CANCER STATISTICS REVIEW 1975-2010: INTRODUCTION

The annual *SEER Cancer Statistics Review* (***CSR***) contains incidence, mortality, prevalence, and survival statistics from 1975 through the most recent year for which data are available. This report is published by the Surveillance Research Program of the National Cancer Institute, which manages the Surveillance, Epidemiology, and End Results (SEER) Program. 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.

The SEER program is an authoritative source of information on cancer incidence and survival in the United States. SEER collects and publishes these statistics from population-based registries covering 28% of the US population. The 18 SEER registries routinely collect data on patient demographics, primary tumor site, tumor morphology, extent of disease, first course of treatment, and active follow-up for vital status. Detailed information describing these fields can be found at http://seer.cancer.gov/resources/.

This report presents statistics on 29 primary sites and subsites, organized into site-specific chapters. Detailed statistics on cancer incidence, mortality, survival, and prevalence are reported by sex, race and ethnicity, age, stage at diagnosis, and geographic area. Information on tumor morphology is also presented. In addition, the ***CSR*** features a chapter on adolescent and young adult cancers and a chapter on childhood cancers. 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 from 1975 to the most recent year, median age at diagnosis, median age at death, and survival rates.

Delay-adjusted cancer incidence rates are a distinctive feature of the ***CSR***. Delay-adjustment corrects the current case count to account for underreporting and corrections to the data. The final delay-adjusted rates are valuable in more precisely estimating trends.

New features added to the ***CSR*** include:

- Estimated cases for 2010 added to the Overview chapter.

Changes in methodology to ***CSR*** include:

- Population estimates now incorporate information from the 2010 Census. See Technical Notes or http://seer.cancer.gov/popdata/ for more information.
- Cancer sites, as reported in the CSR, are defined and grouped by the primary site and histology of the tumor. Beginning with cases diagnosed in 2010, these definitions were updated for Hematopoietic codes. See Technical Notes or http://seer.cancer.gov/siterecode/icdo3_dwhoheme/ for more information.
- Survival time was calculated using pre-calculated months based on the exact day information. See http://seer.cancer.gov/survivaltime/.

- Starting with this release of the CSR, nine new counties have been designated as Indian Health Service's Contract Health Service Delivery Areas. Four of these counties are in SEER areas and so will be included in the calculation of rates for American Indian/Alaska Natives and all nine will be included in the calculation of mortality rates. See Technical Notes or http://seer.cancer.gov/seerstat/variables/seer/race_ethnicity/.
- Starting with patients diagnosed in 2007, the new multiple primary and histology coding rules may impact their incidence data for some cancer sites (e.g., female breast). However, the impact of the new rule on observed incidence is negligible for a majority of the cancer sites. To learn more about the multiple primary rules, visit: http://seer.cancer.gov/tools/mphrules/.

The ***CSR*** files are provided in both PDF and HTML formats. The HTML format is provided as an alternative and accessible version of the *SEER Cancer Statistics Review*. The current edition of the ***CSR*** is available on the web at http://seer.cancer.gov/csr/. Statistics from SEER may also be obtained via ***FastStats*** (http://seer.cancer.gov/faststats/) or ***Cancer Query Systems*** (http://seer.cancer.gov/canques/), which allow the user to access over 10,000,000 cancer statistics. The SEER Research Data file (http://seer.cancer.gov/data/) may be accessed by the public, either through ***SEER*Stat*** software or in an ASCII text format that can be analyzed with standard statistical software.

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 federal policy for reporting disease rates; it allows for the age-adjusted rate to more accurately reflect the current age distribution and burden of cancer.

INTERPRETATION OF CANCER STATISTICS

A number of factors may affect the interpretation of cancer incidence, mortality, and survival statistics provided in this report.

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. 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 frequencies of the component cancers, 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 caused by new screening procedures 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, it 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 then progress to invasive behavior 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 rates and survival estimates without changing the 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 for specific cancers are not presented; trends in stage distributions are presented rarely. However, it is possible to compare survival by stage.

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 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; the seventh edition is the most recent (Edge et al., 2010). The evolution of such classifications reflects the identification of new prognostic factors that may influence choice of treatment. Historically, the SEER Program has only collected 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. Recently the SEER Program has begun collecting **Collaborative Stage**. Collaborative Stage has the advantage of being a consolidated data collection system of three main staging systems (TNM, EOD, and Summary Stage) and allows combined pathological and clinical stage to be captured. New prognostic variables are introduced into staging for some cancers and so previously collected EOD data cannot determine new stage categories. There can be problems in assessing trends in stage of disease for these cancers. Only by reviewing the evolution of staging for a given cancer is it possible to determine what effects 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. For some sites, the historic stage (*localized*, *regional*, or *distant*) is not shown, either because of inconsistencies in its definition over time or because stage is not appropriate (such as for leukemias, which are all considered to be distant at diagnosis).

Interpreting relative survival: The relative survival estimate is the ratio of observed survival to expected survival for a given patient cohort. Expected survival 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, relative survival estimates the probability that a patient will *not* die of the diagnosed cancer within the given time interval. This is the same as the probability that the patient will either survive the interval or die of a different cause.

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 the general population. However, smoking is also a risk factor for other diseases so smokers have a shorter life expectancy than nonsmokers. For this reason, expected survival estimates for lung cancer patients based on life tables for the general population will be unrealistically high; since relative survival = observed / expected, this will result in relative-survival estimates that are *lower* than they would be if the population consisted only of smokers. The problem cannot be easily corrected because separate life tables for smokers and nonsmokers are not available. Moreover, amount of smoking (usually measured in

pack-years) is an important variable and cannot be easily quantified. In addition, expected survival may not be appropriate 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. This should be considered when interpreting relative survival for these cancers.

Previous to the *CSR* for 1973–1996, the expected survival 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 estimates in this review. There may be small variations among survival estimates calculated in this *CSR* and those in *CSR*s prior to 1973–1996.

Comparison with other databases: The SEER data are obtained from population-based cancer registries covering about 28 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 mentioned 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; most statistics from outside the US are based on the 2000 world standard million population. Examples of other databases are US Cancer Statistics (http://apps.nccd.cdc.gov/uscs) and CINA+ Online (http://www.cancer-rates.info/naaccr/).

It is sometimes of interest to compare survival 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 is the same for both data sources. Furthermore, patients on clinical trials 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 include 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: 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.* For a given diagnosis year, additional cancer cases that were previously overlooked 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. 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 revised and updated by the Bureau of the Census (**BOC**). Such changes may result in some differences between incidence and mortality rates for a given calendar period as published in different reports. See our website for the most current information about the population estimates (http://seer.cancer.gov/popdata/).

REFERENCES

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.

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.

Edge SB, Byrd DR, Compton CC, Fritz AG, Greene FL, Trotti A, editors. *AJCC Cancer Staging Manual*, 7th ed. New York (NY): Springer; 2010.

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.

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.

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.

TECHNICAL NOTES

There are four measures commonly used to assess the impact of a cancer in the general population and are reported in this review. 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 estimate 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. 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.

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. See the SEER Research Data (http://seer.cancer.gov/data/) for more information.

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**. In 2012, **Greater Georgia** (the parts of Georgia not included in Atlanta and Rural Georgia) was added to the SEER Program, with data retroactive to 2000.

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 and additional information on race and ethnicity. Other tables give statistics for the **SEER 18** areas; these are the SEER 13 plus Kentucky, Greater California, New Jersey, Louisiana, and Greater Georgia.

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 18 SEER geographic areas are used in this report; the given groups contain, respectively, approximately 9, 14, or 28 percent of the US population. By the end of the 2010 diagnosis year, the database of the 18 SEER registries (plus Arizona Indians) contained information on over 7 million cases diagnosed since 1973. New cases added in the most recent data year numbered over 449,000.

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.

DATA SOURCES

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) at least annually 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 et al., 1990). All cases before 1992 were machine-converted to ICD-O-2. Cases diagnosed 2001-2009 have been coded according to the third edition (**ICD-O-3**) (Fritz et al., 2000). Beginning with 2010 diagnoses, cases are coded based on ICD-O-3 updated for hematopoetic codes based on *WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues* (2008). 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.

Underreporting Adjustment for Veterans Affairs Cases: A CSR section on Department of Veterans Affairs (VA) underreporting (Howlader et al., 2009) was included in recent versions of the CSR. As of the current CSR this section was removed since available evidence indicates that VA underreporting is resolved as of diagnosis year 2010. The section of the CSR introduction about the reporting delay describes measures to address any backlog of VA cases reported after the initial reporting year.

Excluded cancers: Some cancers were excluded from most of the analyses. Myelodysplastic syndrome (MDS), for example, was reclassified in ICD-O-3 (effective diagnosis year 2001) from nonmalignant to malignant; other cancers so reclassified include endometrial stromal sarcoma (low grade), 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.

MORTALITY DATA

The SEER Program annually obtains from the National Center for Health Statistics (NCHS) a 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 death 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.

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 intercensal and Vintage 2011 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/) 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. The new intercensal estimates provide an adjustment of previous population estimates based on the actual 2010 Census results.

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/nvss/bridged_race.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 needed to assure the compatibility of all incidence, mortality and population datasets. Another modification affects only population estimates for the State of Hawaii. The Epidemiology Program of the Hawaii Cancer Research Center has developed its own set of population estimates, based on sample survey data collected by the Hawaii Department of Health. This effort grew out of a concern that the native Hawaiian population has been vastly undercounted in previous censuses. 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.

The 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. Beginning in 2013, CSR reporting diagnoses 1975-2010, CHSDA counties were updated with 9 new counties designated as CHSDA. Four of these are in SEER areas. This addition was made to better reflect AI/AN populations that had been living in these counties.

Usually the use of a population estimate for July 1 of a particular year reflects the average population of that area for the year. Both Hurricane Katrina and Hurricane Rita struck the Gulf Coast area of the United States in 2005. This had the effect of displacing large populations. Since there weren't any population estimates by age, race, sex, and county for time periods just after the hurricanes, it is very difficult to estimate the actual population at risk for certain areas along the Gulf Coast for 2005. For Louisiana, only the first six months of incidence data for 2005 coupled with ½ of the population estimate for July 1, 2005, were used to calculate cancer incidence. For death rate calculations, no adjustments were made to the total US population, but for the Gulf area, an adjustment for displaced populations was made for 2005 state rates. For more details, see http://seer.cancer.gov/popdata/methods.html.

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+.

STATISTICAL METHODS

ESTIMATED CANCER CASES AND DEATHS IN 2013

The American Cancer Society (**ACS**) projects the numbers of new cancer cases and cancer deaths in the US in 2013 (American Cancer Society, 2012). The ACS projects incidence in 2013 based on incidence rates for 1995-2009 from 49 states and the District of Columbia, representing about 98% of the US population. These high-quality incidence data were submitted to the North American Association of Central Cancer Registries (NAACCR) by 49 states (and District of Columbia) belonging to the SEER Program and/or the National Program of Cancer Registries (NPCR). For additional details please refer to http://www.cancer.org/docroot/STT/STT_0.asp

LONG-TERM TRENDS, 1950-2010

Trends in cancer mortality from 1950 to 2010 are summarized by age both for all cancers combined and for lung cancer (Table 1-2). These cancer mortality trends are based on the mortality experience in the entire US. Summaries of long-term trends back to 1950 in cancer survival are also shown for whites.

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

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 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 a 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.

RELATIVE SURVIVAL

Relative survival (Ederer, 1961) was developed to provide an objective measure of the probability of survival of cancer in the absence of other causes of death. It is a measure that is not influenced by changes in mortality from other causes and, therefore, provides a useful measure for both tracking survival across time and comparisons between racial/ethnic groups or between registries. For most cancer registries, cause-of-death information obtained from death certificates is either unavailable or unreliable due to misclassification error. Therefore, instead of calculating the probability of surviving cancer in the usual (cause-specific) way, considering deaths from other causes as censoring events, relative survival compares the observed survival proportion of a group of cancer patients with the survival of a “similar” theoretical cancer-free group. Relative survival is formally defined as the ratio of the observed survival (all causes of death) of a cohort of cancer patients to the expected survival of a comparable set of cancer-free individuals. Since a cohort of cancer-free individuals is difficult to obtain, life tables representing survival of the general population are used instead. The underlying assumption is that the cancer deaths are a negligible proportion of all deaths. To learn more on this topic, visit: http://surveillance.cancer.gov/survival/measures.html.

Expected survival can be calculated using different methods which vary with respect to the definition of the matching group. The three most common methods are: Ederer I (Ederer, et al., 1961), Ederer II (Ederer and Heise, 1959) and Hakulinen (Hakulinen, 1982). In previous

versions of SEER*Stat, relative survival has been calculated using Ederer I and Hakulinen methods, Ederer I being the default for calculations in the Cancer Statistics Review. In the Ederer I and Hakulinen methods, theoretical individuals are matched to each patient and are considered to be at risk for the entire follow-up. Hakulinen adjusts for potential follow-up times. Relative survival using expected rates derived via these two methods are very similar. However, recent research on relative survival has resuscitated the initial method to estimate expected rate: the Ederer II method. Although none of the three methods can be considered a gold standard, the Ederer II method has be shown to be in better alignment with the concept of net cancer survival. For that reason, as of 2011, we have switched to Ederer II as our default choice for calculating expected rate in SEER*Stat and the CSR. For more detail regarding this topic, read Cho et al., 2011 at: http://surveillance.cancer.gov/reports/.

CAUSE-SPECIFIC SURVIVAL

Cause-specific survival is a net-survival measure representing survival of a specified cause of death in the (theoretical) absence of other causes of death. Estimates are calculated by specifying the cause of death. Individuals who die of causes other than the specified cause are censored. This requires a cause-of-death variable that accurately captures all causes related to the specific cause. Cancer registries use algorithms to process causes of death from death certificates in order to identify a single, disease-specific, underlying cause of death. In some cases, attribution of a single cause of death may be difficult and misattribution may occur. For example, a death may be attributed to the site of metastasis instead of the primary site (Percy et al., 1981).

To capture deaths related to the specific cancer but not coded as such, the SEER cause-specific death classification variable is defined by taking into account causes of deaths in conjunction with tumor sequence (i.e., only one tumor or the first of subsequent tumors), site of the original cancer diagnosis, and comorbidities (e.g., AIDS and/or site-related diseases). To learn more on this topic, please read the recent article published at the Journal of National Cancer Institute (Howlader et al., 2010) or visit: http://seer.cancer.gov/causespecific/.

CANCER PREVALENCE

Methods: In this report prevalence is calculated at 1/1/2009. 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). Because SEER has available information for the various racial/ethnic groups for different numbers of years, different years and registries were used to estimate limited-duration prevalence. Prevalence estimates for all races combined, for whites, and for blacks use cases from 1975 through 2008 from the SEER 9 registries; prevalence estimates for Asian Pacific Islanders and Hispanics use cases diagnosed from 1990 through 2008 from the SEER 11 areas and rural Georgia.

The limited-duration prevalence 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.

Different methods can be used to determine which tumors are to be included for people diagnosed with multiple tumors. Unless otherwise specified, prevalence calculations include 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://surveillance.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, which can be found at http://surveillance.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 1/1/2009 *were estimated* by multiplying the SEER age-

and race-specific prevalence proportions by the corresponding US population estimates based on the average of 2008 and 2009 population estimates from the US Census Bureau. 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.

Complete prevalence estimates of the number of individuals in the US diagnosed with cancer as children (ages 0-19), including those surviving for more than 34 years, is calculated using a statistical method that estimates the number of childhood survivors diagnosed before 1975 (Simonetti et al., 2008; Mariotto et al., 2009). Limited-duration prevalence proportions by age at prevalence are not shown for childhood cancers (age at diagnosis 0-19) 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. For more details on available prevalence estimates, see http://surveillance.cancer.gov/prevalence/.

The overview chapter contains two prevalence tables. The first table reports US complete prevalence counts by age at prevalence and sex for some main cancer sites. The second table reports US prevalence counts for people diagnosed in the 5 years and 34 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 site-specific tables displays the percent of the population in the SEER 11 areas diagnosed in the previous 19 years with the specific cancer by 10-year age groups for the different racial/ethnic groups.

PROBABILITY OF BEING DIAGNOSED WITH OR DYING FROM CANCER

Lifetime and interval risks of being diagnosed with cancer: The probability of being diagnosed with cancer is computed by applying cross-sectional age-specific 2007-2010 incidence rates from the SEER 17 areas and death rates from those same areas 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 et al., 2003) and (Fay, 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.

Detailed methodology and software: 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://surveillance.cancer.gov/devcan/.

US 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 2000 US standard population. (In some previous editions of the CSR, the 1970 US standard million population was used; *death rates standardized to the 2000 US standard million population cannot be compared to death rates standardized to the 1970 US standard million population.*)

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

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

The **standard error** for each age-adjusted state death 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

$$SE_d = \text{Square Root of } [SE_S^2 + SE_U^2 - 2 * Cov_{S,U}]$$

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*.

JOINPOINT REGRESSION ANALYSIS OF CANCER TRENDS

An 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 finds the optimal number and location of places where a trend changes. The point (in time) when 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 continuous, piecewise-exponential function. Adjacent segments are connected at a joinpoint. The segments are connected because we assume that rates generally change smoothly, rather than "jump" abruptly. In each segment, the rates are assumed to grow or decay exponentially ($y = e^{mx+b}$), i.e., to change by a constant percentage each year. Thus the "slope" *m* in each segment can be associated with a fixed annual percent change (**APC**) by $APC = 100(e^m - 1)$.

Joinpoint analysis first assumes no joinpoints are needed to describe the data accurately, i.e., the trend over the entire interval 1975-2010 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. 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:

(1) Joinpoints occur only at exact years; the joinpoint is not necessarily the same as the data point for that year;
(2) The minimum time interval between consecutive joinpoints is three years;
(3) The first joinpoint is not earlier than two years after the first year of data;
(4) The last joinpoint is not later than two years before the last year of data;
(5) The maximum number of joinpoints is five for 1975-2010 (SEER 9) data and three for 1992-2010 (SEER 13) data.

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://surveillance.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 website. Starting with the 2011 edition of CSR, we have generated all our cancer trend statistics using a Linux-based *Joinpoint* program as opposed to the downloadable Windows-based program. As a result of using a different platform, in rare instances the results (e.g., # of joinpoints) may differ.

Average Annual Percent Change (AAPC) is a summary measure of a trend over a pre-specified fixed interval based on an underlying joinpoint model. It allows us to use a single number to describe the average trend over a period of multiple years. It can be estimated even if the joinpoint model indicates that there were changes in trends during those years, since it is estimated as a geometric weighted average of the joinpoint APCs, with the weights equal to the lengths of each segment over the pre-specified fixed interval. In this report, we have included AAPCs as an addendum to the underlying joinpoint trends, and as a summary measure to compare fixed interval trends by race/ethnicity. For more information on how the AAPC is calculated and the advantages of reporting an AAPC over APCs, see http://surveillance.cancer.gov/joinpoint/aapc.html.

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 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 2010 were first reported to the NCI in November 2012 and released to the public in April 2013. However, in each subsequent release of the SEER data, *records from all prior diagnosis years* (e.g., diagnosis years 2009 and earlier

in the 2012 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 recent rates to anticipate future corrections (additions, changes, and deletions) to the data*. These adjusted rates 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 SEER 9 and SEER 13 areas. The adjusted rates, factors, and trends are available for all cancers combined (malignant only except for urinary bladder), for female breast in situ, for urinary bladder (in situ and malignant combined), 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.

For more information on cancer incidence rates adjusted for reporting delay, see http://surveillance.cancer.gov/delay/. Estimates of observed incidence rates, delay-adjusted incidence rates, and delay-adjustments factors may be found in the Cancer Query Systems at http://seer.cancer.gov/canques/.

Adjustment for VA Case Backlog, Submission Year 2010

A policy change of the Department of Veterans Affairs (VA) regarding data sharing on VA cancer cases resulted in underreporting on VA hospital cases for submission years 2007-2011. Some special adjustments to case counts are necessary to fit the delay adjustment model. Beginning with the 2009 submission of SEER data, some SEER registries began accounting for the backlog of VA cases that would have been reported in 2006-2008. This upsurge in cases could cause perturbation in the delay model if fit in the usual manner.

As with the 2009 to 2011 submissions, to take account of the effect of the VA backlog in the 2012 submission on the delay adjustment model, the counts are adjusted by re-distributing VA cases to previous submission years according to the expected counts from the delay distribution conditional on the current submission. Specifically, for each of the diagnosis years 2004-2009, given the total cancer count in submission year 2012, the proportion of cumulative cancer count in each subsequent submission year is calculated based on the estimated parameters from previous year's reporting delay model. The VA cases in the 2012 submission are re-distributed

to each of the prior submission years according to this proportion. The adjusted total cancer count in that submission year was then calculated by combining the non-VA cases and the re-distributed VA counts.

Delay-adjusted incidence rates and trends are reported for all cancers combined (malignant only except for urinary bladder), for female breast in situ, for urinary bladder (in situ and malignant combined), 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.

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 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 α = 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 ≈ 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 α ≈ 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 —51% of the total population in 2010 (US Census Bureau, 2013)—than any state. In addition, their higher mortality rates for several types of cancer elevate the overall rate for the District.

STANDARD ERRORS OF RATES

Survival rates: In the tables presenting survival estimates, the magnitude of the standard error is given as a measure of the reliability of a given rate: the greater the standard error, the more uncertainty associated with the estimated 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 estimate could not be calculated, as is noted in the table footnotes.

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

$$\mathbf{SE(CR_t) = CR_t * \text{square root of } [q_1/(e_1-d_1) + q_2/(e_2-d_2) + \ldots + q_t/(e_t-d_t)]}$$

where CR_t is the t-year relative survival estimate, and for $i = 1, \ldots, t$,
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 SE of a crude incidence or mortality rate (Keyfitz, 1966), that is, the SE can be approximated by the rate divided by the square root of the number of cancer cases (or the number of 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.

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 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 population. The potential confounding effect of age is reduced when comparing age-adjusted rates based on the same standard population. For this report, the 2000 US standard 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.

Average Annual Percent Change: The average annual percent change (**AAPC**) is a summary measure of a trend over a pre-specified fixed interval based on an underlying joinpoint model. It allows us to use a single number to describe the average trend over a period of multiple years. It can be estimated even if the joinpoint model indicates that there were changes in trends during those years, since it is estimated as a weighted average of the joinpoint APCs, with the weights equal to the lengths of each subinterval over the pre-specified fixed interval.

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: The observed survival estimate 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: The relative survival estimate is calculated using a procedure (Ederer et al., 1961; Ederer and Heise, 1959) whereby the observed survival estimate is adjusted for expected mortality. The relative survival estimate approximates the likelihood that a patient 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 estimate 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://surveillance.cancer.gov/prevalence/*.

Stage of disease at diagnosis: Extent-of-disease information determines stage of disease at diagnosis. The **SEER summary 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 (Greene et al, 2002; Edge et al., 2010).

SOFTWARE USED TO GENERATE THE SEER CANCER STATISTICS REVIEW

The SEER Cancer Statistics Review includes statistics generated by a variety of statistical software including:

- SEER*Stat, statistical software for the analysis of SEER and other cancer databases, was used to generate incidence, mortality, prevalence, and survival statistics presented in the CSR.
- Analysis generated by the Joinpoint Regression Program are presented to better describe trends that are not constant over time.
- The DevCan system generated the probability of developing cancer from twelve SEER areas and the probability of dying from cancer from the total United States.
- The ComPrev software was used to calculate complete prevalence estimates.

Additional statistics can be obtained via SEER's Cancer Query Systems. These data retrieval applications provide access to pre-calculated cancer statistics stored in online databases.

REFERENCES

American Cancer Society. *Cancer Facts & Figures 2012*. Atlanta: American Cancer Society; 2012.

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.

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. *Stat Med* 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. *Stat Med* 1997;16:425-40.

Cho H, Howlader N, Mariotto AB, Cronin KA. Estimating relative survival for cancer patients from the SEER Program using expected rates based on Ederer I versus Ederer II method. Surveillance Research Program, National Cancer Institute; 2011. Technical Report #2011-01.

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 L, Gail M, Feuer EJ. Estimating the variance of disease prevalence estimates from population-based registries. *Biometrics* 2002;58(3):684-8.

Day JC. *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995 to 2050*, US Census Bureau, Current Population Reports, P25-1130, US Government Printing Office, Washington, DC, 1996. Available from: 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.

Ederer F, Heise H. Instructions to IBM 650 Programmers in Processing Survival Computations, Technical, End Results Evaluation Section, National Cancer Institute, 1959.

Edge SB, Byrd DR, Compton CC, Fritz AG, Greene FL, Trotti A III. *AJCC Cancer Staging Manual*, 7th ed. New York (NY): Springer; 2010.

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. Available from: 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. 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.

Greene FL, Page DL, Fleming ID, Fritz AG, Balch CM, Haller DG, Morrow M, editors. *AJCC Cancer Staging Manual*, 6th ed. New York (NY): Springer; 2002.

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

Hakulinen T. Cancer survival corrected for heterogeneity in patient withdrawal. *Biometrics* 1982;38:933-942.

Harris JE. Reporting delays and the incidence of AIDS. *J Am Stat Assoc* 1990;85:915-924.

Howlader N, Ries LAG, Mariotto AB, Reichman ME, Ruhl J, Cronin KA. Improved estimates of cancer-specific survival rates from population-based data. *J Natl Cancer Inst* 2010;102:1-15.

Howlader N, Ries LAG, Stinchcomb DG, Edwards BK. The impact of underreported Veterans

Affairs data on national cancer statistics: analysis using population-based SEER registries. *J Natl Cancer Inst* 2009;101(7):533-536.

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.

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. Boston: PWS-Kent, 1988.

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, Stanek E, Gloeckler L. Accuracy of cancer death certificates and its effect on cancer mortality statistics. . *Am J Public Health* 1981;71: 3242-3250.

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.

Siegel R, Naishadham D, Jemal A. Cancer statistics, 2012. *CA Cancer J Clin* 2012 Jan-Feb;62(1):10-29.

Simonetti A, Gigli A, Capocaccia R, Mariotto A. Estimating complete prevalence of cancers diagnosed in childhood. *Stat Med* 2008 Mar 30;27(7):990-1007.

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 from: http://www.cdc.gov/cancer/npcr/uscs/index.htm

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

US Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report. Last Revised: Thursday, 04-Nov-2010 12:46:18 EDT.

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.

Zou J, Huang L, Midthune D, Horner MJ, Krapcho M, Feuer EJ. Effect of reporting year on delay modeling. Statistical Research and Applications Branch, National Cancer Institute; 2009. Technical Report #2009-01. Available from: http://surveillance.cancer.gov/reports/.

Table 1.1

Estimated New Cancer Cases and Deaths for 2013
All Races, By Sex

Primary Site	Estimated New Cases			Estimated Deaths		
	Total	Males	Females	Total	Males	Females
All Sites	1,660,290	854,790	805,500	580,350	306,920	273,430
Oral Cavity and Pharynx	41,380	29,620	11,760	7,890	5,500	2,390
Tongue	13,590	9,900	3,690	2,070	1,380	690
Mouth	11,400	6,730	4,670	1,800	1,080	720
Pharynx	13,930	11,200	2,730	2,400	1,790	610
Other Oral Cavity	2,460	1,790	670	1,640	1,260	380
Digestive System	290,200	160,750	129,450	144,570	82,700	61,870
Esophagus	17,990	14,440	3,550	15,210	12,220	2,990
Stomach	21,600	13,230	8,370	10,990	6,740	4,250
Small Intestine	8,810	4,670	4,140	1,170	610	560
Colon[a]	102,480	50,090	52,390	50,830	26,300	24,530
Rectum	40,340	23,590	16,750			
Anus, Anal Canal, and Anorectum	7,060	2,630	4,430	880	330	550
Liver and Intrahepatic Bile Duct	30,640	22,720	7,920	21,670	14,890	6,780
Gallbladder and Other Biliary	10,310	4,740	5,570	3,230	1,260	1,970
Pancreas	45,220	22,740	22,480	38,460	19,480	18,980
Other Digestive	5,750	1,900	3,850	2,130	870	1,260
Respiratory System	246,210	131,760	114,450	163,890	90,600	73,290
Larynx	12,260	9,680	2,580	3,630	2,860	770
Lung and Bronchus	228,190	118,080	110,110	159,480	87,260	72,220
Other Respiratory	5,760	4,000	1,760	780	480	300
Bones and Joints	3,010	1,680	1,330	1,440	810	630
Soft Tissue	11,410	6,290	5,120	4,390	2,500	1,890
Skin (excl. basal & squamous)	82,770	48,660	34,110	12,650	8,560	4,090
Melanoma of the Skin[b]	76,690	45,060	31,630	9,480	6,280	3,200
Other non-epithelial skin	6,080	3,600	2,480	3,170	2,280	890
Breast[b]	234,580	2,240	232,340	40,030	410	39,620
Genital Organs	339,810	248,080	91,730	58,480	30,400	28,080
Cervix (uterus)	12,340		12,340	4,030		4,030
Endometrium (uterus)	49,560		49,560	8,190		8,190
Ovary	22,240		22,240	14,030		14,030
Vulva	4,700		4,700	990		990
Vagina and other genital organs, female	2,890		2,890	840		840
Prostate	238,590	238,590			29,720	29,720
Testis	7,920	7,920			370	370
Penis and other genital organs, male	1,570	1,570			310	310
Urinary System	140,430	96,800	43,630	29,790	20,120	9,670
Urinary Bladder	72,570	54,610	17,960	15,210	10,820	4,390
Kidney and Renal Pelvis	65,150	40,430	24,720	13,680	8,780	4,900
Ureter and other urinary organs	2,710	1,760	950	900	520	380
Eye and Orbit	2,800	1,490	1,310	320	120	200
Brain and Other Nervous System	23,130	12,770	10,360	14,080	7,930	6,150
Endocrine System	62,710	16,210	46,500	2,770	1,270	1,500
Thyroid	60,220	14,910	45,310	1,850	810	1,040
Other Endocrine	2,490	1,300	1,190	920	460	460
Lymphoma	79,030	42,670	36,360	20,200	11,250	8,950
Hodgkin Lymphoma	9,290	5,070	4,220	1,180	660	520
Non-Hodgkin Lymphoma	69,740	37,600	32,140	19,020	10,590	8,430
Myeloma	22,350	12,440	9,910	10,710	6,070	4,640
Leukemia	48,610	27,880	20,730	23,720	13,660	10,060
Lymphocytic Leukemias	21,750	13,070	8,680	6,010	3,570	2,440
Myeloid Leukemias	20,510	11,240	9,270	10,980	6,270	4,710
Other leukemia	6,350	3,570	2,780	6,730	3,820	2,910
All Other Sites[c]	31,860	15,450	16,410	45,420	25,020	20,400

Cancer Facts & Figures – 2013, American Cancer Society (ACS), Atlanta, Georgia, 2013.
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 1995-2009, representing about 98% of the US population.
Estimated deaths are based on data from US Mortality Data, 1995-2009, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

[b] Carcinoma *in situ* of the breast accounts for about 64,640 new cases annually, and melanoma *in situ* accounts for about 61,300 new cases annually.

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

Table 1.2

Estimated New Cancer Cases and Actual Deaths for 2010
All Races, By Sex

Primary Site	Estimated New Cases			Estimated Deaths		
	Total	Males	Females	Total	Males	Females
All Sites	1,585,440	824,270	761,170	574,738	301,032	273,706
Oral Cavity and Pharynx	38,540	27,290	11,250	8,474	5,815	2,659
Tongue	11,850	8,500	3,350	2,125	1,421	704
Mouth	11,190	6,610	4,580	2,132	1,268	864
Pharynx	12,850	10,240	2,610	2,626	1,946	680
Other Oral Cavity	2,650	1,940	710	1,591	1,180	411
Digestive System	278,440	152,640	125,800	142,800	80,772	62,028
Esophagus	17,000	13,490	3,510	14,490	11,416	3,074
Stomach	21,390	13,100	8,290	11,390	6,703	4,687
Small Intestine	7,760	4,110	3,650	1,218	656	562
Colon[a]	103,340	50,470	52,870	52,045	27,073	24,972
Rectum	40,330	23,350	16,980			
Anus, Anal Canal, and Anorectum	6,130	2,300	3,830	813	335	478
Liver and Intrahepatic Bile Duct	25,920	18,800	7,120	20,304	13,657	6,647
Gallbladder and Other Biliary	9,720	4,390	5,330	3,624	1,424	2,200
Pancreas	41,740	20,920	20,820	36,888	18,699	18,189
Other Digestive	5,110	1,710	3,400	2,028	809	1,219
Respiratory System	238,740	130,380	108,360	162,866	91,237	71,629
Larynx	12,420	9,810	2,610	3,691	2,951	740
Lung and Bronchus	220,690	116,650	104,040	158,248	87,698	70,550
Other Respiratory	5,630	3,920	1,710	927	588	339
Bones and Joints	2,920	1,620	1,300	1,378	803	575
Soft Tissue	10,650	5,830	4,820	4,377	2,299	2,078
Skin (excl. basal & squamous)	73,150	42,830	30,320	12,125	8,147	3,978
Melanoma of the Skin	67,020	39,010	28,010	9,154	6,002	3,152
Other non-epithelial skin	6,130	3,820	2,310	2,971	2,145	826
Breast	217,770	2,100	215,670	41,435	439	40,996
Genital Organs	338,960	251,350	87,610	58,046	29,276	28,770
Cervix (uterus)	12,400		12,400	3,939		3,939
Endometrium (uterus)	46,090		46,090	8,402		8,402
Ovary	21,880		21,880	14,572		14,572
Vulva	4,520		4,520	942		942
Vagina and other genital organs, female	2,720		2,720	915		915
Prostate	241,890	241,890		28,560	28,560	
Testis	7,940	7,940		399	399	
Penis and other genital organs, male	1,520	1,520		317	317	
Urinary System	128,980	88,790	40,190	28,726	19,329	9,397
Urinary Bladder	69,370	51,940	17,430	14,730	10,428	4,302
Kidney and Renal Pelvis	56,850	35,140	21,710	13,219	8,436	4,783
Ureter and other urinary organs	2,760	1,710	1,050	777	465	312
Eye and Orbit	2,700	1,440	1,260	283	146	137
Brain and Other Nervous System	22,150	12,190	9,960	14,164	7,977	6,187
Endocrine System	49,290	12,800	36,490	2,641	1,220	1,421
Thyroid	46,920	11,540	35,380	1,686	723	963
Other Endocrine	2,370	1,260	1,110	955	497	458
Lymphoma	74,450	40,070	34,380	21,525	11,761	9,764
Hodgkin Lymphoma	8,930	4,890	4,040	1,231	714	517
Non-Hodgkin Lymphoma	65,520	35,180	30,340	20,294	11,047	9,247
Myeloma	20,640	11,450	9,190	11,022	5,881	5,141
Leukemia	45,890	26,390	19,500	22,673	12,912	9,761
Lymphocytic Leukemias	20,250	11,970	8,280	5,922	3,476	2,446
Myeloid Leukemias	18,990	10,420	8,570	10,169	5,764	4,405
Other leukemia	6,080	3,450	2,630	6,582	3,672	2,910
All Other Sites[b]	32,600	15,960	16,640	42,203	23,018	19,185

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 1995-2009, representing about 98% of the US population. Estimated deaths are based on data from US Mortality Data, 1995-2009, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

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

Table 1.3

61-Year Trends in U.S. Cancer Death Rates[a]

All Races, Males and Females

All Primary Cancer Sites Combined

Age Group	1950	1980	2010	Annual Percent Change 1950-1980	Annual Percent Change 1980-2010	Total Percent Change 1950-2010
Ages 0-4	11.1	4.2	2.0	-3.2*	-2.6*	-81.8
Ages 5-14	6.7	4.3	2.2	-1.5*	-2.2*	-66.4
Ages 15-24	8.6	6.3	3.6	-1.1*	-1.5*	-57.6
Ages 25-34	20.4	13.9	8.9	-1.4*	-1.6*	-56.3
Ages 35-44	63.6	49.9	28.7	-0.7*	-1.8*	-54.9
Ages 45-54	174.2	175.5	109.5	0.1*	-1.7*	-37.2
Ages 55-64	391.3	431.5	295.4	0.4*	-1.4*	-24.5
Ages 65-74	710.0	823.7	674.3	0.5*	-0.7*	-5.0
Ages 75-84	1,167.2	1,227.9	1,188.1	0.2*	-0.1	1.8
Ages 85+	1,450.7	1,572.9	1,713.7	0.2	0.3*	18.1
All Ages	195.4	206.9	171.8	0.2*	-0.7*	-12.1

Lung and Bronchus Cancer[b]

Age Group	1950	1980	2010	Annual Percent Change 1950-1980	Annual Percent Change 1980-2010	Total Percent Change 1950-2010
Ages 0-4	-	-	-	-	-	-
Ages 5-14	-	-	-	-	-	-
Ages 15-24	0.2	0.1	0.1	-2.8*	-0.1	-53.0
Ages 25-34	0.8	0.7	0.4	-0.3	-2.2*	-49.5
Ages 35-44	4.6	9.6	3.3	2.7*	-2.6*	-28.3
Ages 45-54	20.2	52.7	26.2	3.3*	-2.6*	29.5
Ages 55-64	48.9	137.1	84.0	3.3*	-1.8*	71.9
Ages 65-74	59.4	234.5	226.8	4.2*	-0.2	281.7
Ages 75-84	55.4	239.4	355.5	4.9*	1.2*	541.9
Ages 85+	42.3	174.7	330.0	5.1*	2.1*	680.2
All Ages	14.9	49.7	47.5	3.9*	-0.3*	217.9

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[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.

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

\- 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.

Table 1.4

Summary of Changes in Cancer Mortality, 1950-2010 and
5-Year Relative Survival (Percent), 1950-2009
Males and Females, By Primary Cancer Site

	Whites			
	U.S. Mortality Percent Change 1950-2010[a]		5-Year Relative Survival (Percent)[b]	
Primary Site	Total	APC	1950-1954	2003-2009
Oral cavity and pharynx	-51.4	-1.3*	46	67.3
Esophagus	30.3	0.8*	4	20.4
Stomach	-87.4	-3.4*	12	27.7
Colon and rectum	-54.0	-1.2*	37	67.0
Colon	-47.2	-1.0*	41	66.6
Rectum	-69.4	-2.3*	40	68.1
Liver and intrahepatic bile duct	48.8	0.8*	1	16.8
Pancreas	27.2	0.1*	1	6.5
Larynx	-37.8	-0.7*	52	64.4
Lung and bronchus	216.8	1.4*	6	18.0
Males	140.3	0.8*	5	15.7
Females	560.5	3.1*	9	20.4
Melanoma of the skin	177.9	1.3*	49	93.1
Breast(females)	-34.6	-0.6*	60	91.7
Cervix uteri	-82.3	-3.3*	59	70.5
Corpus and uterus, NOS	-66.1	-1.7*	72	85.5
Ovary	-8.9	-0.3*	30	43.9
Prostate	-31.0	-0.3*	43	99.8
Testis	-69.0	-2.9*	57	97.0
Urinary bladder	-28.6	-0.7*	53	80.5
Kidney and renal pelvis	33.4	0.5*	34	73.3
Brain and nervous system	48.9	0.5*	21	33.2
Thyroid	-41.2	-1.1*	80	98.2
Hodgkin lymphoma	-79.3	-3.3*	30	88.7
Non-Hodgkin lymphoma	85.6	1.0*	33	72.3
Myeloma	207.3	1.3*	6	45.2
Leukemia	-0.9	-0.3*	10	60.0
Childhood (Ages 0-14)	-73.8	-2.7*	20	84.6
All Sites	-12.7	-0.1*	35	69.2

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] U.S. Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Due to coding changes throughout the years: Colon excludes other digestive tract; Rectum includes anal canal; Liver & intrahepatic bile duct 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.

[b] Survival estimates for 1950-54 are from NCI Survival Report 5 with the exception of All Sites, Oral cavity & pharynx, Colon & rectum, Non-Hodgkin lymphoma and Childhood cancers which come from historical Connecticut data.
Survival estimates for 2003-2009 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 2010.

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

Table 1.5
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

All Races

Site	Incidence[a] (2006-2010) Total	Males	Females	US Mortality[b] (2006-2010) Total	Males	Females	Survival[c] (%) (2003-2009) Total	Males	Females
All Sites	463.0	535.9	411.2	176.4	215.3	149.7	65.8	66.4	65.3
Oral Cavity & Pharynx:	10.8	16.2	6.2	2.5	3.8	1.4	62.2	61.4	64.0
Lip	0.7	1.1	0.3	0.0	0.0	0.0	89.6	89.8	88.9
Tongue	3.1	4.7	1.8	0.6	0.9	0.4	62.1	62.6	60.7
Salivary gland	1.3	1.7	1.0	0.2	0.4	0.1	72.1	65.2	81.1
Floor of mouth	0.6	0.8	0.3	0.0	0.0	0.0	50.8	48.1	57.4
Gum & other oral cavity	1.5	1.8	1.3	0.4	0.4	0.3	60.1	58.4	62.0
Nasopharynx	0.6	0.9	0.4	0.2	0.3	0.1	58.9	58.0	61.0
Tonsil	1.8	3.0	0.6	0.2	0.4	0.1	69.9	70.7	66.2
Oropharynx	0.4	0.6	0.2	0.2	0.3	0.1	40.7	41.8	36.8
Hypopharynx	0.6	1.1	0.3	0.1	0.2	0.0	30.9	30.5	32.2
Other oral cavity & pharynx	0.2	0.3	0.1	0.5	0.8	0.2	35.4	37.0	31.2
Digestive System:	85.3	104.2	69.9	42.9	55.1	33.3	44.6	42.8	46.6
Esophagus	4.4	7.7	1.8	4.3	7.6	1.6	17.3	17.5	16.5
Stomach	7.5	10.4	5.3	3.5	4.9	2.5	27.7	25.8	30.4
Small intestine	2.1	2.5	1.7	0.4	0.4	0.3	64.5	64.6	64.5
Colon & Rectum:	45.0	52.2	39.3	16.4	19.6	13.9	64.9	65.1	64.6
Colon	32.2	36.1	29.1	-	-	-	64.2	64.7	63.8
Rectum	12.8	16.1	10.1	-	-	-	66.5	66.1	67.0
Anus, anal canal & anorectum	1.7	1.5	1.9	0.2	0.2	0.2	65.6	59.8	69.5
Liver & intrahepatic bile duct	7.7	11.9	4.0	5.6	8.3	3.4	16.1	15.9	16.7
Gallbladder	1.2	0.8	1.4	0.6	0.5	0.8	17.5	15.7	18.2
Other biliary	1.8	2.3	1.5	0.4	0.5	0.4	16.1	17.2	14.7
Pancreas	12.2	13.9	10.9	10.9	12.5	9.6	6.0	5.6	6.5
Retroperitoneum	0.4	0.4	0.4	0.1	0.1	0.1	53.2	53.0	53.5
Peritoneum, omentum & mesentery	0.6	0.1	1.1	0.3	0.1	0.4	30.7	41.4	30.0
Other digestive system	0.5	0.6	0.5	0.3	0.4	0.2	10.9	10.6	11.1
Respiratory System:	65.7	81.6	53.8	50.9	65.9	39.8	19.6	18.8	20.6
Nose, nasal cavity & middle ear	0.7	0.9	0.5	0.2	0.2	0.1	55.5	56.0	54.8
Larynx	3.4	6.0	1.3	1.1	2.0	0.4	60.6	61.5	57.2
Lung & bronchus	61.4	74.3	51.9	49.5	63.5	39.2	16.6	14.3	19.2
Pleura[d]	0.0	0.0	0.0	0.1	0.1	0.0	22.2	16.3	31.1
Trachea & other respiratory organs	0.2	0.3	0.1	0.1	0.1	0.0	49.8	52.1	44.2
Bones & joints	0.9	1.1	0.8	0.4	0.5	0.3	66.4	64.0	69.3
Soft tissue (including heart)	3.3	4.0	2.8	1.3	1.5	1.1	66.1	65.2	67.1
Skin (excl. basal & squamous):	23.1	30.1	18.1	3.6	5.6	2.1	90.8	88.9	93.3
Melanoma of the skin	21.1	27.4	16.7	2.7	4.1	1.7	91.3	89.4	93.7
Other non-epithelial skin	2.0	2.7	1.4	0.9	1.5	0.4	84.9	82.5	87.9
Breast	66.8	1.2	123.8	12.7	0.3	22.6	89.2	83.5	89.2
Breast (*in situ*)	16.6	0.2	31.4	-	-	-	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 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[c] SEER 18 areas. Based on follow-up of patients into 2010.

[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 1.5 - continued
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

All Races

Site	Incidence[a] (2006-2010) Total	Males	Females	US Mortality[b] (2006-2010) Total	Males	Females	Survival[c] (%) (2003-2009) Total	Males	Females
Female Genital System:	26.1	-	48.8	8.7	-	15.6	68.1	-	68.1
Cervix uteri	4.1	-	7.9	1.2	-	2.4	67.9	-	67.9
Corpus uteri	12.6	-	23.6	1.1	-	1.9	82.8	-	82.8
Uterus, NOS	0.3	-	0.6	1.3	-	2.4	26.6	-	26.6
Ovary[d]	6.8	-	12.5	4.5	-	8.1	44.2	-	44.2
Vagina	0.4	-	0.7	0.1	-	0.2	50.9	-	50.9
Vulva	1.3	-	2.4	0.3	-	0.5	70.8	-	70.8
Other female genital system	0.5	-	0.9	0.1	-	0.2	60.1	-	60.1
Male Genital System:	71.8	158.6	-	9.2	23.5	-	98.9	98.9	-
Prostate	68.6	152.0	-	9.0	23.0	-	99.2	99.2	-
Testis	2.8	5.5	-	0.1	0.2	-	95.3	95.3	-
Penis	0.4	0.8	-	0.1	0.2	-	68.4	68.4	-
Other male genital system	0.1	0.3	-	0.0	0.0	-	87.4	87.4	-
Urinary System:	36.9	58.9	20.0	8.6	13.8	5.0	74.8	76.1	72.0
Urinary bladder	20.7	36.6	8.9	4.4	7.7	2.2	77.9	79.4	73.1
Kidney & renal pelvis	15.3	21.0	10.6	4.0	5.8	2.6	71.8	71.7	72.1
Ureter	0.6	0.8	0.4	0.1	0.1	0.1	50.4	52.6	47.5
Other urinary system	0.3	0.5	0.2	0.1	0.2	0.1	51.7	55.3	45.8
Eye & Orbit	0.8	0.9	0.7	0.1	0.1	0.1	81.7	81.4	82.1
Brain & Nervous System:[e]	6.5	7.7	5.4	4.3	5.2	3.5	33.5	32.3	35.0
Brain	6.1	7.3	5.0	-	-	-	30.4	29.7	31.2
Cranial nerves & other nervous system	0.4	0.4	0.4	-	-	-	77.7	74.1	80.9
Endocrine System:	13.0	7.0	18.8	0.8	0.8	0.8	95.6	91.0	97.2
Thyroid	12.2	6.1	18.2	0.5	0.5	0.5	97.7	95.2	98.5
Other endocrine & thymus	0.8	0.9	0.7	0.3	0.3	0.3	63.9	64.6	63.0
Lymphoma:	22.5	27.0	18.8	6.8	8.7	5.4	71.3	70.0	72.7
Hodgkin lymphoma	2.8	3.2	2.4	0.4	0.5	0.3	85.1	84.3	86.0
Non-Hodgkin lymphoma	19.7	23.9	16.4	6.4	8.2	5.1	69.0	67.6	70.6
Myeloma	5.9	7.5	4.8	3.4	4.3	2.7	43.2	44.1	42.1
Leukemia:	12.8	16.3	10.0	7.1	9.5	5.3	56.0	56.7	55.2
Lymphocytic:	6.4	8.4	4.7	2.0	2.8	1.4	75.5	75.5	75.4
Acute lymphocytic	1.7	1.9	1.5	0.5	0.5	0.4	66.0	66.0	66.0
Chronic lymphocytic	4.3	5.9	3.1	1.4	2.1	0.9	79.2	78.4	80.3
Other lymphocytic	0.4	0.7	0.2	0.1	0.2	0.1	80.7	85.0	68.8
Myeloid & Monocytic:	5.7	7.1	4.7	3.4	4.5	2.6	35.3	34.8	36.0
Acute myeloid	3.7	4.5	3.1	2.8	3.7	2.2	24.2	22.7	25.9
Chronic myeloid	1.6	2.1	1.2	0.3	0.4	0.2	61.0	60.1	62.2
Acute monocytic	0.3	0.3	0.2	0.0	0.0	0.0	23.3	23.6	23.0
Other myeloid & monocytic	0.2	0.2	0.1	0.2	0.3	0.1	32.8	31.6	34.0
Other leukemia:	0.6	0.8	0.6	1.7	2.2	1.3	28.8	28.5	29.0
Other acute leukemia	0.2	0.3	0.2	0.7	0.9	0.5	17.2	18.0	16.3
Aleukemic, subleukemic & NOS	0.4	0.5	0.4	1.0	1.4	0.8	36.8	36.6	37.0
Kaposi Sarcoma[f]	0.6	1.0	0.1	-	-	-	71.1	70.5	75.9
Mesothelioma[f]	1.0	1.9	0.4	-	-	-	8.4	6.6	13.8
Ill-defined & unspecified	9.1	10.6	8.0	13.1	16.6	10.6	17.1	21.1	13.3

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 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[c] SEER 18 areas. Based on follow-up of patients into 2010.

[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 1.6
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

Whites

Site	Incidence[a] (2006-2010) Total	Males	Females	US Mortality[b] (2006-2010) Total	Males	Females	Survival[c] (%) (2003-2009) Total	Males	Females
All Sites	471.9	539.1	424.4	175.8	213.1	149.8	66.5	66.8	66.1
Oral Cavity & Pharynx:	11.2	16.7	6.3	2.4	3.6	1.4	63.9	63.6	64.6
Lip	0.8	1.3	0.4	0.0	0.0	0.0	89.7	90.1	88.7
Tongue	3.4	5.1	1.9	0.6	0.9	0.4	64.1	65.0	61.9
Salivary gland	1.3	1.8	1.0	0.2	0.4	0.1	71.0	63.8	81.0
Floor of mouth	0.6	0.9	0.4	0.0	0.0	0.0	52.0	49.3	58.7
Gum & other oral cavity	1.5	1.8	1.3	0.4	0.4	0.3	60.0	59.0	61.2
Nasopharynx	0.4	0.6	0.2	0.2	0.2	0.1	54.1	54.5	52.9
Tonsil	1.9	3.3	0.7	0.2	0.4	0.1	72.4	73.1	68.9
Oropharynx	0.4	0.6	0.2	0.2	0.3	0.1	44.7	46.4	38.3
Hypopharynx	0.6	1.1	0.3	0.1	0.1	0.0	33.7	33.7	34.0
Other oral cavity & pharynx	0.2	0.3	0.1	0.5	0.8	0.2	37.7	39.5	33.0
Digestive System:	82.6	100.9	67.5	41.5	53.2	32.0	45.3	43.7	47.2
Esophagus	4.6	8.0	1.8	4.4	7.8	1.6	18.2	18.5	17.2
Stomach	6.6	9.2	4.5	3.1	4.2	2.2	26.2	24.4	29.2
Small intestine	2.0	2.5	1.7	0.3	0.4	0.3	65.0	65.9	63.9
Colon & Rectum:	44.2	51.3	38.4	15.9	19.1	13.4	65.5	65.9	65.1
Colon	31.7	35.6	28.5	-	-	-	65.1	65.6	64.6
Rectum	12.6	15.7	9.9	-	-	-	66.6	66.5	66.6
Anus, anal canal & anorectum	1.8	1.5	2.1	0.2	0.2	0.3	67.1	61.7	70.5
Liver & intrahepatic bile duct	6.7	10.4	3.5	5.2	7.6	3.2	15.4	15.3	15.7
Gallbladder	1.1	0.8	1.4	0.6	0.4	0.7	17.7	15.0	18.7
Other biliary	1.8	2.2	1.5	0.5	0.5	0.4	15.9	17.2	14.5
Pancreas	12.1	13.8	10.7	10.8	12.5	9.4	6.0	5.6	6.4
Retroperitoneum	0.4	0.4	0.4	0.1	0.1	0.1	53.6	52.4	54.6
Peritoneum, omentum & mesentery	0.7	0.1	1.2	0.3	0.1	0.4	30.4	39.9	29.7
Other digestive system	0.5	0.6	0.5	0.3	0.4	0.2	10.4	10.7	10.2
Respiratory System:	67.4	81.8	56.5	51.5	65.6	41.0	19.9	19.1	20.8
Nose, nasal cavity & middle ear	0.7	0.9	0.5	0.2	0.2	0.1	56.2	57.5	54.5
Larynx	3.4	6.0	1.3	1.1	1.9	0.4	61.5	62.4	57.8
Lung & bronchus	63.1	74.5	54.6	50.2	63.2	40.4	16.9	14.5	19.5
Pleura[d]	0.0	0.1	0.0	0.1	0.1	0.0	20.2	15.9	27.1
Trachea & other respiratory organs	0.2	0.3	0.1	0.1	0.1	0.1	49.9	53.4	40.4
Bones & joints	1.0	1.2	0.8	0.4	0.5	0.4	66.9	63.9	70.6
Soft tissue (including heart)	3.4	4.1	2.8	1.3	1.5	1.1	67.2	66.1	68.5
Skin (excl. basal & squamous):	27.0	34.8	21.4	4.1	6.3	2.4	90.5	88.5	93.1
Melanoma of the skin	25.0	31.9	20.0	3.1	4.6	2.0	91.1	89.1	93.5
Other non-epithelial skin	2.0	2.9	1.4	0.9	1.6	0.5	83.1	80.3	86.8
Breast	68.0	1.2	127.4	12.3	0.3	22.1	90.4	85.8	90.4
Breast (*in situ*)	16.7	0.1	31.9	-	-	-	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 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[c] SEER 18 areas. Based on follow-up of patients into 2010.

[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 1.6 - continued
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

Whites

Site	Incidence[a] (2006-2010) Total	Males	Females	US Mortality[b] (2006-2010) Total	Males	Females	Survival[c] (%) (2003-2009) Total	Males	Females
Female Genital System:	26.7	-	50.5	8.5	-	15.5	69.3	-	69.3
Cervix uteri	4.0	-	7.9	1.1	-	2.2	69.1	-	69.1
Corpus uteri	13.0	-	24.5	1.0	-	1.8	84.9	-	84.9
Uterus, NOS	0.3	-	0.6	1.2	-	2.2	26.7	-	26.7
Ovary[d]	7.1	-	13.3	4.7	-	8.4	44.0	-	44.0
Vagina	0.4	-	0.7	0.1	-	0.2	51.9	-	51.9
Vulva	1.4	-	2.6	0.3	-	0.5	70.5	-	70.5
Other female genital system	0.5	-	0.9	0.1	-	0.2	60.9	-	60.9
Male Genital System:	70.0	152.6	-	8.5	21.7	-	99.2	99.2	-
Prostate	66.1	144.9	-	8.3	21.2	-	99.5	99.5	-
Testis	3.3	6.6	-	0.1	0.3	-	95.6	95.6	-
Penis	0.4	0.9	-	0.1	0.2	-	67.4	67.4	-
Other male genital system	0.1	0.3	-	0.0	0.0	-	89.0	89.0	-
Urinary System:	39.3	62.7	21.0	8.9	14.3	5.0	75.3	76.5	72.6
Urinary bladder	22.5	39.8	9.5	4.6	8.1	2.2	78.3	79.7	74.0
Kidney & renal pelvis	15.8	21.5	10.9	4.1	5.9	2.6	72.1	71.9	72.3
Ureter	0.6	0.9	0.4	0.1	0.2	0.1	49.9	53.1	45.4
Other urinary system	0.3	0.5	0.1	0.1	0.2	0.1	52.5	54.4	48.6
Eye & Orbit	0.9	1.1	0.8	0.1	0.1	0.1	81.3	81.2	81.5
Brain & Nervous System:[e]	7.1	8.4	6.0	4.6	5.6	3.8	32.3	31.4	33.4
Brain	6.7	8.0	5.5	-	-	-	29.2	28.9	29.7
Cranial nerves & other nervous system	0.4	0.4	0.4	-	-	-	79.2	76.5	81.8
Endocrine System:	13.7	7.4	20.0	0.8	0.8	0.8	96.1	91.8	97.5
Thyroid	13.0	6.6	19.4	0.5	0.5	0.5	97.9	95.4	98.7
Other endocrine & thymus	0.7	0.8	0.6	0.3	0.3	0.3	64.1	65.6	62.2
Lymphoma:	23.7	28.3	19.9	7.1	9.0	5.7	71.9	70.9	73.0
Hodgkin lymphoma	3.0	3.4	2.6	0.4	0.5	0.3	85.6	85.1	86.2
Non-Hodgkin lymphoma	20.7	25.0	17.3	6.7	8.5	5.3	69.6	68.5	70.8
Myeloma	5.5	7.1	4.2	3.1	4.0	2.5	43.1	44.7	41.2
Leukemia:	13.5	17.2	10.5	7.3	9.8	5.5	56.3	56.8	55.6
Lymphocytic:	6.9	9.0	5.2	2.1	2.9	1.5	75.7	75.8	75.7
Acute lymphocytic	1.8	2.1	1.6	0.5	0.6	0.4	66.0	66.1	65.8
Chronic lymphocytic	4.6	6.3	3.3	1.5	2.1	1.0	79.3	78.5	80.5
Other lymphocytic	0.4	0.7	0.2	0.1	0.2	0.1	81.5	85.7	69.6
Myeloid & Monocytic:	5.9	7.4	4.8	3.5	4.6	2.7	34.3	33.7	34.9
Acute myeloid	3.8	4.6	3.2	2.9	3.8	2.3	23.4	22.0	25.1
Chronic myeloid	1.6	2.1	1.2	0.3	0.4	0.2	59.6	59.0	60.5
Acute monocytic	0.3	0.4	0.2	0.0	0.0	0.0	23.4	23.4	23.3
Other myeloid & monocytic	0.2	0.2	0.1	0.2	0.3	0.2	31.3	30.5	32.2
Other leukemia:	0.6	0.8	0.6	1.7	2.3	1.3	28.1	27.4	28.8
Other acute leukemia	0.2	0.3	0.2	0.7	0.9	0.5	15.5	15.9	14.9
Aleukemic, subleukemic & NOS	0.4	0.5	0.4	1.0	1.4	0.8	37.1	36.2	37.6
Kaposi Sarcoma[f]	0.5	0.9	0.1	-	-	-	76.8	76.0	84.1
Mesothelioma[f]	1.1	2.1	0.5	-	-	-	8.3	6.5	14.0
Ill-defined & unspecified	9.3	10.8	8.1	13.1	16.6	10.6	17.6	22.3	13.1

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 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[c] SEER 18 areas. Based on follow-up of patients into 2010.

[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 1.7
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

Blacks

Site	Incidence[a] (2006-2010) Total	Males	Females	US Mortality[b] (2006-2010) Total	Males	Females	Survival[c] (%) (2003-2009) Total	Males	Females
All Sites	483.6	610.4	397.5	210.3	276.6	171.2	59.2	62.3	55.7
Oral Cavity & Pharynx:	9.6	14.9	5.4	3.0	5.2	1.4	43.2	38.6	53.0
Lip	0.1	0.1	0.1	-	-	-	76.9	60.5	95.1
Tongue	2.2	3.5	1.2	0.6	0.9	0.3	35.3	33.7	38.0
Salivary gland	1.0	1.1	1.0	0.2	0.3	0.1	73.2	63.5	80.9
Floor of mouth	0.5	0.9	0.3	0.0	0.1	0.0	38.0	34.9	46.0
Gum & other oral cavity	1.4	1.7	1.2	0.3	0.5	0.2	54.4	45.5	64.2
Nasopharynx	0.7	1.1	0.3	0.3	0.4	0.1	53.9	54.1	53.1
Tonsil	1.7	3.0	0.6	0.3	0.5	0.1	46.9	46.8	47.2
Oropharynx	0.7	1.2	0.3	0.4	0.6	0.2	20.4	20.1	21.0
Hypopharynx	1.0	2.0	0.3	0.2	0.3	0.1	18.1	16.6	24.1
Other oral cavity & pharynx	0.3	0.4	0.2	0.8	1.5	0.3	21.4	21.8	19.0
Digestive System:	106.7	132.0	88.5	57.7	76.0	45.0	39.1	36.1	42.3
Esophagus	5.1	8.4	2.7	4.4	7.7	2.1	11.3	10.3	13.7
Stomach	11.6	16.1	8.7	6.7	9.8	4.7	26.7	24.2	29.8
Small intestine	3.3	3.9	2.8	0.6	0.7	0.5	63.4	58.2	67.6
Colon & Rectum:	55.3	64.3	49.2	22.8	28.7	19.0	57.5	56.7	58.2
Colon	41.6	47.2	37.8	-	-	-	56.3	56.3	56.4
Rectum	13.7	17.1	11.4	-	-	-	61.0	58.0	64.1
Anus, anal canal & anorectum	1.7	1.9	1.6	0.2	0.3	0.2	55.2	48.3	61.9
Liver & intrahepatic bile duct	9.1	15.1	4.5	7.4	11.8	4.1	11.3	9.3	16.0
Gallbladder	1.5	1.2	1.7	0.8	0.7	1.0	14.2	17.6	12.8
Other biliary	1.7	2.0	1.5	0.4	0.4	0.4	13.2	12.1	14.2
Pancreas	15.8	17.6	14.3	13.7	15.3	12.5	5.5	5.2	5.7
Retroperitoneum	0.4	0.3	0.4	0.0	0.0	0.0	46.0	48.9	44.6
Peritoneum, omentum & mesentery	0.3	0.1	0.5	0.2	0.1	0.2	30.6	51.6	26.4
Other digestive system	0.7	1.0	0.6	0.4	0.5	0.3	12.6	13.7	11.9
Respiratory System:	75.6	106.5	54.5	55.8	82.8	38.1	17.1	17.0	17.2
Nose, nasal cavity & middle ear	0.6	0.9	0.4	0.2	0.2	0.1	48.2	45.6	53.0
Larynx	5.0	9.6	1.8	2.0	3.9	0.7	54.5	55.2	51.4
Lung & bronchus	69.7	95.8	52.2	53.5	78.5	37.2	13.5	12.0	15.4
Pleura[d]	-	-	-	0.0	0.1	-	-	-	-
Trachea & other respiratory organs	0.2	0.3	0.1	0.1	0.1	0.0	50.9	48.6	54.4
Bones & joints	0.8	0.9	0.7	0.4	0.6	0.3	62.7	60.5	64.9
Soft tissue (including heart)	3.3	3.6	3.1	1.4	1.4	1.4	59.2	58.7	59.7
Skin (excl. basal & squamous):	2.1	2.2	2.0	0.9	1.3	0.6	84.9	83.3	85.5
Melanoma of the skin	1.0	1.1	1.0	0.4	0.5	0.4	73.1	64.0	79.1
Other non-epithelial skin	1.1	1.2	1.1	0.5	0.8	0.2	92.7	96.5	89.6
Breast	69.3	1.9	121.4	18.2	0.5	30.8	78.6	69.6	78.7
Breast (*in situ*)	16.6	0.3	29.5	-	-	-	100.0	98.7	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 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[c] SEER 18 areas. Based on follow-up of patients into 2010.

[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 1.7 - continued
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

Blacks

Site	Incidence[a] (2006-2010) Total	Males	Females	US Mortality[b] (2006-2010) Total	Males	Females	Survival[c] (%) (2003-2009) Total	Males	Females
Female Genital System:	25.5	-	44.9	11.3	-	19.1	54.7	-	54.7
Cervix uteri	5.3	-	9.6	2.4	-	4.2	59.2	-	59.2
Corpus uteri	11.9	-	21.0	1.8	-	3.0	62.5	-	62.5
Uterus, NOS	0.7	-	1.2	2.6	-	4.4	25.0	-	25.0
Ovary[d]	5.6	-	9.7	4.0	-	6.7	36.1	-	36.1
Vagina	0.5	-	0.9	0.2	-	0.3	45.6	-	45.6
Vulva	1.0	-	1.7	0.2	-	0.3	69.4	-	69.4
Other female genital system	0.4	-	0.8	0.2	-	0.3	49.5	-	49.5
Male Genital System:	97.4	230.9	-	18.1	51.4	-	96.5	96.5	-
Prostate	96.3	228.5	-	18.0	50.9	-	96.7	96.7	-
Testis	0.6	1.4	-	0.1	0.1	-	89.5	89.5	-
Penis	0.3	0.9	-	0.1	0.3	-	61.5	61.5	-
Other male genital system	0.1	0.2	-	0.0	0.0	-	78.5	78.5	-
Urinary System:	30.6	46.1	19.9	7.7	11.4	5.4	67.3	69.3	64.0
Urinary bladder	12.5	21.0	7.1	3.7	5.5	2.6	64.9	69.5	56.1
Kidney & renal pelvis	17.4	24.1	12.3	3.9	5.7	2.6	69.6	69.6	69.6
Ureter	0.3	0.4	0.2	0.1	0.1	0.1	50.0	52.6	47.9
Other urinary system	0.4	0.6	0.3	0.1	0.1	0.2	39.8	50.1	32.9
Eye & Orbit	0.2	0.3	0.2	0.0	0.0	0.0	79.1	75.5	83.4
Brain & Nervous System:[e]	4.1	4.7	3.7	2.5	3.0	2.1	39.6	35.5	43.7
Brain	3.7	4.3	3.3	-	-	-	36.0	33.1	38.9
Cranial nerves & other nervous system	0.4	0.3	0.4	-	-	-	70.1	60.8	75.0
Endocrine System:	8.1	4.2	11.4	0.9	0.8	0.9	92.5	83.9	94.9
Thyroid	7.1	3.2	10.5	0.5	0.4	0.6	96.6	91.9	97.4
Other endocrine & thymus	0.9	1.0	0.9	0.4	0.4	0.3	63.4	62.8	63.8
Lymphoma:	16.9	20.5	14.0	4.9	6.3	3.9	65.5	61.6	70.0
Hodgkin lymphoma	2.7	3.2	2.3	0.4	0.4	0.3	80.5	77.5	83.7
Non-Hodgkin lymphoma	14.2	17.4	11.8	4.6	5.9	3.6	61.9	57.9	66.6
Myeloma	11.9	14.4	10.2	6.4	7.9	5.4	42.8	41.9	43.6
Leukemia:	9.8	12.6	7.8	6.1	8.2	4.8	49.5	50.4	48.5
Lymphocytic:	4.1	5.8	2.9	1.7	2.6	1.2	65.8	64.9	67.0
Acute lymphocytic	0.9	1.2	0.7	0.3	0.4	0.2	63.2	62.8	63.7
Chronic lymphocytic	2.9	4.2	2.0	1.3	2.0	0.9	67.5	66.1	69.5
Other lymphocytic	0.2	0.4	0.1	0.1	0.2	0.1	58.8	63.2	46.9
Myeloid & Monocytic:	4.9	5.9	4.3	2.7	3.4	2.2	38.4	38.5	38.2
Acute myeloid	3.1	3.6	2.8	2.2	2.7	1.9	25.5	25.1	25.7
Chronic myeloid	1.5	1.9	1.3	0.3	0.5	0.3	62.4	60.2	64.8
Acute monocytic	0.1	0.2	0.1	0.0	-	-	25.2	23.8	26.3
Other myeloid & monocytic	0.1	0.2	0.1	0.1	0.2	0.1	40.6	41.0	39.3
Other leukemia:	0.8	0.9	0.6	1.7	2.2	1.4	27.3	27.3	26.8
Other acute leukemia	0.2	0.3	0.2	0.5	0.7	0.4	22.6	22.2	22.2
Aleukemic, subleukemic & NOS	0.5	0.6	0.5	1.2	1.5	1.0	29.8	30.3	28.5
Kaposi Sarcoma[f]	1.0	2.0	0.2	-	-	-	52.5	52.2	54.0
Mesothelioma[f]	0.6	1.1	0.3	-	-	-	8.3	6.5	10.2
Ill-defined & unspecified	10.2	11.4	9.2	15.1	19.8	12.0	12.5	12.9	12.0

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 18 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, New Jersey and Georgia excluding ATL/RG).
[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[c] SEER 18 areas. Based on follow-up of patients into 2010.
[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 1.8
SEER Incidence and U.S. Mortality Trends by Primary Cancer Site and Sex
All Races, 2001-2010

Site	Incidence[a] Total APC	Incidence[a] Males APC	Incidence[a] Females APC	US Mortality[b] Total APC	US Mortality[b] Males APC	US Mortality[b] Females APC
All Sites	-0.6*	-1.1*	-0.3	-1.5*	-1.8*	-1.4*
Oral Cavity & Pharynx:	0.2	0.2	-0.2	-1.3*	-1.3*	-1.5*
Lip	-3.9*	-4.5*	-2.7*	-4.1*	-5.2*	-2.2
Tongue	1.8*	2.2*	0.9	-0.7*	-0.7*	-0.9*
Salivary gland	0.7	0.5	0.9	-0.3	-0.1	-1.0
Floor of mouth	-3.7*	-4.5*	-2.2	-7.1*	-7.5*	-5.9*
Gum & other oral cavity	-1.1*	-1.4*	-0.8	-2.2*	-2.6*	-1.7*
Nasopharynx	-0.4	-0.3	-1.0	-0.7*	-0.6	-1.4
Tonsil	3.1*	3.5*	1.2	0.6	1.0	-1.4
Oropharynx	2.0	2.4*	0.3	0.9*	0.7	0.7
Hypopharynx	-2.6*	-2.6*	-3.2*	-3.5*	-3.5*	-3.9*
Other oral cavity & pharynx	-3.7*	-3.9*	-4.0*	-2.8*	-2.8*	-3.2*
Digestive System:	-1.1*	-1.2*	-1.1*	-1.1*	-1.1*	-1.4*
Esophagus	-0.9*	-0.9*	-1.9*	-0.6*	-0.5*	-1.5*
Stomach	-1.1*	-1.5*	-0.6	-2.9*	-3.2*	-2.7*
Small intestine	1.9*	1.8*	2.0*	-0.3	-0.4	-0.4
Colon & Rectum:	-2.6*	-2.9*	-2.4*	-2.9*	-3.0*	-3.0*
Colon	-2.9*	-3.2*	-2.7*	-	-	-
Rectum	-2.0*	-2.3*	-1.7*	-	-	-
Anus, anal canal & anorectum	2.4*	2.1*	2.7*	3.4*	4.0*	3.1*
Liver & intrahepatic bile duct	3.6*	3.8*	2.6*	2.4*	2.5*	1.6*
Gallbladder	-0.5	-0.8	-0.3	-1.1*	-0.5	-1.4*
Other biliary	0.9*	1.0	0.5	-2.9*	-3.2*	-2.7*
Pancreas	0.9*	0.8*	1.0*	0.5*	0.4*	0.4*
Retroperitoneum	-1.3	-0.7	-2.2	-2.8*	-2.1	-3.8*
Peritoneum, omentum & mesentery	-0.5	-0.6	-0.4	0.7	0.6	0.8
Other digestive system	2.0*	3.1*	1.0	-1.0	-0.3	-1.9
Respiratory System:	-1.5*	-2.2*	-0.7*	-1.8*	-2.5*	-1.0*
Nose, nasal cavity & middle ear	0.1	0.4	-0.5	-0.6	-0.7	-0.5
Larynx	-2.1*	-2.3*	-1.8*	-2.4*	-2.7*	-2.1*
Lung & bronchus	-1.5*	-2.2*	-0.7*	-1.7*	-2.5*	-0.9*
Pleura	-1.6	-1.3	-	-7.2*	-7.1*	-8.0*
Trachea & other respiratory organs	0.0	-0.5	0.6	-4.2*	-4.6*	-3.8*
Bones & joints	-0.1	0.0	-0.3	-0.2	-0.2	-0.3
Soft tissue (including heart)	1.1*	0.9*	1.3*	0.5*	1.0*	0.0
Skin (excl. basal & squamous):	1.5*	1.8*	1.1*	0.5*	0.8*	-0.3
Melanoma of the skin	1.5*	1.8*	1.2*	0.5*	0.9*	-0.2
Other non-epithelial skin	1.4*	2.0*	0.5	0.5	0.7	-0.6
Breast	-0.8*	1.3	-0.6	-2.2*	-1.2	-2.0*
Breast (*in situ*)	0.9*	3.0	1.1*	-	-	-

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).

[a] SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

* 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 1.8 - continued
SEER Incidence and U.S. Mortality Trends by Primary Cancer Site and Sex
All Races, 2001-2010

Site	Incidence[a] Total APC	Incidence[a] Males APC	Incidence[a] Females APC	US Mortality[b] Total APC	US Mortality[b] Males APC	US Mortality[b] Females APC
Female Genital System:	-0.4	-	-0.2	-1.3*	-	-1.0*
Cervix uteri	-1.8*	-	-1.7*	-1.7*	-	-1.5*
Corpus uteri	0.6	-	0.9*	-0.9*	-	-0.5
Uterus, NOS	0.9	-	1.2	1.0*	-	1.3*
Ovary[c]	-1.8*	-	-1.7*	-2.0*	-	-1.8*
Vagina	-0.3	-	0.0	-1.1*	-	-0.8
Vulva	0.8*	-	1.0*	0.6*	-	1.0*
Other female genital system	4.8*	-	4.8*	0.1	-	0.4
Male Genital System:	-1.8*	-2.2*	-	-2.6*	-3.3*	-
Prostate	-1.9*	-2.3*	-	-2.7*	-3.4*	-
Testis	0.6*	0.6*	-	-0.3	-0.3	-
Penis	0.1	-0.3	-	-0.1	-0.3	-
Other male genital system	0.6	0.5	-	2.9	2.4	-
Urinary System:	0.6*	0.3	0.7*	-0.4*	-0.3*	-0.9*
Urinary bladder	-0.6*	-0.7*	-0.9*	0.1	0.1	-0.6*
Kidney & renal pelvis	2.4*	2.2*	2.3*	-1.0*	-1.0*	-1.3*
Ureter	-0.3	-0.3	-0.3	0.5	0.2	0.2
Other urinary system	1.8*	1.3	2.1	1.8	3.0	-0.1
Eye & Orbit	-0.6	-1.2*	0.1	0.7	0.1	1.3
Brain & Nervous System:[d]	-0.3	-0.3	-0.4	-0.5*	-0.5*	-0.5*
Brain	-0.2	-0.2	-0.3	-	-	-
Cranial nerves & other nervous system	-1.8*	-1.4	-2.3*	-	-	-
Endocrine System:	5.9*	5.0*	6.3*	0.4	0.4	0.5
Thyroid	6.3*	5.6*	6.5*	1.2*	1.5*	1.1*
Other endocrine & thymus	1.3*	0.7	1.9*	-0.9	-1.2	-0.6
Lymphoma:	0.1	0.2	-0.1	-2.7*	-2.6*	-3.1*
Hodgkin lymphoma	0.0	0.1	-0.1	-2.5*	-2.3*	-2.8*
Non-Hodgkin lymphoma	0.1	0.2	-0.1	-2.8*	-2.6*	-3.1*
Myeloma	0.4	0.6*	0.1	-1.8*	-1.4*	-2.3*
Leukemia:	-0.5*	-0.8*	-0.4	-1.0*	-1.0*	-1.3*
Lymphocytic:	-0.6*	-0.8*	-0.6	-1.5*	-1.5*	-1.7*
Acute lymphocytic	0.7*	0.8	0.6	-1.3*	-1.4*	-1.1
Chronic lymphocytic	-1.1*	-1.3*	-1.0	-1.6*	-1.5*	-2.1*
Other lymphocytic	-0.9	-0.6	-2.1	-1.0	-1.3	-1.2
Myeloid & Monocytic:	0.0	-0.3	0.2	-0.5*	-0.4*	-0.9*
Acute myeloid	0.1	-0.4	0.7	0.3*	0.4*	0.0
Chronic myeloid	0.2	0.3	-0.1	-6.7*	-6.1*	-7.4*
Acute monocytic	-1.5	-1.0	-1.9	-3.5*	-4.2*	-3.3
Other myeloid & monocytic	-1.7*	-1.1	-2.6	0.3	-0.2	0.4
Other leukemia:	-4.1*	-4.9*	-3.5*	-1.4*	-1.6*	-1.5*
Other acute leukemia	-5.8*	-6.0*	-5.8*	-3.7*	-4.2*	-3.4*
Aleukemic, subleukemic & NOS	-3.0*	-4.0*	-1.8	0.2	0.3	-0.1
Kaposi Sarcoma[e]	-3.2*	-3.3*	-3.3*	-	-	-
Mesothelioma[e]	-1.0	-1.2	-0.6	-	-	-
Ill-defined & unspecified	-2.9*	-2.8*	-3.0*	-2.1*	-2.0*	-2.4*

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).

[a] SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[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 1.9
SEER Incidence and U.S. Mortality Trends by Primary Cancer Site and Sex
Whites, 2001-2010

Site	Incidence[a] Total APC	Incidence[a] Males APC	Incidence[a] Females APC	US Mortality[b] Total APC	US Mortality[b] Males APC	US Mortality[b] Females APC
All Sites	-0.6*	-1.1*	-0.3	-1.4*	-1.7*	-1.3*
Oral Cavity & Pharynx:	0.5*	0.6*	0.1	-0.8*	-0.8*	-1.3*
Lip	-4.1*	-4.7*	-2.5*	-3.8*	-5.1*	-1.3
Tongue	2.3*	2.6*	1.3*	-0.2	-0.1	-0.6
Salivary gland	1.1	0.6	1.4	-0.3	-0.2	-0.9
Floor of mouth	-3.2*	-4.1*	-1.4	-6.5*	-6.9*	-5.6*
Gum & other oral cavity	-1.0*	-1.2*	-0.7	-1.7*	-2.1*	-1.4
Nasopharynx	-0.3	-0.7	0.0	-0.6	-0.5	-1.3
Tonsil	3.8*	4.2*	1.6*	1.3*	1.9*	-1.3
Oropharynx	2.0	2.4	0.2	1.8*	1.8*	1.2
Hypopharynx	-2.5*	-2.4*	-3.6*	-3.5*	-3.2*	-5.1*
Other oral cavity & pharynx	-3.3*	-2.9	-5.3*	-2.2*	-2.2*	-2.7*
Digestive System:	-1.1*	-1.2*	-1.2*	-1.1*	-1.1*	-1.3*
Esophagus	-0.3	-0.2	-1.7*	0.0	0.1	-0.9*
Stomach	-0.9*	-1.3*	-0.7	-3.0*	-3.4*	-2.7*
Small intestine	2.3*	2.3*	2.3*	-0.3	-0.2	-0.6
Colon & Rectum:	-2.8*	-3.1*	-2.5*	-3.0*	-3.1*	-3.0*
Colon	-3.0*	-3.3*	-2.8*	-	-	-
Rectum	-2.3*	-2.7*	-1.9*	-	-	-
Anus, anal canal & anorectum	2.6*	2.0*	3.1*	3.3*	3.5*	3.3*
Liver & intrahepatic bile duct	4.2*	4.5*	3.0*	2.5*	2.6*	1.9*
Gallbladder	-0.7	-1.2	-0.4	-1.5*	-1.2*	-1.6*
Other biliary	0.9*	1.0	0.5	-3.0*	-3.3*	-2.8*
Pancreas	1.0*	0.8*	1.1*	0.6*	0.5*	0.6*
Retroperitoneum	-1.5	-1.3	-2.1	-2.5*	-1.9	-3.3*
Peritoneum, omentum & mesentery	-0.2	0.8	-0.2	0.9	0.9	1.0
Other digestive system	1.7*	2.2*	1.3	-1.0	0.0	-2.0
Respiratory System:	-1.4*	-2.1*	-0.6*	-1.6*	-2.4*	-0.9*
Nose, nasal cavity & middle ear	0.3	0.7	-0.5	-0.7	-0.6	-0.9
Larynx	-1.8*	-2.0*	-1.8*	-2.0*	-2.4*	-1.8*
Lung & bronchus	-1.4*	-2.2*	-0.6*	-1.6*	-2.4*	-0.8*
Pleura	-1.5	-0.9	-	-7.1*	-7.1*	-7.9*
Trachea & other respiratory organs	-0.4	-1.1	0.7	-4.2*	-4.6*	-4.0*
Bones & joints	-0.1	0.2	-0.7	-0.2	-0.2	-0.1
Soft tissue (including heart)	1.2*	1.1*	1.3*	0.6*	1.2*	-0.1
Skin (excl. basal & squamous):	1.5*	1.8*	1.2*	0.7*	1.0*	-0.1
Melanoma of the skin	1.6*	1.8*	1.3*	0.7*	1.0*	0.0
Other non-epithelial skin	1.4*	2.0*	0.4	0.8	1.0*	-0.4
Breast	-1.0*	1.2	-0.8*	-2.2*	-1.2*	-2.0*
Breast (*in situ*)	0.7	3.0	0.9	-	-	-

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).

[a] SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

* 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 1.9 - continued
SEER Incidence and U.S. Mortality Trends by Primary Cancer Site and Sex
Whites, 2001-2010

Site	Incidence[a] Total APC	Incidence[a] Males APC	Incidence[a] Females APC	US Mortality[b] Total APC	US Mortality[b] Males APC	US Mortality[b] Females APC
Female Genital System:	-0.4	-	-0.2	-1.3*	-	-1.0*
Cervix uteri	-1.5*	-	-1.4*	-1.5*	-	-1.3*
Corpus uteri	0.4	-	0.7*	-0.9*	-	-0.5
Uterus, NOS	0.1	-	0.4	0.8*	-	1.3*
Ovary[c]	-1.9*	-	-1.7*	-2.0*	-	-1.8*
Vagina	0.3	-	0.6	-0.7	-	-0.4
Vulva	1.1*	-	1.3*	0.8*	-	1.3*
Other female genital system	5.1*	-	5.1*	0.4	-	0.7
Male Genital System:	-1.9*	-2.4*	-	-2.5*	-3.2*	-
Prostate	-2.0*	-2.5*	-	-2.5*	-3.3*	-
Testis	0.7*	0.7*	-	0.3	0.2	-
Penis	0.3	-0.2	-	-0.3	-0.5	-
Other male genital system	0.5	0.3	-	3.6	3.1	-
Urinary System:	0.6*	0.3	0.7	-0.3*	-0.2*	-0.8*
Urinary bladder	-0.6*	-0.7*	-0.9*	0.3*	0.2	-0.4
Kidney & renal pelvis	2.3*	2.2*	2.3*	-1.0*	-1.0*	-1.2*
Ureter	-0.2	-0.2	-0.5	0.4	0.1	0.2
Other urinary system	2.2*	1.5	2.8	2.2	3.2	0.2
Eye & Orbit	-0.4	-1.1	0.3	1.0	0.1	1.8
Brain & Nervous System:[d]	-0.2	-0.1	-0.4	-0.4	-0.4	-0.4
Brain	-0.1	-0.1	-0.2	-	-	-
Cranial nerves & other nervous system	-1.8*	-1.1	-2.4	-	-	-
Endocrine System:	6.0*	5.0*	6.4*	0.1	0.2	0.2
Thyroid	6.4*	5.8*	6.6*	1.0*	1.4*	0.8
Other endocrine & thymus	0.6	-0.1	1.2	-1.2*	-1.7*	-1.0
Lymphoma:	0.1	0.2	-0.1	-2.7*	-2.6*	-3.0*
Hodgkin lymphoma	-0.1	0.0	-0.2	-2.4*	-2.1*	-2.7*
Non-Hodgkin lymphoma	0.1	0.2	0.0	-2.7*	-2.6*	-3.1*
Myeloma	0.4	0.7*	-0.1	-1.8*	-1.5*	-2.3*
Leukemia:	-0.5*	-0.8*	-0.4	-0.9*	-0.9*	-1.2*
Lymphocytic:	-0.6	-0.9*	-0.3	-1.3*	-1.4*	-1.4*
Acute lymphocytic	1.1*	0.9	1.5*	-0.9*	-1.1*	-0.6
Chronic lymphocytic	-1.2*	-1.5*	-1.1	-1.5*	-1.5*	-1.8*
Other lymphocytic	-1.1	-0.9	-2.0	-0.8	-1.2	-1.0
Myeloid & Monocytic:	0.0	-0.2	0.0	-0.4*	-0.3	-0.9*
Acute myeloid	0.1	-0.3	0.3	0.4*	0.5*	-0.1
Chronic myeloid	0.2	0.3	-0.1	-6.7*	-6.0*	-7.5*
Acute monocytic	-1.2	-0.2	-2.3	-3.3*	-4.0*	-2.9
Other myeloid & monocytic	-1.4	-0.7	-2.5	0.3	-0.2	0.5
Other leukemia:	-4.0*	-4.9*	-3.1*	-1.4*	-1.5*	-1.4*
Other acute leukemia	-5.7*	-6.1*	-5.5*	-3.7*	-4.2*	-3.3*
Aleukemic, subleukemic & NOS	-2.7*	-4.0*	-1.4	0.3	0.4	0.0
Kaposi Sarcoma[e]	-3.5*	-3.4*	-4.5*	-	-	-
Mesothelioma[e]	-0.8	-1.0	-0.5	-	-	-
Ill-defined & unspecified	-2.7*	-2.5*	-3.0*	-1.9*	-1.9*	-2.2*

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).

[a] SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[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 1.10
SEER Incidence and U.S. Mortality Trends by Primary Cancer Site and Sex
Blacks, 2001-2010

Site	Incidence[a] Total APC	Incidence[a] Males APC	Incidence[a] Females APC	US Mortality[b] Total APC	US Mortality[b] Males APC	US Mortality[b] Females APC
All Sites	-1.0*	-1.9*	-0.1	-2.1*	-2.6*	-1.7*
Oral Cavity & Pharynx:	-2.5*	-3.1*	-1.4	-3.9*	-4.1*	-3.2*
Lip	-	-	-	-	-	-
Tongue	-2.1*	-2.5*	-1.1	-3.9*	-4.3*	-2.4
Salivary gland	-1.0	-1.7	-0.5	0.2	1.0	-1.3
Floor of mouth	-7.4*	-8.2*	-5.9*	-10.5*	-	-
Gum & other oral cavity	-3.8*	-5.6*	-1.5	-5.7*	-6.0*	-5.0*
Nasopharynx	-1.6	-1.0	-2.2	-2.1	-2.1	-2.9
Tonsil	-0.2	-0.2	-0.2	-2.2	-2.8*	-0.4
Oropharynx	0.0	0.3	-	-2.5*	-2.5*	-2.3
Hypopharynx	-3.9*	-4.4*	-3.1	-3.1	-4.4	-
Other oral cavity & pharynx	-7.4*	-11.8*	-	-5.2*	-5.0*	-5.1*
Digestive System:	-1.2*	-1.2*	-1.3*	-1.7*	-1.5*	-2.1*
Esophagus	-4.5*	-5.0*	-3.1*	-4.8*	-4.6*	-5.2*
Stomach	-1.8*	-2.1*	-1.2	-3.2*	-3.1*	-3.5*
Small intestine	1.1	1.0	1.2	-0.1	-0.8	0.1
Colon & Rectum:	-2.3*	-2.4*	-2.4*	-2.8*	-2.4*	-3.3*
Colon	-2.7*	-3.0*	-2.6*	-	-	-
Rectum	-1.0*	-0.8	-1.4*	-	-	-
Anus, anal canal & anorectum	1.9*	2.7	0.9	4.8*	6.3*	3.1
Liver & intrahepatic bile duct	3.7*	3.7*	3.2*	2.4*	3.0*	0.8
Gallbladder	2.2*	4.8	1.8	0.4	4.3*	-0.8
Other biliary	2.4	0.7	3.5*	-1.8	-2.4	-1.9
Pancreas	0.5	1.3*	0.0	-0.1	0.0	-0.1
Retroperitoneum	0.3	-	-1.0	-5.5	-	-
Peritoneum, omentum & mesentery	-0.8	-	0.2	-0.7	-	-1.3
Other digestive system	3.5	8.4*	-0.5	-1.9	-3.0	-1.3
Respiratory System:	-1.7*	-2.9*	-0.2	-2.5*	-3.3*	-1.3*
Nose, nasal cavity & middle ear	-1.8	-2.5	-0.8	1.3	-0.7	4.2
Larynx	-3.1*	-3.7*	-1.1	-3.8*	-4.0*	-3.0*
Lung & bronchus	-1.7*	-2.8*	-0.2	-2.4*	-3.3*	-1.2*
Pleura	-	-	-	-	-	-
Trachea & other respiratory organs	-	-	-	-4.6	-	-
Bones & joints	0.8	0.2	1.7	-0.7	0.0	-1.8
Soft tissue (including heart)	0.2	-0.4	0.8	0.1	-0.8	0.7
Skin (excl. basal & squamous):	0.1	-0.8	0.6	-1.5*	-1.4	-1.5
Melanoma of the skin	-0.2	-1.5	0.6	0.1	1.9	-1.2
Other non-epithelial skin	0.4	-0.1	0.7	-3.0*	-3.3*	-1.9
Breast	0.3	1.5	0.4	-1.7*	-1.5	-1.6*
Breast (*in situ*)	2.1*	-	2.3*	-	-	-

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).

[a] SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

* 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 1.10 - continued
SEER Incidence and U.S. Mortality Trends by Primary Cancer Site and Sex
Blacks, 2001-2010

Site	Incidence[a] Total APC	Incidence[a] Males APC	Incidence[a] Females APC	US Mortality[b] Total APC	US Mortality[b] Males APC	US Mortality[b] Females APC
Female Genital System:	-0.2	-	0.0	-1.2*	-	-1.0*
Cervix uteri	-3.2*	-	-3.0*	-2.6*	-	-2.4*
Corpus uteri	1.7*	-	1.9*	-1.1	-	-0.7
Uterus, NOS	2.0	-	2.2	1.5*	-	1.7*
Ovary[c]	-1.1	-	-0.9	-1.9*	-	-1.7*
Vagina	-2.2	-	-2.0	-3.4*	-	-3.1*
Vulva	-0.9	-	-0.8	-1.6	-	-1.5
Other female genital system	2.6	-	2.3	-0.4	-	-0.5
Male Genital System:	-2.1*	-2.6*	-	-3.4*	-3.7*	-
Prostate	-2.1*	-2.6*	-	-3.4*	-3.8*	-
Testis	-0.7	-0.7	-	-4.7	-5.2	-
Penis	-2.2	-2.3	-	1.8	1.8	-
Other male genital system	-	-	-	-	-	-
Urinary System:	1.5*	1.5*	1.4*	-1.0*	-0.7	-1.5*
Urinary bladder	-0.2	0.4	-1.2	-0.8	0.0	-1.9*
Kidney & renal pelvis	2.9*	2.5*	3.2*	-1.1*	-1.3*	-1.1*
Ureter	-	-	-	-	-	-
Other urinary system	0.6	-	-	-3.1	-	-3.4
Eye & Orbit	-0.4	-	-	-	-	-
Brain & Nervous System:[d]	-0.3	-0.2	-0.2	-0.5	-0.8	-0.3
Brain	0.2	0.0	0.4	-	-	-
Cranial nerves & other nervous system	-4.1	-3.2	-4.3	-	-	-
Endocrine System:	5.6*	4.8*	6.0*	1.5	2.5	1.0
Thyroid	5.7*	4.9*	6.1*	1.3	1.7	1.2
Other endocrine & thymus	4.6*	4.4*	4.7	1.8	3.3	0.7
Lymphoma:	0.0	0.0	0.0	-2.4*	-2.1*	-2.9*
Hodgkin lymphoma	1.3*	1.0	1.3	-2.3*	-3.1	-1.8
Non-Hodgkin lymphoma	-0.2	-0.2	-0.3	-2.5*	-2.0*	-3.0*
Myeloma	0.3	-0.4	0.7	-1.7*	-1.3*	-2.2*
Leukemia:	-1.7*	-1.9*	-1.6*	-1.6*	-1.3*	-1.9*
Lymphocytic:	-2.7*	-2.4	-3.1*	-2.2*	-1.7	-3.3*
Acute lymphocytic	1.2	3.4	-1.5	-2.8*	-2.7	-3.4*
Chronic lymphocytic	-3.8*	-3.8*	-3.6*	-2.1*	-1.4	-3.4*
Other lymphocytic	-2.3	-	-	-2.0	-3.4	-
Myeloid & Monocytic:	-0.3	-0.9	0.4	-1.6*	-1.4	-1.6*
Acute myeloid	0.3	-0.3	1.0	-0.3	-0.3	-0.3
Chronic myeloid	-0.9	-1.7	0.1	-7.5*	-7.0*	-7.6*
Acute monocytic	-	-	-	-	-	-
Other myeloid & monocytic	-	-	-	-1.1	-0.3	-3.3
Other leukemia:	-5.1*	-4.3	-5.7	-1.0	-0.8	-1.0
Other acute leukemia	-9.3*	-	-	-3.2*	-2.8*	-3.6
Aleukemic, subleukemic & NOS	-2.5	-1.8	-1.7	0.1	0.3	0.2
Kaposi Sarcoma[e]	-2.5*	-3.0*	-	-	-	-
Mesothelioma[e]	-0.3	-0.8	-	-	-	-
Ill-defined & unspecified	-4.0*	-4.5*	-3.5*	-3.3*	-3.3*	-3.3*

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).

[a] SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[b] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[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 1.11

Age Distribution (%) of Incidence Cases by Site, 2006-2010

All Races, Both Sexes

Site	Age at Diagnosis <20	20-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages	Cases
All Sites	1.0	2.6	5.3	14.2	23.8	25.1	20.1	7.8	100.0%	1,968,702
Oral Cavity & Pharynx:	0.6	2.1	5.9	20.2	29.1	21.4	14.7	6.0	100.0%	47,286
Lip	0.2	1.2	5.4	14.9	18.9	23.3	23.4	12.8	100.0%	2,872
Tongue	0.1	1.9	5.5	20.2	32.4	22.5	12.8	4.6	100.0%	13,820
Salivary gland	2.1	6.2	7.5	14.5	20.0	19.0	20.3	10.4	100.0%	5,407
Floor of mouth	0.1	0.2	3.8	20.5	31.7	25.1	14.5	4.1	100.0%	2,512
Gum & other oral cavity	0.7	2.1	4.7	13.5	22.8	23.4	21.6	11.2	100.0%	6,417
Nasopharynx	3.5	5.8	13.2	25.3	25.6	15.2	9.0	2.3	100.0%	2,820
Tonsil	0.0	0.5	6.6	31.4	36.9	16.5	6.5	1.5	100.0%	7,993
Oropharynx	0.0	0.3	4.3	20.4	33.7	24.1	13.0	4.2	100.0%	1,723
Hypopharynx	0.0	0.1	1.6	16.7	31.9	27.7	17.7	4.1	100.0%	2,812
Other oral cavity & pharynx	0.3	0.8	3.1	14.8	29.6	26.9	16.6	7.9	100.0%	910
Digestive System:	0.2	1.0	3.6	13.4	22.2	24.4	23.8	11.3	100.0%	361,202
Esophagus	0.0	0.3	2.1	11.9	26.9	27.5	23.0	8.3	100.0%	18,984
Stomach	0.1	1.6	4.6	12.2	19.7	24.7	25.0	12.2	100.0%	31,599
Small intestine	0.1	1.3	5.3	15.6	24.9	25.1	19.8	8.0	100.0%	8,822
Colon & Rectum:	0.1	1.2	4.0	13.8	20.8	24.0	24.1	12.0	100.0%	190,166
Colon	0.1	1.0	3.4	11.6	19.3	24.5	26.4	13.8	100.0%	135,206
Rectum	0.0	1.6	5.7	19.4	24.4	22.8	18.4	7.7	100.0%	54,960
Colon & Rectum (Male)	0.1	1.2	4.0	14.7	23.2	25.9	22.2	8.7	100.0%	97,800
Colon & Rectum (Female)	0.1	1.1	4.1	13.0	18.2	22.0	26.0	15.6	100.0%	92,366
Anus, anal canal & anorectum	0.0	1.0	7.8	25.1	26.7	18.7	14.2	6.4	100.0%	7,504
Liver & intrahepatic bile duct	1.0	0.8	2.6	17.8	32.1	22.4	17.5	5.9	100.0%	33,637
Gallbladder	0.0	0.4	2.7	8.5	19.1	25.3	28.7	15.4	100.0%	4,830
Other biliary	0.1	0.6	2.4	8.7	19.0	25.7	28.7	14.9	100.0%	7,656
Pancreas	0.1	0.4	2.1	9.7	20.8	26.0	27.4	13.5	100.0%	51,395
Retroperitoneum	9.0	4.8	8.2	15.0	22.3	20.9	14.9	4.8	100.0%	1,629
Peritoneum, omentum & mesentery	0.6	1.2	3.0	9.8	24.3	32.0	23.1	5.8	100.0%	2,674
Other digestive system	0.2	1.0	3.2	10.9	19.3	22.4	28.3	14.7	100.0%	2,306
Respiratory System:	0.1	0.4	1.5	9.3	21.8	31.1	27.3	8.5	100.0%	274,554
Nose, nasal cavity & middle ear	1.6	4.5	7.0	15.1	23.6	21.3	17.5	9.3	100.0%	2,965
Larynx	0.1	0.4	2.6	16.2	30.2	28.6	17.0	4.8	100.0%	14,693
Lung & bronchus	0.0	0.3	1.4	8.8	21.3	31.4	28.1	8.7	100.0%	255,990
Lung & bronchus (Male)	0.0	0.2	1.3	8.6	22.4	32.1	27.6	7.8	100.0%	135,823
Lung & bronchus (Female)	0.0	0.3	1.5	9.0	20.1	30.8	28.5	9.8	100.0%	120,167
Pleura	4.9	0.0	4.1	9.8	13.0	26.0	28.5	13.8	100.0%	123
Trachea & other respiratory organs	16.1	20.1	9.6	11.9	13.0	11.5	11.9	6.0	100.0%	783
Bones & joints	27.4	15.3	9.7	13.1	11.9	9.5	9.3	3.6	100.0%	3,888
Soft tissue (including heart)	9.0	9.4	10.0	14.8	17.2	16.2	16.2	7.2	100.0%	13,963
Skin (excl. basal & squamous):	0.6	6.4	9.8	17.2	21.2	19.5	17.6	7.7	100.0%	98,066
Melanoma of the skin	0.6	6.5	10.0	17.8	21.8	19.6	16.8	7.0	100.0%	89,930
Other non-epithelial skin	1.3	5.5	7.1	9.9	14.8	19.1	26.5	15.9	100.0%	8,136
Breast (Female)	0.0	1.8	9.6	22.2	25.2	20.7	14.8	5.7	100.0%	285,391
Breast (Female -*in situ*)	0.0	0.7	10.7	28.8	26.8	19.7	11.2	2.2	100.0%	72,153

Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).
Percents may not sum to 100 due to rounding.

Table 1.11 - continued

Age Distribution (%) of Incidence Cases by Site, 2006-2010

All Races, Both Sexes

Site	Age at Diagnosis <20	20-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages	Cases
Female Genital System:	0.4	4.1	9.2	19.2	27.3	20.1	13.7	5.9	100.0%	112,905
Cervix uteri	0.1	13.8	25.7	24.2	17.0	10.7	5.8	2.6	100.0%	17,288
Corpus uteri	0.0	1.6	5.8	18.8	33.6	22.9	13.0	4.3	100.0%	55,690
Uterus, NOS	0.2	1.5	5.1	16.3	22.9	19.5	18.3	16.2	100.0%	1,500
Ovary[a]	1.3	3.6	7.2	18.5	23.7	20.4	17.2	8.2	100.0%	29,070
Vagina	0.8	1.6	5.1	14.2	23.1	21.0	21.5	12.7	100.0%	1,717
Vulva	0.2	2.0	6.7	15.4	18.9	18.5	23.1	15.1	100.0%	5,556
Other female genital system	1.1	6.6	7.0	14.5	24.3	22.5	17.0	7.1	100.0%	2,084
Male Genital System:	0.2	1.8	1.6	9.8	31.2	34.5	17.1	3.9	100.0%	309,497
Prostate	0.0	0.0	0.6	9.6	32.3	35.8	17.7	4.0	100.0%	295,797
Testis	6.2	48.4	24.9	13.8	4.7	1.3	0.7	0.2	100.0%	11,637
Penis	0.1	2.0	6.7	11.3	22.0	24.7	22.5	10.7	100.0%	1,565
Other male genital system	3.2	2.4	6.4	13.3	21.1	19.9	21.5	12.2	100.0%	498
Urinary System:	0.6	1.0	3.4	11.1	21.6	26.5	25.5	10.4	100.0%	154,986
Urinary bladder	0.1	0.4	1.5	7.3	18.5	27.6	30.9	13.7	100.0%	85,752
Kidney & renal pelvis	1.2	1.7	6.0	16.4	25.9	25.0	17.8	5.8	100.0%	65,613
Ureter	0.0	0.1	0.6	4.0	14.3	29.1	36.8	15.1	100.0%	2,350
Other urinary system	0.0	0.7	2.0	7.9	17.2	23.9	31.3	16.9	100.0%	1,271
Eye & Orbit	13.0	3.2	6.3	15.0	20.2	20.2	15.8	6.2	100.0%	3,429
Brain & Nervous System:	13.1	8.8	8.8	14.9	19.5	16.7	13.4	4.8	100.0%	27,410
Brain	12.5	8.7	8.7	14.8	19.7	17.1	13.7	4.9	100.0%	25,747
Cranial nerves & other nervous system	23.3	11.3	11.1	16.1	16.3	10.3	8.4	3.2	100.0%	1,663
Endocrine System:	2.9	14.8	19.3	23.8	19.4	12.2	6.0	1.5	100.0%	55,611
Thyroid	1.8	15.3	19.9	24.4	19.5	12.0	5.7	1.4	100.0%	52,338
Other endocrine & thymus	21.1	7.5	8.8	15.2	18.6	16.0	10.1	2.7	100.0%	3,273
Lymphoma:	3.1	7.2	7.4	13.4	19.2	21.0	20.5	8.3	100.0%	94,880
Hodgkin lymphoma	13.0	31.2	14.6	12.7	10.7	8.8	6.7	2.2	100.0%	11,775
Non-Hodgkin lymphoma	1.7	3.8	6.3	13.5	20.4	22.8	22.4	9.2	100.0%	83,105
Myeloma	0.0	0.5	3.2	11.4	22.8	27.4	25.2	9.6	100.0%	25,028
Leukemia:	10.3	4.7	5.2	10.4	16.7	20.0	21.7	11.1	100.0%	53,448
Lymphocytic:	15.5	3.0	3.2	9.0	17.5	20.8	20.6	10.4	100.0%	26,775
Acute lymphocytic	59.5	10.5	5.5	6.7	7.0	5.3	4.0	1.5	100.0%	6,974
Chronic lymphocytic	0.0	0.2	1.6	8.9	21.1	26.9	27.2	14.0	100.0%	18,082
Other lymphocytic	0.2	2.2	10.9	19.1	22.2	18.8	18.6	8.0	100.0%	1,719
Myeloid & Monocytic:	5.1	6.7	7.5	12.2	16.2	19.7	22.3	10.3	100.0%	23,979
Acute myeloid	5.8	6.4	6.6	11.3	15.8	20.5	23.3	10.3	100.0%	15,392
Chronic myeloid	2.9	7.5	9.3	14.3	17.2	18.3	20.5	10.0	100.0%	6,803
Acute monocytic	9.4	6.5	8.2	12.8	17.7	16.8	19.3	9.3	100.0%	1,115
Other myeloid & monocytic	4.6	5.4	7.8	10.2	12.3	21.1	23.9	14.8	100.0%	669
Other leukemia:	4.0	3.5	4.0	8.1	12.6	16.0	26.5	25.3	100.0%	2,694
Other acute leukemia	7.7	4.2	3.3	8.2	11.4	15.0	25.4	24.8	100.0%	1,016
Aleukemic, subleukemic & NOS	1.8	3.1	4.4	8.0	13.3	16.6	27.2	25.6	100.0%	1,678
Kaposi Sarcoma	0.2	19.1	29.0	21.1	9.2	7.5	7.8	6.1	100.0%	2,283
Mesothelioma	0.1	0.6	1.9	6.4	16.1	27.0	34.1	13.7	100.0%	4,184
Ill-defined & unspecified	0.4	0.9	2.4	9.6	18.1	22.2	27.5	18.8	100.0%	38,395

Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).
Percents may not sum to 100 due to rounding.

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

Table 1.12
Median Age of Cancer Patients at Diagnosis[a], 2006-2010
By Primary Cancer Site, Race and Sex

Site	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Sites	66.0	66.0	65.0	66.0	67.0	65.0	62.0	63.0	62.0
Oral Cavity & Pharynx:	62.0	61.0	64.0	62.0	61.0	66.0	58.0	58.0	57.0
Lip	68.0	67.0	72.0	69.0	68.0	73.0	56.0	56.0	54.0
Tongue	61.0	61.0	63.0	62.0	61.0	64.0	59.0	60.0	57.0
Salivary gland	64.0	66.0	61.0	66.0	68.0	63.0	55.0	57.5	52.0
Floor of mouth	62.0	61.0	67.0	63.0	61.0	68.0	59.0	59.0	59.0
Gum & other oral cavity	67.0	64.0	71.0	68.0	65.0	73.0	59.0	59.0	60.0
Nasopharynx	55.0	55.0	56.0	58.0	57.0	61.0	52.0	53.0	51.0
Tonsil	57.0	57.0	60.0	57.0	57.0	60.0	57.0	57.5	56.5
Oropharynx	62.0	61.0	65.0	63.0	62.0	66.0	59.0	59.0	60.0
Hypopharynx	64.0	64.0	66.0	65.0	64.0	67.0	60.0	60.0	62.0
Other oral cavity & pharynx	65.0	64.0	70.0	65.0	64.0	70.0	62.0	60.5	66.5
Digestive System:	68.0	66.0	71.0	69.0	67.0	72.0	64.0	63.0	66.0
Esophagus	67.0	66.0	72.0	68.0	67.0	73.0	63.0	63.0	65.0
Stomach	69.0	68.0	71.0	70.0	69.0	72.0	67.0	66.0	69.0
Small intestine	66.0	65.0	67.0	66.0	65.0	67.0	63.0	63.0	63.0
Colon & Rectum:	69.0	67.0	71.0	70.0	68.0	72.0	64.0	63.0	65.0
Colon	71.0	69.0	73.0	72.0	70.0	74.0	65.0	64.0	67.0
Rectum	64.0	63.0	65.0	65.0	64.0	66.0	60.0	60.0	61.0
Anus, anal canal & anorectum	60.0	58.0	61.0	61.0	59.0	61.0	54.0	51.0	58.0
Liver & intrahepatic bile duct	63.0	61.0	69.0	63.0	62.0	70.0	59.0	59.0	62.0
Gallbladder	72.0	72.0	72.0	73.0	73.0	74.0	67.0	69.0	67.0
Other biliary	72.0	71.0	74.0	73.0	72.0	74.0	68.0	66.0	70.0
Pancreas	71.0	69.0	74.0	72.0	69.0	74.0	67.0	64.0	70.0
Retroperitoneum	60.0	60.0	60.5	61.0	60.0	62.0	58.0	56.0	58.0
Peritoneum, omentum & mesentery	68.0	63.5	68.0	68.0	65.0	68.0	65.0	54.0	66.0
Other digestive system	72.0	70.0	74.0	73.0	71.0	75.0	67.0	67.0	66.5
Respiratory System:	70.0	69.0	71.0	71.0	70.0	71.0	66.0	65.0	66.0
Nose, nasal cavity & middle ear	64.0	63.0	66.0	65.0	64.0	67.0	57.0	57.0	57.5
Larynx	65.0	65.0	64.0	65.0	65.0	64.0	62.0	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	72.0	73.0	67.5	73.0	72.5	76.0	-	-	-
Trachea & other respiratory organs	48.0	41.0	61.0	50.0	41.0	65.0	52.5	47.0	56.0
Bones & joints	42.0	40.0	45.0	44.0	41.0	46.0	36.0	32.0	41.0
Soft tissue (including heart)	58.0	59.0	58.0	60.0	61.0	59.0	51.0	48.0	53.0
Skin (excl. basal & squamous):	62.0	65.0	58.0	62.0	65.0	58.0	56.0	56.0	55.0
Melanoma of the skin	61.0	64.0	57.0	62.0	64.0	57.0	62.0	63.0	62.0
Other non-epithelial skin	71.0	72.0	69.0	73.0	73.0	71.0	48.0	51.0	48.0
Breast	61.0	68.0	61.0	62.0	69.0	62.0	58.0	64.0	58.0
Breast (*in situ*)	58.0	64.0	58.0	59.0	64.0	58.0	58.0	65.0	58.0

[a] SEER 18 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, New Jersey and Georgia excluding ATL/RG).

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

Table 1.12 - continued
Median Age of Cancer Patients at Diagnosis[a], 2006-2010
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	61.0	-	61.0	60.0	-	60.0
Cervix uteri	49.0	-	49.0	48.0	-	48.0	51.0	-	51.0
Corpus uteri	61.0	-	61.0	62.0	-	62.0	63.0	-	63.0
Uterus, NOS	66.0	-	66.0	68.0	-	68.0	63.0	-	63.0
Ovary[b]	63.0	-	63.0	63.0	-	63.0	61.0	-	61.0
Vagina	67.0	-	67.0	68.0	-	68.0	61.0	-	61.0
Vulva	68.0	-	68.0	70.0	-	70.0	56.0	-	56.0
Other female genital system	63.0	-	63.0	64.0	-	64.0	59.0	-	59.0
Male Genital System:	66.0	66.0	-	66.0	66.0	-	63.0	63.0	-
Prostate	66.0	66.0	-	67.0	67.0	-	64.0	64.0	-
Testis	33.0	33.0	-	33.0	33.0	-	35.0	35.0	-
Penis	68.0	68.0	-	68.0	68.0	-	65.0	65.0	-
Other male genital system	66.5	66.5	-	67.5	67.5	-	54.0	54.0	-
Urinary System:	69.0	69.0	69.0	70.0	70.0	70.0	65.0	64.0	66.0
Urinary bladder	73.0	72.0	74.0	73.0	73.0	74.0	70.0	68.0	73.0
Kidney & renal pelvis	64.0	63.0	65.0	64.0	64.0	66.0	61.0	60.0	63.0
Ureter	75.0	74.0	76.0	75.0	74.0	77.0	73.0	74.0	69.5
Other urinary system	74.0	75.0	72.0	75.0	75.0	74.0	67.0	69.0	65.0
Eye & Orbit	61.0	61.0	60.0	62.0	62.0	61.0	6.0	6.0	3.0
Brain & Nervous System:	57.0	56.0	58.0	58.0	57.0	59.0	50.0	50.0	49.0
Brain	57.0	57.0	59.0	58.0	57.0	60.0	50.0	50.0	49.0
Cranial nerves & other nervous system	47.0	45.0	49.0	47.0	45.0	50.0	44.0	41.0	47.0
Endocrine System:	50.0	54.0	49.0	50.0	54.0	49.0	51.0	53.0	50.0
Thyroid	50.0	54.0	49.0	50.0	54.0	49.0	51.0	54.0	50.0
Other endocrine & thymus	53.0	51.0	55.0	53.0	51.0	56.0	51.0	50.0	52.0
Lymphoma:	64.0	63.0	66.0	65.0	64.0	67.0	54.0	52.0	57.0
Hodgkin lymphoma	38.0	40.0	36.0	39.0	41.0	37.0	36.0	37.0	34.0
Non-Hodgkin lymphoma	66.0	65.0	68.0	67.0	66.0	69.0	57.0	55.0	60.0
Myeloma	69.0	68.0	70.0	70.0	69.0	71.0	66.0	65.0	66.0
Leukemia:	66.0	65.0	67.0	67.0	66.0	68.0	60.0	59.0	62.0
Lymphocytic:	65.0	65.0	67.0	66.0	65.0	67.0	62.0	60.0	65.0
Acute lymphocytic	14.0	14.0	13.0	14.0	14.0	13.0	13.0	13.0	13.0
Chronic lymphocytic	71.0	70.0	73.0	72.0	70.0	74.0	69.0	68.0	72.0
Other lymphocytic	62.0	61.0	68.0	62.0	61.0	67.0	68.0	66.0	76.0
Myeloid & Monocytic:	66.0	66.0	66.0	67.0	67.0	67.0	58.0	58.0	58.0
Acute myeloid	67.0	67.0	67.0	68.0	68.0	68.0	59.0	58.0	60.0
Chronic myeloid	64.0	63.0	65.0	66.0	65.0	67.0	56.0	56.0	56.0
Acute monocytic	62.0	64.0	60.0	63.0	65.0	61.0	52.0	57.0	49.5
Other myeloid & monocytic	69.0	70.0	69.0	70.0	71.0	69.5	63.5	64.0	63.0
Other leukemia:	76.0	73.0	78.0	77.0	75.0	79.0	65.0	62.0	71.0
Other acute leukemia	75.0	71.0	78.0	77.0	73.0	80.0	61.5	56.0	66.5
Aleukemic, subleukemic & NOS	76.0	73.0	78.0	77.0	76.0	79.0	69.0	65.0	72.0
Kaposi Sarcoma	45.0	44.0	74.5	47.0	46.0	80.0	39.0	39.0	41.5
Mesothelioma	74.0	74.0	71.0	74.0	75.0	72.0	70.0	71.0	63.0
Ill-defined & unspecified	73.0	70.0	76.0	74.0	71.0	76.0	67.0	64.0	69.0

[a] SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[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 1.13

Age Distribution (%) of Deaths by Site, 2006-2010

All Races, Both Sexes

Site	Age at Death <20	20-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages	Deaths
All Sites	0.4	0.8	2.3	8.9	18.5	24.9	28.4	15.8	100.0%	2,830,559
Oral Cavity & Pharynx:	0.1	0.7	3.0	13.9	25.1	23.9	21.2	12.0	100.0%	40,202
Lip	0.3	0.6	2.3	10.0	12.5	16.4	25.1	32.8	100.0%	311
Tongue	0.1	1.0	3.6	14.6	25.9	23.7	20.3	10.8	100.0%	10,019
Salivary gland	0.1	0.7	2.8	9.4	16.8	21.4	27.8	20.9	100.0%	3,781
Floor of mouth	0.0	0.2	2.3	13.5	30.2	27.7	18.4	7.7	100.0%	517
Gum & other oral cavity	0.1	0.5	2.1	9.1	18.8	21.8	25.9	21.8	100.0%	5,680
Nasopharynx	0.7	3.3	6.9	18.5	25.8	20.9	16.6	7.3	100.0%	3,318
Tonsil	0.0	0.1	3.1	21.5	32.2	23.7	14.8	4.6	100.0%	3,597
Oropharynx	0.0	0.2	2.4	15.1	29.3	24.1	19.1	9.7	100.0%	3,631
Hypopharynx	0.0	0.3	1.2	12.8	28.6	28.8	22.1	6.0	100.0%	1,522
Other oral cavity & pharynx	0.0	0.2	1.8	13.3	26.6	27.2	21.7	9.3	100.0%	7,826
Digestive System:	0.1	0.5	2.2	9.6	19.7	23.7	27.6	16.7	100.0%	692,392
Esophagus	0.0	0.2	1.7	10.6	24.7	27.4	24.9	10.4	100.0%	69,389
Stomach	0.0	1.3	3.9	10.3	17.2	22.4	27.5	17.4	100.0%	56,659
Small intestine	0.0	0.8	2.8	9.8	20.1	23.2	27.7	15.5	100.0%	5,779
Colon & Rectum:	0.0	0.6	2.5	8.9	17.0	21.9	28.2	20.8	100.0%	263,165
Colon & Rectum (Male)	0.0	0.7	2.7	9.8	19.7	24.7	27.5	15.0	100.0%	134,617
Colon & Rectum (Female)	0.0	0.6	2.3	8.0	14.2	19.0	28.9	27.0	100.0%	128,548
Anus, anal canal & anorectum	0.0	0.6	5.8	20.0	24.9	18.9	18.3	11.4	100.0%	3,616
Liver & intrahepatic bile duct	0.3	0.6	1.9	13.7	26.1	23.1	24.0	10.5	100.0%	91,540
Gallbladder	0.0	0.2	1.6	7.0	17.4	25.8	30.3	17.7	100.0%	10,038
Other biliary	0.0	0.3	1.4	6.5	14.8	22.1	32.4	22.5	100.0%	7,143
Pancreas	0.0	0.2	1.4	8.0	19.4	25.8	29.5	15.7	100.0%	175,321
Retroperitoneum	0.4	1.6	2.7	10.8	19.6	24.3	27.5	13.1	100.0%	1,008
Peritoneum, omentum & mesentery	0.1	0.6	1.9	7.5	19.2	28.5	30.2	12.0	100.0%	4,003
Other digestive system	0.1	0.4	1.9	7.4	16.1	21.2	30.8	22.2	100.0%	4,731
Respiratory System:	0.0	0.1	1.1	7.9	19.7	30.4	29.9	10.8	100.0%	815,324
Nose, nasal cavity & middle ear	0.1	1.9	5.9	12.8	19.3	20.8	23.7	15.6	100.0%	2,442
Larynx	0.0	0.1	1.4	11.7	25.8	28.3	23.6	9.2	100.0%	18,536
Lung & bronchus	0.0	0.1	1.1	7.8	19.6	30.5	30.1	10.8	100.0%	792,203
Lung & bronchus (Male)	0.0	0.1	1.0	7.8	20.8	31.3	29.5	9.4	100.0%	441,505
Lung & bronchus (Female)	0.0	0.1	1.2	7.8	18.1	29.4	30.8	12.6	100.0%	350,698
Pleura	0.2	0.4	1.4	3.6	14.0	26.4	38.5	15.6	100.0%	1,037
Trachea & other respiratory organs	0.8	4.6	4.2	12.3	17.1	21.8	25.0	14.1	100.0%	1,106
Bones & joints	12.8	15.3	6.2	10.6	12.4	14.1	16.6	12.0	100.0%	6,821
Soft tissue (including heart)	3.6	6.1	6.6	13.5	19.1	19.1	20.8	11.2	100.0%	20,689
Skin (excl. basal & squamous):	0.1	2.0	4.4	11.7	19.3	20.9	24.8	16.8	100.0%	58,070
Melanoma of the skin	0.1	2.5	5.3	13.1	20.3	21.5	24.0	13.2	100.0%	43,878
Other non-epithelial skin	0.0	0.3	1.5	7.5	16.3	19.0	27.5	27.7	100.0%	14,192
Breast (Female)	0.0	0.9	5.3	14.6	21.6	20.2	21.5	15.9	100.0%	203,679

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Percents may not sum to 100 due to rounding.

Table 1.13 - continued

Age Distribution (%) of Deaths by Site, 2006-2010

All Races, Both Sexes

Site	Age at Death <20	20-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages	Deaths
Female Genital System:	0.0	1.2	4.1	11.7	21.0	23.8	24.1	14.0	100.0%	139,987
Cervix uteri	0.0	4.8	14.9	24.3	22.2	15.5	11.9	6.4	100.0%	19,853
Corpus uteri	0.0	0.3	1.9	7.4	22.5	28.3	25.5	14.1	100.0%	17,239
Uterus, NOS	0.0	0.5	2.2	8.7	21.1	25.8	25.4	16.3	100.0%	21,391
Ovary	0.1	0.7	2.5	10.7	20.9	24.9	26.2	14.0	100.0%	72,848
Vagina	0.0	0.7	2.7	7.1	16.2	19.3	29.1	24.8	100.0%	2,010
Vulva	0.0	0.5	2.4	7.2	13.0	16.6	29.7	30.6	100.0%	4,536
Other female genital system	0.1	1.5	3.4	10.2	20.2	25.6	23.7	15.2	100.0%	2,110
Male Genital System:	0.0	0.5	0.4	1.9	8.5	19.8	37.0	31.9	100.0%	145,865
Prostate	0.0	0.0	0.1	1.6	8.3	20.0	37.6	32.5	100.0%	142,584
Testis	1.9	35.4	21.3	17.8	11.2	5.0	4.5	3.0	100.0%	1,817
Penis	0.1	0.7	4.5	10.7	21.4	23.9	22.9	15.9	100.0%	1,229
Other male genital system	0.9	1.7	2.1	9.4	13.6	23.4	24.7	24.3	100.0%	235
Urinary System:	0.2	0.3	1.2	6.7	15.8	22.8	31.3	21.7	100.0%	138,317
Urinary bladder	0.0	0.1	0.7	4.0	11.5	20.7	35.2	27.8	100.0%	70,284
Kidney & renal pelvis	0.4	0.5	1.9	9.7	20.8	25.1	26.7	14.9	100.0%	64,191
Ureter	0.0	0.3	0.5	3.5	9.7	23.7	38.0	24.4	100.0%	1,776
Other urinary system	0.0	0.2	1.1	6.1	12.5	21.9	35.3	22.8	100.0%	2,066
Eye & Orbit	1.8	1.5	5.3	11.1	19.1	22.2	24.6	14.4	100.0%	1,291
Brain & Nervous System:	3.8	3.6	6.1	14.4	22.9	22.7	19.3	7.2	100.0%	68,184
Endocrine System:	6.7	2.5	4.1	9.7	17.4	22.0	24.1	13.5	100.0%	12,722
Thyroid	0.1	0.9	2.4	8.0	16.9	24.7	29.5	17.6	100.0%	8,122
Other endocrine & thymus	18.2	5.5	7.1	12.8	18.4	17.3	14.6	6.2	100.0%	4,600
Lymphoma:	0.5	2.1	2.8	6.9	14.3	21.8	32.1	19.6	100.0%	108,422
Hodgkin lymphoma	1.4	12.8	10.7	11.2	14.9	16.8	21.7	10.5	100.0%	6,250
Non-Hodgkin lymphoma	0.4	1.4	2.3	6.6	14.3	22.1	32.8	20.2	100.0%	102,172
Myeloma	0.0	0.1	1.1	6.1	16.3	26.2	33.3	16.8	100.0%	53,902
Leukemia:	2.7	3.1	3.0	6.3	13.1	21.6	30.8	19.5	100.0%	111,736
Lymphocytic:	4.2	3.8	2.3	4.8	11.5	18.9	29.6	24.8	100.0%	31,468
Acute lymphocytic	18.1	16.2	8.7	10.8	13.6	13.6	12.7	6.4	100.0%	7,094
Chronic lymphocytic	0.0	0.1	0.4	2.8	10.8	20.6	34.7	30.6	100.0%	22,407
Other lymphocytic	1.6	1.5	1.6	5.7	11.5	19.0	32.9	26.1	100.0%	1,967
Myeloid & Monocytic:	2.0	3.0	3.6	7.9	15.3	23.9	30.2	14.1	100.0%	53,485
Acute myeloid	2.1	3.1	3.6	8.0	15.8	24.7	30.0	12.7	100.0%	44,442
Chronic myeloid	0.6	3.2	4.9	8.9	13.0	17.9	28.8	22.8	100.0%	5,083
Acute monocytic	1.4	1.8	2.3	5.3	11.1	23.8	32.8	21.5	100.0%	488
Other myeloid & monocytic	1.6	1.3	2.1	5.2	12.6	22.8	34.9	19.5	100.0%	3,472
Other leukemia:	2.3	2.3	2.3	5.0	10.7	20.2	33.3	24.0	100.0%	26,783
Other acute leukemia	1.3	2.6	2.5	5.1	10.7	20.9	34.1	22.9	100.0%	10,301
Aleukemic, subleukemic & NOS	2.9	2.2	2.2	4.9	10.7	19.7	32.7	24.7	100.0%	16,482
Ill-defined & unspecified	0.2	0.7	2.0	8.1	17.4	23.4	29.3	18.8	100.0%	210,920

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Percents may not sum to 100 due to rounding.

Table 1.14
Median Age of Cancer Patients at Death[a], 2006-2010
By Primary Cancer Site, Race and Sex

Site	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Sites	72.0	72.0	73.0	73.0	72.0	74.0	68.0	67.0	68.0
Oral Cavity & Pharynx:	67.0	65.0	73.0	69.0	66.0	75.0	62.0	61.0	63.0
Lip	78.0	75.0	85.0	78.0	75.0	85.0	-	-	-
Tongue	66.0	64.0	72.0	67.0	65.0	73.0	61.0	62.0	60.0
Salivary gland	74.0	73.0	76.0	75.0	74.0	77.0	62.0	62.0	63.5
Floor of mouth	66.0	63.0	71.0	67.0	64.0	72.0	61.5	60.0	64.0
Gum & other oral cavity	74.0	68.0	80.0	75.0	69.0	81.0	64.0	62.0	68.0
Nasopharynx	62.0	61.0	67.0	65.0	63.0	71.0	57.0	57.0	59.0
Tonsil	62.0	61.0	67.0	62.0	61.0	67.0	61.0	61.0	61.0
Oropharynx	66.0	64.0	72.0	67.0	64.0	74.0	61.0	61.0	59.0
Hypopharynx	67.0	66.0	70.0	68.0	67.0	70.0	62.0	61.0	65.0
Other oral cavity & pharynx	67.0	66.0	71.0	68.0	67.0	72.0	63.0	62.0	66.0
Digestive System:	72.0	70.0	76.0	73.0	70.0	77.0	67.0	65.0	71.0
Esophagus	69.0	68.0	74.0	70.0	68.0	75.0	65.0	64.0	66.0
Stomach	72.0	71.0	75.0	73.0	71.0	76.0	70.0	68.0	73.0
Small intestine	72.0	70.0	74.0	73.0	71.0	75.0	65.0	63.0	66.5
Colon & Rectum	74.0	72.0	77.0	75.0	72.0	78.0	69.0	67.0	71.0
Anus, anal canal & anorectum	64.0	62.0	65.0	65.0	63.0	66.0	56.0	53.0	60.0
Liver & intrahepatic bile duct	68.0	65.0	74.0	69.0	66.0	75.0	61.0	60.0	67.0
Gallbladder	74.0	73.0	74.0	75.0	74.0	75.0	69.0	70.0	68.0
Other biliary	76.0	74.0	78.0	77.0	75.0	79.0	71.5	69.5	74.0
Pancreas	73.0	70.0	75.0	73.0	71.0	76.0	69.0	66.0	72.0
Retroperitoneum	70.0	68.5	72.0	71.0	69.0	73.0	63.0	61.0	67.5
Peritoneum, omentum & mesentery	72.0	68.0	73.0	72.0	68.0	73.0	67.0	65.5	68.0
Other digestive system	76.0	73.0	79.0	77.0	74.0	79.0	69.0	65.0	74.0
Respiratory System:	72.0	71.0	72.0	72.0	72.0	73.0	67.0	67.0	69.0
Nose, nasal cavity & middle ear	70.0	66.0	74.0	71.0	68.0	75.0	62.0	60.0	66.0
Larynx	68.0	68.0	70.0	69.0	69.0	71.0	65.0	64.0	65.0
Lung & bronchus	72.0	71.0	72.0	72.0	72.0	73.0	68.0	67.0	69.0
Pleura	75.0	76.0	74.0	76.0	76.0	75.0	68.5	68.0	-
Trachea & other respiratory organs	69.0	66.0	74.0	70.0	67.0	75.0	61.5	61.5	62.0
Bones & joints	59.0	56.0	63.0	60.0	58.0	65.0	51.0	49.0	54.0
Soft tissue (including heart)	65.0	65.0	65.0	66.0	66.0	67.0	57.0	55.0	58.0
Skin (excl. basal & squamous):	71.0	70.0	72.0	71.0	70.0	72.0	63.0	61.0	69.0
Melanoma of the skin	69.0	68.0	69.0	69.0	68.0	69.0	68.0	65.0	70.0
Other non-epithelial skin	77.0	75.0	81.0	78.0	76.0	82.0	60.0	59.0	68.0
Breast	68.0	71.0	68.0	70.0	72.0	70.0	61.0	65.0	61.0

[a] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

\- Statistic could not be calculated. Less than 16 deaths occurred during the time interval.

Table 1.14 - continued
Median Age of Cancer Patients at Death[a], 2006-2010
By Primary Cancer Site, Race and Sex

Site	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Female Genital System:	70.0	-	70.0	70.0	-	70.0	66.0	-	66.0
Cervix uteri	57.0	-	57.0	57.0	-	57.0	56.0	-	56.0
Corpus uteri	71.0	-	71.0	71.0	-	71.0	68.0	-	68.0
Uterus, NOS	71.0	-	71.0	72.0	-	72.0	69.0	-	69.0
Ovary	71.0	-	71.0	71.0	-	71.0	67.0	-	67.0
Vagina	76.0	-	76.0	77.0	-	77.0	71.0	-	71.0
Vulva	79.0	-	79.0	79.0	-	79.0	70.0	-	70.0
Other female genital system	70.0	-	70.0	71.0	-	71.0	66.0	-	66.0
Male Genital System:	80.0	80.0	-	81.0	81.0	-	77.0	77.0	-
Prostate	80.0	80.0	-	81.0	81.0	-	77.0	77.0	-
Testis	40.0	40.0	-	41.0	41.0	-	39.0	39.0	-
Penis	70.0	70.0	-	71.0	71.0	-	66.0	66.0	-
Other male genital system	74.0	74.0	-	75.0	75.0	-	69.0	69.0	-
Urinary System:	76.0	75.0	78.0	76.0	75.0	78.0	71.0	68.0	74.0
Urinary bladder	79.0	78.0	80.0	79.0	78.0	81.0	75.0	73.0	77.0
Kidney & renal pelvis	71.0	69.0	75.0	72.0	70.0	75.0	67.0	64.0	71.0
Ureter	78.0	77.0	79.0	78.0	77.0	80.0	74.5	74.5	74.0
Other urinary system	77.0	77.0	78.0	78.0	77.0	79.0	67.0	67.0	67.0
Eye & Orbit	70.0	69.0	71.0	70.0	69.0	71.5	57.0	54.5	58.5
Brain & Nervous System	64.0	63.0	66.0	65.0	63.0	67.0	59.0	58.0	61.0
Endocrine System:	69.0	66.0	71.0	70.0	67.0	73.0	63.0	58.0	65.0
Thyroid	73.0	71.0	76.0	74.0	71.0	76.0	70.0	67.0	71.0
Other endocrine & thymus	58.0	57.0	59.0	59.0	58.0	60.0	51.0	50.0	53.0
Lymphoma:	75.0	73.0	77.0	76.0	74.0	78.0	64.0	61.0	68.0
Hodgkin lymphoma	64.0	61.0	68.0	66.0	63.0	70.0	50.0	48.0	53.0
Non-Hodgkin lymphoma	76.0	73.0	78.0	76.0	74.0	78.0	65.0	62.0	69.0
Myeloma	75.0	73.0	76.0	75.0	74.0	77.0	71.0	69.0	72.0
Leukemia:	75.0	73.0	76.0	75.0	74.0	77.0	68.0	66.0	70.0
Lymphocytic:	76.0	74.0	79.0	77.0	75.0	80.0	69.0	67.0	74.0
Acute lymphocytic	52.0	48.0	55.0	53.0	50.0	56.0	42.0	35.0	49.0
Chronic lymphocytic	79.0	77.0	82.0	80.0	78.0	83.0	73.0	71.0	77.0
Other lymphocytic	78.0	76.0	81.0	78.0	76.0	81.0	74.0	68.0	78.0
Myeloid & Monocytic:	72.0	72.0	73.0	73.0	73.0	74.0	65.0	65.0	66.0
Acute myeloid	72.0	72.0	72.0	72.0	72.0	73.0	66.0	65.0	66.0
Chronic myeloid	75.0	73.0	78.0	77.0	75.0	80.0	61.0	60.0	62.0
Acute monocytic	76.0	77.0	76.0	77.0	77.0	76.0	71.0	-	-
Other myeloid & monocytic	76.0	75.0	78.0	77.0	76.0	78.0	69.0	68.0	75.0
Other leukemia:	77.0	76.0	79.0	78.0	76.0	80.0	71.0	69.0	73.0
Other acute leukemia	77.0	76.0	78.0	77.0	76.0	79.0	71.0	69.0	73.0
Aleukemic, subleukemic & NOS	77.0	76.0	79.0	78.0	77.0	80.0	71.0	69.0	73.0
Ill-defined & unspecified	74.0	72.0	76.0	75.0	73.0	77.0	68.0	66.0	70.0

[a] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
- Statistic could not be calculated. Less than 16 deaths occurred during the time interval.

Table 1.15

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

Both Sexes, 18 SEER Areas, 2008-2010

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	40.76 (40.67, 40.85)	41.08 (40.98, 41.18)	37.66 (37.40, 37.93)
Invasive and In Situ	43.13 (43.04, 43.22)	43.48 (43.38, 43.58)	39.01 (38.74, 39.28)
Oral Cavity and Pharynx	1.09 (1.07, 1.10)	1.13 (1.11, 1.14)	0.80 (0.76, 0.83)
Esophagus	0.51 (0.50, 0.52)	0.52 (0.51, 0.54)	0.47 (0.44, 0.50)
Stomach	0.86 (0.85, 0.88)	0.75 (0.74, 0.77)	1.12 (1.08, 1.17)
Colon and Rectum	4.82 (4.79, 4.85)	4.74 (4.71, 4.77)	4.94 (4.84, 5.03)
Invasive and In Situ	5.01 (4.98, 5.04)	4.92 (4.88, 4.95)	5.19 (5.09, 5.29)
Liver and Intrahepatic Bile Duct	0.86 (0.85, 0.87)	0.76 (0.74, 0.77)	0.88 (0.85, 0.92)
Pancreas	1.49 (1.47, 1.51)	1.47 (1.45, 1.49)	1.59 (1.54, 1.65)
Larynx	0.36 (0.35, 0.37)	0.36 (0.35, 0.37)	0.45 (0.42, 0.48)
Invasive and In Situ	0.38 (0.38, 0.39)	0.39 (0.38, 0.40)	0.48 (0.45, 0.51)
Lung and Bronchus	6.88 (6.85, 6.92)	7.06 (7.02, 7.10)	6.56 (6.45, 6.68)
Melanoma of the Skin	2.03 (2.02, 2.05)	2.38 (2.35, 2.40)	0.09 (0.07, 0.10)
Invasive and In Situ	3.35 (3.33, 3.38)	3.83 (3.80, 3.86)	0.11 (0.10, 0.13)
Breast	6.37 (6.33, 6.40)	6.50 (6.46, 6.54)	5.78 (5.69, 5.88)
Invasive and In Situ	7.63 (7.59, 7.66)	7.76 (7.72, 7.80)	6.93 (6.83, 7.04)
Urinary Bladder (Invasive and In Situ)	2.40 (2.38, 2.43)	2.61 (2.58, 2.63)	1.24 (1.19, 1.29)
Kidney and Renal Pelvis	1.61 (1.59, 1.63)	1.66 (1.64, 1.68)	1.59 (1.54, 1.64)
Brain and Other Nervous System	0.62 (0.61, 0.63)	0.68 (0.67, 0.70)	0.35 (0.33, 0.37)
Thyroid	1.08 (1.07, 1.09)	1.14 (1.13, 1.15)	0.60 (0.57, 0.63)
Hodgkin Lymphoma	0.22 (0.22, 0.23)	0.24 (0.23, 0.25)	0.20 (0.18, 0.21)
Non-Hodgkin Lymphoma	2.14 (2.12, 2.16)	2.24 (2.22, 2.27)	1.27 (1.22, 1.31)
Myeloma	0.70 (0.69, 0.71)	0.64 (0.63, 0.66)	1.17 (1.12, 1.22)
Leukemia	1.40 (1.38, 1.41)	1.46 (1.44, 1.48)	0.92 (0.87, 0.96)
Acute Lymphocytic Leukemia	0.13 (0.12, 0.13)	0.14 (0.14, 0.15)	0.07 (0.06, 0.08)
Chronic Lymphocytic Leukemia	0.52 (0.51, 0.53)	0.55 (0.54, 0.56)	0.29 (0.26, 0.31)
Acute Myeloid Leukemia	0.41 (0.40, 0.42)	0.42 (0.41, 0.43)	0.29 (0.27, 0.32)
Chronic Myeloid Leukemia	0.17 (0.17, 0.18)	0.18 (0.17, 0.18)	0.14 (0.13, 0.16)
Kaposi Sarcoma	0.05 (0.04, 0.05)	0.04 (0.04, 0.05)	0.07 (0.06, 0.08)
Mesothelioma	0.13 (0.12, 0.13)	0.14 (0.14, 0.15)	0.06 (0.05, 0.07)

Source: Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.cancer.gov/devcan/). SEER 18 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, New Jersey, and Georgia excluding ATL/RG).

Note: Invasive cancer only unless specified otherwise.
A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.15 - continued

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

Both Sexes, 18 SEER Areas, 2008-2010

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	35.09 (34.74, 35.46)	29.44 (28.26, 30.73)	37.76 (37.43, 38.09)
Invasive and In Situ	36.55 (36.19, 36.92)	30.05 (28.86, 31.34)	39.05 (38.72, 39.38)
Oral Cavity and Pharynx	0.90 (0.84, 0.96)	0.82 (0.60, 1.16)	0.78 (0.74, 0.84)
Esophagus	0.36 (0.32, 0.40)	0.42 (0.30, 0.68)	0.38 (0.35, 0.41)
Stomach	1.85 (1.76, 1.95)	0.99 (0.79, 1.31)	1.52 (1.45, 1.59)
Colon and Rectum	5.05 (4.91, 5.20)	4.20 (3.75, 4.76)	4.71 (4.59, 4.84)
Invasive and In Situ	5.25 (5.11, 5.40)	4.34 (3.88, 4.91)	4.89 (4.77, 5.02)
Liver and Intrahepatic Bile Duct	1.89 (1.81, 1.97)	1.57 (1.33, 1.92)	1.54 (1.48, 1.61)
Pancreas	1.59 (1.51, 1.69)	1.26 (1.02, 1.62)	1.65 (1.58, 1.73)
Larynx	0.18 (0.15, 0.21)	0.26 (0.17, 0.50)	0.31 (0.28, 0.34)
Invasive and In Situ	0.19 (0.16, 0.22)	0.28 (0.19, 0.51)	0.33 (0.30, 0.36)
Lung and Bronchus	5.62 (5.47, 5.78)	4.57 (4.11, 5.14)	4.41 (4.29, 4.53)
Melanoma of the Skin	0.16 (0.13, 0.19)	0.31 (0.22, 0.54)	0.51 (0.47, 0.55)
Invasive and In Situ	0.21 (0.19, 0.25)	0.44 (0.32, 0.68)	0.77 (0.72, 0.82)
Breast	5.35 (5.23, 5.47)	3.80 (3.45, 4.25)	5.11 (5.00, 5.22)
Invasive and In Situ	6.71 (6.58, 6.84)	4.23 (3.87, 4.69)	6.01 (5.90, 6.13)
Urinary Bladder (Invasive and In Situ)	1.44 (1.36, 1.52)	0.95 (0.74, 1.29)	1.59 (1.52, 1.68)
Kidney and Renal Pelvis	1.03 (0.97, 1.09)	2.02 (1.74, 2.42)	1.78 (1.71, 1.84)
Brain and Other Nervous System	0.39 (0.35, 0.43)	0.32 (0.19, 0.59)	0.55 (0.52, 0.60)
Thyroid	1.19 (1.14, 1.25)	0.73 (0.56, 1.02)	1.01 (0.97, 1.06)
Hodgkin Lymphoma	0.11 (0.10, 0.13)	0.11 (0.05, 0.35)	0.22 (0.20, 0.24)
Non-Hodgkin Lymphoma	1.83 (1.75, 1.92)	1.27 (1.04, 1.62)	2.23 (2.15, 2.32)
Myeloma	0.51 (0.47, 0.56)	0.38 (0.27, 0.64)	0.72 (0.68, 0.77)
Leukemia	0.97 (0.91, 1.03)	0.88 (0.68, 1.19)	1.18 (1.13, 1.24)
Acute Lymphocytic Leukemia	0.11 (0.09, 0.13)	0.09 (0.05, 0.31)	0.19 (0.18, 0.21)
Chronic Lymphocytic Leukemia	0.15 (0.13, 0.18)	0.18 (0.09, 0.42)	0.29 (0.26, 0.32)
Acute Myeloid Leukemia	0.42 (0.38, 0.46)	0.35 (0.23, 0.62)	0.40 (0.36, 0.43)
Chronic Myeloid Leukemia	0.15 (0.13, 0.18)	0.14 (0.08, 0.38)	0.16 (0.14, 0.19)
Kaposi Sarcoma	0.02 (0.01, 0.04)	0.02 (0.00, 0.25)	0.08 (0.07, 0.10)
Mesothelioma	0.05 (0.04, 0.07)	0.11 (0.05, 0.35)	0.13 (0.11, 0.15)

Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.cancer.gov/devcan/).

Source: SEER 18 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, New Jersey, and Georgia excluding ATL/RG).

Note: Invasive cancer only unless specified otherwise.

[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.

A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.16

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

Males, 18 SEER Areas, 2008-2010

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	43.92 (43.78, 44.06)	43.72 (43.57, 43.87)	42.13 (41.72, 42.55)
Invasive and In Situ	45.35 (45.21, 45.49)	45.17 (45.01, 45.32)	42.46 (42.05, 42.88)
Oral Cavity and Pharynx	1.52 (1.49, 1.54)	1.57 (1.55, 1.60)	1.14 (1.08, 1.21)
Esophagus	0.80 (0.78, 0.82)	0.84 (0.82, 0.86)	0.69 (0.64, 0.74)
Stomach	1.08 (1.06, 1.10)	0.97 (0.95, 0.99)	1.32 (1.25, 1.40)
Colon and Rectum	5.01 (4.97, 5.06)	4.94 (4.89, 4.99)	5.00 (4.86, 5.14)
Invasive and In Situ	5.22 (5.18, 5.27)	5.13 (5.08, 5.19)	5.26 (5.11, 5.40)
Liver and Intrahepatic Bile Duct	1.23 (1.20, 1.25)	1.08 (1.06, 1.11)	1.32 (1.26, 1.39)
Pancreas	1.50 (1.47, 1.52)	1.49 (1.46, 1.52)	1.54 (1.46, 1.62)
Larynx	0.60 (0.58, 0.61)	0.60 (0.58, 0.61)	0.76 (0.71, 0.82)
Invasive and In Situ	0.64 (0.63, 0.66)	0.65 (0.63, 0.66)	0.82 (0.77, 0.88)
Lung and Bronchus	7.62 (7.56, 7.68)	7.66 (7.59, 7.72)	7.87 (7.70, 8.06)
Melanoma of the Skin	2.54 (2.50, 2.57)	2.93 (2.90, 2.97)	0.08 (0.07, 0.11)
Invasive and In Situ	4.14 (4.10, 4.18)	4.68 (4.64, 4.73)	0.11 (0.09, 0.14)
Breast	0.13 (0.12, 0.14)	0.13 (0.12, 0.14)	0.15 (0.12, 0.18)
Invasive and In Situ	0.14 (0.14, 0.15)	0.14 (0.13, 0.15)	0.17 (0.14, 0.20)
Prostate	15.33 (15.26, 15.41)	14.61 (14.52, 14.69)	19.26 (18.99, 19.53)
Testis	0.39 (0.38, 0.39)	0.46 (0.45, 0.47)	0.09 (0.08, 0.11)
Urinary Bladder (Invasive and In Situ)	3.82 (3.78, 3.87)	4.15 (4.10, 4.19)	1.76 (1.67, 1.86)
Kidney and Renal Pelvis	2.05 (2.02, 2.08)	2.11 (2.08, 2.14)	1.94 (1.86, 2.03)
Brain and Other Nervous System	0.69 (0.68, 0.71)	0.76 (0.75, 0.78)	0.37 (0.33, 0.41)
Thyroid	0.55 (0.54, 0.57)	0.59 (0.58, 0.61)	0.26 (0.23, 0.30)
Hodgkin Lymphoma	0.25 (0.24, 0.25)	0.26 (0.25, 0.27)	0.21 (0.19, 0.24)
Non-Hodgkin Lymphoma	2.36 (2.33, 2.40)	2.47 (2.44, 2.51)	1.40 (1.34, 1.48)
Myeloma	0.80 (0.78, 0.82)	0.76 (0.74, 0.78)	1.22 (1.15, 1.29)
Leukemia	1.65 (1.63, 1.68)	1.73 (1.70, 1.76)	1.02 (0.96, 1.09)
Acute Lymphocytic Leukemia	0.14 (0.14, 0.15)	0.16 (0.15, 0.16)	0.08 (0.07, 0.10)
Chronic Lymphocytic Leukemia	0.64 (0.63, 0.66)	0.68 (0.66, 0.70)	0.34 (0.30, 0.39)
Acute Myeloid Leukemia	0.47 (0.45, 0.48)	0.48 (0.47, 0.50)	0.31 (0.27, 0.35)
Chronic Myeloid Leukemia	0.21 (0.20, 0.22)	0.21 (0.20, 0.22)	0.16 (0.14, 0.19)
Kaposi Sarcoma	0.08 (0.08, 0.09)	0.07 (0.07, 0.08)	0.13 (0.11, 0.15)
Mesothelioma	0.21 (0.20, 0.22)	0.24 (0.23, 0.25)	0.10 (0.08, 0.12)

Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.cancer.gov/devcan/).
Source: SEER 18 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, New Jersey, and Georgia excluding ATL/RG).
Note: Invasive cancer only unless specified otherwise.
A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.16 - continued

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

Males, 18 SEER Areas, 2008-2010

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	37.06 (36.52, 37.62)	30.38 (28.63, 32.38)	41.11 (40.59, 41.63)
Invasive and In Situ	37.43 (36.88, 37.99)	30.58 (28.82, 32.59)	41.56 (41.04, 42.09)
Oral Cavity and Pharynx	1.25 (1.16, 1.36)	1.20 (0.82, 1.95)	1.04 (0.97, 1.13)
Esophagus	0.52 (0.46, 0.60)	0.65 (0.43, 1.28)	0.64 (0.58, 0.71)
Stomach	2.17 (2.03, 2.33)	1.16 (0.85, 1.83)	1.86 (1.74, 1.99)
Colon and Rectum	5.27 (5.07, 5.48)	4.53 (3.83, 5.53)	5.22 (5.03, 5.42)
Invasive and In Situ	5.50 (5.29, 5.71)	4.69 (3.98, 5.70)	5.41 (5.22, 5.61)
Liver and Intrahepatic Bile Duct	2.57 (2.44, 2.71)	2.36 (1.91, 3.12)	2.09 (1.99, 2.20)
Pancreas	1.51 (1.40, 1.64)	1.26 (0.96, 1.92)	1.49 (1.39, 1.59)
Larynx	0.33 (0.29, 0.40)	0.49 (0.31, 1.08)	0.58 (0.52, 0.66)
Invasive and In Situ	0.35 (0.30, 0.42)	0.49 (0.32, 1.09)	0.62 (0.56, 0.70)
Lung and Bronchus	7.08 (6.83, 7.35)	5.02 (4.32, 6.01)	5.05 (4.86, 5.26)
Melanoma of the Skin	0.19 (0.15, 0.25)	0.31 (0.17, 0.89)	0.53 (0.47, 0.60)
Invasive and In Situ	0.26 (0.21, 0.32)	0.47 (0.29, 1.07)	0.79 (0.72, 0.88)
Breast	0.10 (0.07, 0.16)	0.04 (0.01, 0.64)	0.07 (0.06, 0.12)
Invasive and In Situ	0.11 (0.08, 0.17)	0.06 (0.01, 0.65)	0.08 (0.06, 0.12)
Prostate	10.31 (10.04, 10.59)	7.69 (6.87, 8.79)	14.64 (14.35, 14.95)
Testis	0.14 (0.12, 0.18)	0.32 (0.23, 0.87)	0.34 (0.32, 0.38)
Urinary Bladder (Invasive and In Situ)	2.26 (2.12, 2.41)	1.52 (1.15, 2.25)	2.56 (2.42, 2.73)
Kidney and Renal Pelvis	1.37 (1.27, 1.49)	2.53 (2.00, 3.37)	2.25 (2.14, 2.37)
Brain and Other Nervous System	0.45 (0.40, 0.52)	0.25 (0.15, 0.82)	0.57 (0.52, 0.64)
Thyroid	0.55 (0.50, 0.62)	0.28 (0.18, 0.84)	0.44 (0.40, 0.50)
Hodgkin Lymphoma	0.12 (0.10, 0.16)	0.06 (0.03, 0.65)	0.25 (0.22, 0.30)
Non-Hodgkin Lymphoma	2.05 (1.93, 2.18)	1.32 (1.03, 1.97)	2.38 (2.26, 2.51)
Myeloma	0.56 (0.51, 0.64)	0.31 (0.18, 0.89)	0.84 (0.77, 0.94)
Leukemia	1.14 (1.05, 1.25)	1.06 (0.72, 1.76)	1.35 (1.26, 1.46)
Acute Lymphocytic Leukemia	0.13 (0.10, 0.17)	0.10 (0.04, 0.68)	0.19 (0.18, 0.23)
Chronic Lymphocytic Leukemia	0.22 (0.18, 0.28)	0.28 (0.11, 0.91)	0.35 (0.30, 0.41)
Acute Myeloid Leukemia	0.45 (0.40, 0.53)	0.37 (0.18, 0.99)	0.45 (0.40, 0.52)
Chronic Myeloid Leukemia	0.21 (0.18, 0.27)	0.17 (0.04, 0.78)	0.18 (0.15, 0.23)
Kaposi Sarcoma	0.03 (0.02, 0.07)	0.04 (0.00, 0.64)	0.12 (0.10, 0.17)
Mesothelioma	0.08 (0.06, 0.12)	0.15 (0.04, 0.75)	0.22 (0.18, 0.28)

Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.cancer.gov/devcan/).

Source: SEER 18 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, New Jersey, and Georgia excluding ATL/RG).

Note: Invasive cancer only unless specified otherwise.

[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.

A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.17

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

Females, 18 SEER Areas, 2008-2010

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	38.00 (37.88, 38.12)	38.80 (38.67, 38.94)	33.78 (33.44, 34.12)
Invasive and In Situ	41.31 (41.19, 41.43)	42.18 (42.04, 42.31)	36.05 (35.70, 36.40)
Oral Cavity and Pharynx	0.68 (0.66, 0.69)	0.70 (0.68, 0.72)	0.48 (0.45, 0.53)
Esophagus	0.23 (0.22, 0.24)	0.23 (0.22, 0.24)	0.28 (0.25, 0.32)
Stomach	0.67 (0.65, 0.68)	0.56 (0.54, 0.57)	0.96 (0.90, 1.03)
Colon and Rectum	4.65 (4.60, 4.69)	4.56 (4.51, 4.61)	4.90 (4.77, 5.03)
Invasive and In Situ	4.82 (4.78, 4.86)	4.72 (4.67, 4.77)	5.14 (5.01, 5.28)
Liver and Intrahepatic Bile Duct	0.51 (0.50, 0.52)	0.44 (0.43, 0.45)	0.49 (0.45, 0.53)
Pancreas	1.48 (1.46, 1.51)	1.45 (1.43, 1.48)	1.64 (1.56, 1.72)
Larynx	0.14 (0.13, 0.14)	0.14 (0.13, 0.15)	0.17 (0.15, 0.20)
Invasive and In Situ	0.14 (0.14, 0.15)	0.15 (0.14, 0.16)	0.18 (0.16, 0.21)
Lung and Bronchus	6.26 (6.21, 6.31)	6.56 (6.51, 6.62)	5.46 (5.32, 5.60)
Melanoma of the Skin	1.60 (1.58, 1.62)	1.89 (1.86, 1.92)	0.09 (0.07, 0.11)
Invasive and In Situ	2.68 (2.65, 2.70)	3.09 (3.05, 3.12)	0.12 (0.10, 0.14)
Breast	12.29 (12.23, 12.36)	12.68 (12.61, 12.75)	10.82 (10.64, 11.01)
Invasive and In Situ	14.76 (14.70, 14.83)	15.18 (15.10, 15.26)	13.00 (12.81, 13.20)
Cervix Uteri	0.66 (0.65, 0.68)	0.65 (0.63, 0.66)	0.83 (0.78, 0.88)
Corpus and Uterus, NOS	2.69 (2.66, 2.72)	2.78 (2.74, 2.81)	2.34 (2.26, 2.43)
Invasive and In Situ	2.71 (2.68, 2.74)	2.80 (2.77, 2.83)	2.37 (2.29, 2.46)
Ovary[a]	1.37 (1.35, 1.39)	1.45 (1.43, 1.48)	1.00 (0.94, 1.06)
Urinary Bladder (Invasive and In Situ)	1.15 (1.13, 1.17)	1.23 (1.20, 1.25)	0.80 (0.74, 0.86)
Kidney and Renal Pelvis	1.20 (1.18, 1.22)	1.23 (1.21, 1.25)	1.27 (1.21, 1.34)
Brain and Other Nervous System	0.55 (0.54, 0.57)	0.61 (0.59, 0.62)	0.33 (0.30, 0.37)
Thyroid	1.61 (1.59, 1.63)	1.71 (1.68, 1.73)	0.92 (0.87, 0.97)
Hodgkin Lymphoma	0.20 (0.20, 0.21)	0.22 (0.21, 0.23)	0.18 (0.16, 0.21)
Non-Hodgkin Lymphoma	1.93 (1.91, 1.96)	2.04 (2.01, 2.07)	1.15 (1.09, 1.21)
Myeloma	0.61 (0.59, 0.62)	0.54 (0.53, 0.56)	1.14 (1.07, 1.20)
Leukemia	1.17 (1.15, 1.19)	1.22 (1.19, 1.24)	0.83 (0.78, 0.89)
Acute Lymphocytic Leukemia	0.11 (0.11, 0.12)	0.13 (0.12, 0.13)	0.06 (0.05, 0.08)
Chronic Lymphocytic Leukemia	0.41 (0.40, 0.43)	0.44 (0.42, 0.45)	0.24 (0.21, 0.28)
Acute Myeloid Leukemia	0.37 (0.35, 0.38)	0.37 (0.36, 0.38)	0.28 (0.25, 0.32)
Chronic Myeloid Leukemia	0.14 (0.14, 0.15)	0.14 (0.14, 0.15)	0.13 (0.11, 0.15)
Kaposi Sarcoma	0.01 (0.01, 0.01)	0.01 (0.01, 0.01)	0.01 (0.01, 0.03)
Mesothelioma	0.05 (0.05, 0.06)	0.06 (0.05, 0.06)	0.03 (0.02, 0.04)

Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.cancer.gov/devcan/).
Source: SEER 18 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, New Jersey, and Georgia excluding ATL/RG).
Note: Invasive cancer only unless specified otherwise.
[a] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.17 - continued

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

Females, 18 SEER Areas, 2008-2010

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	33.59 (33.11, 34.08)	28.80 (27.19, 30.59)	35.25 (34.83, 35.69)
Invasive and In Situ	36.00 (35.51, 36.50)	29.83 (28.21, 31.63)	37.33 (36.90, 37.78)
Oral Cavity and Pharynx	0.59 (0.53, 0.67)	0.47 (0.25, 0.95)	0.55 (0.49, 0.62)
Esophagus	0.22 (0.18, 0.28)	0.22 (0.11, 0.61)	0.15 (0.12, 0.19)
Stomach	1.59 (1.47, 1.72)	0.84 (0.60, 1.31)	1.24 (1.15, 1.33)
Colon and Rectum	4.87 (4.68, 5.08)	3.95 (3.35, 4.74)	4.29 (4.13, 4.46)
Invasive and In Situ	5.05 (4.85, 5.26)	4.08 (3.47, 4.87)	4.47 (4.30, 4.64)
Liver and Intrahepatic Bile Duct	1.31 (1.21, 1.42)	0.86 (0.63, 1.31)	1.04 (0.96, 1.13)
Pancreas	1.66 (1.54, 1.80)	1.24 (0.90, 1.81)	1.78 (1.67, 1.90)
Larynx	0.05 (0.03, 0.09)	0.06 (0.02, 0.44)	0.07 (0.05, 0.10)
Invasive and In Situ	0.05 (0.03, 0.09)	0.08 (0.03, 0.46)	0.08 (0.06, 0.11)
Lung and Bronchus	4.42 (4.24, 4.61)	4.21 (3.61, 5.01)	3.90 (3.75, 4.07)
Melanoma of the Skin	0.13 (0.10, 0.18)	0.31 (0.19, 0.70)	0.50 (0.45, 0.56)
Invasive and In Situ	0.18 (0.15, 0.23)	0.41 (0.27, 0.81)	0.77 (0.71, 0.84)
Breast	9.87 (9.65, 10.10)	7.38 (6.71, 8.22)	9.73 (9.53, 9.94)
Invasive and In Situ	12.39 (12.16, 12.64)	8.22 (7.53, 9.08)	11.49 (11.28, 11.71)
Cervix Uteri	0.66 (0.60, 0.72)	0.58 (0.43, 0.97)	0.98 (0.93, 1.05)
Corpus and Uterus, NOS	2.12 (2.03, 2.23)	2.03 (1.71, 2.54)	2.27 (2.18, 2.37)
Invasive and In Situ	2.14 (2.04, 2.24)	2.05 (1.73, 2.56)	2.29 (2.20, 2.39)
Ovary[c]	1.08 (1.00, 1.17)	1.21 (0.88, 1.76)	1.37 (1.29, 1.46)
Urinary Bladder (Invasive and In Situ)	0.76 (0.67, 0.86)	0.43 (0.23, 0.90)	0.80 (0.72, 0.88)
Kidney and Renal Pelvis	0.74 (0.67, 0.82)	1.61 (1.28, 2.13)	1.37 (1.29, 1.45)
Brain and Other Nervous System	0.34 (0.29, 0.39)	0.36 (0.16, 0.84)	0.53 (0.48, 0.59)
Thyroid	1.76 (1.68, 1.86)	1.15 (0.86, 1.66)	1.58 (1.52, 1.66)
Hodgkin Lymphoma	0.10 (0.08, 0.14)	0.16 (0.05, 0.57)	0.19 (0.17, 0.23)
Non-Hodgkin Lymphoma	1.65 (1.54, 1.78)	1.21 (0.88, 1.76)	2.11 (2.01, 2.23)
Myeloma	0.46 (0.41, 0.53)	0.44 (0.27, 0.87)	0.63 (0.58, 0.70)
Leukemia	0.82 (0.74, 0.91)	0.74 (0.52, 1.20)	1.04 (0.97, 1.12)
Acute Lymphocytic Leukemia	0.08 (0.07, 0.12)	0.09 (0.04, 0.46)	0.19 (0.17, 0.21)
Chronic Lymphocytic Leukemia	0.10 (0.08, 0.14)	0.10 (0.04, 0.48)	0.24 (0.20, 0.28)
Acute Myeloid Leukemia	0.39 (0.34, 0.45)	0.34 (0.18, 0.77)	0.35 (0.31, 0.41)
Chronic Myeloid Leukemia	0.10 (0.07, 0.15)	0.13 (0.07, 0.51)	0.14 (0.11, 0.18)
Kaposi Sarcoma	0.00 (0.00, 0.04)	0.01 (0.00, 0.40)	0.04 (0.02, 0.07)
Mesothelioma	0.03 (0.01, 0.06)	0.08 (0.01, 0.48)	0.05 (0.04, 0.08)

Source: Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.cancer.gov/devcan/).
SEER 18 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, New Jersey, and Georgia excluding ATL/RG).

Note: Invasive cancer only unless specified otherwise.

[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.

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

A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.18

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

Both Sexes, Total U.S., 2008-2010

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	20.93 (20.90, 20.96)	21.05 (21.02, 21.09)	21.11 (21.02, 21.21)
Oral Cavity and Pharynx	0.28 (0.27, 0.28)	0.28 (0.27, 0.28)	0.27 (0.26, 0.29)
Esophagus	0.49 (0.48, 0.49)	0.51 (0.50, 0.51)	0.42 (0.40, 0.43)
Stomach	0.41 (0.41, 0.42)	0.36 (0.36, 0.37)	0.68 (0.66, 0.70)
Colon and Rectum	1.98 (1.97, 1.99)	1.94 (1.93, 1.95)	2.31 (2.27, 2.34)
Liver and Intrahepatic Bile Duct	0.65 (0.65, 0.66)	0.61 (0.61, 0.62)	0.74 (0.72, 0.76)
Pancreas	1.33 (1.32, 1.34)	1.32 (1.32, 1.33)	1.42 (1.39, 1.44)
Larynx	0.13 (0.12, 0.13)	0.12 (0.12, 0.12)	0.19 (0.18, 0.20)
Lung and Bronchus	5.75 (5.73, 5.76)	5.88 (5.86, 5.90)	5.25 (5.20, 5.30)
Melanoma of the Skin	0.31 (0.31, 0.32)	0.36 (0.35, 0.36)	0.04 (0.04, 0.05)
Breast	1.44 (1.44, 1.45)	1.42 (1.41, 1.43)	1.77 (1.74, 1.80)
Urinary Bladder	0.59 (0.59, 0.60)	0.62 (0.61, 0.63)	0.40 (0.38, 0.41)
Kidney and Renal Pelvis	0.47 (0.47, 0.47)	0.48 (0.48, 0.49)	0.39 (0.38, 0.40)
Brain and Other Nervous System	0.45 (0.44, 0.45)	0.49 (0.48, 0.49)	0.23 (0.22, 0.25)
Thyroid	0.06 (0.06, 0.07)	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 (0.03, 0.03)
Non-Hodgkin Lymphoma	0.78 (0.78, 0.79)	0.82 (0.82, 0.83)	0.44 (0.42, 0.45)
Myeloma	0.41 (0.41, 0.41)	0.39 (0.38, 0.39)	0.65 (0.63, 0.67)
Leukemia	0.86 (0.85, 0.87)	0.90 (0.89, 0.90)	0.62 (0.60, 0.64)
Acute Lymphocytic Leukemia	0.04 (0.04, 0.04)	0.05 (0.04, 0.05)	0.03 (0.02, 0.03)
Chronic Lymphocytic Leukemia	0.19 (0.19, 0.19)	0.20 (0.19, 0.20)	0.14 (0.13, 0.15)
Acute Myeloid Leukemia	0.33 (0.32, 0.33)	0.34 (0.34, 0.35)	0.21 (0.20, 0.22)
Chronic Myeloid Leukemia	0.04 (0.04, 0.04)	0.04 (0.04, 0.04)	0.03 (0.03, 0.04)

Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.cancer.gov/devcan/).
Source: NCHS public use data file for the total US.
A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.18 - continued

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

Both Sexes, Total U.S., 2008-2010

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	18.71 (18.47, 18.96)	17.42 (16.92, 17.93)	17.66 (17.51, 17.80)
Oral Cavity and Pharynx	0.30 (0.27, 0.34)	0.22 (0.17, 0.30)	0.21 (0.19, 0.23)
Esophagus	0.29 (0.26, 0.32)	0.39 (0.32, 0.49)	0.33 (0.31, 0.35)
Stomach	1.19 (1.12, 1.26)	0.54 (0.45, 0.65)	0.81 (0.78, 0.85)
Colon and Rectum	2.10 (2.01, 2.20)	1.95 (1.77, 2.15)	1.90 (1.85, 1.95)
Liver and Intrahepatic Bile Duct	1.53 (1.46, 1.60)	0.98 (0.86, 1.12)	1.18 (1.15, 1.22)
Pancreas	1.38 (1.31, 1.46)	0.94 (0.82, 1.09)	1.30 (1.26, 1.34)
Larynx	0.06 (0.05, 0.08)	0.12 (0.08, 0.20)	0.12 (0.11, 0.13)
Lung and Bronchus	4.30 (4.18, 4.42)	4.34 (4.10, 4.62)	3.05 (2.99, 3.11)
Melanoma of the Skin	0.05 (0.04, 0.07)	0.10 (0.07, 0.17)	0.11 (0.10, 0.12)
Breast	0.95 (0.90, 1.02)	0.91 (0.79, 1.05)	1.11 (1.07, 1.15)
Urinary Bladder	0.39 (0.35, 0.44)	0.31 (0.24, 0.42)	0.40 (0.38, 0.43)
Kidney and Renal Pelvis	0.33 (0.29, 0.36)	0.75 (0.64, 0.88)	0.49 (0.47, 0.51)
Brain and Other Nervous System	0.27 (0.25, 0.31)	0.25 (0.20, 0.33)	0.33 (0.32, 0.35)
Thyroid	0.13 (0.11, 0.16)	0.06 (0.02, 0.13)	0.09 (0.08, 0.10)
Hodgkin Lymphoma	0.03 (0.02, 0.04)	0.02 (0.01, 0.08)	0.05 (0.04, 0.06)
Non-Hodgkin Lymphoma	0.75 (0.70, 0.81)	0.51 (0.42, 0.62)	0.77 (0.74, 0.80)
Myeloma	0.28 (0.26, 0.31)	0.31 (0.24, 0.40)	0.40 (0.37, 0.42)
Leukemia	0.64 (0.59, 0.69)	0.53 (0.44, 0.66)	0.68 (0.65, 0.71)
Acute Lymphocytic Leukemia	0.03 (0.03, 0.05)	0.03 (0.02, 0.08)	0.07 (0.06, 0.08)
Chronic Lymphocytic Leukemia	0.06 (0.04, 0.08)	0.11 (0.06, 0.20)	0.09 (0.08, 0.11)
Acute Myeloid Leukemia	0.31 (0.28, 0.34)	0.21 (0.16, 0.30)	0.25 (0.24, 0.27)
Chronic Myeloid Leukemia	0.03 (0.02, 0.05)	0.03 (0.02, 0.09)	0.03 (0.03, 0.04)

Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.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 the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.
A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.19

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

Males, Total U.S., 2008-2010

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	22.94 (22.89, 22.98)	22.99 (22.94, 23.04)	23.65 (23.50, 23.79)
Oral Cavity and Pharynx	0.38 (0.37, 0.39)	0.37 (0.37, 0.38)	0.42 (0.40, 0.44)
Esophagus	0.79 (0.78, 0.79)	0.82 (0.81, 0.83)	0.64 (0.61, 0.66)
Stomach	0.50 (0.49, 0.51)	0.44 (0.43, 0.45)	0.83 (0.80, 0.87)
Colon and Rectum	2.07 (2.06, 2.09)	2.04 (2.02, 2.05)	2.41 (2.36, 2.47)
Liver and Intrahepatic Bile Duct	0.87 (0.86, 0.88)	0.81 (0.80, 0.82)	1.04 (1.01, 1.07)
Pancreas	1.34 (1.33, 1.35)	1.35 (1.33, 1.36)	1.33 (1.29, 1.36)
Larynx	0.21 (0.20, 0.21)	0.20 (0.19, 0.20)	0.32 (0.30, 0.34)
Lung and Bronchus	6.61 (6.58, 6.63)	6.67 (6.65, 6.70)	6.59 (6.50, 6.67)
Melanoma of the Skin	0.43 (0.42, 0.43)	0.49 (0.48, 0.50)	0.04 (0.04, 0.05)
Breast	0.03 (0.03, 0.03)	0.03 (0.03, 0.03)	0.05 (0.04, 0.06)
Prostate	2.71 (2.69, 2.73)	2.53 (2.51, 2.55)	4.55 (4.47, 4.63)
Testis	0.02 (0.02, 0.02)	0.02 (0.02, 0.02)	0.01 (0.01, 0.01)
Urinary Bladder	0.90 (0.89, 0.91)	0.95 (0.94, 0.96)	0.48 (0.46, 0.51)
Kidney and Renal Pelvis	0.61 (0.60, 0.62)	0.63 (0.62, 0.64)	0.48 (0.46, 0.50)
Brain and Other Nervous System	0.50 (0.50, 0.51)	0.55 (0.54, 0.55)	0.25 (0.24, 0.27)
Thyroid	0.05 (0.05, 0.06)	0.06 (0.05, 0.06)	0.04 (0.03, 0.04)
Hodgkin Lymphoma	0.04 (0.04, 0.05)	0.05 (0.04, 0.05)	0.03 (0.03, 0.04)
Non-Hodgkin Lymphoma	0.87 (0.86, 0.88)	0.92 (0.91, 0.93)	0.49 (0.47, 0.51)
Myeloma	0.46 (0.45, 0.47)	0.44 (0.43, 0.45)	0.68 (0.66, 0.71)
Leukemia	1.02 (1.01, 1.03)	1.07 (1.05, 1.08)	0.70 (0.67, 0.73)
Acute Lymphocytic Leukemia	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	0.03 (0.02, 0.03)
Chronic Lymphocytic Leukemia	0.24 (0.23, 0.24)	0.25 (0.24, 0.25)	0.18 (0.17, 0.20)
Acute Myeloid Leukemia	0.39 (0.38, 0.39)	0.41 (0.40, 0.42)	0.23 (0.21, 0.24)
Chronic Myeloid Leukemia	0.05 (0.04, 0.05)	0.05 (0.04, 0.05)	0.04 (0.03, 0.05)

Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.cancer.gov/devcan/).
Source: NCHS public use data file for the total US.
A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.19 - continued

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

Males, Total U.S., 2008-2010

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	21.16 (20.79, 21.54)	18.65 (17.88, 19.47)	20.26 (20.03, 20.50)
Oral Cavity and Pharynx	0.40 (0.35, 0.46)	0.30 (0.22, 0.50)	0.29 (0.27, 0.32)
Esophagus	0.44 (0.39, 0.50)	0.61 (0.48, 0.85)	0.56 (0.52, 0.60)
Stomach	1.38 (1.28, 1.50)	0.64 (0.52, 0.87)	0.96 (0.91, 1.02)
Colon and Rectum	2.19 (2.06, 2.34)	1.86 (1.60, 2.20)	2.17 (2.08, 2.25)
Liver and Intrahepatic Bile Duct	1.98 (1.88, 2.09)	1.27 (1.08, 1.54)	1.50 (1.44, 1.56)
Pancreas	1.32 (1.23, 1.43)	0.90 (0.74, 1.15)	1.27 (1.21, 1.34)
Larynx	0.12 (0.09, 0.16)	0.24 (0.13, 0.47)	0.22 (0.20, 0.25)
Lung and Bronchus	5.53 (5.33, 5.73)	4.76 (4.40, 5.21)	4.03 (3.93, 4.14)
Melanoma of the Skin	0.06 (0.04, 0.09)	0.14 (0.08, 0.33)	0.13 (0.11, 0.16)
Breast	0.03 (0.01, 0.06)	0.02 (0.00, 0.20)	0.03 (0.02, 0.05)
Prostate	2.20 (2.04, 2.37)	2.28 (1.93, 2.72)	3.14 (3.02, 3.27)
Testis	0.01 (0.00, 0.04)	0.03 (0.01, 0.20)	0.02 (0.02, 0.04)
Urinary Bladder	0.60 (0.52, 0.70)	0.47 (0.32, 0.73)	0.61 (0.56, 0.66)
Kidney and Renal Pelvis	0.47 (0.41, 0.54)	0.87 (0.72, 1.11)	0.63 (0.59, 0.67)
Brain and Other Nervous System	0.32 (0.27, 0.37)	0.27 (0.20, 0.47)	0.37 (0.34, 0.40)
Thyroid	0.06 (0.05, 0.10)	0.03 (0.01, 0.21)	0.06 (0.05, 0.07)
Hodgkin Lymphoma	0.04 (0.02, 0.07)	0.03 (0.01, 0.21)	0.06 (0.05, 0.08)
Non-Hodgkin Lymphoma	0.82 (0.75, 0.91)	0.48 (0.37, 0.69)	0.83 (0.78, 0.88)
Myeloma	0.35 (0.31, 0.41)	0.34 (0.24, 0.54)	0.46 (0.42, 0.50)
Leukemia	0.72 (0.66, 0.80)	0.77 (0.58, 1.06)	0.79 (0.74, 0.84)
Acute Lymphocytic Leukemia	0.04 (0.03, 0.07)	0.02 (0.01, 0.20)	0.07 (0.06, 0.09)
Chronic Lymphocytic Leukemia	0.08 (0.06, 0.12)	0.18 (0.08, 0.42)	0.10 (0.08, 0.13)
Acute Myeloid Leukemia	0.35 (0.31, 0.40)	0.28 (0.20, 0.49)	0.30 (0.27, 0.33)
Chronic Myeloid Leukemia	0.03 (0.02, 0.06)	0.05 (0.02, 0.23)	0.05 (0.03, 0.07)

Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.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 the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.
A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.20

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

Females, Total U.S., 2008-2010

Site	All Races	Whites	Blacks
	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)
All Sites	19.34 (19.30, 19.38)	19.52 (19.48, 19.57)	19.24 (19.12, 19.36)
Oral Cavity and Pharynx	0.18 (0.18, 0.19)	0.19 (0.18, 0.19)	0.15 (0.14, 0.16)
Esophagus	0.21 (0.21, 0.22)	0.21 (0.21, 0.22)	0.23 (0.21, 0.24)
Stomach	0.34 (0.33, 0.34)	0.29 (0.29, 0.30)	0.56 (0.54, 0.59)
Colon and Rectum	1.90 (1.88, 1.91)	1.86 (1.84, 1.87)	2.23 (2.18, 2.27)
Liver and Intrahepatic Bile Duct	0.45 (0.44, 0.46)	0.43 (0.42, 0.43)	0.48 (0.46, 0.50)
Pancreas	1.32 (1.31, 1.33)	1.30 (1.29, 1.31)	1.49 (1.45, 1.53)
Larynx	0.05 (0.05, 0.05)	0.05 (0.05, 0.05)	0.07 (0.06, 0.08)
Lung and Bronchus	4.99 (4.97, 5.01)	5.19 (5.17, 5.21)	4.14 (4.08, 4.20)
Melanoma of the Skin	0.21 (0.20, 0.21)	0.24 (0.23, 0.24)	0.04 (0.04, 0.05)
Breast	2.74 (2.72, 2.75)	2.71 (2.69, 2.73)	3.25 (3.20, 3.30)
Cervix Uteri	0.23 (0.22, 0.23)	0.21 (0.20, 0.21)	0.39 (0.37, 0.41)
Corpus and Uterus, NOS	0.55 (0.55, 0.56)	0.52 (0.52, 0.53)	0.84 (0.82, 0.87)
Ovary	0.99 (0.98, 1.00)	1.04 (1.03, 1.05)	0.75 (0.72, 0.77)
Urinary Bladder	0.34 (0.33, 0.35)	0.34 (0.34, 0.35)	0.34 (0.32, 0.36)
Kidney and Renal Pelvis	0.34 (0.34, 0.35)	0.35 (0.34, 0.36)	0.31 (0.29, 0.33)
Brain and Other Nervous System	0.40 (0.39, 0.40)	0.43 (0.43, 0.44)	0.22 (0.21, 0.24)
Thyroid	0.07 (0.07, 0.07)	0.07 (0.07, 0.07)	0.07 (0.06, 0.08)
Hodgkin Lymphoma	0.03 (0.03, 0.04)	0.04 (0.04, 0.04)	0.03 (0.02, 0.03)
Non-Hodgkin Lymphoma	0.70 (0.70, 0.71)	0.74 (0.73, 0.75)	0.40 (0.38, 0.42)
Myeloma	0.37 (0.36, 0.37)	0.34 (0.33, 0.35)	0.63 (0.61, 0.66)
Leukemia	0.72 (0.71, 0.73)	0.75 (0.74, 0.76)	0.56 (0.53, 0.58)
Acute Lymphocytic Leukemia	0.04 (0.04, 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)	0.11 (0.10, 0.13)
Acute Myeloid Leukemia	0.28 (0.27, 0.28)	0.29 (0.28, 0.29)	0.20 (0.19, 0.21)
Chronic Myeloid Leukemia	0.03 (0.03, 0.03)	0.03 (0.03, 0.04)	0.02 (0.02, 0.03)

Source: Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.cancer.gov/devcan/).
NCHS public use data file for the total US.
A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.20 - continued

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

Females, Total U.S., 2008-2010

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	16.77 (16.45, 17.09)	16.52 (15.85, 17.23)	15.73 (15.54, 15.91)
Oral Cavity and Pharynx	0.22 (0.18, 0.28)	0.14 (0.09, 0.26)	0.13 (0.11, 0.16)
Esophagus	0.16 (0.13, 0.20)	0.18 (0.11, 0.31)	0.14 (0.12, 0.17)
Stomach	1.03 (0.93, 1.14)	0.43 (0.32, 0.59)	0.69 (0.65, 0.74)
Colon and Rectum	2.02 (1.89, 2.17)	2.05 (1.79, 2.35)	1.69 (1.62, 1.76)
Liver and Intrahepatic Bile Duct	1.15 (1.06, 1.24)	0.71 (0.57, 0.90)	0.90 (0.85, 0.95)
Pancreas	1.43 (1.33, 1.54)	0.96 (0.79, 1.19)	1.33 (1.27, 1.39)
Larynx	0.02 (0.01, 0.04)	0.03 (0.01, 0.13)	0.03 (0.02, 0.04)
Lung and Bronchus	3.31 (3.17, 3.46)	3.96 (3.63, 4.34)	2.24 (2.17, 2.32)
Melanoma of the Skin	0.05 (0.03, 0.08)	0.06 (0.03, 0.16)	0.09 (0.08, 0.11)
Breast	1.73 (1.63, 1.84)	1.73 (1.51, 2.00)	2.05 (1.99, 2.12)
Cervix Uteri	0.23 (0.20, 0.28)	0.38 (0.29, 0.53)	0.33 (0.30, 0.35)
Corpus and Uterus, NOS	0.45 (0.40, 0.51)	0.32 (0.23, 0.46)	0.50 (0.47, 0.53)
Ovary	0.73 (0.67, 0.80)	0.83 (0.68, 1.04)	0.82 (0.78, 0.87)
Urinary Bladder	0.23 (0.18, 0.29)	0.18 (0.11, 0.32)	0.25 (0.22, 0.28)
Kidney and Renal Pelvis	0.21 (0.18, 0.26)	0.63 (0.49, 0.82)	0.37 (0.35, 0.41)
Brain and Other Nervous System	0.24 (0.20, 0.28)	0.23 (0.16, 0.35)	0.30 (0.28, 0.33)
Thyroid	0.18 (0.15, 0.23)	0.07 (0.03, 0.20)	0.11 (0.09, 0.13)
Hodgkin Lymphoma	0.02 (0.01, 0.04)	0.01 (0.00, 0.10)	0.04 (0.03, 0.05)
Non-Hodgkin Lymphoma	0.69 (0.62, 0.78)	0.53 (0.40, 0.71)	0.72 (0.68, 0.77)
Myeloma	0.22 (0.19, 0.27)	0.27 (0.19, 0.42)	0.35 (0.32, 0.38)
Leukemia	0.58 (0.51, 0.65)	0.35 (0.25, 0.50)	0.60 (0.56, 0.64)
Acute Lymphocytic Leukemia	0.03 (0.02, 0.05)	0.03 (0.02, 0.13)	0.06 (0.06, 0.08)
Chronic Lymphocytic Leukemia	0.04 (0.02, 0.07)	0.06 (0.02, 0.19)	0.09 (0.07, 0.11)
Acute Myeloid Leukemia	0.28 (0.24, 0.33)	0.15 (0.10, 0.26)	0.22 (0.20, 0.25)
Chronic Myeloid Leukemia	0.03 (0.02, 0.05)	0.02 (0.00, 0.12)	0.03 (0.02, 0.04)

Devcan Version 6.7.0, June 2013, National Cancer Institute (http://surveillance.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 the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.
A percent or confidence interval value of 0.00 represents a value that is below 0.005.

Table 1.21
U.S. and SEER Death Rates by Primary Cancer Site and Race/Ethnicity, 2006-2010

		Total United States[a]							SEER 18 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	176.4	175.8	210.3	160.4	108.8	121.8	179.8	170.9	172.7	210.5	137.6	115.2	123.2	178.4
	Male	215.3	213.1	276.6	191.0	132.4	152.1	217.3	206.1	206.7	272.7	159.9	140.7	150.7	212.9
	Female	149.7	149.8	171.2	139.0	92.1	101.2	153.6	146.9	149.2	173.6	121.8	97.4	104.5	154.6
Oral Cavity & Pharynx	Both Sexes	2.5	2.4	3.0	2.3	2.0	1.5	2.5	2.5	2.4	3.0	2.2	2.1	1.5	2.6
	Male	3.8	3.6	5.2	3.4	3.0	2.5	3.7	3.8	3.7	5.2	3.3	3.1	2.4	3.8
	Female	1.4	1.4	1.4	1.5	1.2	0.8	1.4	1.4	1.4	1.4	-	1.3	0.8	1.5
Esophagus	Both Sexes	4.3	4.4	4.4	3.6	1.8	2.3	4.6	3.9	4.1	4.3	2.8	1.9	2.2	4.3
	Male	7.6	7.8	7.7	6.1	3.1	4.3	8.1	6.8	7.2	7.3	4.4	3.3	4.1	7.6
	Female	1.6	1.6	2.1	1.6	0.8	0.8	1.6	1.6	1.5	2.2	1.6	0.9	0.7	1.6
Stomach	Both Sexes	3.5	3.1	6.7	5.6	6.6	5.7	2.8	4.1	3.5	7.0	6.5	6.8	6.3	3.0
	Male	4.9	4.2	9.8	8.1	8.7	7.6	3.9	5.5	4.8	9.9	8.9	8.9	8.4	4.2
	Female	2.5	2.2	4.7	3.8	5.1	4.4	1.9	3.0	2.5	5.2	4.5	5.4	4.8	2.1
Colon & Rectum	Both Sexes	16.4	15.9	22.8	16.9	11.2	12.7	16.1	15.9	15.6	22.9	15.9	11.7	12.3	15.9
	Male	19.6	19.1	28.7	18.7	13.1	16.1	19.2	19.0	18.6	28.1	18.8	13.9	15.7	18.9
	Female	13.9	13.4	19.0	15.4	9.7	10.2	13.6	13.6	13.2	19.5	13.8	10.0	9.7	13.6
Liver & Intrahepatic Bile Duct	Both Sexes	5.6	5.2	7.4	9.3	9.7	8.5	4.8	6.1	5.4	7.6	9.3	9.8	8.6	4.9
	Male	8.3	7.6	11.8	13.2	14.4	12.3	7.1	8.9	7.9	11.9	12.8	14.6	12.2	7.2
	Female	3.4	3.2	4.1	6.1	6.0	5.4	2.9	3.7	3.4	4.3	6.3	6.0	5.6	3.0
Pancreas	Both Sexes	10.9	10.8	13.7	9.2	7.6	8.6	10.9	10.9	10.9	13.9	9.9	8.3	9.2	11.0
	Male	12.5	12.5	15.3	10.1	8.3	9.6	12.7	12.4	12.5	15.4	10.6	9.1	10.1	12.7
	Female	9.6	9.4	12.5	8.6	7.1	7.7	9.5	9.6	9.5	12.6	9.2	7.6	8.5	9.7
Larynx	Both Sexes	1.1	1.1	2.0	1.0	0.4	0.8	1.1	1.0	1.0	1.7	-	0.5	0.7	1.0
	Male	2.0	1.9	3.9	2.1	0.8	1.7	1.9	1.8	1.8	3.3	-	0.9	1.5	1.8
	Female	0.4	0.4	0.7	-	0.1	0.2	0.4	0.4	0.4	0.7	-	0.1	0.2	0.4
Lung & Bronchus	Both Sexes	49.5	50.2	53.5	40.2	25.5	21.3	52.6	45.4	46.6	53.4	29.6	27.0	20.2	50.1
	Male	63.5	63.2	78.5	49.6	35.5	31.3	65.7	57.3	57.4	76.5	36.4	38.0	28.6	61.2
	Female	39.2	40.4	37.2	33.1	18.4	14.1	42.7	36.6	38.5	38.1	24.6	19.0	14.2	41.9
Melanoma of the Skin	Both Sexes	2.7	3.1	0.4	1.1	0.4	0.8	3.4	2.6	3.1	0.4	-	0.4	0.8	3.5
	Male	4.1	4.6	0.5	1.7	0.4	1.1	5.0	3.9	4.6	0.6	-	0.5	1.0	5.2
	Female	1.7	2.0	0.4	0.8	0.3	0.6	2.1	1.6	2.0	0.3	-	0.3	0.7	2.2
Breast	Female	22.6	22.1	30.8	15.5	11.5	14.8	22.7	22.7	22.7	31.3	14.0	12.8	14.9	23.7

[a] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] The SEER 18 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, New Jersey and Georgia excluding ATL/RG.

[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 the District of Columbia, North Dakota, and South Carolina.

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

Table 1.21 - continued
U.S. and SEER Death Rates by Primary Cancer Site and Race/Ethnicity, 2006-2010

		Total United States[a]							SEER 18 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	2.4	2.2	4.2	3.5	1.9	2.9	2.1	2.4	2.2	4.0	3.1	1.9	3.1	2.0
Corpus & Uterus, NOS	Female	4.3	4.0	7.4	3.2	2.6	3.3	4.0	4.3	4.1	7.1	2.5	2.9	3.4	4.1
Ovary	Female	8.1	8.4	6.7	7.1	4.8	5.8	8.6	8.2	8.7	6.9	6.9	5.0	6.3	9.0
Prostate	Male	23.0	21.2	50.9	20.7	10.1	19.2	21.3	23.1	22.0	49.6	17.5	10.9	19.7	22.1
Testis	Male	0.2	0.3	0.1	-	0.1	0.3	0.3	0.2	0.3	0.1	-	0.1	0.3	0.3
Urinary	Both Sexes	4.4	4.6	3.7	2.4	1.7	2.4	4.8	4.3	4.6	3.8	2.0	1.8	2.3	4.8
Bladder	Male	7.7	8.1	5.5	4.1	2.8	4.0	8.4	7.4	8.0	5.8	3.1	3.0	3.9	8.5
	Female	2.2	2.2	2.6	1.2	0.9	1.3	2.3	2.2	2.2	2.7	-	1.0	1.3	2.4
Kidney &	Both Sexes	4.0	4.1	3.9	6.7	2.0	3.5	4.1	3.8	3.9	3.9	6.2	2.1	3.6	3.9
Renal	Male	5.8	5.9	5.7	9.5	3.0	5.1	5.9	5.5	5.7	5.8	8.5	3.2	5.2	5.7
Pelvis	Female	2.6	2.6	2.6	4.4	1.2	2.3	2.6	2.4	2.5	2.5	4.4	1.4	2.4	2.5
Brain &	Both Sexes	4.3	4.6	2.5	2.6	1.9	2.8	4.8	4.2	4.7	2.6	1.8	2.0	3.0	5.0
Nervous	Male	5.2	5.6	3.0	2.8	2.3	3.3	5.8	5.2	5.7	3.1	1.9	2.5	3.4	6.1
System	Female	3.5	3.8	2.1	2.3	1.6	2.4	3.9	3.4	3.8	2.2	1.6	1.7	2.6	4.0
Thyroid	Both Sexes	0.5	0.5	0.5	0.5	0.7	0.6	0.5	0.5	0.5	0.4	-	0.8	0.6	0.5
	Male	0.5	0.5	0.4	-	0.5	0.5	0.5	0.5	0.5	0.3	-	0.6	0.5	0.5
	Female	0.5	0.5	0.6	-	0.9	0.7	0.5	0.6	0.5	0.5	-	1.0	0.7	0.5
Hodgkin	Both Sexes	0.4	0.4	0.4	-	0.2	0.4	0.4	0.4	0.4	0.4	-	0.2	0.4	0.4
Lymphoma	Male	0.5	0.5	0.4	-	0.2	0.5	0.5	0.5	0.5	0.5	-	0.2	0.5	0.5
	Female	0.3	0.3	0.3	-	0.1	0.3	0.3	0.3	0.3	0.3	-	0.1	0.3	0.3
Non-Hodgkin	Both Sexes	6.4	6.7	4.6	4.8	4.1	5.3	6.8	6.3	6.7	4.6	3.6	4.5	5.6	6.7
Lymphoma	Male	8.2	8.5	5.9	5.4	5.2	6.5	8.6	8.0	8.4	6.1	3.7	5.7	6.8	8.5
	Female	5.1	5.3	3.6	4.3	3.4	4.4	5.4	5.0	5.3	3.5	3.4	3.7	4.6	5.4
Myeloma	Both Sexes	3.4	3.1	6.4	2.9	1.7	2.8	3.1	3.3	3.1	6.4	1.8	1.9	2.9	3.1
	Male	4.3	4.0	7.9	3.6	2.3	3.5	4.1	4.2	4.0	7.9	2.3	2.5	3.6	4.0
	Female	2.7	2.5	5.4	2.4	1.3	2.3	2.5	2.6	2.4	5.5	1.5	1.5	2.5	2.4
Leukemia	Both Sexes	7.1	7.3	6.1	4.8	3.9	4.9	7.4	6.9	7.2	6.2	3.8	4.1	4.9	7.4
	Male	9.5	9.8	8.2	7.0	5.0	6.1	10.0	9.2	9.7	8.2	5.1	5.2	6.2	9.9
	Female	5.3	5.5	4.8	3.3	3.1	4.0	5.5	5.2	5.4	4.9	2.9	3.3	4.0	5.5

[a] US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[b] The SEER 18 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, New Jersey and Georgia excluding ATL/RG.

[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 the District of Columbia, North Dakota, and South Carolina.

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

Table 1.22
U.S. Prevalence Counts, Invasive Cancers Only, January 1, 2010[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 35 Years[d]	5-Year Limited Duration: 1st Per Site in Previous 5 Years[e]	35-year Limited Duration: 1st Invasive Tumor Ever[c]	35-year Limited Duration: 1st Per Site in Previous 35 Years[d]
All Sites	Both Sexes	4,511,266	4,598,344	5,044,168	12,600,627	12,810,577
	Male	2,332,050	2,366,640	2,584,260	5,990,343	6,060,178
	Female	2,179,216	2,231,704	2,459,908	6,610,284	6,750,399
Oral Cavity & Pharynx	Both Sexes	102,019	117,112	121,258	264,620	291,343
	Male	71,123	80,929	83,544	175,045	190,951
	Female	30,896	36,183	37,714	89,575	100,392
Esophagus	Both Sexes	21,268	25,973	26,092	33,702	39,594
	Male	16,808	20,399	20,447	26,317	30,715
	Female	4,460	5,574	5,645	7,385	8,879
Stomach	Both Sexes	35,420	42,280	42,609	70,821	81,142
	Male	21,286	25,765	25,901	40,560	46,844
	Female	14,134	16,515	16,708	30,261	34,298
Colon & Rectum	Both Sexes	407,833	471,251	480,046	1,129,666	1,258,620
	Male	207,302	239,824	244,132	561,245	622,211
	Female	200,531	231,427	235,914	568,421	636,409
Liver & Intrahepatic Bile Duct	Both Sexes	30,577	34,834	34,867	40,940	45,832
	Male	22,266	25,232	25,265	28,891	32,221
	Female	8,311	9,602	9,602	12,049	13,611
Pancreas	Both Sexes	31,442	38,275	38,275	41,284	49,174
	Male	15,733	19,467	19,467	20,155	24,367
	Female	15,709	18,808	18,808	21,129	24,807
Larynx	Both Sexes	30,947	37,152	37,518	87,135	98,063
	Male	25,107	30,036	30,356	70,117	78,586
	Female	5,840	7,116	7,162	17,018	19,477
Lung & Bronchus	Both Sexes	231,996	296,283	304,764	391,564	480,133
	Male	108,211	140,119	143,487	178,912	220,472
	Female	123,785	156,164	161,277	212,652	259,661
Melanoma of the Skin	Both Sexes	276,312	312,334	325,566	884,259	953,581
	Male	148,749	171,783	180,200	440,298	480,917
	Female	127,563	140,551	145,366	443,961	472,664
Breast	Female	842,193	909,424	965,835	2,770,060	2,934,536
Cervix	Female	38,963	40,783	40,907	208,065	213,819
Corpus & Uterus, NOS	Female	169,126	189,983	190,106	569,448	620,803
Ovary[f]	Female	57,207	66,063	66,139	169,398	190,511

[a] U.S. 2010 cancer prevalence counts are based on 2010 cancer prevalence proportions from the SEER 9 registries and 1/1/2010 U.S. population estimates based on the average of 2009 and 2010 population estimates from the U.S. Bureau of the Census.

[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] (c) First invasive tumor ever

[d] (d) First invasive tumor for each cancer site diagnosed during the previous 35 years (1975-2009)

[e] (e) First invasive tumor for each cancer site diagnosed during the previous 5 years (2005-2009)

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 2005; Melanoma in 2006.
In method (c) the melanoma is the woman's first cancer, and is counted for the melanoma and all sites 35-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 1/1/2010.
In method (d) the 1981 melanoma is counted for the melanoma and all sites 35-year limited duration prevalence. The 2005 breast cancer is counted for the breast 5-year and 35-year limited duration prevalence.
In method (e) the 2005 breast cancer is counted for the breast cancer and all sites 5-year limited duration prevalence. The 2006 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 1.22 - continued
U.S. Prevalence Counts, Invasive Cancers Only, January 1, 2010[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 35 Years[d]	5-Year Limited Duration: 1st Per Site in Previous 5 Years[e]	35-year Limited Duration: 1st Invasive Tumor Ever[c]	35-year Limited Duration: 1st Per Site in Previous 35 Years[d]
Prostate	Male	1,026,391	1,107,903	1,107,977	2,616,190	2,787,286
Testis	Male	42,302	43,012	43,616	205,130	207,844
Urinary Bladder	Both Sexes	198,998	248,244	253,143	551,278	641,106
	Male	151,489	190,075	194,009	411,638	479,012
	Female	47,509	58,169	59,134	139,640	162,094
Kidney & Renal Pelvis	Both Sexes	145,766	177,066	179,051	330,450	385,370
	Male	88,557	108,930	110,317	196,335	230,734
	Female	57,209	68,136	68,734	134,115	154,636
Brain & Nervous System	Both Sexes	43,995	46,883	47,345	128,063	132,164
	Male	24,044	25,790	26,033	68,158	70,466
	Female	19,951	21,093	21,312	59,905	61,698
Thyroid	Both Sexes	165,253	183,524	184,093	494,969	528,131
	Male	37,076	42,905	43,058	107,747	117,569
	Female	128,177	140,619	141,035	387,222	410,562
Hodgkin Lymphoma	Both Sexes	39,048	41,589	41,611	168,309	172,937
	Male	21,122	22,557	22,568	87,084	89,522
	Female	17,926	19,032	19,043	81,225	83,415
Non-Hodgkin Lymphoma	Both Sexes	198,946	233,585	235,457	499,712	558,340
	Male	105,553	125,451	126,442	261,560	292,961
	Female	93,393	108,134	109,015	238,152	265,379
Myeloma	Both Sexes	49,451	58,292	58,328	77,360	88,490
	Male	26,622	32,063	32,087	42,092	48,802
	Female	22,829	26,229	26,241	35,268	39,688
Leukemia	Both Sexes	112,120	129,298	129,528	282,150	310,046
	Male	64,915	75,612	75,711	160,039	176,801
	Female	47,205	53,686	53,817	122,111	133,245
Acute Lymphocytic Leukemia	Both Sexes	16,205	16,686	16,686	66,030	66,759
	Male	9,215	9,443	9,443	36,418	36,708
	Female	6,990	7,243	7,243	29,612	30,051
Childhood (Ages 0-19)	Both Sexes	63,904	63,977	64,503	304,247	304,716
	Male	33,948	33,981	34,250	156,819	157,032
	Female	29,956	29,996	30,253	147,428	147,684
Kaposi Sarcoma	Both Sexes	7,319	7,750	7,750	24,815	25,977
	Male	6,865	7,208	7,208	23,533	24,518
	Female	454	542	542	1,282	1,459
Mesothelioma	Both Sexes	2,968	3,926	3,938	4,538	5,658
	Male	1,998	2,761	2,773	2,601	3,467
	Female	970	1,165	1,165	1,937	2,191

[a] U.S. 2010 cancer prevalence counts are based on 2010 cancer prevalence proportions from the SEER 9 registries and 1/1/2010 U.S. population estimates based on the average of 2009 and 2010 population estimates from the U.S. Bureau of the Census.

[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] (c) First invasive tumor ever
[d] (d) First invasive tumor for each cancer site diagnosed during the previous 35 years (1975-2009)
[e] (e) First invasive tumor for each cancer site diagnosed during the previous 5 years (2005-2009)
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 2005; Melanoma in 2006.
In method (c) the melanoma is the woman's first cancer, and is counted for the melanoma and all sites 35-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 1/1/2010.
In method (d) the 1981 melanoma is counted for the melanoma and all sites 35-year limited duration prevalence. The 2005 breast cancer is counted for the breast 5-year and 35-year limited duration prevalence.
In method (e) the 2005 breast cancer is counted for the breast cancer and all sites 5-year limited duration prevalence. The 2006 melanoma is counted for 5-year limited duration prevalence for melanoma.

Table 1.23
U.S. Complete Prevalence Counts, Invasive Cancers Only, January 1, 2010[a]
By Age at Prevalence

Site/Sex	Age at Prevalence								
	All Ages[c]	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+
All Sites									
Males	6,078,974	18,390	42,087	83,873	155,608	354,801	860,143	1,578,142	2,985,931
Females	6,948,940	16,117	36,351	86,197	226,859	636,726	1,276,932	1,684,808	2,984,950
Oral Cavity & Pharynx									
Males	181,084	68	468	1,480	3,518	14,224	43,847	54,509	62,971
Females	94,109	90	553	1,470	3,635	8,681	17,691	22,821	39,167
Esophagus									
Males	26,388	0	0	22	219	1,177	4,653	9,419	10,897
Females	7,451	0	0	0	28	256	1,263	1,790	4,114
Stomach									
Males	41,386	0	18	64	607	2,589	7,095	10,242	20,773
Females	30,883	4	12	165	568	2,307	4,398	6,312	17,118
Colon & Rectum									
Males	569,930	11	117	1,190	5,632	25,029	80,675	136,002	321,273
Females	584,551	0	75	1,251	5,467	23,433	67,578	110,244	376,504
Liver & Intrahep									
Males	28,967	484	535	554	454	1,582	10,000	9,083	6,274
Females	12,437	471	470	312	411	895	2,803	3,028	4,048
Pancreas									
Males	20,293	11	12	127	376	1,616	4,320	6,183	7,649
Females	21,316	0	66	155	413	1,376	3,843	5,483	9,980
Larynx									
Males	71,659	0	0	78	243	1,915	10,556	20,739	38,129
Females	17,370	0	0	25	134	1,011	3,256	4,677	8,267
Lung & Bronchus									
Males	183,410	45	90	444	1,184	5,545	24,951	54,888	96,262
Females	216,021	31	71	396	1,435	7,883	28,898	59,047	118,261
Melanoma of the Skin									
Males	452,540	78	656	5,014	18,294	46,766	95,157	122,709	163,865
Females	469,240	113	993	10,894	33,972	73,514	109,961	106,450	133,343

[a] U.S. 2010 cancer prevalence counts are based on 2010 cancer prevalence proportions from the SEER 9 registries (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta) and 1/1/2010 U.S. population estimates based on the average of 2009 and 2010 population estimates from the U.S. Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

[b] Cases diagnosed more than 35 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 1.23 - continued
U.S. Complete Prevalence Counts, Invasive Cancers Only, January 1, 2010[a]
By Age at Prevalence

Site/Sex	Age at Prevalence								
	All Ages[c]	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+
Breast									
Males	14,588	0	0	11	89	586	2,018	4,133	7,751
Females	2,829,041	0	53	2,740	36,291	216,912	539,229	767,846	1,265,969
Cervix									
Females	249,496	0	45	2,239	16,405	42,748	59,766	55,248	73,044
Corpus & Uterus, NOS									
Females	600,346	0	47	530	5,666	24,621	87,167	157,833	324,482
Ovary[d]									
Females	186,138	84	1,018	3,453	6,883	18,736	40,700	47,632	67,632
Prostate									
Males	2,617,682	34	59	101	324	21,033	228,561	740,428	1,627,144
Urinary Bladder									
Males	419,648	45	105	611	2,438	11,535	42,898	99,644	262,372
Females	143,992	23	57	217	964	4,266	13,698	30,030	94,737
Kidney & Renal Pelvis									
Males	202,516	1,454	2,505	2,659	5,172	17,901	40,060	57,511	75,253
Females	138,989	1,343	2,681	2,851	4,901	12,071	23,973	33,716	57,452
Hodgkin Lymphoma									
Males	93,890	181	2,315	9,272	16,487	24,007	21,438	13,274	6,916
Females	88,038	101	1,901	9,617	16,530	23,444	18,638	10,651	7,157
Non-Hodgkin Lymphoma									
Males	266,478	773	3,513	7,582	13,366	29,224	52,496	67,493	92,032
Females	242,587	430	1,847	4,348	8,879	20,902	41,030	56,723	108,427
Myeloma									
Males	42,185	0	6	84	442	2,859	8,141	13,608	17,045
Females	35,432	0	0	39	281	2,266	6,273	10,676	15,896
Leukemia									
Males	162,651	6,545	12,947	12,388	10,928	13,500	22,064	32,827	51,452
Females	125,312	5,438	10,680	10,750	9,514	9,728	14,680	20,623	43,899
Acute Lymphocytic Leuk									
Males	38,239	5,461	11,081	9,597	6,075	3,568	1,238	775	444
Females	31,328	4,527	9,014	7,859	5,163	2,755	884	717	408

[a] U.S. 2010 cancer prevalence counts are based on 2010 cancer prevalence proportions from the SEER 9 registries (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta) and 1/1/2010 U.S. population estimates based on the average of 2009 and 2010 population estimates from the U.S. Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

[b] Cases diagnosed more than 35 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 1.24
Age-Adjusted SEER Incidence Rates and Trends for the Top 15 Cancer Sites[a] by Race/Ethnicity

Both Sexes

All Races

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	463.0	-0.6*
Prostate[f]	68.6	-1.9*
Breast	66.8	-0.8*
Lung and Bronchus	61.4	-1.5*
Colon and Rectum	45.0	-2.6*
Melanoma of the Skin	21.1	1.5*
Urinary Bladder	20.7	-0.6*
Non-Hodgkin Lymphoma	19.7	0.1
Kidney and Renal Pelvis	15.3	2.4*
Corpus and Uterus, NOS[f]	13.0	0.6
Leukemia	12.8	-0.5*
Pancreas	12.2	0.9*
Thyroid	12.2	6.3*
Oral Cavity and Pharynx	10.8	0.2
Liver & IBD[g]	7.7	3.6*
Stomach	7.5	-1.1*

White

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	471.9	-0.6*
Breast	68.0	-1.0*
Prostate[f]	66.1	-2.0*
Lung and Bronchus	63.1	-1.4*
Colon and Rectum	44.2	-2.8*
Melanoma of the Skin	25.0	1.6*
Urinary Bladder	22.5	-0.6*
Non-Hodgkin Lymphoma	20.7	0.1
Kidney and Renal Pelvis	15.8	2.3*
Leukemia	13.5	-0.5*
Corpus and Uterus, NOS[f]	13.3	0.4
Thyroid	13.0	6.4*
Pancreas	12.1	1.0*
Oral Cavity and Pharynx	11.2	0.5*
Brain and ONS[g]	7.1	-0.2
Ovary[fh]	7.1	-1.9*

Black

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	483.6	-1.0*
Prostate[f]	96.3	-2.1*
Lung and Bronchus	69.7	-1.7*
Breast	69.3	0.3
Colon and Rectum	55.3	-2.3*
Kidney and Renal Pelvis	17.4	2.9*
Pancreas	15.8	0.5
Non-Hodgkin Lymphoma	14.2	-0.2
Corpus and Uterus, NOS[f]	12.7	1.7*
Urinary Bladder	12.5	-0.2
Myeloma	11.9	0.3
Stomach	11.6	-1.8*
Leukemia	9.8	-1.7*
Oral Cavity and Pharynx	9.6	-2.5*
Liver & IBD[g]	9.1	3.7*
Thyroid	7.1	5.7*

Asian/Pacific Islander

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	307.4	-0.9*
Breast	50.6	0.3
Lung and Bronchus	37.6	-1.3*
Colon and Rectum	37.6	-2.4*
Prostate[f]	35.5	-3.7*
Liver & IBD[g]	14.1	-0.9
Non-Hodgkin Lymphoma	13.1	-0.5
Thyroid	12.1	5.5*
Stomach	11.9	-3.2*
Corpus and Uterus, NOS[f]	10.1	2.4*
Pancreas	9.6	0.7
Urinary Bladder	9.0	-1.0*
Kidney and Renal Pelvis	7.9	2.8*
Oral Cavity and Pharynx	7.6	-0.6
Leukemia	7.4	-0.5
Ovary[fh]	5.1	-1.2

American Indian/Alaska Native[d]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	323.6	-0.6
Lung and Bronchus	42.1	-2.2*
Breast	41.7	-0.6
Colon and Rectum	39.9	-2.3*
Prostate[f]	34.3	-1.9*
Kidney and Renal Pelvis	19.7	3.0*
Liver & IBD[g]	13.5	4.8*
Non-Hodgkin Lymphoma	12.3	0.1
Pancreas	10.9	2.2*
Corpus and Uterus, NOS[f]	10.8	2.9
Stomach	10.0	-3.5
Urinary Bladder	7.8	1.1
Oral Cavity and Pharynx	7.4	0.2
Thyroid	7.3	4.8*
Leukemia	7.3	-1.5
Ovary[fh]	5.9	-3.9

Hispanic[e]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	356.7	-0.9*
Prostate[f]	55.2	-2.6*
Breast	48.9	-0.6
Colon and Rectum	37.7	-1.7*
Lung and Bronchus	32.2	-1.6*
Non-Hodgkin Lymphoma	17.8	0.7
Kidney and Renal Pelvis	15.1	2.1*
Liver & IBD[g]	12.1	2.8*
Urinary Bladder	11.5	-1.6*
Stomach	11.3	-1.8*
Pancreas	11.3	0.3
Thyroid	10.5	5.4*
Corpus and Uterus, NOS[f]	10.4	1.5*
Leukemia	10.2	-0.2
Oral Cavity and Pharynx	6.5	0.4
Ovary[fh]	6.1	-2.0*

Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[a] Top 15 cancer sites selected based on 2006-2010 age-adjusted rates for the race/ethnic group.

[b] Rates are per 100,000 and 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.
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.

[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).

- 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.

Table 1.25
Age-Adjusted SEER Incidence Rates and Trends for the Top 15 Cancer Sites[a] by Race/Ethnicity

Males

All Races

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	535.9	-1.1*
Prostate	152.0	-2.3*
Lung and Bronchus	74.3	-2.2*
Colon and Rectum	52.2	-2.9*
Urinary Bladder	36.6	-0.7*
Melanoma of the Skin	27.4	1.8*
Non-Hodgkin Lymphoma	23.9	0.2
Kidney and Renal Pelvis	21.0	2.2*
Leukemia	16.3	-0.8*
Oral Cavity and Pharynx	16.2	0.2
Pancreas	13.9	0.8*
Liver & IBD[f]	11.9	3.8*
Stomach	10.4	-1.5*
Esophagus	7.7	-0.9*
Brain and ONS[f]	7.7	-0.3
Myeloma	7.5	0.6*

White

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	539.1	-1.1*
Prostate	144.9	-2.5*
Lung and Bronchus	74.5	-2.2*
Colon and Rectum	51.3	-3.1*
Urinary Bladder	39.8	-0.7*
Melanoma of the Skin	31.9	1.8*
Non-Hodgkin Lymphoma	25.0	0.2
Kidney and Renal Pelvis	21.5	2.2*
Leukemia	17.2	-0.8*
Oral Cavity and Pharynx	16.7	0.6*
Pancreas	13.8	0.8*
Liver & IBD[f]	10.4	4.5*
Stomach	9.2	-1.3*
Brain and ONS[f]	8.4	-0.1
Esophagus	8.0	-0.2
Myeloma	7.1	0.7*

Black

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	610.4	-1.9*
Prostate	228.5	-2.6*
Lung and Bronchus	95.8	-2.8*
Colon and Rectum	64.3	-2.4*
Kidney and Renal Pelvis	24.1	2.5*
Urinary Bladder	21.0	0.4
Pancreas	17.6	1.3*
Non-Hodgkin Lymphoma	17.4	-0.2
Stomach	16.1	-2.1*
Liver & IBD[f]	15.1	3.7*
Oral Cavity and Pharynx	14.9	-3.1*
Myeloma	14.4	-0.4
Leukemia	12.6	-1.9*
Larynx	9.6	-3.7*
Esophagus	8.4	-5.0*
Brain and ONS[f]	4.7	-0.2

Asian/Pacific Islander

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	335.0	-1.8*
Prostate	81.8	-3.8*
Lung and Bronchus	50.7	-1.7*
Colon and Rectum	43.8	-2.7*
Liver & IBD[f]	21.4	-0.9
Urinary Bladder	16.1	-1.0*
Non-Hodgkin Lymphoma	16.1	-0.2
Stomach	15.5	-3.5*
Kidney and Renal Pelvis	11.0	3.2*
Oral Cavity and Pharynx	11.0	0.4
Pancreas	10.4	0.3
Leukemia	9.0	-0.8
Thyroid	5.3	4.6*
Myeloma	4.3	1.5
Brain and ONS[f]	4.2	0.1
Esophagus	3.9	-1.3

American Indian/Alaska Native[d]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	351.3	-0.7
Prostate	77.8	-2.2*
Lung and Bronchus	51.2	-2.3*
Colon and Rectum	44.1	-1.2
Kidney and Renal Pelvis	24.8	2.9
Liver & IBD[f]	20.6	6.1
Non-Hodgkin Lymphoma	14.1	-1.1
Urinary Bladder	13.7	-
Stomach	13.1	-5.4*
Pancreas	11.4	-
Oral Cavity and Pharynx	11.1	2.9
Leukemia	8.8	-
Esophagus	6.1	-
Larynx	4.6	-
Testis	4.5	-
Melanoma of the Skin	4.1	-

Hispanic[e]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	409.7	-1.4*
Prostate	125.8	-3.0*
Colon and Rectum	45.5	-1.7*
Lung and Bronchus	40.6	-2.6*
Non-Hodgkin Lymphoma	20.5	0.7
Urinary Bladder	20.2	-1.5*
Kidney and Renal Pelvis	20.1	2.1*
Liver & IBD[f]	18.3	3.2*
Stomach	14.9	-1.3*
Leukemia	12.2	-0.3
Pancreas	12.1	0.9
Oral Cavity and Pharynx	9.3	-0.1
Myeloma	6.7	-1.3
Brain and ONS[f]	5.9	-1.3*
Esophagus	5.2	-1.0
Melanoma of the Skin	4.7	-1.2

Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[a] Top 15 cancer sites selected based on 2006-2010 age-adjusted rates for the race/ethnic group.

[b] Rates are per 100,000 and 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.
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.

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

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

\- 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.

Table 1.26
Age-Adjusted SEER Incidence Rates and Trends for the Top 15 Cancer Sites[a] by Race/Ethnicity

Females

All Races

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	411.2	-0.3
Breast	123.8	-0.6
Lung and Bronchus	51.9	-0.7*
Colon and Rectum	39.3	-2.4*
Corpus and Uterus, NOS	24.3	0.9*
Thyroid	18.2	6.5*
Melanoma of the Skin	16.7	1.2*
Non-Hodgkin Lymphoma	16.4	-0.1
Ovary[g]	12.5	-1.7*
Pancreas	10.9	1.0*
Kidney and Renal Pelvis	10.6	2.3*
Leukemia	10.0	-0.4
Urinary Bladder	8.9	-0.9*
Cervix Uteri	7.9	-1.7*
Oral Cavity and Pharynx	6.2	-0.2
Brain and ONS[f]	5.4	-0.4

White

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	424.4	-0.3
Breast	127.4	-0.8*
Lung and Bronchus	54.6	-0.6*
Colon and Rectum	38.4	-2.5*
Corpus and Uterus, NOS	25.1	0.7*
Melanoma of the Skin	20.0	1.3*
Thyroid	19.4	6.6*
Non-Hodgkin Lymphoma	17.3	0.0
Ovary[g]	13.3	-1.7*
Kidney and Renal Pelvis	10.9	2.3*
Pancreas	10.7	1.1*
Leukemia	10.5	-0.4
Urinary Bladder	9.5	-0.9*
Cervix Uteri	7.9	-1.4*
Oral Cavity and Pharynx	6.3	0.1
Brain and ONS[f]	6.0	-0.4

Black

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	397.5	-0.1
Breast	121.4	0.4
Lung and Bronchus	52.2	-0.2
Colon and Rectum	49.2	-2.4*
Corpus and Uterus, NOS	22.2	1.9*
Pancreas	14.3	0.0
Kidney and Renal Pelvis	12.3	3.2*
Non-Hodgkin Lymphoma	11.8	-0.3
Thyroid	10.5	6.1*
Myeloma	10.2	0.7
Ovary[g]	9.7	-0.9
Cervix Uteri	9.6	-3.0*
Stomach	8.7	-1.2
Leukemia	7.8	-1.6*
Urinary Bladder	7.1	-1.2
Oral Cavity and Pharynx	5.4	-1.4

Asian/Pacific Islander

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	291.5	-0.1
Breast	91.8	0.2
Colon and Rectum	32.7	-2.0*
Lung and Bronchus	28.1	-0.4
Corpus and Uterus, NOS	18.6	2.4*
Thyroid	17.9	5.7*
Non-Hodgkin Lymphoma	10.9	-0.8
Ovary[g]	9.4	-1.2
Stomach	9.3	-2.6*
Pancreas	8.9	1.0
Liver & IBD[f]	8.2	-0.9
Cervix Uteri	6.6	-3.9*
Leukemia	6.1	0.0
Kidney and Renal Pelvis	5.5	2.4
Oral Cavity and Pharynx	4.9	-2.1*
Urinary Bladder	3.9	-0.9

American Indian/Alaska Native[d]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	306.5	-0.4
Breast	77.1	-0.5
Colon and Rectum	36.6	-3.3*
Lung and Bronchus	35.7	-2.0
Corpus and Uterus, NOS	20.3	3.1
Kidney and Renal Pelvis	15.6	3.0
Thyroid	11.0	4.7*
Non-Hodgkin Lymphoma	10.8	0.8
Ovary[g]	10.7	-3.7
Pancreas	10.5	1.9
Liver & IBD[f]	7.7	2.8
Stomach	7.7	-1.1
Cervix Uteri	7.3	0.1
Leukemia	6.2	-2.3
Oral Cavity and Pharynx	4.3	-
Myeloma	3.7	-

Hispanic[e]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	323.2	-0.4*
Breast	90.8	-0.5
Colon and Rectum	31.6	-1.8*
Lung and Bronchus	26.3	-0.6
Corpus and Uterus, NOS	19.4	1.7*
Thyroid	16.4	5.7*
Non-Hodgkin Lymphoma	15.6	0.7
Ovary[g]	11.3	-1.8*
Kidney and Renal Pelvis	11.1	1.9*
Cervix Uteri	10.9	-4.2*
Pancreas	10.6	-0.2
Leukemia	8.7	-0.1
Stomach	8.6	-2.3*
Liver & IBD[f]	6.9	1.8
Urinary Bladder	5.2	-2.3*
Brain and ONS[f]	4.7	-1.1

Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).

[a] Top 15 cancer sites selected based on 2006-2010 age-adjusted rates for the race/ethnic group.

[b] Rates are per 100,000 and 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.
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.

[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).

- 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.

Table 1.27
Age-Adjusted U.S. Death Rates and Trends for the Top 15 Cancer Sites[a] by Race/Ethnicity

Both Sexes

All Races

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	176.4	-1.5*
Lung and Bronchus	49.5	-1.7*
Colon and Rectum	16.4	-2.9*
Breast	12.7	-2.2*
Pancreas	10.9	0.5*
Prostate[f]	9.0	-2.7*
Leukemia	7.1	-1.0*
Non-Hodgkin Lymphoma	6.4	-2.8*
Liver & IBD[g]	5.6	2.4*
Ovary[f]	4.5	-2.0*
Urinary Bladder	4.4	0.1
Esophagus	4.3	-0.6*
Brain and ONS[g]	4.3	-0.5*
Kidney and Renal Pelvis	4.0	-1.0*
Stomach	3.5	-2.9*
Myeloma	3.4	-1.8*

White

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	175.8	-1.4*
Lung and Bronchus	50.2	-1.6*
Colon and Rectum	15.9	-3.0*
Breast	12.3	-2.2*
Pancreas	10.8	0.6*
Prostate[f]	8.3	-2.5*
Leukemia	7.3	-0.9*
Non-Hodgkin Lymphoma	6.7	-2.7*
Liver & IBD[g]	5.2	2.5*
Ovary[f]	4.7	-2.0*
Brain and ONS[g]	4.6	-0.4
Urinary Bladder	4.6	0.3*
Esophagus	4.4	0.0
Kidney and Renal Pelvis	4.1	-1.0*
Myeloma	3.1	-1.8*
Melanoma of the Skin	3.1	0.7*

Black

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	210.3	-2.1*
Lung and Bronchus	53.5	-2.4*
Colon and Rectum	22.8	-2.8*
Breast	18.2	-1.7*
Prostate[f]	18.0	-3.4*
Pancreas	13.7	-0.1
Liver & IBD[g]	7.4	2.4*
Stomach	6.7	-3.2*
Myeloma	6.4	-1.7*
Leukemia	6.1	-1.6*
Non-Hodgkin Lymphoma	4.6	-2.5*
Esophagus	4.4	-4.8*
Corpus and Uterus, NOS[f]	4.4	0.4
Ovary[f]	4.0	-1.9*
Kidney and Renal Pelvis	3.9	-1.1*
Urinary Bladder	3.7	-0.8

Asian/Pacific Islander

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	108.8	-1.2*
Lung and Bronchus	25.5	-1.2*
Colon and Rectum	11.2	-1.9*
Liver & IBD[g]	9.7	-1.2*
Pancreas	7.6	0.5
Stomach	6.6	-3.4*
Breast	6.5	-1.5*
Non-Hodgkin Lymphoma	4.1	-2.1*
Prostate[f]	4.1	-2.5*
Leukemia	3.9	0.2
Ovary[f]	2.7	-0.5
Kidney and Renal Pelvis	2.0	1.9
Oral Cavity and Pharynx	2.0	-2.5*
Brain and ONS[g]	1.9	-0.1
Esophagus	1.8	-0.8
Myeloma	1.7	0.4

American Indian/Alaska Native[d]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	160.4	-0.7*
Lung and Bronchus	40.2	-0.7
Colon and Rectum	16.9	-0.4
Liver & IBD[g]	9.3	1.5
Pancreas	9.2	2.1
Breast	8.8	-1.3
Prostate[f]	8.1	-1.0
Kidney and Renal Pelvis	6.7	-0.2
Stomach	5.6	-5.4*
Non-Hodgkin Lymphoma	4.8	-3.0
Leukemia	4.8	-0.1
Ovary[f]	4.1	-2.3
Esophagus	3.6	-2.0*
Myeloma	2.9	-5.0*
Brain and ONS[g]	2.6	2.8
Urinary Bladder	2.4	2.8

Hispanic[e]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	121.8	-1.4*
Lung and Bronchus	21.3	-2.1*
Colon and Rectum	12.7	-1.7*
Pancreas	8.6	0.2
Liver & IBD[g]	8.5	1.6*
Breast	8.2	-1.6*
Prostate[f]	7.5	-2.6*
Stomach	5.7	-2.7*
Non-Hodgkin Lymphoma	5.3	-1.4*
Leukemia	4.9	-0.9*
Kidney and Renal Pelvis	3.5	-1.0
Ovary[f]	3.3	-1.3*
Myeloma	2.8	-2.0*
Brain and ONS[g]	2.8	-0.2
Urinary Bladder	2.4	-1.1
Esophagus	2.3	-0.7

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[a] Top 15 cancer sites selected based on 2006-2010 age-adjusted rates for the race/ethnic group.
[b] Rates are per 100,000 and 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.
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 2006-2010 Hispanic death rates do not include deaths from the District of Columbia, North Dakota and South Carolina.
The 2001-2010 Hispanic mortality trends do not include deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.
[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).
- 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.

Table 1.28
Age-Adjusted U.S. Death Rates and Trends for the Top 15 Cancer Sites[a] by Race/Ethnicity

Males

All Races

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	215.3	-1.8*
Lung and Bronchus	63.5	-2.5*
Prostate	23.0	-3.4*
Colon and Rectum	19.6	-3.0*
Pancreas	12.5	0.4*
Leukemia	9.5	-1.0*
Liver & IBD[f]	8.3	2.5*
Non-Hodgkin Lymphoma	8.2	-2.6*
Urinary Bladder	7.7	0.1
Esophagus	7.6	-0.5*
Kidney and Renal Pelvis	5.8	-1.0*
Brain and ONS[f]	5.2	-0.5*
Stomach	4.9	-3.2*
Myeloma	4.3	-1.4*
Melanoma of the Skin	4.1	0.9*
Oral Cavity and Pharynx	3.8	-1.3*

White

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	213.1	-1.7*
Lung and Bronchus	63.2	-2.4*
Prostate	21.2	-3.3*
Colon and Rectum	19.1	-3.1*
Pancreas	12.5	0.5*
Leukemia	9.8	-0.9*
Non-Hodgkin Lymphoma	8.5	-2.6*
Urinary Bladder	8.1	0.2
Esophagus	7.8	0.1
Liver & IBD[f]	7.6	2.6*
Kidney and Renal Pelvis	5.9	-1.0*
Brain and ONS[f]	5.6	-0.4
Melanoma of the Skin	4.6	1.0*
Stomach	4.2	-3.4*
Myeloma	4.0	-1.5*
Oral Cavity and Pharynx	3.6	-0.8*

Black

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	276.6	-2.6*
Lung and Bronchus	78.5	-3.3*
Prostate	50.9	-3.8*
Colon and Rectum	28.7	-2.4*
Pancreas	15.3	0.0
Liver & IBD[f]	11.8	3.0*
Stomach	9.8	-3.1*
Leukemia	8.2	-1.3*
Myeloma	7.9	-1.3*
Esophagus	7.7	-4.6*
Non-Hodgkin Lymphoma	5.9	-2.0*
Kidney and Renal Pelvis	5.7	-1.3*
Urinary Bladder	5.5	0.0
Oral Cavity and Pharynx	5.2	-4.1*
Larynx	3.9	-4.0*
Brain and ONS[f]	3.0	-0.8

Asian/Pacific Islander

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	132.4	-1.3*
Lung and Bronchus	35.5	-1.6*
Liver & IBD[f]	14.4	-1.0*
Colon and Rectum	13.1	-2.3*
Prostate	10.1	-2.3*
Stomach	8.7	-3.1*
Pancreas	8.3	0.5
Non-Hodgkin Lymphoma	5.2	-2.0*
Leukemia	5.0	-0.2
Esophagus	3.1	-1.1
Oral Cavity and Pharynx	3.0	-2.6*
Kidney and Renal Pelvis	3.0	3.3*
Urinary Bladder	2.8	-1.0
Brain and ONS[f]	2.3	-1.5
Myeloma	2.3	3.2*
Soft Tissue including Heart	0.9	1.2

American Indian/Alaska Native[d]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	191.0	-0.4
Lung and Bronchus	49.6	-0.5
Prostate	20.7	-1.4
Colon and Rectum	18.7	-1.5
Liver & IBD[f]	13.2	3.3
Pancreas	10.1	3.5
Kidney and Renal Pelvis	9.5	0.1
Stomach	8.1	-5.7*
Leukemia	7.0	3.7*
Esophagus	6.1	-2.4
Non-Hodgkin Lymphoma	5.4	-1.8
Urinary Bladder	4.1	-
Myeloma	3.6	-3.6*
Oral Cavity and Pharynx	3.4	-3.4
Brain and ONS[f]	2.8	1.0
Larynx	2.1	-

Hispanic[e]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	152.1	-1.6*
Lung and Bronchus	31.3	-2.8*
Prostate	19.2	-3.0*
Colon and Rectum	16.1	-1.4*
Liver & IBD[f]	12.3	1.9*
Pancreas	9.6	0.5
Stomach	7.6	-2.9*
Non-Hodgkin Lymphoma	6.5	-1.4*
Leukemia	6.1	-1.1*
Kidney and Renal Pelvis	5.1	-1.5
Esophagus	4.3	-0.3
Urinary Bladder	4.0	-1.1
Myeloma	3.5	-1.9
Brain and ONS[f]	3.3	-0.1
Oral Cavity and Pharynx	2.5	-1.9*
Larynx	1.7	-2.7*

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[a] Top 15 cancer sites selected based on 2006-2010 age-adjusted rates for the race/ethnic group.
[b] Rates are per 100,000 and 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.
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 2006-2010 Hispanic death rates do not include deaths from the District of Columbia, North Dakota and South Carolina.
The 2001-2010 Hispanic mortality trends do not include deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.
[f] IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.
* The APC is significantly different from zero (p<.05).
- 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.

Table 1.29
Age-Adjusted U.S. Death Rates and Trends for the Top 15 Cancer Sites[a] by Race/Ethnicity

Females

All Races

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	149.7	-1.4*
Lung and Bronchus	39.2	-0.9*
Breast	22.6	-2.0*
Colon and Rectum	13.9	-3.0*
Pancreas	9.6	0.4*
Ovary	8.1	-1.8*
Leukemia	5.3	-1.3*
Non-Hodgkin Lymphoma	5.1	-3.1*
Corpus and Uterus, NOS	4.3	0.5
Brain and ONS[f]	3.5	-0.5*
Liver & IBD[f]	3.4	1.6*
Myeloma	2.7	-2.3*
Kidney and Renal Pelvis	2.6	-1.3*
Stomach	2.5	-2.7*
Cervix Uteri	2.4	-1.5*
Urinary Bladder	2.2	-0.6*

White

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	149.8	-1.3*
Lung and Bronchus	40.4	-0.8*
Breast	22.1	-2.0*
Colon and Rectum	13.4	-3.0*
Pancreas	9.4	0.6*
Ovary	8.4	-1.8*
Leukemia	5.5	-1.2*
Non-Hodgkin Lymphoma	5.3	-3.1*
Corpus and Uterus, NOS	4.0	0.4
Brain and ONS[f]	3.8	-0.4
Liver & IBD[f]	3.2	1.9*
Kidney and Renal Pelvis	2.6	-1.2*
Myeloma	2.5	-2.3*
Urinary Bladder	2.2	-0.4
Stomach	2.2	-2.7*
Cervix Uteri	2.2	-1.3*

Black

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	171.2	-1.7*
Lung and Bronchus	37.2	-1.2*
Breast	30.8	-1.6*
Colon and Rectum	19.0	-3.3*
Pancreas	12.5	-0.1
Corpus and Uterus, NOS	7.4	0.7*
Ovary	6.7	-1.7*
Myeloma	5.4	-2.2*
Leukemia	4.8	-1.9*
Stomach	4.7	-3.5*
Cervix Uteri	4.2	-2.4*
Liver & IBD[f]	4.1	0.8
Non-Hodgkin Lymphoma	3.6	-3.0*
Urinary Bladder	2.6	-1.9*
Kidney and Renal Pelvis	2.6	-1.1*
Esophagus	2.1	-5.2*

Asian/Pacific Islander

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	92.1	-1.0*
Lung and Bronchus	18.4	-0.5
Breast	11.5	-1.7*
Colon and Rectum	9.7	-1.6*
Pancreas	7.1	0.5
Liver & IBD[f]	6.0	-1.5
Stomach	5.1	-3.7*
Ovary	4.8	-0.6
Non-Hodgkin Lymphoma	3.4	-2.0*
Leukemia	3.1	0.7
Corpus and Uterus, NOS	2.6	2.3*
Cervix Uteri	1.9	-4.6*
Brain and ONS[f]	1.6	1.6
Myeloma	1.3	-2.5
Kidney and Renal Pelvis	1.2	-0.3
Oral Cavity and Pharynx	1.2	-2.4

American Indian/Alaska Native[d]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	139.0	-1.1*
Lung and Bronchus	33.1	-0.8
Breast	15.5	-1.1
Colon and Rectum	15.4	0.4
Pancreas	8.6	0.5
Ovary	7.1	-2.3
Liver & IBD[f]	6.1	-1.1
Kidney and Renal Pelvis	4.4	-0.7
Non-Hodgkin Lymphoma	4.3	-3.8
Stomach	3.8	-6.0*
Cervix Uteri	3.5	-0.4
Leukemia	3.3	-3.4
Corpus and Uterus, NOS	3.2	-
Myeloma	2.4	-6.2
Brain and ONS[f]	2.3	-
Gallbladder	2.0	-4.6

Hispanic[e]

	Rate[b] 2006-2010	APC[c] 2001-2010
All Sites	101.2	-1.2*
Breast	14.8	-1.5*
Lung and Bronchus	14.1	-1.1*
Colon and Rectum	10.2	-2.1*
Pancreas	7.7	0.1
Ovary	5.8	-1.2*
Liver & IBD[f]	5.4	0.9*
Non-Hodgkin Lymphoma	4.4	-1.5*
Stomach	4.4	-2.6*
Leukemia	4.0	-0.6
Corpus and Uterus, NOS	3.3	0.6
Cervix Uteri	2.9	-2.3*
Brain and ONS[f]	2.4	-0.4
Myeloma	2.3	-2.3*
Kidney and Renal Pelvis	2.3	-0.4
Gallbladder	1.3	-1.6

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[a] Top 15 cancer sites selected based on 2006-2010 age-adjusted rates for the race/ethnic group.
[b] Rates are per 100,000 and 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.
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 2006-2010 Hispanic death rates do not include deaths from the District of Columbia, North Dakota and South Carolina.
The 2001-2010 Hispanic mortality trends do not include deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.
[f] IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.
* The APC is significantly different from zero (p<.05).
- 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.

Surveillance, Epidemiology, and End Results (SEER) Program: SEER 9, 13, & 18 Geographic Areas National Cancer Institute, USA

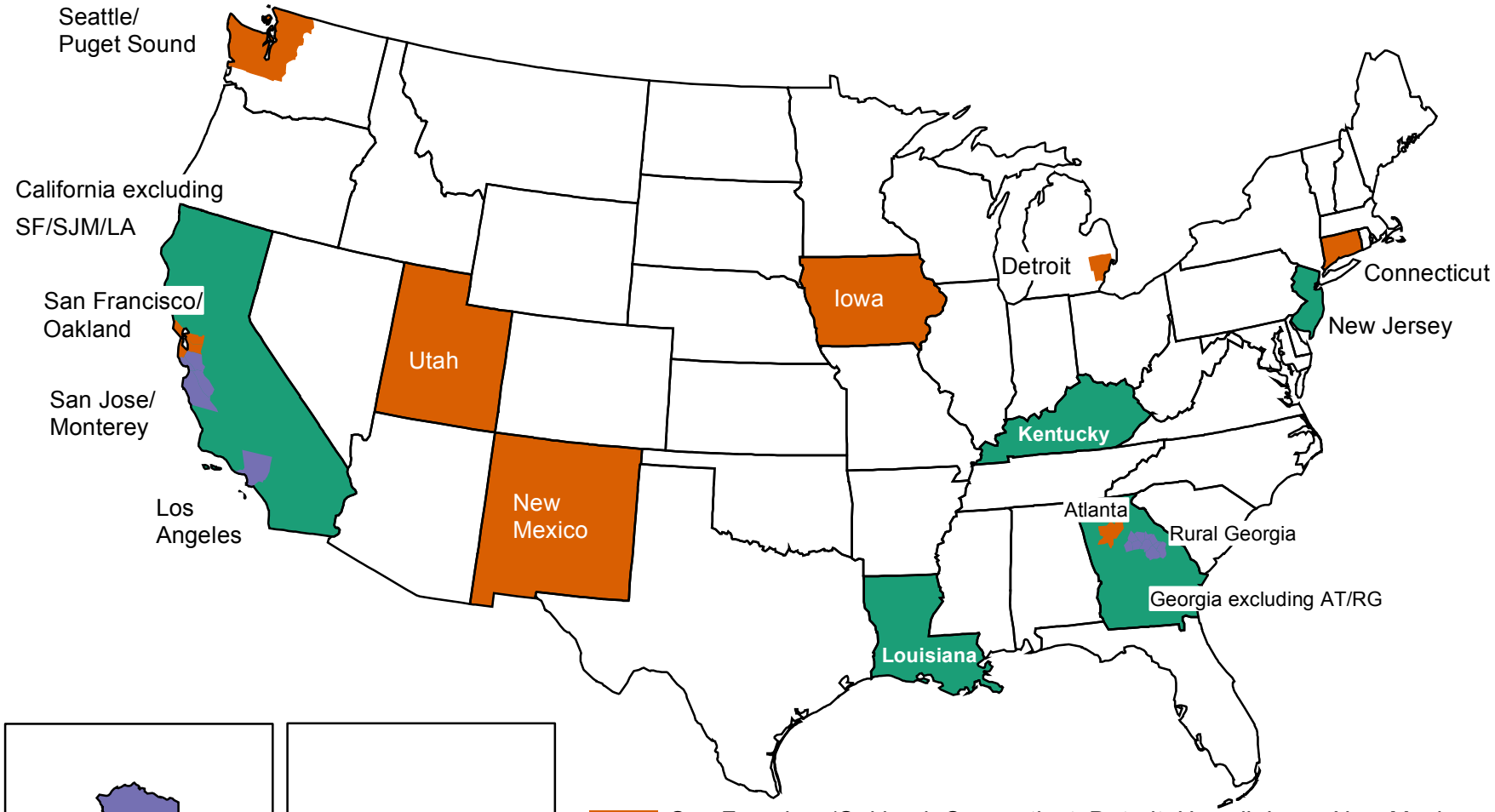
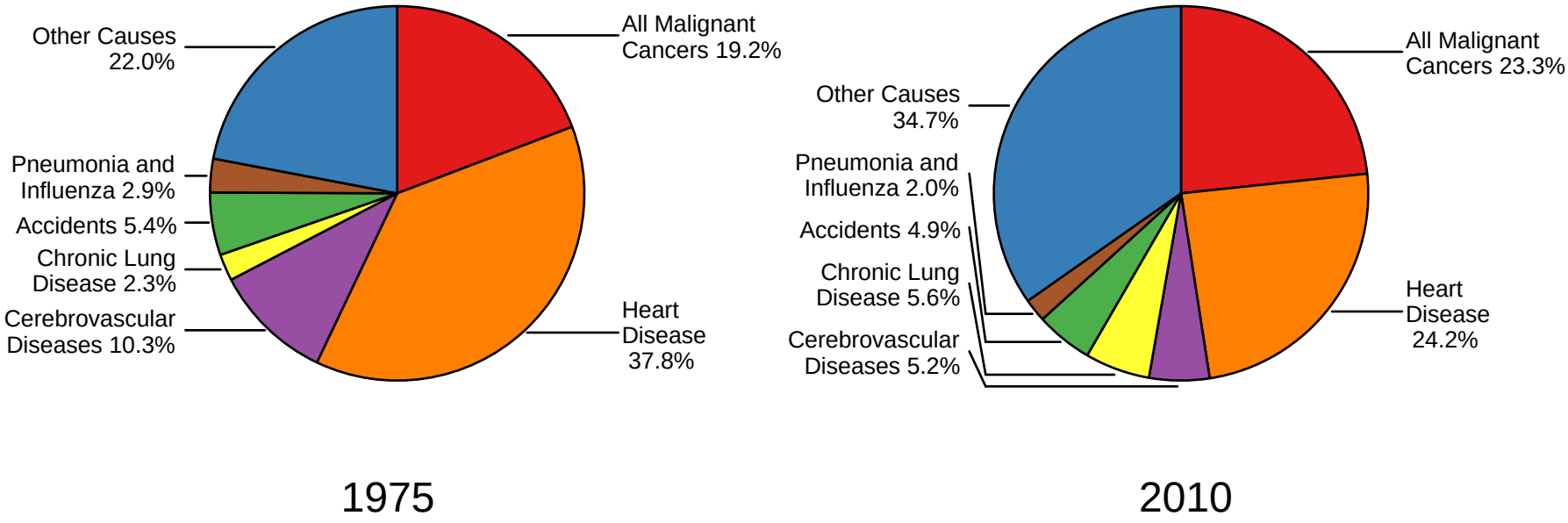


Figure 1.1

http://seer.cancer.gov

Figure 1.2

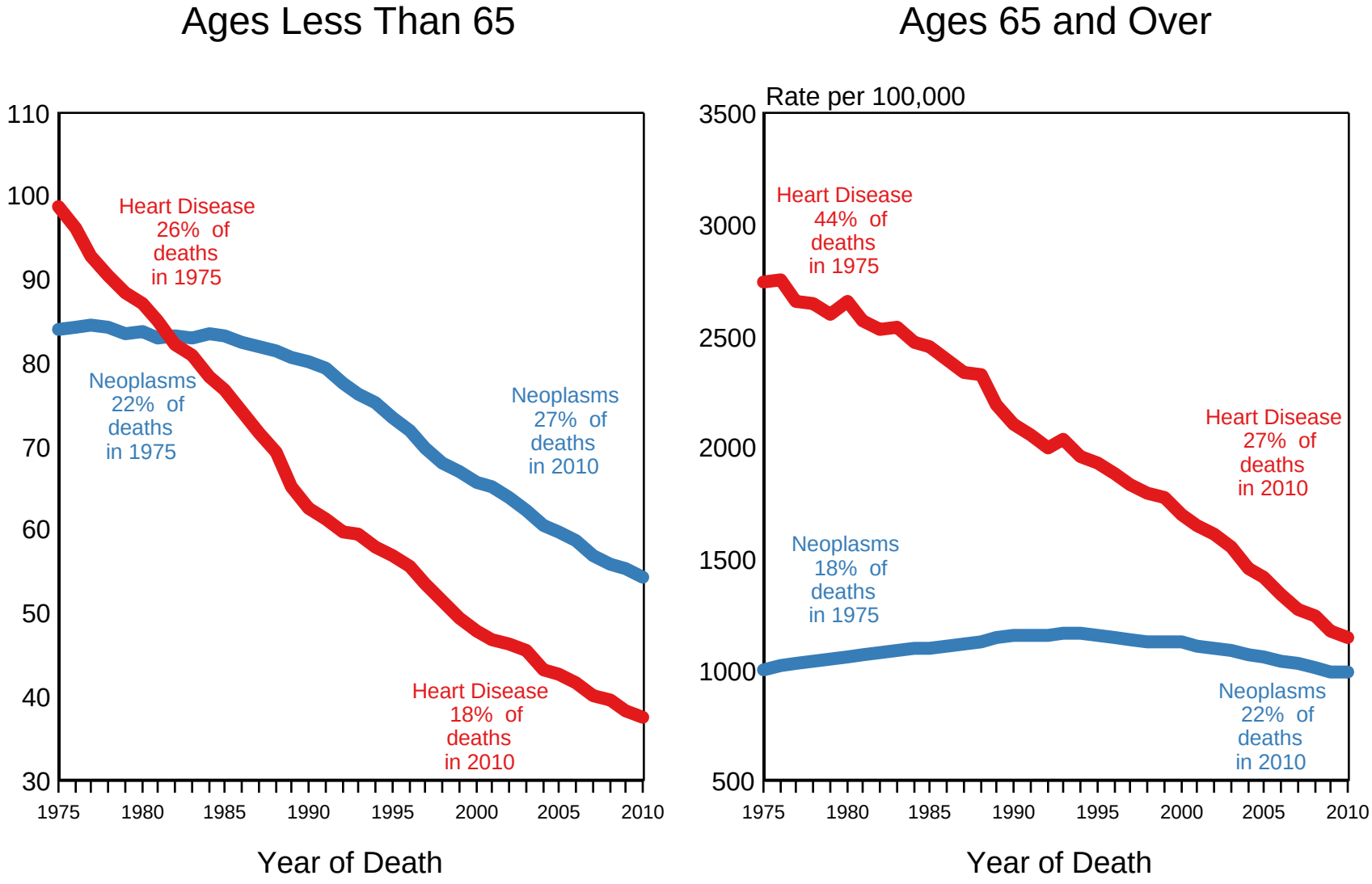
Leading Causes of Death in US, 1975 vs 2010
Percent of All Causes of Death



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

Figure 1.3

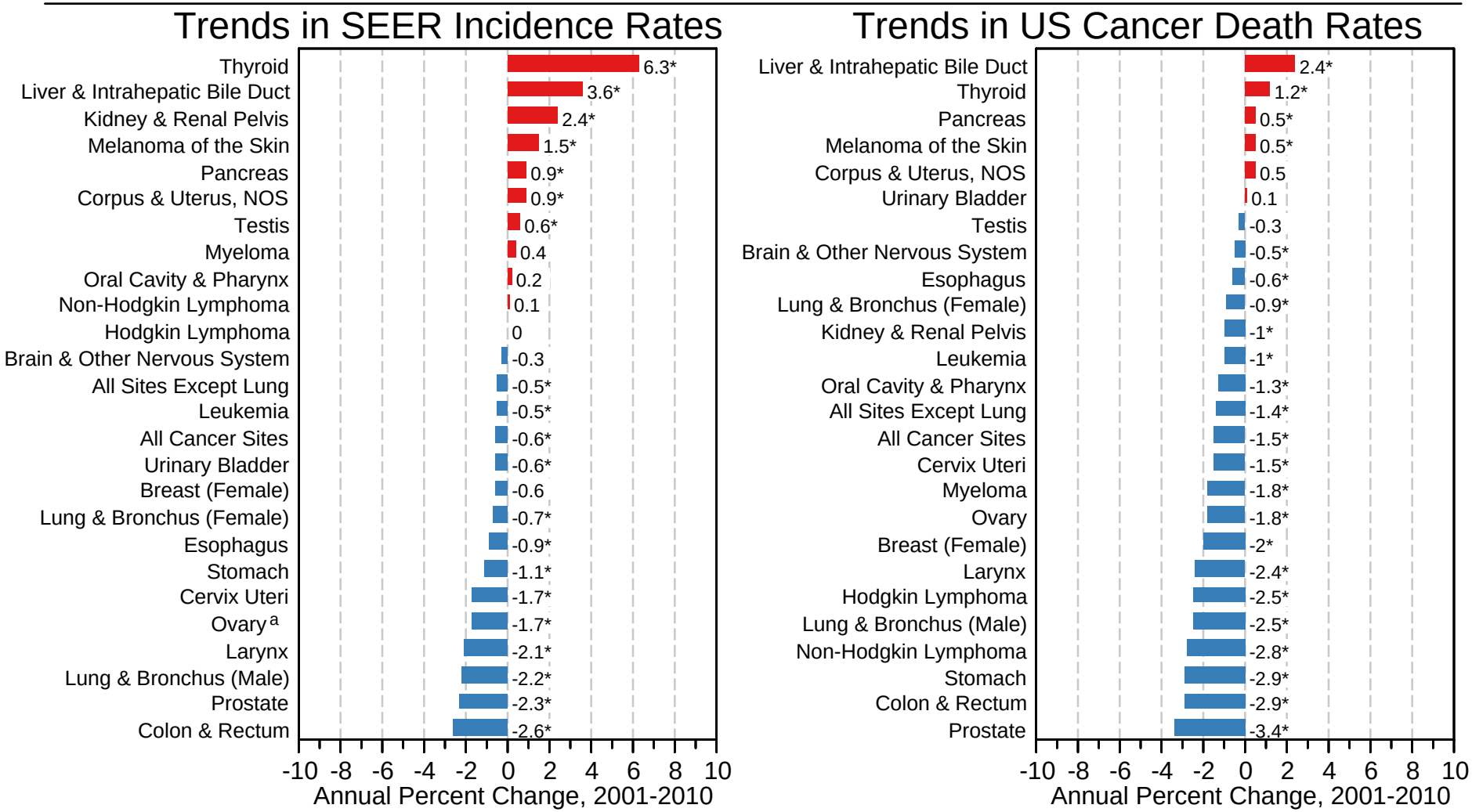
Us Death Rates, 1975-2010
Heart Disease compared to Neoplasms, by age at death



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Figure 1.4

Trends in SEER Incidence and US Death Rates by Primary Cancer Site 2001-2010



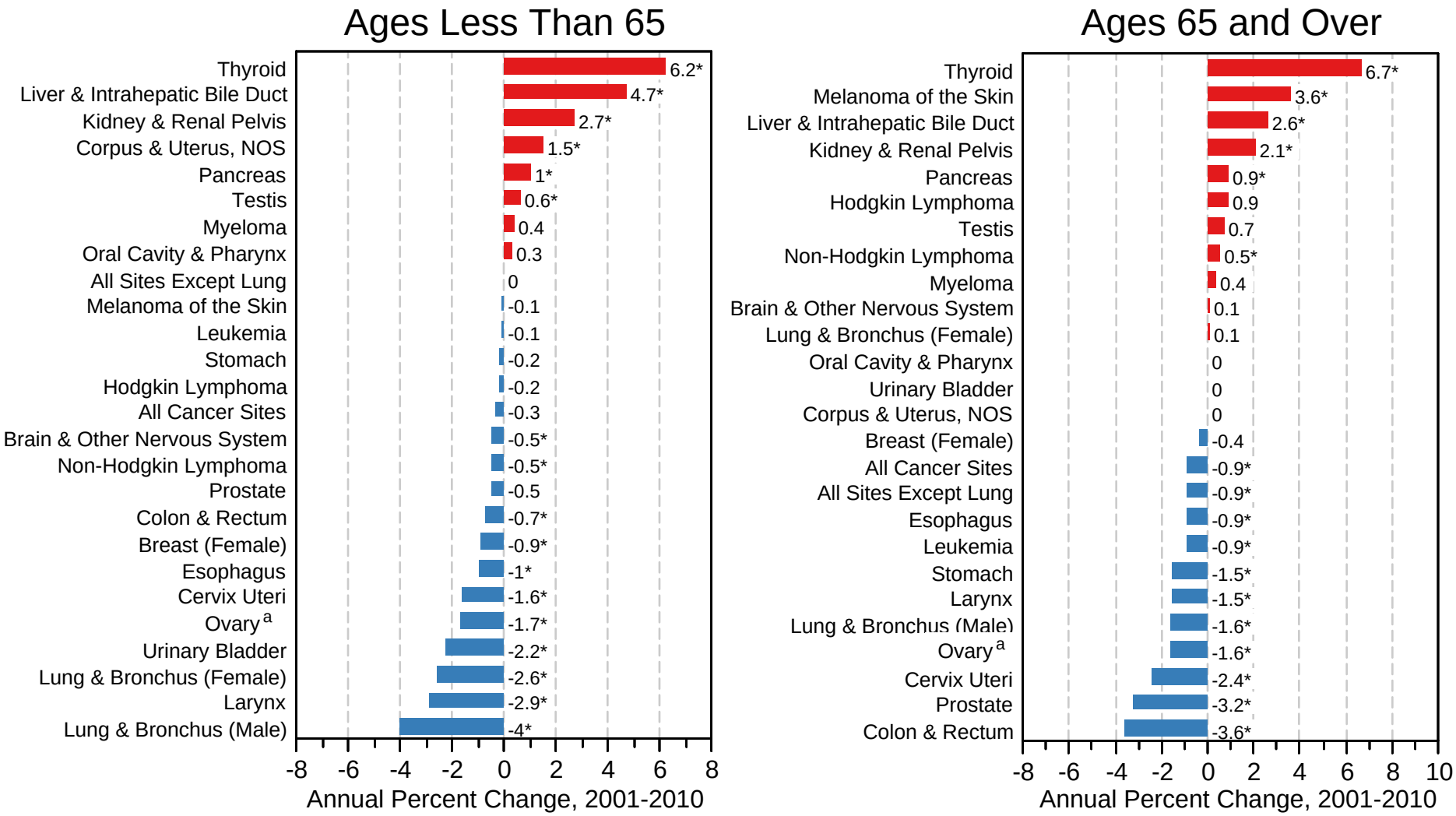
Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG) and US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
For sex-specific cancer sites, the population was limited to the population of the appropriate sex.

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

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

Figure 1.5

Trends in SEER Incidence Rates by Age Group and Primary Cancer Site 2001-2010



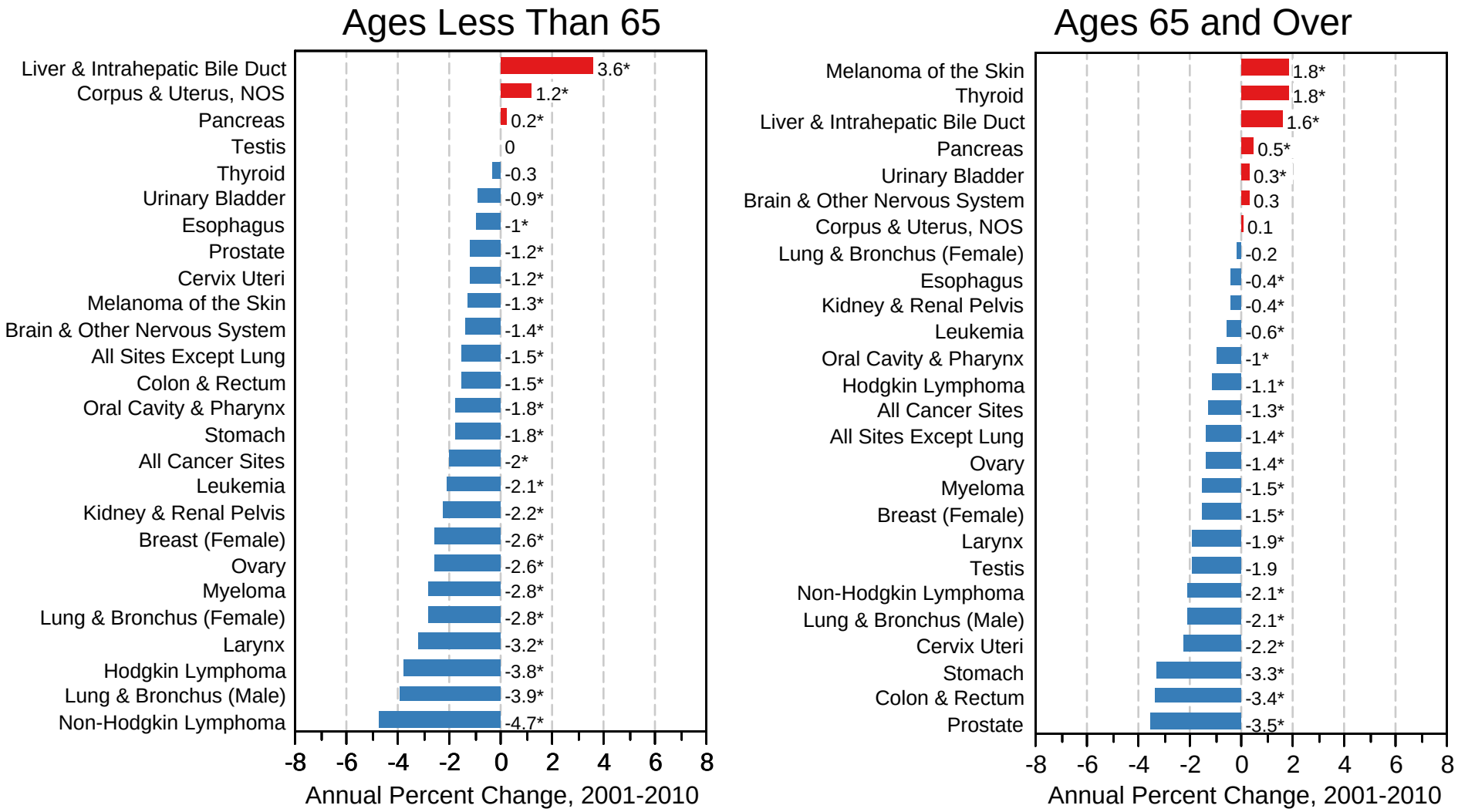
Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).
Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
For sex-specific cancer sites, the population was limited to the population of the appropriate sex.

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

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

Figure 1.6

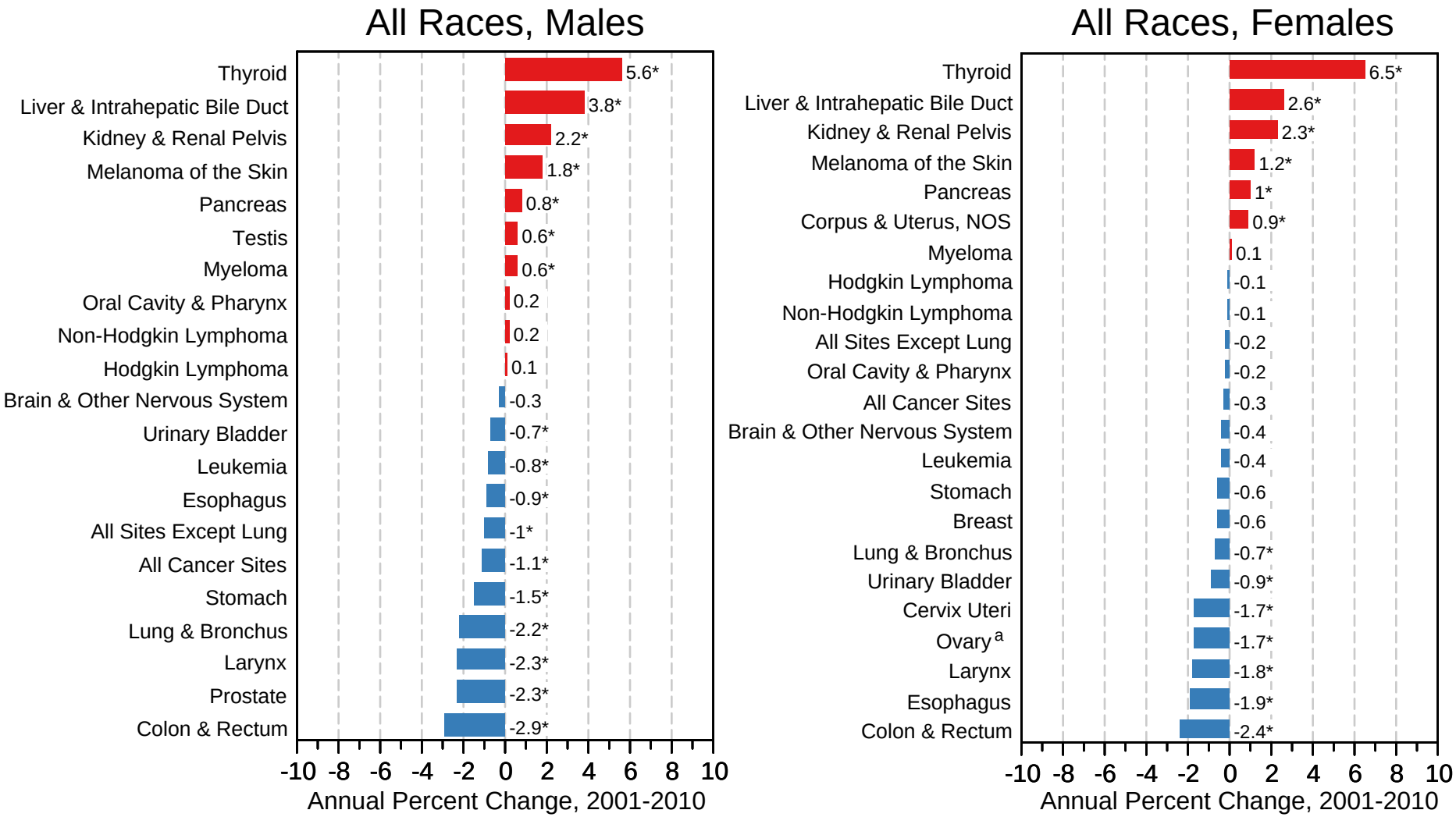
Trends in US Death Rates by Age Group and Primary Cancer Site 2001-2010



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
For sex-specific cancer sites, the population was limited to the population of the appropriate sex.
* The APC is significantly different from zero (p<.05).

Figure 1.7

Trends in SEER Incidence Rates by Sex and Primary Cancer Site 2001-2010



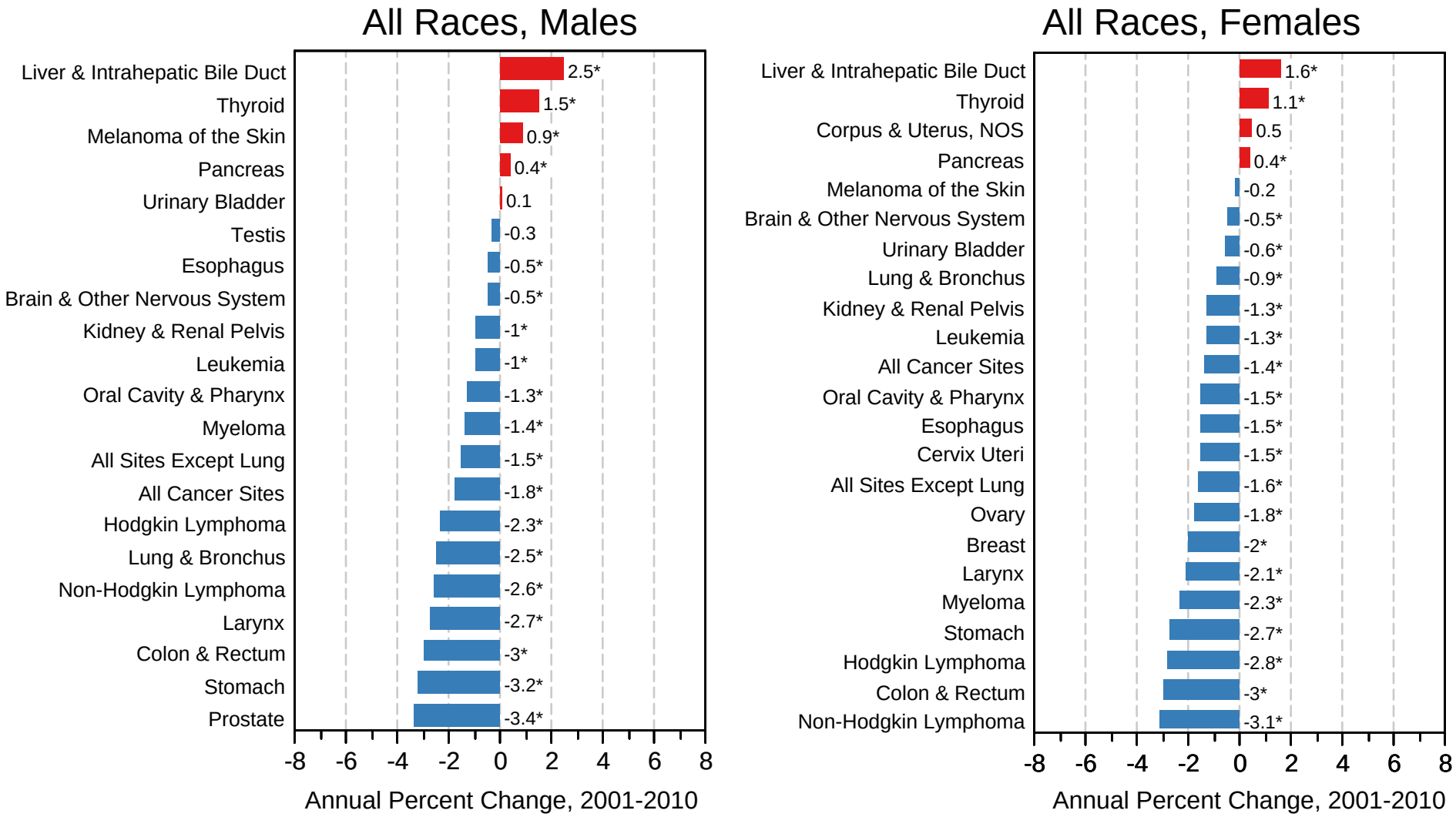
Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).
Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
For sex-specific cancer sites, the population was limited to the population of the appropriate sex.

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

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

Figure 1.8

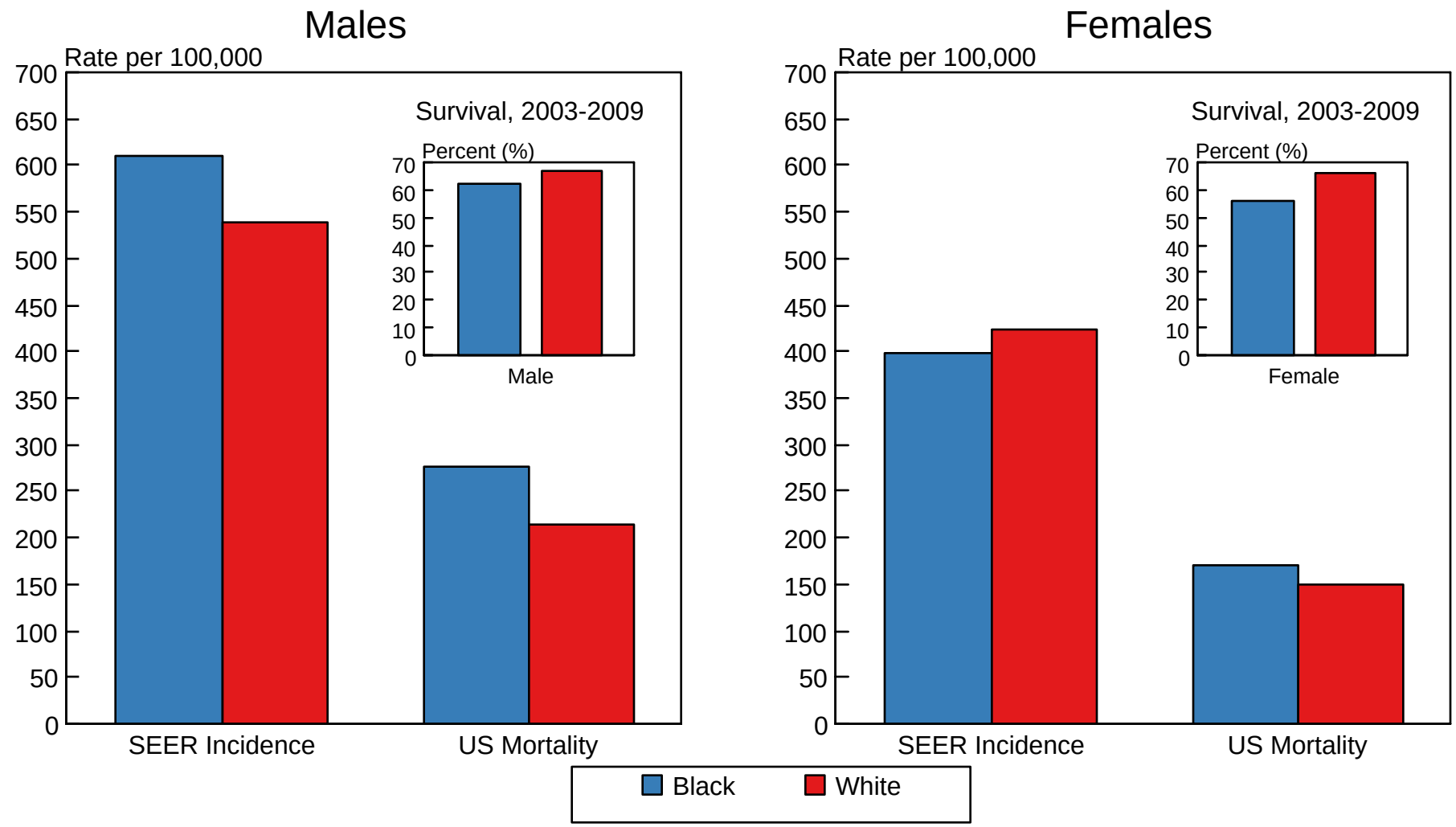
Trends in US Death Rates by Sex and Primary Cancer Site 2001-2010



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Underlying rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
For sex-specific cancer sites, the population was limited to the population of the appropriate sex.
* The APC is significantly different from zero (p<.05).

Figure 1.9

SEER Incidence[a] and US Death Rates,[b] 2006-2010
5-Year Relative Survival,[c] 2003-2009
All Cancer Combined, by Race and Sex

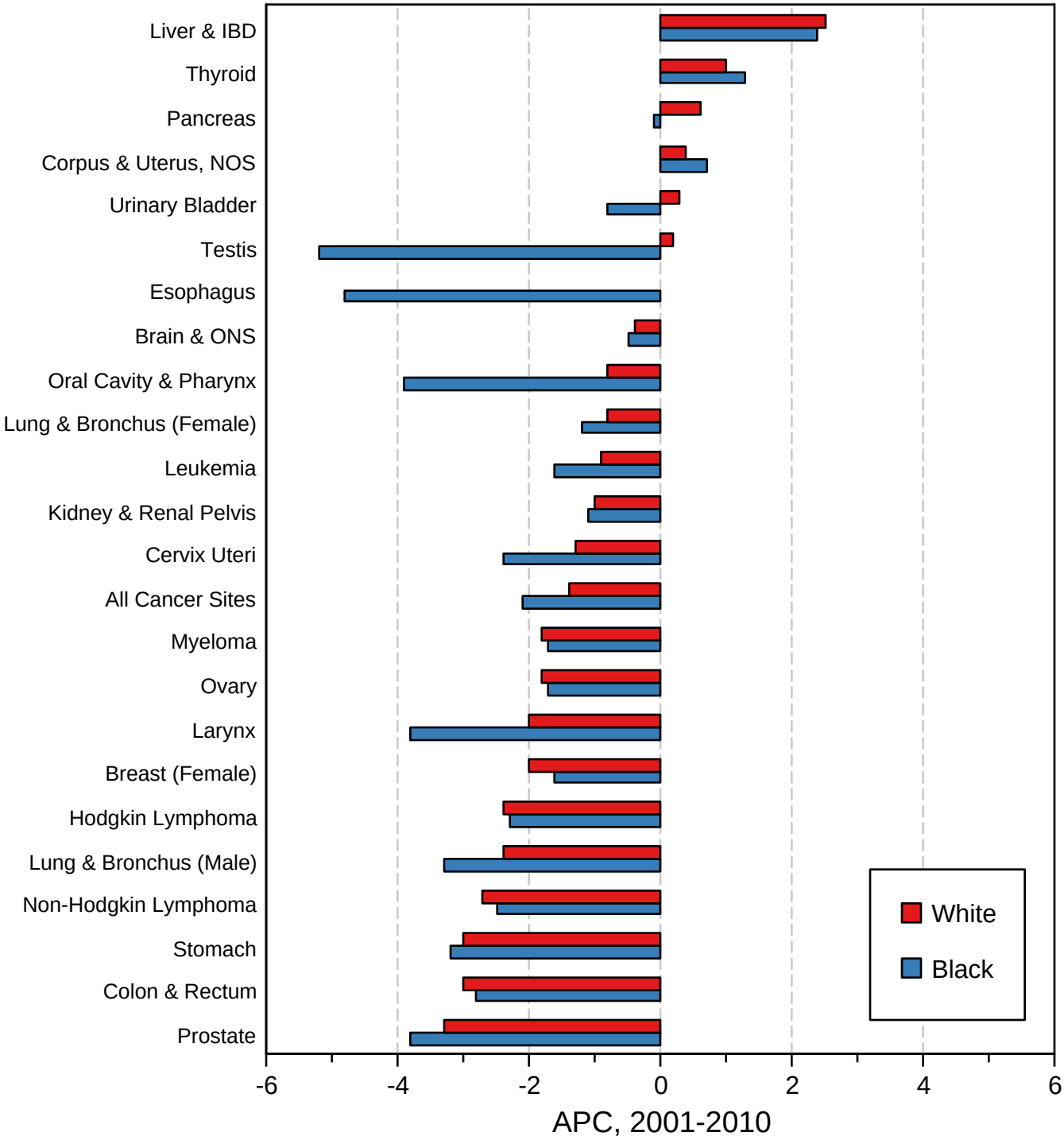


[a] Incidence rates are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry,Rural Georgia,California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG) and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

[b] Death rates are from the US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

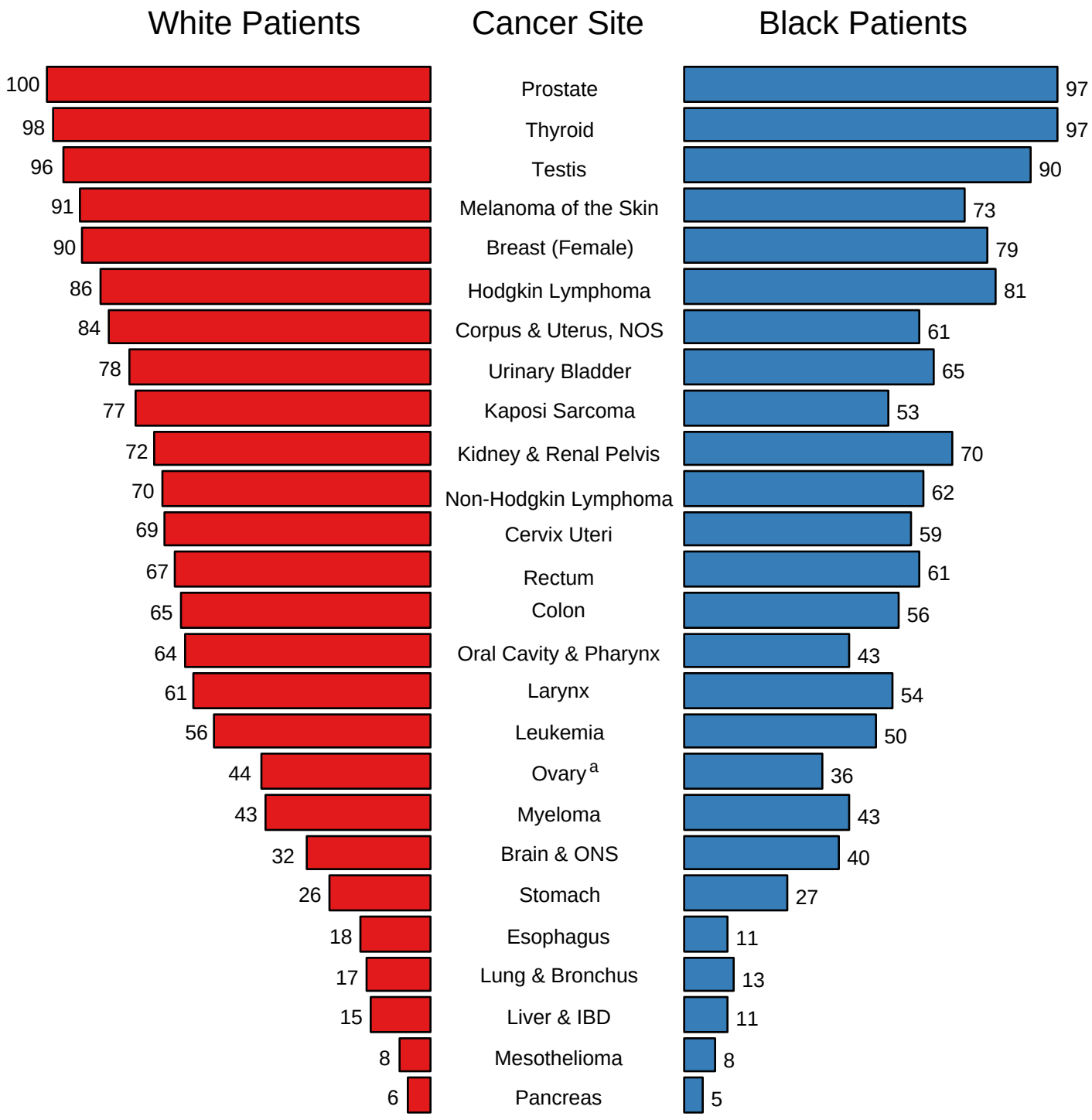
[c] Survival rates are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Trends in US Death Rates, 2001-2010
All Ages, by Race and Primary Cancer Site



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
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).

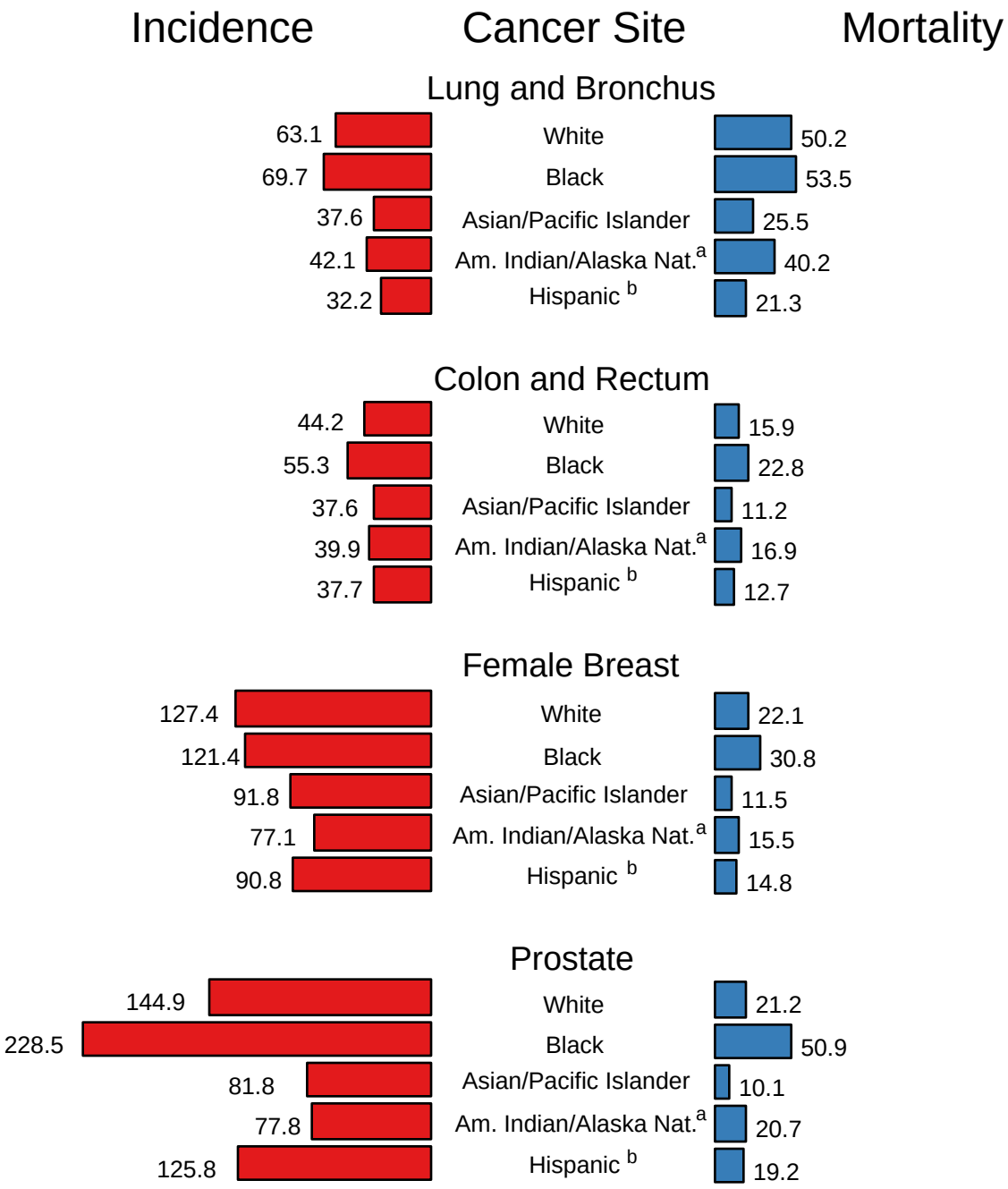
5-Year Relative Survival (%)
SEER Program, 2003-2009
Both Sexes, by Race and Cancer Site



Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).

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

SEER Cancer Incidence and US Death Rates, 2006-2010 By Cancer Site and Race/Ethnicity



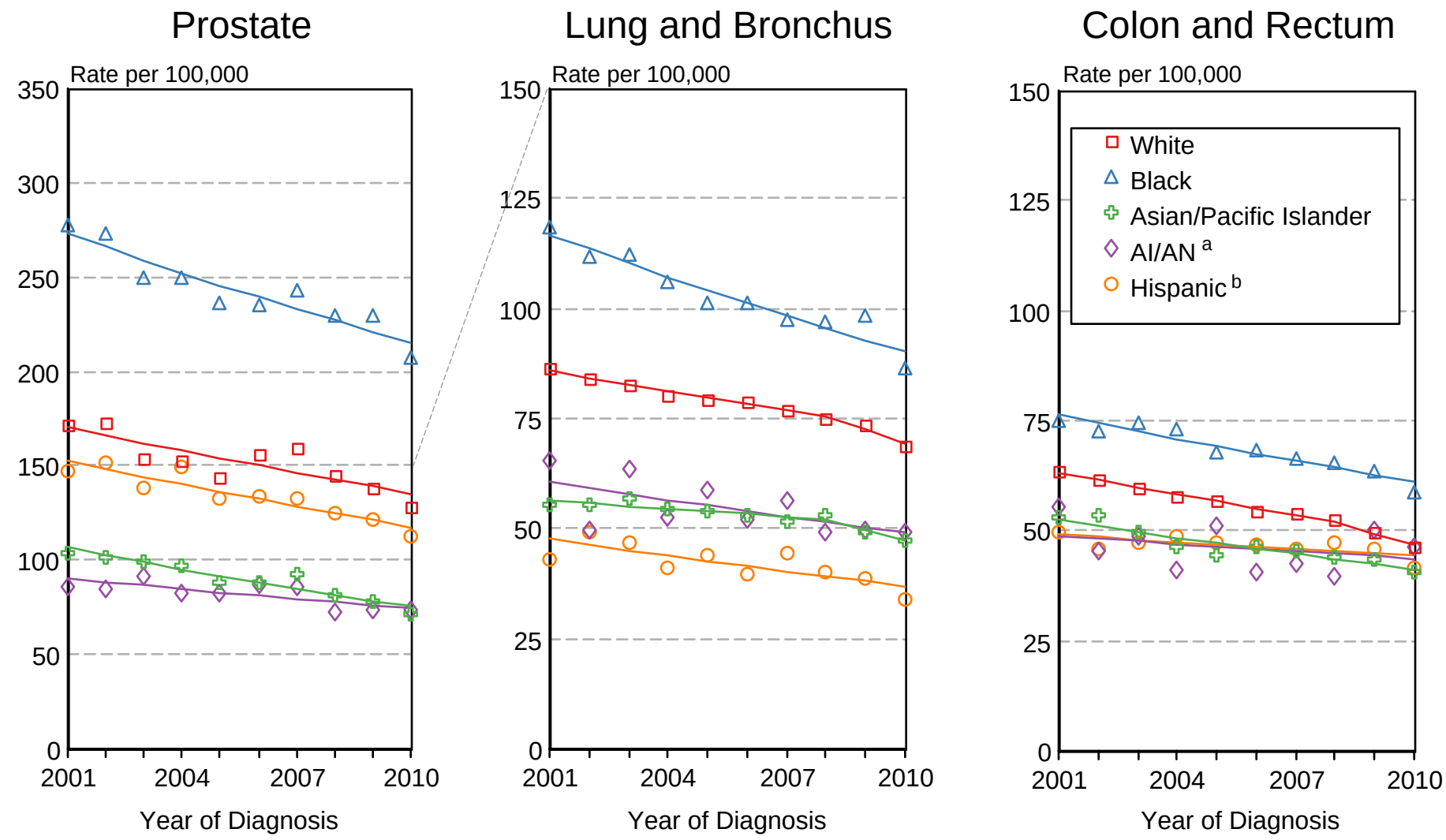
Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG) and US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

[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.
Mortality data for Hispanics exclude cases from the District of Columbia, North Dakota and South Carolina.

Figure 1.13

SEER Incidence 2001-2010
Males by Race/Ethnicity



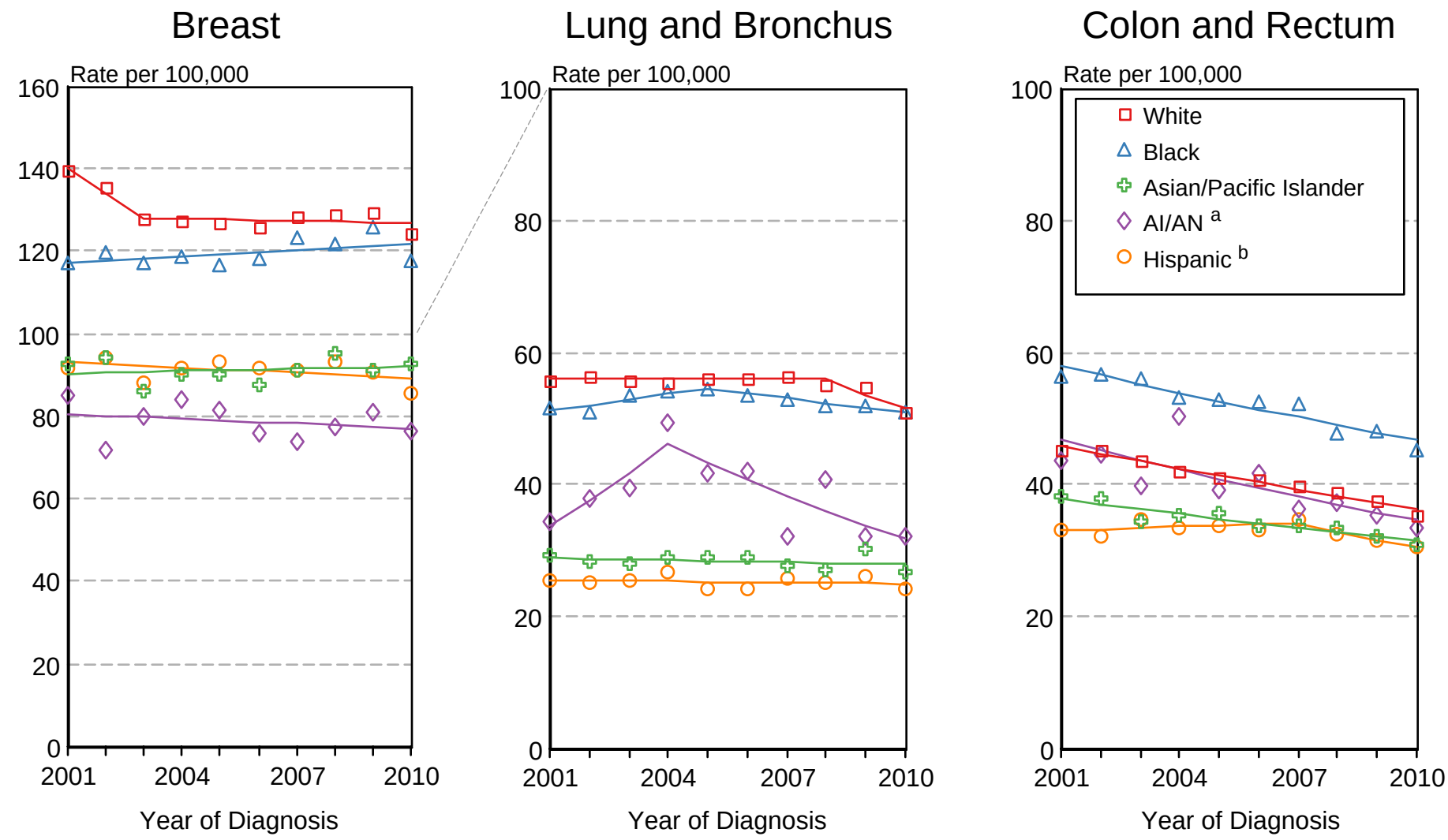
Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines are calculated using the Joinpoint Regression Program Version 4.0.3, April 2013, 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.

Figure 1.14

SEER Incidence 2001-2010
Females by Race/Ethnicity



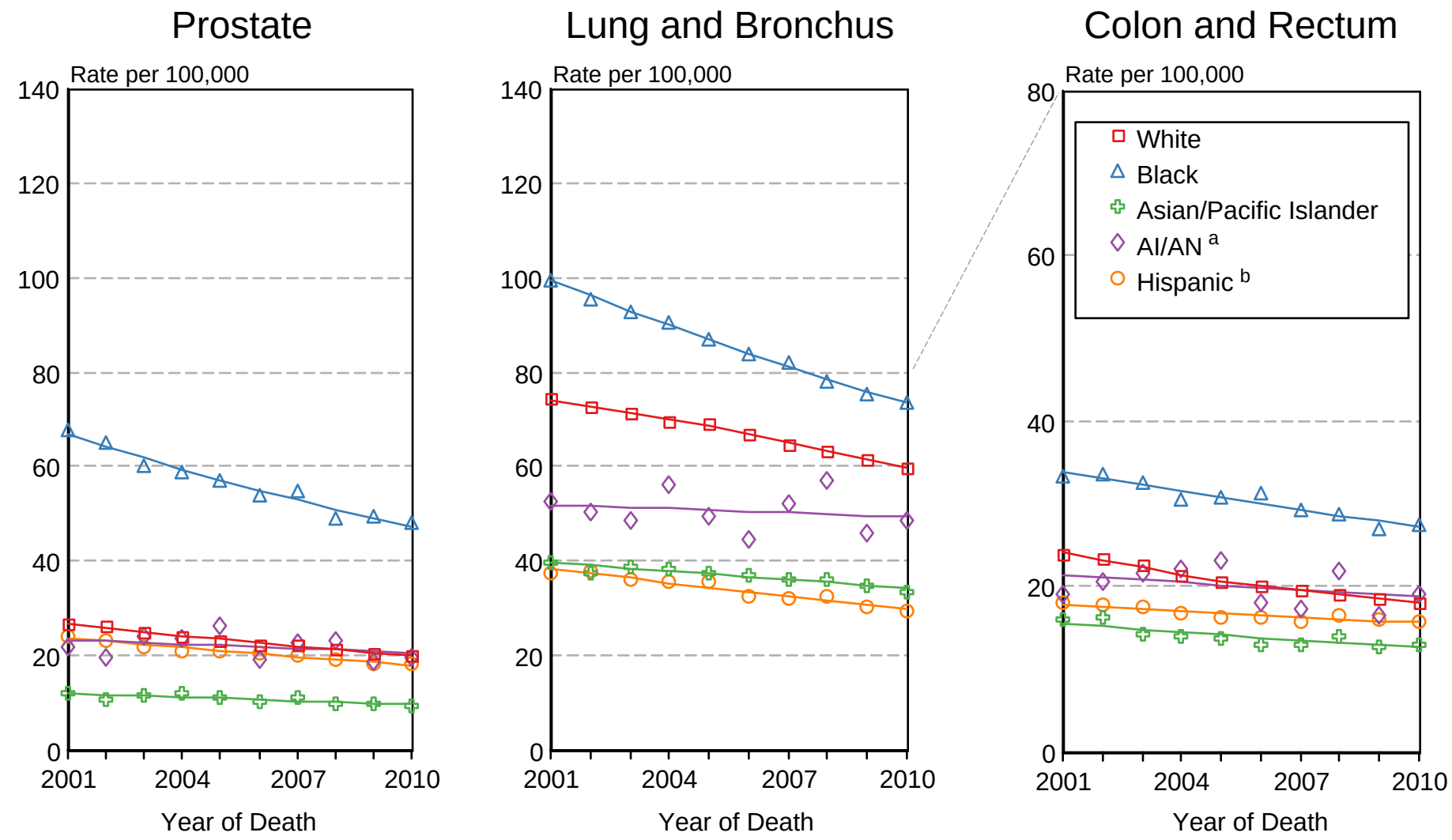
Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines are calculated using the Joinpoint Regression Program Version 4.0.3, April 2013, 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.

Figure 1.15

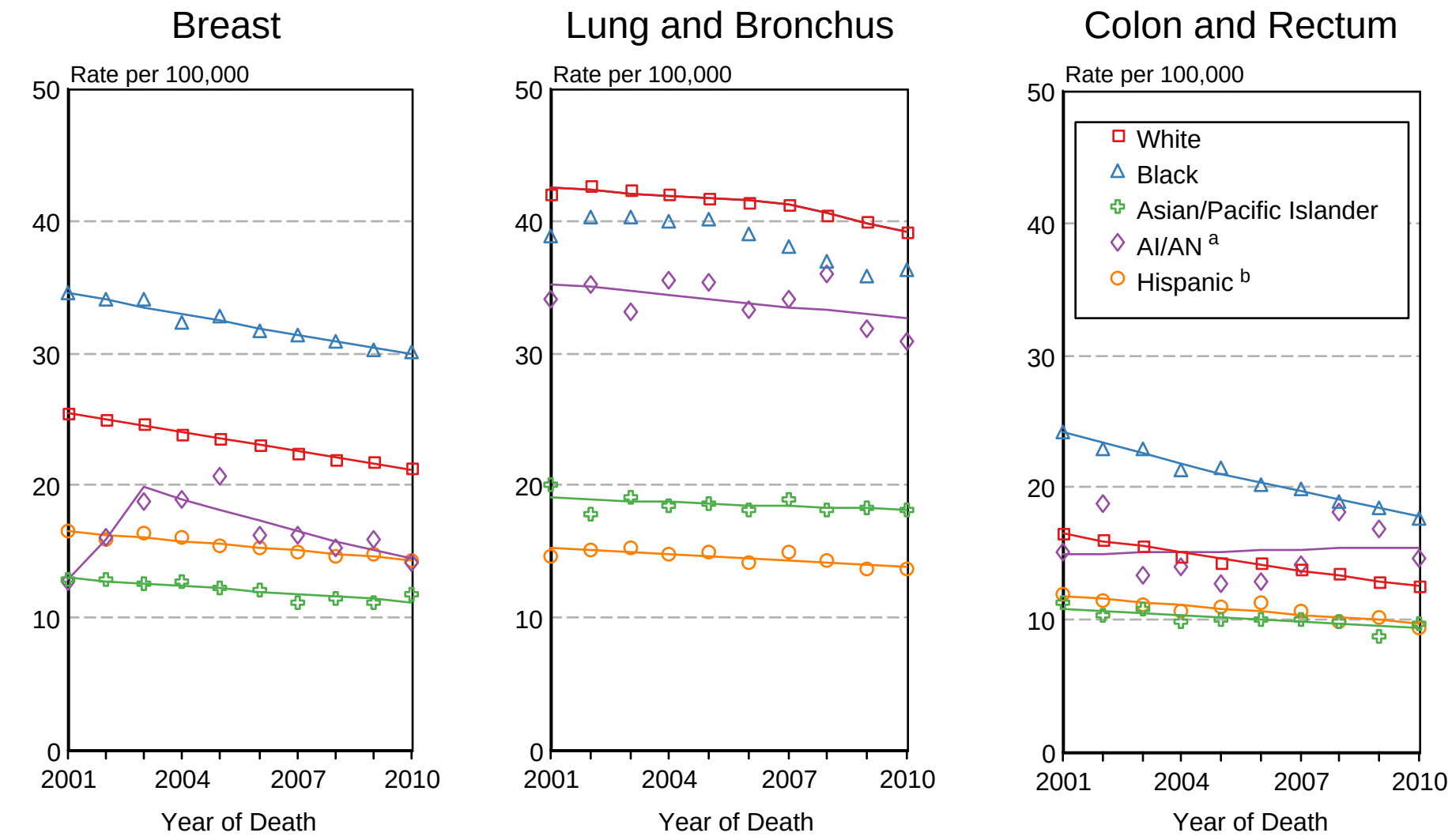
US Mortality 2001-2010
Males by Race/Ethnicity



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
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 4.0.3, April 2013, 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 the District of Columbia, Maine, Minnesota, New Hampshire, North Dakota, and Oklahoma.

Figure 1.16

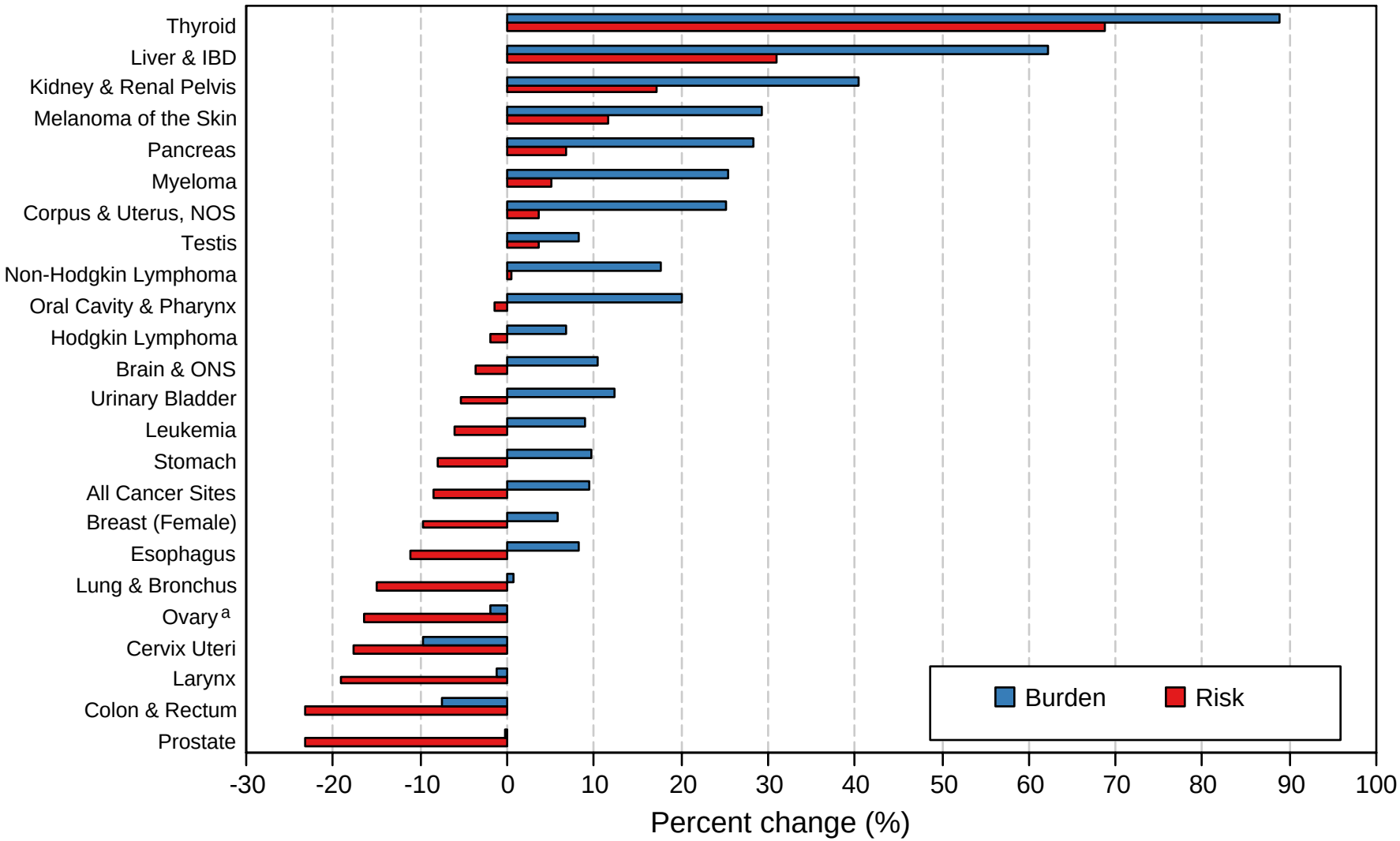
US Mortality 2001-2010
Females by Race/Ethnicity



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
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 4.0.3, April 2013, 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 the District of Columbia, Maine, Minnesota, New Hampshire, North Dakota, and Oklahoma.

Figure 1.17

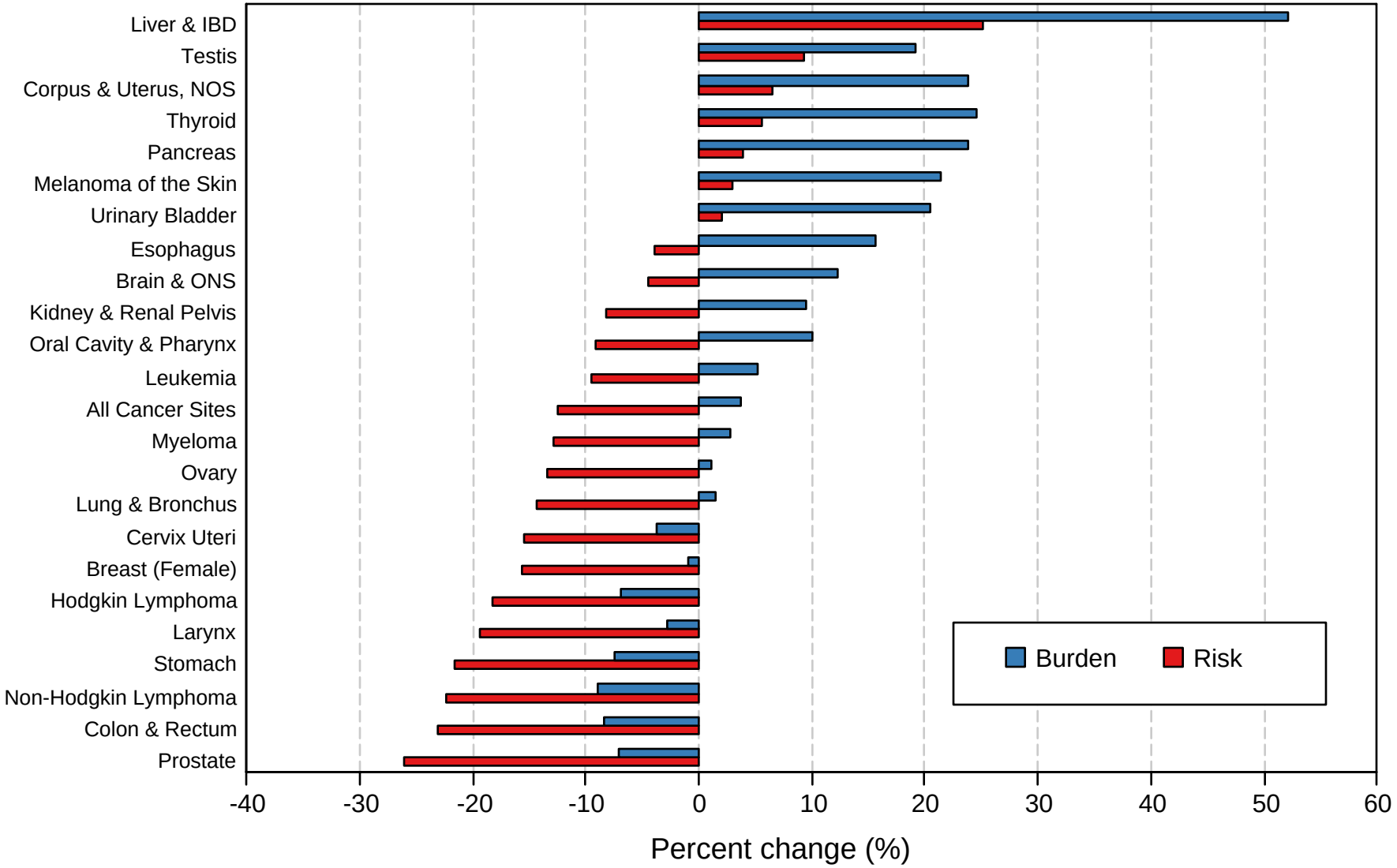
Incidence Percent Change between 2001 and 2010
Numbers (burden) vs Rates (risk)
All Races, All Ages, Both Sexes



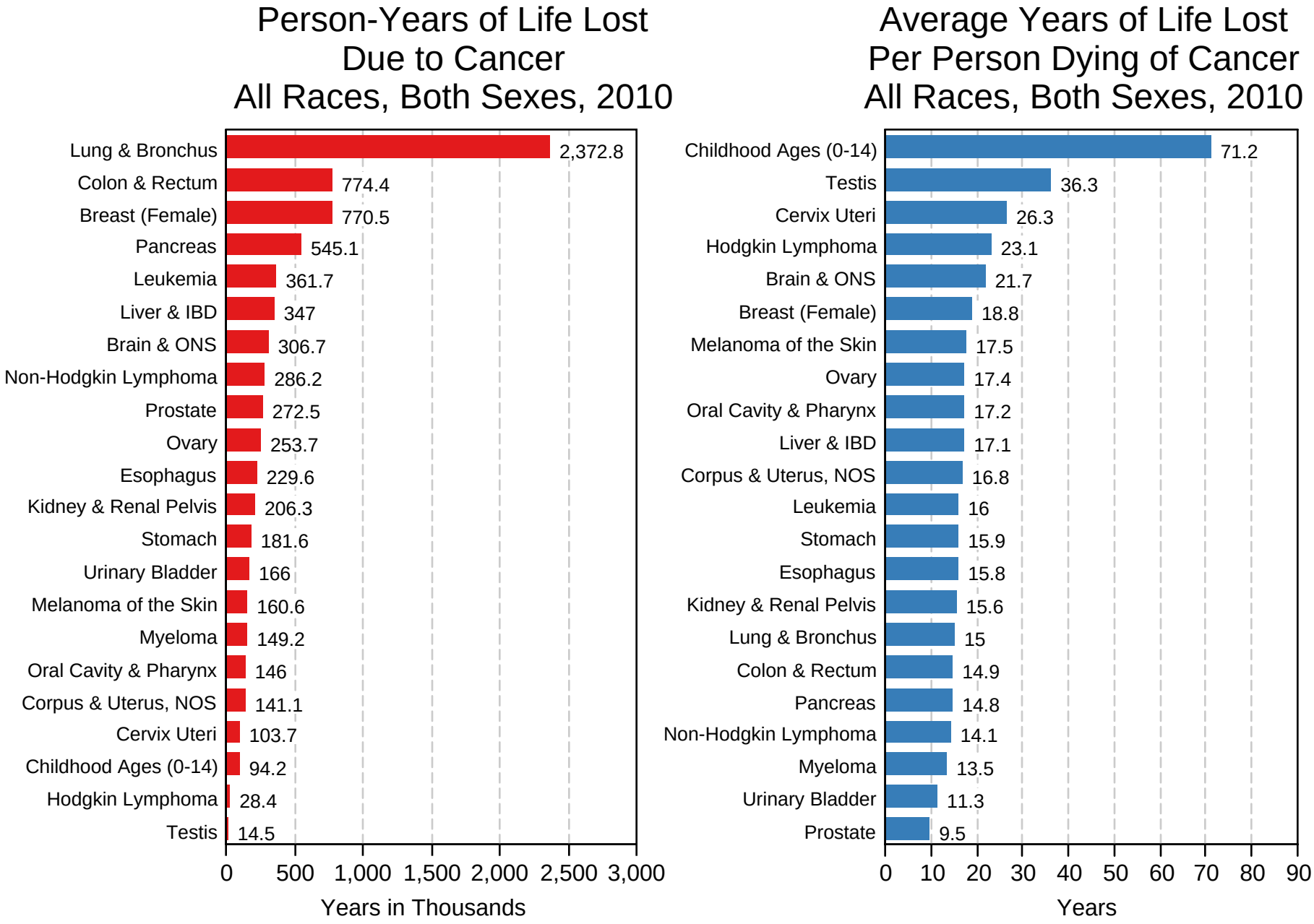
Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).
Burden is the change in the number of incidence cases between 2001 and 2010.
Risk is the change in the cancer incidence rates between 2001 and 2010.
[a] Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Figure 1.18

Mortality Percent Change between 2001 and 2010
Numbers (burden) vs Rates (risk)
All Races, All Ages, Both Sexes

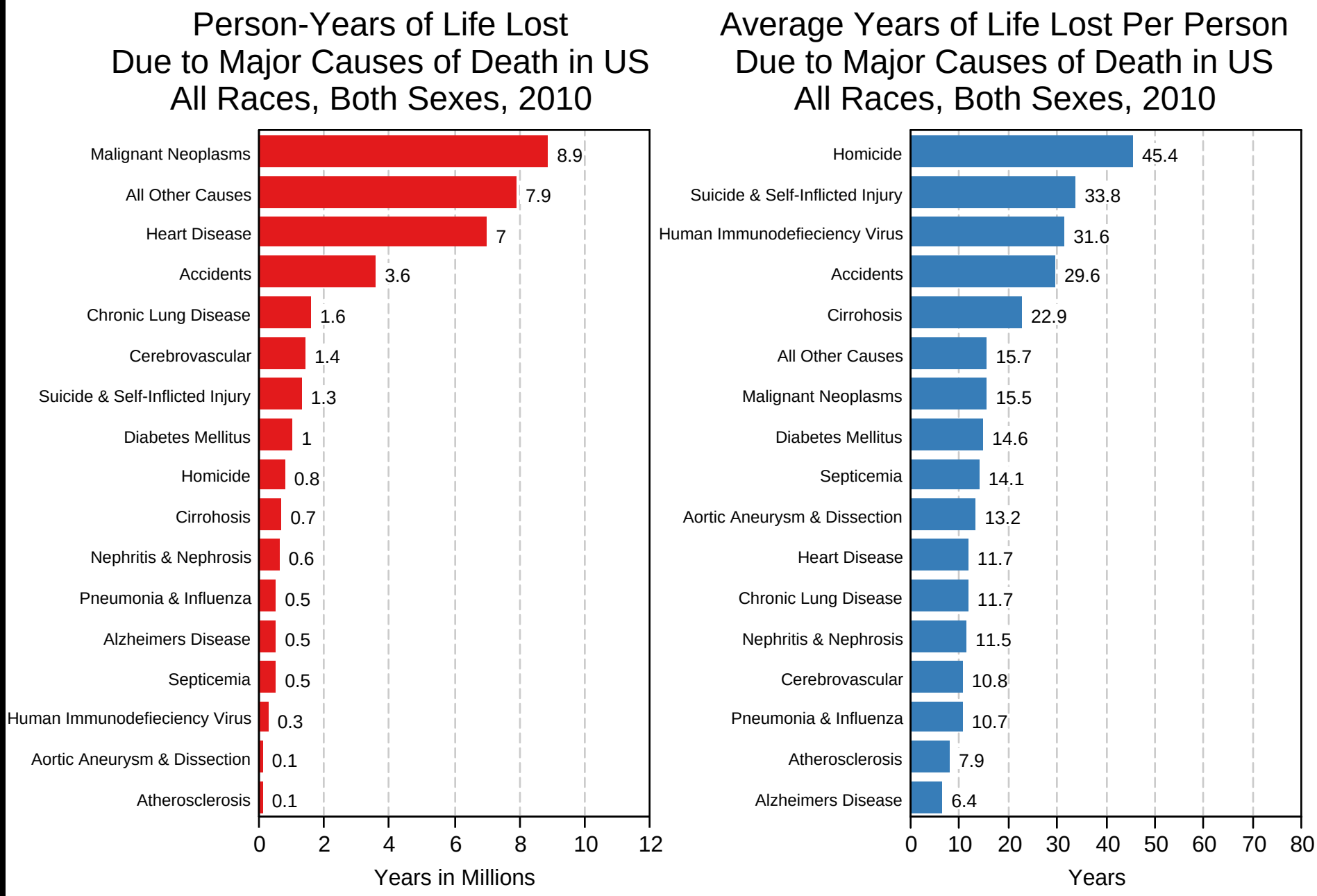


US Mortality estimates based on US age-specific rates applied to US population.
Burden is the change in the number of deaths between 2001 and 2010.
Risk is the change in the cancer death rates between 2001 and 2010.



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention and 2008 Life Tables.

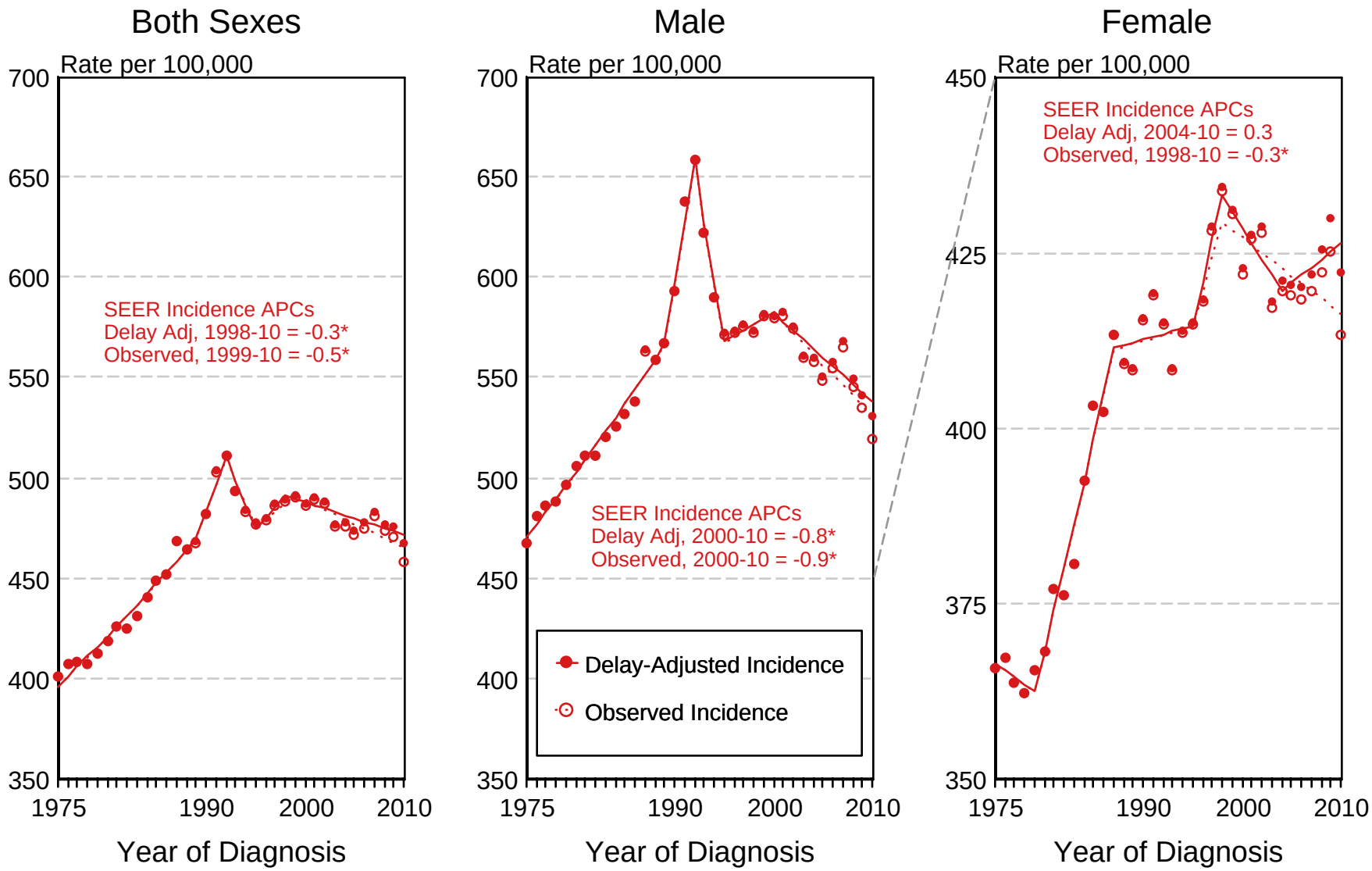
Figure 1.20



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention and 2008 Life Tables.

Figure 1.21

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

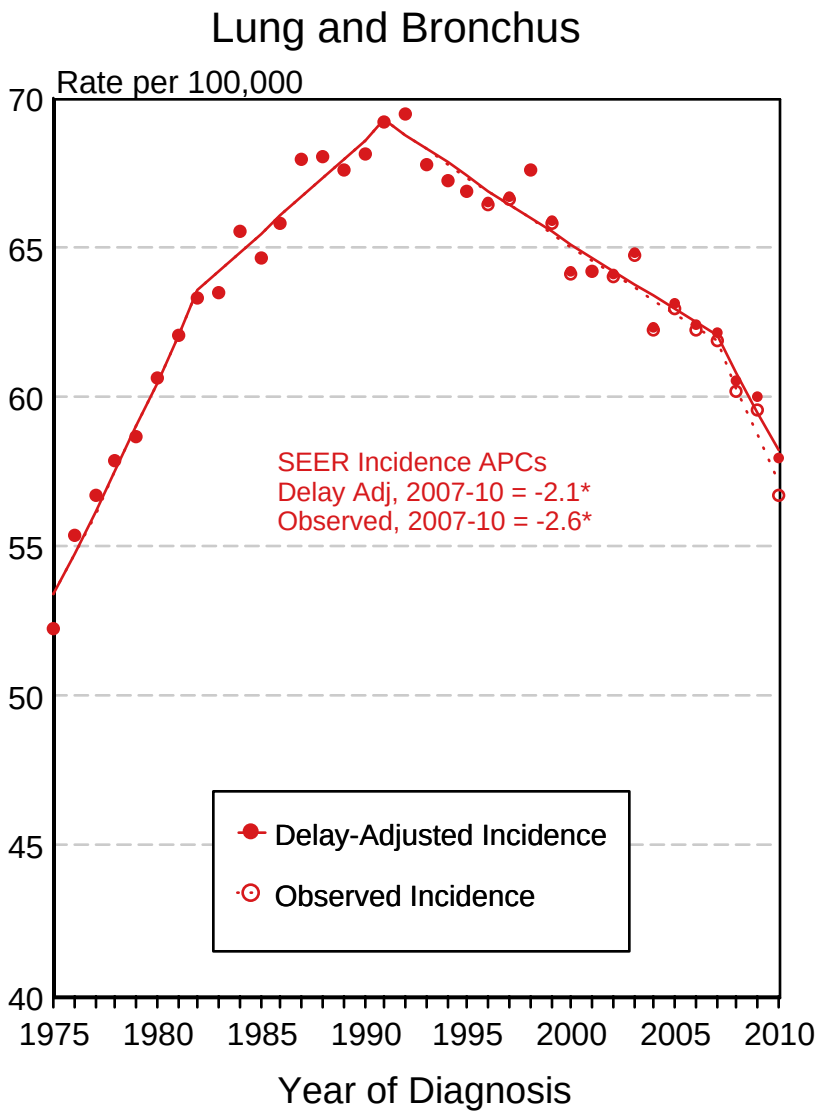


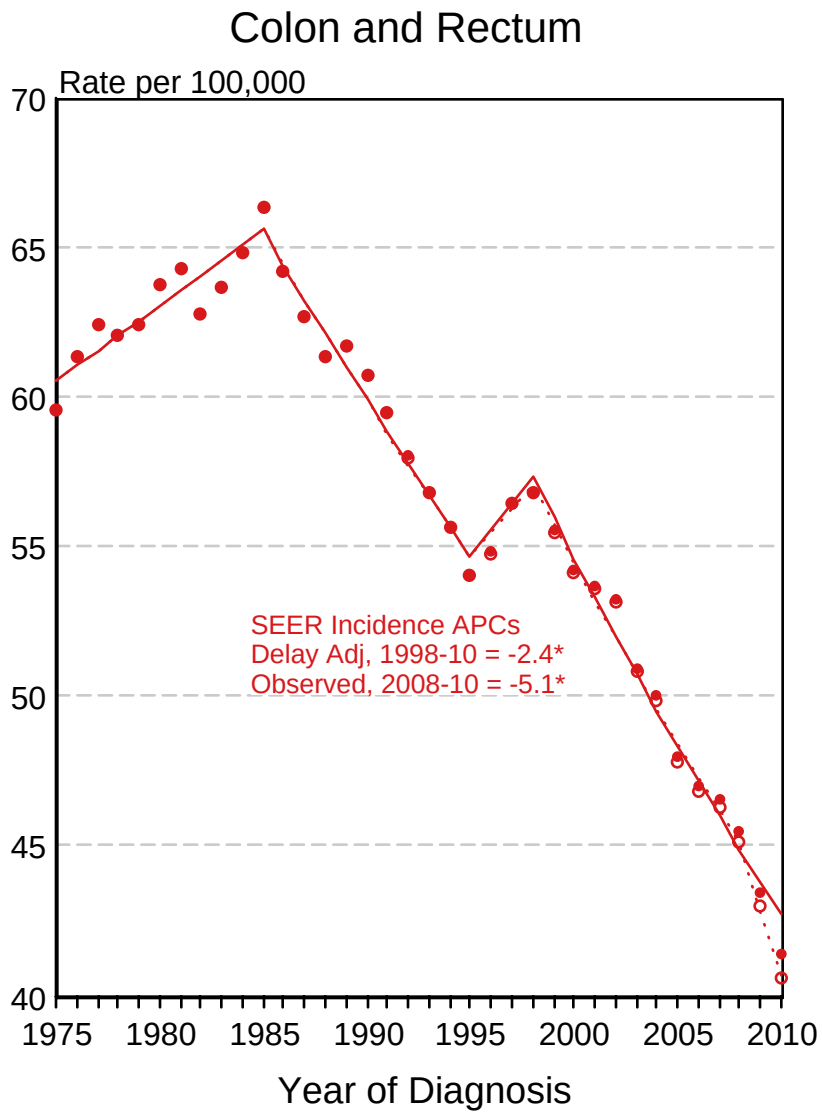
[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.0.3, April 2013, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 1.22

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



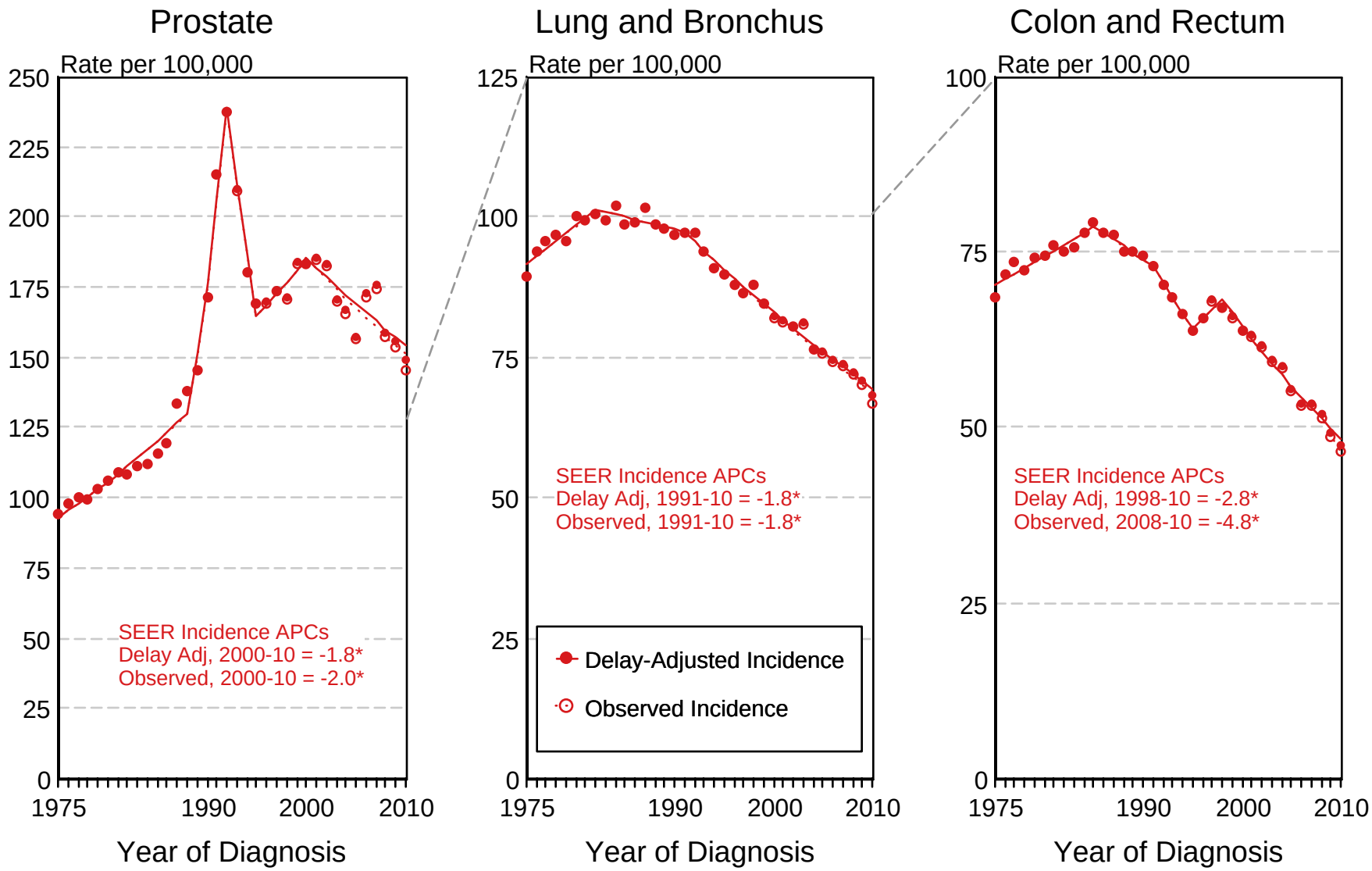


[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.0.3, April 2013, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 1.23

SEER Observed Incidence and Delay Adjusted Incidence Rates[a] Males

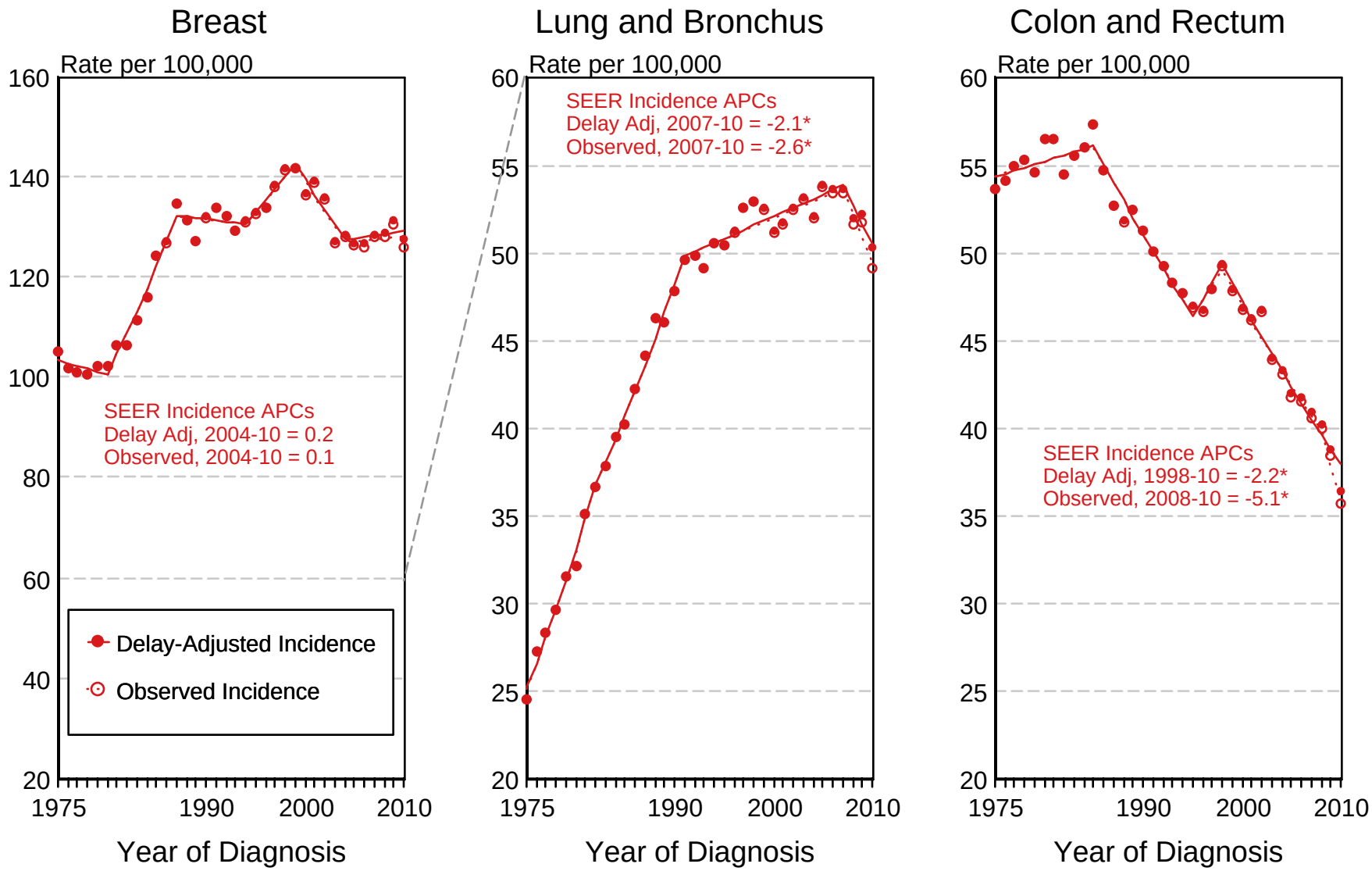


[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.0.3, April 2013, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 1.24

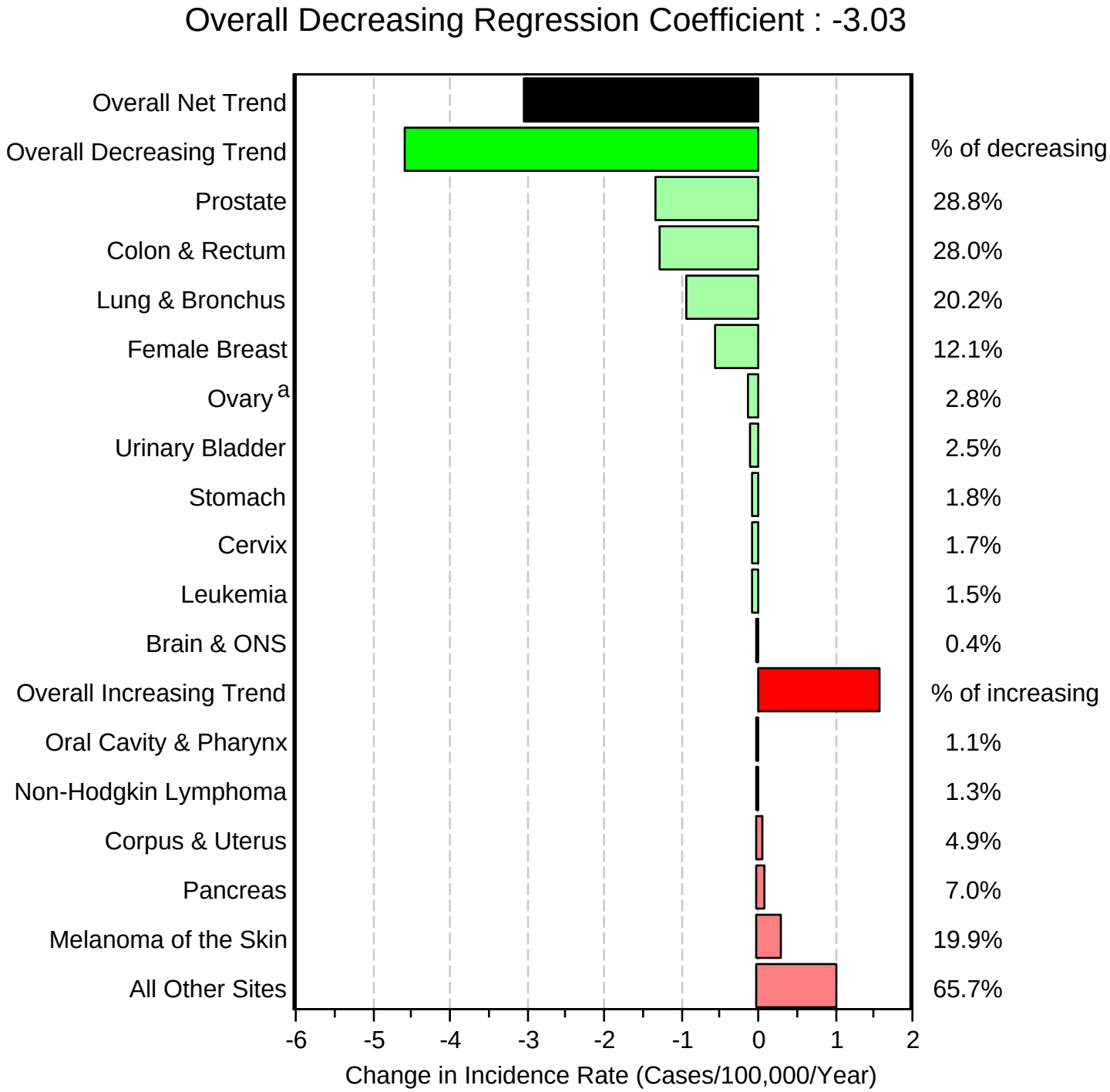
SEER Observed Incidence and Delay Adjusted Incidence Rates[a] Females



[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 4.0.3, April 2013, 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 Trends in Incidence Rates For the Time Period 2001-2010 All Races, Both Sexes

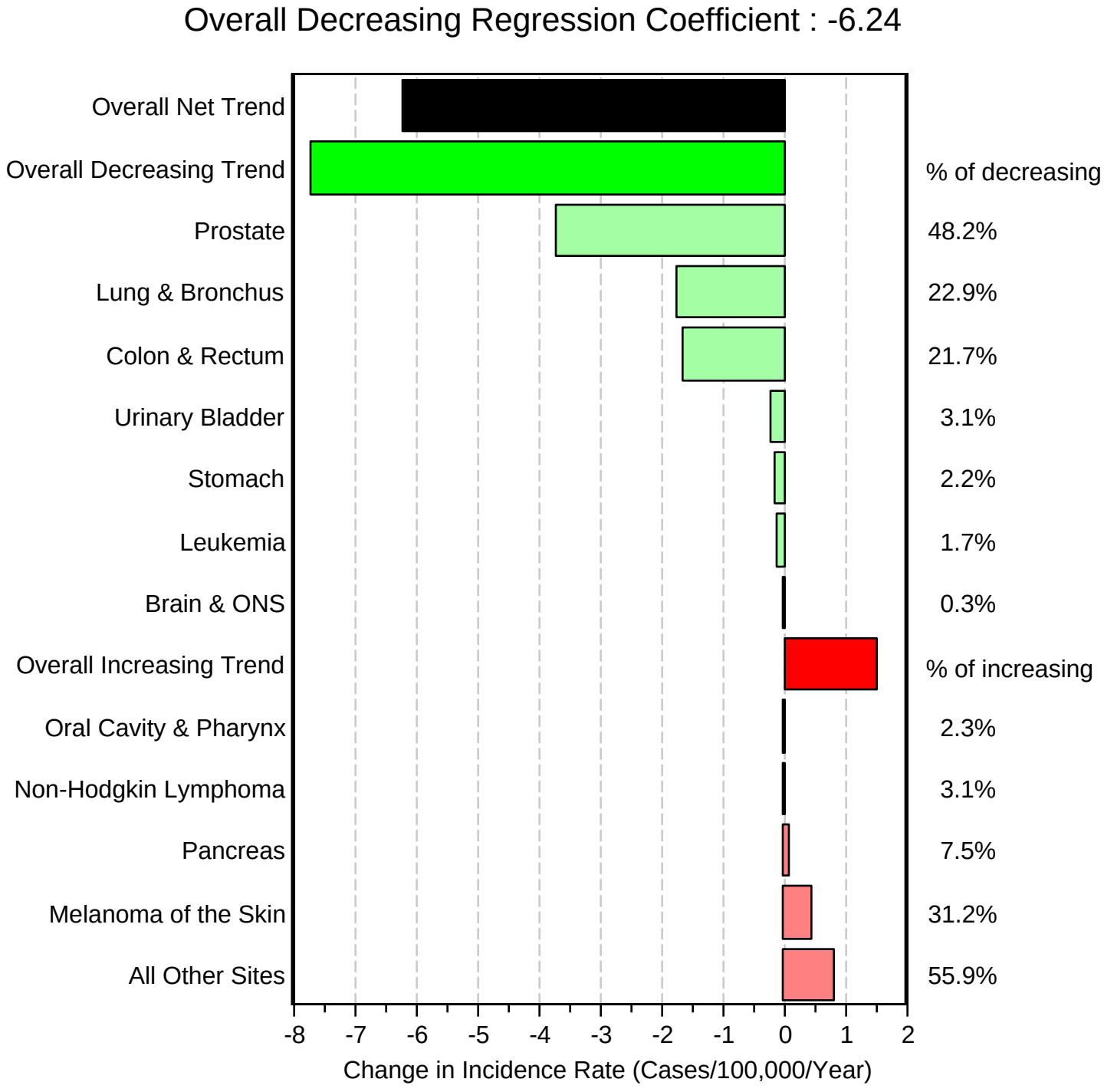


Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

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

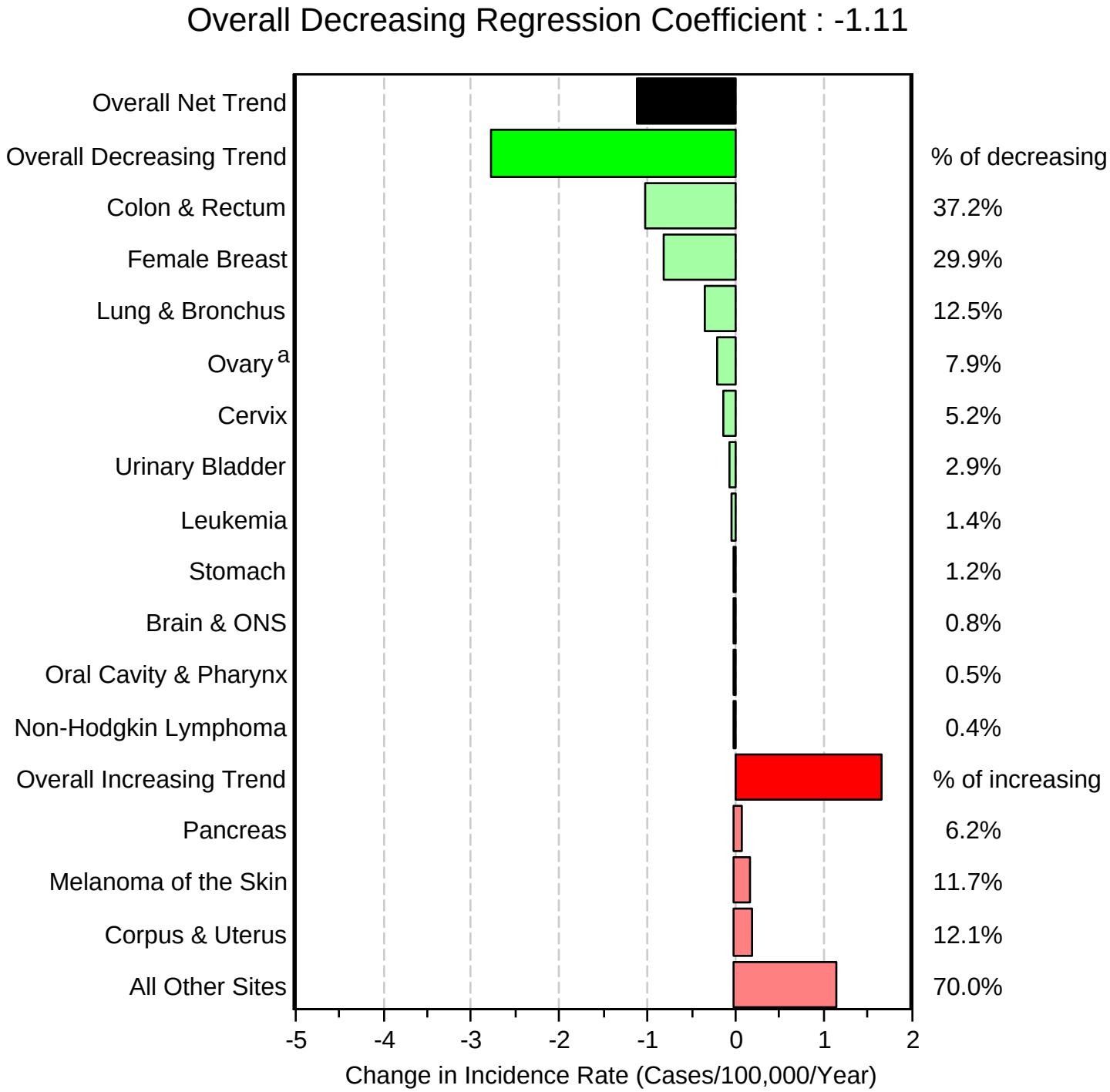
Percents may not add to 100 due to rounding.

Partition of Trends in Incidence Rates For the Time Period 2001-2010 All Races, Males



Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).
Percents may not add to 100 due to rounding.

Partition of Trends in Incidence Rates For the Time Period 2001-2010 All Races, Females

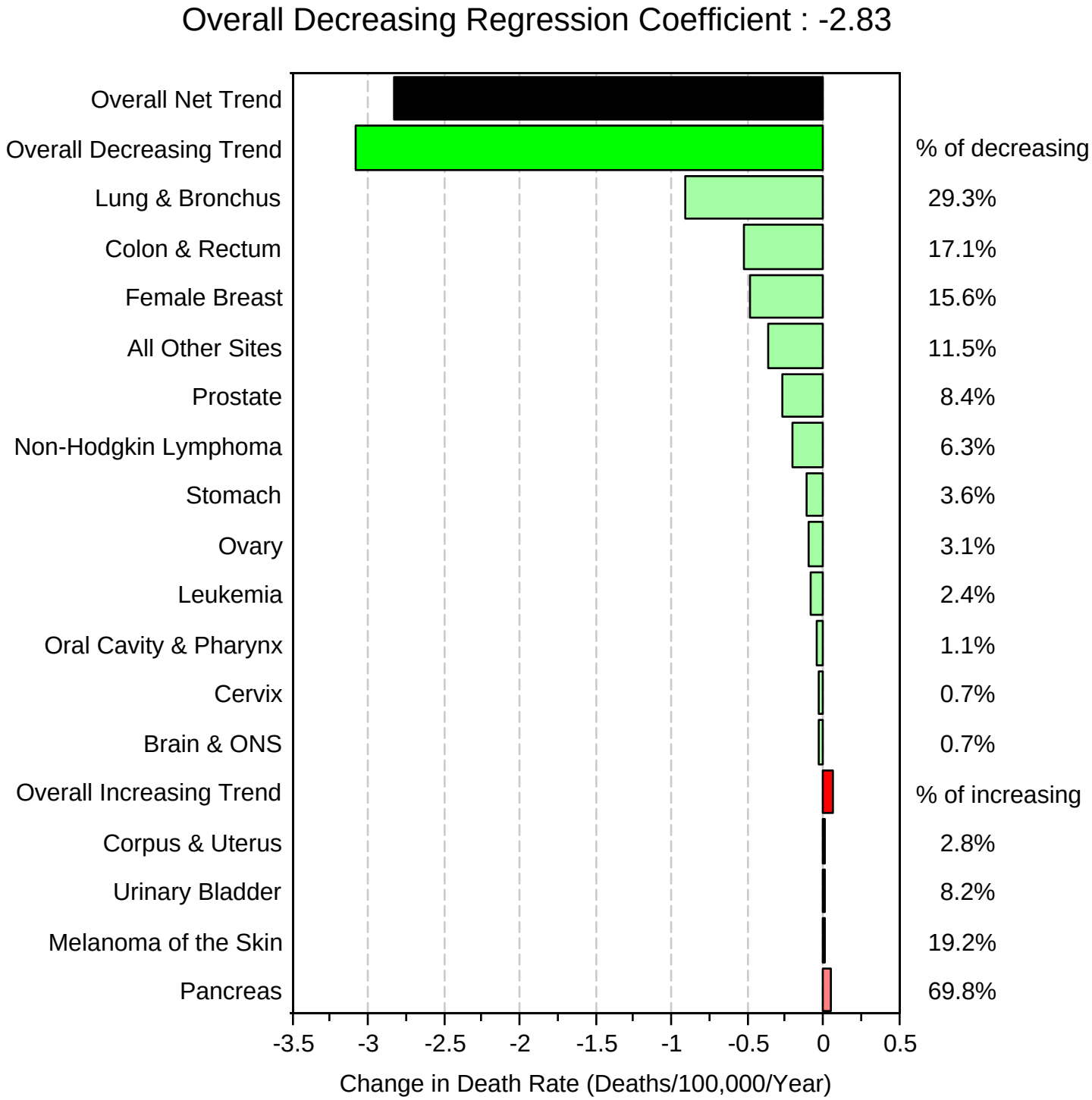


Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

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

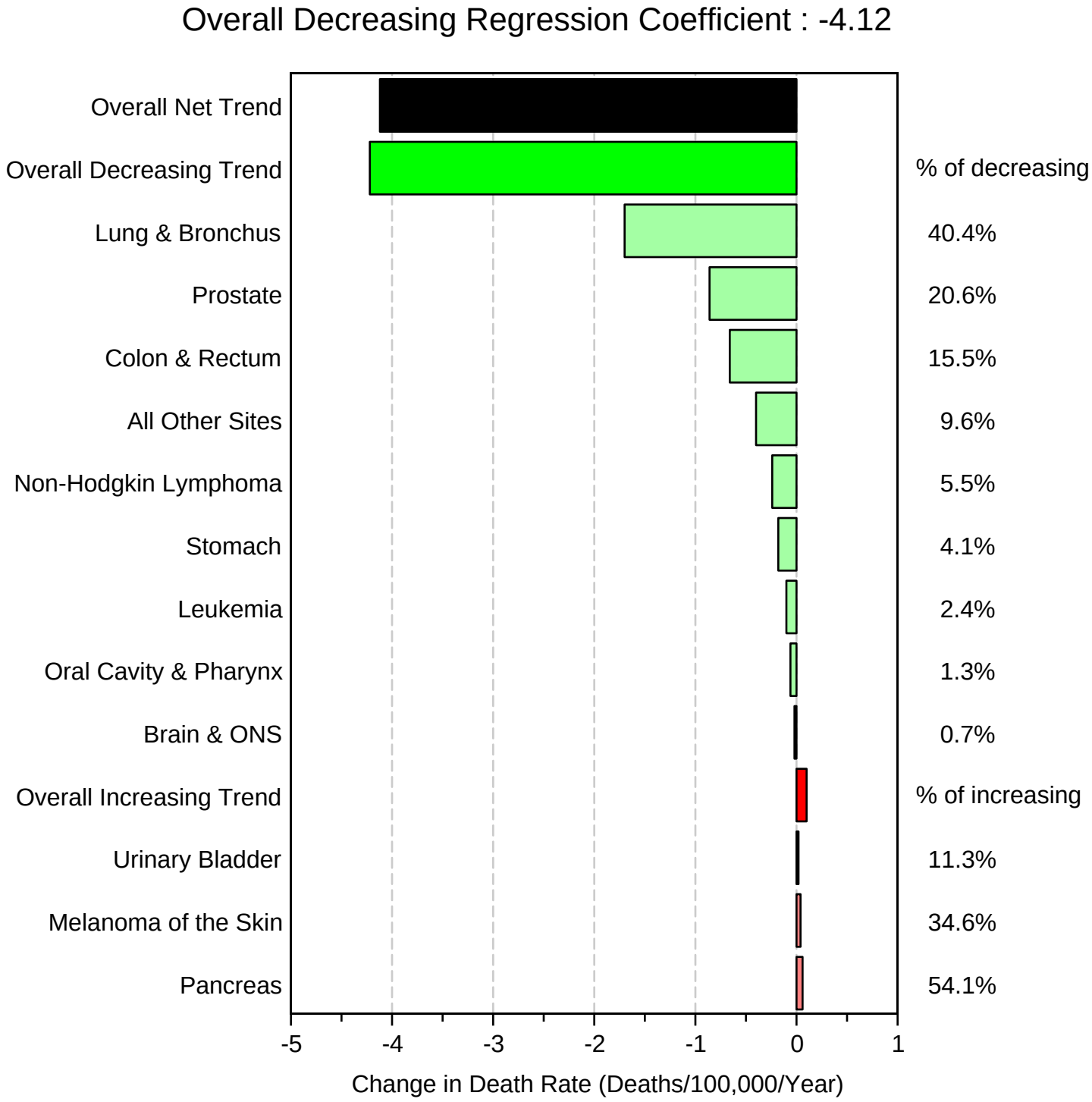
Percents may not add to 100 due to rounding.

Partition of Trend in Death Rates For the Time Period 2001-2010 All Races, Both Sexes



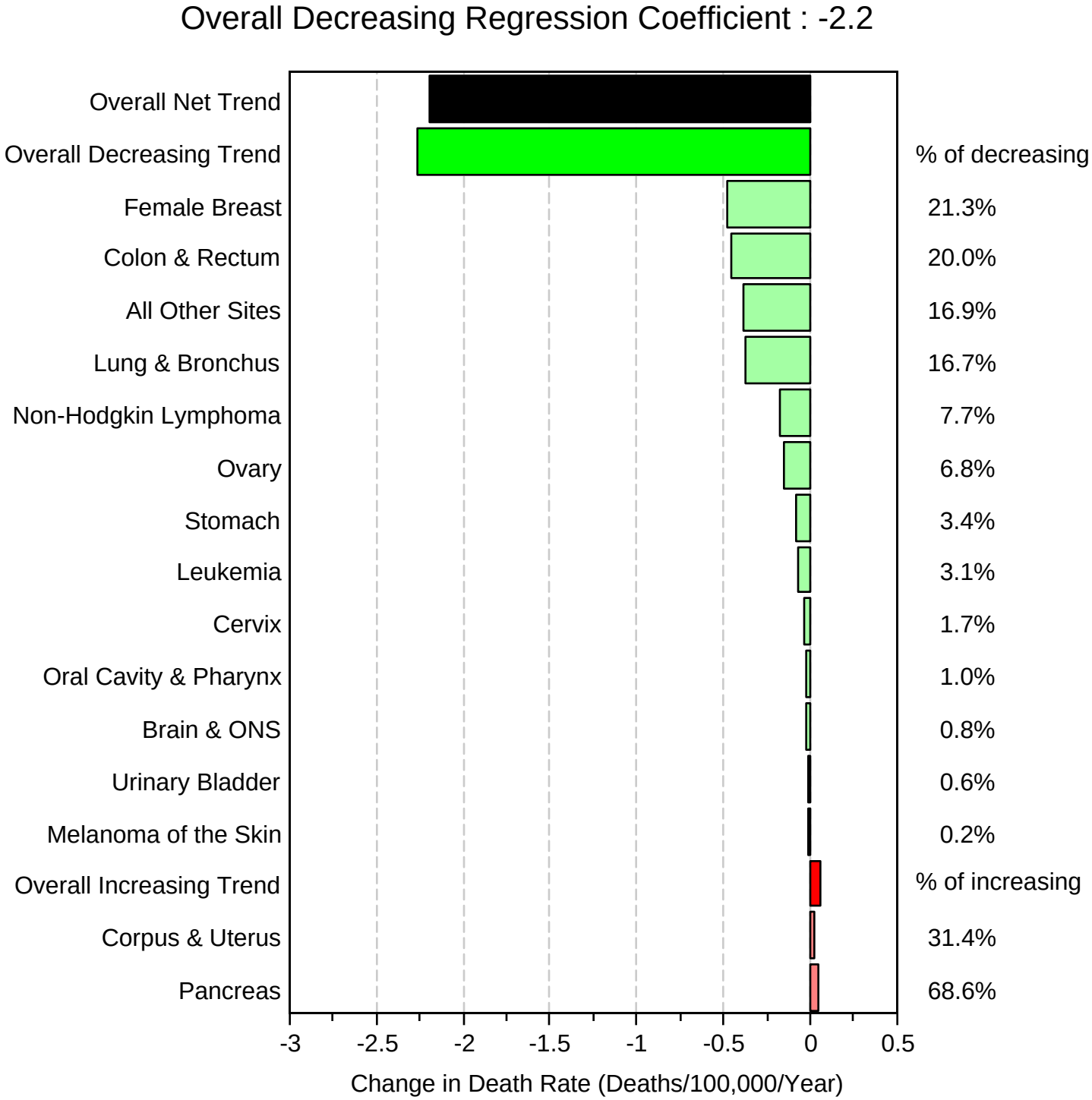
Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Percents may not add to 100 due to rounding.

Partition of Trend in Death Rates For the Time Period 2001-2010 All Races, Males



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Percents may not add to 100 due to rounding.

Partition of Trend in Death Rates For the Time Period 2001-2010 All Races, Females



Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Percents may not add to 100 due to rounding.