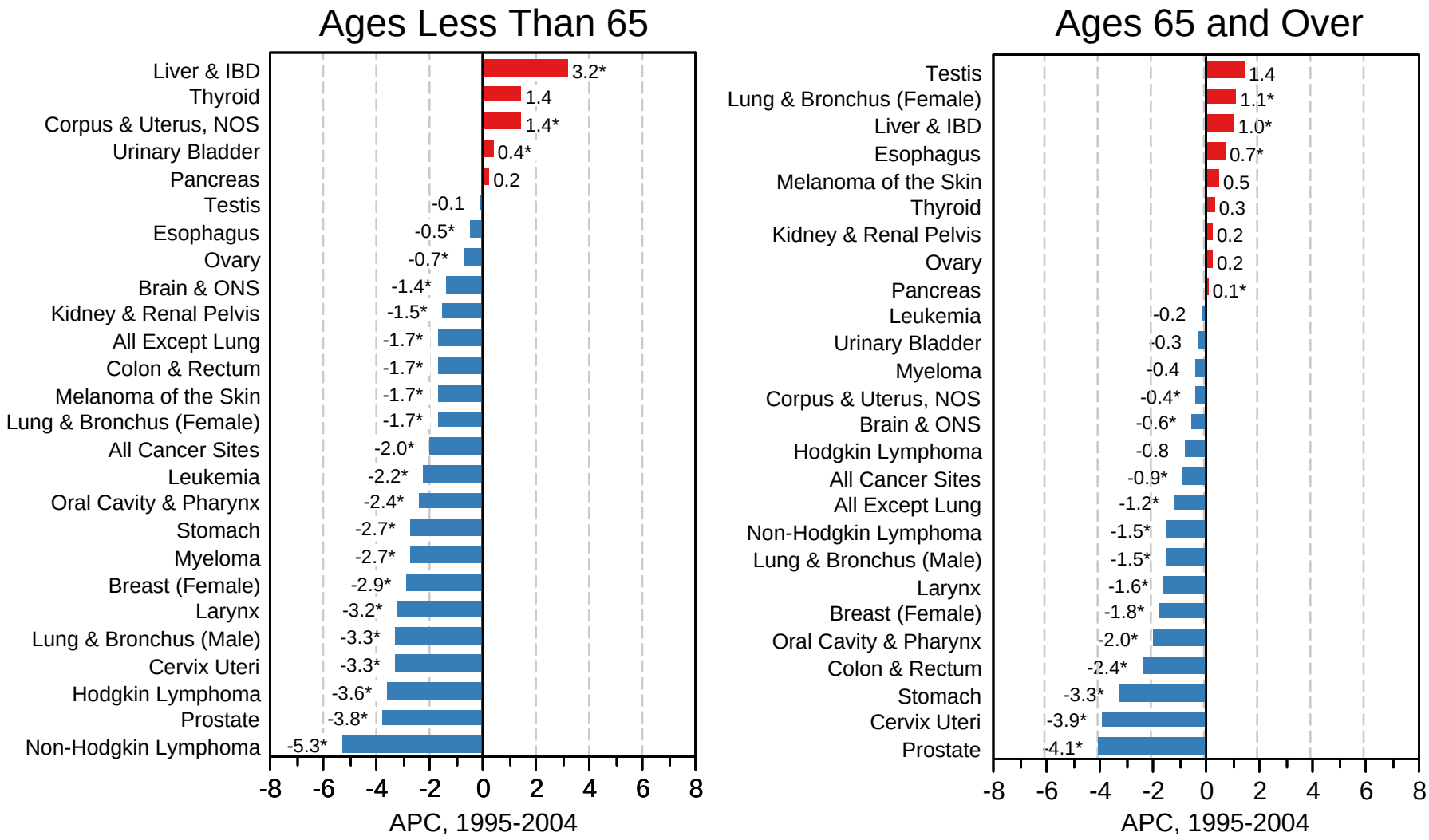


Source: SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). For sex-specific cancer sites, the population was limited to the population of the appropriate sex.
Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
The APC is the Annual Percent Change over the time interval.

* The APC is significantly different from zero ($p<.05$).

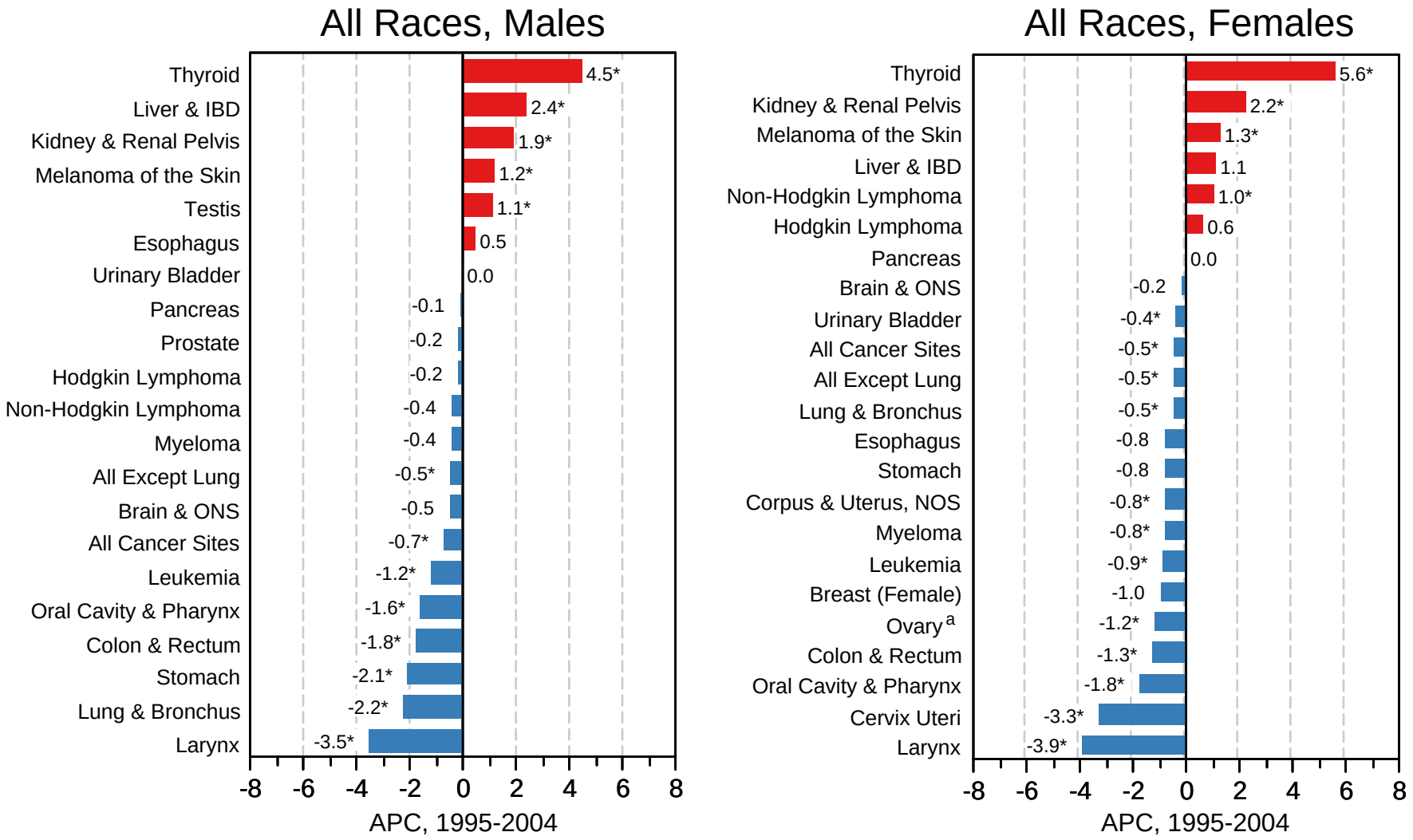
[a] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Trends in US Death Rates by Primary Cancer Site 1995-2004



Source: NCHS public use data file for the total US. For sex-specific cancer sites, the population was limited to the population of the appropriate sex.
Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
The APC is the Annual Percent Change over the time interval.
* The APC is significantly different from zero (p<.05).

Trends in SEER Incidence Rates by Primary Cancer Site 1995-2004

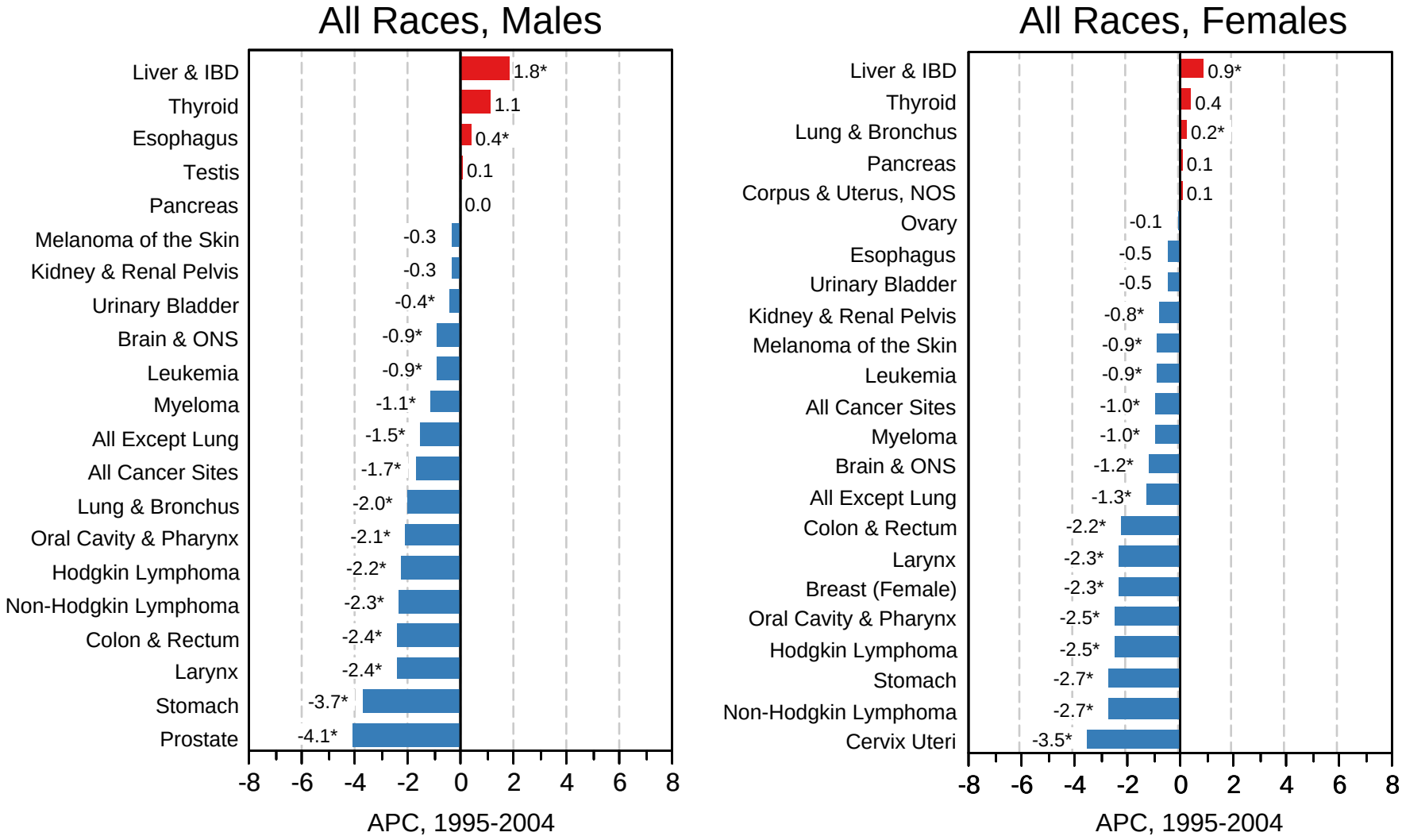


Source: SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).
Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
The APC is the Annual Percent Change over the time interval.

* The APC is significantly different from zero (p<.05).

[a] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Trends in US Death Rates by Primary Cancer Site 1995-2004



Source: NCHS public use data file for the total US.
Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
The APC is the Annual Percent Change over the time interval.
* The APC is significantly different from zero (p<.05).

SEER Incidence[a] and US Death Rates[b], 2000-2004
5-Year Relative Survival Rates[c], 1996-2003
All Cancer Combined, by Race and Sex

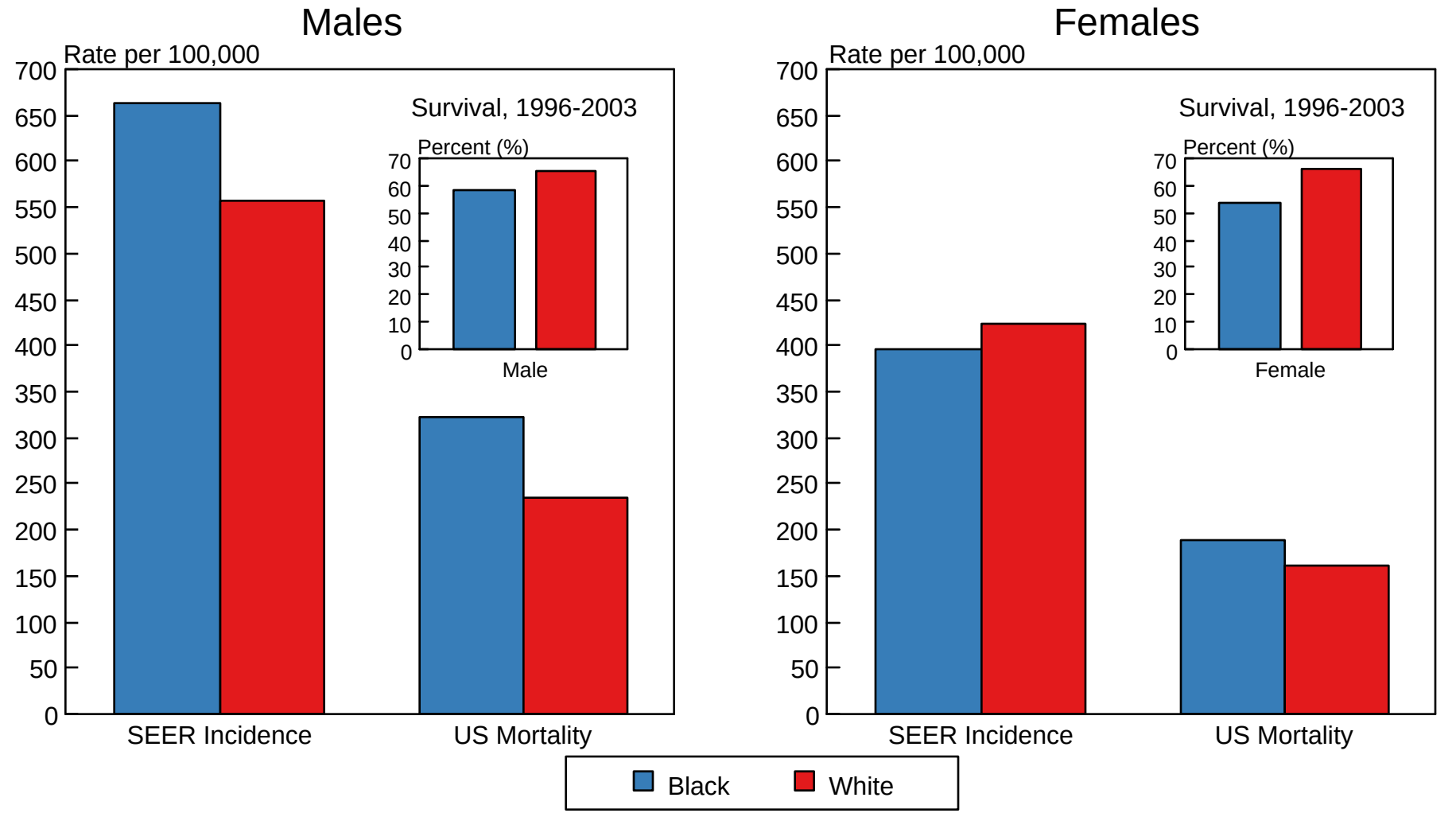


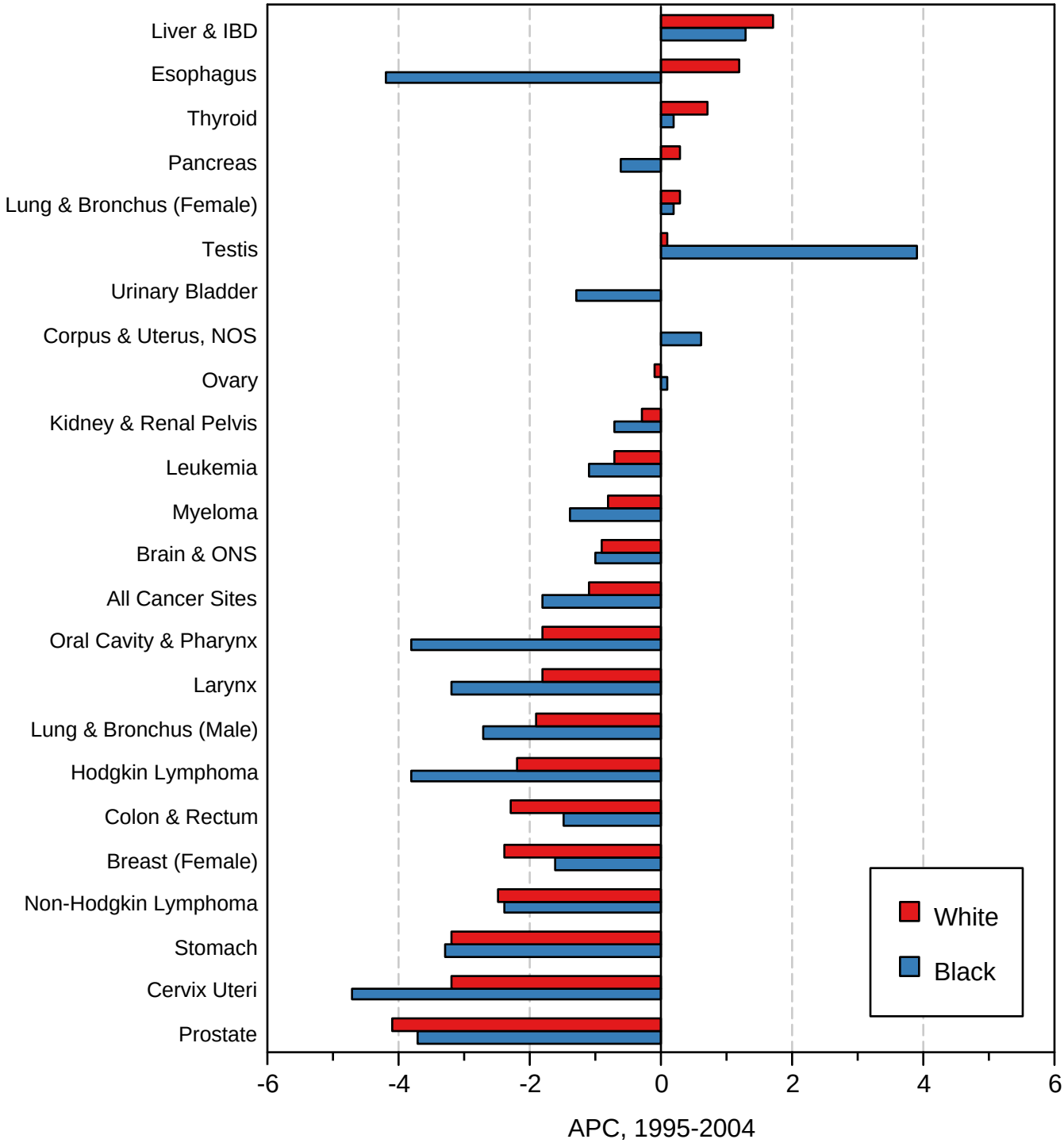
Figure I-9

[a] Incidence rates are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey) and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

[b] Death rates are from the NCHS public use data file for the total US and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

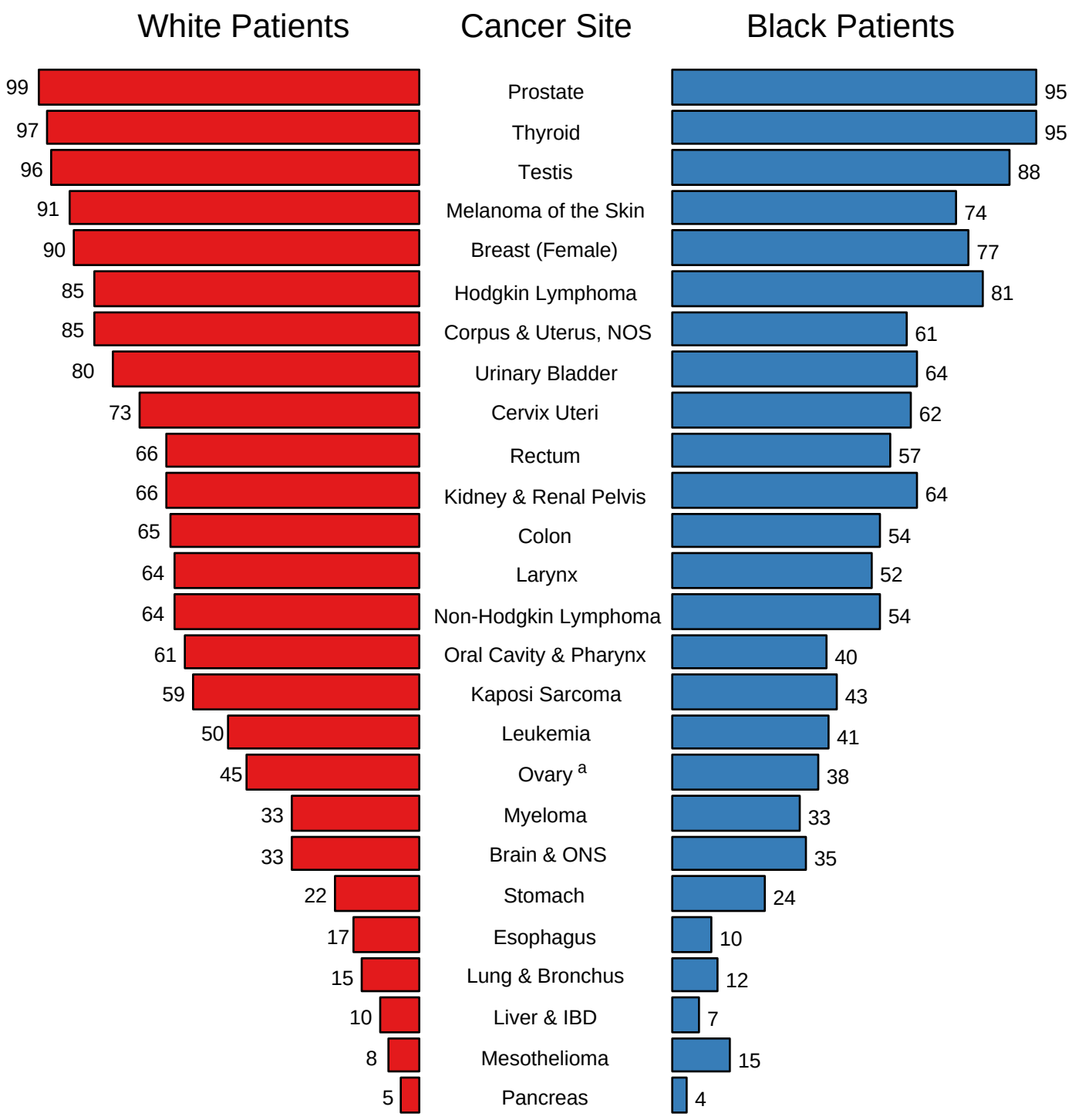
[c] Survival rates are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2003. The remaining 13 SEER Areas contribute cases for the entire period 1996-2003. Relative survival rates are expressed as percents.

Trends in US Death Rates, 1995-2004 by Primary Cancer Site All Ages, by Race



Source: NCHS public use data file for the total US.
The APC is the Annual Percent Change over the time interval.
Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

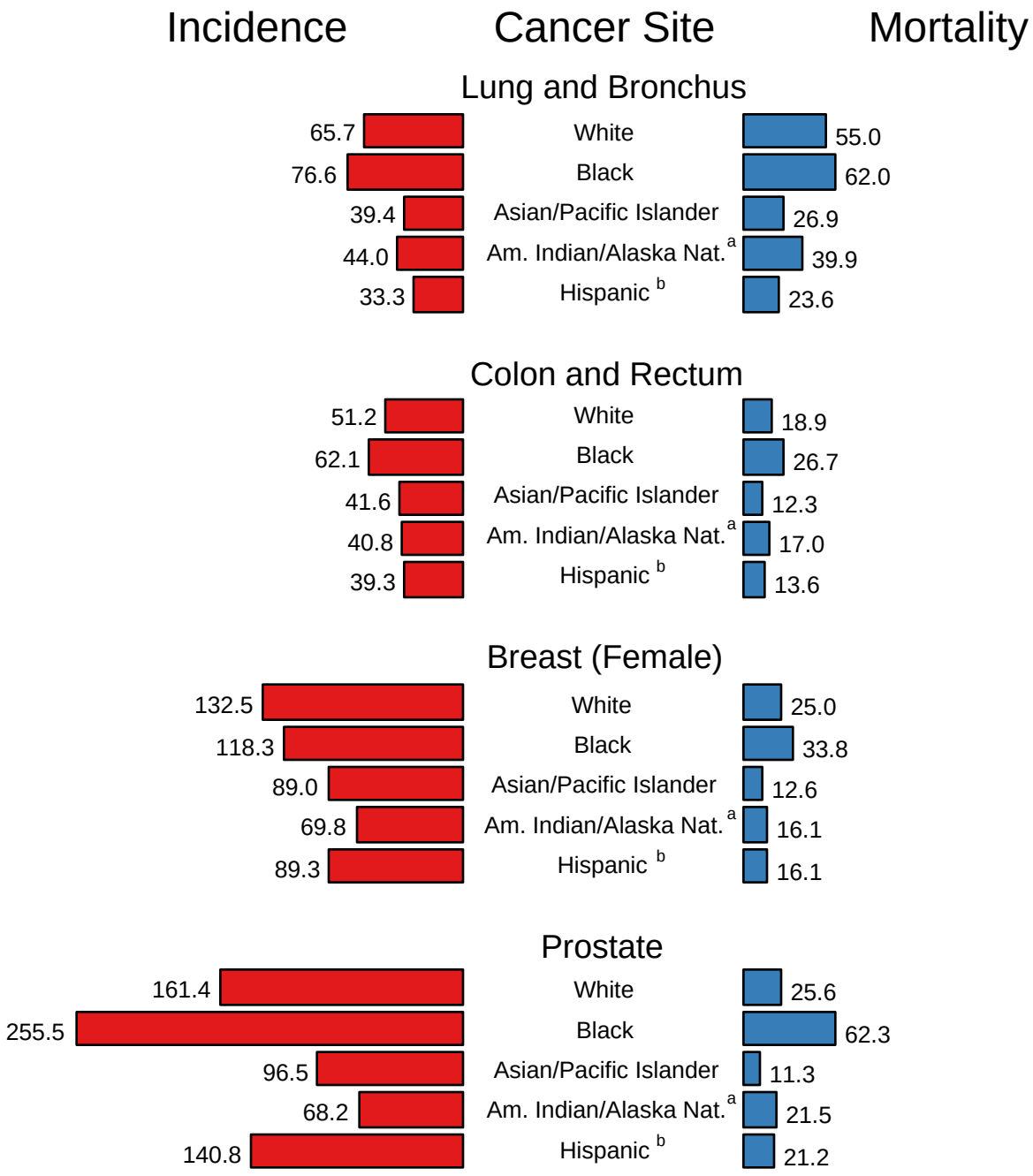
5-Year Relative Survival Rates
SEER Program, 1996-2003
Both Sexes, by Race



Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2003. The remaining 13 SEER Areas contribute cases for the entire period 1996-2003.

[a] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

SEER Cancer Incidence and US Death Rates, 2000-2004 By Cancer Site and Race



Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey) and NCHS public use data file for the total US.
Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

[a] Rates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry and Kentucky. Mortality data for Hispanics exclude cases from Minnesota, New Hampshire, and North Dakota.

SEER Incidence 1995-2004
Males by Race/Ethnicity

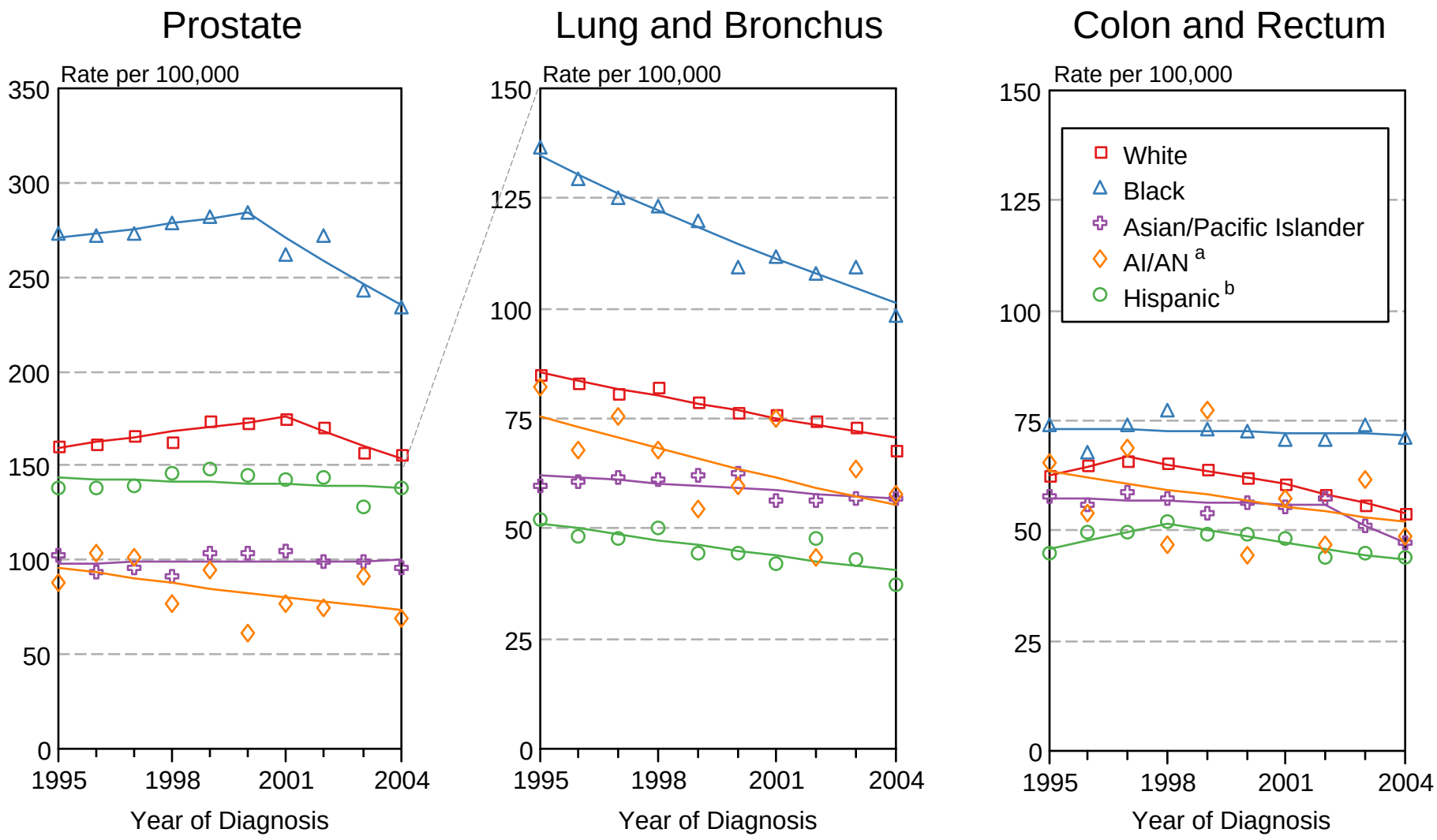


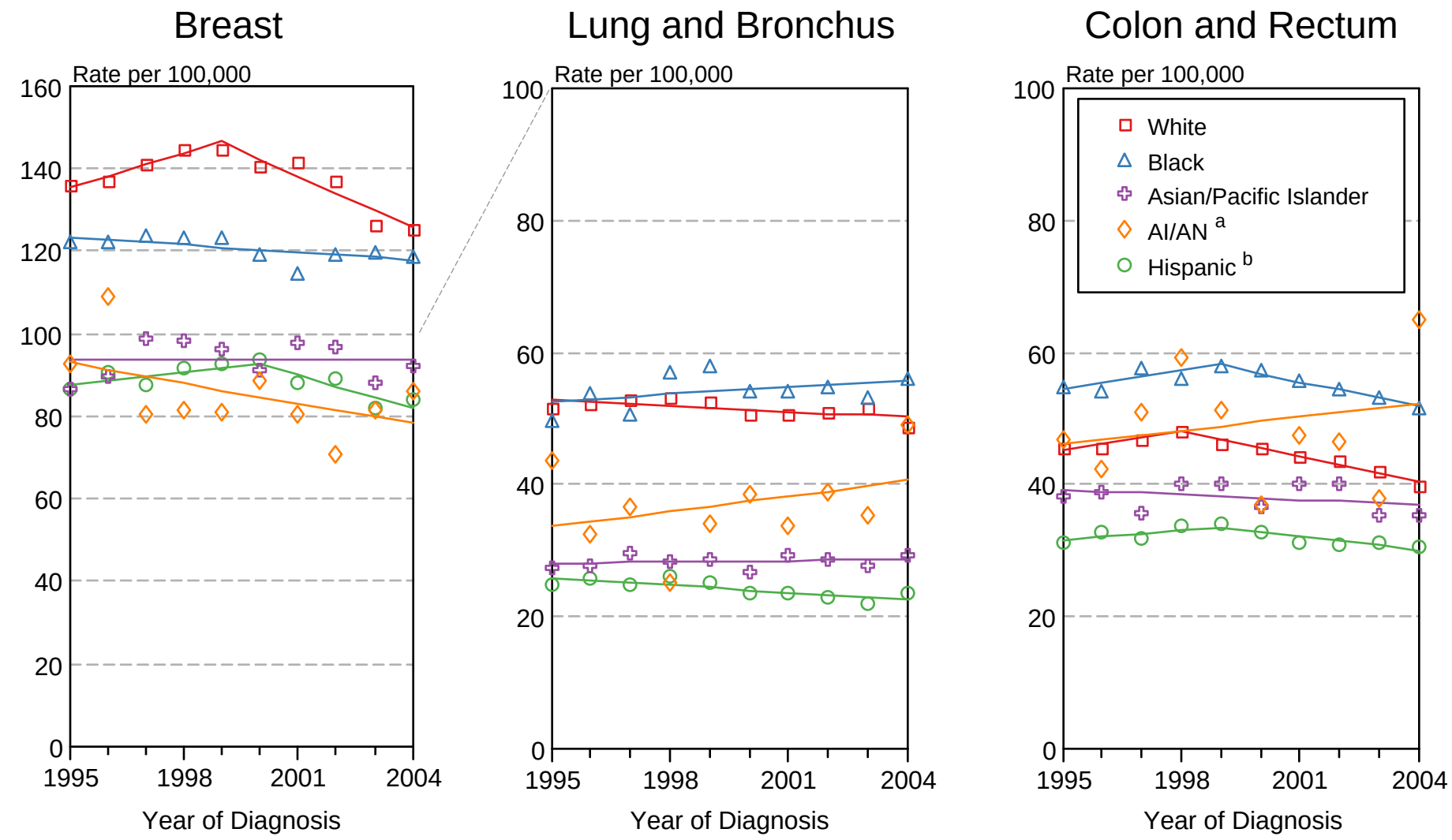
Figure I-13

Source: SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.

[a] Incidence rates for American Indian/Alaska Native (AI/AN) are based on the CHSDA(Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

SEER Incidence 1995-2004
Females by Race/Ethnicity



Source: SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.

[a] Incidence rates for American Indian/Alaska Native (AI/AN) are based on the CHSDA(Contract Health Service Delivery Area) counties.

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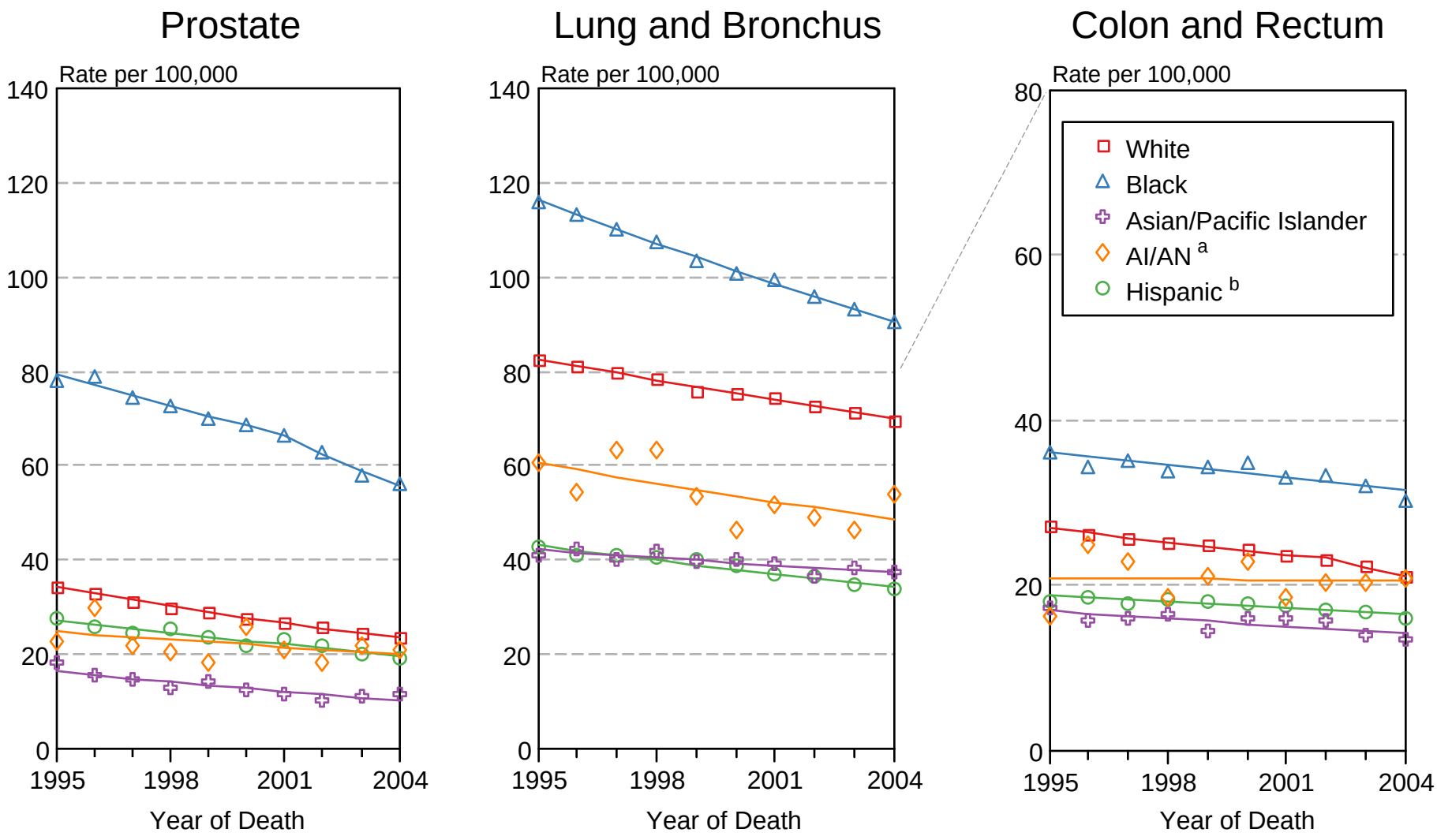
US Mortality 1995-2004
Males by Race/Ethnicity

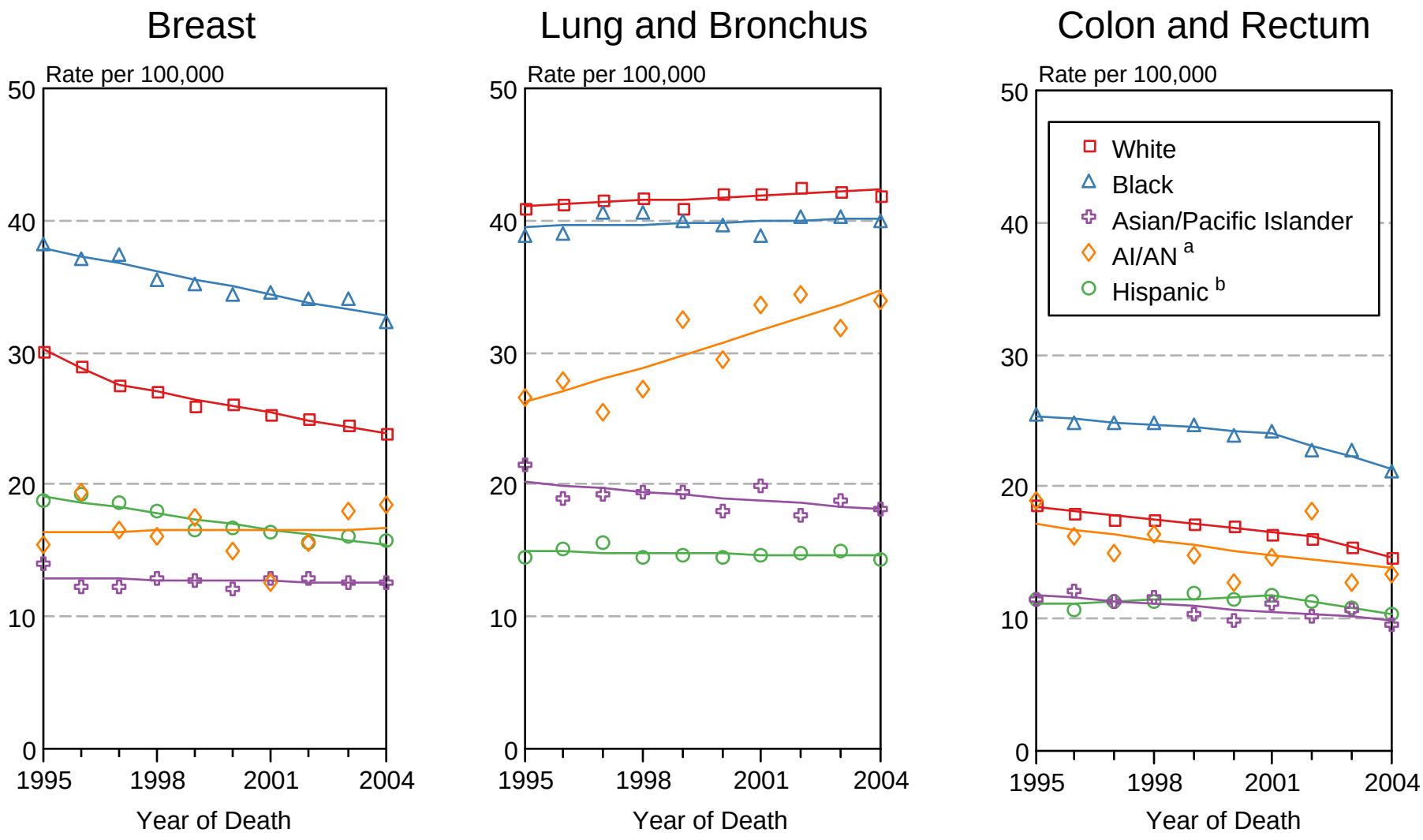


Source: NCHS public use data file for the total US. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.

[a] Mortality rates for American Indian/Alaska Native (AI/AN) are based on the CHSDA(Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Mortality data for Hispanics excludes cases from Maine, Minnesota, New Hampshire, North Dakota, and Oklahoma.

US Mortality 1995-2004
Females by Race/Ethnicity

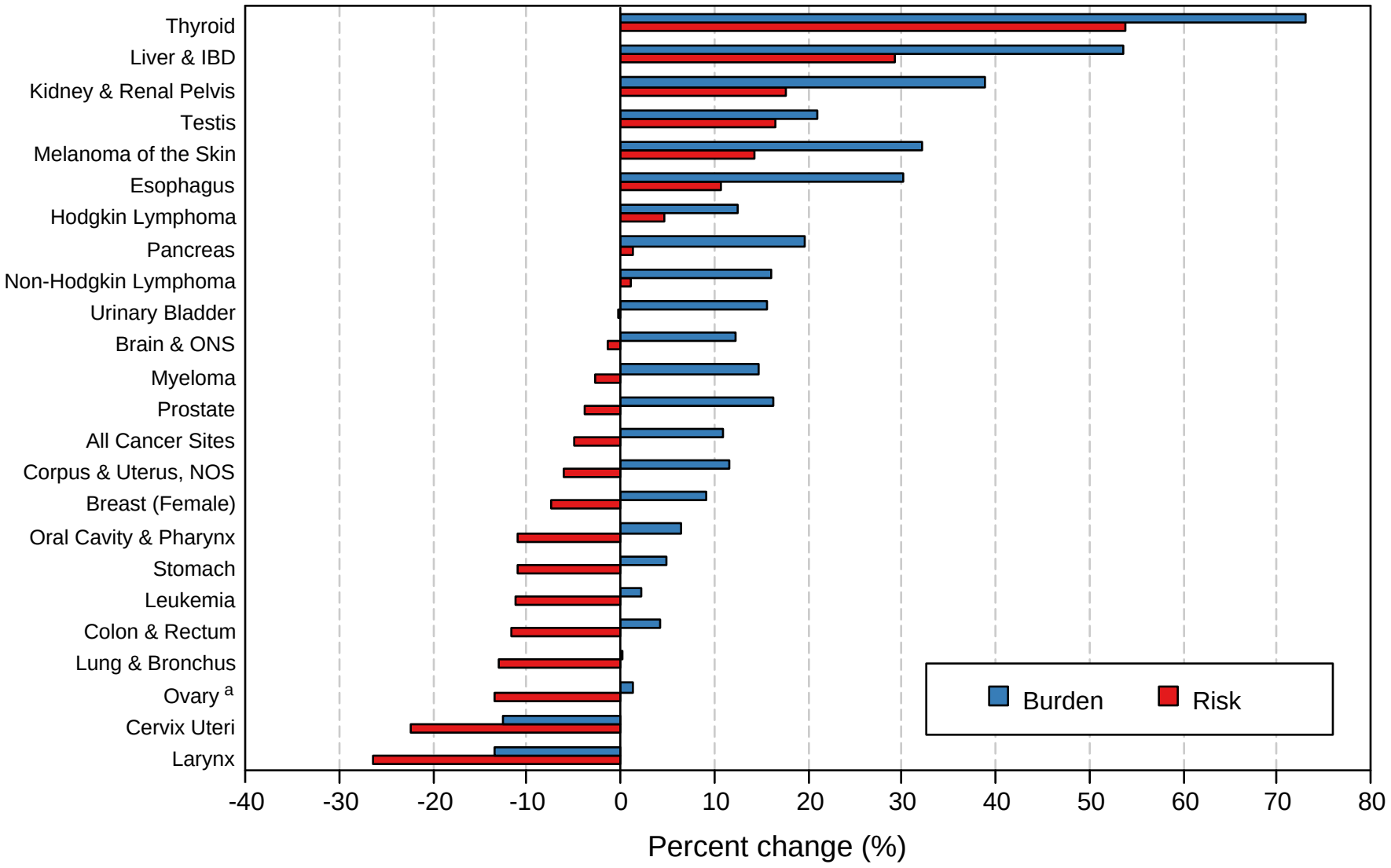


Source: NCHS public use data file for the total US. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.

[a] Mortality rates for American Indian/Alaska Native (AI/AN) are based on the CHSDA(Contract Health Service Delivery Area) counties.

[b] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Mortality data for Hispanics excludes cases from Maine, Minnesota, New Hampshire, North Dakota, and Oklahoma.

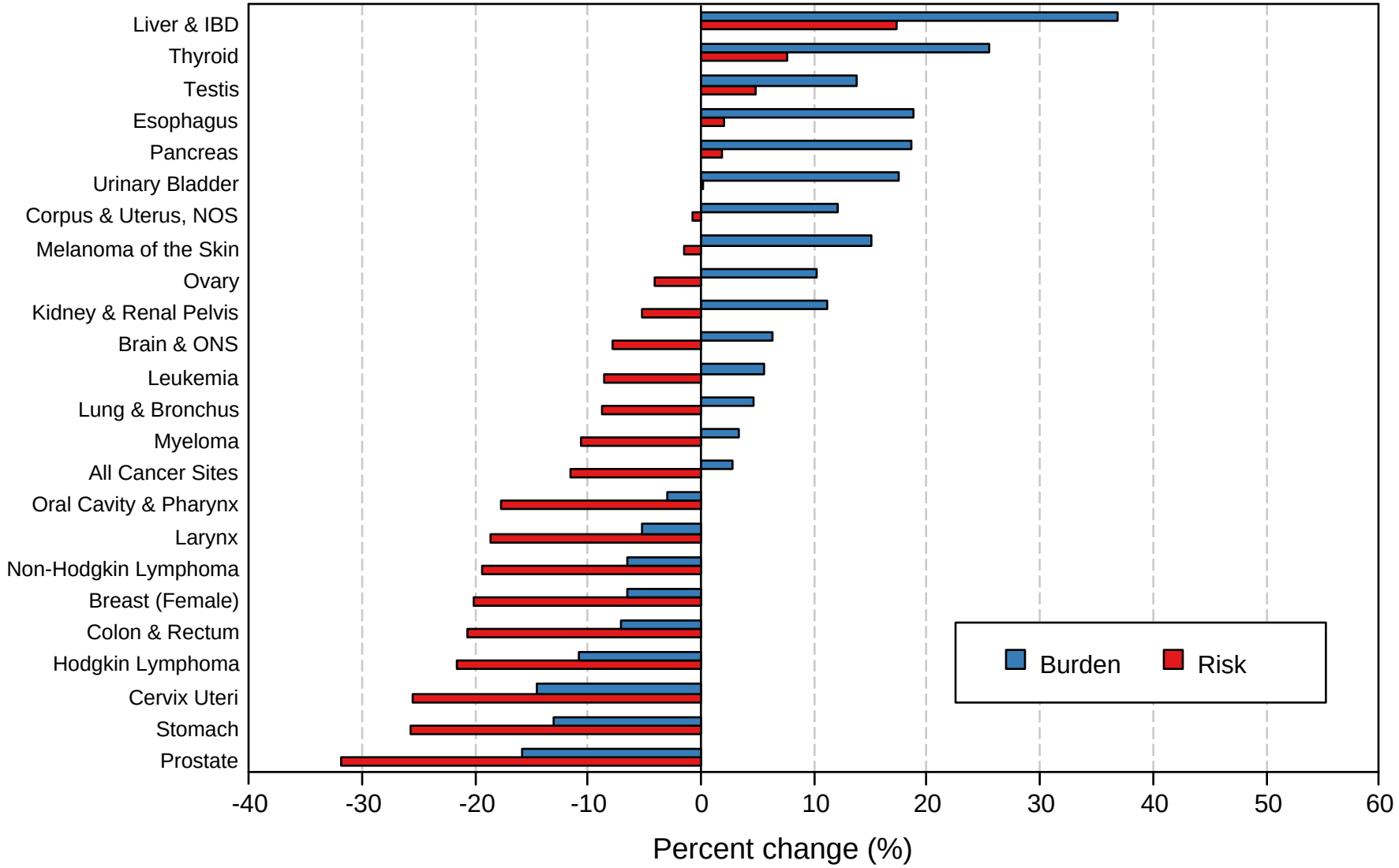
Incidence Percent Change between 1995 and 2004
Numbers (burden) vs Rates (risk)
All Ages



US Incidence estimates based on SEER age-specific rates applied to US population.
Burden is the change in the number of incidence cases between 1995 and 2004.
Risk is the change in the cancer incidence rates between 1995 and 2004.
[a] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

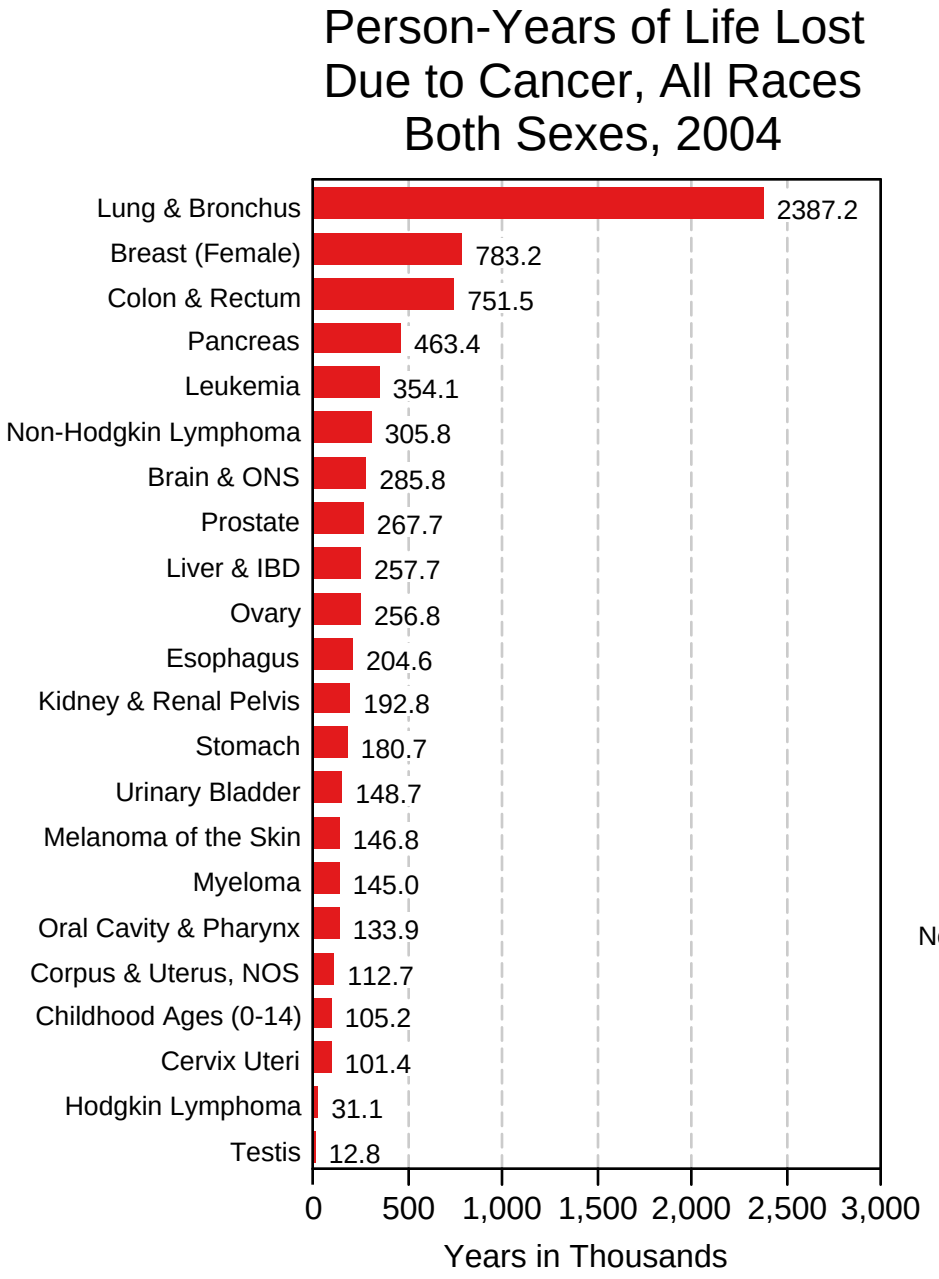
Figure I-17

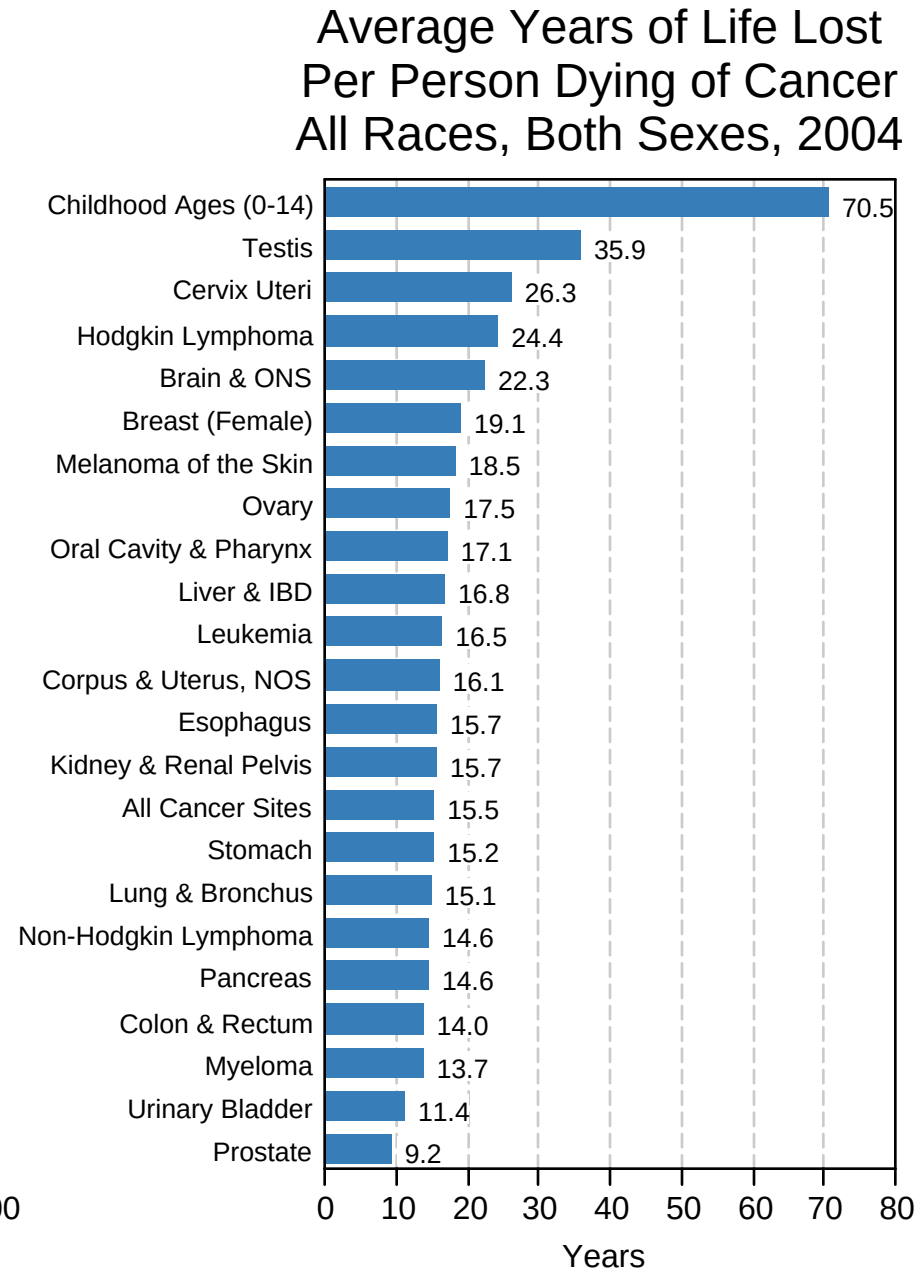
Mortality Percent Change between 1995 and 2004
Numbers (burden) vs Rates (risk)
All Ages



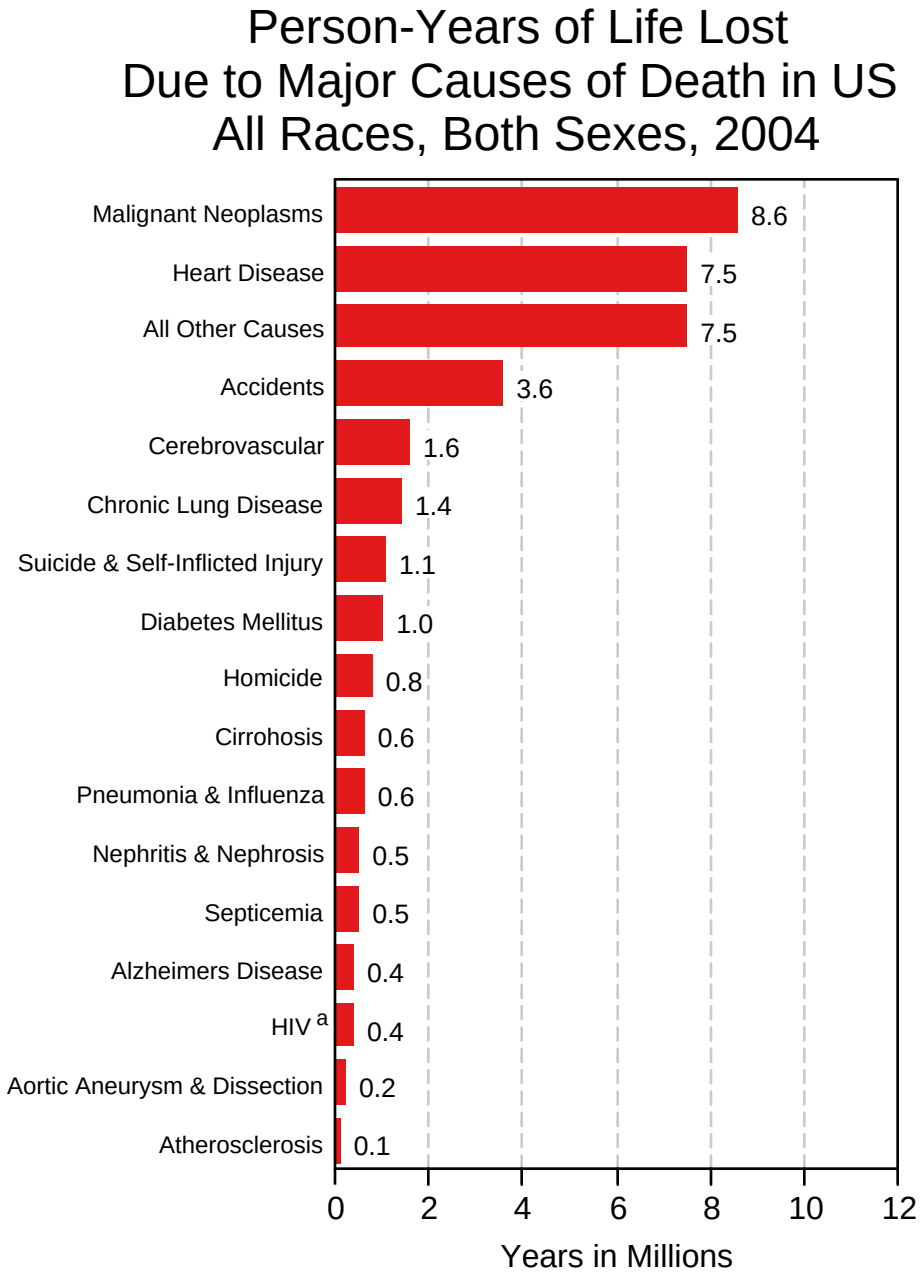
US Mortality estimates based on US age-specific rates applied to US population.
Burden is the change in the number of deaths between 1995 and 2004.
Risk is the change in the cancer death rates between 1995 and 2004.

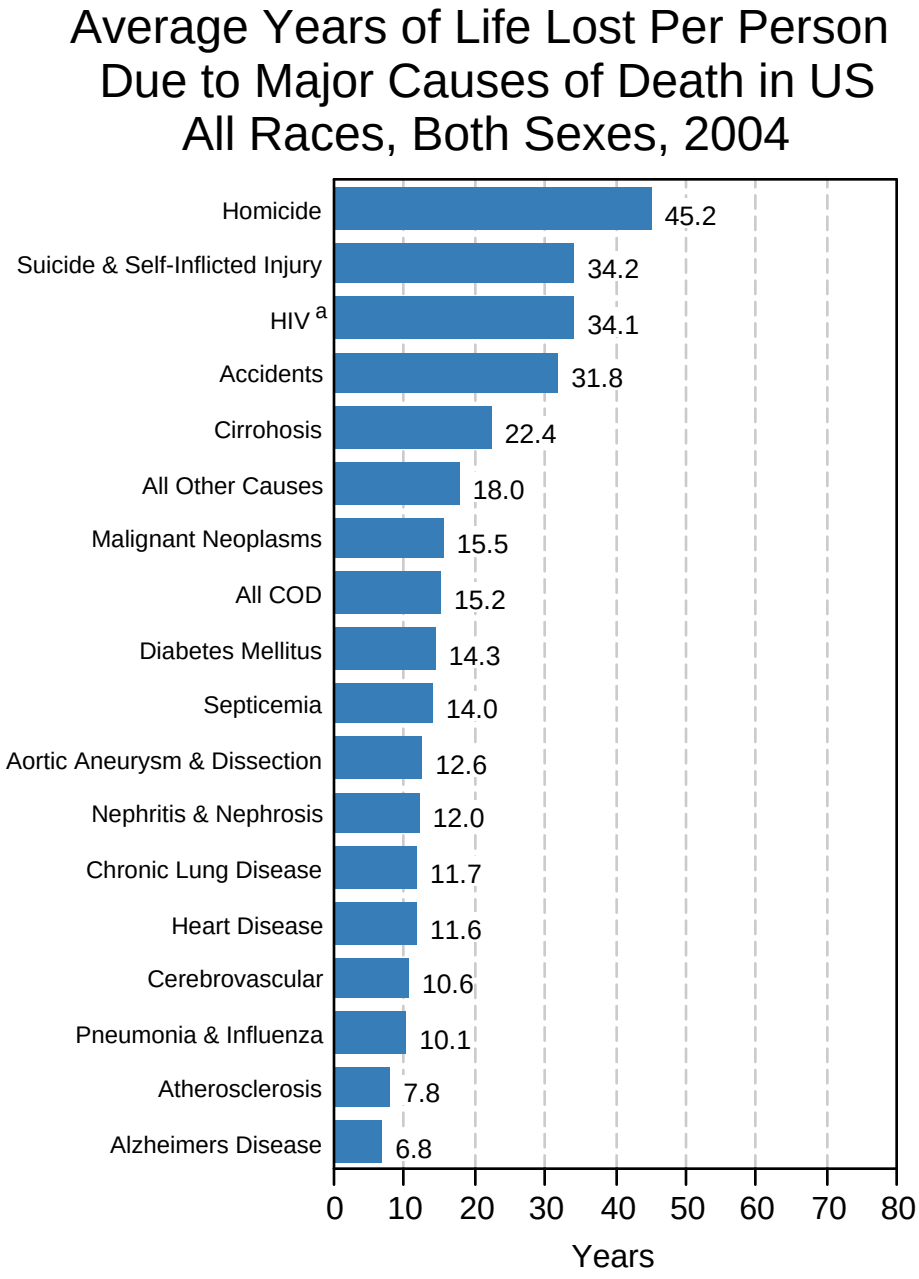
Figure I-18





Source: NCHS public use data file for the total US and 2003 Life Tables. Updated on June 28, 2007 to reflect March 28, 2007 update to NCHS 2003 Life Table.

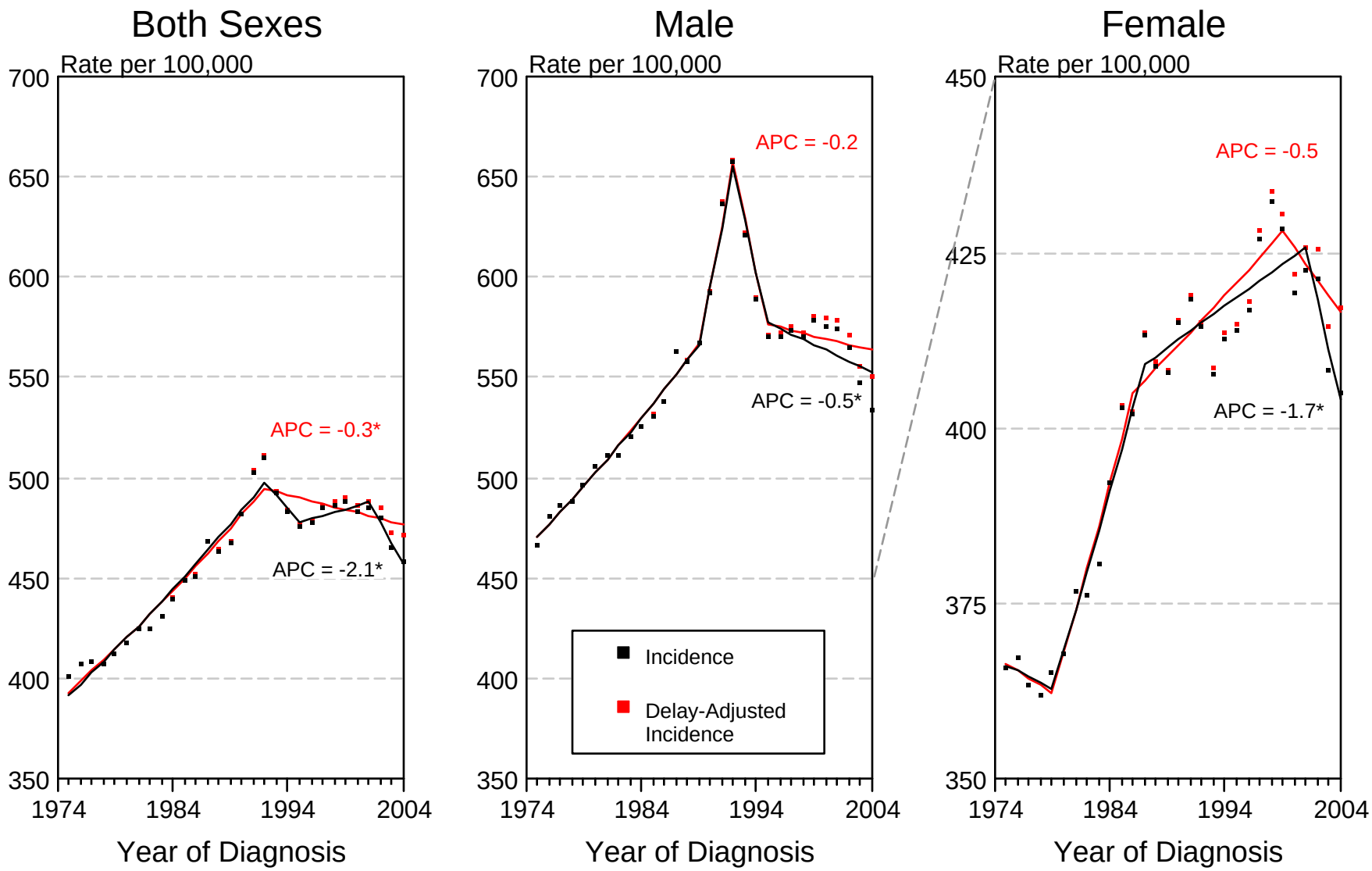




Source: NCHS public use data file for the total US and 2003 Life Tables. Updated on June 28, 2007 to reflect March 28, 2007 update to NCHS 2003 Life Table.

[a] Human Immunodeficiency Virus

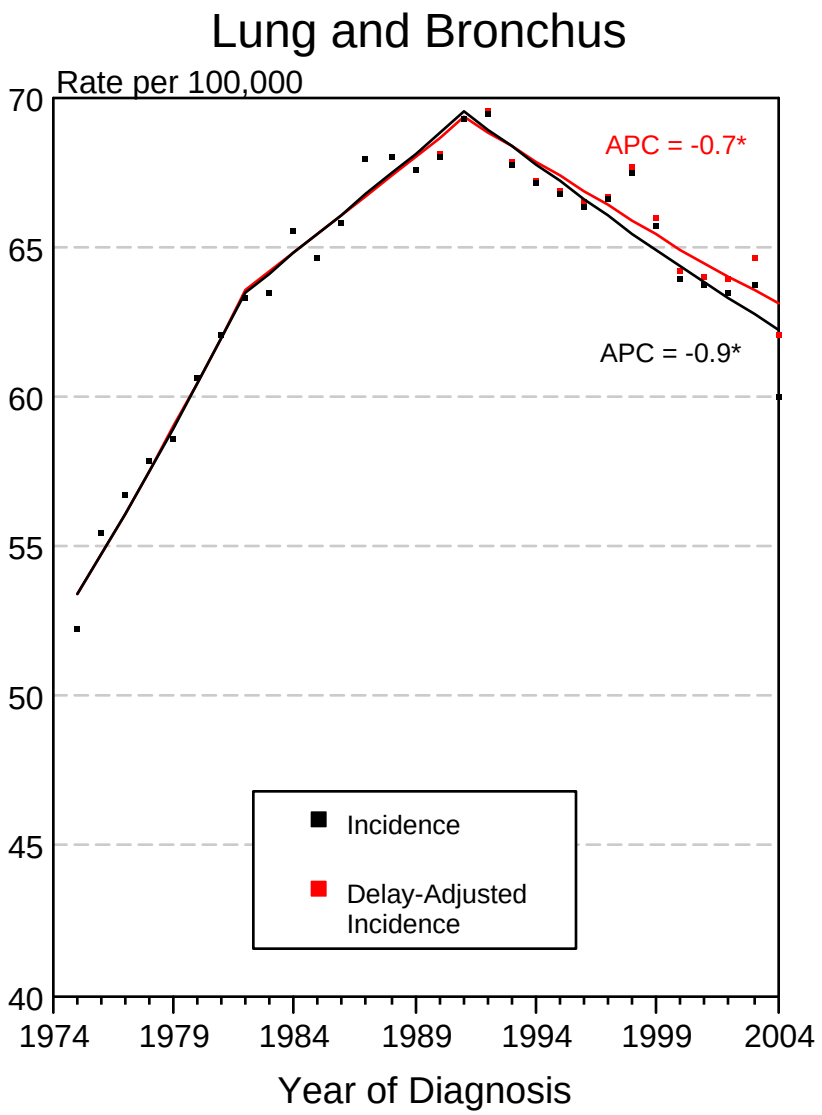
SEER Incidence and Delay Adjusted Incidence Rates[a]
All Cancer Sites, By Sex

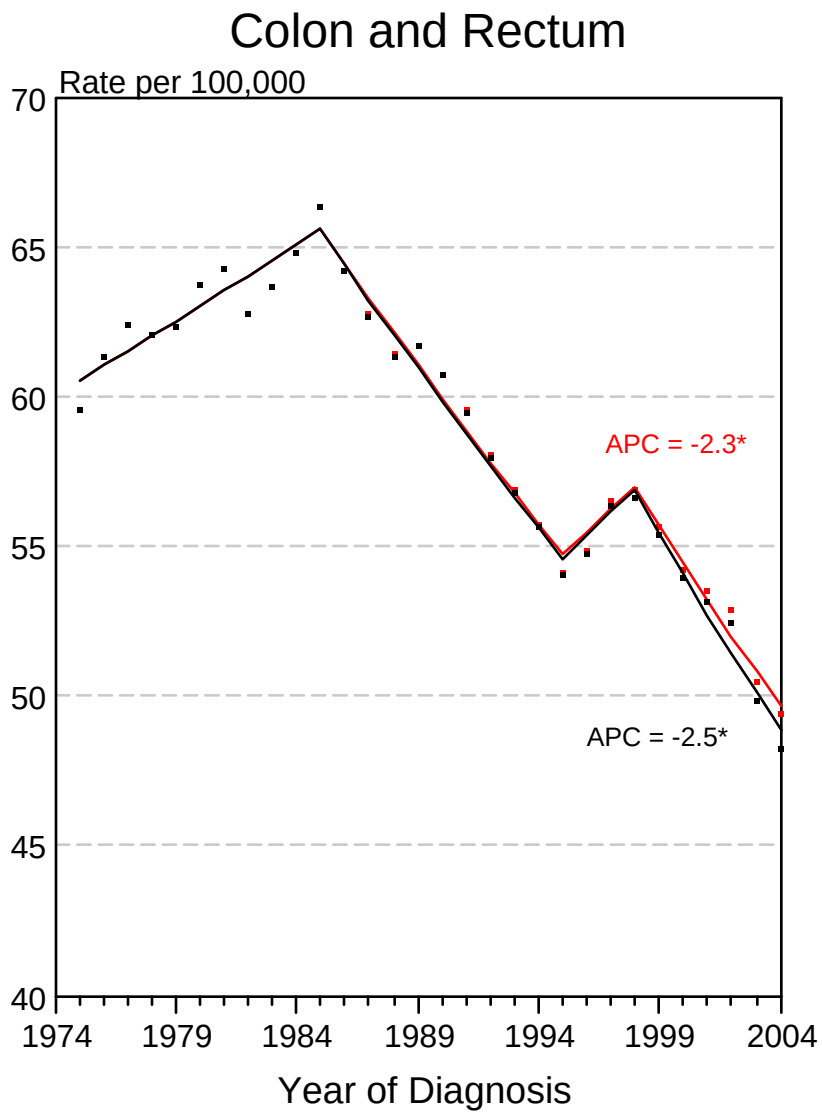


[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

SEER Incidence and Delay Adjusted Incidence Rates[a]
Both Sexes





[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.
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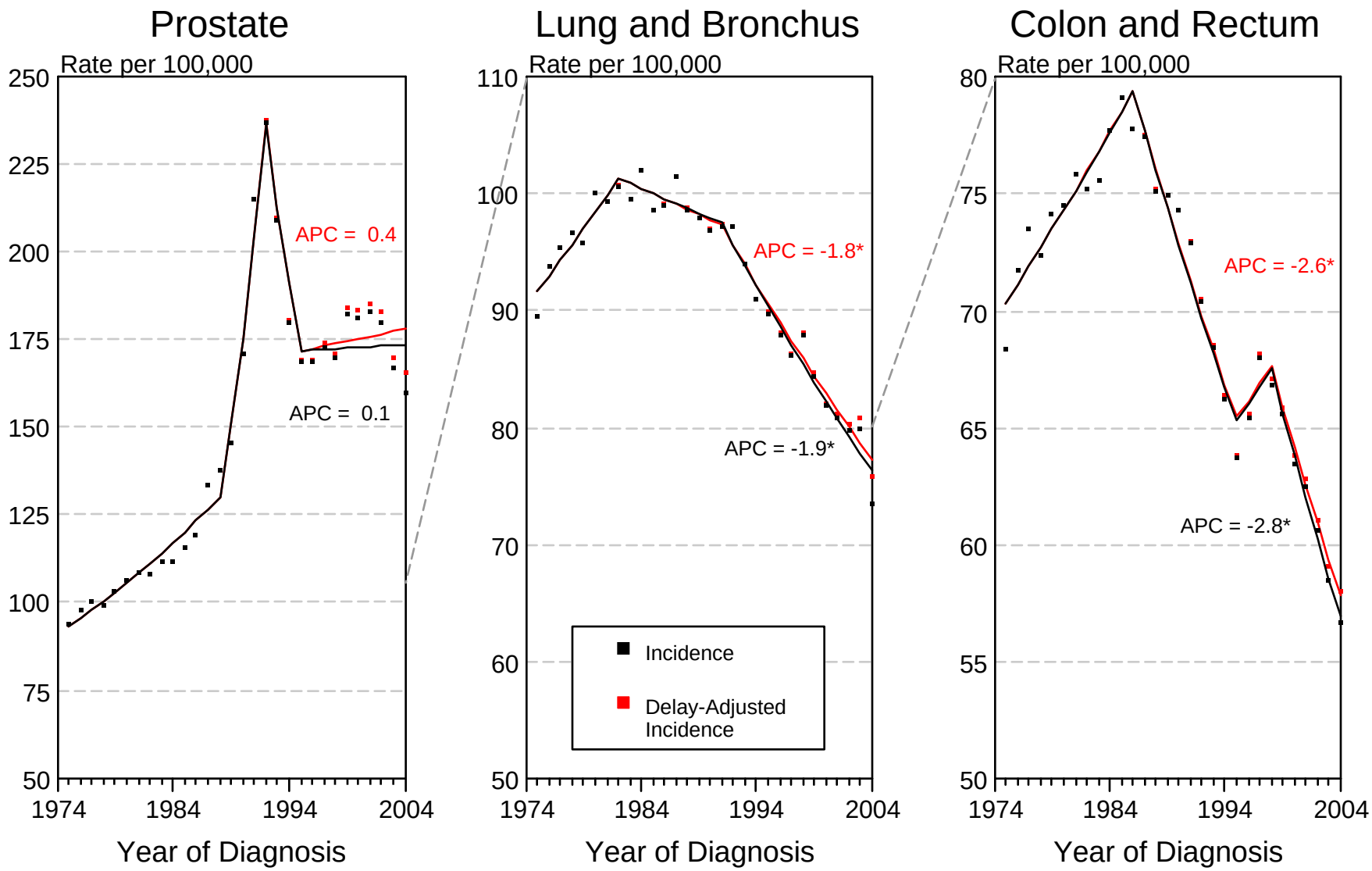
* The APC is significantly different from zero ($p < 0.05$).

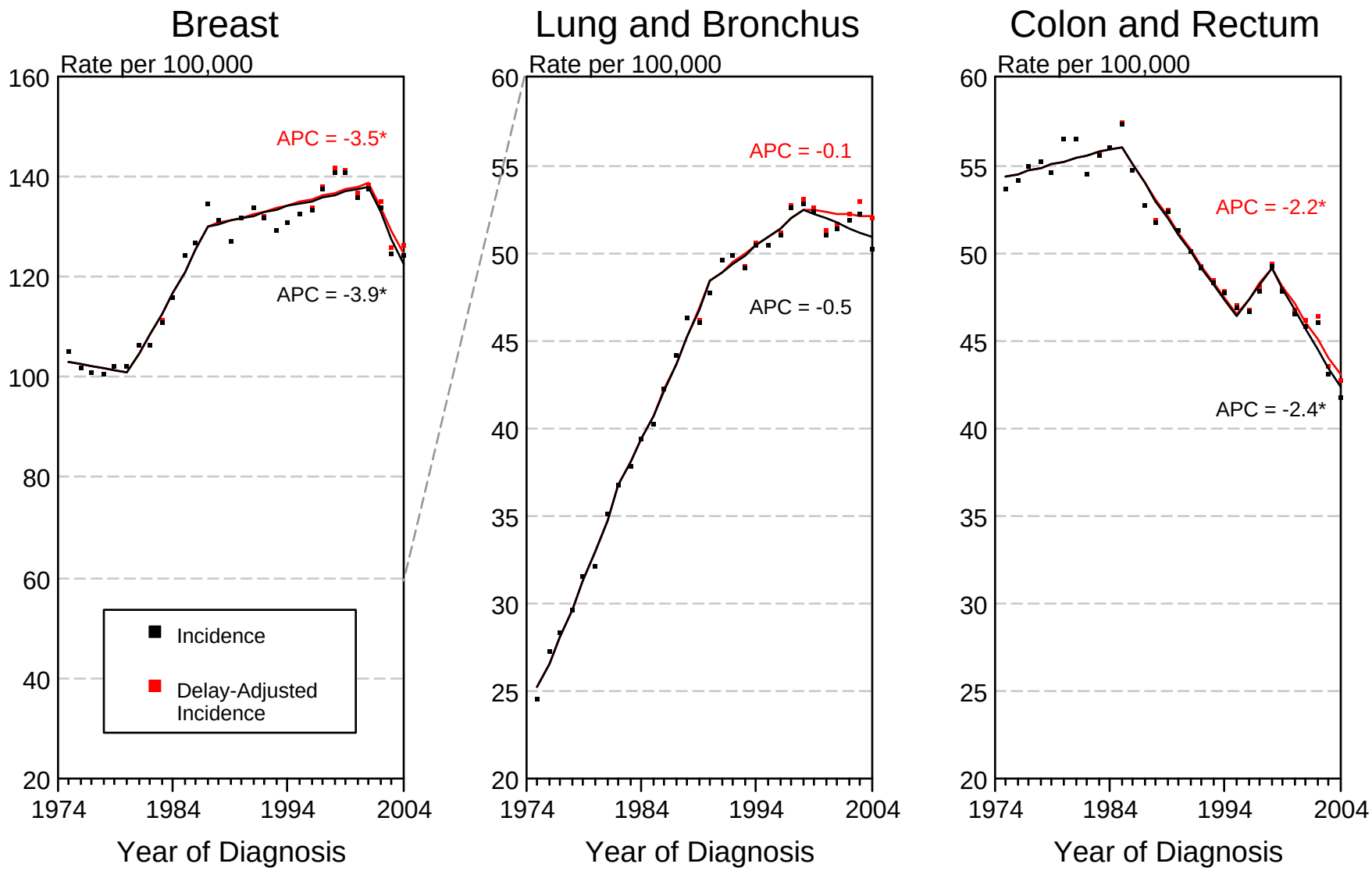
SEER Incidence and Delay Adjusted Incidence Rates[a]
Males



[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

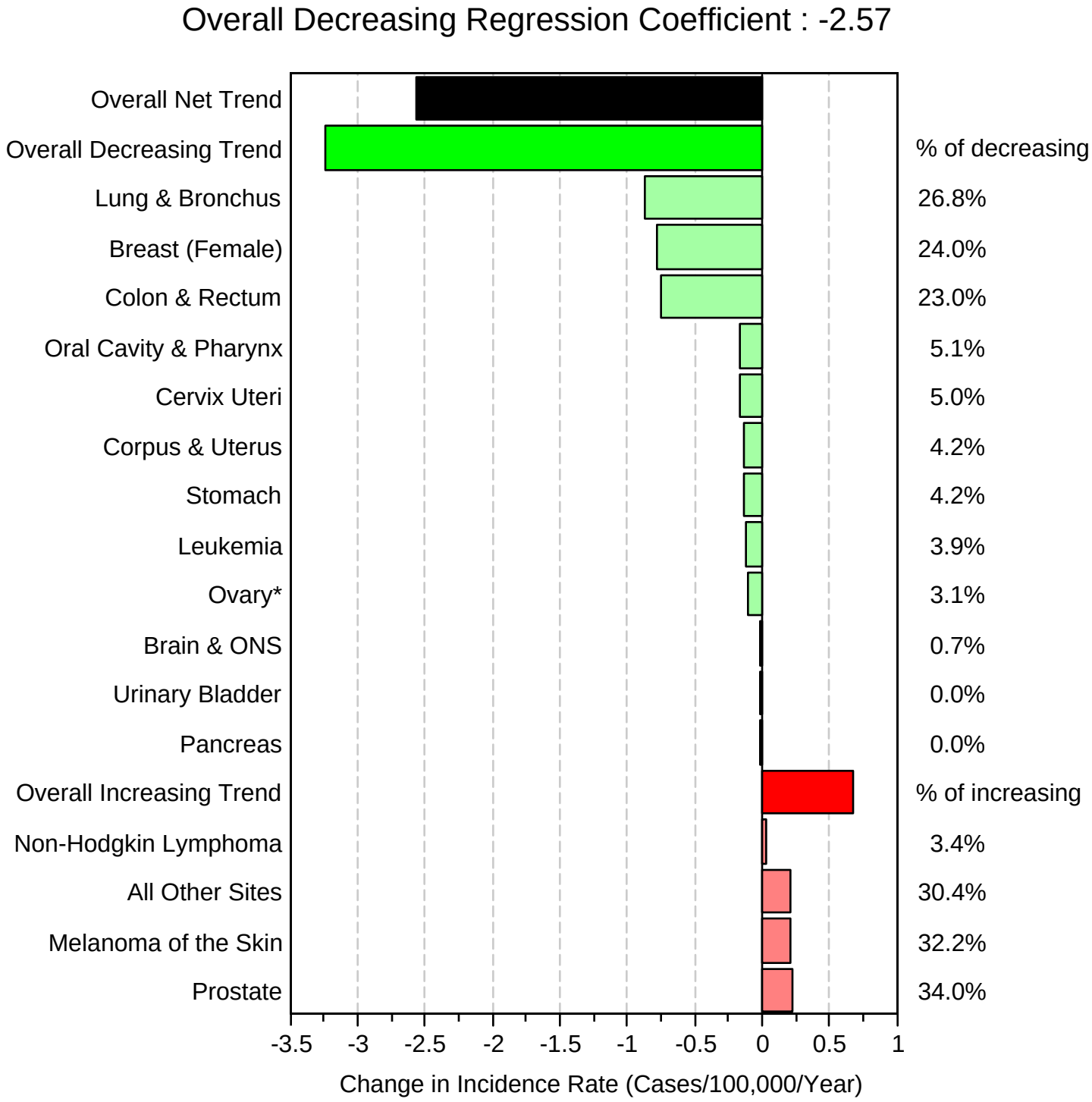
SEER Incidence and Delay Adjusted Incidence Rates[a]
Females



[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

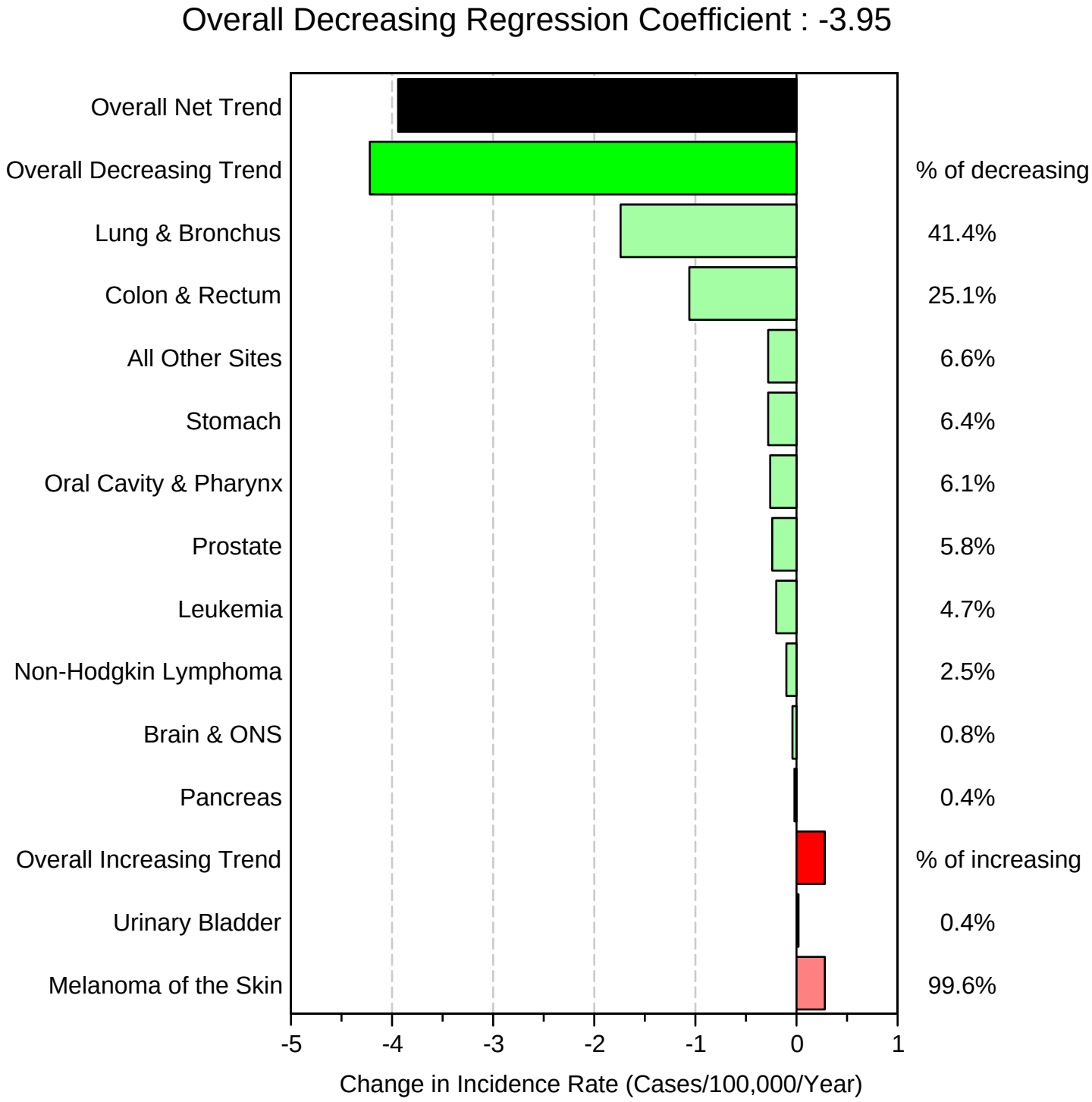
* The APC is significantly different from zero ($p < 0.05$).

Partition of Trend in Incidence Rates for the Time Period 1995-2004 All Races, Both Sexes



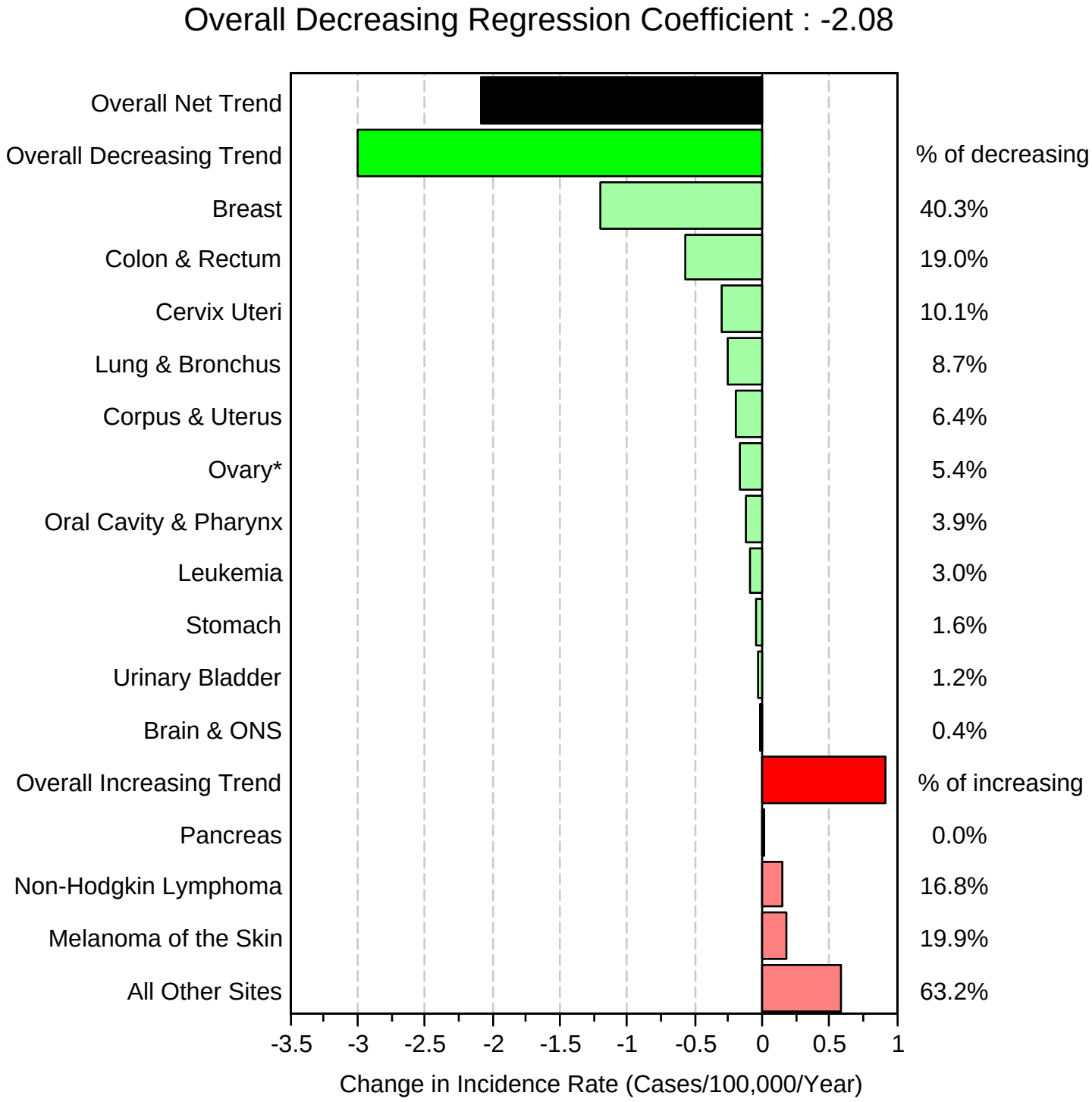
Source: SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).
Percents may not add to 100 due to rounding.
* Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Partition of Trend in Incidence Rates for the Time Period 1995-2004 All Races, Males



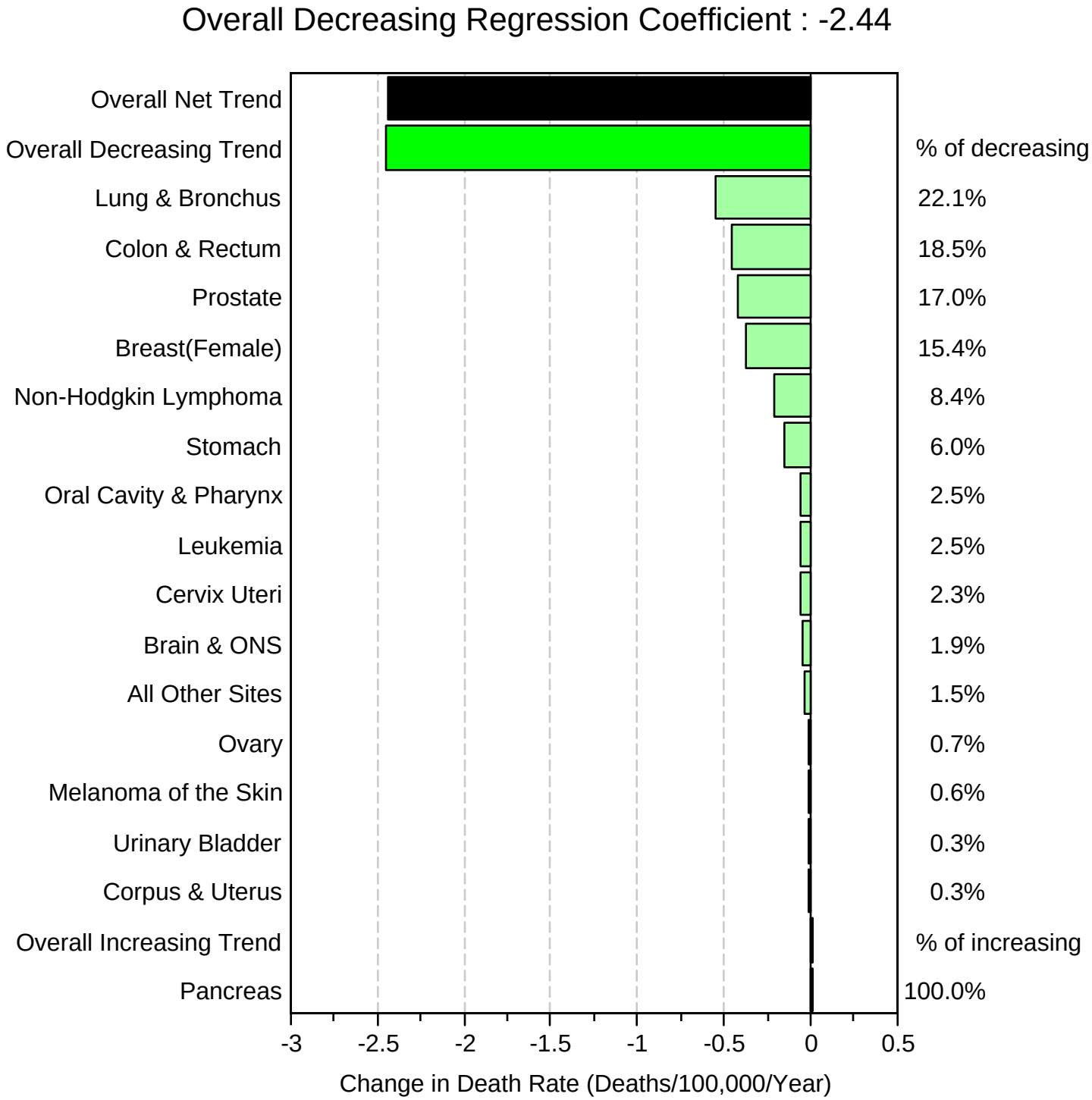
Source: SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).
Percents may not add to 100 due to rounding.

Partition of Trend in Incidence Rates for the Time Period 1995-2004 All Races, Females



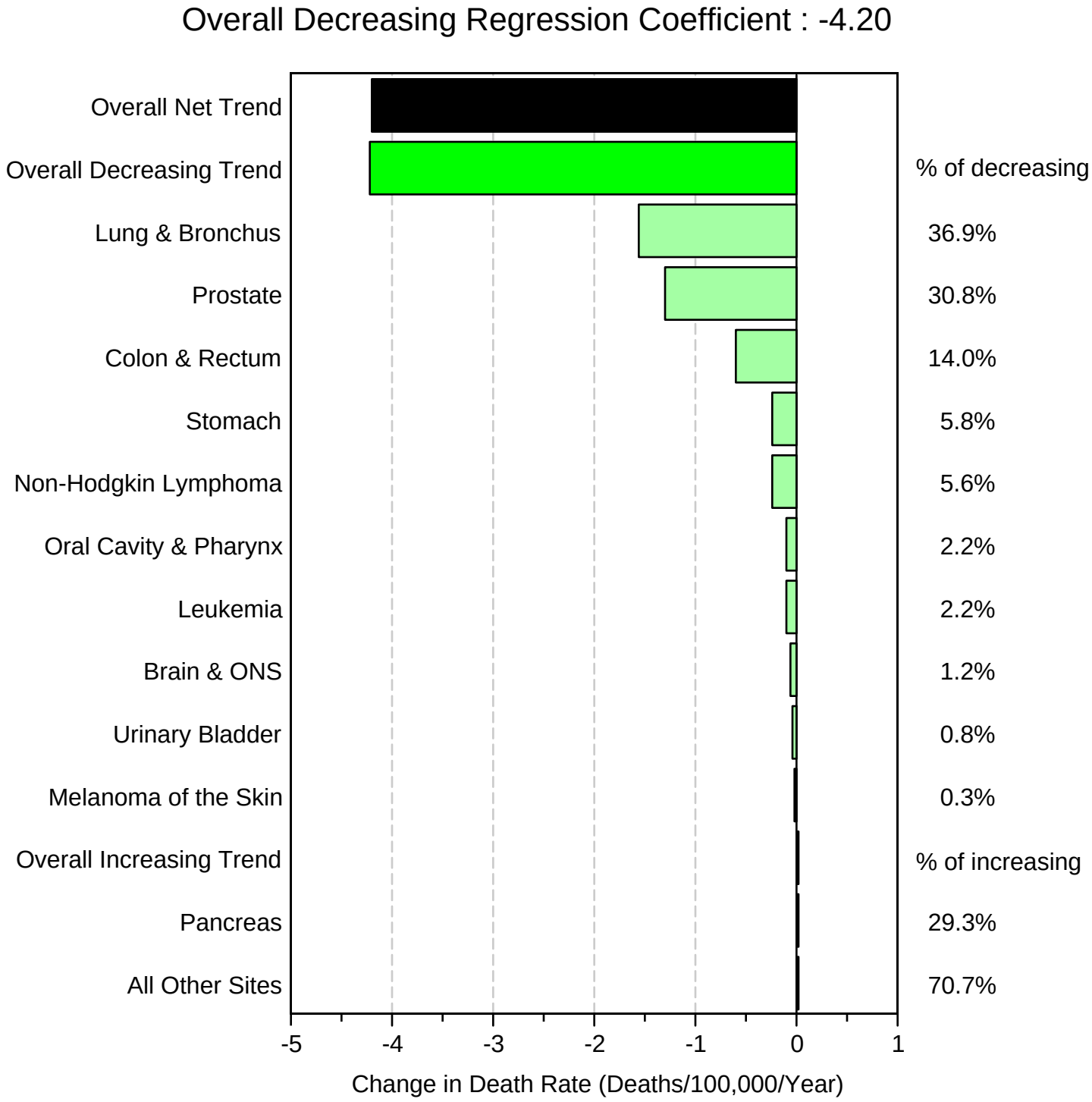
Source: SEER 13 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).
Percents may not add to 100 due to rounding.
* Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Partition of Trend in Death Rates for the Time Period 1995-2004 All Races, Both Sexes



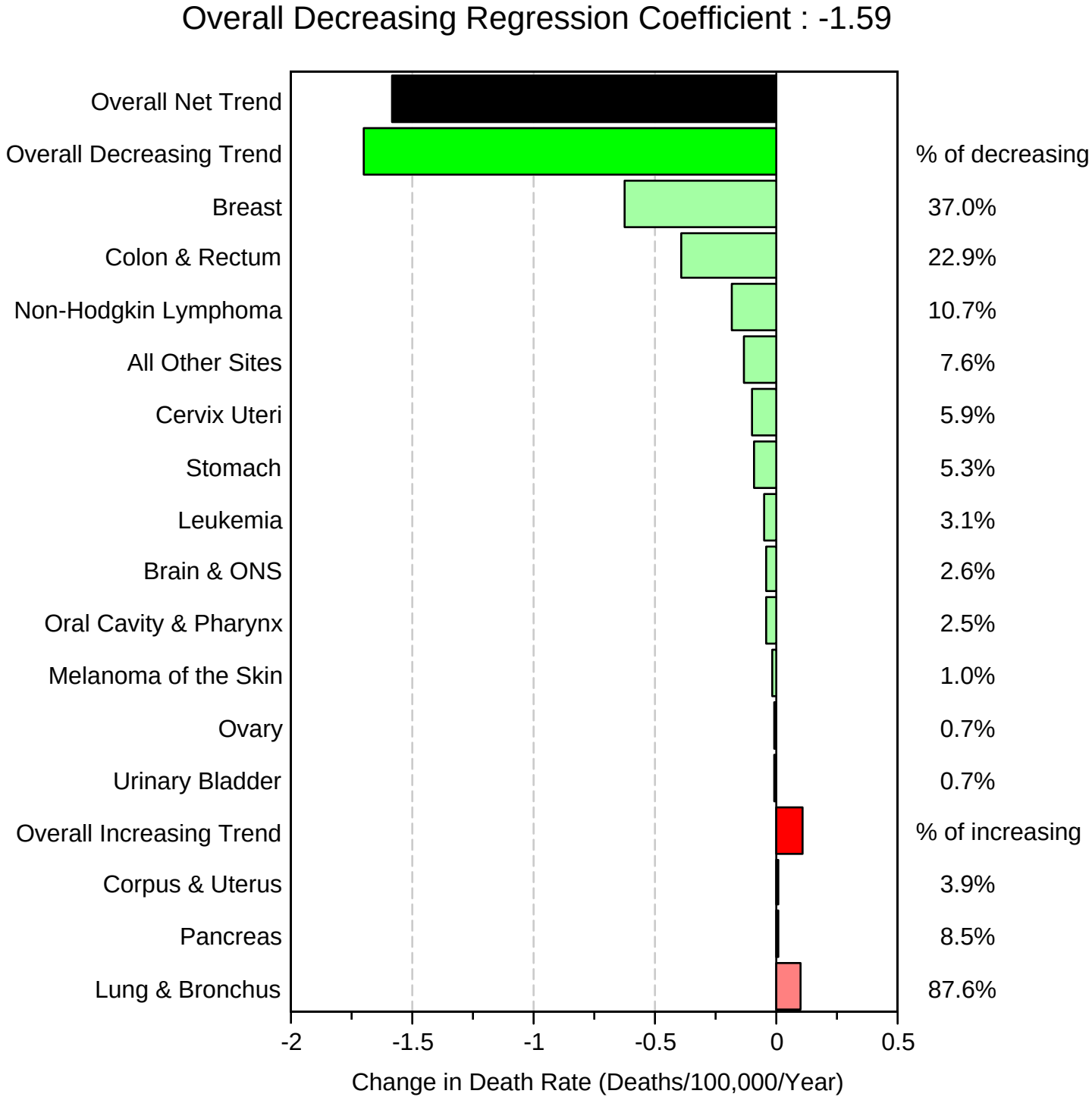
Source: NCHS public-use file for the total US.
Percents may not add to 100 due to rounding.

Partition of Trend in Death Rates for the Time Period 1995-2004 All Races, Males



Source: NCHS public-use file for the total US.
Percents may not add to 100 due to rounding.

Partition of Trend in Death Rates for the Time Period 1995-2004 All Races, Females



Source: NCHS public-use file for the total US.
Percents may not add to 100 due to rounding.