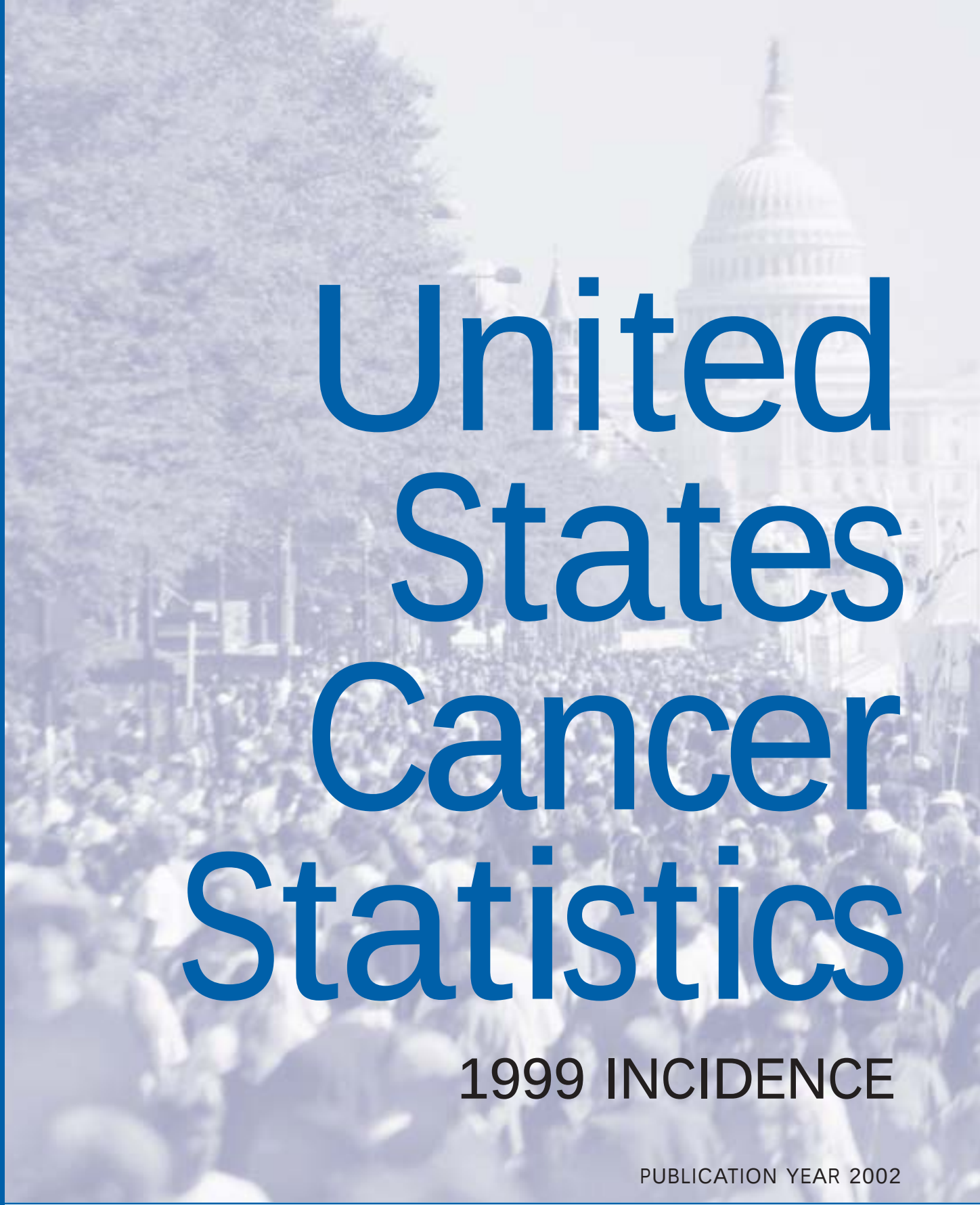

United States Cancer Statistics

1999 INCIDENCE

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CENTERS FOR DISEASE CONTROL AND PREVENTION

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United States Cancer Statistics

1999 Incidence

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We thank the National Program of Cancer Registries' Scientific Workgroup members for their assistance in designing and reviewing this document, and we thank the National Program of Cancer Registries' Logistics Workgroup members for their work on operational and data quality issues related to the data presented here. See Appendix B for lists of the workgroup members.

National partner organizations are crucial to the success of cancer registration and cancer surveillance in the United States. This document, and many advances in cancer surveillance in the United States, would not have been possible without the tireless efforts and many achievements of these organizations. The Centers for Disease Control and Prevention and the National Cancer Institute gratefully acknowledge and thank the American Cancer Society, the American College of Surgeons Commission on Cancer, the American Joint Committee on Cancer, the National Cancer Registrars Association, and our collaborating partner, the North American Association of Central Cancer Registries, for their support for cancer registration and cancer surveillance provided over many years. Appendix C has contact information for these national partner organizations.

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All sections of this report are available on the Web sites listed below:

- http://www.cdc.gov/cancer/npcr/uscs/
- http://seer.cancer.gov/statistics/

Preface

United States Cancer Statistics: 1999 Incidence is a joint publication of the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia, and the National Cancer Institute (NCI) in Bethesda, Maryland, in collaboration with the North American Association of Central Cancer Registries (NAACCR) in Springfield, Illinois. This is the first joint report from the two federal programs that support population-based cancer registries in the United States: CDC's National Program of Cancer Registries (NPCR) and NCI's Surveillance, Epidemiology, and End Results (SEER) Program. The report contains, for the first time, official federal government cancer statistics for more than 1 million invasive cancer cases diagnosed during 1999 among residents of 37 states, 6 metropolitan areas, and the District of Columbia, geographic areas in which approximately 78% of the U.S. population reside. Data from population-based central cancer registries in these states and metropolitan areas meet the selected criteria for inclusion in this report (see "Registry Eligibility Criteria").

Beginning with 1999 data, the Department of Health and Human Services adopted the 2000 U.S. standard population for age adjustment.[1–5] Therefore, the age-adjusted rates presented in this report are adjusted to the new 2000 U.S. standard population, and caution should be used when comparing these data with previously published cancer incidence rates that were adjusted to the 1970 U.S. standard population.

Format and Content of the Report

This report has five major sections:

- Technical Notes
- Cancer Incidence: All Areas Combined
- Cancer Incidence, by U.S. Census Region and Division, State, and Metropolitan Area
- State and Metropolitan Area Incidence Rates for Most Common Cancers
- Appendices

Technical Notes. In this section, we describe the background for the report and provide information about the two federal programs that support cancer registration in the United States and their collaborating partner, the North American Association of Central Cancer Registries. Also provided are (1) criteria required for inclusion of a registry's data in the report and (2) information about the data sources and the statistical methods used in preparing the report. Suggestions for interpreting the data conclude the technical notes.

Statistical tables and figures are the primary focus of the report. The next three sections of the report provide tables and figures.

Cancer Incidence: All Areas Combined. Figure 1 is a map showing all the states and metropolitan areas that contributed data to the report. Tables 1.1 through 1.4 provide cancer incidence rates by sex and race (all races, white, black) for all the contributing areas combined. Tables 1.1 and 1.2 provide crude and age-adjusted incidence rates, by sex and race, for invasive cancers at 66 selected primary sites for males and 70 selected primary sites for females (including *in situ* breast cancer), and for invasive cancers at all sites combined; case counts used in calculating the rates in Tables 1.1 and 1.2 are in Appendix D. Tables 1.3 and 1.4 provide age-specific incidence rates for all cancer sites combined, by sex and race.

Cancer Incidence, by U.S. Census Region and Division, State, and Metropolitan Area. Figure 2 is a map showing the states and metropolitan areas, by U.S. census region and division, that contributed data to the report. Tables 2.1.1 through 2.25.2 show the incidence rates for U.S. census regions and divisions, states, and metropolitan areas by sex and race (all races, white, black), for invasive cancers at each of 23 major primary sites, *in situ* female breast cancer, and invasive cancers at all sites combined. Case counts used in calculating the rates in Tables 2.1.1 through 2.25.2 are in Appendix E.

State and Metropolitan Area Incidence Rates for Most Common Cancers. Figures 3.1 through 3.44 are a set of bar graphs for each of the 44 contributing state or metropolitan area cancer registries. The graphs rank the incidence rates for the 15 cancer sites with the highest age-adjusted incidence rates within sex- and race-specific population subgroups in each state or metropolitan area. The rates are the same as those shown in Tables 2.1.1 through 2.25.2, with the following exception: for populations of less than 50,000, incidence rates were not ranked and therefore are not shown. Case counts used to calculate the rates for these figures are in Appendix E.

Appendices. These supplement information in the report and assist readers in interpreting the data in the statistical tables and figures.

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Technical Notes

Background

Cancer is the second leading cause of death among Americans.[6–8] In the United States, one of every four deaths is due to cancer. The American Cancer Society estimates that, in 2002, about 1,284,900 Americans will receive a new diagnosis of cancer and about 555,500 Americans will die of this disease. The National Cancer Institute (NCI) estimates that approximately 8.9 million Americans are now alive with a history of cancer.[4] These estimates do not include *in situ* cancer or the approximately 1 million cases of basal and squamous cell skin cancers expected to be diagnosed this year.

According to the 2002 annual report to the nation on the status of cancer, age-adjusted cancer death rates—as well as age-specific cancer death rates in all age groups—are declining and age-adjusted cancer incidence rates stabilized from 1995 to 1999.[9] Even if the age-adjusted incidence rates remain stable, however, the number of Americans diagnosed with cancer is expected to double in the next 50 years, from 1.3 million to 2.6 million per year.[9] The anticipated growth and aging of the U.S. population are factors that will increase the number of people who are diagnosed with, and treated for, cancer.[9]

The National Institutes of Health estimates that, in 2002, the overall annual cost of cancer will be about $171.6 billion, broken down as follows:[10]

- Direct medical costs, including health expenditures: $60.9 billion.
- Indirect morbidity costs associated with lost productivity due to illness: $15.5 billion.
- Indirect mortality costs associated with lost productivity due to premature death: $95.2 billion.

These costs are likely to increase because of the anticipated growth and aging of the U.S. population.

There are effective primary and secondary prevention measures that could substantially reduce the number of new cancer cases and prevent many cancer-related deaths. To reduce the nation's cancer burden, we must reduce the prevalence of behavioral and environmental factors that increase cancer risk, and we must ensure that high-quality screening services and evidence-based treatment protocols are available and accessible, particularly to medically underserved populations.[11]

Information derived from population-based central cancer registries is critical for directing effective location- or population-specific cancer prevention and control programs that focus on preventing behaviors that put people at increased risk for cancer (e.g., smoking) and on reducing environmental risk factors (e.g., occupational exposure to known carcinogens). Such information is also essential for identifying when and where cancer-screening programs should be set up or improved and for making long-term plans for adequate diagnostic and treatment resources. Pooled data at the national, U.S. census region, and U.S. census division levels will help federal and state public health officials establish, prioritize, and monitor national public health surveillance initiatives and track progress toward the national goals and objectives set forth in *Healthy People 2010*.[12]

Cancer registries collect data about the occurrence of cancer (incidence), the types of cancer that occur (morphology), the site in the body where the cancer first occurred (primary site), the extent of disease at the time of diagnosis (stage), the planned first course of treatment received by cancer patients,[13,14] and the outcome of treatment and clinical management (vital status). Cancer data are reported to statewide and metropolitan area cancer registries from a variety of medical facilities, including hospitals, physicians' offices, radiation facilities, freestanding surgical centers, and pathology laboratories.

Federal Programs

Surveillance, Epidemiology, and End Results (SEER) Program

In 1971, Congress passed the National Cancer Act that mandated the collection, analysis, and dissemination of data useful for the prevention, diagnosis, and treatment of cancer.[15] This mandate led to the establishment of the Surveillance, Epidemiology, and End Results (SEER) Program.[16] A continuing program of the NCI, SEER consists

of population-based cancer registries that routinely collect data on all cancers that occur among residents of the participating geographic areas. Trends since 1973 in cancer incidence and patient survival in the United States are derived from this database.

The goals of the SEER Program are as follows:

- Assemble and report, on a periodic basis, estimates of cancer incidence, survival, and mortality in the United States.
- Monitor annual cancer incidence trends in order to identify unusual changes in specific forms of cancer that occur in population subgroups, which are defined by geographic and demographic characteristics.
- Provide continuing information on trends over time in the extent of disease at diagnosis, trends in therapy, and associated changes in patient survival.
- 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 length and quality of patient survival.
- Promote research studies measuring progress in cancer control and etiology, including linkage of information from the biomedical and social sciences.
- Promote specialty training in epidemiology, biostatistics, surveillance research, and tumor registry methodology, operations, and management.
- Develop new statistical methods, models, and software for the analysis and presentation of national and small-area cancer statistics.

The SEER Program is an authoritative source of information on cancer incidence and survival in the United States. Case ascertainment for SEER began on January 1, 1973, in Connecticut, Hawaii, Iowa, New Mexico, and Utah and in the metropolitan areas of Detroit and San Francisco-Oakland. During 1974–1975, the metropolitan area of Atlanta and the 13-county Seattle-Puget Sound area were added. In 1978, 10 predominantly black rural counties in Georgia were added, followed in 1980 by the addition of American Indians residing in Arizona. Three other geographic areas participated in the SEER Program but left the program prior to 1990: New Orleans, Louisiana (1974–1977); four counties in New Jersey (1979–1989); and Puerto Rico (1973–1989). The NCI also funds a cancer registry that, with technical assistance from SEER, collects information on cancer cases among Alaska Natives 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 José-Monterey area south of San Francisco. In 2001, the SEER Program further expanded its coverage by providing additional funds to the NPCR registries in California, Kentucky, Louisiana, and New Jersey (see Web site http://surveillance.cancer.gov/expansion.html). Appendix F is a map of the United States that shows the location of SEER registries. Appendix G shows the first diagnosis year for which data were reported to NCI for each SEER area.

The SEER Program currently collects and publishes cancer incidence and survival data from these population-based cancer registries and supplemental registries. With its recent expansion in 2001, SEER coverage increased from 14% to 26% of the U.S. population (from about 39 million to nearly 74 million people). The 2001 expansion increased SEER coverage to 23% of African Americans, 40% of Hispanics (32% of non-Mexican Hispanics), 45% of American Indians and Alaska Natives, 53% of Asians, and 70% of Native Hawaiians and Pacific Islanders. Information on more than 3 million *in situ* and invasive cancer cases is included in the SEER database, and approximately 170,000 new cases are accessioned each year within SEER catchment areas. The SEER registries routinely collect data on patient demographics, primary tumor site, morphology, stage at diagnosis, and first course of treatment. They also actively follow all patients for information on vital status (alive or dead).

For more information on the SEER Program, visit its Web site at http://seer.cancer.gov.

National Program of Cancer Registries (NPCR)

Recognizing the need for more complete local, state, regional, and national cancer incidence data, Congress established the National Program of Cancer Registries (NPCR) by enacting the Cancer Registries Amendment Act, Public Law 102-515, in 1992 and reauthorizing the program in 1998.[17] Congress mandated the Centers for Disease Control and Prevention (CDC) to provide funds to states and territories to improve or enhance existing cancer registries; plan for and implement registries where they did not exist; develop model legislation and regulations for states and territories to enhance the viability of registry operations; set standards for data completeness, timeliness, and quality; provide training for registry personnel; and help establish a computerized reporting and data-processing system. Federal funds are provided to state and territorial health departments (or their authorized agencies) at a ratio of 3:1 to match state support for the central cancer registry.

NPCR's goals are to rapidly establish and standardize the reporting of cancer within and among the states in order to build state and national capacity to do the following:[18]

- Monitor the cancer burden.
- Identify cancer incidence variation for ethnic groups and for regions within a state, between states, and between regions.
- Provide data for research.
- Provide guidance for health resource allocation.
- Respond to public concern and inquiries about cancer.
- Improve planning for future health care needs.
- Evaluate cancer prevention and control activities.

NPCR registries routinely collect data on patient demographics, primary site, morphology, stage at diagnosis, and first course of treatment. They also conduct passive follow-up for vital status (confirming deaths through linkage with state and national death records).

Before NPCR was established, 10 states had no cancer registry and many states with a cancer registry lacked the resources and legislative support to collect needed data.[19] In 1994, the first 37 states received funding from CDC to participate in NPCR; 5 additional states and the District of Columbia joined in 1995, and 3 more states and 3 territories joined in 1997.[20] In 2002, CDC funds a total of 49 statewide and territorial cancer registries at two levels: planning for a new registry or enhancement for an existing one. Two states (South Dakota and Tennessee) and 2 territories (Palau and the Virgin Islands) receive funds to plan for and establish a registry; 43 states, 1 territory (Puerto Rico), and the District of Columbia receive funds to enhance their cancer registries (Appendix F). NPCR registries cover 96% of the U.S. population. NPCR registries whose data for the 1999 diagnosis year meet criteria for inclusion in this report cover 73% of the U.S. population (73% of the white population, 69% of the black population, and 72% of the Hispanic population).

In 2000, CDC began the NPCR–Cancer Surveillance System (NPCR–CSS) to receive, evaluate, and disseminate data from NPCR registries. NPCR–CSS is designed to provide cancer incidence data to meet CDC's public health surveillance responsibilities and to help monitor progress toward NPCR goals. In January 2001, NPCR registries began annually reporting their incidence data to CDC. NPCR registries report incidence data to CDC from their NPCR reference year forward. The "NPCR reference year" is the first diagnosis year for which a state or territorial cancer registry collected data with the assistance of NPCR funds. The NPCR reference year for each state and territory is shown in Appendix G. Data from the SEER metropolitan areas and SEER special population cancer registries operating in Alaska, Arizona, California, Georgia, Michigan, and Washington are reported to their respective NPCR state cancer registry for inclusion in the state's incidence data and are transmitted to CDC as part of the state's annual data submission. In January 2002,

CDC received information on more than 5.3 million invasive cancer cases diagnosed during 1995–1999, including more than 1.1 million invasive cancer cases diagnosed in 1999.

For more information on NPCR, visit its Web site at http://www.cdc.gov/cancer/npcr/.

Collaborating Partner

North American Association of Central Cancer Registries (NAACCR)

Both the SEER Program and NPCR work closely with the North American Association of Central Cancer Registries (NAACCR) to promote standards for cancer surveillance in the United States and Canada. Established in 1987, NAACCR is an umbrella organization for population-based cancer registries, governmental agencies, professional associations, and private groups in North America interested in improving the quality and use of cancer registry data. The mission of NAACCR is to support and coordinate the development, enhancement, and application of cancer registration techniques in population-based groups in a consistent manner, so that quality data may be used for cancer control and epidemiologic research, public health programs, and patient care to reduce the burden of cancer in North America. For more information, see http://www.naaccr.org/about/index.html. All state and metropolitan area registries participating in SEER and NPCR are members of NAACCR.

In 1997, NAACCR began voluntary annual reviews of member registries to determine their ability to produce complete, accurate, and timely data. Registries report their data to NAACCR in early December each year. NAACCR evaluates the data using standard, objective measures and then recognizes those registries that meet the highest standards for data quality.[21,22] For more information on the certification program, visit the Web site: http://www.naaccr.org/Certification/index.html.

In 1997, when NAACCR began its registry certification program with an evaluation of 1995 incidence data, 9 NPCR registries and all 10 SEER registries were certified. In 2002, after NAACCR evaluated the 1999 incidence data, 32 NPCR registries and all 10 SEER registries were certified. (Data from San Francisco-Oakland and San José-Monterey are combined and evaluated as the Greater Bay Area.)

For more information on NAACCR, visit its Web site at http://www.naaccr.org.

Registry Eligibility Criteria

Data included in this report are from statewide or metropolitan area cancer registries that have high quality cancer incidence data for 1999 as demonstrated by meeting the following data quality criteria for all cancer sites combined:

- *Case ascertainment is 90% or more complete*. The registry data include at least 90% of the expected, unduplicated cases where the expected cases are estimated by using methods developed by NAACCR.[5,21–23] Because some cancer patients receive diagnostic or treatment services at more than one reporting facility, cancer registries perform a procedure known as "unduplication" to ensure that each cancer case is counted only once.[24]

- *No more than 5% of cases are ascertained solely on the basis of a death certificate*. The proportion of cases ascertained solely on the basis of a death certificate, with no other information on the case available after the registry has completed a routine procedure known as "death clearance and followback,"[24–26] is one measure of the completeness of case ascertainment.

- *No more than 3% of cases are missing information on sex*.

- *No more than 3% of cases are missing information on age*.

- *No more than 5% of cases are missing information on race*.

- *At least 97% of the registry's records passed a set of single-field and inter-field computerized edits*. Computerized edits are computer programs that test the validity and logic of data

components. For example, if (a) a patient received a diagnosis of cancer in 1999, (b) the patient's age was reported as 80 years, and (c) the patient's year of birth was reported as 1942, a computerized edit could, without human intervention, identify these components as incompatible. The computerized edits applied to the data in this report were designed by the SEER Program for use by SEER registries. During the 1990s, these edits were expanded and incorporated into NAACCR standards (http://www.naaccr.org/standards) and into editing software designed and maintained by CDC (http://www.cdc.gov/cancer/edits/edits.htm).

Data from 37 state cancer registries (32 NPCR and 5 SEER), the District of Columbia (NPCR), and 6 SEER metropolitan areas (Atlanta, Detroit, Los Angeles, San Francisco-Oakland, San José-Monterey, and Seattle-Puget Sound) are included in this report. In total, these registries cover 78% of the U.S. population (Figure 1) (78% of the U.S. white population, 72% of the U.S. black population, and 77% of the U.S. Hispanic population). Appendix H shows state-specific measures for the data quality criteria used to determine which registries' data were eligible for inclusion in this report. NPCR registries whose data are not included in this report were allowed to choose whether to have their data quality information listed in Appendix H.

Data Sources

Incidence Data

Data from registries in the SEER Program were reported to NCI as of November 1, 2001, and made available through the SEER Program public use data file, released in April 2002 (http://www.seer.cancer.gov/publicdata/). Data from the registries participating in NPCR were reported to CDC as of January 31, 2002. For this report, data from California, Kentucky, Louisiana, and New Jersey are as reported to CDC as of January 31, 2002.

SEER and NPCR cancer registries consider as reportable all incident cases with a behavior code of 2 (*in situ*, non-invasive) or 3 (malignant or invasive, primary site only) in the *International Classification of Diseases for Oncology*, 2nd edition (ICD–O–2),[27] with the exception of *in situ* cancer of the cervix. Basal and squamous cell carcinomas of the skin are also excluded, with the exception of those on the skin of the genital organs.[28]

Both SEER and NPCR data were collected and reported by using uniform data items and codes as documented by NAACCR, which provides for comparability of data items collected by the two federal programs.[14,28] All information on primary cancer sites was coded according to the ICD–O–2,[27] and cancer sites listed in this publication were defined according to SEER recodes, which define standard groupings of primary cancer sites (Appendix I).[4] *In situ* bladder cancers were recoded to invasive bladder cases because the data for distinguishing between *in situ* and invasive bladder cases are not always available or reliable. Case counts and rates were calculated for invasive cancers. The report also includes counts and rates for *in situ* breast cancer cases in females; these are reported separately and are not included in counts or rates for the "all sites" category. Case counts and rates for leukemias were calculated for acute and chronic lymphocytic leukemia, acute and chronic myeloid leukemia, and other leukemias. The "other leukemias" category includes other lymphocytic leukemias, other myeloid leukemias, all monocytic leukemias, and all other leukemias. Non-reportable cancers and cancers in patients of unknown sex or age were omitted from all calculations, but cases in patients of unknown race were included in the "all races" category. Counts of cases used in this report are in Appendices D and E.

Of the cases included in this report, 93.8% were confirmed by positive microscopic findings (histology, cytology, or unspecified microscopy method) indicative of cancer.[28] Other methods used to confirm the diagnosis of cancer were positive laboratory test results or markers indicative of cancer (0.3%), direct visualization (0.2%), radiography or other imaging techniques (2.1%), and clinical diagnosis only (0.6%). For 3% of the cases, it was unknown whether the diagnosis was microscopically confirmed.

Population Data

The population estimates for the denominators of incidence rates are race- (all races, white, black) and

sex-specific county population estimates aggregated to the state or metropolitan area level. The county population estimates incorporated into NCI's SEER*Stat software to calculate cancer incidence and mortality rates are available at http://www.seer.cancer.gov. The SEER*Stat population estimates are a slight modification of the annual time series of July 1 county population estimates (by age, sex, race, and Hispanic origin) produced by the Population Estimates Program of the U.S. Bureau of the Census (Census Bureau) with support from NCI through an interagency agreement. The Census Bureau's population estimates are available on its Web site at http://eire.census.gov/popest/data/counties.php. The procedures used by the Census Bureau to produce its county estimates are documented at http://www.census.gov/population/estimates/county/casrh_doc.txt. The 1999 race- and sex-specific population estimates from the U.S. Bureau of the Census, as available from SEER*Stat, are projected estimates and did not reflect results from the enumerated 2000 census.

Specific documentation regarding modifications made by NCI to Census Bureau estimates is given at http://www.seer.cancer.gov. Briefly, the modification affects only population estimates for Hawaii and is based on information from the Epidemiology Program of the Hawaii Cancer Research Center. The modified population estimates were obtained by SEER using survey data collected by the Hawaii Department of Health to address concerns that the Native Hawaiian population had been undercounted in previous censuses. The "Hawaii-adjustment" to Census Bureau estimates has the net result of reducing the estimated white population and increasing the estimated Asian and Pacific Islander population in the state. Census Bureau estimates for the total population, black population, and American Indian and Alaska Native populations in Hawaii are unaffected.

NCI recently made an additional modification to its use of Census Bureau estimates in order to calculate the age-specific rates needed for age-adjustment according to the 2000 U.S. standard population.[1,2] Prior to implementing the use of the 2000 U.S. standard population, NCI used a single age category for 0- to 4-year-olds for age adjustment. NCI currently uses Census Bureau estimates to subdivide this age group into younger than 1 year and 1–4 years of age. Population estimates for all ages combined, by state and SEER metropolitan area, race and sex, for 1999, are shown in Appendix J.

Statistical Methods

Incidence Rates

Crude and age-adjusted incidence rates are per 100,000 population. Incidence rates are for invasive cancers and *in situ* female breast cancer, unless otherwise specified. An exception is the incidence rate for cancer of the urinary bladder, which includes both *in situ* and invasive cancers. Cancer incidence rates include multiple primary cancers that occur in single patients; for example, if a patient has more than one primary cancer, each cancer is counted as a separate case according to standard rules for counting multiple primary cancers.[14] For cancers that occur only in one sex, such as cancers of the prostate or uterine cervix, the population denominators used to calculate incidence rates are for the specific sex only.

Crude Incidence Rates

The crude incidence rates presented in this report are the total number of new cancer cases diagnosed in 1999 in a population category of interest divided by the at-risk population for that category, multiplied by 100,000.

Age-Adjusted Incidence Rates

Because the occurrence of many cancers increases with age and because the age distribution of a population (i.e., the number of people in particular age categories) can change over time and can be different for different populations, researchers must age-adjust incidence rates so that they can make a valid comparison between one year's rates and those of another year or between one geographic area's rates and those of another area. Age-adjusting the rates ensures that any differences in incidence from one year to another or from one geographic area to another are not actually due to differences in age distribution.

The standard used to age-adjust the rates for this report was the 2000 U.S. standard population, in

accordance with a 1998 Department of Health and Human Services recommendation.[1,2] The 2000 U.S. standard population is based on the proportion of the population in specific age groups (e.g., younger than 1 year, 1–4 years, 5–9 years, 10–14 years, 15–19 years, . . . 85 years or older) in 2000. The proportions of the population in these age groups serve as weights for calculating age-adjusted incidence rates. The weights for the 2000 U.S. standard population are in Appendix K. Note that the 2000 U.S. standard population weights are not race- or sex-specific, so they do not adjust for differences in race or sex between geographic areas or among population groups. They do, however, provide the basis for adjustment for differences in the age distributions across groups defined by sex, race, geography, or other categories.

The 2000 U.S. standard population weights used for this report are the estimated age distribution of the U.S. population across 5-year age categories.[29] These standard weights are used to compute age-adjusted incidence rates by the method of direct standardization as implemented in NCI SEER*Stat software and described as follows:[3] If I_j is the number of incident cases diagnosed in 1999 in age category j, and P_j is the population size at risk in age category j, then the incidence rate R_j in age category j is defined as

$$R_j = \frac{I_j}{P_j}$$

If w_j is the 2000 U.S. standard population weight for age category j, then the age-adjusted (directly standardized) incidence rate R_{adj} is computed as

$$R_{adj} = \sum_j w_j R_j \text{ x } 100{,}000$$

Note from the multiplier in the formula that incidence rates are expressed as cases per 100,000 population.

Confidence Intervals

Cancer registries have data included in this report if the registry's case ascertainment for cancers diagnosed in 1999 among residents of the state or metropolitan area is at least 90% complete.[5,21–23] However, even if all the registries were able to collect data on 100% of diagnosed cancer cases, there would still be some uncertainty in computed cancer statistics such as crude and age-adjusted incidence rates. This uncertainty arises because many factors contribute to a cancer incidence rate in any given year or state, and some of these factors exhibit random behavior. For example, there is uncertainty about whether cancer will develop in an individual in any given year. Chance also plays a role in determining when a cancer is detected and diagnosed, and when the data on that cancer are included in the registry. When large numbers of a particular cancer are diagnosed in any given year, the effects of chance are small relative to the large incidence rate. With rare cancers, however, the incidence rates are small and the chance occurrence of more or fewer cases in a given year can markedly affect the rate.

To estimate the extent of this uncertainty, a statistical framework known as superpopulation sampling is applied. Under this framework, the observed cancer cases are but one outcome among many outcomes that could have occurred as a result of an underlying random process. In general, in superpopulation modeling, certain features of the mechanism thought to have generated the observed data are specified.[30] The standard superpopulation model used for rates for vital statistics is the Poisson process,[31] which assigns to rare events more uncertainty relative to the size of the rate than it does to common events. The population risk profile is posited to influence the underlying Poisson process from which rates arise, and only a single realization of that process is observed. Parameters are estimated for the underlying disease process. In the current report, a single parameter is estimated to represent the incidence rate and its variability. However, the Poisson model is capable of estimating separate parameters that represent contributions to the rate from various population risk factors, the effects of cancer control interventions, and other attributes of the population risk profile in any particular year.

The range of plausible underlying disease rates that may have generated the observed rate is expressed through a confidence interval. For this report, we used confidence intervals that are expected to include the true underlying rate 95% of the time. Confidence intervals in this report were computed by using SEER*Stat Version 4.2 software and are based on the gamma method.[32] These gamma intervals are approximations to exact Poisson confidence intervals. The gamma method performs better than other methods, especially for small incidence rates or for populations with age distributions that differ from the

standard age distribution. Various factors such as population heterogeneity can sometimes lead to "extra-Poisson" variation in which the rates are more variable than would be predicted by a Poisson model. No attempt was made to correct for this. In addition, as discussed in "Interpreting the Data," the confidence intervals do not account for systematic (i.e., non-random) biases in the incidence rates.

Users of this report who want to know if the differences between the incidence rates of various groups are statistically significant may consider examining whether the confidence intervals overlap. The use of overlapping confidence intervals to test for statistically significant differences between two incidence rates is not advised because the practice more frequently fails to detect significant differences than does standard hypothesis testing.[33] Another consideration when comparing differences between rates is public health importance. For some rates in this report, numerators and denominators are large and standard errors are therefore small, with the result that some statistically significant differences may be so small as to lack importance, especially for population-based public health program decisions.

Suppression of Incidence Rates and Case Counts

When the numbers of cases used to compute incidence rates are small, those rates tend to have poor reliability.[31] Therefore, to discourage misinterpretation and misuse of rates or counts that are unstable because of the small numbers of cases, incidence rates and case counts are not shown in tables and figures if the case counts are less than 16. A case count of less than approximately 16 results in a standard error of the incidence rate that is approximately 25% or more as large as the incidence rate itself. Equivalently, a case count of less than approximately 16 results in the width of the 95% confidence interval around the rate being at least as large as the rate itself. These relationships were derived under the assumption of a Poisson process and with the standard population age distribution close to the observed population age distribution.

Another important reason for employing a cell suppression threshold value is to protect the confidentiality of patients whose data are included in a report by reducing or eliminating the risk of identity disclosure.[34,35] The cell suppression threshold value of 16, which was selected to reduce misuse and misinterpretation of unstable rates and counts in this report, is more than sufficient to protect patient confidentiality given the low level of geographic and clinical detail provided in the report.[36]

Because the incidence rates shown in the state-, sex-, and race-specific bar graphs in Figures 3.1 through 3.44 do not contain confidence intervals to indicate their reliability, we applied a data suppression criterion in addition to the threshold value of 16 cases: in these figures, incidence rates are not ranked or shown for any population groups of less than 50,000 persons.

Inclusion of Incidence Rates and Counts for U.S. Census Regions and Divisions

Rates for U.S. census regions and divisions were calculated by aggregating data reported from the states in each region and division. Only data from state registries that met the criteria for inclusion in this report (see "Registry Eligibility Criteria") were included in calculations of rates for U.S. census regions and divisions. There is a potential for bias in the rates for census regions and divisions where data for some states were excluded. We considered the extent of potential bias in regions or divisions with incomplete data and made the following determination: in this report, incidence rates for U.S. census regions and divisions are reported only if (1) at least 78% of the population is covered by cancer registries that meet the criteria for inclusion in this report and (2) 95% confidence intervals around the observed age-adjusted region or division incidence rates for each of four major cancer sites (female breast, male prostate, male and female colorectal, male and female lung and bronchus) for the region or division include estimated "bias-corrected" region or division rates (see Appendix L) for each of those cancer sites.

On the basis of these analyses, the observed rates for the following census regions or divisions are published in this report: the Northeast region and the New England and Middle Atlantic divisions;

the Midwest region and the West North Central division; and the West region and the Pacific division.

Case counts for U.S. census regions and divisions are in Appendix E if all state cancer registries in the region or division met the criteria for inclusion in this report, with the following exception: the region or division count is suppressed if the count for exactly one state in the region or division is suppressed due to a count of less than 16.

Inclusion of Incidence Rates and Counts for the United States

Cancer incidence rates for the United States, as shown in Tables 1.1 through 1.4 and in one row of Tables 2.2.2 through 2.25.2, are aggregate rates based on more than 1 million cancer cases reported from central cancer registries in 37 states, 6 metropolitan areas, and the District of Columbia, geographic areas in which approximately 78% of the U.S. population resides. The U.S. rates in this report did not meet the statistical criteria for inclusion that were applied to rates and counts for U.S. census regions and divisions (see "Inclusion of Incidence Rates and Counts for U.S. Census Regions and Divisions").

Case counts for the U.S. rates for all ages combined are in Appendix D. The U.S. case counts are provided only to allow readers the opportunity to verify the crude rates by recalculation. Readers are cautioned that the U.S. counts in this report are not estimates of the number of cancer cases that occurred or that were reported during 1999 in the entire United States. In addition, because the 22% of the U.S. population that is not covered by registries whose data are in this report may differ in important ways from the 78% of the U.S. population that is covered, it should not be assumed that these counts represent 78% of the cancer cases that occurred or were reported during 1999 in the entire United States.

Interpreting the Data

Both crude and age-adjusted incidence rates are presented in this report. Crude rates are helpful in determining the need for services for a given population, relative to another population, regardless of size. Crude rates are influenced by the underlying age distribution of the state's population. Even if two states have the same age-adjusted rates, the state with the relatively older population (as demonstrated by having a higher median age) will have higher crude rates because incidence rates for most cancers increase with increasing age. A table of the median age of each state's population is in Appendix M to help with the interpretation of the crude rates. Ideally, crude, age-adjusted, and age-specific rates are used in planning for population-based cancer prevention and control interventions.[2]

Published age-adjusted cancer incidence rates for diagnosis years before 1999 were calculated by using the 1970 U.S. standard population. Beginning with the first publication of data for the 1999 diagnosis year, cancer incidence rates are age-adjusted to the 2000 U.S. standard population. This change conforms to Department of Health and Human Services policy for reporting death and disease rates.[1,2] This policy was motivated by a need to standardize age-adjustment procedures across government agencies.[1] The change from the 1970 to the 2000 U.S. standard updates the calculation of age-adjusted rates to more closely reflect the current age distribution of the U.S. population and the current burden of cancer. Due to the aging of the U.S. population, the 2000 U.S. standard population gives more weight to older age categories than did the 1970 standard population.[2,9,37] Appendix K compares the differences in age distributions between the 1970 and the 2000 U.S. standard populations.

Because cancer incidence increases with age, the change to the 2000 U.S. standard population results in higher incidence rates for most cancers. Therefore, caution should be used when comparing the data published here with previously published cancer incidence rates adjusted to standard populations other than the 2000 U.S. standard population.

There are other reasons to use caution when interpreting these data. Data quality is routinely evaluated by the SEER Program and NPCR.[20,38] This evaluation includes (1) re-abstracting and re-coding studies and (2) casefinding studies, both of

which are conducted with registries from time to time to provide information on errors in the data and data completeness. Even though the cancer registries whose data are included in this report met data quality criteria for all invasive sites combined, the completeness and quality of site-specific data may vary. The observed rates may have been influenced by differences in the timeliness, completeness, and accuracy of the data from one registry to another, from one reporting period to another, and from one primary cancer site to another.

Completeness and accuracy of the data may also be affected by the time interval allowed for reporting data to the two federal programs. For this reason, the completeness and accuracy of data on specific cancer sites may vary. For this report of 1999 data, the SEER and NPCR time interval for reporting data differed by 3 months. NCI (SEER) allowed an interval of 22 months after the close of the diagnosis year (data submission November 1, 2001) and CDC (NPCR) allowed an interval of 25 months after the close of the diagnosis year (data submission January 31, 2002).

Delays in reporting of cancer cases can affect timely and accurate calculation of cancer incidence rates.[39] Cases are reported continuously to statewide and metropolitan area cancer registries in accordance with statutory and contractual reporting requirements. After the initial submission of the most recent year's data to the federal funding agency, cancer registries continue to revise and update their data on the basis of new information received. Therefore, some 1999 cancer cases will have been reported to statewide and metropolitan area cancer registries after these registries submitted their 1999 data to either NCI or CDC. For this reason, incidence rates and case counts reported directly by statewide or metropolitan area cancer registries may differ from those included in this publication. Reporting delays appear to be more of a problem for cancers that are usually diagnosed and treated in nonhospital settings such as physician offices (e.g., prostate cancer, melanoma of the skin). Methods to adjust incidence rates for reporting delay exist[39] but were not applied to the data in the current report.

Incidence rates are also influenced by the choice of population files. As described in "Population Data," the denominators for our incidence rates were race- and sex-specific population estimates that were projected from the 1990 census. Because some state health departments use customized state population projections in calculating incidence rates, the rates published in this report may differ slightly from those published by individual states.

Rates in this report are for cancer cases diagnosed in 1999, the year just before the 2000 decennial census. When the final detailed race-specific data from the enumerated 2000 census are available, they will be used with the 1990 census data to provide intercensal race-specific population estimates for 1999 (expected in 2003), which will be more accurate than the projected 1999 populations used in this report. Preliminary 2000 census results indicate that there are sizable differences with some of the projected population estimates. The problems appear to be more acute for smaller geographic areas and populations with limited numbers of people. Specifically, in some metropolitan areas
the projected 1999 black population varies considerably from the enumerated 2000 census counts. For example, the 1999 populations for blacks in one SEER metropolitan area appear to differ from the 2000 census counts by more than 20%, and rates based on projected versus preliminary local intercensal (incorporating 2000 census data) estimates differed by approximately 19%. We anticipate that cancer incidence rates, and in fact all population-based data that used race-specific 1999 projected estimates for population denominators, may need to be adjusted after the 2000 census data are final. The adjustments may result not only in different rates but also in different relationships between rates in geographic areas and among different populations.

There is yet another reason for caution when interpreting incidence rates based on projected 1999 population counts. For the 2000 census, respondents for the first time were given the opportunity to identify themselves as being of more than one race. Studies are in progress to determine the appropriate corrections needed to adjust for this change in procedures for collecting census data on race.[40]

Rates for populations according to Hispanic ethnicity and racial populations other than black and white are not included in this report. States with a high proportion of Hispanics may have different incidence patterns than states with a low proportion of Hispanics. Data collection procedures for identifying specific racial and ethnic populations vary widely from registry to registry.[41] Further study of the quality of data on race and ethnicity is ongoing; we expect that future *United States Cancer Statistics* reports will have cancer statistics on Hispanics and other ethnic and racial populations.

Rates for a census region or division, or the country as a whole, may not have met the statistical criteria for inclusion due to bias. This bias arises if, within the region, division, or country, the sub-area for which data are available has rates that are substantially different from the rates in the sub-area for which data are not available. Merely increasing the coverage may not reduce bias unless the covered area is similar to the missing area in terms of cancer rates or proportions. It is possible to have some bias even if the percentage of coverage is high and millions of cases are recorded. As the proportion of the U.S. population covered by cancer registries with high quality data approaches 100% and the covered area becomes more representative of the entire country, the reported U.S. rate is expected to move closer to a true U.S. rate.

Geographic variation in cancer incidence rates may be the result of regional differences in the exposure of the population to known or unknown risk factors.[42–44] A comparison of incidence rates based on data from all SEER registries combined and from all NPCR registries combined revealed that the two federal programs had different cancer incidence rates. NPCR reported higher incidence rates for tobacco-related cancers and for colon cancer than did SEER. The relationship was reversed for melanoma, prostate cancer, female breast cancer, and cancers that are more common among Asian and Pacific Islander populations (e.g., stomach cancer and cancer of the liver and intrahepatic bile duct). The rates for cancer sites classified as ill-defined were higher in NPCR than in SEER. These registry program differences may arise from differences in socio-demographic population characteristics (e.g., age, race and ethnicity, geographic region, urban or rural residence), screening use, health behaviors (e.g., using tobacco, eating poorly, not engaging in regular physical activity), exposure to cancer-causing agents, or registry operations factors (e.g., completeness, timeliness, specificity in coding cancer site). Methodologic work is under way to investigate variability associated with known factors that affect cancer rates and risks by using model-based statistical techniques and other approaches for surveillance research. Studies are also in progress to evaluate differences in registry operations. Work continues to ensure the reporting of high-quality data.

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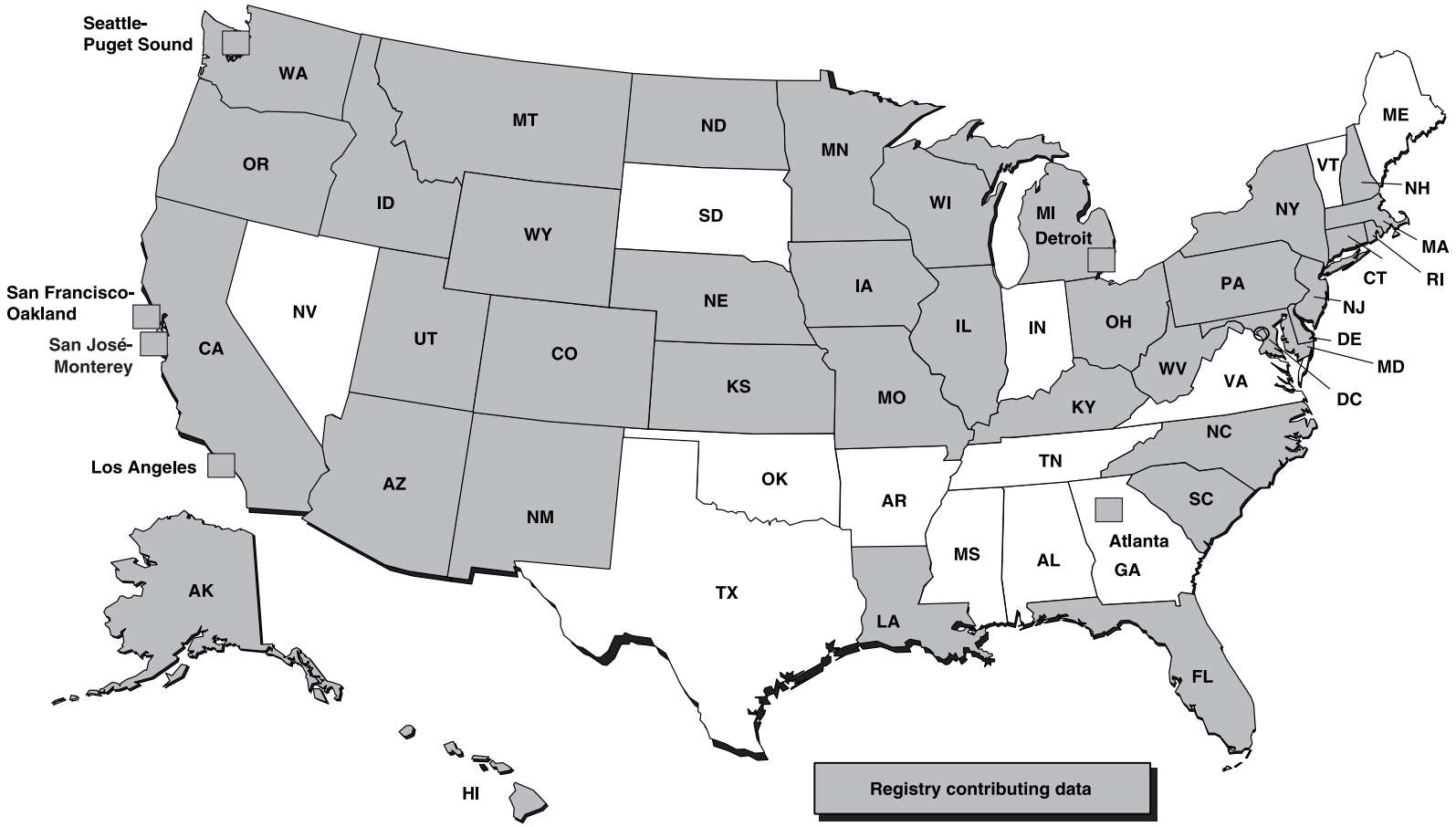
Cancer Incidence: All Areas Combined

Figure 1: Geographic Areas Covered by SEER and NPCR Registries That Contributed Data to *United States Cancer Statistics: 1999 Incidence*



Note: Shaded areas represent statewide and metropolitan cancer registries that met the following data quality criteria: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. Rates cover approximately 78% of the U.S. population.

Table 1.1: Invasive Cancer Incidence Rates by Primary Site and Race (All Races, White, Black), United States: SEER and NPCR Registries That Meet Quality Criteria*†

Males, 1999

Primary Site	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
All Sites	552.3 (550.8-553.9)	498.2 (496.9-499.6)	542.0 (540.4-543.6)	519.5 (518.0-521.0)	617.4 (611.6-623.3)	389.4 (385.9-393.0)
Oral Cavity and Pharynx	15.8 (15.5- 16.0)	14.6 (14.4- 14.8)	15.2 (15.0- 15.5)	14.9 (14.6- 15.1)	19.2 (18.3- 20.2)	13.6 (12.9- 14.2)
Lip	1.6 (1.5- 1.6)	1.4 (1.3- 1.5)	1.7 (1.6- 1.8)	1.6 (1.5- 1.7)	~	~
Tongue	3.8 (3.7- 3.9)	3.5 (3.4- 3.7)	3.8 (3.7- 3.9)	3.7 (3.6- 3.8)	4.0 (3.6- 4.5)	2.9 (2.6- 3.2)
Salivary Gland	1.5 (1.4- 1.6)	1.4 (1.3- 1.4)	1.5 (1.5- 1.6)	1.5 (1.4- 1.5)	1.2 (0.9- 1.4)	0.8 (0.6- 1.0)
Floor of Mouth	1.2 (1.1- 1.2)	1.1 (1.0- 1.2)	1.1 (1.1- 1.2)	1.1 (1.1- 1.2)	1.7 (1.4- 2.0)	1.2 (1.0- 1.4)
Gum and Other Mouth	2.1 (2.0- 2.2)	1.9 (1.8- 2.0)	2.0 (1.9- 2.1)	1.9 (1.8- 2.0)	2.9 (2.5- 3.3)	2.0 (1.8- 2.3)
Nasopharynx	0.8 (0.8- 0.9)	0.8 (0.8- 0.9)	0.6 (0.6- 0.7)	0.6 (0.6- 0.7)	1.0 (0.8- 1.3)	0.8 (0.7- 1.0)
Tonsil	2.1 (2.0- 2.2)	2.0 (1.9- 2.1)	2.1 (2.0- 2.2)	2.1 (2.0- 2.2)	2.9 (2.6- 3.3)	2.1 (1.8- 2.4)
Oropharynx	0.6 (0.6- 0.7)	0.6 (0.5- 0.6)	0.6 (0.5- 0.6)	0.5 (0.5- 0.6)	1.5 (1.2- 1.8)	1.0 (0.8- 1.2)
Hypopharynx	1.5 (1.4- 1.6)	1.4 (1.3- 1.4)	1.3 (1.3- 1.4)	1.3 (1.2- 1.4)	2.9 (2.5- 3.3)	1.9 (1.7- 2.2)
Other Oral Cavity and Pharynx	0.6 (0.5- 0.6)	0.5 (0.5- 0.6)	0.5 (0.5- 0.6)	0.5 (0.5- 0.6)	1.1 (0.9- 1.4)	0.7 (0.6- 0.9)
Digestive System	112.0 (111.3-112.7)	99.3 (98.7- 99.9)	108.9 (108.2-109.6)	102.9 (102.2-103.6)	130.6 (127.9-133.3)	80.3 (78.7- 81.9)
Esophagus	8.8 (8.6- 8.9)	7.9 (7.8- 8.1)	8.4 (8.2- 8.6)	8.1 (7.9- 8.3)	13.0 (12.2- 13.9)	8.3 (7.8- 8.8)
Stomach	11.0 (10.8- 11.3)	9.7 (9.5- 9.9)	10.0 (9.8- 10.2)	9.4 (9.2- 9.6)	17.5 (16.5- 18.6)	10.3 (9.7- 10.9)
Small Intestine	2.0 (1.9- 2.1)	1.8 (1.7- 1.9)	1.9 (1.8- 2.0)	1.8 (1.7- 1.9)	3.0 (2.6- 3.5)	1.9 (1.6- 2.1)
Colon and Rectum	66.4 (65.9- 66.9)	58.6 (58.1- 59.0)	66.0 (65.4- 66.5)	62.1 (61.6- 62.6)	67.9 (65.9- 69.9)	41.2 (40.0- 42.3)
Colon excluding Rectum	46.9 (46.4- 47.3)	41.0 (40.6- 41.4)	46.3 (45.8- 46.8)	43.3 (42.8- 43.7)	52.0 (50.2- 53.7)	31.0 (30.0- 32.0)
Rectum and Rectosigmoid Junction	19.5 (19.2- 19.8)	17.6 (17.3- 17.8)	19.6 (19.3- 20.0)	18.8 (18.5- 19.1)	15.9 (15.0- 16.9)	10.2 (9.6- 10.8)
Anus, Anal Canal and Anorectum	1.2 (1.1- 1.2)	1.1 (1.0- 1.1)	1.2 (1.1- 1.2)	1.1 (1.0- 1.2)	1.3 (1.1- 1.6)	1.0 (0.8- 1.2)
Liver and Intrahepatic Bile Duct	7.0 (6.9- 7.2)	6.4 (6.3- 6.6)	6.1 (5.9- 6.3)	5.9 (5.7- 6.0)	9.6 (8.9- 10.4)	6.5 (6.1- 7.0)
Gallbladder	0.8 (0.7- 0.9)	0.7 (0.6- 0.7)	0.8 (0.7- 0.8)	0.7 (0.7- 0.8)	0.9 (0.7- 1.2)	0.5 (0.4- 0.6)
Other Biliary	1.6 (1.5- 1.6)	1.4 (1.3- 1.4)	1.6 (1.5- 1.6)	1.4 (1.4- 1.5)	1.2 (1.0- 1.5)	0.8 (0.6- 0.9)
Pancreas	12.3 (12.0- 12.5)	10.9 (10.7- 11.1)	12.1 (11.8- 12.3)	11.4 (11.2- 11.7)	15.2 (14.3- 16.2)	9.4 (8.8- 9.9)
Retroperitoneum	0.4 (0.4- 0.5)	0.4 (0.4- 0.4)	0.4 (0.4- 0.5)	0.4 (0.4- 0.5)	0.4 (0.3- 0.6)	0.3 (0.2- 0.4)
Peritoneum, Omentum and Mesentery	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	~	~
Other Digestive Organs	0.3 (0.3- 0.4)	0.3 (0.2- 0.3)	0.3 (0.3- 0.4)	0.3 (0.3- 0.3)	0.3 (0.2- 0.5)	0.2 (0.1- 0.3)
Respiratory System	100.0 (99.3-100.6)	90.0 (89.4- 90.5)	98.5 (97.8- 99.1)	94.5 (93.8- 95.1)	125.0 (122.3-127.6)	78.0 (76.5- 79.6)
Nose, Nasal Cavity and Middle Ear	0.8 (0.8- 0.9)	0.8 (0.7- 0.8)	0.8 (0.8- 0.9)	0.8 (0.7- 0.9)	1.0 (0.7- 1.2)	0.7 (0.5- 0.8)
Larynx	7.9 (7.7- 8.1)	7.3 (7.1- 7.4)	7.6 (7.4- 7.8)	7.4 (7.2- 7.6)	12.1 (11.3- 12.9)	7.9 (7.4- 8.4)
Lung and Bronchus	89.1 (88.5- 89.7)	80.0 (79.5- 80.6)	87.8 (87.2- 88.5)	84.2 (83.6- 84.8)	110.7 (108.3-113.3)	68.7 (67.2- 70.2)
Pleura	1.8 (1.7- 1.9)	1.6 (1.5- 1.7)	1.9 (1.8- 2.0)	1.8 (1.7- 1.9)	0.8 (0.6- 1.1)	0.5 (0.4- 0.6)
Trachea and Other Respiratory Organs	0.3 (0.3- 0.4)	0.3 (0.3- 0.3)	0.3 (0.3- 0.4)	0.3 (0.3- 0.4)	0.4 (0.2- 0.5)	0.3 (0.2- 0.4)
Bones and Joints	1.1 (1.0- 1.1)	1.0 (1.0- 1.1)	1.1 (1.0- 1.2)	1.1 (1.0- 1.1)	0.8 (0.6- 1.0)	0.8 (0.6- 1.0)
Soft Tissue including Heart	3.3 (3.2- 3.5)	3.1 (3.0- 3.2)	3.3 (3.1- 3.4)	3.2 (3.0- 3.3)	3.6 (3.2- 4.0)	2.8 (2.5- 3.1)
Skin excluding Basal and Squamous	21.5 (21.2- 21.8)	19.8 (19.5- 20.1)	22.8 (22.5- 23.2)	22.1 (21.8- 22.4)	4.1 (3.7- 4.5)	3.3 (3.0- 3.6)
Melanomas of the Skin	19.0 (18.7- 19.3)	17.6 (17.3- 17.8)	20.5 (20.2- 20.8)	19.9 (19.6- 20.2)	1.2 (1.0- 1.5)	0.8 (0.6- 1.0)
Other Non-Epithelial Skin	2.5 (2.4- 2.6)	2.3 (2.2- 2.4)	2.3 (2.2- 2.4)	2.2 (2.1- 2.3)	2.9 (2.5- 3.3)	2.5 (2.2- 2.8)
Breast	1.5 (1.4- 1.6)	1.4 (1.3- 1.4)	1.5 (1.4- 1.5)	1.4 (1.3- 1.5)	2.1 (1.8- 2.5)	1.3 (1.1- 1.5)
Male Genital System	168.6 (167.7-169.4)	153.1 (152.3-153.8)	159.6 (158.7-160.4)	154.4 (153.6-155.3)	231.6 (228.0-235.2)	142.5 (140.4-144.7)
Prostate	162.0 (161.2-162.8)	146.5 (145.8-147.2)	152.3 (151.5-153.2)	147.1 (146.3-148.0)	229.3 (225.7-232.9)	140.6 (138.5-142.7)
Testis	5.5 (5.3- 5.6)	5.6 (5.5- 5.8)	6.2 (6.0- 6.3)	6.3 (6.1- 6.5)	1.4 (1.1- 1.6)	1.3 (1.1- 1.5)
Penis	0.9 (0.8- 0.9)	0.8 (0.7- 0.8)	0.8 (0.8- 0.9)	0.8 (0.7- 0.9)	0.7 (0.5- 0.9)	0.4 (0.3- 0.6)
Other Male Genital Organs	0.2 (0.2- 0.3)	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	0.2 (0.1- 0.4)	0.2 (0.1- 0.3)

continued

Table 1.1: Invasive Cancer Incidence Rates by Primary Site and Race (All Races, White, Black), United States: SEER and NPCR Registries That Meet Quality Criteria[*†] *(continued)*

Males, 1999

Primary Site	All Races		White		Black	
	Age-Adjusted Rate[‡§] (CI)	Crude Rate[‡] (CI)	Age-Adjusted Rate[‡§] (CI)	Crude Rate[‡] (CI)	Age-Adjusted Rate[‡§] (CI)	Crude Rate[‡] (CI)
Urinary System	55.7 (55.2- 56.2)	49.4 (48.9- 49.8)	57.7 (57.2- 58.3)	54.7 (54.2- 55.2)	35.0 (33.6- 36.5)	21.3 (20.5- 22.2)
Urinary Bladder[‖]	38.3 (37.9- 38.7)	33.5 (33.2- 33.9)	40.2 (39.8- 40.7)	37.7 (37.3- 38.1)	17.9 (16.9- 19.0)	10.0 (9.5- 10.6)
Kidney and Renal Pelvis	16.0 (15.8- 16.3)	14.7 (14.5- 14.9)	16.1 (15.8- 16.4)	15.6 (15.4- 15.9)	16.3 (15.4- 17.3)	10.9 (10.3- 11.5)
Ureter	0.9 (0.8- 0.9)	0.8 (0.7- 0.8)	0.9 (0.8- 1.0)	0.9 (0.8- 0.9)	0.3 (0.2- 0.4)	0.2 (0.1- 0.2)
Other Urinary Organs	0.5 (0.4- 0.5)	0.4 (0.4- 0.5)	0.5 (0.4- 0.5)	0.4 (0.4- 0.5)	0.5 (0.3- 0.7)	0.3 (0.2- 0.4)
Eye and Orbit	0.9 (0.8- 0.9)	0.8 (0.7- 0.9)	0.9 (0.8- 1.0)	0.9 (0.8- 0.9)	0.3 (0.2- 0.4)	0.3 (0.2- 0.4)
Brain and Other Nervous System	7.9 (7.7- 8.1)	7.5 (7.3- 7.7)	8.3 (8.1- 8.5)	8.2 (8.0- 8.4)	4.5 (4.1- 5.0)	3.8 (3.4- 4.1)
Brain	7.5 (7.3- 7.6)	7.1 (6.9- 7.3)	7.9 (7.7- 8.1)	7.8 (7.6- 7.9)	4.2 (3.7- 4.6)	3.5 (3.1- 3.8)
Cranial Nerves and Other Nervous System	0.4 (0.4- 0.5)	0.4 (0.4- 0.4)	0.4 (0.4- 0.5)	0.4 (0.4- 0.5)	0.4 (0.3- 0.6)	0.3 (0.2- 0.4)
Endocrine System	4.3 (4.2- 4.4)	4.2 (4.1- 4.3)	4.5 (4.3- 4.6)	4.4 (4.3- 4.6)	2.5 (2.2- 2.9)	2.0 (1.7- 2.3)
Thyroid	3.6 (3.5- 3.7)	3.5 (3.4- 3.6)	3.8 (3.6- 3.9)	3.8 (3.6- 3.9)	1.8 (1.5- 2.1)	1.3 (1.1- 1.5)
Other Endocrine including Thymus	0.7 (0.6- 0.8)	0.7 (0.6- 0.7)	0.7 (0.6- 0.7)	0.7 (0.6- 0.7)	0.8 (0.6- 1.0)	0.7 (0.5- 0.8)
Lymphomas	25.1 (24.8- 25.4)	23.2 (22.9- 23.5)	25.4 (25.0- 25.7)	24.5 (24.2- 24.8)	19.6 (18.6- 20.6)	15.0 (14.4- 15.8)
Hodgkin Lymphoma	3.2 (3.1- 3.3)	3.1 (3.0- 3.2)	3.2 (3.1- 3.4)	3.2 (3.1- 3.4)	2.9 (2.6- 3.2)	2.7 (2.4- 3.0)
Non-Hodgkin Lymphoma	22.0 (21.7- 22.3)	20.0 (19.7- 20.3)	22.1 (21.8- 22.5)	21.3 (21.0- 21.6)	16.7 (15.8- 17.6)	12.4 (11.7- 13.0)
Multiple Myeloma	6.0 (5.8- 6.2)	5.3 (5.2- 5.5)	5.6 (5.4- 5.7)	5.3 (5.1- 5.4)	10.8 (10.0- 11.6)	6.6 (6.2- 7.1)
Leukemias	14.5 (14.3- 14.8)	13.0 (12.8- 13.3)	14.8 (14.5- 15.1)	14.0 (13.8- 14.3)	10.5 (9.8- 11.3)	7.2 (6.7- 7.7)
Acute Lymphocytic	1.5 (1.5- 1.6)	1.5 (1.5- 1.6)	1.6 (1.5- 1.7)	1.6 (1.5- 1.7)	0.9 (0.7- 1.1)	0.9 (0.8- 1.1)
Chronic Lymphocytic	4.2 (4.1- 4.3)	3.7 (3.5- 3.8)	4.3 (4.1- 4.4)	4.0 (3.9- 4.1)	3.1 (2.7- 3.5)	1.8 (1.5- 2.0)
Acute Myeloid	4.4 (4.3- 4.6)	4.0 (3.9- 4.1)	4.5 (4.3- 4.6)	4.3 (4.1- 4.4)	3.3 (2.9- 3.8)	2.3 (2.0- 2.6)
Chronic Myeloid	1.8 (1.7- 1.9)	1.6 (1.6- 1.7)	1.8 (1.7- 1.9)	1.7 (1.6- 1.8)	1.5 (1.2- 1.8)	1.0 (0.9- 1.2)
Other Leukemias	2.6 (2.5- 2.7)	2.2 (2.1- 2.3)	2.6 (2.5- 2.7)	2.4 (2.3- 2.5)	1.8 (1.5- 2.1)	1.1 (0.9- 1.3)
Miscellaneous	14.4 (14.1- 14.6)	12.6 (12.4- 12.8)	14.1 (13.8- 14.3)	13.1 (12.9- 13.4)	17.2 (16.3- 18.3)	10.6 (10.1- 11.2)

[*] Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. Rates cover approximately 78% of the U.S. population.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

‖ Includes invasive and *in situ*.

~ Rates are suppressed if fewer than 16 cases were reported in the specific site-race category.

Table 1.2: Invasive Cancer Incidence Rates by Primary Site and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Primary Site	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
All Sites	420.1 (418.9-421.2)	457.9 (456.7-459.2)	423.8 (422.5-425.1)	487.4 (486.0-488.9)	381.7 (378.0-385.4)	313.2 (310.2-316.3)
Oral Cavity and Pharynx	6.3 (6.2- 6.5)	6.9 (6.7- 7.0)	6.2 (6.0- 6.3)	7.1 (7.0- 7.3)	6.3 (5.8- 6.8)	5.3 (4.9- 5.7)
Lip	0.3 (0.3- 0.4)	0.4 (0.3- 0.4)	0.3 (0.3- 0.4)	0.4 (0.4- 0.5)	~	~
Tongue	1.6 (1.5- 1.6)	1.7 (1.6- 1.8)	1.5 (1.5- 1.6)	1.8 (1.7- 1.9)	1.2 (1.0- 1.5)	1.0 (0.9- 1.2)
Salivary Gland	0.9 (0.8- 0.9)	0.9 (0.9- 1.0)	0.9 (0.8- 0.9)	1.0 (0.9- 1.1)	0.8 (0.6- 0.9)	0.6 (0.5- 0.8)
Floor of Mouth	0.5 (0.4- 0.5)	0.5 (0.5- 0.6)	0.5 (0.4- 0.5)	0.6 (0.5- 0.6)	0.5 (0.4- 0.7)	0.4 (0.3- 0.6)
Gum and Other Mouth	1.4 (1.3- 1.5)	1.5 (1.5- 1.6)	1.4 (1.3- 1.4)	1.6 (1.5- 1.7)	1.3 (1.1- 1.5)	1.1 (0.9- 1.2)
Nasopharynx	0.4 (0.3- 0.4)	0.4 (0.3- 0.4)	0.3 (0.2- 0.3)	0.3 (0.3- 0.3)	0.5 (0.4- 0.6)	0.4 (0.3- 0.6)
Tonsil	0.6 (0.6- 0.6)	0.6 (0.6- 0.7)	0.6 (0.5- 0.6)	0.7 (0.6- 0.7)	0.8 (0.6- 1.0)	0.7 (0.5- 0.8)
Oropharynx	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	0.3 (0.2- 0.5)	0.3 (0.2- 0.4)
Hypopharynx	0.4 (0.3- 0.4)	0.4 (0.3- 0.4)	0.3 (0.3- 0.4)	0.4 (0.4- 0.4)	0.5 (0.4- 0.7)	0.4 (0.3- 0.5)
Other Oral Cavity and Pharynx	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	0.2 (0.2- 0.2)	0.2 (0.2- 0.3)	0.3 (0.2- 0.4)	0.2 (0.1- 0.3)
Digestive System	75.0 (74.5- 75.5)	85.4 (84.9- 86.0)	72.7 (72.2- 73.2)	89.0 (88.4- 89.6)	90.3 (88.5- 92.2)	70.9 (69.4- 72.3)
Esophagus	2.2 (2.1- 2.2)	2.5 (2.4- 2.5)	2.0 (1.9- 2.1)	2.5 (2.4- 2.6)	3.6 (3.2- 4.0)	2.9 (2.6- 3.2)
Stomach	5.1 (5.0- 5.2)	5.9 (5.7- 6.0)	4.4 (4.3- 4.6)	5.5 (5.3- 5.7)	9.1 (8.5- 9.7)	7.0 (6.6- 7.5)
Small Intestine	1.4 (1.3- 1.5)	1.5 (1.5- 1.6)	1.3 (1.3- 1.4)	1.6 (1.5- 1.6)	2.2 (1.9- 2.5)	1.7 (1.5- 2.0)
Colon and Rectum	48.5 (48.1- 48.9)	55.3 (54.9- 55.7)	47.6 (47.2- 48.0)	58.4 (57.9- 58.9)	54.0 (52.6- 55.4)	42.5 (41.4- 43.6)
Colon excluding Rectum	36.5 (36.1- 36.8)	41.9 (41.5- 42.3)	35.6 (35.2- 36.0)	44.1 (43.7- 44.6)	43.2 (41.9- 44.5)	33.9 (32.9- 34.9)
Rectum and Rectosigmoid Junction	12.0 (11.8- 12.2)	13.4 (13.2- 13.6)	12.0 (11.8- 12.2)	14.3 (14.1- 14.5)	10.8 (10.2- 11.4)	8.6 (8.1- 9.1)
Anus, Anal Canal and Anorectum	1.5 (1.4- 1.5)	1.6 (1.5- 1.7)	1.5 (1.4- 1.6)	1.7 (1.6- 1.8)	1.3 (1.1- 1.5)	1.1 (0.9- 1.3)
Liver and Intrahepatic Bile Duct	2.8 (2.7- 2.9)	3.2 (3.1- 3.3)	2.5 (2.4- 2.6)	3.1 (2.9- 3.2)	3.5 (3.1- 3.9)	2.8 (2.5- 3.1)
Gallbladder	1.5 (1.4- 1.6)	1.7 (1.6- 1.8)	1.5 (1.4- 1.5)	1.8 (1.7- 1.9)	1.6 (1.3- 1.9)	1.2 (1.0- 1.4)
Other Biliary	1.1 (1.1- 1.2)	1.3 (1.2- 1.4)	1.1 (1.0- 1.2)	1.4 (1.3- 1.5)	1.0 (0.8- 1.2)	0.7 (0.6- 0.9)
Pancreas	9.6 (9.4- 9.7)	11.0 (10.8- 11.2)	9.2 (9.0- 9.4)	11.4 (11.2- 11.6)	13.1 (12.4- 13.8)	10.1 (9.5- 10.6)
Retroperitoneum	0.4 (0.3- 0.4)	0.4 (0.3- 0.4)	0.4 (0.3- 0.4)	0.4 (0.4- 0.4)	0.4 (0.3- 0.6)	0.4 (0.3- 0.5)
Peritoneum, Omentum and Mesentery	0.8 (0.7- 0.8)	0.8 (0.8- 0.9)	0.8 (0.8- 0.9)	1.0 (0.9- 1.0)	0.3 (0.2- 0.5)	0.3 (0.2- 0.4)
Other Digestive Organs	0.3 (0.2- 0.3)	0.3 (0.3- 0.3)	0.3 (0.2- 0.3)	0.3 (0.3- 0.4)	0.2 (0.2- 0.4)	0.2 (0.1- 0.3)
Respiratory System	56.1 (55.7- 56.5)	62.0 (61.5- 62.5)	57.2 (56.7- 57.6)	67.2 (66.6- 67.7)	53.4 (52.0- 54.8)	42.7 (41.6- 43.8)
Nose, Nasal Cavity and Middle Ear	0.5 (0.5- 0.6)	0.6 (0.5- 0.6)	0.5 (0.5- 0.6)	0.6 (0.6- 0.7)	0.4 (0.3- 0.6)	0.4 (0.3- 0.5)
Larynx	1.7 (1.7- 1.8)	1.9 (1.8- 1.9)	1.7 (1.6- 1.8)	1.9 (1.8- 2.0)	2.4 (2.2- 2.8)	2.0 (1.8- 2.3)
Lung and Bronchus	53.4 (52.9- 53.8)	59.0 (58.6- 59.5)	54.4 (54.0- 54.9)	64.1 (63.5- 64.6)	50.3 (48.9- 51.7)	40.1 (39.0- 41.2)
Pleura	0.3 (0.3- 0.4)	0.4 (0.3- 0.4)	0.4 (0.3- 0.4)	0.4 (0.4- 0.5)	0.1 (0.1- 0.2)	0.1 (0.1- 0.2)
Trachea and Other Respiratory Organs	0.1 (0.1- 0.1)	0.1 (0.1- 0.2)	0.1 (0.1- 0.1)	0.1 (0.1- 0.2)	~	~
Bones and Joints	0.8 (0.7- 0.9)	0.8 (0.8- 0.9)	0.8 (0.8- 0.9)	0.9 (0.8- 0.9)	0.6 (0.5- 0.8)	0.6 (0.5- 0.8)
Soft Tissue including Heart	2.4 (2.3- 2.5)	2.6 (2.5- 2.7)	2.4 (2.3- 2.5)	2.7 (2.6- 2.8)	2.3 (2.0- 2.6)	2.1 (1.8- 2.3)
Skin excluding Basal and Squamous	13.2 (13.0- 13.4)	13.9 (13.7- 14.2)	14.4 (14.2- 14.7)	15.6 (15.4- 15.9)	2.0 (1.8- 2.3)	1.8 (1.6- 2.0)
Melanomas of the Skin	12.1 (11.9- 12.3)	12.7 (12.5- 12.9)	13.4 (13.1- 13.6)	14.4 (14.2- 14.7)	0.9 (0.7- 1.1)	0.7 (0.6- 0.9)
Other Non-Epithelial Skin	1.1 (1.1- 1.2)	1.2 (1.2- 1.3)	1.1 (1.0- 1.1)	1.2 (1.2- 1.3)	1.2 (1.0- 1.4)	1.1 (0.9- 1.3)
Breast	134.1 (133.4-134.8)	143.2 (142.5-143.9)	136.3 (135.5-137.0)	152.7 (151.9-153.5)	112.7 (110.7-114.7)	94.9 (93.3- 96.6)
Female Genital System	53.9 (53.5- 54.3)	57.4 (56.9- 57.9)	54.6 (54.1- 55.0)	60.7 (60.2- 61.3)	46.5 (45.3- 47.8)	39.1 (38.1- 40.2)
Cervix	9.5 (9.3- 9.6)	9.7 (9.5- 9.9)	8.8 (8.6- 9.0)	9.2 (9.0- 9.4)	13.9 (13.2- 14.6)	12.3 (11.8- 13.0)
Corpus	23.9 (23.6- 24.2)	25.6 (25.3- 25.9)	24.6 (24.3- 25.0)	27.7 (27.4- 28.1)	17.3 (16.5- 18.1)	14.0 (13.4- 14.7)
Uterus, NOS	0.7 (0.7- 0.8)	0.8 (0.7- 0.9)	0.7 (0.6- 0.7)	0.8 (0.7- 0.8)	1.4 (1.1- 1.6)	1.1 (0.9- 1.3)
Ovary	16.2 (15.9- 16.4)	17.2 (17.0- 17.5)	16.8 (16.6- 17.1)	18.8 (18.5- 19.1)	10.6 (10.0- 11.3)	8.9 (8.4- 9.4)
Vagina	0.7 (0.6- 0.7)	0.8 (0.7- 0.8)	0.6 (0.6- 0.7)	0.7 (0.7- 0.8)	1.2 (1.0- 1.4)	1.0 (0.8- 1.1)
Vulva	2.3 (2.2- 2.4)	2.6 (2.5- 2.7)	2.4 (2.3- 2.5)	2.9 (2.7- 3.0)	1.6 (1.3- 1.8)	1.3 (1.1- 1.5)
Other Female Genital Organs	0.6 (0.6- 0.7)	0.7 (0.6- 0.7)	0.6 (0.6- 0.7)	0.7 (0.6- 0.8)	0.6 (0.5- 0.8)	0.5 (0.4- 0.7)

continued

Table 1.2: Invasive Cancer Incidence Rates by Primary Site and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Primary Site	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
Urinary System	19.0 (18.8- 19.3)	21.3 (21.0- 21.5)	19.5 (19.2- 19.7)	23.2 (22.9- 23.5)	16.3 (15.5- 17.1)	13.0 (12.4- 13.6)
Urinary Bladder‖	10.0 (9.8- 10.2)	11.4 (11.2- 11.6)	10.4 (10.2- 10.6)	12.7 (12.4- 12.9)	7.1 (6.6- 7.7)	5.4 (5.0- 5.8)
Kidney and Renal Pelvis	8.4 (8.2- 8.5)	9.1 (9.0- 9.3)	8.4 (8.2- 8.6)	9.7 (9.5- 9.9)	8.7 (8.2- 9.3)	7.2 (6.7- 7.7)
Ureter	0.5 (0.4- 0.5)	0.5 (0.5- 0.6)	0.5 (0.4- 0.5)	0.6 (0.5- 0.6)	0.2 (0.1- 0.3)	0.1 (0.1- 0.2)
Other Urinary Organs	0.2 (0.1- 0.2)	0.2 (0.2- 0.2)	0.1 (0.1- 0.2)	0.2 (0.2- 0.2)	0.3 (0.2- 0.4)	0.2 (0.2- 0.3)
Eye and Orbit	0.6 (0.6- 0.7)	0.7 (0.6- 0.7)	0.7 (0.6- 0.7)	0.7 (0.7- 0.8)	0.2 (0.2- 0.3)	0.2 (0.2- 0.3)
Brain and Other Nervous System	5.7 (5.5- 5.8)	6.0 (5.8- 6.1)	6.0 (5.8- 6.1)	6.5 (6.4- 6.7)	3.6 (3.3- 4.0)	3.2 (2.9- 3.5)
Brain	5.3 (5.1- 5.4)	5.6 (5.4- 5.7)	5.6 (5.5- 5.8)	6.1 (6.0- 6.3)	3.2 (2.9- 3.6)	2.9 (2.6- 3.2)
Cranial Nerves and Other Nervous System	0.4 (0.3- 0.4)	0.4 (0.4- 0.4)	0.4 (0.3- 0.4)	0.4 (0.4- 0.5)	0.4 (0.3- 0.5)	0.3 (0.2- 0.4)
Endocrine System	10.4 (10.2- 10.6)	10.6 (10.4- 10.8)	10.7 (10.5- 10.9)	11.0 (10.8- 11.2)	6.5 (6.0- 7.0)	6.0 (5.6- 6.4)
Thyroid	9.9 (9.7- 10.1)	10.0 (9.8- 10.2)	10.2 (10.0- 10.4)	10.4 (10.2- 10.7)	5.9 (5.5- 6.4)	5.4 (5.0- 5.8)
Other Endocrine including Thymus	0.5 (0.5- 0.6)	0.5 (0.5- 0.6)	0.5 (0.5- 0.6)	0.5 (0.5- 0.6)	0.6 (0.5- 0.8)	0.5 (0.4- 0.7)
Lymphomas	18.3 (18.0- 18.5)	19.9 (19.7- 20.2)	18.8 (18.5- 19.0)	21.6 (21.3- 21.9)	12.7 (12.1- 13.4)	11.1 (10.5- 11.7)
Hodgkin Lymphoma	2.5 (2.4- 2.6)	2.6 (2.5- 2.7)	2.7 (2.6- 2.8)	2.7 (2.6- 2.8)	1.9 (1.7- 2.2)	1.9 (1.7- 2.2)
Non-Hodgkin Lymphoma	15.7 (15.5- 16.0)	17.4 (17.1- 17.6)	16.1 (15.8- 16.3)	18.9 (18.6- 19.1)	10.8 (10.2- 11.4)	9.2 (8.7- 9.7)
Multiple Myeloma	4.1 (4.0- 4.3)	4.6 (4.5- 4.8)	3.7 (3.6- 3.8)	4.5 (4.3- 4.6)	8.2 (7.7- 8.8)	6.4 (6.0- 6.9)
Leukemias	8.8 (8.6- 8.9)	9.6 (9.5- 9.8)	8.9 (8.7- 9.1)	10.3 (10.1- 10.5)	7.0 (6.5- 7.5)	5.9 (5.5- 6.3)
Acute Lymphocytic	1.2 (1.1- 1.2)	1.2 (1.1- 1.2)	1.2 (1.2- 1.3)	1.2 (1.1- 1.3)	0.7 (0.6- 0.9)	0.7 (0.6- 0.9)
Chronic Lymphocytic	2.1 (2.0- 2.2)	2.4 (2.3- 2.5)	2.1 (2.0- 2.2)	2.6 (2.5- 2.7)	1.5 (1.2- 1.7)	1.1 (0.9- 1.3)
Acute Myeloid	3.1 (3.0- 3.2)	3.4 (3.2- 3.5)	3.1 (3.0- 3.2)	3.6 (3.5- 3.7)	2.6 (2.3- 3.0)	2.2 (2.0- 2.5)
Chronic Myeloid	1.1 (1.0- 1.1)	1.2 (1.1- 1.3)	1.1 (1.0- 1.1)	1.2 (1.2- 1.3)	1.0 (0.8- 1.2)	0.8 (0.7- 1.0)
Other Leukemias	1.3 (1.3- 1.4)	1.5 (1.5- 1.6)	1.4 (1.3- 1.4)	1.7 (1.6- 1.8)	1.2 (1.0- 1.4)	1.0 (0.8- 1.1)
Miscellaneous	11.3 (11.1- 11.5)	13.0 (12.8- 13.3)	11.1 (10.9- 11.3)	13.8 (13.5- 14.0)	12.9 (12.2- 13.6)	10.1 (9.5- 10.6)
Breast, *in situ*¶	28.8 (28.5- 29.1)	30.1 (29.8- 30.4)	29.3 (28.9- 29.6)	31.7 (31.4- 32.1)	22.5 (21.6- 23.4)	18.8 (18.1- 19.6)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. Rates cover approximately 78% of the U.S. population.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

‖ Includes invasive and *in situ*.

¶ Rates for *in situ* female breast cancer are listed separately and are not included in rates for the "all sites" category.

~ Rates are suppressed if fewer than 16 cases were reported in the specific site-race category.

Table 1.3: All Cancer Sites Combined. Invasive Cancer Incidence Rates by Age and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Age at Diagnosis (Years)	Age-Specific Rate‡ (CI)		
	All Races	White	Black
<1	26.2 (23.6- 28.9)	27.4 (24.4- 30.5)	17.9 (12.7- 24.6)
1-4	20.2 (19.1- 21.4)	21.2 (19.9- 22.5)	13.1 (10.7- 15.8)
5-9	12.0 (11.3- 12.8)	12.1 (11.3- 13.0)	11.0 (9.2- 13.1)
10-14	12.3 (11.6- 13.1)	12.9 (12.0- 13.8)	9.2 (7.5- 11.1)
15-19	20.7 (19.7- 21.7)	21.0 (19.9- 22.2)	18.4 (16.0- 21.1)
20-24	31.8 (30.5- 33.1)	33.7 (32.2- 35.3)	17.0 (14.5- 19.8)
25-29	48.0 (46.4- 49.6)	50.9 (49.0- 52.8)	28.9 (25.5- 32.6)
30-34	65.4 (63.6- 67.3)	67.2 (65.1- 69.2)	50.6 (46.1- 55.4)
35-39	87.3 (85.4- 89.3)	87.7 (85.5- 89.8)	79.5 (74.1- 85.3)
40-44	143.4 (140.9- 146.0)	140.2 (137.5- 143.0)	160.4 (152.4- 168.8)
45-49	271.5 (267.8- 275.3)	259.6 (255.7- 263.7)	369.0 (355.3- 383.1)
50-54	531.0 (525.3- 536.7)	507.2 (501.1- 513.2)	761.8 (739.0- 785.1)
55-59	975.0 (966.2- 983.9)	938.7 (929.4- 948.0)	1343.1 (1308.2-1378.8)
60-64	1583.8 (1571.3-1596.5)	1536.9 (1523.6-1550.2)	2031.1 (1982.9-2080.2)
65-69	2327.2 (2311.0-2343.4)	2294.5 (2277.3-2311.7)	2509.9 (2453.1-2567.8)
70-74	2864.5 (2845.6-2883.5)	2826.5 (2806.6-2846.4)	2967.5 (2896.7-3039.5)
75-79	3068.3 (3046.4-3090.3)	3016.1 (2993.4-3039.0)	3245.2 (3156.9-3335.4)
80-84	3152.7 (3124.1-3181.5)	3107.8 (3078.1-3137.7)	3188.1 (3067.3-3312.5)
85+	3065.5 (3031.3-3099.9)	3049.7 (3014.0-3085.8)	2866.0 (2735.7-3000.9)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. Rates cover approximately 78% of the U.S. population.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

Table 1.4: All Cancer Sites Combined. Invasive Cancer Incidence Rates by Age and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Age at Diagnosis (Years)	Age-Specific Rate‡ (CI) All Races	White	Black
<1	19.5 (17.3- 22.0)	19.6 (17.1- 22.3)	15.2 (10.3- 21.5)
1-4	17.9 (16.9- 19.1)	18.7 (17.4- 20.0)	13.6 (11.2- 16.4)
5-9	9.7 (9.0- 10.4)	9.8 (9.0- 10.6)	7.6 (6.1- 9.4)
10-14	12.4 (11.6- 13.2)	12.5 (11.6- 13.5)	11.0 (9.1- 13.1)
15-19	19.0 (18.0- 20.0)	19.6 (18.5- 20.8)	13.9 (11.8- 16.4)
20-24	34.6 (33.3- 36.1)	35.8 (34.2- 37.4)	25.1 (22.0- 28.5)
25-29	63.2 (61.3- 65.0)	65.7 (63.6- 67.9)	47.3 (43.1- 51.8)
30-34	102.4 (100.2- 104.7)	102.9 (100.4- 105.5)	93.5 (87.7- 99.6)
35-39	162.8 (160.2- 165.5)	163.3 (160.4- 166.3)	151.5 (144.4- 158.9)
40-44	265.7 (262.3- 269.1)	264.8 (261.0- 268.5)	252.8 (243.3- 262.6)
45-49	410.9 (406.4- 415.4)	412.0 (407.1- 417.1)	383.1 (370.3- 396.2)
50-54	605.9 (599.9- 611.8)	609.1 (602.6- 615.6)	566.9 (549.3- 585.0)
55-59	833.4 (825.6- 841.3)	846.2 (837.6- 854.8)	737.0 (714.2- 760.3)
60-64	1104.3 (1094.4-1114.3)	1121.2 (1110.4-1132.1)	1003.1 (973.9-1033.0)
65-69	1385.0 (1373.5-1396.5)	1413.5 (1401.0-1426.1)	1181.5 (1147.8-1215.9)
70-74	1677.2 (1664.3-1690.1)	1694.8 (1681.1-1708.6)	1527.9 (1485.3-1571.5)
75-79	1888.2 (1873.7-1902.9)	1897.3 (1881.9-1912.8)	1755.1 (1703.1-1808.2)
80-84	1998.5 (1980.7-2016.4)	2002.4 (1983.8-2021.2)	1823.5 (1756.3-1892.6)
85+	1873.1 (1855.7-1890.7)	1871.6 (1853.4-1890.0)	1762.1 (1695.6-1830.5)

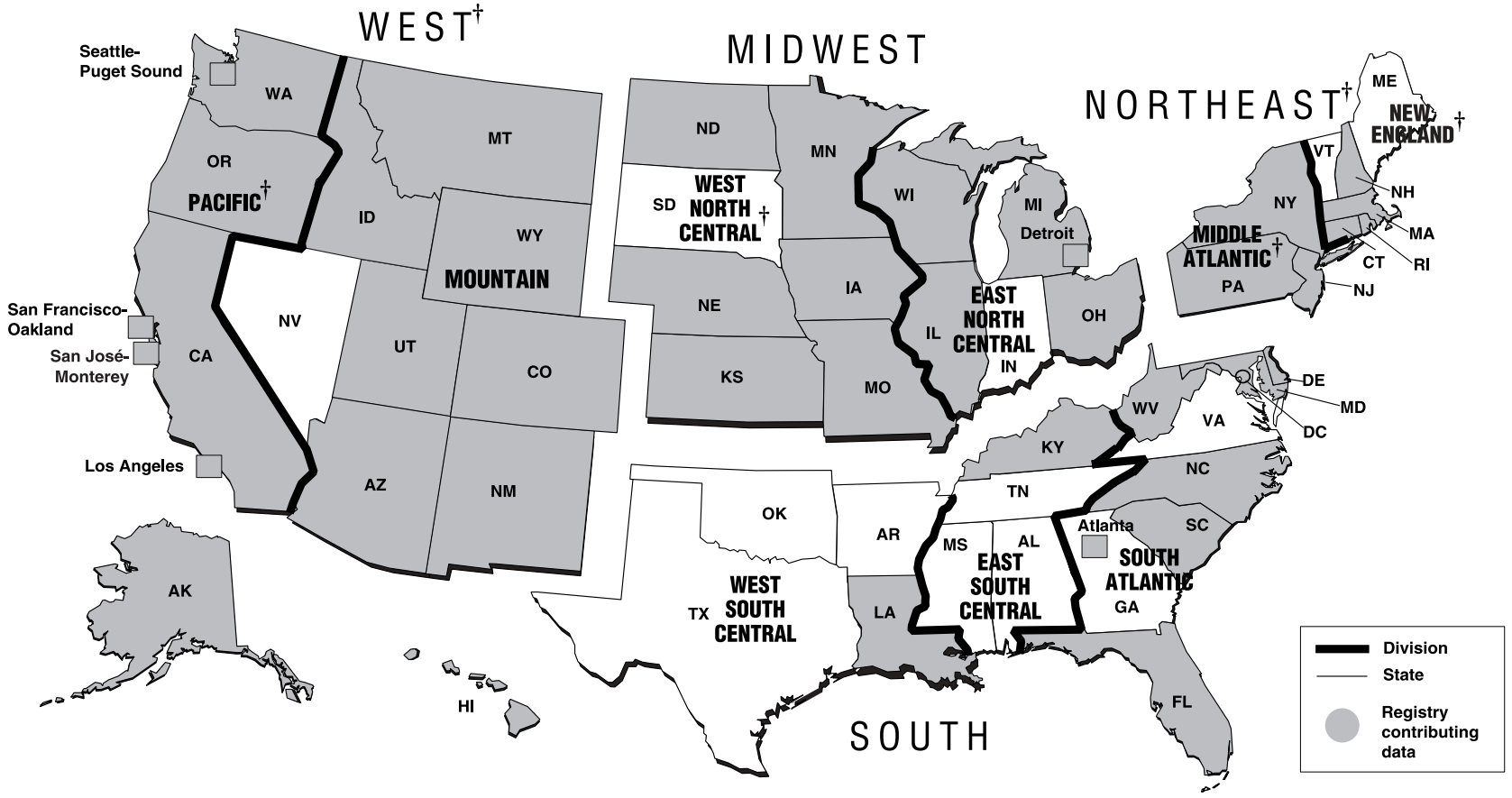
* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. Rates cover approximately 78% of the U.S. population.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

Cancer Incidence, by U.S. Census Region and Division, State, and Metropolitan Area

Figure 2: SEER and NPCR Registries That Contributed Data to *United States Cancer Statistics: 1999 Incidence,* by U.S. Census Region and Division



† U.S. Census regions and divisions that met criteria for display of region-specific rates in Table 2 series.

Note: Shaded areas represent statewide and metropolitan cancer registries that met the following data quality criteria: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. Rates cover approximately 78% of the U.S. population.

Table 2.1.1: All Cancer Sites Combined. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	552.3 (550.8- 553.9)	498.2 (496.9-499.6)	542.0 (540.4- 543.6)	519.5 (518.0-521.0)	617.4 (611.6- 623.3)	389.4 (385.9-393.0)
Northeast	573.0 (569.9- 576.1)	545.8 (542.9-548.8)	564.9 (561.6- 568.2)	574.3 (570.9-577.6)	595.6 (584.5- 607.0)	395.1 (388.0-402.3)
New England	586.4 (579.8- 593.0)	548.3 (542.2-554.5)	578.9 (572.3- 585.7)	568.7 (562.2-575.3)	615.9 (579.7- 654.4)	329.7 (311.5-348.7)
Connecticut	580.6 (568.6- 592.9)	558.8 (547.2-570.5)	570.1 (557.7- 582.7)	579.9 (567.4-592.7)	623.0 (568.0- 683.1)	362.7 (332.5-394.9)
Maine						
Massachusetts	588.6 (579.5- 597.7)	547.9 (539.5-556.4)	579.7 (570.5- 589.1)	570.5 (561.5-579.7)	613.6 (562.5- 669.5)	312.0 (287.8-337.7)
New Hampshire	534.1 (513.8- 555.0)	457.2 (440.1-474.7)	533.0 (512.7- 554.0)	461.4 (444.1-479.3)	~	~
Rhode Island	644.7 (621.7- 668.4)	628.8 (606.5-651.8)	650.0 (626.4- 674.4)	663.8 (639.9-688.4)	654.1 (506.6- 844.6)	305.8 (241.3-382.2)
Vermont						
Middle Atlantic	569.1 (565.6- 572.6)	545.1 (541.7-548.5)	560.4 (556.6- 564.2)	576.1 (572.3-580.0)	593.6 (581.9- 605.5)	404.4 (396.7-412.2)
New Jersey	606.9 (598.9- 615.0)	565.6 (558.2-573.1)	609.0 (600.4- 617.7)	615.9 (607.2-624.6)	669.4 (641.9- 698.2)	436.3 (419.3-453.8)
New York	537.9 (532.8- 543.0)	495.0 (490.4-499.7)	531.0 (525.5- 536.6)	530.2 (524.7-535.7)	517.6 (503.0- 532.5)	352.2 (342.8-361.8)
Pennsylvania	587.4 (581.3- 593.7)	607.2 (600.9-613.6)	567.7 (561.4- 574.1)	612.1 (605.4-618.9)	718.2 (691.5- 745.9)	514.4 (495.6-533.7)
Midwest						
East North Central						
Illinois	558.8 (552.2- 565.4)	479.8 (474.2-485.4)	539.8 (532.9- 546.8)	492.4 (486.1-498.7)	631.0 (609.3- 653.4)	395.2 (382.1-408.6)
Indiana						
Michigan	607.8 (600.3- 615.4)	534.3 (527.8-540.9)	588.2 (580.3- 596.1)	542.7 (535.5-549.9)	713.1 (688.2- 738.8)	484.1 (467.5-501.2)
Detroit	633.1 (621.1- 645.3)	560.5 (550.1-571.1)	607.5 (594.3- 621.0)	572.7 (560.5-585.2)	736.1 (707.1- 766.1)	541.5 (520.4-563.3)
Ohio	555.4 (548.8- 562.1)	509.8 (503.8-515.9)	531.8 (525.0- 538.7)	506.1 (499.7-512.5)	623.4 (599.1- 648.6)	432.5 (416.2-449.3)
Wisconsin	540.9 (531.5- 550.5)	493.3 (484.8-502.0)	532.7 (523.2- 542.4)	508.7 (499.7-517.9)	726.8 (653.8- 808.8)	316.7 (288.2-347.3)
West North Central	548.4 (543.3- 553.5)	506.0 (501.4-510.8)	536.2 (531.0- 541.4)	514.5 (509.6-519.5)	657.5 (627.1- 689.1)	375.3 (358.7-392.6)
Iowa	554.4 (542.0- 566.9)	552.0 (539.8-564.5)	545.1 (532.7- 557.6)	554.8 (542.3-567.5)	724.2 (584.6- 894.7)	356.3 (291.7-430.9)
Kansas	553.4 (540.0- 567.0)	499.9 (487.8-512.1)	534.1 (520.6- 547.8)	501.0 (488.4-513.8)	729.9 (649.2- 819.0)	406.7 (363.2-454.0)
Minnesota	561.5 (551.2- 571.9)	487.8 (478.9-496.8)	550.5 (540.2- 561.0)	499.6 (490.3-509.1)	609.3 (513.3- 725.4)	248.5 (214.4-286.5)
Missouri	533.4 (524.3- 542.7)	497.9 (489.4-506.5)	522.4 (513.0- 532.0)	510.3 (501.2-519.6)	647.8 (610.6- 687.1)	412.9 (389.8-437.0)
Nebraska	545.5 (529.0- 562.4)	509.0 (493.6-524.7)	525.3 (508.9- 542.2)	506.7 (490.9-522.9)	545.2 (438.7- 676.7)	304.4 (247.9-369.8)
North Dakota	534.1 (508.6- 560.6)	524.9 (499.9-550.8)	534.4 (508.7- 561.2)	549.3 (522.8-576.7)	~	~
South Dakota						
South						
South Atlantic						
Delaware	568.3 (542.7- 595.0)	523.3 (500.1-547.2)	550.8 (523.6- 579.4)	554.1 (527.1-582.0)	688.7 (608.7- 779.0)	420.9 (374.4-471.5)
District of Columbia	667.1 (634.0- 701.5)	636.9 (605.6-669.3)	453.9 (407.4- 506.0)	408.6 (367.8-452.8)	758.7 (714.5- 805.3)	759.5 (715.5-805.5)
Florida	587.5 (582.3- 592.7)	688.2 (682.3-694.3)	582.1 (576.7- 587.5)	753.3 (746.4-760.2)	627.3 (606.4- 648.9)	359.4 (348.3-370.7)
Georgia						
Atlanta	532.6 (515.7- 550.0)	334.7 (324.8-344.7)	479.0 (460.9- 497.7)	347.2 (334.8-359.9)	748.1 (701.3- 797.9)	316.9 (299.6-334.9)
Maryland	567.3 (557.0- 577.9)	475.2 (466.7-483.8)	542.2 (530.7- 553.8)	509.4 (498.8-520.1)	592.3 (567.6- 618.2)	364.7 (350.5-379.3)
North Carolina	499.5 (491.7- 507.4)	439.0 (432.3-445.8)	490.0 (481.5- 498.7)	468.8 (460.8-476.8)	551.5 (530.7- 573.1)	357.9 (344.8-371.4)
South Carolina	578.3 (566.4- 590.5)	508.2 (498.1-518.5)	557.5 (544.3- 571.0)	546.2 (533.6-559.0)	642.7 (615.4- 671.0)	414.7 (397.7-432.3)
Virginia						
West Virginia	579.5 (563.7- 595.7)	600.0 (583.8-616.5)	570.5 (554.6- 586.8)	595.8 (579.4-612.6)	630.8 (529.6- 746.3)	510.7 (429.0-603.4)
East South Central						
Alabama						
Kentucky	599.9 (588.1- 612.0)	531.0 (520.7-541.4)	575.2 (563.2- 587.3)	521.7 (511.1-532.4)	599.7 (548.9- 654.5)	393.2 (360.7-427.8)
Mississippi						
Tennessee						

continued

Table 2.1.1: All Cancer Sites Combined. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	579.6 (568.1- 591.3)	480.7 (471.3-490.1)	556.9 (544.0- 570.2)	520.4 (508.6-532.5)	670.7 (645.1- 697.1)	414.0 (398.6-429.8)
Oklahoma						
Texas						
West	509.4 (506.5- 512.3)	416.7 (414.4-419.0)	507.4 (504.4- 510.5)	432.7 (430.1-435.3)	557.6 (542.3- 573.3)	340.6 (331.7-349.7)
Mountain						
Arizona	458.9 (449.8- 468.1)	421.6 (413.3-429.9)	465.0 (455.6- 474.5)	453.0 (443.9-462.2)	457.9 (390.6- 536.5)	238.7 (207.7-273.0)
Colorado	503.1 (491.8- 514.7)	396.4 (387.7-405.1)	505.1 (493.4- 517.0)	407.1 (398.0-416.4)	424.6 (366.4- 492.3)	257.0 (225.0-292.4)
Idaho	503.6 (484.5- 523.3)	428.4 (412.3-444.9)	506.5 (487.2- 526.4)	436.8 (420.3-453.7)	~	~
Montana	507.2 (485.9- 529.2)	495.5 (474.9-516.7)	487.8 (466.6- 509.7)	497.9 (476.5-520.1)	~	~
Nevada						
New Mexico	466.6 (450.9- 482.7)	402.7 (389.3-416.3)	478.9 (462.4- 495.9)	442.2 (427.1-457.6)	345.6 (259.2- 457.9)	241.5 (182.9-312.8)
Utah	490.7 (474.3- 507.6)	330.9 (320.1-342.1)	496.6 (479.9- 513.8)	341.6 (330.3-353.2)	~	~
Wyoming	542.1 (510.5- 575.4)	475.7 (448.6-504.0)	543.8 (511.8- 577.4)	486.2 (458.2-515.5)	~	~
Pacific	519.1 (515.7- 522.4)	420.2 (417.5-422.9)	516.2 (512.6- 519.9)	435.4 (432.4-438.5)	577.4 (560.8- 594.4)	356.7 (346.9-366.7)
Alaska	526.8 (489.5- 567.5)	306.2 (287.5-325.9)	501.8 (461.8- 545.8)	318.8 (297.0-341.8)	771.0 (484.9-1252.5)	260.9 (179.6-366.4)
California	506.3 (502.4- 510.2)	399.0 (395.9-402.0)	500.4 (496.2- 504.7)	412.5 (409.1-416.0)	577.2 (559.8- 595.1)	365.6 (355.0-376.4)
San Francisco-Oakland	521.1 (510.3- 532.0)	457.2 (447.8-466.7)	516.2 (503.6- 529.0)	484.9 (473.1-496.8)	554.0 (518.6- 591.5)	409.7 (384.3-436.4)
San Jose-Monterey	490.6 (475.8- 505.8)	366.3 (355.4-377.4)	480.4 (464.3- 497.0)	379.9 (367.3-392.8)	551.1 (440.2- 693.6)	229.6 (189.0-276.2)
Los Angeles	497.1 (489.5- 504.7)	367.8 (362.2-373.3)	490.1 (481.6- 498.7)	369.1 (362.8-375.5)	597.5 (571.7- 624.4)	433.9 (415.7-452.7)
Hawaii	478.0 (460.2- 496.3)	463.6 (446.4-481.3)	635.8 (593.2- 680.8)	506.0 (472.7-541.1)	297.3 (178.6- 478.4)	115.6 (72.4-175.0)
Oregon	556.5 (544.8- 568.5)	525.2 (514.2-536.5)	551.5 (539.6- 563.7)	535.8 (524.3-547.5)	617.8 (499.3- 761.7)	338.5 (278.0-408.3)
Washington	574.9 (565.3- 584.6)	486.8 (478.8-495.0)	565.0 (555.1- 575.0)	500.7 (492.0-509.5)	592.8 (526.6- 667.5)	313.2 (280.4-348.7)
Seattle-Puget Sound	590.9 (579.0- 603.0)	491.2 (481.4-501.1)	596.6 (584.1- 609.3)	523.7 (512.9-534.7)	630.9 (557.2- 714.4)	330.4 (294.5-369.5)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.1.2: All Cancer Sites Combined. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	420.1 (418.9- 421.2)	457.9 (456.7-459.2)	423.8 (422.5- 425.1)	487.4 (486.0-488.9)	381.7 (378.0- 385.4)	313.2 (310.2-316.3)
Northeast	438.6 (436.2- 441.0)	509.3 (506.6-512.1)	442.3 (439.7- 444.9)	543.5 (540.4-546.7)	367.9 (361.0- 375.0)	320.8 (314.8-326.9)
New England	454.3 (449.2- 459.4)	518.4 (512.7-524.2)	453.4 (448.1- 458.7)	540.2 (534.0-546.4)	361.0 (338.7- 384.5)	259.6 (244.0-275.9)
Connecticut	458.0 (448.4- 467.7)	532.3 (521.3-543.4)	457.1 (447.1- 467.3)	558.5 (546.5-570.7)	388.6 (354.3- 425.6)	306.9 (280.5-335.1)
Maine						
Massachusetts	451.5 (444.5- 458.6)	516.0 (508.1-523.9)	449.6 (442.4- 456.9)	539.3 (530.9-547.9)	342.1 (311.2- 375.5)	230.7 (210.5-252.3)
New Hampshire	427.7 (411.5- 444.4)	437.1 (420.6-454.0)	424.7 (408.4- 441.4)	437.6 (420.9-454.7)	~	~
Rhode Island	487.0 (469.2- 505.4)	584.3 (563.6-605.6)	495.7 (477.3- 514.8)	617.1 (594.9-639.9)	400.1 (294.7- 540.5)	229.0 (174.3-295.3)
Vermont						
Middle Atlantic	434.1 (431.4- 436.8)	506.6 (503.5-509.7)	438.7 (435.7- 441.7)	544.7 (541.0-548.3)	368.7 (361.3- 376.1)	329.0 (322.5-335.6)
New Jersey	450.0 (444.0- 456.1)	513.3 (506.5-520.2)	463.3 (456.6- 470.0)	568.2 (560.1-576.4)	402.0 (384.8- 420.0)	335.0 (320.9-349.6)
New York	423.9 (419.9- 427.8)	479.0 (474.6-483.4)	431.5 (427.1- 436.0)	523.8 (518.5-529.1)	332.0 (322.9- 341.4)	297.8 (289.7-306.1)
Pennsylvania	438.5 (433.8- 443.3)	544.1 (538.3-549.9)	433.2 (428.2- 438.2)	557.7 (551.4-564.0)	436.5 (419.7- 453.9)	409.6 (393.9-425.9)
Midwest						
East North Central						
Illinois	426.2 (421.2- 431.2)	455.6 (450.3-460.9)	424.7 (419.3- 430.2)	480.4 (474.4-486.5)	415.5 (401.4- 430.0)	340.1 (328.7-351.9)
Indiana						
Michigan	432.6 (427.1- 438.3)	459.5 (453.6-465.4)	431.0 (425.1- 437.1)	480.0 (473.4-486.7)	432.1 (415.9- 448.8)	361.4 (347.9-375.2)
Detroit	436.1 (427.6- 444.7)	472.7 (463.5-482.1)	435.7 (426.0- 445.6)	509.3 (498.0-520.8)	439.7 (421.1- 458.9)	388.2 (371.8-405.0)
Ohio	422.8 (417.8- 427.9)	472.3 (466.7-477.9)	417.8 (412.5- 423.1)	483.3 (477.2-489.4)	390.1 (374.4- 406.4)	337.6 (324.1-351.7)
Wisconsin	405.3 (398.0- 412.8)	443.6 (435.6-451.6)	403.3 (395.8- 411.0)	460.1 (451.6-468.7)	449.9 (403.9- 500.6)	264.3 (239.2-291.4)
West North Central	413.6 (409.6- 417.6)	460.6 (456.3-465.0)	409.5 (405.4- 413.6)	471.9 (467.3-476.6)	409.5 (390.0- 429.9)	308.1 (293.5-323.2)
Iowa	417.6 (407.9- 427.5)	499.5 (488.1-511.0)	415.3 (405.5- 425.3)	506.1 (494.5-517.9)	428.3 (339.2- 535.3)	291.3 (231.7-361.6)
Kansas	416.4 (406.0- 427.1)	460.8 (449.4-472.4)	411.6 (400.9- 422.5)	470.2 (458.2-482.5)	381.1 (333.0- 434.6)	292.2 (255.6-332.5)
Minnesota	422.8 (414.7- 430.9)	443.0 (434.7-451.5)	416.4 (408.3- 424.7)	454.0 (445.2-462.9)	405.0 (337.0- 485.0)	203.9 (172.3-239.6)
Missouri	410.6 (403.5- 417.8)	461.2 (453.3-469.2)	408.2 (400.7- 415.8)	477.7 (469.1-486.4)	421.4 (397.1- 446.8)	346.7 (326.9-367.4)
Nebraska	406.0 (393.1- 419.2)	456.8 (442.6-471.4)	398.2 (385.2- 411.6)	460.4 (445.6-475.5)	321.3 (252.2- 405.7)	222.9 (176.2-278.2)
North Dakota	364.3 (344.5- 385.0)	418.9 (396.7-442.0)	365.2 (345.1- 386.3)	435.5 (412.1-459.9)	~	~
South Dakota						
South						
South Atlantic						
Delaware	457.5 (437.0- 478.7)	489.3 (467.5-511.9)	459.3 (436.9- 482.7)	534.4 (508.5-561.3)	443.9 (390.0- 503.9)	329.7 (290.7-372.4)
District of Columbia	422.0 (399.7- 445.4)	495.6 (469.7-522.5)	392.5 (353.5- 436.9)	416.7 (376.3-460.3)	422.5 (395.1- 451.9)	525.9 (492.4-561.1)
Florida	441.6 (437.4- 445.8)	577.3 (572.0-582.7)	449.1 (444.6- 453.7)	639.7 (633.5-645.9)	377.0 (364.0- 390.4)	277.0 (267.7-286.5)
Georgia						
Atlanta	405.1 (393.3- 417.3)	331.4 (321.9-341.2)	392.2 (378.7- 406.1)	369.0 (356.4-382.0)	452.1 (425.2- 480.6)	266.5 (251.6-282.0)
Maryland	415.2 (407.6- 423.0)	424.9 (417.1-432.9)	423.2 (414.2- 432.3)	482.4 (472.2-492.8)	382.7 (366.8- 399.2)	300.1 (288.0-312.6)
North Carolina	374.3 (368.5- 380.2)	403.5 (397.2-409.8)	383.1 (376.5- 389.8)	443.0 (435.5-450.7)	338.8 (325.9- 352.0)	294.5 (283.4-306.0)
South Carolina	377.8 (369.6- 386.2)	401.9 (393.2-410.8)	381.5 (371.9- 391.3)	444.6 (433.5-456.0)	358.7 (342.6- 375.4)	304.7 (291.1-318.8)
Virginia						
West Virginia	432.5 (420.4- 444.8)	535.9 (521.2-551.0)	429.2 (417.0- 441.7)	534.5 (519.5-549.8)	419.2 (351.1- 497.8)	470.0 (395.7-554.3)
East South Central						
Alabama						
Kentucky	430.4 (421.8- 439.2)	470.3 (461.0-479.8)	427.3 (418.4- 436.3)	476.1 (466.3-486.1)	422.0 (387.4- 459.0)	366.3 (336.4-398.1)
Mississippi						
Tennessee						

continued

Table 2.1.2: All Cancer Sites Combined. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	391.0 (382.9- 399.1)	398.5 (390.4-406.8)	396.4 (386.8- 406.1)	450.7 (439.9-461.6)	382.1 (366.6- 398.1)	309.9 (297.5-322.7)
Oklahoma						
Texas						
West	405.0 (402.7- 407.3)	400.2 (397.9-402.4)	414.4 (411.9- 417.0)	424.1 (421.5-426.7)	368.2 (357.5- 379.2)	284.8 (276.6-293.1)
Mountain						
Arizona	375.0 (367.5- 382.6)	396.0 (388.1-404.1)	385.4 (377.5- 393.5)	427.5 (418.7-436.3)	260.5 (218.8- 308.8)	173.2 (146.5-203.4)
Colorado	391.6 (383.0- 400.4)	382.2 (373.8-390.8)	394.2 (385.3- 403.4)	393.7 (384.7-402.7)	311.9 (268.2- 361.8)	230.4 (199.5-264.6)
Idaho	397.1 (381.5- 413.2)	393.8 (378.5-409.7)	400.3 (384.6- 416.7)	402.0 (386.2-418.3)	~	~
Montana	385.4 (368.3- 403.3)	434.2 (415.1-454.1)	379.3 (361.9- 397.5)	444.1 (423.9-464.9)	~	~
Nevada						
New Mexico	361.4 (349.0- 374.3)	359.2 (346.8-371.9)	377.5 (364.2- 391.3)	395.9 (381.9-410.3)	157.8 (102.9- 233.7)	120.8 (79.6-175.7)
Utah	349.6 (337.1- 362.4)	278.2 (268.3-288.3)	354.2 (341.4- 367.4)	286.4 (276.2-297.0)	~	~
Wyoming	387.8 (363.6- 413.5)	401.7 (376.7-428.0)	387.9 (363.4- 414.0)	408.7 (382.9-435.8)	~	~
Pacific	414.8 (412.1- 417.6)	409.3 (406.7-412.0)	426.9 (423.9- 430.0)	436.6 (433.5-439.7)	381.7 (370.1- 393.6)	299.7 (290.7-308.9)
Alaska	437.5 (407.3- 469.9)	308.1 (288.4-328.8)	428.4 (394.3- 465.3)	316.3 (293.1-340.8)	255.0 (134.8- 498.2)	149.5 (87.1-239.3)
California	405.3 (402.2- 408.4)	392.9 (389.9-395.9)	418.8 (415.3- 422.3)	421.7 (418.2-425.2)	382.5 (370.4- 394.9)	307.8 (298.1-317.7)
San Francisco-Oakland	414.1 (405.6- 422.7)	447.3 (438.2-456.6)	444.7 (434.1- 455.4)	513.2 (501.2-525.5)	366.1 (341.0- 392.5)	322.8 (301.0-345.9)
San Jose-Monterey	398.3 (386.5- 410.3)	378.2 (367.0-389.6)	408.8 (395.5- 422.4)	408.0 (394.8-421.5)	302.1 (229.6- 393.4)	171.3 (133.6-216.5)
Los Angeles	385.9 (380.1- 391.8)	362.0 (356.6-367.5)	403.5 (396.6- 410.4)	384.2 (377.8-390.8)	376.7 (359.6- 394.3)	336.6 (321.4-352.3)
Hawaii	392.1 (376.9- 407.7)	430.9 (414.3-448.0)	444.0 (410.8- 479.5)	443.1 (410.3-477.9)	252.0 (147.1- 411.1)	148.2 (92.9-224.4)
Oregon	442.9 (433.3- 452.6)	493.5 (482.9-504.3)	445.3 (435.6- 455.3)	509.3 (498.2-520.6)	398.3 (314.7- 498.0)	268.3 (212.8-333.9)
Washington	455.2 (447.5- 463.0)	460.6 (452.8-468.5)	455.1 (447.0- 463.3)	478.6 (470.2-487.2)	383.2 (334.0- 438.7)	245.9 (215.6-279.2)
Seattle-Puget Sound	466.0 (456.6- 475.6)	469.3 (459.8-478.9)	476.7 (466.6- 486.9)	502.7 (492.1-513.5)	390.8 (337.4- 451.5)	244.8 (212.8-280.1)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.2.1: Cancer of the Oral Cavity and Pharynx. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	15.8 (15.5- 16.0)	14.6 (14.4- 14.8)	15.2 (15.0- 15.5)	14.9 (14.6- 15.1)	19.2 (18.3- 20.2)	13.6 (12.9- 14.2)
Northeast	15.4 (14.9- 15.9)	14.9 (14.4- 15.4)	14.7 (14.1- 15.2)	15.0 (14.4- 15.5)	17.6 (15.9- 19.6)	12.8 (11.6- 14.2)
New England	16.0 (15.0- 17.2)	15.2 (14.2- 16.2)	15.6 (14.6- 16.8)	15.5 (14.4- 16.6)	20.8 (15.0- 29.0)	12.3 (9.0- 16.4)
Connecticut	16.0 (14.1- 18.1)	15.5 (13.6- 17.6)	15.4 (13.4- 17.6)	15.7 (13.7- 17.9)	23.0 (14.5- 37.0)	15.7 (10.0- 23.6)
Maine						
Massachusetts	16.2 (14.7- 17.8)	15.3 (13.9- 16.8)	15.8 (14.3- 17.4)	15.7 (14.2- 17.3)	19.8 (11.7- 33.7)	10.2 (6.2- 15.7)
New Hampshire	15.2 (12.0- 19.2)	13.5 (10.7- 16.8)	15.1 (11.9- 19.1)	13.5 (10.7- 16.9)	~	~
Rhode Island	16.1 (12.6- 20.2)	15.5 (12.2- 19.5)	16.1 (12.6- 20.5)	16.2 (12.7- 20.5)	~	~
Vermont						
Middle Atlantic	15.2 (14.6- 15.7)	14.8 (14.2- 15.4)	14.3 (13.7- 14.9)	14.8 (14.2- 15.4)	17.3 (15.5- 19.4)	12.9 (11.6- 14.4)
New Jersey	14.3 (13.1- 15.6)	13.7 (12.6- 14.9)	14.0 (12.8- 15.4)	14.3 (13.0- 15.7)	15.9 (12.3- 20.7)	12.1 (9.4- 15.4)
New York	15.3 (14.4- 16.2)	14.5 (13.7- 15.3)	14.4 (13.5- 15.3)	14.5 (13.6- 15.5)	15.2 (12.9- 17.8)	11.6 (9.9- 13.4)
Pennsylvania	15.5 (14.6- 16.6)	16.0 (14.9- 17.0)	14.5 (13.5- 15.6)	15.4 (14.4- 16.5)	23.9 (19.3- 29.5)	17.3 (14.0- 21.2)
Midwest						
East North Central						
Illinois	16.0 (15.0- 17.1)	14.4 (13.5- 15.4)	15.2 (14.1- 16.4)	14.3 (13.3- 15.4)	21.5 (18.0- 25.8)	15.6 (13.1- 18.4)
Indiana						
Michigan	15.4 (14.2- 16.6)	14.1 (13.1- 15.2)	14.7 (13.5- 16.0)	14.0 (12.9- 15.2)	21.0 (17.1- 25.6)	15.7 (12.8- 19.1)
Detroit	16.3 (14.5- 18.4)	15.1 (13.4- 16.9)	14.3 (12.3- 16.5)	13.8 (12.0- 15.9)	25.1 (20.1- 31.1)	19.6 (15.8- 24.1)
Ohio	13.0 (12.0- 14.1)	12.2 (11.3- 13.2)	12.5 (11.5- 13.5)	12.1 (11.2- 13.2)	15.5 (12.0- 19.9)	11.3 (8.8- 14.2)
Wisconsin	17.2 (15.6- 19.0)	16.3 (14.7- 17.9)	16.5 (14.9- 18.2)	16.2 (14.6- 17.9)	43.4 (26.2- 71.6)	18.2 (11.9- 26.7)
West North Central	16.2 (15.3- 17.1)	15.2 (14.4- 16.0)	15.7 (14.9- 16.6)	15.3 (14.4- 16.2)	18.0 (13.6- 23.7)	11.8 (9.0- 15.2)
Iowa	16.7 (14.6- 19.0)	16.7 (14.6- 18.9)	16.6 (14.5- 18.9)	16.9 (14.7- 19.2)	~	~
Kansas	16.4 (14.2- 18.9)	15.0 (13.0- 17.3)	15.5 (13.3- 18.0)	14.7 (12.6- 17.0)	~	~
Minnesota	16.9 (15.2- 18.7)	15.1 (13.5- 16.7)	16.6 (14.9- 18.5)	15.5 (13.9- 17.2)	~	~
Missouri	15.4 (13.9- 17.1)	14.8 (13.4- 16.3)	14.9 (13.3- 16.6)	14.8 (13.3- 16.5)	18.3 (12.9- 25.9)	13.2 (9.3- 18.1)
Nebraska	15.1 (12.4- 18.1)	14.2 (11.8- 17.1)	14.4 (11.8- 17.4)	14.0 (11.5- 16.9)	~	~
North Dakota	16.4 (12.2- 21.7)	15.9 (11.8- 20.9)	16.2 (11.9- 21.5)	16.3 (12.0- 21.6)	~	~
South Dakota						
South						
South Atlantic						
Delaware	17.5 (13.3- 22.8)	16.6 (12.7- 21.4)	16.1 (11.8- 21.8)	16.4 (12.0- 21.8)	~	~
District of Columbia	24.5 (18.7- 31.9)	24.6 (18.8- 31.7)	~	~	29.1 (21.1- 39.6)	29.4 (21.3- 39.6)
Florida	20.0 (19.1- 21.0)	22.3 (21.2- 23.4)	19.7 (18.7- 20.8)	23.9 (22.7- 25.2)	20.3 (16.9- 24.4)	12.7 (10.7- 15.0)
Georgia						
Atlanta	13.4 (11.1- 16.3)	10.2 (8.5- 12.1)	11.4 (9.0- 14.6)	9.7 (7.7- 12.0)	20.3 (14.1- 29.8)	11.8 (8.7- 15.7)
Maryland	16.4 (14.8- 18.2)	14.8 (13.3- 16.4)	15.7 (13.8- 17.7)	15.4 (13.6- 17.4)	18.0 (14.3- 22.7)	13.3 (10.7- 16.3)
North Carolina	16.0 (14.6- 17.5)	14.5 (13.3- 15.7)	14.5 (13.1- 16.1)	14.1 (12.7- 15.5)	22.7 (19.0- 27.2)	16.9 (14.1- 20.0)
South Carolina	19.9 (17.9- 22.3)	18.6 (16.7- 20.6)	18.6 (16.4- 21.2)	19.2 (16.9- 21.7)	23.7 (19.0- 29.6)	17.1 (13.8- 20.9)
Virginia						
West Virginia	16.3 (13.8- 19.2)	17.8 (15.1- 20.8)	15.5 (13.1- 18.4)	17.2 (14.5- 20.2)	~	~
East South Central						
Alabama						
Kentucky	15.4 (13.6- 17.3)	14.5 (12.8- 16.3)	14.5 (12.7- 16.5)	13.9 (12.2- 15.8)	19.7 (12.0- 31.7)	14.6 (8.9- 22.5)
Mississippi						
Tennessee						

continued

Table 2.2.1: Cancer of the Oral Cavity and Pharynx. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	20.2 (18.2- 22.4)	17.8 (16.1- 19.7)	19.1 (16.8- 21.7)	18.6 (16.4- 21.0)	24.3 (19.9- 29.5)	17.0 (14.0- 20.4)
Oklahoma						
Texas						
West	14.4 (13.9- 14.9)	12.2 (11.8- 12.6)	14.6 (14.0- 15.1)	12.8 (12.3- 13.2)	13.6 (11.3- 16.2)	8.9 (7.5- 10.5)
Mountain						
Arizona	12.1 (10.7- 13.7)	11.2 (9.9- 12.7)	12.3 (10.9- 14.0)	12.0 (10.6- 13.6)	~	~
Colorado	11.2 (9.6- 13.1)	9.4 (8.1- 10.8)	11.4 (9.7- 13.3)	9.8 (8.4- 11.3)	~	~
Idaho	14.5 (11.5- 18.1)	13.0 (10.3- 16.1)	14.5 (11.5- 18.2)	13.2 (10.5- 16.4)	~	~
Montana	12.4 (9.4- 16.3)	13.0 (9.8- 16.8)	12.4 (9.3- 16.3)	13.5 (10.2- 17.6)	~	~
Nevada						
New Mexico	14.0 (11.4- 17.0)	12.5 (10.2- 15.1)	14.7 (12.0- 17.9)	13.9 (11.4- 16.9)	~	~
Utah	10.5 (8.3- 13.3)	7.4 (5.8- 9.2)	10.7 (8.4- 13.6)	7.6 (6.0- 9.5)	~	~
Wyoming	13.9 (9.2- 20.4)	12.4 (8.4- 17.8)	13.3 (8.7- 19.8)	12.1 (8.0- 17.5)	~	~
Pacific	15.2 (14.6- 15.8)	12.8 (12.3- 13.3)	15.5 (14.8- 16.1)	13.4 (12.9- 14.0)	14.6 (12.2- 17.6)	9.7 (8.1- 11.4)
Alaska	17.4 (11.6- 27.1)	12.6 (9.0- 17.1)	12.5 (7.2- 23.1)	10.5 (6.8- 15.4)	~	~
California	15.3 (14.6- 16.0)	12.5 (12.0- 13.1)	15.6 (14.8- 16.3)	13.1 (12.5- 13.7)	15.4 (12.8- 18.6)	10.5 (8.8- 12.5)
San Francisco-Oakland	16.3 (14.5- 18.3)	14.9 (13.2- 16.7)	16.4 (14.3- 18.9)	15.8 (13.8- 18.1)	14.2 (9.1- 21.8)	10.6 (6.9- 15.7)
San Jose-Monterey	14.0 (11.7- 16.8)	11.2 (9.3- 13.2)	13.6 (11.0- 16.6)	11.1 (9.1- 13.5)	~	~
Los Angeles	13.9 (12.7- 15.2)	10.7 (9.8- 11.7)	14.1 (12.7- 15.6)	10.8 (9.7- 11.9)	16.4 (12.6- 21.3)	13.2 (10.2- 16.8)
Hawaii	13.7 (10.9- 17.2)	13.6 (10.7- 16.9)	16.8 (10.7- 25.4)	14.8 (9.6- 21.8)	~	~
Oregon	16.4 (14.5- 18.6)	16.0 (14.1- 18.1)	16.7 (14.7- 18.9)	16.7 (14.7- 18.9)	~	~
Washington	14.1 (12.7- 15.7)	12.5 (11.2- 13.9)	14.3 (12.8- 15.9)	13.2 (11.9- 14.7)	~	~
Seattle-Puget Sound	14.5 (12.7- 16.4)	12.8 (11.3- 14.5)	15.2 (13.3- 17.3)	14.1 (12.4- 16.1)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.2.2: Cancer of the Oral Cavity and Pharynx. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	6.3 (6.2- 6.5)	6.9 (6.7- 7.0)	6.2 (6.0- 6.3)	7.1 (7.0- 7.3)	6.3 (5.8- 6.8)	5.3 (4.9- 5.7)
Northeast	6.3 (6.0- 6.6)	7.3 (7.0- 7.7)	6.1 (5.8- 6.4)	7.6 (7.2- 7.9)	6.2 (5.3- 7.2)	5.5 (4.7- 6.3)
New England	7.1 (6.5- 7.8)	8.1 (7.4- 8.9)	7.1 (6.4- 7.8)	8.3 (7.6- 9.1)	~	~
Connecticut	6.6 (5.5- 7.9)	7.9 (6.6- 9.3)	6.6 (5.5- 8.0)	8.2 (6.8- 9.8)	~	~
Maine						
Massachusetts	7.4 (6.6- 8.4)	8.4 (7.4- 9.5)	7.3 (6.4- 8.3)	8.7 (7.6- 9.8)	~	~
New Hampshire	6.8 (4.9- 9.3)	6.7 (4.8- 9.1)	6.9 (4.9- 9.4)	6.9 (4.9- 9.3)	~	~
Rhode Island	7.3 (5.3- 10.0)	8.7 (6.4- 11.7)	7.1 (5.1- 10.0)	8.7 (6.2- 11.8)	~	~
Vermont						
Middle Atlantic	6.1 (5.7- 6.4)	7.1 (6.7- 7.5)	5.8 (5.5- 6.2)	7.3 (6.9- 7.7)	6.3 (5.4- 7.3)	5.7 (4.9- 6.6)
New Jersey	7.1 (6.3- 7.9)	8.1 (7.2- 9.0)	6.9 (6.1- 7.8)	8.6 (7.6- 9.6)	7.7 (5.6- 10.5)	6.8 (5.0- 9.2)
New York	5.7 (5.3- 6.2)	6.4 (5.9- 7.0)	5.5 (5.0- 6.0)	6.7 (6.1- 7.3)	5.4 (4.3- 6.7)	4.8 (3.8- 6.0)
Pennsylvania	5.9 (5.4- 6.5)	7.5 (6.8- 8.2)	5.5 (5.0- 6.1)	7.3 (6.6- 8.1)	7.4 (5.3- 10.0)	6.9 (5.0- 9.3)
Midwest						
East North Central						
Illinois	6.5 (5.9- 7.1)	6.8 (6.2- 7.5)	6.3 (5.7- 7.1)	7.0 (6.3- 7.8)	6.8 (5.1- 8.8)	5.8 (4.4- 7.5)
Indiana						
Michigan	6.6 (5.9- 7.3)	7.0 (6.3- 7.8)	6.5 (5.8- 7.3)	7.2 (6.5- 8.1)	6.2 (4.4- 8.5)	5.2 (3.7- 7.1)
Detroit	6.8 (5.7- 7.9)	7.3 (6.2- 8.5)	6.7 (5.5- 8.0)	7.9 (6.5- 9.4)	6.1 (4.1- 8.8)	5.5 (3.7- 7.8)
Ohio	5.9 (5.3- 6.5)	6.6 (6.0- 7.3)	5.8 (5.2- 6.4)	6.7 (6.0- 7.4)	6.1 (4.3- 8.5)	5.4 (3.8- 7.4)
Wisconsin	6.2 (5.3- 7.2)	6.7 (5.8- 7.8)	6.2 (5.3- 7.2)	7.0 (6.0- 8.1)	~	~
West North Central	5.6 (5.1- 6.1)	6.3 (5.8- 6.8)	5.5 (5.0- 6.0)	6.4 (5.9- 7.0)	5.4 (3.4- 8.2)	4.2 (2.7- 6.3)
Iowa	5.0 (4.0- 6.2)	6.1 (4.9- 7.5)	5.0 (4.0- 6.2)	6.2 (5.0- 7.6)	~	~
Kansas	5.4 (4.3- 6.7)	6.3 (5.0- 7.8)	5.3 (4.2- 6.7)	6.5 (5.1- 8.1)	~	~
Minnesota	6.1 (5.2- 7.2)	6.4 (5.4- 7.4)	5.8 (4.9- 6.9)	6.3 (5.3- 7.4)	~	~
Missouri	5.5 (4.7- 6.4)	6.1 (5.2- 7.1)	5.4 (4.6- 6.4)	6.3 (5.4- 7.4)	~	~
Nebraska	6.3 (4.8- 8.2)	7.3 (5.6- 9.3)	6.2 (4.7- 8.1)	7.3 (5.5- 9.4)	~	~
North Dakota	4.9 (2.9- 8.0)	6.0 (3.6- 9.3)	4.8 (2.8- 7.9)	6.0 (3.6- 9.5)	~	~
South Dakota						
South						
South Atlantic						
Delaware	5.8 (3.7- 8.8)	5.9 (3.8- 8.9)	6.5 (4.0- 10.1)	7.0 (4.3- 10.7)	~	~
District of Columbia	6.4 (3.9- 10.2)	7.6 (4.7- 11.6)	~	~	~	~
Florida	7.9 (7.4- 8.5)	10.3 (9.6- 11.0)	8.0 (7.4- 8.6)	11.3 (10.5- 12.2)	6.0 (4.5- 7.9)	4.8 (3.6- 6.2)
Georgia						
Atlanta	6.2 (4.8- 7.9)	4.9 (3.8- 6.2)	6.4 (4.7- 8.4)	5.7 (4.2- 7.5)	5.0 (2.7- 9.0)	3.5 (2.0- 5.8)
Maryland	6.2 (5.3- 7.2)	6.3 (5.4- 7.3)	5.7 (4.7- 6.9)	6.5 (5.4- 7.9)	6.8 (4.8- 9.3)	5.3 (3.8- 7.2)
North Carolina	5.9 (5.2- 6.7)	6.4 (5.6- 7.2)	5.8 (5.0- 6.7)	6.8 (5.9- 7.8)	6.3 (4.6- 8.3)	5.5 (4.0- 7.2)
South Carolina	6.8 (5.7- 8.0)	7.2 (6.1- 8.5)	6.5 (5.3- 7.9)	7.7 (6.3- 9.3)	7.2 (5.1- 9.9)	6.3 (4.5- 8.6)
Virginia						
West Virginia	5.8 (4.5- 7.4)	7.4 (5.7- 9.3)	5.9 (4.6- 7.6)	7.6 (5.9- 9.6)	~	~
East South Central						
Alabama						
Kentucky	6.1 (5.1- 7.2)	6.6 (5.6- 7.8)	6.1 (5.1- 7.3)	6.7 (5.6- 8.0)	~	~
Mississippi						
Tennessee						

continued

Table 2.2.2: Cancer of the Oral Cavity and Pharynx. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	7.2 (6.2- 8.4)	7.4 (6.3- 8.6)	7.1 (5.9- 8.5)	8.1 (6.7- 9.7)	7.6 (5.6- 10.2)	6.4 (4.7- 8.4)
Oklahoma						
Texas						
West	6.1 (5.8- 6.4)	6.0 (5.8- 6.3)	6.0 (5.7- 6.3)	6.1 (5.8- 6.4)	6.1 (4.8- 7.7)	4.9 (3.9- 6.2)
Mountain						
Arizona	5.7 (4.8- 6.8)	6.1 (5.1- 7.1)	5.9 (5.0- 7.0)	6.5 (5.5- 7.7)	~	~
Colorado	4.5 (3.6- 5.5)	4.4 (3.5- 5.4)	4.3 (3.4- 5.4)	4.3 (3.4- 5.3)	~	~
Idaho	5.2 (3.6- 7.3)	5.3 (3.6- 7.4)	5.3 (3.6- 7.5)	5.4 (3.7- 7.6)	~	~
Montana	6.1 (4.2- 8.8)	7.2 (4.9- 10.2)	6.0 (4.0- 8.8)	7.3 (4.9- 10.4)	~	~
Nevada						
New Mexico	4.4 (3.1- 6.0)	4.4 (3.1- 6.0)	4.7 (3.3- 6.5)	5.0 (3.5- 6.8)	~	~
Utah	4.8 (3.4- 6.5)	3.8 (2.7- 5.2)	4.8 (3.4- 6.6)	3.9 (2.8- 5.3)	~	~
Wyoming	6.4 (3.7- 10.7)	6.7 (3.8- 10.9)	~	~	~	~
Pacific	6.4 (6.1- 6.8)	6.3 (6.0- 6.7)	6.3 (5.9- 6.6)	6.4 (6.1- 6.8)	6.1 (4.7- 7.7)	5.0 (3.9- 6.3)
Alaska	~	~	~	~	~	~
California	6.3 (5.9- 6.7)	6.1 (5.7- 6.5)	6.2 (5.8- 6.6)	6.3 (5.8- 6.7)	6.2 (4.8- 8.0)	5.3 (4.1- 6.7)
San Francisco-Oakland	7.0 (5.9- 8.2)	7.6 (6.4- 8.9)	6.5 (5.3- 8.0)	7.5 (6.1- 9.1)	~	~
San Jose-Monterey	5.0 (3.8- 6.6)	4.8 (3.6- 6.2)	4.6 (3.3- 6.3)	4.7 (3.4- 6.4)	~	~
Los Angeles	5.9 (5.2- 6.6)	5.5 (4.9- 6.2)	5.7 (5.0- 6.6)	5.5 (4.8- 6.3)	6.4 (4.4- 9.1)	6.0 (4.1- 8.4)
Hawaii	8.8 (6.6- 11.4)	9.7 (7.3- 12.5)	12.7 (7.6- 20.2)	12.5 (7.5- 19.5)	~	~
Oregon	6.5 (5.4- 7.8)	7.4 (6.2- 8.8)	6.4 (5.3- 7.7)	7.5 (6.2- 9.0)	~	~
Washington	6.5 (5.6- 7.5)	6.6 (5.7- 7.6)	6.3 (5.3- 7.3)	6.6 (5.6- 7.7)	~	~
Seattle-Puget Sound	6.5 (5.4- 7.7)	6.6 (5.5- 7.8)	6.4 (5.3- 7.7)	6.8 (5.6- 8.2)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.3.1: Cancer of the Esophagus. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	8.8 (8.6- 8.9)	7.9 (7.8- 8.1)	8.4 (8.2- 8.6)	8.1 (7.9- 8.3)	13.0 (12.2- 13.9)	8.3 (7.8- 8.8)
Northeast	9.2 (8.8- 9.6)	8.8 (8.4- 9.1)	8.8 (8.4- 9.2)	9.0 (8.6- 9.4)	13.2 (11.6- 15.1)	8.7 (7.6- 9.8)
New England	10.1 (9.3- 11.0)	9.5 (8.7- 10.3)	10.0 (9.1- 10.9)	9.8 (9.0- 10.8)	15.9 (10.4- 24.2)	7.8 (5.2- 11.2)
Connecticut	9.3 (7.8- 11.0)	9.0 (7.6- 10.6)	9.1 (7.6- 10.8)	9.3 (7.8- 11.1)	~	~
Maine						
Massachusetts	10.8 (9.6- 12.2)	10.1 (9.0- 11.3)	10.7 (9.5- 12.1)	10.5 (9.3- 11.8)	~	~
New Hampshire	9.4 (6.9- 12.7)	8.1 (6.0- 10.8)	9.4 (6.8- 12.6)	8.1 (6.0- 10.8)	~	~
Rhode Island	9.2 (6.7- 12.5)	9.2 (6.7- 12.4)	9.2 (6.6- 12.5)	9.6 (6.9- 13.0)	~	~
Vermont						
Middle Atlantic	8.9 (8.5- 9.3)	8.5 (8.1- 9.0)	8.5 (8.0- 8.9)	8.7 (8.2- 9.2)	13.0 (11.3- 14.9)	8.8 (7.7- 10.0)
New Jersey	8.6 (7.6- 9.6)	8.0 (7.2- 9.0)	8.5 (7.5- 9.5)	8.6 (7.6- 9.7)	12.2 (8.6- 17.0)	7.7 (5.6- 10.4)
New York	8.5 (7.9- 9.2)	7.9 (7.3- 8.5)	8.0 (7.3- 8.7)	8.0 (7.3- 8.7)	12.5 (10.3- 15.0)	8.6 (7.2- 10.2)
Pennsylvania	9.6 (8.8- 10.4)	9.8 (9.0- 10.7)	9.0 (8.3- 9.9)	9.7 (8.9- 10.6)	14.9 (11.2- 19.6)	10.4 (7.9- 13.5)
Midwest						
East North Central						
Illinois	10.1 (9.2- 11.0)	8.7 (8.0- 9.5)	9.4 (8.5- 10.3)	8.6 (7.8- 9.5)	16.2 (12.9- 20.2)	10.2 (8.2- 12.5)
Indiana						
Michigan	10.3 (9.3- 11.3)	9.1 (8.3- 10.0)	10.2 (9.2- 11.3)	9.5 (8.6- 10.5)	11.8 (8.8- 15.6)	8.2 (6.1- 10.7)
Detroit	8.7 (7.3- 10.2)	7.8 (6.6- 9.2)	8.5 (7.0- 10.2)	8.1 (6.7- 9.7)	10.3 (7.2- 14.5)	7.9 (5.5- 10.9)
Ohio	10.2 (9.3- 11.1)	9.4 (8.6- 10.3)	9.9 (9.0- 10.9)	9.6 (8.8- 10.6)	12.2 (8.9- 16.6)	7.8 (5.8- 10.4)
Wisconsin	9.5 (8.3- 10.9)	8.7 (7.6- 9.9)	9.2 (8.0- 10.5)	8.8 (7.6- 10.0)	~	~
West North Central	8.1 (7.5- 8.7)	7.5 (6.9- 8.1)	8.0 (7.3- 8.6)	7.7 (7.1- 8.3)	11.5 (7.9- 16.5)	6.9 (4.8- 9.6)
Iowa	8.6 (7.1- 10.3)	8.6 (7.1- 10.3)	8.3 (6.8- 10.0)	8.5 (7.0- 10.2)	~	~
Kansas	6.9 (5.5- 8.6)	6.4 (5.1- 7.9)	6.4 (5.0- 8.0)	6.0 (4.7- 7.6)	~	~
Minnesota	8.8 (7.6- 10.3)	7.7 (6.6- 8.9)	8.9 (7.7- 10.4)	8.1 (7.0- 9.4)	~	~
Missouri	7.9 (6.8- 9.1)	7.4 (6.4- 8.5)	7.8 (6.7- 9.1)	7.6 (6.5- 8.8)	8.9 (5.1- 14.9)	5.9 (3.4- 9.4)
Nebraska	8.3 (6.4- 10.7)	7.9 (6.0- 10.0)	8.3 (6.4- 10.7)	8.1 (6.2- 10.4)	~	~
North Dakota	6.2 (3.7- 9.7)	6.0 (3.6- 9.4)	6.3 (3.8- 10.0)	6.4 (3.9- 10.1)	~	~
South Dakota						
South						
South Atlantic						
Delaware	7.9 (5.3- 11.9)	7.6 (5.1- 11.0)	7.9 (5.0- 12.2)	8.4 (5.4- 12.5)	~	~
District of Columbia	13.8 (9.5- 19.6)	13.5 (9.3- 19.0)	~	~	20.7 (14.0- 29.8)	21.2 (14.4- 30.1)
Florida	9.9 (9.2- 10.6)	11.4 (10.7- 12.2)	9.5 (8.8- 10.2)	12.2 (11.3- 13.1)	13.3 (10.5- 16.9)	7.8 (6.2- 9.6)
Georgia						
Atlanta	8.0 (6.1- 10.6)	5.0 (3.9- 6.4)	5.9 (4.0- 8.5)	4.2 (3.0- 5.8)	16.8 (10.3- 26.9)	6.8 (4.5- 9.9)
Maryland	10.3 (9.0- 11.8)	8.7 (7.6- 9.9)	9.6 (8.2- 11.3)	9.1 (7.7- 10.6)	13.2 (9.9- 17.7)	8.5 (6.4- 11.0)
North Carolina	7.3 (6.4- 8.3)	6.4 (5.6- 7.3)	6.5 (5.5- 7.6)	6.2 (5.3- 7.2)	11.6 (8.8- 15.3)	7.6 (5.8- 9.8)
South Carolina	11.5 (9.9- 13.3)	10.5 (9.0- 12.0)	8.6 (7.0- 10.5)	8.4 (6.9- 10.2)	22.1 (17.6- 27.8)	15.8 (12.6- 19.5)
Virginia						
West Virginia	7.8 (6.1- 10.0)	8.0 (6.3- 10.1)	7.6 (5.9- 9.8)	7.9 (6.1- 10.0)	~	~
East South Central						
Alabama						
Kentucky	7.8 (6.5- 9.3)	7.0 (5.9- 8.3)	7.5 (6.2- 9.1)	6.9 (5.7- 8.2)	~	~
Mississippi						
Tennessee						

continued

Table 2.3.1: Cancer of the Esophagus. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	9.7 (8.2- 11.3)	8.0 (6.9- 9.3)	8.3 (6.8- 10.1)	7.8 (6.4- 9.4)	14.3 (10.8- 18.8)	9.0 (6.8- 11.5)
Oklahoma						
Texas						
West	7.3 (6.9- 7.6)	5.9 (5.6- 6.2)	7.4 (7.1- 7.8)	6.3 (6.0- 6.6)	7.6 (5.9- 9.8)	4.4 (3.5- 5.6)
Mountain						
Arizona	6.9 (5.8- 8.1)	6.3 (5.3- 7.4)	7.0 (5.9- 8.3)	6.8 (5.7- 8.0)	~	~
Colorado	6.9 (5.6- 8.5)	5.0 (4.0- 6.0)	6.9 (5.5- 8.5)	5.1 (4.1- 6.3)	~	~
Idaho	6.0 (4.1- 8.5)	5.3 (3.6- 7.4)	6.1 (4.2- 8.7)	5.4 (3.7- 7.6)	~	~
Montana	12.4 (9.3- 16.3)	12.3 (9.2- 16.0)	12.0 (8.9- 16.0)	12.5 (9.3- 16.5)	~	~
Nevada						
New Mexico	7.7 (5.8- 10.1)	6.7 (5.0- 8.6)	8.2 (6.1- 10.7)	7.6 (5.7- 9.8)	~	~
Utah	5.6 (4.0- 7.8)	3.9 (2.8- 5.2)	5.7 (4.0- 7.8)	4.0 (2.8- 5.4)	~	~
Wyoming	~	~	~	~	~	~
Pacific	7.4 (7.0- 7.8)	5.9 (5.6- 6.3)	7.6 (7.2- 8.1)	6.4 (6.0- 6.7)	7.7 (5.8- 10.0)	4.5 (3.4- 5.7)
Alaska	~	~	~	~	~	~
California	7.0 (6.6- 7.5)	5.5 (5.1- 5.8)	7.2 (6.7- 7.8)	5.9 (5.5- 6.3)	7.8 (5.8- 10.3)	4.6 (3.5- 6.0)
San Francisco-Oakland	7.8 (6.5- 9.3)	6.7 (5.6- 8.0)	8.1 (6.6- 9.9)	7.4 (6.0- 9.0)	~	~
San Jose-Monterey	7.4 (5.7- 9.6)	5.4 (4.1- 6.9)	8.7 (6.6- 11.3)	6.7 (5.1- 8.6)	~	~
Los Angeles	6.3 (5.5- 7.2)	4.6 (4.0- 5.2)	6.2 (5.3- 7.3)	4.6 (4.0- 5.4)	6.5 (4.0- 10.3)	4.5 (2.8- 6.7)
Hawaii	7.3 (5.3- 9.9)	7.1 (5.1- 9.6)	~	~	~	~
Oregon	7.9 (6.5- 9.4)	7.3 (6.1- 8.8)	7.9 (6.5- 9.5)	7.6 (6.3- 9.1)	~	~
Washington	9.1 (7.9- 10.4)	7.8 (6.8- 8.9)	9.2 (8.0- 10.6)	8.3 (7.2- 9.5)	~	~
Seattle-Puget Sound	9.4 (8.0- 11.1)	8.0 (6.8- 9.4)	9.8 (8.3- 11.5)	8.8 (7.4- 10.3)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.3.2: Cancer of the Esophagus. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	2.2 (2.1- 2.2)	2.5 (2.4- 2.5)	2.0 (1.9- 2.1)	2.5 (2.4- 2.6)	3.6 (3.2- 4.0)	2.9 (2.6- 3.2)
Northeast	2.3 (2.1- 2.5)	2.8 (2.6- 3.0)	2.1 (1.9- 2.3)	2.8 (2.6- 3.0)	3.7 (3.1- 4.5)	3.3 (2.7- 4.0)
New England	2.5 (2.2- 3.0)	3.0 (2.6- 3.5)	2.3 (1.9- 2.7)	2.9 (2.5- 3.4)	5.4 (3.1- 9.2)	4.0 (2.3- 6.5)
Connecticut	3.1 (2.4- 4.0)	3.6 (2.8- 4.6)	2.5 (1.9- 3.4)	3.2 (2.4- 4.3)	~	~
Maine						
Massachusetts	2.2 (1.7- 2.7)	2.6 (2.1- 3.3)	1.9 (1.5- 2.5)	2.6 (2.0- 3.2)	~	~
New Hampshire	2.6 (1.5- 4.3)	2.6 (1.5- 4.3)	2.6 (1.5- 4.3)	2.7 (1.5- 4.4)	~	~
Rhode Island	3.2 (1.9- 5.1)	4.1 (2.5- 6.2)	3.1 (1.8- 5.1)	4.2 (2.6- 6.5)	~	~
Vermont						
Middle Atlantic	2.2 (2.1- 2.4)	2.8 (2.5- 3.0)	2.0 (1.9- 2.2)	2.8 (2.5- 3.0)	3.5 (2.8- 4.3)	3.2 (2.6- 3.9)
New Jersey	2.5 (2.1- 3.0)	3.0 (2.5- 3.6)	2.4 (1.9- 2.9)	3.2 (2.6- 3.9)	3.6 (2.2- 5.8)	3.0 (1.8- 4.7)
New York	2.4 (2.1- 2.7)	2.8 (2.5- 3.1)	2.1 (1.8- 2.4)	2.8 (2.4- 3.2)	3.6 (2.7- 4.7)	3.3 (2.5- 4.3)
Pennsylvania	1.9 (1.7- 2.3)	2.6 (2.2- 3.0)	1.8 (1.5- 2.2)	2.5 (2.1- 3.0)	3.2 (1.9- 5.1)	3.1 (1.8- 4.8)
Midwest						
East North Central						
Illinois	2.0 (1.7- 2.4)	2.2 (1.9- 2.6)	1.8 (1.5- 2.2)	2.1 (1.8- 2.6)	3.7 (2.5- 5.4)	2.9 (1.9- 4.1)
Indiana						
Michigan	2.1 (1.7- 2.5)	2.3 (1.9- 2.7)	1.9 (1.5- 2.3)	2.2 (1.8- 2.7)	3.5 (2.2- 5.4)	2.8 (1.7- 4.3)
Detroit	2.1 (1.6- 2.8)	2.4 (1.7- 3.1)	1.8 (1.2- 2.5)	2.2 (1.5- 3.0)	3.6 (2.1- 5.9)	3.1 (1.8- 5.0)
Ohio	2.3 (2.0- 2.7)	2.7 (2.3- 3.2)	2.1 (1.7- 2.5)	2.5 (2.1- 3.0)	3.9 (2.4- 5.9)	3.2 (2.0- 4.8)
Wisconsin	2.3 (1.8- 2.9)	2.7 (2.1- 3.4)	2.2 (1.7- 2.8)	2.7 (2.0- 3.4)	~	~
West North Central	1.8 (1.5- 2.0)	2.1 (1.8- 2.4)	1.7 (1.5- 2.0)	2.1 (1.8- 2.5)	~	~
Iowa	1.6 (1.1- 2.4)	2.2 (1.5- 3.1)	1.7 (1.1- 2.4)	2.3 (1.5- 3.2)	~	~
Kansas	1.5 (1.0- 2.3)	1.8 (1.1- 2.6)	1.6 (1.0- 2.4)	1.9 (1.2- 2.9)	~	~
Minnesota	2.0 (1.5- 2.6)	2.3 (1.7- 3.0)	2.0 (1.5- 2.6)	2.4 (1.8- 3.1)	~	~
Missouri	1.9 (1.4- 2.4)	2.2 (1.7- 2.8)	1.6 (1.2- 2.1)	2.0 (1.5- 2.6)	~	~
Nebraska	1.5 (0.9- 2.5)	1.9 (1.1- 3.1)	1.6 (0.9- 2.6)	2.0 (1.1- 3.3)	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	~	~	~	~	~	~
District of Columbia	~	~	~	~	~	~
Florida	2.5 (2.2- 2.9)	3.6 (3.2- 4.0)	2.4 (2.1- 2.7)	3.8 (3.3- 4.3)	3.8 (2.6- 5.5)	2.6 (1.8- 3.7)
Georgia						
Atlanta	2.5 (1.6- 3.7)	1.9 (1.2- 2.8)	~	~	~	~
Maryland	2.5 (1.9- 3.1)	2.5 (2.0- 3.2)	2.3 (1.7- 3.0)	2.7 (1.9- 3.5)	3.3 (1.9- 5.3)	2.3 (1.4- 3.7)
North Carolina	1.8 (1.4- 2.3)	2.0 (1.6- 2.5)	1.5 (1.1- 2.0)	1.8 (1.4- 2.4)	3.2 (2.0- 4.8)	2.7 (1.7- 4.0)
South Carolina	2.7 (2.0- 3.5)	2.9 (2.2- 3.7)	1.5 (1.0- 2.3)	1.9 (1.2- 2.8)	6.1 (4.1- 8.7)	5.0 (3.4- 7.1)
Virginia						
West Virginia	2.0 (1.3- 3.1)	2.6 (1.6- 3.8)	2.0 (1.3- 3.2)	2.6 (1.6- 3.8)	~	~
East South Central						
Alabama						
Kentucky	1.7 (1.2- 2.4)	2.0 (1.4- 2.7)	1.8 (1.3- 2.5)	2.1 (1.5- 2.9)	~	~
Mississippi						
Tennessee						

continued

Table 2.3.2: Cancer of the Esophagus. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	2.2 (1.6- 2.9)	2.2 (1.7- 3.0)	2.3 (1.6- 3.2)	2.7 (1.9- 3.7)	~	~
Oklahoma						
Texas						
West	2.0 (1.8- 2.2)	2.0 (1.8- 2.2)	2.0 (1.9- 2.2)	2.2 (2.0- 2.3)	3.2 (2.3- 4.5)	2.4 (1.7- 3.2)
Mountain						
Arizona	1.6 (1.2- 2.2)	1.8 (1.3- 2.4)	1.7 (1.2- 2.3)	2.0 (1.4- 2.7)	~	~
Colorado	1.8 (1.2- 2.5)	1.7 (1.2- 2.4)	1.7 (1.2- 2.4)	1.7 (1.2- 2.4)	~	~
Idaho	~	~	~	~	~	~
Montana	~	~	~	~	~	~
Nevada						
New Mexico	~	~	~	~	~	~
Utah	~	~	~	~	~	~
Wyoming	~	~	~	~	~	~
Pacific	2.2 (2.0- 2.4)	2.2 (2.0- 2.4)	2.2 (2.0- 2.5)	2.4 (2.1- 2.6)	3.4 (2.3- 4.7)	2.5 (1.7- 3.5)
Alaska	~	~	~	~	~	~
California	2.2 (2.0- 2.4)	2.1 (1.9- 2.4)	2.2 (2.0- 2.5)	2.3 (2.1- 2.6)	3.6 (2.5- 5.1)	2.8 (1.9- 3.9)
San Francisco-Oakland	2.4 (1.8- 3.2)	2.6 (2.0- 3.4)	2.4 (1.7- 3.4)	3.0 (2.1- 4.0)	~	~
San Jose-Monterey	2.4 (1.5- 3.5)	2.3 (1.5- 3.3)	2.5 (1.6- 3.8)	2.6 (1.6- 3.9)	~	~
Los Angeles	1.8 (1.5- 2.3)	1.8 (1.4- 2.2)	1.9 (1.4- 2.4)	1.9 (1.5- 2.4)	3.3 (1.9- 5.5)	2.9 (1.7- 4.7)
Hawaii	~	~	~	~	~	~
Oregon	2.4 (1.8- 3.2)	2.7 (2.0- 3.7)	2.4 (1.8- 3.3)	2.9 (2.1- 3.8)	~	~
Washington	2.2 (1.7- 2.8)	2.2 (1.7- 2.8)	2.4 (1.8- 3.0)	2.5 (1.9- 3.2)	~	~
Seattle-Puget Sound	2.4 (1.7- 3.1)	2.4 (1.7- 3.1)	2.6 (1.9- 3.5)	2.8 (2.0- 3.7)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.4.1: Cancer of the Stomach. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	11.0 (10.8- 11.3)	9.7 (9.5- 9.9)	10.0 (9.8- 10.2)	9.4 (9.2- 9.6)	17.5 (16.5- 18.6)	10.3 (9.7- 10.9)
Northeast	13.5 (13.0- 14.0)	12.6 (12.1- 13.0)	12.6 (12.1- 13.1)	12.5 (12.0- 13.0)	19.0 (16.9- 21.3)	11.5 (10.3- 12.8)
New England	12.2 (11.2- 13.2)	11.1 (10.2- 12.0)	11.6 (10.6- 12.6)	11.1 (10.2- 12.0)	20.9 (14.5- 30.0)	10.5 (7.4- 14.3)
Connecticut	13.0 (11.2- 15.0)	12.4 (10.7- 14.2)	12.4 (10.7- 14.5)	12.6 (10.8- 14.6)	~	~
Maine						
Massachusetts	12.1 (10.8- 13.5)	10.8 (9.7- 12.1)	11.2 (9.9- 12.6)	10.6 (9.4- 11.9)	25.7 (15.7- 41.5)	12.2 (7.8- 18.1)
New Hampshire	9.0 (6.6- 12.3)	7.8 (5.7- 10.4)	9.2 (6.7- 12.4)	8.0 (5.8- 10.6)	~	~
Rhode Island	13.0 (9.9- 16.8)	12.6 (9.6- 16.2)	13.0 (9.8- 16.9)	13.3 (10.1- 17.2)	~	~
Vermont						
Middle Atlantic	13.9 (13.4- 14.5)	13.0 (12.5- 13.6)	12.9 (12.3- 13.5)	13.0 (12.4- 13.6)	18.8 (16.6- 21.2)	11.7 (10.4- 13.1)
New Jersey	14.9 (13.7- 16.3)	13.6 (12.4- 14.8)	14.5 (13.2- 15.9)	14.4 (13.1- 15.8)	20.2 (15.4- 26.4)	11.6 (9.0- 14.8)
New York	14.8 (13.9- 15.6)	13.2 (12.5- 14.0)	13.5 (12.6- 14.4)	13.1 (12.3- 14.0)	16.9 (14.2- 20.0)	10.4 (8.8- 12.1)
Pennsylvania	12.2 (11.3- 13.2)	12.4 (11.5- 13.3)	11.3 (10.4- 12.3)	12.0 (11.1- 13.0)	22.4 (17.8- 28.0)	15.3 (12.2- 19.0)
Midwest						
East North Central						
Illinois	11.1 (10.2- 12.1)	9.4 (8.6- 10.2)	10.1 (9.2- 11.1)	9.0 (8.2- 9.9)	16.1 (12.8- 20.2)	10.0 (8.0- 12.3)
Indiana						
Michigan	10.9 (9.9- 12.0)	9.2 (8.3- 10.1)	10.1 (9.1- 11.3)	9.0 (8.1- 10.0)	15.6 (12.0- 20.1)	9.8 (7.6- 12.5)
Detroit	13.7 (11.9- 15.7)	11.4 (10.0- 13.0)	13.0 (11.1- 15.2)	11.7 (10.0- 13.6)	15.7 (11.5- 20.9)	10.9 (8.1- 14.4)
Ohio	9.3 (8.5- 10.3)	8.4 (7.6- 9.2)	8.2 (7.4- 9.2)	7.7 (6.9- 8.5)	18.1 (14.1- 23.2)	12.1 (9.5- 15.2)
Wisconsin	9.9 (8.7- 11.3)	8.9 (7.8- 10.2)	9.6 (8.4- 11.0)	9.1 (7.9- 10.4)	~	~
West North Central	9.1 (8.4- 9.8)	8.3 (7.7- 8.9)	8.6 (8.0- 9.3)	8.2 (7.5- 8.8)	17.4 (12.5- 23.7)	9.0 (6.6- 12.1)
Iowa	9.2 (7.6- 10.9)	9.1 (7.6- 10.8)	9.2 (7.6- 10.9)	9.3 (7.7- 11.1)	~	~
Kansas	9.6 (7.9- 11.6)	8.6 (7.1- 10.3)	9.0 (7.3- 11.0)	8.4 (6.8- 10.2)	~	~
Minnesota	10.2 (8.9- 11.8)	8.7 (7.6- 10.0)	9.8 (8.4- 11.3)	8.7 (7.5- 10.0)	~	~
Missouri	8.5 (7.4- 9.8)	7.8 (6.7- 8.9)	7.7 (6.6- 9.0)	7.4 (6.3- 8.6)	17.5 (11.7- 25.5)	10.7 (7.3- 15.3)
Nebraska	6.2 (4.5- 8.2)	5.8 (4.2- 7.7)	5.7 (4.1- 7.7)	5.5 (4.0- 7.4)	~	~
North Dakota	10.7 (7.4- 15.1)	10.5 (7.2- 14.7)	10.9 (7.5- 15.5)	11.2 (7.7- 15.7)	~	~
South Dakota						
South						
South Atlantic						
Delaware	10.0 (6.9- 14.4)	9.3 (6.4- 13.0)	8.6 (5.5- 13.3)	8.7 (5.6- 12.9)	~	~
District of Columbia	15.7 (10.9- 22.1)	14.3 (10.0- 19.9)	~	~	17.3 (11.1- 26.0)	17.1 (11.1- 25.2)
Florida	10.8 (10.1- 11.6)	12.6 (11.8- 13.4)	10.0 (9.3- 10.8)	12.9 (12.0- 13.8)	19.3 (15.7- 23.8)	10.2 (8.4- 12.3)
Georgia						
Atlanta	9.2 (7.1- 11.9)	5.8 (4.6- 7.3)	6.3 (4.3- 9.1)	4.4 (3.1- 6.1)	15.1 (8.8- 25.2)	6.0 (3.9- 9.0)
Maryland	10.5 (9.1- 12.1)	8.3 (7.3- 9.6)	8.4 (7.0- 10.0)	7.8 (6.5- 9.2)	18.3 (13.7- 24.2)	9.2 (7.1- 11.8)
North Carolina	9.0 (8.0- 10.2)	7.6 (6.7- 8.5)	6.6 (5.7- 7.8)	6.2 (5.3- 7.2)	21.0 (16.9- 25.9)	12.7 (10.3- 15.4)
South Carolina	10.8 (9.2- 12.7)	9.2 (7.9- 10.7)	8.5 (6.9- 10.5)	7.9 (6.5- 9.6)	19.2 (14.8- 24.9)	12.4 (9.6- 15.8)
Virginia						
West Virginia	8.1 (6.2- 10.3)	7.9 (6.2- 10.0)	8.1 (6.2- 10.4)	8.0 (6.2- 10.1)	~	~
East South Central						
Alabama						
Kentucky	9.2 (7.8- 10.9)	7.9 (6.7- 9.3)	8.9 (7.4- 10.5)	7.8 (6.6- 9.2)	~	~
Mississippi						
Tennessee						

continued

Table 2.4.1: Cancer of the Stomach. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	10.6 (9.1- 12.3)	8.6 (7.4- 9.9)	8.5 (7.0- 10.3)	7.9 (6.5- 9.5)	17.2 (13.2- 22.2)	10.0 (7.7- 12.7)
Oklahoma						
Texas						
West	10.6 (10.2- 11.0)	8.5 (8.1- 8.8)	9.4 (9.0- 9.9)	7.9 (7.5- 8.2)	13.9 (11.5- 16.9)	7.6 (6.3- 9.0)
Mountain						
Arizona	8.5 (7.3- 9.9)	7.8 (6.7- 9.0)	8.4 (7.2- 9.8)	8.2 (7.0- 9.5)	~	~
Colorado	7.9 (6.5- 9.6)	6.0 (4.9- 7.1)	7.6 (6.1- 9.2)	5.8 (4.8- 7.0)	~	~
Idaho	7.6 (5.4- 10.6)	6.1 (4.3- 8.3)	7.3 (5.1- 10.3)	5.9 (4.2- 8.2)	~	~
Montana	8.4 (5.9- 11.8)	8.2 (5.7- 11.3)	8.2 (5.7- 11.6)	8.3 (5.8- 11.7)	~	~
Nevada						
New Mexico	8.6 (6.6- 11.2)	7.2 (5.6- 9.3)	7.8 (5.8- 10.3)	7.0 (5.3- 9.2)	~	~
Utah	8.0 (6.0- 10.6)	5.1 (3.8- 6.6)	7.9 (5.9- 10.5)	5.2 (3.8- 6.8)	~	~
Wyoming	~	~	~	~	~	~
Pacific	11.5 (11.0- 12.0)	9.1 (8.7- 9.5)	10.1 (9.6- 10.6)	8.4 (7.9- 8.8)	14.0 (11.4- 17.1)	7.9 (6.5- 9.5)
Alaska	13.4 (7.5- 23.8)	6.8 (4.2- 10.2)	~	~	~	~
California	11.6 (11.0- 12.3)	9.0 (8.5- 9.4)	10.4 (9.8- 11.1)	8.5 (8.0- 9.0)	14.6 (11.8- 17.9)	8.6 (7.0- 10.4)
San Francisco-Oakland	12.3 (10.7- 14.1)	10.6 (9.2- 12.1)	10.0 (8.3- 11.9)	9.3 (7.7- 11.0)	20.4 (13.8- 29.6)	13.6 (9.3- 19.2)
San Jose-Monterey	11.6 (9.4- 14.2)	8.3 (6.8- 10.2)	8.4 (6.4- 11.0)	6.5 (4.9- 8.4)	~	~
Los Angeles	14.8 (13.5- 16.2)	10.7 (9.8- 11.7)	13.4 (12.0- 14.9)	9.9 (8.9- 11.0)	12.6 (9.2- 17.3)	9.3 (6.8- 12.4)
Hawaii	21.0 (17.3- 25.1)	20.2 (16.7- 24.1)	13.9 (8.1- 22.4)	10.6 (6.3- 16.8)	~	~
Oregon	8.6 (7.2- 10.3)	8.0 (6.7- 9.5)	8.1 (6.7- 9.8)	7.8 (6.4- 9.3)	~	~
Washington	10.0 (8.8- 11.4)	8.4 (7.3- 9.5)	9.5 (8.3- 10.9)	8.4 (7.3- 9.6)	~	~
Seattle-Puget Sound	11.2 (9.6- 13.0)	9.1 (7.8- 10.5)	10.3 (8.7- 12.1)	8.9 (7.5- 10.4)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.4.2: Cancer of the Stomach. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	5.1 (5.0- 5.2)	5.9 (5.7- 6.0)	4.4 (4.3- 4.6)	5.5 (5.3- 5.7)	9.1 (8.5- 9.7)	7.0 (6.6- 7.5)
Northeast	5.9 (5.6- 6.2)	7.4 (7.1- 7.7)	5.3 (5.1- 5.6)	7.3 (6.9- 7.6)	9.0 (8.0- 10.3)	7.5 (6.6- 8.5)
New England	5.3 (4.8- 5.8)	6.6 (6.0- 7.3)	5.1 (4.5- 5.6)	6.8 (6.1- 7.5)	7.7 (4.7- 12.2)	5.0 (3.1- 7.7)
Connecticut	6.2 (5.2- 7.4)	7.9 (6.6- 9.4)	6.0 (4.9- 7.2)	8.2 (6.8- 9.8)	~	~
Maine						
Massachusetts	4.8 (4.1- 5.5)	6.0 (5.2- 6.9)	4.6 (3.9- 5.3)	6.1 (5.2- 7.1)	~	~
New Hampshire	4.0 (2.6- 5.9)	4.4 (2.9- 6.5)	3.9 (2.5- 5.8)	4.4 (2.9- 6.4)	~	~
Rhode Island	6.6 (4.8- 9.0)	8.9 (6.5- 11.9)	6.4 (4.6- 9.0)	9.1 (6.6- 12.2)	~	~
Vermont						
Middle Atlantic	6.1 (5.8- 6.4)	7.6 (7.3- 8.0)	5.4 (5.1- 5.7)	7.4 (7.0- 7.9)	9.2 (8.0- 10.5)	7.8 (6.8- 8.9)
New Jersey	6.6 (5.9- 7.3)	8.0 (7.1- 8.9)	5.9 (5.2- 6.7)	8.0 (7.1- 9.1)	9.0 (6.5- 12.2)	7.2 (5.2- 9.6)
New York	6.6 (6.1- 7.1)	7.8 (7.3- 8.4)	5.7 (5.2- 6.2)	7.6 (7.0- 8.2)	9.0 (7.5- 10.7)	7.6 (6.4- 9.0)
Pennsylvania	5.2 (4.7- 5.7)	7.1 (6.5- 7.8)	4.8 (4.3- 5.3)	6.8 (6.2- 7.6)	9.5 (7.2- 12.4)	9.0 (6.8- 11.7)
Midwest						
East North Central						
Illinois	5.1 (4.6- 5.7)	5.8 (5.2- 6.4)	4.5 (4.0- 5.1)	5.5 (4.9- 6.2)	8.4 (6.5- 10.9)	6.4 (4.9- 8.2)
Indiana						
Michigan	5.3 (4.7- 5.9)	5.8 (5.2- 6.6)	4.5 (3.9- 5.1)	5.3 (4.6- 6.1)	11.0 (8.5- 14.0)	8.8 (6.8- 11.2)
Detroit	6.7 (5.7- 7.8)	7.5 (6.4- 8.8)	5.7 (4.7- 6.9)	7.2 (5.9- 8.6)	10.0 (7.4- 13.4)	8.6 (6.3- 11.4)
Ohio	4.6 (4.1- 5.1)	5.4 (4.8- 6.1)	4.0 (3.6- 4.6)	5.1 (4.5- 5.7)	9.2 (6.9- 12.1)	7.6 (5.6- 9.9)
Wisconsin	3.5 (2.9- 4.3)	4.2 (3.4- 5.0)	3.4 (2.7- 4.1)	4.2 (3.4- 5.1)	~	~
West North Central	3.5 (3.1- 3.8)	4.3 (3.9- 4.7)	3.3 (2.9- 3.6)	4.2 (3.8- 4.7)	4.9 (3.0- 7.7)	3.7 (2.2- 5.7)
Iowa	3.2 (2.4- 4.2)	4.1 (3.2- 5.3)	3.1 (2.4- 4.1)	4.2 (3.2- 5.4)	~	~
Kansas	3.3 (2.5- 4.3)	4.0 (3.0- 5.2)	3.2 (2.3- 4.2)	4.0 (2.9- 5.3)	~	~
Minnesota	4.1 (3.4- 4.9)	4.8 (4.0- 5.7)	4.0 (3.3- 4.9)	5.0 (4.1- 6.0)	~	~
Missouri	3.2 (2.6- 3.9)	3.8 (3.1- 4.6)	2.8 (2.2- 3.5)	3.6 (2.8- 4.4)	~	~
Nebraska	3.6 (2.5- 5.0)	4.7 (3.4- 6.4)	3.1 (2.1- 4.5)	4.3 (3.0- 6.0)	~	~
North Dakota	3.5 (2.0- 6.0)	5.3 (3.1- 8.6)	3.6 (2.0- 6.2)	5.7 (3.3- 9.1)	~	~
South Dakota						
South						
South Atlantic						
Delaware	6.5 (4.3- 9.5)	7.2 (4.8- 10.5)	5.4 (3.3- 8.5)	6.7 (4.1- 10.3)	~	~
District of Columbia	10.7 (7.5- 15.3)	13.4 (9.4- 18.4)	~	~	10.9 (7.1- 16.9)	14.9 (9.8- 21.9)
Florida	4.9 (4.5- 5.3)	6.9 (6.4- 7.5)	4.4 (3.9- 4.8)	6.9 (6.2- 7.5)	10.7 (8.5- 13.3)	7.0 (5.6- 8.7)
Georgia						
Atlanta	5.5 (4.2- 7.2)	4.1 (3.1- 5.3)	4.4 (3.0- 6.2)	3.9 (2.7- 5.4)	8.9 (5.4- 14.1)	4.6 (2.9- 7.1)
Maryland	4.3 (3.5- 5.1)	4.4 (3.7- 5.3)	3.3 (2.5- 4.2)	4.0 (3.1- 5.0)	6.9 (4.9- 9.6)	5.1 (3.6- 6.9)
North Carolina	4.3 (3.7- 5.0)	4.7 (4.1- 5.5)	3.5 (2.9- 4.2)	4.2 (3.5- 5.0)	8.0 (6.1- 10.3)	6.8 (5.2- 8.8)
South Carolina	4.5 (3.7- 5.5)	4.9 (4.0- 5.9)	3.8 (2.9- 4.9)	4.5 (3.5- 5.8)	7.1 (4.9- 9.8)	5.8 (4.1- 8.1)
Virginia						
West Virginia	3.5 (2.5- 4.8)	4.6 (3.3- 6.2)	3.5 (2.5- 4.8)	4.6 (3.3- 6.2)	~	~
East South Central						
Alabama						
Kentucky	4.6 (3.8- 5.6)	5.2 (4.3- 6.3)	4.4 (3.5- 5.4)	5.0 (4.0- 6.1)	~	~
Mississippi						
Tennessee						

continued

Table 2.4.2: Cancer of the Stomach. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	5.7 (4.8- 6.8)	5.9 (5.0- 7.0)	3.8 (2.9- 4.8)	4.5 (3.5- 5.7)	11.5 (8.9- 14.6)	8.9 (6.9- 11.3)
Oklahoma						
Texas						
West	5.4 (5.1- 5.6)	5.4 (5.1- 5.7)	4.5 (4.3- 4.8)	4.8 (4.5- 5.0)	10.2 (8.4- 12.2)	7.3 (6.0- 8.7)
Mountain						
Arizona	3.8 (3.1- 4.6)	4.1 (3.4- 5.0)	3.5 (2.8- 4.3)	4.1 (3.3- 5.0)	~	~
Colorado	4.5 (3.6- 5.5)	4.3 (3.4- 5.2)	4.2 (3.3- 5.2)	4.1 (3.2- 5.1)	~	~
Idaho	3.7 (2.4- 5.6)	3.8 (2.5- 5.7)	3.8 (2.4- 5.7)	4.0 (2.5- 5.9)	~	~
Montana	~	~	~	~	~	~
Nevada						
New Mexico	6.0 (4.5- 7.9)	5.9 (4.4- 7.7)	5.4 (3.9- 7.3)	5.6 (4.1- 7.6)	~	~
Utah	4.6 (3.3- 6.3)	3.6 (2.6- 5.0)	4.8 (3.4- 6.5)	3.8 (2.7- 5.2)	~	~
Wyoming	~	~	~	~	~	~
Pacific	5.8 (5.5- 6.1)	5.8 (5.5- 6.2)	4.7 (4.4- 5.1)	5.0 (4.7- 5.4)	10.3 (8.5- 12.6)	7.5 (6.2- 9.1)
Alaska	7.4 (4.0- 13.4)	5.4 (3.1- 8.8)	~	~	~	~
California	6.1 (5.7- 6.5)	6.0 (5.7- 6.4)	5.2 (4.8- 5.6)	5.4 (5.0- 5.8)	10.5 (8.5- 12.9)	7.9 (6.4- 9.6)
San Francisco-Oakland	7.6 (6.5- 8.8)	8.4 (7.2- 9.8)	6.0 (4.9- 7.4)	7.4 (6.0- 9.0)	11.7 (7.5- 17.5)	10.0 (6.5- 14.7)
San Jose-Monterey	6.9 (5.5- 8.7)	6.6 (5.2- 8.3)	6.0 (4.5- 7.9)	6.2 (4.7- 8.1)	~	~
Los Angeles	7.4 (6.6- 8.2)	7.1 (6.3- 7.9)	6.2 (5.4- 7.1)	6.1 (5.3- 7.0)	10.8 (8.0- 14.2)	9.1 (6.7- 12.0)
Hawaii	11.3 (8.9- 14.2)	12.7 (10.0- 15.9)	~	~	~	~
Oregon	2.9 (2.2- 3.7)	3.3 (2.5- 4.3)	2.7 (2.0- 3.5)	3.3 (2.4- 4.3)	~	~
Washington	4.6 (3.8- 5.4)	4.7 (3.9- 5.6)	3.8 (3.1- 4.6)	4.1 (3.4- 5.0)	~	~
Seattle-Puget Sound	4.5 (3.6- 5.6)	4.6 (3.7- 5.7)	3.7 (2.9- 4.7)	4.0 (3.1- 5.1)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.5.1: Cancer of the Colon and Rectum. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	66.4 (65.9- 66.9)	58.6 (58.1- 59.0)	66.0 (65.4- 66.5)	62.1 (61.6- 62.6)	67.9 (65.9- 69.9)	41.2 (40.0- 42.3)
Northeast	72.6 (71.5- 73.7)	67.8 (66.8- 68.9)	72.8 (71.6- 74.0)	73.1 (71.9- 74.3)	63.1 (59.5- 67.0)	40.7 (38.4- 43.0)
New England	70.2 (67.9- 72.5)	64.4 (62.3- 66.5)	70.1 (67.8- 72.5)	67.9 (65.6- 70.2)	55.0 (44.4- 68.0)	28.9 (23.7- 35.0)
Connecticut	72.1 (67.9- 76.5)	68.4 (64.4- 72.6)	72.2 (67.9- 76.9)	72.9 (68.5- 77.5)	56.9 (40.8- 78.5)	31.5 (23.0- 42.0)
Maine						
Massachusetts	70.0 (66.9- 73.3)	63.9 (61.0- 66.8)	69.7 (66.5- 73.0)	67.5 (64.5- 70.7)	56.9 (41.8- 77.4)	29.0 (21.9- 37.5)
New Hampshire	58.3 (51.6- 65.8)	47.4 (42.0- 53.3)	58.2 (51.4- 65.7)	47.8 (42.3- 53.8)	~	~
Rhode Island	76.8 (69.0- 85.4)	74.7 (67.1- 82.8)	78.7 (70.6- 87.5)	80.3 (72.1- 89.2)	~	~
Vermont						
Middle Atlantic	73.3 (72.0- 74.6)	68.9 (67.7- 70.1)	73.7 (72.3- 75.1)	74.8 (73.4- 76.2)	64.0 (60.1- 68.1)	42.3 (39.9- 44.9)
New Jersey	77.0 (74.2- 80.0)	70.1 (67.5- 72.7)	78.3 (75.2- 81.5)	77.9 (74.8- 81.0)	73.0 (64.0- 83.2)	46.8 (41.3- 52.8)
New York	70.7 (68.8- 72.6)	63.5 (61.8- 65.1)	71.3 (69.3- 73.4)	70.2 (68.2- 72.2)	55.8 (51.0- 61.1)	36.2 (33.3- 39.4)
Pennsylvania	74.6 (72.4- 76.8)	76.3 (74.1- 78.6)	73.8 (71.5- 76.2)	79.1 (76.6- 81.5)	76.7 (68.1- 86.3)	54.4 (48.4- 60.9)
Midwest						
East North Central						
Illinois	71.3 (68.9- 73.7)	59.5 (57.5- 61.5)	70.6 (68.1- 73.2)	62.9 (60.6- 65.1)	72.7 (65.3- 80.9)	43.4 (39.1- 48.0)
Indiana						
Michigan	62.5 (60.1- 65.1)	53.7 (51.7- 55.8)	61.5 (58.9- 64.1)	55.5 (53.3- 57.9)	71.1 (63.3- 79.7)	46.6 (41.5- 52.1)
Detroit	64.3 (60.5- 68.4)	55.6 (52.4- 59.0)	62.2 (57.9- 66.7)	57.3 (53.5- 61.4)	74.2 (65.0- 84.3)	53.3 (46.8- 60.4)
Ohio	70.8 (68.4- 73.2)	63.4 (61.3- 65.6)	69.3 (66.8- 71.8)	64.5 (62.2- 66.8)	69.5 (61.5- 78.5)	47.3 (42.0- 53.1)
Wisconsin	70.6 (67.2- 74.2)	63.6 (60.6- 66.8)	69.9 (66.5- 73.5)	66.1 (62.9- 69.4)	69.1 (47.5- 101.0)	28.0 (20.0- 38.2)
West North Central	68.9 (67.1- 70.8)	62.7 (61.1- 64.4)	68.3 (66.4- 70.1)	64.7 (62.9- 66.5)	77.4 (67.1- 89.1)	42.5 (37.0- 48.6)
Iowa	76.6 (72.1- 81.4)	75.9 (71.4- 80.6)	76.8 (72.2- 81.6)	77.8 (73.2- 82.7)	~	~
Kansas	67.2 (62.6- 72.1)	60.3 (56.1- 64.6)	65.9 (61.2- 70.9)	61.4 (57.1- 66.0)	85.3 (58.8- 121.0)	44.8 (31.2- 62.3)
Minnesota	63.1 (59.7- 66.7)	53.8 (50.9- 56.8)	62.8 (59.4- 66.5)	56.1 (53.0- 59.3)	~	~
Missouri	69.2 (65.9- 72.6)	63.2 (60.2- 66.3)	68.1 (64.7- 71.7)	65.3 (62.0- 68.6)	79.6 (66.9- 94.5)	49.9 (42.1- 58.8)
Nebraska	71.8 (65.8- 78.1)	66.1 (60.7- 71.9)	70.2 (64.2- 76.6)	67.1 (61.4- 73.1)	~	~
North Dakota	69.1 (60.1- 79.1)	67.6 (58.9- 77.4)	69.1 (60.1- 79.3)	70.9 (61.6- 81.1)	~	~
South Dakota						
South						
South Atlantic						
Delaware	66.4 (57.6- 76.5)	58.4 (50.8- 66.8)	62.5 (53.3- 73.2)	60.3 (51.7- 70.0)	96.4 (67.0- 137.5)	55.1 (39.2- 75.3)
District of Columbia	66.1 (55.8- 77.9)	61.1 (51.7- 71.7)	50.7 (35.6- 72.2)	42.5 (30.1- 58.4)	75.6 (62.0- 91.6)	74.5 (61.2- 89.9)
Florida	72.9 (71.1- 74.8)	85.5 (83.4- 87.6)	72.1 (70.2- 74.0)	94.2 (91.7- 96.7)	77.8 (70.4- 85.9)	43.0 (39.2- 47.0)
Georgia						
Atlanta	57.4 (51.7- 63.7)	33.0 (30.0- 36.3)	52.5 (46.4- 59.3)	35.6 (31.7- 39.8)	83.5 (67.3- 103.1)	30.5 (25.3- 36.4)
Maryland	63.2 (59.7- 66.9)	51.2 (48.5- 54.1)	61.3 (57.4- 65.4)	56.0 (52.5- 59.6)	65.4 (57.1- 74.8)	38.3 (33.8- 43.2)
North Carolina	53.4 (50.8- 56.1)	45.8 (43.7- 48.0)	52.7 (49.9- 55.6)	49.2 (46.6- 51.8)	57.6 (51.0- 65.1)	36.7 (32.6- 41.2)
South Carolina	64.3 (60.2- 68.5)	55.0 (51.7- 58.5)	62.2 (57.7- 67.0)	59.4 (55.3- 63.7)	68.2 (59.4- 78.2)	43.4 (38.0- 49.4)
Virginia						
West Virginia	73.3 (67.6- 79.3)	73.8 (68.2- 79.7)	72.3 (66.6- 78.4)	73.8 (68.1- 79.8)	~	~
East South Central						
Alabama						
Kentucky	71.4 (67.2- 75.7)	60.8 (57.4- 64.4)	71.0 (66.7- 75.5)	62.0 (58.4- 65.7)	69.7 (52.7- 91.1)	43.0 (32.7- 55.4)
Mississippi						
Tennessee						

continued

Table 2.5.1: Cancer of the Colon and Rectum. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	70.5 (66.5- 74.7)	57.1 (53.9- 60.4)	69.1 (64.5- 73.9)	63.4 (59.3- 67.7)	77.3 (68.6- 86.9)	45.7 (40.6- 51.1)
Oklahoma						
Texas						
West	57.1 (56.1- 58.1)	45.4 (44.6- 46.2)	56.7 (55.7- 57.8)	47.1 (46.2- 47.9)	60.9 (55.7- 66.4)	35.4 (32.6- 38.4)
Mountain						
Arizona	54.7 (51.6- 58.0)	49.4 (46.6- 52.3)	55.6 (52.3- 59.0)	53.4 (50.3- 56.6)	56.6 (33.0- 93.8)	26.9 (17.2- 40.0)
Colorado	54.8 (51.0- 58.9)	41.2 (38.4- 44.1)	54.8 (50.8- 58.9)	42.1 (39.2- 45.2)	39.3 (24.1- 65.3)	26.7 (17.1- 39.7)
Idaho	52.2 (46.1- 58.9)	43.3 (38.3- 48.8)	52.3 (46.1- 59.1)	44.1 (38.9- 49.7)	~	~
Montana	63.3 (55.9- 71.6)	60.5 (53.5- 68.3)	59.7 (52.3- 67.9)	59.4 (52.2- 67.4)	~	~
Nevada						
New Mexico	53.5 (48.2- 59.2)	45.5 (41.1- 50.2)	54.9 (49.4- 61.0)	50.2 (45.2- 55.5)	~	~
Utah	50.7 (45.4- 56.4)	32.9 (29.5- 36.5)	51.2 (45.8- 57.0)	33.9 (30.4- 37.7)	~	~
Wyoming	65.9 (55.1- 78.5)	56.4 (47.3- 66.7)	67.1 (56.1- 80.0)	58.7 (49.2- 69.4)	~	~
Pacific	58.0 (56.8- 59.1)	45.6 (44.7- 46.5)	57.4 (56.2- 58.7)	47.1 (46.1- 48.2)	62.9 (57.4- 68.9)	36.9 (33.8- 40.2)
Alaska	67.3 (54.0- 84.3)	36.0 (29.8- 43.1)	53.5 (40.6- 71.1)	31.0 (24.5- 38.8)	~	~
California	57.1 (55.8- 58.4)	43.6 (42.6- 44.6)	56.8 (55.4- 58.3)	45.5 (44.4- 46.7)	64.0 (58.2- 70.5)	38.4 (35.1- 42.1)
San Francisco-Oakland	60.0 (56.3- 63.9)	51.0 (47.9- 54.2)	60.2 (55.9- 64.8)	55.4 (51.5- 59.5)	52.6 (41.6- 66.1)	35.6 (28.4- 44.1)
San Jose-Monterey	54.1 (49.2- 59.5)	39.1 (35.6- 42.8)	54.4 (49.0- 60.4)	41.2 (37.1- 45.6)	85.4 (44.6- 164.4)	36.9 (21.9- 58.3)
Los Angeles	56.8 (54.2- 59.4)	40.5 (38.7- 42.4)	55.6 (52.7- 58.6)	40.4 (38.4- 42.6)	68.5 (59.7- 78.5)	47.4 (41.5- 53.9)
Hawaii	61.8 (55.5- 68.7)	59.5 (53.4- 66.0)	59.3 (46.8- 74.4)	46.6 (36.9- 58.1)	~	~
Oregon	56.7 (53.0- 60.7)	52.8 (49.3- 56.4)	56.3 (52.5- 60.3)	54.0 (50.3- 57.8)	~	~
Washington	62.1 (58.9- 65.4)	51.1 (48.5- 53.8)	61.5 (58.2- 64.9)	53.1 (50.3- 56.0)	47.9 (31.2- 74.0)	27.4 (18.3- 39.3)
Seattle-Puget Sound	61.0 (57.2- 65.1)	49.2 (46.2- 52.4)	61.4 (57.3- 65.6)	52.4 (49.0- 55.9)	52.7 (34.0- 82.6)	30.1 (20.0- 43.5)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.5.2: Cancer of the Colon and Rectum. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	48.5 (48.1- 48.9)	55.3 (54.9- 55.7)	47.6 (47.2- 48.0)	58.4 (57.9- 58.9)	54.0 (52.6- 55.4)	42.5 (41.4- 43.6)
Northeast	53.2 (52.4- 54.0)	65.9 (64.9- 66.9)	52.6 (51.7- 53.4)	70.5 (69.4- 71.6)	53.2 (50.5- 56.0)	44.7 (42.5- 47.0)
New England	52.7 (51.0- 54.4)	64.7 (62.7- 66.7)	52.1 (50.3- 53.8)	67.7 (65.5- 69.9)	56.0 (47.2- 66.2)	37.3 (31.6- 43.8)
Connecticut	54.2 (51.1- 57.5)	68.0 (64.1- 72.0)	52.8 (49.6- 56.2)	71.1 (66.9- 75.5)	68.5 (54.2- 85.8)	50.7 (40.4- 63.0)
Maine						
Massachusetts	51.2 (49.0- 53.6)	63.1 (60.4- 65.9)	50.8 (48.5- 53.2)	66.7 (63.7- 69.8)	47.3 (35.9- 61.5)	29.4 (22.5- 37.7)
New Hampshire	47.4 (42.2- 53.2)	50.2 (44.8- 56.2)	46.7 (41.5- 52.5)	50.0 (44.5- 56.0)	~	~
Rhode Island	61.8 (55.8- 68.4)	80.9 (73.3- 89.0)	62.3 (56.2- 69.1)	85.6 (77.4- 94.3)	~	~
Vermont						
Middle Atlantic	53.3 (52.4- 54.3)	66.2 (65.1- 67.4)	52.7 (51.7- 53.7)	71.4 (70.1- 72.7)	52.9 (50.1- 55.8)	45.7 (43.3- 48.2)
New Jersey	52.6 (50.6- 54.6)	63.1 (60.8- 65.6)	52.7 (50.5- 54.9)	70.1 (67.3- 73.0)	55.9 (49.4- 63.1)	44.4 (39.3- 49.9)
New York	53.5 (52.1- 54.9)	63.5 (61.9- 65.1)	52.7 (51.2- 54.2)	69.2 (67.3- 71.2)	49.8 (46.2- 53.5)	43.1 (40.0- 46.3)
Pennsylvania	53.5 (51.9- 55.1)	72.6 (70.5- 74.7)	52.7 (51.1- 54.4)	75.1 (72.8- 77.4)	58.0 (51.9- 64.6)	54.2 (48.6- 60.4)
Midwest						
East North Central						
Illinois	50.4 (48.7- 52.1)	56.4 (54.6- 58.3)	48.9 (47.1- 50.7)	59.5 (57.3- 61.6)	57.2 (51.9- 62.8)	45.3 (41.2- 49.7)
Indiana						
Michigan	47.2 (45.4- 49.0)	51.8 (49.9- 53.9)	45.8 (43.9- 47.7)	53.6 (51.5- 55.9)	54.1 (48.5- 60.3)	44.6 (40.0- 49.7)
Detroit	47.9 (45.1- 50.8)	53.4 (50.3- 56.6)	45.4 (42.4- 48.6)	56.1 (52.4- 60.0)	56.6 (50.0- 63.9)	49.4 (43.7- 55.6)
Ohio	50.0 (48.3- 51.7)	58.6 (56.7- 60.6)	48.3 (46.6- 50.1)	59.3 (57.2- 61.4)	55.5 (49.6- 61.9)	46.9 (41.9- 52.3)
Wisconsin	47.3 (44.8- 49.8)	55.1 (52.3- 58.0)	46.3 (43.9- 48.9)	56.9 (53.9- 60.0)	67.7 (49.6- 91.1)	34.0 (25.4- 44.6)
West North Central	48.9 (47.6- 50.3)	58.5 (56.9- 60.1)	48.3 (47.0- 49.7)	60.3 (58.7- 62.0)	55.1 (47.9- 63.0)	39.7 (34.5- 45.3)
Iowa	55.0 (51.7- 58.5)	72.6 (68.3- 77.1)	55.1 (51.7- 58.7)	74.3 (69.9- 78.9)	~	~
Kansas	48.0 (44.6- 51.6)	57.0 (53.1- 61.2)	46.9 (43.4- 50.5)	58.1 (53.9- 62.5)	58.6 (40.5- 82.5)	43.2 (29.9- 60.4)
Minnesota	45.5 (43.0- 48.2)	50.6 (47.8- 53.5)	44.6 (42.1- 47.3)	52.1 (49.2- 55.2)	64.2 (38.0- 103.9)	27.7 (16.9- 42.8)
Missouri	48.9 (46.6- 51.4)	58.4 (55.6- 61.3)	48.3 (45.8- 50.8)	60.8 (57.7- 63.9)	54.6 (46.0- 64.4)	43.8 (36.9- 51.6)
Nebraska	50.7 (46.4- 55.4)	61.6 (56.4- 67.1)	50.5 (46.0- 55.2)	63.3 (57.9- 69.1)	~	~
North Dakota	42.0 (35.7- 49.2)	52.5 (44.8- 61.1)	41.6 (35.2- 48.9)	54.4 (46.3- 63.4)	~	~
South Dakota						
South						
South Atlantic						
Delaware	54.4 (47.6- 62.0)	59.7 (52.3- 67.9)	51.6 (44.4- 59.7)	62.6 (53.9- 72.2)	79.9 (57.3- 109.1)	54.9 (39.8- 74.0)
District of Columbia	55.3 (47.7- 64.2)	68.6 (59.2- 79.1)	34.3 (23.8- 51.0)	39.7 (28.0- 54.8)	66.1 (55.9- 78.4)	86.1 (72.9-101.1)
Florida	53.0 (51.6- 54.4)	75.3 (73.4- 77.3)	52.1 (50.6- 53.5)	82.7 (80.5- 85.0)	58.1 (52.9- 63.7)	40.1 (36.6- 43.8)
Georgia						
Atlanta	43.5 (39.6- 47.7)	33.4 (30.4- 36.6)	38.4 (34.2- 43.0)	35.1 (31.3- 39.2)	65.5 (55.0- 77.6)	33.2 (28.1- 39.0)
Maryland	45.6 (43.1- 48.2)	47.3 (44.7- 49.9)	42.6 (39.9- 45.5)	51.9 (48.6- 55.4)	50.1 (44.2- 56.5)	36.1 (32.0- 40.6)
North Carolina	42.1 (40.2- 44.1)	46.6 (44.5- 48.7)	41.0 (38.9- 43.2)	49.5 (46.9- 52.1)	47.5 (42.7- 52.6)	40.6 (36.5- 44.9)
South Carolina	44.1 (41.3- 47.0)	47.5 (44.5- 50.6)	41.2 (38.1- 44.4)	49.6 (45.9- 53.4)	51.4 (45.4- 58.1)	42.6 (37.6- 48.1)
Virginia						
West Virginia	52.2 (48.2- 56.5)	68.4 (63.2- 73.9)	52.0 (47.9- 56.4)	68.6 (63.3- 74.2)	61.0 (36.7- 96.8)	66.7 (40.7-103.0)
East South Central						
Alabama						
Kentucky	52.2 (49.3- 55.3)	58.6 (55.3- 62.0)	51.3 (48.4- 54.5)	59.1 (55.6- 62.7)	62.6 (49.7- 77.9)	54.3 (43.2- 67.4)
Mississippi						
Tennessee						

continued

Table 2.5.2: Cancer of the Colon and Rectum. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	47.5 (44.8- 50.4)	49.1 (46.2- 52.0)	46.5 (43.3- 49.9)	54.6 (50.9- 58.5)	50.6 (45.0- 56.8)	39.8 (35.4- 44.5)
Oklahoma						
Texas						
West	42.5 (41.7- 43.2)	42.7 (41.9- 43.4)	41.8 (41.1- 42.6)	44.3 (43.4- 45.1)	52.7 (48.5- 57.1)	37.8 (34.9- 40.9)
Mountain						
Arizona	40.0 (37.6- 42.5)	43.7 (41.1- 46.4)	41.0 (38.5- 43.6)	47.6 (44.7- 50.6)	33.6 (19.2- 55.5)	19.8 (11.5- 31.6)
Colorado	39.4 (36.6- 42.3)	37.5 (34.9- 40.3)	39.0 (36.2- 41.9)	38.3 (35.5- 41.2)	45.3 (29.1- 68.3)	31.1 (20.5- 45.2)
Idaho	38.7 (34.0- 43.9)	39.9 (35.1- 45.2)	38.7 (34.0- 43.9)	40.5 (35.6- 45.9)	~	~
Montana	41.9 (36.4- 48.0)	49.1 (42.8- 56.1)	40.0 (34.6- 46.1)	49.2 (42.7- 56.5)	~	~
Nevada						
New Mexico	32.3 (28.7- 36.3)	32.1 (28.5- 36.1)	34.2 (30.3- 38.5)	36.2 (32.1- 40.8)	~	~
Utah	35.4 (31.5- 39.7)	27.7 (24.6- 31.0)	35.6 (31.6- 39.9)	28.4 (25.3- 31.9)	~	~
Wyoming	48.4 (40.1- 58.1)	50.7 (42.1- 60.6)	48.1 (39.8- 57.9)	51.6 (42.7- 61.8)	~	~
Pacific	43.8 (42.9- 44.7)	44.0 (43.2- 44.9)	43.0 (42.0- 43.9)	45.7 (44.7- 46.7)	54.7 (50.2- 59.5)	40.0 (36.7- 43.4)
Alaska	49.6 (39.0- 62.5)	29.6 (23.7- 36.5)	38.6 (27.8- 52.8)	22.4 (16.6- 29.7)	~	~
California	42.9 (41.9- 43.9)	42.4 (41.4- 43.4)	42.3 (41.2- 43.4)	44.3 (43.2- 45.5)	55.2 (50.5- 60.2)	41.7 (38.2- 45.4)
San Francisco-Oakland	45.9 (43.2- 48.8)	51.3 (48.2- 54.5)	44.8 (41.6- 48.2)	55.5 (51.6- 59.6)	55.4 (45.8- 66.6)	46.7 (38.7- 56.0)
San Jose-Monterey	38.4 (34.8- 42.3)	36.5 (33.1- 40.2)	38.8 (34.8- 43.1)	39.6 (35.6- 44.0)	~	~
Los Angeles	42.2 (40.3- 44.1)	40.1 (38.3- 41.9)	40.9 (38.8- 43.2)	40.6 (38.5- 42.7)	52.5 (46.1- 59.4)	45.4 (40.0- 51.4)
Hawaii	48.0 (42.9- 53.6)	54.0 (48.3- 60.3)	43.5 (33.7- 55.6)	44.1 (34.2- 56.0)	~	~
Oregon	48.4 (45.3- 51.6)	56.5 (52.9- 60.2)	48.1 (45.0- 51.3)	58.1 (54.4- 62.0)	~	~
Washington	44.3 (42.0- 46.8)	45.9 (43.4- 48.4)	43.2 (40.8- 45.7)	47.1 (44.5- 49.8)	53.0 (34.6- 78.5)	27.9 (18.4- 40.6)
Seattle-Puget Sound	45.7 (42.8- 48.7)	46.7 (43.7- 49.8)	45.4 (42.4- 48.6)	49.5 (46.2- 52.9)	59.8 (39.0- 88.9)	31.3 (20.6- 45.6)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.6.1: Cancer of the Liver and Intrahepatic Bile Duct. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	7.0 (6.9- 7.2)	6.4 (6.3- 6.6)	6.1 (5.9- 6.3)	5.9 (5.7- 6.0)	9.6 (8.9- 10.4)	6.5 (6.1- 7.0)
Northeast	7.8 (7.4- 8.2)	7.5 (7.2- 7.9)	6.8 (6.5- 7.2)	6.9 (6.6- 7.3)	11.1 (9.7- 12.7)	7.9 (6.9- 9.0)
New England	6.9 (6.2- 7.7)	6.5 (5.9- 7.2)	6.3 (5.7- 7.1)	6.2 (5.6- 7.0)	13.0 (8.5- 20.2)	7.5 (5.0- 10.8)
Connecticut	7.5 (6.2- 9.1)	7.3 (6.0- 8.7)	6.8 (5.5- 8.3)	6.9 (5.6- 8.4)	~	~
Maine						
Massachusetts	6.8 (5.8- 7.8)	6.4 (5.5- 7.3)	6.2 (5.3- 7.3)	6.2 (5.3- 7.2)	~	~
New Hampshire	6.1 (4.2- 8.8)	5.4 (3.7- 7.6)	6.0 (4.1- 8.7)	5.4 (3.6- 7.6)	~	~
Rhode Island	6.5 (4.4- 9.4)	6.3 (4.2- 9.0)	5.7 (3.7- 8.6)	5.7 (3.7- 8.4)	~	~
Vermont						
Middle Atlantic	8.1 (7.7- 8.5)	7.8 (7.4- 8.2)	7.0 (6.5- 7.4)	7.2 (6.7- 7.6)	10.9 (9.4- 12.6)	8.0 (6.9- 9.1)
New Jersey	7.0 (6.1- 7.9)	6.5 (5.7- 7.3)	6.4 (5.5- 7.4)	6.4 (5.5- 7.3)	9.8 (6.8- 14.0)	6.9 (4.9- 9.4)
New York	9.2 (8.5- 9.8)	8.6 (7.9- 9.2)	8.1 (7.4- 8.8)	8.1 (7.4- 8.8)	9.3 (7.5- 11.5)	6.7 (5.5- 8.2)
Pennsylvania	7.3 (6.6- 8.0)	7.6 (6.9- 8.3)	5.9 (5.3- 6.6)	6.4 (5.7- 7.1)	16.6 (12.9- 21.3)	12.6 (9.8- 15.9)
Midwest						
East North Central						
Illinois	7.4 (6.7- 8.2)	6.5 (5.8- 7.2)	6.3 (5.6- 7.1)	5.8 (5.2- 6.6)	12.5 (9.6- 16.1)	7.8 (6.0- 9.9)
Indiana						
Michigan	8.1 (7.2- 9.0)	7.2 (6.4- 8.0)	7.6 (6.7- 8.5)	7.0 (6.2- 7.9)	10.4 (7.6- 14.0)	7.3 (5.4- 9.6)
Detroit	8.9 (7.6- 10.5)	8.0 (6.8- 9.3)	8.3 (6.8- 10.0)	7.8 (6.4- 9.4)	10.7 (7.5- 15.0)	8.1 (5.7- 11.1)
Ohio	5.6 (4.9- 6.3)	5.1 (4.5- 5.7)	4.7 (4.1- 5.4)	4.4 (3.8- 5.1)	11.8 (8.8- 15.9)	8.5 (6.3- 11.1)
Wisconsin	5.9 (5.0- 7.0)	5.5 (4.6- 6.4)	5.9 (4.9- 7.0)	5.6 (4.7- 6.7)	~	~
West North Central	5.1 (4.6- 5.6)	4.7 (4.3- 5.2)	4.5 (4.0- 5.0)	4.4 (3.9- 4.8)	12.0 (8.4- 17.0)	7.7 (5.5- 10.5)
Iowa	5.3 (4.1- 6.7)	5.2 (4.1- 6.6)	4.9 (3.8- 6.3)	5.0 (3.9- 6.3)	~	~
Kansas	4.7 (3.5- 6.1)	4.3 (3.2- 5.6)	4.4 (3.3- 5.9)	4.2 (3.1- 5.5)	~	~
Minnesota	5.1 (4.2- 6.2)	4.6 (3.8- 5.6)	4.3 (3.4- 5.3)	4.0 (3.2- 4.9)	~	~
Missouri	5.3 (4.4- 6.3)	5.0 (4.2- 5.9)	4.5 (3.7- 5.5)	4.4 (3.6- 5.4)	12.4 (7.9- 19.2)	8.3 (5.3- 12.4)
Nebraska	4.8 (3.4- 6.6)	4.5 (3.2- 6.3)	4.5 (3.1- 6.4)	4.5 (3.1- 6.2)	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	4.8 (2.7- 8.3)	4.4 (2.5- 7.1)	~	~	~	~
District of Columbia	11.9 (7.9- 17.4)	11.9 (8.0- 17.1)	~	~	14.7 (9.2- 22.8)	15.0 (9.4- 22.8)
Florida	7.1 (6.5- 7.7)	8.1 (7.5- 8.8)	6.6 (6.0- 7.2)	8.4 (7.7- 9.1)	9.7 (7.4- 12.9)	6.1 (4.7- 7.7)
Georgia						
Atlanta	5.9 (4.2- 8.1)	3.7 (2.8- 5.0)	4.1 (2.5- 6.5)	2.7 (1.7- 4.0)	~	~
Maryland	6.0 (4.9- 7.2)	4.9 (4.1- 5.9)	5.0 (3.9- 6.3)	4.5 (3.5- 5.6)	7.4 (5.0- 11.0)	5.0 (3.4- 6.9)
North Carolina	4.2 (3.5- 5.0)	3.8 (3.2- 4.5)	4.0 (3.3- 4.9)	3.9 (3.2- 4.7)	4.5 (2.9- 7.0)	3.3 (2.2- 4.8)
South Carolina	5.3 (4.3- 6.7)	4.7 (3.8- 5.8)	5.1 (3.9- 6.6)	5.0 (3.9- 6.4)	5.5 (3.3- 8.9)	3.9 (2.4- 6.0)
Virginia						
West Virginia	5.5 (4.1- 7.4)	5.5 (4.1- 7.3)	5.1 (3.7- 7.0)	5.1 (3.7- 6.9)	~	~
East South Central						
Alabama						
Kentucky	5.6 (4.5- 6.9)	4.8 (3.9- 5.9)	5.4 (4.3- 6.8)	4.7 (3.8- 5.9)	~	~
Mississippi						
Tennessee						

continued

Table 2.6.1: Cancer of the Liver and Intrahepatic Bile Duct. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	7.6 (6.4- 9.1)	6.3 (5.3- 7.4)	7.7 (6.2- 9.5)	6.8 (5.5- 8.3)	7.0 (4.8- 10.2)	4.9 (3.3- 6.9)
Oklahoma						
Texas						
West	7.9 (7.6- 8.3)	6.7 (6.4- 7.0)	6.5 (6.1- 6.8)	5.6 (5.3- 5.9)	9.6 (7.8- 11.9)	6.3 (5.2- 7.7)
Mountain						
Arizona	5.9 (4.9- 7.1)	5.4 (4.5- 6.4)	6.0 (4.9- 7.2)	5.8 (4.8- 6.9)	~	~
Colorado	6.1 (4.9- 7.6)	5.0 (4.0- 6.0)	5.9 (4.7- 7.4)	4.9 (3.9- 6.0)	~	~
Idaho	3.6 (2.2- 5.7)	3.2 (2.0- 4.9)	3.7 (2.3- 5.8)	3.3 (2.0- 5.1)	~	~
Montana	5.1 (3.1- 7.9)	4.8 (3.0- 7.3)	4.8 (2.9- 7.6)	4.7 (2.8- 7.3)	~	~
Nevada						
New Mexico	8.1 (6.2- 10.6)	7.0 (5.4- 9.0)	7.7 (5.7- 10.2)	7.0 (5.3- 9.2)	~	~
Utah	4.4 (2.9- 6.4)	2.9 (2.0- 4.1)	4.3 (2.8- 6.3)	2.9 (1.9- 4.1)	~	~
Wyoming	~	~	~	~	~	~
Pacific	8.7 (8.3- 9.2)	7.3 (7.0- 7.7)	6.8 (6.4- 7.2)	5.9 (5.5- 6.2)	10.6 (8.5- 13.1)	7.0 (5.7- 8.6)
Alaska	9.3 (5.1- 17.7)	5.8 (3.5- 9.1)	~	~	~	~
California	9.3 (8.8- 9.8)	7.5 (7.1- 7.9)	7.2 (6.7- 7.7)	6.0 (5.6- 6.4)	10.4 (8.3- 13.0)	7.2 (5.8- 8.9)
San Francisco-Oakland	12.3 (10.7- 14.0)	11.3 (9.9- 12.9)	8.7 (7.1- 10.5)	8.4 (6.9- 10.1)	12.7 (8.2- 19.6)	10.6 (6.9- 15.7)
San Jose-Monterey	11.1 (9.0- 13.6)	8.7 (7.1- 10.5)	7.2 (5.4- 9.6)	5.8 (4.4- 7.6)	~	~
Los Angeles	10.2 (9.1- 11.3)	7.6 (6.9- 8.5)	8.2 (7.2- 9.4)	6.2 (5.4- 7.1)	8.8 (6.0- 12.7)	6.7 (4.6- 9.4)
Hawaii	12.0 (9.4- 15.2)	11.9 (9.2- 15.0)	~	~	~	~
Oregon	5.7 (4.6- 7.0)	5.5 (4.4- 6.8)	5.3 (4.2- 6.6)	5.2 (4.1- 6.5)	~	~
Washington	7.2 (6.2- 8.4)	6.4 (5.5- 7.4)	6.1 (5.2- 7.3)	5.6 (4.7- 6.6)	~	~
Seattle-Puget Sound	8.2 (6.8- 9.7)	7.1 (6.0- 8.4)	6.7 (5.5- 8.2)	6.1 (5.0- 7.4)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.6.2: Cancer of the Liver and Intrahepatic Bile Duct. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	2.8 (2.7- 2.9)	3.2 (3.1- 3.3)	2.5 (2.4- 2.6)	3.1 (2.9- 3.2)	3.5 (3.1- 3.9)	2.8 (2.5- 3.1)
Northeast	2.9 (2.7- 3.1)	3.5 (3.3- 3.7)	2.6 (2.4- 2.8)	3.4 (3.2- 3.7)	4.0 (3.3- 4.9)	3.4 (2.8- 4.1)
New England	2.5 (2.1- 2.9)	2.9 (2.5- 3.4)	2.3 (2.0- 2.7)	3.0 (2.5- 3.5)	~	~
Connecticut	2.6 (2.0- 3.5)	3.2 (2.4- 4.2)	2.8 (2.1- 3.7)	3.6 (2.7- 4.7)	~	~
Maine						
Massachusetts	2.6 (2.1- 3.2)	3.1 (2.5- 3.7)	2.3 (1.8- 2.8)	2.9 (2.3- 3.6)	~	~
New Hampshire	~	~	~	~	~	~
Rhode Island	~	~	~	~	~	~
Vermont						
Middle Atlantic	3.0 (2.8- 3.2)	3.7 (3.4- 4.0)	2.6 (2.4- 2.9)	3.5 (3.3- 3.8)	4.3 (3.5- 5.1)	3.7 (3.0- 4.4)
New Jersey	2.7 (2.3- 3.3)	3.3 (2.7- 3.9)	2.6 (2.2- 3.2)	3.5 (2.9- 4.2)	~	~
New York	3.6 (3.3- 4.0)	4.3 (3.9- 4.7)	3.1 (2.7- 3.5)	4.1 (3.6- 4.6)	4.6 (3.6- 5.9)	4.0 (3.1- 5.1)
Pennsylvania	2.3 (2.0- 2.7)	3.1 (2.7- 3.6)	2.1 (1.8- 2.5)	2.9 (2.5- 3.4)	4.5 (2.9- 6.6)	4.2 (2.7- 6.1)
Midwest						
East North Central						
Illinois	3.5 (3.0- 3.9)	3.8 (3.3- 4.3)	3.2 (2.7- 3.7)	3.7 (3.2- 4.3)	4.6 (3.2- 6.5)	3.7 (2.6- 5.1)
Indiana						
Michigan	2.7 (2.3- 3.2)	2.9 (2.5- 3.5)	2.5 (2.1- 3.0)	2.9 (2.4- 3.5)	3.9 (2.5- 5.8)	3.2 (2.0- 4.7)
Detroit	3.3 (2.6- 4.1)	3.6 (2.9- 4.5)	2.8 (2.1- 3.7)	3.5 (2.6- 4.6)	4.6 (2.9- 7.1)	4.0 (2.5- 6.1)
Ohio	2.4 (2.1- 2.9)	2.8 (2.4- 3.3)	2.3 (1.9- 2.7)	2.8 (2.3- 3.3)	3.9 (2.5- 5.9)	3.3 (2.1- 5.0)
Wisconsin	2.4 (1.9- 3.0)	2.7 (2.1- 3.4)	2.3 (1.8- 3.0)	2.7 (2.1- 3.5)	~	~
West North Central	2.2 (1.9- 2.5)	2.5 (2.2- 2.9)	2.0 (1.7- 2.3)	2.4 (2.1- 2.8)	4.2 (2.4- 6.9)	2.9 (1.7- 4.8)
Iowa	2.2 (1.5- 3.0)	2.9 (2.1- 3.9)	2.1 (1.5- 2.9)	2.8 (2.0- 3.8)	~	~
Kansas	2.9 (2.1- 3.9)	3.3 (2.4- 4.5)	2.8 (2.0- 3.9)	3.4 (2.5- 4.6)	~	~
Minnesota	2.1 (1.6- 2.7)	2.2 (1.7- 2.9)	1.9 (1.4- 2.6)	2.2 (1.6- 2.9)	~	~
Missouri	2.2 (1.7- 2.8)	2.5 (2.0- 3.2)	1.9 (1.4- 2.5)	2.2 (1.7- 2.9)	~	~
Nebraska	~	~	~	~	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	~	~	~	~	~	~
District of Columbia	6.0 (3.6- 9.7)	7.2 (4.4- 11.1)	~	~	8.5 (5.1- 14.3)	10.9 (6.6- 17.0)
Florida	3.0 (2.6- 3.3)	4.1 (3.6- 4.5)	2.9 (2.5- 3.3)	4.4 (3.9- 5.0)	2.9 (1.9- 4.3)	2.3 (1.5- 3.3)
Georgia						
Atlanta	2.8 (1.9- 4.0)	2.2 (1.5- 3.1)	~	~	~	~
Maryland	2.4 (1.9- 3.1)	2.5 (2.0- 3.2)	2.2 (1.6- 3.0)	2.7 (2.0- 3.6)	~	~
North Carolina	1.7 (1.4- 2.2)	1.9 (1.5- 2.4)	1.7 (1.3- 2.2)	2.0 (1.5- 2.6)	~	~
South Carolina	1.8 (1.3- 2.5)	2.0 (1.4- 2.7)	1.8 (1.2- 2.6)	2.1 (1.4- 3.0)	~	~
Virginia						
West Virginia	2.2 (1.5- 3.3)	3.0 (2.0- 4.3)	2.2 (1.4- 3.3)	3.0 (2.0- 4.4)	~	~
East South Central						
Alabama						
Kentucky	2.3 (1.8- 3.1)	2.6 (1.9- 3.4)	2.2 (1.6- 3.0)	2.5 (1.8- 3.3)	~	~
Mississippi						
Tennessee						

continued

Table 2.6.2: Cancer of the Liver and Intrahepatic Bile Duct. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	2.7 (2.1- 3.5)	2.8 (2.1- 3.6)	2.9 (2.1- 3.8)	3.4 (2.5- 4.5)	~	~
Oklahoma						
Texas						
West	3.2 (3.0- 3.5)	3.2 (3.0- 3.4)	2.7 (2.5- 2.9)	2.9 (2.7- 3.1)	3.3 (2.3- 4.5)	2.4 (1.7- 3.3)
Mountain						
Arizona	2.2 (1.7- 2.9)	2.4 (1.8- 3.1)	2.1 (1.6- 2.8)	2.4 (1.8- 3.2)	~	~
Colorado	2.4 (1.8- 3.2)	2.3 (1.7- 3.1)	2.3 (1.7- 3.1)	2.3 (1.6- 3.1)	~	~
Idaho	2.6 (1.5- 4.2)	2.7 (1.6- 4.3)	2.6 (1.5- 4.3)	2.8 (1.6- 4.5)	~	~
Montana	~	~	~	~	~	~
Nevada						
New Mexico	3.3 (2.2- 4.8)	3.3 (2.2- 4.7)	3.2 (2.1- 4.7)	3.4 (2.2- 5.0)	~	~
Utah	2.7 (1.7- 4.1)	2.1 (1.4- 3.2)	2.7 (1.7- 4.1)	2.2 (1.4- 3.3)	~	~
Wyoming	~	~	~	~	~	~
Pacific	3.5 (3.3- 3.8)	3.5 (3.3- 3.8)	2.9 (2.7- 3.2)	3.0 (2.8- 3.3)	3.5 (2.5- 4.9)	2.6 (1.9- 3.6)
Alaska	~	~	~	~	~	~
California	3.6 (3.3- 3.9)	3.5 (3.3- 3.8)	3.0 (2.7- 3.3)	3.1 (2.8- 3.4)	3.4 (2.4- 4.9)	2.6 (1.8- 3.7)
San Francisco-Oakland	3.7 (2.9- 4.6)	4.0 (3.2- 5.0)	2.4 (1.7- 3.3)	2.8 (2.0- 3.9)	~	~
San Jose-Monterey	3.4 (2.3- 4.7)	3.1 (2.2- 4.3)	2.0 (1.2- 3.2)	2.0 (1.2- 3.2)	~	~
Los Angeles	4.5 (3.9- 5.1)	4.2 (3.6- 4.8)	4.1 (3.4- 4.8)	4.0 (3.3- 4.7)	3.6 (2.1- 5.7)	3.1 (1.8- 4.9)
Hawaii	4.3 (2.9- 6.3)	4.9 (3.3- 7.1)	~	~	~	~
Oregon	2.8 (2.1- 3.6)	3.1 (2.3- 4.1)	2.5 (1.8- 3.3)	2.9 (2.1- 3.8)	~	~
Washington	3.3 (2.7- 4.0)	3.4 (2.7- 4.1)	2.6 (2.0- 3.3)	2.9 (2.2- 3.6)	~	~
Seattle-Puget Sound	3.7 (2.9- 4.7)	3.8 (3.0- 4.7)	3.0 (2.2- 3.9)	3.2 (2.4- 4.2)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.7.1: Cancer of the Pancreas. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	12.3 (12.0- 12.5)	10.9 (10.7- 11.1)	12.1 (11.8- 12.3)	11.4 (11.2- 11.7)	15.2 (14.3- 16.2)	9.4 (8.8- 9.9)
Northeast	13.5 (13.0- 14.0)	12.7 (12.2- 13.1)	13.3 (12.8- 13.8)	13.3 (12.8- 13.8)	15.7 (13.9- 17.7)	10.1 (9.0- 11.3)
New England	13.2 (12.2- 14.3)	12.1 (11.2- 13.1)	13.1 (12.1- 14.2)	12.7 (11.7- 13.7)	14.0 (9.1- 21.6)	7.8 (5.2- 11.2)
Connecticut	13.3 (11.6- 15.4)	12.6 (10.9- 14.5)	13.1 (11.3- 15.2)	13.2 (11.4- 15.2)	19.4 (10.6- 34.3)	10.9 (6.3- 17.8)
Maine						
Massachusetts	13.3 (12.0- 14.8)	12.2 (11.0- 13.5)	13.2 (11.9- 14.7)	12.8 (11.5- 14.3)	~	~
New Hampshire	12.9 (9.9- 16.7)	10.8 (8.3- 13.8)	12.9 (9.9- 16.7)	10.9 (8.4- 14.0)	~	~
Rhode Island	12.4 (9.3- 16.2)	11.7 (8.9- 15.3)	12.6 (9.5- 16.6)	12.6 (9.5- 16.4)	~	~
Vermont						
Middle Atlantic	13.6 (13.0- 14.1)	12.8 (12.3- 13.3)	13.3 (12.7- 13.9)	13.6 (13.0- 14.2)	15.9 (14.0- 18.0)	10.4 (9.2- 11.7)
New Jersey	13.8 (12.6- 15.1)	12.6 (11.5- 13.7)	13.2 (11.9- 14.5)	13.1 (11.9- 14.4)	19.1 (14.6- 25.0)	11.6 (9.0- 14.8)
New York	13.7 (12.9- 14.6)	12.4 (11.7- 13.1)	13.9 (13.0- 14.9)	13.7 (12.9- 14.7)	13.4 (11.1- 16.2)	8.4 (7.0- 10.0)
Pennsylvania	13.3 (12.3- 14.2)	13.7 (12.7- 14.7)	12.6 (11.7- 13.6)	13.6 (12.6- 14.6)	19.7 (15.6- 24.9)	14.4 (11.4- 18.0)
Midwest						
East North Central						
Illinois	13.2 (12.2- 14.3)	11.2 (10.4- 12.1)	12.7 (11.6- 13.8)	11.5 (10.6- 12.5)	16.6 (13.2- 20.8)	10.1 (8.1- 12.4)
Indiana						
Michigan	12.1 (11.1- 13.2)	10.6 (9.7- 11.6)	11.4 (10.4- 12.6)	10.5 (9.5- 11.6)	18.4 (14.6- 23.0)	12.7 (10.1- 15.7)
Detroit	12.2 (10.6- 14.0)	10.8 (9.4- 12.4)	10.9 (9.2- 12.9)	10.3 (8.7- 12.1)	18.2 (13.9- 23.6)	13.5 (10.4- 17.3)
Ohio	11.4 (10.4- 12.4)	10.4 (9.6- 11.3)	11.4 (10.4- 12.4)	10.8 (9.9- 11.8)	11.5 (8.4- 15.6)	7.8 (5.8- 10.4)
Wisconsin	11.9 (10.6- 13.4)	10.8 (9.6- 12.2)	11.7 (10.4- 13.3)	11.2 (9.9- 12.6)	~	~
West North Central	11.6 (10.8- 12.3)	10.6 (9.9- 11.3)	11.3 (10.5- 12.1)	10.8 (10.1- 11.5)	19.5 (14.6- 26.0)	10.8 (8.2- 14.1)
Iowa	10.7 (9.0- 12.6)	10.6 (8.9- 12.4)	10.4 (8.8- 12.3)	10.5 (8.9- 12.4)	~	~
Kansas	13.4 (11.4- 15.7)	11.9 (10.1- 13.9)	12.9 (10.8- 15.2)	11.8 (9.9- 13.9)	~	~
Minnesota	10.4 (9.0- 11.9)	9.0 (7.9- 10.3)	10.2 (8.8- 11.7)	9.3 (8.0- 10.7)	~	~
Missouri	12.7 (11.3- 14.2)	11.8 (10.5- 13.2)	12.5 (11.1- 14.1)	12.1 (10.8- 13.7)	14.6 (9.6- 21.9)	9.4 (6.2- 13.6)
Nebraska	11.6 (9.3- 14.3)	10.8 (8.7- 13.3)	11.1 (8.8- 13.8)	10.7 (8.5- 13.3)	~	~
North Dakota	7.2 (4.5- 10.9)	7.0 (4.4- 10.6)	7.3 (4.6- 11.2)	7.5 (4.7- 11.3)	~	~
South Dakota						
South						
South Atlantic						
Delaware	12.6 (9.0- 17.5)	11.2 (8.0- 15.2)	12.4 (8.6- 17.8)	12.2 (8.5- 17.0)	~	~
District of Columbia	17.2 (12.2- 23.6)	16.4 (11.7- 22.3)	~	~	19.3 (12.8- 28.3)	19.1 (12.7- 27.7)
Florida	13.1 (12.3- 13.9)	15.3 (14.4- 16.2)	12.9 (12.1- 13.7)	16.7 (15.7- 17.7)	16.4 (13.2- 20.5)	9.0 (7.4- 11.0)
Georgia						
Atlanta	12.8 (10.2- 16.0)	7.6 (6.2- 9.3)	10.8 (8.2- 14.3)	7.5 (5.8- 9.6)	22.0 (14.2- 33.3)	8.6 (5.9- 12.0)
Maryland	11.3 (9.9- 12.9)	9.5 (8.3- 10.7)	10.9 (9.3- 12.7)	10.2 (8.8- 11.9)	12.8 (9.5- 17.3)	8.2 (6.2- 10.6)
North Carolina	12.2 (11.0- 13.5)	10.4 (9.4- 11.5)	12.2 (10.8- 13.7)	11.3 (10.1- 12.6)	12.5 (9.6- 16.3)	8.1 (6.2- 10.4)
South Carolina	12.5 (10.8- 14.6)	10.3 (8.9- 11.9)	12.7 (10.6- 15.0)	11.6 (9.8- 13.6)	12.4 (8.9- 17.2)	7.8 (5.6- 10.5)
Virginia						
West Virginia	10.6 (8.6- 13.1)	11.0 (8.9- 13.5)	10.4 (8.4- 12.9)	10.8 (8.7- 13.3)	~	~
East South Central						
Alabama						
Kentucky	12.0 (10.3- 13.8)	10.3 (8.9- 11.8)	11.7 (10.0- 13.7)	10.3 (8.8- 11.9)	~	~
Mississippi						
Tennessee						

continued

Table 2.7.1: Cancer of the Pancreas. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	13.1 (11.3- 15.0)	10.4 (9.1- 11.9)	11.6 (9.7- 13.7)	10.4 (8.8- 12.3)	18.9 (14.7- 24.1)	10.9 (8.5- 13.8)
Oklahoma						
Texas						
West	11.2 (10.8- 11.6)	9.0 (8.6- 9.3)	11.3 (10.8- 11.8)	9.4 (9.1- 9.8)	11.7 (9.6- 14.3)	7.2 (5.9- 8.6)
Mountain						
Arizona	9.8 (8.5- 11.2)	8.9 (7.8- 10.2)	10.0 (8.6- 11.5)	9.7 (8.4- 11.1)	~	~
Colorado	11.3 (9.6- 13.2)	8.3 (7.1- 9.7)	11.2 (9.4- 13.2)	8.4 (7.1- 9.8)	~	~
Idaho	9.4 (7.0- 12.5)	8.2 (6.1- 10.7)	9.6 (7.1- 12.7)	8.4 (6.3- 11.1)	~	~
Montana	12.8 (9.6- 16.9)	12.1 (9.0- 15.8)	12.9 (9.6- 17.1)	12.8 (9.5- 16.7)	~	~
Nevada						
New Mexico	13.5 (11.0- 16.5)	11.8 (9.6- 14.3)	13.0 (10.4- 16.1)	12.2 (9.8- 15.0)	~	~
Utah	11.2 (8.8- 14.1)	7.2 (5.6- 9.0)	11.4 (8.9- 14.4)	7.4 (5.8- 9.3)	~	~
Wyoming	16.4 (11.3- 23.5)	14.5 (10.1- 20.2)	16.0 (10.9- 23.0)	14.2 (9.8- 20.0)	~	~
Pacific	11.2 (10.7- 11.7)	8.9 (8.5- 9.3)	11.4 (10.8- 11.9)	9.4 (9.0- 9.9)	12.2 (9.9- 15.0)	7.5 (6.1- 9.0)
Alaska	10.6 (5.6- 19.9)	5.8 (3.5- 9.1)	~	~	~	~
California	11.0 (10.4- 11.6)	8.4 (8.0- 8.9)	11.1 (10.5- 11.8)	9.0 (8.5- 9.5)	12.3 (9.9- 15.3)	7.8 (6.4- 9.6)
San Francisco-Oakland	10.7 (9.2- 12.4)	9.4 (8.1- 10.8)	10.1 (8.4- 12.1)	9.6 (8.0- 11.4)	14.8 (9.6- 22.5)	11.0 (7.2- 16.2)
San Jose-Monterey	12.6 (10.2- 15.3)	8.9 (7.3- 10.8)	11.7 (9.3- 14.6)	8.9 (7.1- 11.1)	~	~
Los Angeles	10.8 (9.7- 12.1)	7.7 (7.0- 8.6)	11.5 (10.2- 12.9)	8.3 (7.4- 9.3)	11.0 (7.8- 15.4)	8.3 (6.0- 11.3)
Hawaii	10.8 (8.3- 13.9)	10.3 (7.9- 13.3)	13.5 (7.9- 21.9)	10.0 (5.8- 16.1)	~	~
Oregon	12.3 (10.7- 14.3)	11.7 (10.1- 13.4)	12.1 (10.4- 14.1)	11.8 (10.2- 13.7)	~	~
Washington	12.2 (10.8- 13.7)	10.2 (9.1- 11.4)	12.2 (10.8- 13.8)	10.7 (9.5- 12.1)	~	~
Seattle-Puget Sound	13.0 (11.2- 14.9)	10.6 (9.2- 12.1)	13.1 (11.3- 15.1)	11.4 (9.8- 13.1)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.7.2: Cancer of the Pancreas. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	9.6 (9.4- 9.7)	11.0 (10.8- 11.2)	9.2 (9.0- 9.4)	11.4 (11.2- 11.6)	13.1 (12.4- 13.8)	10.1 (9.5- 10.6)
Northeast	10.4 (10.1- 10.8)	13.0 (12.6- 13.5)	10.2 (9.8- 10.6)	13.7 (13.2- 14.2)	12.9 (11.6- 14.3)	10.5 (9.4- 11.7)
New England	9.9 (9.1- 10.6)	12.1 (11.2- 13.0)	9.9 (9.1- 10.7)	12.8 (11.9- 13.8)	10.1 (6.4- 15.1)	6.3 (4.1- 9.2)
Connecticut	10.1 (8.8- 11.6)	12.8 (11.2- 14.7)	10.2 (8.8- 11.8)	13.9 (12.0- 15.9)	~	~
Maine						
Massachusetts	9.8 (8.9- 10.9)	12.1 (10.9- 13.3)	9.9 (8.9- 11.0)	12.9 (11.6- 14.3)	~	~
New Hampshire	9.4 (7.2- 12.2)	9.9 (7.5- 12.7)	9.4 (7.1- 12.2)	9.9 (7.5- 12.8)	~	~
Rhode Island	9.1 (7.0- 11.9)	12.4 (9.6- 15.9)	9.2 (6.9- 12.1)	13.1 (10.0- 16.8)	~	~
Vermont						
Middle Atlantic	10.6 (10.2- 11.0)	13.3 (12.8- 13.8)	10.3 (9.9- 10.7)	14.0 (13.4- 14.6)	13.2 (11.8- 14.7)	11.1 (9.9- 12.3)
New Jersey	11.0 (10.1- 12.0)	13.4 (12.3- 14.5)	10.9 (10.0- 12.0)	14.6 (13.3- 15.9)	14.5 (11.1- 18.6)	10.3 (8.0- 13.2)
New York	11.3 (10.7- 12.0)	13.6 (12.8- 14.3)	11.0 (10.3- 11.7)	14.6 (13.7- 15.5)	13.0 (11.2- 15.0)	11.0 (9.5- 12.7)
Pennsylvania	9.5 (8.8- 10.2)	12.8 (11.9- 13.7)	9.1 (8.4- 9.8)	12.9 (12.0- 13.9)	13.0 (10.2- 16.3)	12.1 (9.5- 15.2)
Midwest						
East North Central						
Illinois	10.1 (9.4- 10.9)	11.4 (10.5- 12.2)	9.6 (8.8- 10.4)	11.7 (10.8- 12.7)	13.5 (11.0- 16.4)	10.3 (8.4- 12.5)
Indiana						
Michigan	10.8 (9.9- 11.7)	11.9 (10.9- 12.9)	9.9 (9.1- 10.9)	11.7 (10.6- 12.7)	17.4 (14.3- 21.2)	14.0 (11.4- 16.9)
Detroit	11.7 (10.3- 13.1)	13.0 (11.6- 14.7)	10.3 (8.9- 11.9)	12.8 (11.1- 14.7)	17.6 (14.0- 21.8)	15.0 (11.9- 18.6)
Ohio	8.8 (8.1- 9.5)	10.4 (9.6- 11.3)	8.4 (7.7- 9.2)	10.4 (9.6- 11.4)	12.9 (10.1- 16.2)	10.9 (8.6- 13.7)
Wisconsin	10.0 (8.9- 11.2)	11.8 (10.5- 13.1)	9.4 (8.4- 10.6)	11.8 (10.4- 13.2)	28.6 (17.1- 45.7)	13.7 (8.5- 21.0)
West North Central	8.5 (8.0- 9.1)	10.1 (9.5- 10.8)	8.2 (7.6- 8.7)	10.2 (9.5- 10.9)	16.0 (12.3- 20.5)	11.6 (8.9- 14.8)
Iowa	7.7 (6.5- 9.1)	10.3 (8.7- 12.0)	7.4 (6.2- 8.8)	10.2 (8.6- 12.0)	~	~
Kansas	8.8 (7.4- 10.4)	10.5 (8.9- 12.4)	8.7 (7.2- 10.3)	10.8 (9.0- 12.8)	~	~
Minnesota	6.9 (5.9- 8.0)	7.5 (6.4- 8.6)	6.7 (5.7- 7.8)	7.6 (6.5- 8.9)	~	~
Missouri	10.2 (9.2- 11.4)	12.3 (11.1- 13.7)	9.6 (8.5- 10.8)	12.2 (10.8- 13.6)	17.2 (12.6- 23.1)	14.0 (10.2- 18.7)
Nebraska	8.1 (6.4- 10.1)	9.8 (7.8- 12.1)	7.9 (6.2- 10.0)	9.9 (7.9- 12.4)	~	~
North Dakota	8.1 (5.4- 11.7)	10.1 (6.9- 14.2)	8.3 (5.6- 12.0)	10.7 (7.3- 15.2)	~	~
South Dakota						
South						
South Atlantic						
Delaware	12.1 (9.0- 16.0)	13.2 (9.8- 17.3)	12.4 (9.0- 16.8)	15.1 (11.0- 20.1)	~	~
District of Columbia	10.7 (7.5- 15.2)	13.4 (9.4- 18.4)	~	~	12.2 (8.1- 18.6)	16.1 (10.7- 23.2)
Florida	10.2 (9.6- 10.8)	14.5 (13.7- 15.4)	10.0 (9.4- 10.7)	15.9 (14.9- 16.9)	12.5 (10.1- 15.3)	8.5 (6.9- 10.3)
Georgia						
Atlanta	9.1 (7.3- 11.2)	6.7 (5.4- 8.3)	7.0 (5.3- 9.1)	6.3 (4.7- 8.2)	17.6 (12.2- 24.8)	8.0 (5.6- 11.0)
Maryland	9.1 (8.0- 10.3)	9.4 (8.3- 10.6)	8.6 (7.4- 9.9)	10.4 (8.9- 12.0)	11.7 (8.9- 15.1)	7.9 (6.1- 10.2)
North Carolina	9.2 (8.3- 10.1)	10.4 (9.4- 11.4)	8.5 (7.6- 9.5)	10.5 (9.4- 11.8)	12.6 (10.2- 15.4)	10.6 (8.6- 13.0)
South Carolina	9.4 (8.1- 10.8)	10.1 (8.8- 11.6)	8.2 (6.8- 9.7)	9.8 (8.2- 11.6)	13.7 (10.7- 17.4)	11.2 (8.7- 14.1)
Virginia						
West Virginia	6.5 (5.1- 8.2)	8.5 (6.8- 10.6)	6.6 (5.2- 8.3)	8.7 (6.9- 10.8)	~	~
East South Central						
Alabama						
Kentucky	9.3 (8.1- 10.7)	10.6 (9.2- 12.1)	9.0 (7.8- 10.4)	10.5 (9.1- 12.1)	13.3 (7.7- 21.5)	11.3 (6.6- 18.0)
Mississippi						
Tennessee						

continued

Table 2.7.2: Cancer of the Pancreas. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	10.0 (8.8- 11.4)	10.4 (9.1- 11.8)	9.2 (7.9- 10.8)	11.0 (9.4- 12.9)	12.5 (9.8- 15.7)	9.7 (7.6- 12.2)
Oklahoma						
Texas						
West	8.8 (8.5- 9.2)	8.9 (8.5- 9.2)	8.8 (8.4- 9.1)	9.3 (8.9- 9.7)	10.7 (8.9- 12.8)	7.7 (6.4- 9.1)
Mountain						
Arizona	8.3 (7.3- 9.5)	9.2 (8.0- 10.5)	8.3 (7.2- 9.5)	9.7 (8.4- 11.1)	~	~
Colorado	8.3 (7.1- 9.7)	7.9 (6.7- 9.2)	8.3 (7.0- 9.7)	8.1 (6.9- 9.5)	~	~
Idaho	12.7 (10.1- 15.8)	13.1 (10.4- 16.2)	12.9 (10.2- 16.1)	13.5 (10.7- 16.8)	~	~
Montana	7.4 (5.3- 10.3)	9.0 (6.4- 12.3)	7.4 (5.3- 10.4)	9.5 (6.8- 13.0)	~	~
Nevada						
New Mexico	8.5 (6.7- 10.7)	8.5 (6.7- 10.6)	8.9 (7.0- 11.2)	9.5 (7.4- 11.9)	~	~
Utah	6.4 (4.8- 8.4)	5.0 (3.8- 6.6)	6.4 (4.8- 8.4)	5.1 (3.8- 6.7)	~	~
Wyoming	6.3 (3.6- 10.6)	6.7 (3.8- 10.9)	~	~	~	~
Pacific	9.0 (8.6- 9.4)	9.1 (8.7- 9.5)	8.9 (8.5- 9.3)	9.5 (9.0- 9.9)	10.6 (8.7- 12.8)	7.8 (6.4- 9.4)
Alaska	13.0 (7.8- 21.0)	7.1 (4.4- 10.9)	13.2 (7.5- 22.5)	7.8 (4.5- 12.5)	~	~
California	8.6 (8.2- 9.1)	8.5 (8.1- 9.0)	8.6 (8.2- 9.2)	9.1 (8.6- 9.6)	10.5 (8.5- 12.8)	8.0 (6.5- 9.7)
San Francisco-Oakland	8.3 (7.1- 9.5)	9.3 (8.0- 10.7)	8.3 (7.0- 9.9)	10.6 (9.0- 12.5)	8.5 (5.0- 13.6)	7.2 (4.3- 11.4)
San Jose-Monterey	8.6 (6.9- 10.5)	8.1 (6.5- 9.9)	8.5 (6.7- 10.7)	8.6 (6.7- 10.7)	~	~
Los Angeles	8.1 (7.3- 9.0)	7.7 (7.0- 8.6)	8.3 (7.4- 9.4)	8.2 (7.3- 9.2)	8.4 (6.0- 11.5)	7.3 (5.2- 9.9)
Hawaii	11.6 (9.1- 14.6)	13.0 (10.3- 16.3)	~	~	~	~
Oregon	10.4 (9.0- 12.0)	12.2 (10.6- 14.0)	10.3 (8.9- 11.9)	12.6 (10.9- 14.5)	~	~
Washington	9.2 (8.2- 10.4)	9.5 (8.4- 10.7)	9.1 (8.0- 10.3)	9.9 (8.7- 11.1)	~	~
Seattle-Puget Sound	10.7 (9.3- 12.2)	10.9 (9.5- 12.4)	10.6 (9.2- 12.2)	11.5 (10.0- 13.3)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.8.1: Cancer of the Larynx. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	7.9 (7.7- 8.1)	7.3 (7.1- 7.4)	7.6 (7.4- 7.8)	7.4 (7.2- 7.6)	12.1 (11.3- 12.9)	7.9 (7.4- 8.4)
Northeast	8.3 (7.9- 8.6)	8.0 (7.6- 8.4)	8.0 (7.6- 8.4)	8.3 (7.9- 8.7)	10.8 (9.3- 12.4)	7.3 (6.4- 8.4)
New England	8.6 (7.8- 9.4)	8.2 (7.4- 9.0)	8.4 (7.7- 9.3)	8.4 (7.6- 9.2)	13.5 (8.7- 20.9)	7.2 (4.8- 10.5)
Connecticut	8.3 (6.9- 9.9)	8.2 (6.8- 9.7)	8.1 (6.7- 9.8)	8.4 (7.0- 10.1)	~	~
Maine						
Massachusetts	8.5 (7.5- 9.7)	8.1 (7.1- 9.1)	8.3 (7.2- 9.5)	8.3 (7.2- 9.4)	16.2 (9.1- 29.2)	8.1 (4.6- 13.2)
New Hampshire	8.5 (6.2- 11.6)	7.4 (5.4- 10.0)	8.6 (6.3- 11.8)	7.6 (5.5- 10.2)	~	~
Rhode Island	10.3 (7.5- 13.8)	9.9 (7.2- 13.1)	10.0 (7.3- 13.6)	10.1 (7.3- 13.5)	~	~
Vermont						
Middle Atlantic	8.1 (7.7- 8.6)	7.9 (7.5- 8.4)	7.9 (7.4- 8.3)	8.2 (7.8- 8.7)	10.5 (9.0- 12.2)	7.3 (6.3- 8.4)
New Jersey	7.5 (6.7- 8.5)	7.1 (6.3- 8.0)	7.1 (6.2- 8.2)	7.3 (6.4- 8.3)	12.0 (8.7- 16.5)	8.4 (6.2- 11.2)
New York	8.0 (7.4- 8.7)	7.6 (7.0- 8.2)	8.0 (7.3- 8.7)	8.1 (7.5- 8.8)	8.6 (6.9- 10.8)	6.0 (4.8- 7.4)
Pennsylvania	8.7 (7.9- 9.4)	9.0 (8.2- 9.8)	8.2 (7.4- 9.0)	8.9 (8.1- 9.7)	13.5 (10.1- 17.9)	9.8 (7.4- 12.9)
Midwest						
East North Central						
Illinois	9.1 (8.3- 9.9)	8.0 (7.3- 8.8)	8.3 (7.4- 9.2)	7.7 (6.9- 8.5)	14.7 (11.8- 18.4)	10.2 (8.2- 12.5)
Indiana						
Michigan	8.0 (7.2- 8.9)	7.2 (6.5- 8.0)	7.4 (6.6- 8.3)	7.0 (6.2- 7.9)	13.8 (10.5- 17.9)	9.4 (7.2- 12.0)
Detroit	7.3 (6.1- 8.7)	6.7 (5.6- 8.0)	6.0 (4.8- 7.4)	5.9 (4.8- 7.3)	13.4 (9.8- 18.0)	10.0 (7.4- 13.4)
Ohio	8.3 (7.5- 9.2)	7.8 (7.1- 8.6)	8.1 (7.3- 9.0)	7.9 (7.1- 8.7)	9.3 (6.7- 12.9)	6.8 (4.9- 9.3)
Wisconsin	6.7 (5.7- 7.9)	6.3 (5.3- 7.3)	6.4 (5.4- 7.5)	6.2 (5.3- 7.3)	~	~
West North Central	7.6 (7.0- 8.2)	7.1 (6.6- 7.7)	7.4 (6.8- 8.0)	7.2 (6.6- 7.8)	13.2 (9.3- 18.4)	7.9 (5.6- 10.7)
Iowa	8.0 (6.6- 9.7)	8.1 (6.7- 9.7)	8.0 (6.5- 9.6)	8.2 (6.7- 9.8)	~	~
Kansas	7.2 (5.7- 8.9)	6.6 (5.3- 8.1)	6.8 (5.3- 8.5)	6.5 (5.1- 8.1)	~	~
Minnesota	6.7 (5.7- 8.0)	5.9 (5.0- 7.0)	6.7 (5.7- 8.0)	6.2 (5.2- 7.3)	~	~
Missouri	8.9 (7.8- 10.2)	8.5 (7.4- 9.6)	8.5 (7.3- 9.8)	8.4 (7.3- 9.7)	14.0 (9.1- 21.1)	9.4 (6.2- 13.6)
Nebraska	6.6 (5.0- 8.8)	6.4 (4.8- 8.4)	6.6 (4.9- 8.8)	6.6 (4.9- 8.6)	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	10.5 (7.4- 14.8)	10.1 (7.1- 13.9)	10.1 (6.8- 14.8)	10.5 (7.1- 14.9)	~	~
District of Columbia	14.2 (9.8- 20.1)	13.9 (9.6- 19.5)	~	~	17.5 (11.4- 26.0)	17.8 (11.6- 26.0)
Florida	10.0 (9.3- 10.7)	11.5 (10.7- 12.3)	9.8 (9.1- 10.5)	12.4 (11.5- 13.3)	11.9 (9.2- 15.6)	6.7 (5.3- 8.4)
Georgia						
Atlanta	7.0 (5.2- 9.3)	4.5 (3.4- 5.8)	6.2 (4.4- 8.7)	4.8 (3.4- 6.5)	11.7 (6.1- 21.2)	4.5 (2.7- 7.2)
Maryland	8.8 (7.6- 10.2)	7.8 (6.7- 8.9)	7.9 (6.6- 9.4)	7.7 (6.4- 9.1)	13.1 (9.8- 17.6)	8.3 (6.3- 10.8)
North Carolina	9.1 (8.1- 10.2)	8.3 (7.4- 9.3)	8.3 (7.3- 9.5)	8.3 (7.2- 9.4)	13.5 (10.5- 17.3)	9.0 (7.0- 11.3)
South Carolina	9.1 (7.7- 10.8)	8.3 (7.1- 9.7)	8.3 (6.8- 10.1)	8.4 (6.9- 10.1)	12.3 (8.9- 16.8)	8.5 (6.2- 11.4)
Virginia						
West Virginia	10.4 (8.5- 12.8)	11.4 (9.2- 13.8)	10.1 (8.1- 12.5)	11.1 (8.9- 13.6)	~	~
East South Central						
Alabama						
Kentucky	9.5 (8.1- 11.1)	9.0 (7.7- 10.4)	9.4 (8.0- 11.0)	9.1 (7.8- 10.6)	~	~
Mississippi						
Tennessee						

continued

Table 2.8.1: Cancer of the Larynx. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	10.3 (8.9- 11.9)	9.2 (8.0- 10.6)	9.1 (7.6- 10.9)	9.2 (7.7- 10.9)	14.6 (11.2- 18.8)	9.7 (7.5- 12.4)
Oklahoma						
Texas						
West	5.9 (5.6- 6.2)	4.9 (4.6- 5.1)	5.9 (5.6- 6.2)	5.1 (4.8- 5.4)	10.2 (8.2- 12.5)	6.5 (5.3- 7.8)
Mountain						
Arizona	5.7 (4.7- 6.9)	5.2 (4.4- 6.3)	5.6 (4.6- 6.8)	5.5 (4.5- 6.6)	~	~
Colorado	5.3 (4.2- 6.6)	4.3 (3.5- 5.3)	5.4 (4.3- 6.8)	4.5 (3.6- 5.6)	~	~
Idaho	7.6 (5.4- 10.4)	6.6 (4.7- 8.9)	7.7 (5.5- 10.6)	6.8 (4.9- 9.2)	~	~
Montana	6.3 (4.1- 9.2)	6.4 (4.2- 9.2)	5.8 (3.8- 8.8)	6.1 (4.0- 9.1)	~	~
Nevada						
New Mexico	6.5 (4.8- 8.7)	5.7 (4.2- 7.6)	6.7 (4.9- 9.1)	6.4 (4.7- 8.5)	~	~
Utah	3.5 (2.3- 5.3)	2.4 (1.5- 3.5)	3.6 (2.3- 5.5)	2.5 (1.6- 3.7)	~	~
Wyoming	~	~	~	~	~	~
Pacific	6.0 (5.7- 6.4)	4.9 (4.6- 5.2)	6.0 (5.6- 6.4)	5.1 (4.8- 5.4)	10.8 (8.7- 13.4)	6.8 (5.5- 8.3)
Alaska	~	~	~	~	~	~
California	5.9 (5.5- 6.4)	4.7 (4.4- 5.0)	5.8 (5.4- 6.3)	4.8 (4.4- 5.2)	11.1 (8.8- 13.8)	7.1 (5.7- 8.8)
San Francisco-Oakland	7.2 (6.0- 8.6)	6.5 (5.4- 7.7)	7.3 (5.9- 9.0)	6.9 (5.6- 8.5)	13.2 (8.3- 20.6)	9.8 (6.2- 14.6)
San Jose-Monterey	5.4 (4.0- 7.3)	4.0 (2.9- 5.3)	5.8 (4.1- 8.0)	4.5 (3.2- 6.1)	~	~
Los Angeles	6.5 (5.6- 7.4)	4.8 (4.2- 5.4)	6.2 (5.3- 7.3)	4.6 (4.0- 5.4)	10.5 (7.4- 14.8)	7.9 (5.6- 10.8)
Hawaii	5.9 (4.1- 8.3)	5.8 (4.0- 8.1)	14.3 (8.5- 22.8)	11.2 (6.8- 17.5)	~	~
Oregon	6.1 (4.9- 7.5)	5.9 (4.7- 7.2)	6.1 (4.9- 7.5)	6.0 (4.8- 7.4)	~	~
Washington	6.6 (5.6- 7.7)	5.6 (4.8- 6.5)	6.5 (5.5- 7.7)	5.8 (4.9- 6.8)	~	~
Seattle-Puget Sound	6.0 (4.9- 7.4)	5.0 (4.1- 6.1)	6.1 (4.9- 7.5)	5.4 (4.3- 6.6)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.8.2: Cancer of the Larynx. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	1.7 (1.7- 1.8)	1.9 (1.8- 1.9)	1.7 (1.6- 1.8)	1.9 (1.8- 2.0)	2.4 (2.2- 2.8)	2.0 (1.8- 2.3)
Northeast	1.8 (1.6- 1.9)	2.0 (1.8- 2.2)	1.7 (1.5- 1.9)	2.0 (1.9- 2.2)	2.4 (1.9- 3.1)	2.2 (1.7- 2.7)
New England	2.0 (1.7- 2.4)	2.3 (1.9- 2.7)	2.0 (1.7- 2.4)	2.3 (1.9- 2.8)	~	~
Connecticut	2.5 (1.9- 3.4)	2.9 (2.1- 3.8)	2.6 (1.9- 3.5)	3.1 (2.3- 4.1)	~	~
Maine						
Massachusetts	1.8 (1.4- 2.3)	2.0 (1.5- 2.5)	1.7 (1.2- 2.2)	2.0 (1.5- 2.5)	~	~
New Hampshire	~	~	~	~	~	~
Rhode Island	~	~	~	~	~	~
Vermont						
Middle Atlantic	1.7 (1.5- 1.9)	1.9 (1.7- 2.1)	1.6 (1.4- 1.8)	1.9 (1.7- 2.2)	2.5 (1.9- 3.1)	2.3 (1.7- 2.9)
New Jersey	1.6 (1.2- 2.0)	1.8 (1.4- 2.2)	1.5 (1.2- 2.0)	1.8 (1.4- 2.4)	~	~
New York	1.8 (1.5- 2.1)	2.0 (1.7- 2.3)	1.8 (1.5- 2.1)	2.1 (1.8- 2.4)	2.0 (1.4- 2.9)	1.9 (1.3- 2.6)
Pennsylvania	1.7 (1.4- 2.0)	2.0 (1.7- 2.4)	1.5 (1.2- 1.8)	1.8 (1.5- 2.2)	3.7 (2.3- 5.7)	3.6 (2.2- 5.4)
Midwest						
East North Central						
Illinois	1.5 (1.3- 1.9)	1.6 (1.3- 1.9)	1.4 (1.1- 1.8)	1.5 (1.2- 1.9)	2.4 (1.4- 3.7)	2.0 (1.2- 3.1)
Indiana						
Michigan	2.7 (2.3- 3.2)	2.8 (2.4- 3.3)	2.2 (1.8- 2.7)	2.4 (2.0- 3.0)	5.9 (4.2- 8.2)	5.0 (3.6- 6.9)
Detroit	3.3 (2.6- 4.1)	3.5 (2.7- 4.4)	2.5 (1.9- 3.4)	3.0 (2.2- 4.0)	5.9 (3.9- 8.5)	5.3 (3.6- 7.6)
Ohio	1.5 (1.3- 1.9)	1.7 (1.4- 2.0)	1.4 (1.1- 1.7)	1.5 (1.2- 1.9)	2.6 (1.5- 4.2)	2.3 (1.3- 3.8)
Wisconsin	2.0 (1.5- 2.6)	2.1 (1.6- 2.7)	1.9 (1.4- 2.5)	2.1 (1.6- 2.8)	~	~
West North Central	1.5 (1.3- 1.8)	1.7 (1.4- 1.9)	1.5 (1.3- 1.8)	1.7 (1.4- 2.0)	~	~
Iowa	1.7 (1.1- 2.4)	2.0 (1.3- 2.8)	1.6 (1.1- 2.4)	2.0 (1.3- 2.8)	~	~
Kansas	1.2 (0.7- 2.0)	1.3 (0.8- 2.1)	1.2 (0.7- 2.0)	1.4 (0.8- 2.2)	~	~
Minnesota	1.2 (0.8- 1.8)	1.2 (0.8- 1.8)	1.3 (0.9- 1.8)	1.3 (0.9- 1.9)	~	~
Missouri	1.8 (1.4- 2.4)	2.0 (1.5- 2.6)	1.8 (1.3- 2.4)	2.0 (1.5- 2.7)	~	~
Nebraska	~	~	~	~	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	~	~	~	~	~	~
District of Columbia	~	~	~	~	~	~
Florida	2.3 (2.0- 2.6)	2.9 (2.6- 3.3)	2.4 (2.0- 2.7)	3.2 (2.8- 3.7)	1.9 (1.1- 3.1)	1.4 (0.8- 2.2)
Georgia						
Atlanta	1.8 (1.1- 2.9)	1.4 (0.9- 2.2)	~	~	~	~
Maryland	1.8 (1.3- 2.4)	1.8 (1.3- 2.4)	1.9 (1.3- 2.6)	2.1 (1.5- 2.9)	~	~
North Carolina	1.6 (1.2- 2.0)	1.7 (1.3- 2.2)	1.6 (1.2- 2.1)	1.9 (1.4- 2.5)	~	~
South Carolina	2.2 (1.6- 2.9)	2.3 (1.7- 3.1)	2.3 (1.6- 3.3)	2.6 (1.8- 3.6)	~	~
Virginia						
West Virginia	2.4 (1.6- 3.6)	2.9 (1.9- 4.2)	2.5 (1.6- 3.7)	3.0 (2.0- 4.4)	~	~
East South Central						
Alabama						
Kentucky	2.7 (2.0- 3.4)	2.8 (2.2- 3.7)	2.5 (1.9- 3.3)	2.7 (2.0- 3.6)	~	~
Mississippi						
Tennessee						

continued

Table 2.8.2: Cancer of the Larynx. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	2.5 (1.9- 3.3)	2.6 (1.9- 3.3)	2.5 (1.8- 3.4)	2.8 (2.0- 3.8)	2.8 (1.6- 4.5)	2.3 (1.3- 3.6)
Oklahoma						
Texas						
West	1.3 (1.2- 1.5)	1.3 (1.2- 1.4)	1.4 (1.2- 1.5)	1.4 (1.2- 1.5)	2.1 (1.4- 3.2)	1.6 (1.1- 2.4)
Mountain						
Arizona	1.7 (1.2- 2.3)	1.8 (1.3- 2.4)	1.8 (1.3- 2.4)	2.0 (1.4- 2.7)	~	~
Colorado	1.3 (0.8- 1.9)	1.2 (0.8- 1.8)	1.3 (0.8- 1.9)	1.3 (0.8- 1.9)	~	~
Idaho	~	~	~	~	~	~
Montana	~	~	~	~	~	~
Nevada						
New Mexico	~	~	~	~	~	~
Utah	~	~	~	~	~	~
Wyoming	~	~	~	~	~	~
Pacific	1.3 (1.2- 1.5)	1.3 (1.1- 1.4)	1.4 (1.2- 1.6)	1.4 (1.2- 1.6)	2.3 (1.5- 3.5)	1.8 (1.2- 2.6)
Alaska	~	~	~	~	~	~
California	1.2 (1.1- 1.4)	1.2 (1.0- 1.3)	1.3 (1.1- 1.5)	1.3 (1.1- 1.5)	2.1 (1.3- 3.3)	1.6 (1.0- 2.5)
San Francisco-Oakland	1.1 (0.7- 1.7)	1.2 (0.8- 1.7)	1.3 (0.8- 2.1)	1.5 (0.9- 2.3)	~	~
San Jose-Monterey	~	~	~	~	~	~
Los Angeles	1.1 (0.8- 1.4)	1.0 (0.7- 1.3)	1.1 (0.7- 1.5)	1.0 (0.7- 1.4)	~	~
Hawaii	~	~	~	~	~	~
Oregon	1.5 (1.0- 2.2)	1.7 (1.1- 2.4)	1.6 (1.1- 2.3)	1.8 (1.2- 2.6)	~	~
Washington	1.6 (1.2- 2.2)	1.6 (1.2- 2.2)	1.6 (1.2- 2.2)	1.6 (1.2- 2.2)	~	~
Seattle-Puget Sound	1.5 (1.0- 2.1)	1.5 (1.0- 2.1)	1.3 (0.9- 2.0)	1.4 (0.9- 2.1)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.9.1: Cancer of the Lung and Bronchus. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	89.1 (88.5- 89.7)	80.0 (79.5- 80.6)	87.8 (87.2- 88.5)	84.2 (83.6- 84.8)	110.7 (108.3- 113.3)	68.7 (67.2- 70.2)
Northeast	86.8 (85.6- 88.0)	82.7 (81.6- 83.9)	86.0 (84.7- 87.3)	87.9 (86.6- 89.2)	97.2 (92.7- 101.9)	63.1 (60.3- 66.0)
New England	88.2 (85.7- 90.8)	82.3 (80.0- 84.7)	87.9 (85.3- 90.5)	86.5 (84.0- 89.1)	93.8 (79.9- 110.0)	48.5 (41.7- 56.1)
Connecticut	84.5 (79.9- 89.2)	81.1 (76.8- 85.7)	83.8 (79.1- 88.7)	85.4 (80.7- 90.4)	95.5 (74.8- 121.5)	55.4 (44.0- 68.9)
Maine						
Massachusetts	88.1 (84.6- 91.7)	81.9 (78.6- 85.2)	87.7 (84.2- 91.4)	86.5 (83.0- 90.1)	85.7 (67.3- 109.3)	42.2 (33.6- 52.3)
New Hampshire	83.5 (75.7- 92.1)	70.9 (64.3- 78.0)	83.7 (75.7- 92.3)	71.9 (65.2- 79.2)	~	~
Rhode Island	105.0 (95.9- 114.8)	103.4 (94.5-113.0)	105.4 (96.0- 115.4)	108.9 (99.3-119.2)	~	~
Vermont						
Middle Atlantic	86.4 (85.1- 87.8)	82.8 (81.5- 84.1)	85.4 (84.0- 86.9)	88.4 (86.9- 89.9)	97.6 (92.9- 102.6)	65.1 (62.1- 68.3)
New Jersey	86.1 (83.1- 89.2)	80.1 (77.3- 82.9)	85.1 (81.9- 88.4)	86.4 (83.1- 89.7)	107.4 (96.5- 119.4)	69.1 (62.5- 76.3)
New York	80.7 (78.7- 82.7)	73.9 (72.1- 75.7)	81.8 (79.7- 84.0)	81.9 (79.7- 84.1)	74.1 (68.6- 79.9)	49.7 (46.2- 53.4)
Pennsylvania	94.2 (91.8- 96.8)	98.3 (95.7-100.9)	89.9 (87.4- 92.5)	98.2 (95.5-100.9)	147.2 (135.1- 160.2)	103.2 (94.9-112.1)
Midwest						
East North Central						
Illinois	95.8 (93.1- 98.6)	81.7 (79.4- 84.0)	92.4 (89.6- 95.4)	83.9 (81.4- 86.6)	126.3 (116.7- 136.6)	78.3 (72.5- 84.4)
Indiana						
Michigan	94.6 (91.6- 97.6)	82.7 (80.2- 85.3)	90.9 (87.8- 94.0)	83.5 (80.7- 86.3)	127.6 (117.2- 138.8)	86.3 (79.4- 93.7)
Detroit	100.5 (95.7- 105.4)	88.6 (84.5- 92.8)	93.5 (88.3- 98.9)	88.0 (83.2- 92.9)	133.4 (121.2- 146.6)	98.0 (89.1-107.5)
Ohio	102.5 (99.7- 105.4)	94.3 (91.7- 96.9)	99.7 (96.7- 102.6)	95.3 (92.5- 98.1)	123.3 (112.6- 135.0)	84.2 (77.0- 91.7)
Wisconsin	83.0 (79.3- 86.7)	75.5 (72.2- 78.9)	81.5 (77.8- 85.3)	77.8 (74.3- 81.5)	135.0 (104.4- 175.4)	57.5 (45.7- 71.3)
West North Central	88.8 (86.8- 90.9)	82.0 (80.1- 83.9)	86.8 (84.8- 88.9)	83.5 (81.5- 85.5)	134.8 (121.4- 149.5)	77.1 (69.7- 85.1)
Iowa	88.0 (83.1- 93.0)	88.1 (83.2- 93.1)	87.6 (82.8- 92.8)	89.8 (84.8- 95.0)	148.1 (86.9- 244.5)	67.2 (41.1-103.8)
Kansas	91.9 (86.5- 97.5)	82.6 (77.8- 87.7)	90.4 (84.9- 96.2)	84.7 (79.6- 90.1)	131.4 (98.7- 172.9)	72.9 (55.2- 94.5)
Minnesota	74.4 (70.7- 78.3)	64.3 (61.1- 67.6)	73.2 (69.5- 77.1)	66.2 (62.8- 69.7)	123.5 (85.2- 183.4)	49.7 (35.2- 68.2)
Missouri	105.2 (101.2- 109.4)	98.5 (94.7-102.3)	102.4 (98.2- 106.7)	100.5 (96.4-104.6)	136.0 (119.4- 154.5)	87.7 (77.2- 99.2)
Nebraska	78.3 (72.1- 84.9)	73.1 (67.4- 79.2)	75.6 (69.5- 82.2)	73.1 (67.2- 79.4)	130.3 (81.9- 206.0)	72.3 (46.3-107.6)
North Dakota	69.3 (60.4- 79.3)	68.6 (59.7- 78.4)	68.6 (59.7- 78.7)	71.2 (61.9- 81.5)	~	~
South Dakota						
South						
South Atlantic						
Delaware	109.9 (98.7- 122.2)	100.4 (90.4-111.2)	107.8 (96.0- 121.0)	108.4 (96.7-121.2)	130.9 (96.4- 176.8)	74.9 (56.1- 97.9)
District of Columbia	111.4 (98.2- 126.2)	105.7 (93.2-119.5)	63.7 (46.7- 87.0)	53.7 (39.6- 71.2)	134.6 (116.4- 155.2)	134.7 (116.5-154.8)
Florida	101.8 (99.6- 103.9)	120.7 (118.2-123.2)	101.3 (99.1- 103.6)	133.5 (130.6-136.4)	110.4 (101.7- 119.8)	61.6 (57.1- 66.4)
Georgia						
Atlanta	89.1 (82.1- 96.7)	51.6 (47.7- 55.6)	80.8 (73.3- 89.1)	54.1 (49.2- 59.2)	123.2 (104.3- 145.4)	50.1 (43.4- 57.6)
Maryland	92.1 (87.9- 96.5)	75.7 (72.3- 79.2)	90.0 (85.4- 94.9)	83.7 (79.4- 88.1)	104.5 (94.2- 115.9)	62.5 (56.7- 68.7)
North Carolina	103.2 (99.7- 106.9)	89.8 (86.8- 92.9)	101.9 (98.0- 105.9)	97.1 (93.5-100.8)	111.8 (102.4- 121.9)	70.6 (64.8- 76.7)
South Carolina	109.5 (104.4- 114.9)	97.1 (92.7-101.6)	108.9 (103.2- 115.0)	108.0 (102.4-113.7)	110.8 (99.8- 122.9)	72.7 (65.7- 80.3)
Virginia						
West Virginia	126.3 (119.1- 134.0)	133.6 (126.0-141.5)	126.4 (119.0- 134.1)	134.8 (127.1-142.9)	96.2 (59.5- 148.0)	77.7 (48.1-118.8)
East South Central						
Alabama						
Kentucky	135.6 (130.0- 141.4)	120.7 (115.8-125.7)	136.6 (130.9- 142.6)	124.7 (119.5-130.0)	115.9 (94.2- 141.7)	75.7 (61.9- 91.8)
Mississippi						
Tennessee						

continued

Table 2.9.1: Cancer of the Lung and Bronchus. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	114.9 (109.9- 120.2)	95.3 (91.2- 99.6)	107.5 (101.9- 113.4)	100.7 (95.5-106.1)	142.1 (130.5- 154.6)	87.7 (80.7- 95.1)
Oklahoma						
Texas						
West	72.1 (71.0- 73.2)	57.7 (56.9- 58.6)	72.3 (71.1- 73.4)	60.5 (59.5- 61.5)	91.8 (85.6- 98.5)	54.3 (50.7- 58.0)
Mountain						
Arizona	75.8 (72.2- 79.6)	69.5 (66.2- 73.0)	76.8 (73.0- 80.7)	75.0 (71.3- 78.8)	88.6 (61.9- 127.2)	47.1 (33.9- 63.6)
Colorado	63.2 (59.1- 67.5)	47.3 (44.4- 50.4)	63.5 (59.3- 68.0)	48.8 (45.7- 52.1)	53.8 (34.1- 84.4)	30.0 (19.8- 43.7)
Idaho	69.0 (62.0- 76.6)	57.7 (51.9- 64.0)	69.5 (62.4- 77.2)	59.1 (53.1- 65.5)	~	~
Montana	76.6 (68.5- 85.5)	74.4 (66.6- 82.9)	74.0 (65.9- 82.9)	75.4 (67.2- 84.3)	~	~
Nevada						
New Mexico	60.5 (54.9- 66.6)	50.8 (46.2- 55.9)	62.0 (56.1- 68.4)	56.1 (50.8- 61.8)	~	~
Utah	44.3 (39.4- 49.6)	28.8 (25.7- 32.3)	43.7 (38.8- 49.1)	29.1 (25.9- 32.7)	~	~
Wyoming	68.9 (57.9- 81.7)	59.7 (50.4- 70.3)	69.4 (58.2- 82.3)	61.3 (51.6- 72.2)	~	~
Pacific	74.1 (72.8- 75.4)	58.7 (57.7- 59.7)	74.6 (73.2- 76.0)	61.7 (60.5- 62.9)	95.4 (88.7- 102.6)	57.0 (53.1- 61.1)
Alaska	77.3 (63.7- 94.3)	43.0 (36.2- 50.8)	74.5 (59.9- 93.6)	45.5 (37.5- 54.8)	~	~
California	70.5 (69.1- 72.0)	54.3 (53.1- 55.4)	70.3 (68.8- 72.0)	56.8 (55.6- 58.1)	94.3 (87.3- 101.9)	57.8 (53.6- 62.2)
San Francisco-Oakland	68.9 (65.0- 73.0)	58.9 (55.6- 62.4)	63.8 (59.4- 68.5)	58.7 (54.6- 62.9)	88.3 (74.4- 104.4)	64.0 (54.2- 75.1)
San Jose-Monterey	62.5 (57.2- 68.3)	44.4 (40.6- 48.3)	62.2 (56.4- 68.6)	46.9 (42.6- 51.6)	110.6 (61.1- 198.3)	38.9 (23.4- 60.8)
Los Angeles	64.1 (61.4- 66.9)	46.1 (44.2- 48.1)	60.4 (57.4- 63.5)	44.3 (42.1- 46.5)	98.0 (87.4- 109.6)	68.3 (61.2- 76.0)
Hawaii	69.1 (62.5- 76.3)	67.3 (60.8- 74.2)	90.5 (74.8- 108.9)	69.7 (57.7- 83.4)	~	~
Oregon	86.1 (81.5- 90.9)	80.5 (76.3- 85.0)	85.5 (80.8- 90.4)	82.6 (78.1- 87.3)	132.4 (80.5- 212.2)	68.3 (42.8-103.4)
Washington	86.6 (82.9- 90.5)	72.0 (68.9- 75.1)	86.6 (82.7- 90.6)	75.4 (72.1- 78.9)	112.0 (84.9- 148.0)	58.5 (44.8- 75.0)
Seattle-Puget Sound	90.3 (85.7- 95.2)	73.2 (69.5- 77.1)	90.9 (86.0- 96.0)	78.1 (73.9- 82.4)	118.7 (88.5- 159.5)	60.3 (45.5- 78.3)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.9.2: Cancer of the Lung and Bronchus. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	53.4 (52.9- 53.8)	59.0 (58.6- 59.5)	54.4 (54.0- 54.9)	64.1 (63.5- 64.6)	50.3 (48.9- 51.7)	40.1 (39.0- 41.2)
Northeast	53.7 (52.9- 54.6)	63.7 (62.8- 64.7)	54.8 (53.9- 55.7)	69.4 (68.3- 70.5)	45.8 (43.3- 48.3)	39.3 (37.2- 41.5)
New England	58.3 (56.5- 60.2)	67.3 (65.3- 69.4)	58.7 (56.8- 60.6)	71.0 (68.8- 73.3)	49.3 (41.1- 58.7)	33.6 (28.1- 39.8)
Connecticut	54.3 (51.0- 57.7)	63.9 (60.1- 67.8)	54.7 (51.4- 58.3)	68.2 (64.1- 72.5)	50.2 (38.3- 65.1)	38.4 (29.4- 49.2)
Maine						
Massachusetts	59.0 (56.5- 61.6)	68.4 (65.5- 71.3)	59.0 (56.5- 61.7)	72.1 (69.1- 75.3)	51.3 (39.4- 66.0)	31.8 (24.6- 40.4)
New Hampshire	61.0 (54.9- 67.6)	61.6 (55.5- 68.1)	61.0 (54.9- 67.6)	62.1 (55.9- 68.8)	~	~
Rhode Island	65.2 (58.9- 72.1)	78.9 (71.4- 87.0)	66.6 (60.0- 73.8)	84.1 (76.0- 92.8)	~	~
Vermont						
Middle Atlantic	52.4 (51.5- 53.4)	62.6 (61.6- 63.8)	53.6 (52.6- 54.6)	68.8 (67.5- 70.1)	45.4 (42.9- 48.1)	40.1 (37.8- 42.4)
New Jersey	55.5 (53.4- 57.6)	64.5 (62.1- 67.0)	57.2 (54.9- 59.6)	72.6 (69.7- 75.5)	51.5 (45.4- 58.3)	42.0 (37.1- 47.4)
New York	51.5 (50.1- 52.9)	59.2 (57.6- 60.7)	54.4 (52.8- 56.0)	67.8 (65.9- 69.8)	36.6 (33.6- 39.8)	32.3 (29.7- 35.1)
Pennsylvania	51.9 (50.3- 53.5)	66.7 (64.7- 68.7)	50.6 (49.0- 52.3)	67.8 (65.7- 70.1)	63.7 (57.3- 70.5)	59.7 (53.8- 66.1)
Midwest						
East North Central						
Illinois	54.8 (53.0- 56.6)	58.8 (56.9- 60.8)	54.0 (52.1- 56.0)	62.0 (59.8- 64.2)	62.0 (56.5- 67.8)	49.9 (45.5- 54.5)
Indiana						
Michigan	57.4 (55.4- 59.5)	61.2 (59.1- 63.4)	56.5 (54.3- 58.7)	63.5 (61.1- 66.0)	66.8 (60.5- 73.7)	54.5 (49.3- 60.0)
Detroit	59.6 (56.5- 62.8)	65.3 (61.9- 68.9)	59.0 (55.5- 62.7)	70.5 (66.4- 74.9)	63.8 (56.8- 71.5)	55.1 (49.0- 61.6)
Ohio	56.1 (54.3- 58.0)	63.9 (61.8- 66.0)	55.3 (53.5- 57.3)	65.5 (63.3- 67.8)	60.8 (54.7- 67.5)	52.3 (47.0- 58.0)
Wisconsin	46.9 (44.4- 49.5)	51.2 (48.5- 54.0)	46.3 (43.8- 49.0)	53.0 (50.2- 56.0)	65.0 (48.1- 87.0)	36.0 (27.1- 46.8)
West North Central	50.6 (49.3- 52.0)	56.7 (55.1- 58.2)	50.0 (48.6- 51.5)	58.1 (56.5- 59.8)	61.8 (54.2- 70.1)	44.8 (39.4- 50.8)
Iowa	46.2 (43.0- 49.5)	56.1 (52.4- 60.1)	46.1 (42.9- 49.4)	57.0 (53.2- 61.1)	~	~
Kansas	52.8 (49.1- 56.7)	58.4 (54.4- 62.6)	53.3 (49.5- 57.4)	61.1 (56.8- 65.6)	48.1 (31.9- 69.9)	35.6 (23.6- 51.4)
Minnesota	45.8 (43.2- 48.6)	47.4 (44.7- 50.2)	45.0 (42.4- 47.8)	48.7 (45.8- 51.6)	87.4 (57.1- 130.6)	40.2 (26.9- 57.8)
Missouri	59.2 (56.6- 62.0)	67.2 (64.2- 70.3)	58.9 (56.1- 61.8)	69.9 (66.6- 73.3)	61.9 (52.8- 72.2)	49.9 (42.5- 58.1)
Nebraska	44.4 (40.2- 48.8)	51.3 (46.6- 56.3)	43.1 (39.0- 47.6)	51.5 (46.6- 56.7)	~	~
North Dakota	37.2 (31.1- 44.2)	43.1 (36.1- 50.9)	36.8 (30.7- 44.0)	44.3 (37.1- 52.5)	~	~
South Dakota						
South						
South Atlantic						
Delaware	65.8 (58.2- 74.1)	70.8 (62.7- 79.7)	66.0 (57.7- 75.2)	78.3 (68.6- 89.0)	65.4 (45.5- 91.8)	46.0 (32.2- 63.7)
District of Columbia	50.8 (43.3- 59.4)	60.6 (51.8- 70.5)	39.6 (27.9- 57.5)	41.9 (29.8- 57.3)	55.4 (46.0- 66.8)	71.8 (59.7- 85.5)
Florida	62.9 (61.4- 64.5)	87.0 (84.9- 89.1)	65.5 (63.8- 67.2)	99.8 (97.3-102.2)	39.1 (34.9- 43.6)	28.0 (25.1- 31.2)
Georgia						
Atlanta	55.1 (50.6- 59.8)	41.4 (38.0- 44.9)	55.6 (50.5- 61.2)	49.6 (45.0- 54.5)	52.7 (43.6- 63.4)	27.9 (23.2- 33.2)
Maryland	57.0 (54.1- 59.9)	58.0 (55.2- 61.0)	58.7 (55.4- 62.2)	68.3 (64.5- 72.2)	55.2 (49.1- 61.9)	40.0 (35.7- 44.8)
North Carolina	51.0 (48.9- 53.2)	56.1 (53.8- 58.5)	53.8 (51.4- 56.3)	64.4 (61.5- 67.4)	38.3 (34.0- 43.0)	32.3 (28.7- 36.2)
South Carolina	46.2 (43.4- 49.2)	49.9 (46.9- 53.1)	50.4 (47.0- 54.0)	60.7 (56.7- 65.0)	32.9 (28.1- 38.3)	27.1 (23.1- 31.5)
Virginia						
West Virginia	67.5 (63.0- 72.4)	87.3 (81.4- 93.5)	67.0 (62.3- 71.9)	87.0 (81.0- 93.3)	82.5 (54.2- 121.8)	93.3 (62.0-134.9)
East South Central						
Alabama						
Kentucky	70.4 (67.0- 74.0)	77.6 (73.8- 81.5)	69.8 (66.3- 73.5)	78.7 (74.7- 82.8)	82.2 (67.2- 99.6)	70.2 (57.5- 84.9)
Mississippi						
Tennessee						

continued

Table 2.9.2: Cancer of the Lung and Bronchus. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	52.4 (49.5- 55.4)	53.9 (50.9- 57.0)	54.3 (50.9- 58.0)	63.3 (59.3- 67.5)	47.4 (42.0- 53.4)	37.4 (33.2- 42.0)
Oklahoma						
Texas						
West	48.4 (47.6- 49.2)	47.8 (47.0- 48.6)	50.4 (49.6- 51.3)	52.0 (51.1- 52.9)	51.8 (47.7- 56.1)	38.1 (35.2- 41.2)
Mountain						
Arizona	47.7 (45.1- 50.4)	52.0 (49.2- 55.0)	49.1 (46.4- 52.0)	56.8 (53.7- 60.1)	29.7 (16.7- 50.0)	18.6 (10.6- 30.2)
Colorado	40.7 (37.9- 43.7)	38.4 (35.7- 41.2)	40.9 (38.0- 43.9)	39.7 (36.9- 42.6)	48.0 (30.6- 72.4)	28.8 (18.6- 42.5)
Idaho	42.0 (37.0- 47.5)	41.5 (36.6- 46.9)	42.2 (37.2- 47.8)	42.3 (37.3- 47.8)	~	~
Montana	48.5 (42.6- 55.0)	55.7 (48.9- 63.1)	47.0 (41.1- 53.6)	56.3 (49.3- 64.0)	~	~
Nevada						
New Mexico	36.3 (32.5- 40.6)	36.2 (32.4- 40.4)	38.6 (34.4- 43.2)	41.1 (36.7- 45.9)	~	~
Utah	22.4 (19.2- 25.8)	17.2 (14.9- 19.9)	22.5 (19.4- 26.1)	17.8 (15.3- 20.5)	~	~
Wyoming	46.5 (38.4- 56.0)	48.6 (40.2- 58.3)	45.9 (37.8- 55.6)	49.0 (40.4- 59.0)	~	~
Pacific	50.9 (50.0- 51.9)	50.1 (49.2- 51.1)	53.9 (52.8- 54.9)	55.4 (54.3- 56.5)	54.1 (49.7- 58.7)	40.6 (37.4- 44.1)
Alaska	69.3 (57.0- 83.9)	42.5 (35.3- 50.6)	73.0 (58.7- 90.4)	46.7 (38.1- 56.7)	~	~
California	48.8 (47.7- 49.9)	47.2 (46.1- 48.2)	51.4 (50.1- 52.6)	52.2 (51.0- 53.5)	54.6 (50.0- 59.5)	42.3 (38.8- 46.1)
San Francisco-Oakland	49.6 (46.7- 52.6)	53.9 (50.7- 57.2)	54.4 (50.7- 58.2)	64.1 (59.9- 68.5)	55.7 (46.2- 66.9)	47.9 (39.8- 57.3)
San Jose-Monterey	44.5 (40.6- 48.7)	41.8 (38.2- 45.7)	45.8 (41.5- 50.5)	46.1 (41.8- 50.8)	~	~
Los Angeles	41.5 (39.6- 43.4)	38.7 (37.0- 40.5)	42.8 (40.6- 45.1)	41.1 (39.0- 43.3)	51.9 (45.6- 58.8)	45.4 (40.0- 51.4)
Hawaii	39.5 (34.9- 44.7)	44.9 (39.6- 50.6)	56.6 (44.9- 70.6)	54.0 (42.9- 67.0)	~	~
Oregon	60.8 (57.3- 64.4)	68.2 (64.3- 72.3)	61.6 (58.0- 65.4)	71.3 (67.2- 75.6)	~	~
Washington	58.5 (55.7- 61.3)	58.5 (55.7- 61.3)	60.1 (57.2- 63.1)	62.9 (59.9- 66.1)	52.8 (34.9- 77.7)	28.9 (19.2- 41.8)
Seattle-Puget Sound	63.3 (59.9- 67.0)	62.8 (59.4- 66.4)	66.3 (62.5- 70.2)	69.5 (65.6- 73.6)	54.2 (34.8- 81.9)	29.0 (18.8- 42.8)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.10.1: Melanomas of the Skin. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	19.0 (18.7- 19.3)	17.6 (17.3- 17.8)	20.5 (20.2- 20.8)	19.9 (19.6- 20.2)	1.2 (1.0- 1.5)	0.8 (0.6- 1.0)
Northeast	16.7 (16.2- 17.2)	16.1 (15.6- 16.7)	18.3 (17.7- 18.9)	18.7 (18.1- 19.3)	~	~
New England	22.3 (21.0- 23.6)	21.4 (20.2- 22.6)	22.9 (21.6- 24.2)	22.8 (21.5- 24.2)	~	~
Connecticut	25.6 (23.1- 28.2)	25.1 (22.7- 27.7)	26.2 (23.6- 29.0)	26.8 (24.2- 29.7)	~	~
Maine						
Massachusetts	19.7 (18.1- 21.4)	18.9 (17.4- 20.6)	20.2 (18.6- 22.0)	20.4 (18.7- 22.2)	~	~
New Hampshire	23.2 (19.2- 28.0)	20.8 (17.3- 24.8)	23.6 (19.5- 28.4)	21.3 (17.7- 25.4)	~	~
Rhode Island	25.6 (21.2- 30.8)	24.8 (20.5- 29.6)	26.8 (22.1- 32.2)	27.0 (22.3- 32.3)	~	~
Vermont						
Middle Atlantic	15.0 (14.5- 15.6)	14.6 (14.0- 15.1)	16.8 (16.1- 17.5)	17.2 (16.6- 17.9)	~	~
New Jersey	19.1 (17.7- 20.6)	18.2 (16.9- 19.6)	22.3 (20.7- 24.0)	22.8 (21.2- 24.5)	~	~
New York	11.8 (11.1- 12.6)	11.1 (10.4- 11.8)	13.8 (12.9- 14.7)	13.9 (13.0- 14.8)	~	~
Pennsylvania	17.0 (15.9- 18.1)	17.3 (16.2- 18.4)	17.3 (16.2- 18.5)	18.3 (17.1- 19.5)	~	~
Midwest						
East North Central						
Illinois	14.9 (13.9- 16.0)	13.4 (12.5- 14.3)	16.3 (15.1- 17.5)	15.4 (14.3- 16.5)	~	~
Indiana						
Michigan	22.3 (20.9- 23.7)	20.2 (18.9- 21.5)	23.5 (22.0- 25.1)	22.3 (20.9- 23.8)	~	~
Detroit	20.6 (18.5- 22.9)	18.6 (16.7- 20.6)	25.2 (22.6- 28.1)	24.3 (21.8- 26.9)	~	~
Ohio	16.6 (15.4- 17.7)	15.5 (14.5- 16.6)	16.4 (15.2- 17.6)	15.9 (14.8- 17.1)	~	~
Wisconsin	13.0 (11.6- 14.5)	12.3 (11.0- 13.7)	13.4 (12.0- 15.0)	13.2 (11.7- 14.7)	~	~
West North Central	17.1 (16.2- 18.0)	16.0 (15.2- 16.9)	16.6 (15.8- 17.6)	16.1 (15.3- 17.0)	~	~
Iowa	20.1 (17.8- 22.6)	19.9 (17.6- 22.3)	18.9 (16.7- 21.4)	19.1 (16.8- 21.6)	~	~
Kansas	21.8 (19.2- 24.6)	20.0 (17.6- 22.6)	20.3 (17.8- 23.2)	19.2 (16.8- 21.8)	~	~
Minnesota	19.7 (17.8- 21.7)	18.0 (16.4- 19.8)	19.4 (17.6- 21.4)	18.4 (16.7- 20.3)	~	~
Missouri	12.4 (11.0- 13.8)	11.7 (10.4- 13.0)	13.3 (11.8- 14.9)	13.0 (11.6- 14.6)	~	~
Nebraska	14.6 (12.0- 17.6)	13.9 (11.4- 16.7)	11.4 (9.1- 14.2)	11.0 (8.8- 13.6)	~	~
North Dakota	10.5 (7.2- 14.9)	10.5 (7.2- 14.7)	10.8 (7.4- 15.3)	11.2 (7.7- 15.7)	~	~
South Dakota						
South						
South Atlantic						
Delaware	16.0 (12.0- 21.2)	15.0 (11.3- 19.5)	18.1 (13.5- 24.1)	18.5 (13.8- 24.2)	~	~
District of Columbia	10.8 (7.1- 16.0)	11.1 (7.3- 16.1)	19.8 (11.4- 34.9)	19.0 (11.1- 30.5)	~	~
Florida	21.9 (20.8- 22.9)	24.6 (23.5- 25.8)	23.2 (22.1- 24.4)	28.3 (27.0- 29.7)	~	~
Georgia						
Atlanta	21.8 (18.6- 25.5)	15.6 (13.5- 17.9)	26.0 (22.1- 30.5)	21.5 (18.5- 24.9)	~	~
Maryland	22.1 (20.1- 24.2)	19.3 (17.6- 21.1)	28.4 (25.8- 31.1)	27.4 (25.0- 30.0)	~	~
North Carolina	17.1 (15.7- 18.6)	15.5 (14.2- 16.8)	20.7 (19.0- 22.5)	20.1 (18.5- 21.8)	~	~
South Carolina	21.7 (19.5- 24.2)	19.6 (17.7- 21.7)	27.5 (24.7- 30.7)	27.3 (24.6- 30.3)	~	~
Virginia						
West Virginia	19.2 (16.4- 22.3)	20.0 (17.1- 23.2)	17.5 (14.9- 20.6)	18.6 (15.8- 21.8)	~	~
East South Central						
Alabama						
Kentucky	22.4 (20.3- 24.8)	21.0 (19.0- 23.1)	22.2 (19.9- 24.6)	21.0 (18.9- 23.3)	~	~
Mississippi						
Tennessee						

continued

Table 2.10.1: Melanomas of the Skin. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	12.1 (10.5- 13.9)	10.2 (8.9- 11.6)	15.2 (13.1- 17.5)	14.4 (12.4- 16.5)	~	~
Oklahoma						
Texas						
West	22.1 (21.5- 22.7)	19.0 (18.5- 19.5)	24.1 (23.5- 24.8)	21.4 (20.9- 22.0)	~	~
Mountain						
Arizona	20.1 (18.2- 22.1)	18.4 (16.7- 20.2)	20.9 (19.0- 23.1)	20.1 (18.2- 22.1)	~	~
Colorado	24.4 (22.0- 27.0)	21.1 (19.1- 23.2)	25.7 (23.2- 28.4)	22.7 (20.6- 25.0)	~	~
Idaho	24.0 (20.1- 28.6)	21.4 (18.0- 25.4)	24.5 (20.5- 29.2)	22.1 (18.5- 26.2)	~	~
Montana	13.3 (10.0- 17.4)	12.7 (9.6- 16.6)	11.8 (8.7- 15.9)	11.8 (8.7- 15.6)	~	~
Nevada						
New Mexico	17.7 (14.8- 21.1)	15.8 (13.2- 18.7)	19.3 (16.1- 23.0)	18.3 (15.3- 21.6)	~	~
Utah	28.4 (24.6- 32.6)	20.4 (17.7- 23.3)	29.4 (25.5- 33.7)	21.4 (18.6- 24.5)	~	~
Wyoming	28.1 (21.4- 36.5)	25.7 (19.7- 33.0)	28.7 (21.8- 37.3)	26.7 (20.5- 34.3)	~	~
Pacific	22.2 (21.5- 22.9)	18.9 (18.4- 19.5)	24.6 (23.8- 25.4)	21.7 (21.0- 22.4)	~	~
Alaska	14.4 (8.3- 24.6)	8.3 (5.5- 12.1)	15.2 (8.8- 27.0)	10.1 (6.5- 14.9)	~	~
California	22.1 (21.3- 22.9)	18.3 (17.7- 19.0)	24.4 (23.4- 25.3)	20.9 (20.1- 21.7)	~	~
San Francisco-Oakland	19.0 (17.0- 21.2)	17.5 (15.7- 19.4)	24.9 (22.2- 27.8)	24.3 (21.8- 27.1)	~	~
San Jose-Monterey	20.3 (17.5- 23.5)	16.7 (14.4- 19.2)	20.5 (17.3- 24.1)	17.4 (14.8- 20.3)	~	~
Los Angeles	17.4 (16.0- 18.9)	13.5 (12.5- 14.6)	21.4 (19.7- 23.3)	16.8 (15.4- 18.2)	~	~
Hawaii	19.6 (16.2- 23.6)	19.1 (15.8- 23.0)	55.2 (43.4- 69.4)	47.2 (37.5- 58.8)	~	~
Oregon	23.7 (21.4- 26.3)	23.2 (20.9- 25.7)	24.4 (21.9- 27.0)	24.4 (22.0- 27.0)	~	~
Washington	23.3 (21.5- 25.3)	21.2 (19.6- 23.0)	25.3 (23.3- 27.4)	23.8 (21.9- 25.8)	~	~
Seattle-Puget Sound	23.4 (21.2- 25.9)	21.3 (19.3- 23.4)	25.7 (23.3- 28.4)	24.4 (22.1- 26.9)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.10.2: Melanomas of the Skin. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	12.1 (11.9- 12.3)	12.7 (12.5- 12.9)	13.4 (13.1- 13.6)	14.4 (14.2- 14.7)	0.9 (0.7- 1.1)	0.7 (0.6- 0.9)
Northeast	10.4 (10.0- 10.7)	11.5 (11.0- 11.9)	11.6 (11.1- 12.0)	13.2 (12.8- 13.7)	~	~
New England	14.9 (14.0- 15.9)	16.2 (15.2- 17.2)	15.3 (14.3- 16.3)	17.0 (16.0- 18.2)	~	~
Connecticut	15.9 (14.1- 17.9)	17.3 (15.4- 19.4)	16.1 (14.2- 18.2)	18.0 (15.9- 20.3)	~	~
Maine						
Massachusetts	13.9 (12.6- 15.2)	15.1 (13.8- 16.5)	14.3 (13.0- 15.7)	16.1 (14.7- 17.6)	~	~
New Hampshire	19.0 (15.7- 22.8)	19.7 (16.3- 23.6)	19.1 (15.8- 23.0)	20.0 (16.5- 23.9)	~	~
Rhode Island	12.9 (10.1- 16.3)	15.0 (11.8- 18.7)	13.6 (10.7- 17.3)	16.3 (12.8- 20.3)	~	~
Vermont						
Middle Atlantic	9.0 (8.6- 9.4)	10.0 (9.6- 10.5)	10.3 (9.9- 10.8)	11.9 (11.4- 12.5)	~	~
New Jersey	11.5 (10.6- 12.6)	12.8 (11.7- 13.9)	13.8 (12.6- 15.0)	15.9 (14.6- 17.3)	~	~
New York	7.3 (6.8- 7.8)	8.0 (7.4- 8.6)	8.8 (8.1- 9.4)	10.0 (9.3- 10.8)	~	~
Pennsylvania	9.9 (9.2- 10.7)	11.3 (10.5- 12.2)	10.3 (9.5- 11.1)	12.0 (11.1- 13.0)	~	~
Midwest						
East North Central						
Illinois	8.7 (8.0- 9.4)	9.0 (8.3- 9.8)	9.9 (9.1- 10.8)	10.6 (9.7- 11.6)	~	~
Indiana						
Michigan	15.3 (14.2- 16.4)	15.7 (14.6- 16.8)	16.7 (15.5- 17.9)	17.6 (16.3- 18.9)	~	~
Detroit	13.3 (11.8- 14.9)	13.9 (12.4- 15.6)	17.1 (15.1- 19.2)	18.6 (16.5- 20.9)	~	~
Ohio	11.0 (10.2- 11.9)	11.6 (10.8- 12.6)	11.3 (10.4- 12.2)	12.1 (11.2- 13.1)	~	~
Wisconsin	9.1 (8.0- 10.3)	9.4 (8.3- 10.6)	9.4 (8.2- 10.6)	9.9 (8.7- 11.3)	~	~
West North Central	11.9 (11.2- 12.6)	12.5 (11.8- 13.3)	11.6 (10.9- 12.4)	12.5 (11.7- 13.2)	~	~
Iowa	14.2 (12.4- 16.2)	15.5 (13.5- 17.6)	13.4 (11.7- 15.5)	14.9 (13.0- 17.1)	~	~
Kansas	12.4 (10.6- 14.4)	13.1 (11.3- 15.2)	11.2 (9.5- 13.2)	12.2 (10.3- 14.3)	~	~
Minnesota	15.6 (14.1- 17.3)	15.9 (14.4- 17.6)	15.4 (13.9- 17.1)	16.0 (14.4- 17.8)	~	~
Missouri	7.4 (6.5- 8.5)	8.0 (7.0- 9.1)	7.9 (6.9- 9.1)	8.8 (7.7- 10.0)	~	~
Nebraska	13.9 (11.5- 16.7)	14.0 (11.6- 16.7)	11.5 (9.2- 14.1)	11.7 (9.4- 14.3)	~	~
North Dakota	6.5 (4.0- 10.1)	6.9 (4.3- 10.5)	6.5 (4.0- 10.3)	7.0 (4.4- 10.8)	~	~
South Dakota						
South						
South Atlantic						
Delaware	10.7 (7.7- 14.5)	11.1 (8.0- 15.0)	12.2 (8.7- 16.8)	13.4 (9.6- 18.2)	~	~
District of Columbia	5.9 (3.6- 9.7)	7.2 (4.4- 11.1)	~	~	~	~
Florida	12.3 (11.6- 13.1)	14.6 (13.7- 15.4)	13.5 (12.7- 14.4)	16.7 (15.7- 17.8)	~	~
Georgia						
Atlanta	10.9 (9.1- 13.0)	10.2 (8.6- 12.0)	14.1 (11.8- 16.9)	14.4 (12.0- 17.1)	~	~
Maryland	14.4 (13.1- 16.0)	14.9 (13.5- 16.5)	20.0 (18.0- 22.1)	21.7 (19.6- 24.0)	~	~
North Carolina	11.3 (10.3- 12.3)	11.7 (10.7- 12.8)	14.0 (12.7- 15.4)	15.2 (13.8- 16.6)	~	~
South Carolina	13.2 (11.7- 14.8)	13.7 (12.1- 15.4)	17.5 (15.5- 19.9)	19.0 (16.8- 21.5)	~	~
Virginia						
West Virginia	11.5 (9.5- 13.9)	12.8 (10.6- 15.3)	10.4 (8.5- 12.7)	11.7 (9.5- 14.1)	~	~
East South Central						
Alabama						
Kentucky	16.4 (14.7- 18.3)	17.2 (15.4- 19.1)	16.5 (14.7- 18.4)	17.4 (15.6- 19.4)	~	~
Mississippi						
Tennessee						

continued

Table 2.10.2: Melanomas of the Skin. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	6.5 (5.5- 7.7)	6.6 (5.6- 7.7)	9.1 (7.7- 10.7)	9.8 (8.3- 11.5)	~	~
Oklahoma						
Texas						
West	14.4 (14.0- 14.9)	14.3 (13.8- 14.7)	15.8 (15.4- 16.3)	15.9 (15.4- 16.4)	1.3 (0.8- 2.1)	1.2 (0.7- 1.8)
Mountain						
Arizona	12.4 (11.0- 13.9)	12.5 (11.1- 14.0)	13.6 (12.0- 15.2)	14.0 (12.5- 15.7)	~	~
Colorado	16.9 (15.2- 18.8)	17.0 (15.3- 18.9)	18.0 (16.1- 20.0)	18.3 (16.4- 20.3)	~	~
Idaho	15.8 (12.8- 19.4)	15.3 (12.4- 18.7)	16.3 (13.2- 19.9)	15.8 (12.8- 19.3)	~	~
Montana	9.5 (6.8- 12.9)	9.7 (7.0- 13.1)	8.9 (6.2- 12.4)	9.3 (6.6- 12.7)	~	~
Nevada						
New Mexico	9.8 (7.8- 12.1)	9.6 (7.7- 11.9)	10.6 (8.5- 13.3)	10.8 (8.6- 13.4)	~	~
Utah	17.5 (14.8- 20.5)	14.6 (12.4- 17.1)	18.3 (15.5- 21.4)	15.4 (13.1- 18.0)	~	~
Wyoming	12.5 (8.4- 18.0)	13.0 (8.8- 18.5)	12.9 (8.7- 18.6)	13.6 (9.2- 19.3)	~	~
Pacific	14.6 (14.1- 15.1)	14.4 (13.9- 15.0)	16.3 (15.7- 16.9)	16.3 (15.7- 16.9)	1.2 (0.7- 2.1)	1.1 (0.7- 1.8)
Alaska	7.2 (4.2- 12.5)	6.5 (3.9- 10.1)	9.1 (5.3- 16.0)	8.7 (5.2- 13.6)	~	~
California	13.9 (13.3- 14.5)	13.5 (13.0- 14.1)	15.2 (14.5- 15.9)	15.1 (14.4- 15.8)	~	~
San Francisco-Oakland	13.3 (11.8- 14.9)	14.2 (12.6- 15.9)	18.4 (16.3- 20.8)	20.2 (17.9- 22.8)	~	~
San Jose-Monterey	14.5 (12.4- 17.0)	14.2 (12.1- 16.5)	13.6 (11.2- 16.2)	13.6 (11.3- 16.3)	~	~
Los Angeles	11.0 (10.1- 12.0)	10.5 (9.6- 11.4)	13.8 (12.6- 15.2)	13.1 (11.9- 14.4)	~	~
Hawaii	9.7 (7.4- 12.6)	10.3 (7.9- 13.3)	26.9 (19.3- 36.9)	27.7 (19.9- 37.4)	~	~
Oregon	16.5 (14.7- 18.6)	17.4 (15.5- 19.5)	16.6 (14.7- 18.7)	17.7 (15.7- 19.9)	~	~
Washington	19.4 (17.8- 21.0)	19.6 (18.0- 21.3)	21.3 (19.5- 23.1)	21.9 (20.2- 23.8)	~	~
Seattle-Puget Sound	18.9 (17.0- 20.9)	19.2 (17.4- 21.3)	20.9 (18.9- 23.2)	21.9 (19.7- 24.2)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.11: Cancer of the Breast. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	134.1 (133.4- 134.8)	143.2 (142.5-143.9)	136.3 (135.5- 137.0)	152.7 (151.9-153.5)	112.7 (110.7- 114.7)	94.9 (93.3- 96.6)
Northeast	136.1 (134.8- 137.5)	153.6 (152.1-155.1)	138.5 (137.0- 140.0)	164.1 (162.4-165.8)	101.9 (98.3- 105.7)	90.9 (87.7- 94.2)
New England	145.1 (142.2- 148.1)	160.7 (157.5-163.9)	145.1 (142.1- 148.2)	167.0 (163.6-170.5)	107.3 (95.5- 120.2)	79.9 (71.4- 89.2)
Connecticut	150.1 (144.6- 155.8)	169.6 (163.5-176.0)	149.3 (143.5- 155.3)	176.3 (169.6-183.2)	121.8 (103.2- 143.2)	98.4 (83.7-114.9)
Maine						
Massachusetts	144.7 (140.7- 148.7)	160.3 (156.0-164.8)	145.1 (141.0- 149.4)	168.1 (163.4-172.9)	94.4 (79.0- 112.4)	67.4 (56.7- 79.6)
New Hampshire	137.9 (128.7- 147.6)	138.6 (129.4-148.3)	136.3 (127.1- 146.1)	138.1 (128.9-147.9)	~	~
Rhode Island	139.7 (130.1- 150.0)	159.6 (148.9-170.9)	142.1 (132.1- 152.8)	168.0 (156.5-180.1)	133.0 (76.9- 226.3)	77.6 (47.4-119.9)
Vermont						
Middle Atlantic	133.5 (132.0- 135.1)	151.4 (149.7-153.1)	136.3 (134.7- 138.0)	163.1 (161.1-165.1)	101.4 (97.6- 105.3)	92.4 (88.9- 95.9)
New Jersey	139.6 (136.2- 143.0)	155.4 (151.7-159.2)	145.8 (142.0- 149.7)	172.6 (168.1-177.1)	109.0 (100.3- 118.4)	94.2 (86.7-102.1)
New York	128.7 (126.5- 130.9)	141.8 (139.5-144.3)	132.7 (130.2- 135.2)	155.1 (152.3-158.1)	90.1 (85.4- 94.9)	82.9 (78.7- 87.3)
Pennsylvania	136.2 (133.5- 138.9)	163.3 (160.1-166.5)	135.1 (132.3- 138.0)	167.7 (164.3-171.1)	125.1 (116.1- 134.6)	116.7 (108.3-125.5)
Midwest						
East North Central						
Illinois	136.6 (133.7- 139.5)	142.9 (140.0-145.9)	137.0 (133.9- 140.2)	150.6 (147.2-154.0)	122.2 (114.7- 130.1)	102.4 (96.1-108.9)
Indiana						
Michigan	131.6 (128.5- 134.7)	137.8 (134.6-141.1)	132.8 (129.5- 136.2)	145.3 (141.7-149.0)	121.7 (113.3- 130.7)	103.4 (96.2-110.9)
Detroit	129.9 (125.3- 134.7)	139.0 (134.0-144.1)	131.8 (126.4- 137.3)	150.9 (144.8-157.2)	125.0 (115.2- 135.4)	111.6 (102.9-120.8)
Ohio	135.8 (132.9- 138.7)	148.5 (145.4-151.7)	134.3 (131.3- 137.4)	151.9 (148.5-155.3)	117.9 (109.4- 127.0)	103.4 (96.0-111.3)
Wisconsin	132.8 (128.6- 137.1)	142.3 (137.8-146.9)	132.2 (127.9- 136.7)	147.4 (142.6-152.3)	140.8 (116.7- 169.7)	89.0 (74.7-105.3)
West North Central	133.1 (130.8- 135.4)	144.1 (141.6-146.5)	132.9 (130.6- 135.3)	148.5 (145.9-151.2)	120.5 (110.1- 131.6)	92.7 (84.8-101.2)
Iowa	132.3 (126.8- 138.1)	153.2 (146.9-159.6)	132.8 (127.2- 138.6)	156.2 (149.8-162.8)	127.3 (81.7- 191.2)	88.8 (57.5-131.1)
Kansas	135.8 (129.8- 142.0)	145.7 (139.3-152.3)	134.6 (128.4- 141.0)	148.6 (141.8-155.5)	110.9 (86.1- 141.1)	87.7 (68.2-110.9)
Minnesota	140.1 (135.4- 144.9)	143.9 (139.2-148.8)	139.5 (134.8- 144.4)	148.9 (144.0-154.1)	107.0 (74.1- 152.4)	55.5 (39.6- 75.5)
Missouri	127.7 (123.7- 131.8)	138.9 (134.6-143.3)	127.5 (123.3- 131.8)	144.2 (139.5-149.1)	125.1 (112.2- 139.2)	104.3 (93.6-116.0)
Nebraska	130.4 (123.0- 138.1)	142.9 (135.0-151.2)	129.9 (122.4- 137.7)	146.2 (137.9-154.8)	112.9 (74.2- 167.2)	80.0 (53.2-115.6)
North Dakota	130.3 (118.4- 143.1)	144.6 (131.7-158.4)	130.8 (118.7- 144.0)	150.3 (136.7-164.9)	~	~
South Dakota						
South						
South Atlantic						
Delaware	138.0 (126.8- 150.0)	145.5 (133.8-158.1)	137.9 (125.6- 151.2)	157.3 (143.4-172.2)	127.8 (100.6- 161.1)	100.9 (79.9-125.8)
District of Columbia	138.0 (125.3- 152.0)	157.0 (142.6-172.5)	162.8 (137.9- 193.2)	167.5 (142.3-196.0)	126.3 (111.3- 143.4)	150.4 (132.7-169.8)
Florida	132.9 (130.5- 135.2)	166.3 (163.4-169.1)	136.5 (134.0- 139.1)	184.9 (181.6-188.2)	100.3 (93.8- 107.2)	76.4 (71.6- 81.5)
Georgia						
Atlanta	141.3 (134.4- 148.4)	119.4 (113.7-125.3)	139.8 (131.9- 148.1)	133.8 (126.2-141.7)	144.2 (129.8- 159.9)	94.3 (85.5-103.7)
Maryland	137.0 (132.6- 141.5)	139.6 (135.2-144.2)	139.6 (134.4- 144.9)	155.3 (149.6-161.2)	127.7 (118.9- 137.1)	106.9 (99.7-114.4)
North Carolina	123.2 (119.8- 126.6)	131.0 (127.5-134.7)	125.8 (122.0- 129.7)	143.2 (138.9-147.6)	110.9 (103.6- 118.5)	97.4 (91.1-104.1)
South Carolina	125.6 (120.9- 130.5)	132.7 (127.7-137.8)	127.2 (121.7- 133.0)	147.2 (140.8-153.8)	114.9 (105.9- 124.4)	99.6 (91.9-107.8)
Virginia						
West Virginia	123.5 (117.0- 130.3)	149.9 (142.1-157.9)	122.7 (116.1- 129.5)	149.8 (141.9-158.0)	116.5 (81.7- 162.5)	126.7 (89.6-173.9)
East South Central						
Alabama						
Kentucky	126.8 (122.1- 131.6)	136.7 (131.7-141.9)	125.7 (120.9- 130.7)	138.1 (132.9-143.6)	126.8 (108.1- 147.8)	110.0 (93.9-128.0)
Mississippi						
Tennessee						

continued

Table 2.11: Cancer of the Breast. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	123.1 (118.6- 127.8)	124.5 (120.0-129.2)	127.6 (122.2- 133.1)	143.4 (137.4-149.7)	111.8 (103.6- 120.6)	91.4 (84.7- 98.5)
Oklahoma						
Texas						
West	136.0 (134.7- 137.4)	133.1 (131.8-134.4)	140.5 (139.1- 142.0)	141.8 (140.3-143.3)	113.1 (107.3- 119.1)	91.1 (86.5- 95.8)
Mountain						
Arizona	123.6 (119.3- 128.1)	128.5 (124.0-133.1)	126.9 (122.3- 131.6)	138.3 (133.3-143.4)	84.2 (62.0- 113.1)	59.3 (44.2- 78.0)
Colorado	139.4 (134.2- 144.6)	138.3 (133.2-143.5)	140.9 (135.6- 146.3)	142.8 (137.4-148.3)	91.5 (69.9- 119.2)	74.9 (57.8- 95.4)
Idaho	131.4 (122.5- 140.9)	128.8 (120.0-138.0)	132.3 (123.3- 141.9)	131.1 (122.2-140.6)	~	~
Montana	122.2 (112.6- 132.6)	136.6 (125.9-147.9)	120.7 (111.0- 131.2)	140.1 (128.9-152.1)	~	~
Nevada						
New Mexico	122.8 (115.6- 130.4)	121.9 (114.7-129.4)	129.9 (122.0- 138.1)	135.7 (127.5-144.2)	~	~
Utah	119.3 (112.0- 127.0)	92.7 (87.0- 98.6)	121.5 (114.0- 129.4)	95.9 (90.0-102.1)	~	~
Wyoming	131.2 (117.3- 146.6)	136.3 (121.9-151.9)	133.0 (118.8- 148.7)	140.5 (125.5-156.7)	~	~
Pacific	138.9 (137.3- 140.5)	135.5 (134.0-137.1)	144.6 (142.9- 146.4)	145.5 (143.7-147.3)	117.6 (111.3- 124.1)	95.8 (90.8-101.1)
Alaska	127.8 (112.7- 145.1)	99.9 (88.8-112.0)	136.2 (118.3- 156.8)	111.7 (98.1-126.6)	~	~
California	135.1 (133.3- 136.9)	129.2 (127.5-131.0)	141.5 (139.4- 143.6)	139.6 (137.5-141.6)	118.0 (111.4- 124.9)	98.5 (93.1-104.2)
San Francisco-Oakland	143.8 (138.8- 148.9)	153.0 (147.7-158.4)	159.5 (153.1- 166.1)	179.3 (172.2-186.6)	110.9 (97.5- 125.8)	100.3 (88.3-113.5)
San Jose-Monterey	137.1 (130.2- 144.3)	128.9 (122.4-135.6)	146.4 (138.4- 154.7)	143.8 (136.0-151.9)	76.8 (45.4- 127.2)	53.9 (33.7- 81.5)
Los Angeles	125.5 (122.2- 128.9)	115.8 (112.8-118.9)	132.0 (128.1- 136.1)	122.3 (118.7-126.0)	115.6 (106.4- 125.5)	105.4 (97.0-114.3)
Hawaii	134.0 (125.2- 143.3)	147.2 (137.6-157.3)	155.5 (136.2- 177.0)	157.4 (138.0-178.6)	~	~
Oregon	151.5 (145.9- 157.3)	166.5 (160.4-172.8)	153.0 (147.3- 159.0)	172.4 (166.0-179.0)	137.8 (91.0- 201.0)	93.9 (62.4-135.7)
Washington	153.8 (149.3- 158.4)	154.9 (150.4-159.5)	154.6 (150.0- 159.5)	161.5 (156.6-166.5)	107.7 (83.3- 138.4)	73.3 (57.3- 92.5)
Seattle-Puget Sound	156.1 (150.6- 161.7)	156.6 (151.1-162.2)	160.8 (155.0- 166.8)	168.5 (162.4-174.7)	106.7 (80.9- 139.9)	73.1 (56.2- 93.5)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.12: Cancer of the Breast. *In Situ* Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	28.8 (28.5- 29.1)	30.1 (29.8- 30.4)	29.3 (28.9- 29.6)	31.7 (31.4- 32.1)	22.5 (21.6- 23.4)	18.8 (18.1- 19.6)
Northeast	34.4 (33.7- 35.1)	37.4 (36.6- 38.1)	35.1 (34.4- 35.9)	39.5 (38.7- 40.4)	24.0 (22.3- 25.8)	21.4 (19.9- 23.0)
New England	43.1 (41.5- 44.8)	45.7 (44.0- 47.5)	43.0 (41.3- 44.7)	47.1 (45.3- 49.0)	27.0 (21.4- 33.8)	20.5 (16.3- 25.5)
Connecticut	40.2 (37.3- 43.3)	43.5 (40.4- 46.8)	40.1 (37.0- 43.3)	45.0 (41.7- 48.6)	30.9 (22.2- 42.5)	26.0 (18.7- 35.1)
Maine						
Massachusetts	47.0 (44.7- 49.4)	49.7 (47.3- 52.2)	46.7 (44.3- 49.2)	51.2 (48.6- 53.9)	26.2 (18.4- 36.7)	18.3 (13.0- 25.1)
New Hampshire	36.4 (31.7- 41.5)	36.5 (31.8- 41.6)	36.3 (31.6- 41.5)	36.6 (31.9- 41.8)	~	~
Rhode Island	35.8 (30.9- 41.2)	39.1 (33.9- 44.9)	37.1 (32.0- 43.0)	41.8 (36.2- 48.1)	~	~
Vermont						
Middle Atlantic	31.8 (31.1- 32.6)	34.8 (34.0- 35.7)	32.5 (31.7- 33.4)	37.0 (36.0- 37.9)	23.6 (21.8- 25.5)	21.5 (19.9- 23.3)
New Jersey	34.4 (32.7- 36.2)	37.0 (35.2- 38.9)	36.9 (35.0- 39.0)	41.6 (39.5- 43.9)	23.0 (19.2- 27.6)	20.2 (16.8- 24.0)
New York	31.2 (30.1- 32.3)	33.4 (32.2- 34.6)	32.1 (30.8- 33.4)	35.7 (34.3- 37.1)	20.4 (18.2- 22.8)	18.7 (16.7- 20.8)
Pennsylvania	31.0 (29.7- 32.3)	35.5 (34.0- 37.0)	30.4 (29.0- 31.8)	35.8 (34.2- 37.4)	33.1 (28.5- 38.1)	30.8 (26.6- 35.5)
Midwest						
East North Central						
Illinois	27.0 (25.7- 28.3)	27.6 (26.3- 28.9)	27.3 (25.9- 28.7)	29.0 (27.5- 30.5)	19.5 (16.6- 22.9)	16.3 (13.9- 19.0)
Indiana						
Michigan	32.0 (30.5- 33.6)	32.8 (31.3- 34.5)	32.2 (30.5- 33.9)	34.2 (32.5- 36.1)	30.7 (26.5- 35.3)	26.0 (22.5- 30.0)
Detroit	39.4 (36.9- 42.1)	41.5 (38.8- 44.3)	40.6 (37.6- 43.8)	45.1 (41.8- 48.6)	34.4 (29.4- 40.1)	30.7 (26.3- 35.7)
Ohio	27.5 (26.2- 28.8)	29.4 (28.0- 30.8)	27.3 (26.0- 28.8)	30.0 (28.5- 31.5)	22.2 (18.5- 26.3)	19.3 (16.2- 22.9)
Wisconsin	26.9 (25.0- 28.9)	27.7 (25.8- 29.8)	27.0 (25.0- 29.1)	28.7 (26.6- 30.9)	26.5 (16.9- 41.1)	17.0 (11.1- 24.9)
West North Central	24.6 (23.7- 25.7)	25.7 (24.7- 26.8)	24.9 (23.9- 25.9)	26.8 (25.7- 27.9)	14.3 (10.9- 18.5)	11.0 (8.4- 14.2)
Iowa	25.8 (23.3- 28.4)	28.4 (25.7- 31.3)	26.2 (23.8- 28.9)	29.4 (26.6- 32.3)	~	~
Kansas	23.1 (20.6- 25.8)	23.7 (21.1- 26.4)	22.4 (19.9- 25.2)	23.6 (21.0- 26.5)	~	~
Minnesota	28.7 (26.6- 30.9)	28.6 (26.5- 30.8)	28.4 (26.3- 30.7)	29.4 (27.2- 31.7)	~	~
Missouri	21.6 (20.0- 23.3)	23.1 (21.3- 24.9)	22.2 (20.5- 24.1)	24.5 (22.6- 26.6)	15.5 (11.2- 21.1)	13.1 (9.5- 17.6)
Nebraska	25.3 (22.1- 28.9)	26.2 (22.9- 29.9)	25.9 (22.5- 29.6)	27.4 (23.9- 31.3)	~	~
North Dakota	21.1 (16.5- 26.7)	22.9 (18.0- 28.8)	21.5 (16.7- 27.3)	24.2 (18.9- 30.4)	~	~
South Dakota						
South						
South Atlantic						
Delaware	39.3 (33.4- 46.0)	40.6 (34.5- 47.5)	40.8 (34.1- 48.5)	44.8 (37.6- 53.1)	29.6 (17.6- 48.1)	24.3 (14.6- 37.9)
District of Columbia	29.0 (23.3- 36.0)	32.8 (26.4- 40.3)	36.5 (25.2- 54.1)	36.5 (25.3- 51.0)	23.1 (17.1- 31.3)	28.7 (21.3- 37.8)
Florida	27.3 (26.2- 28.4)	33.0 (31.7- 34.3)	28.3 (27.2- 29.6)	36.6 (35.1- 38.1)	18.8 (16.0- 21.9)	14.4 (12.4- 16.7)
Georgia						
Atlanta	30.7 (27.5- 34.1)	25.9 (23.3- 28.8)	31.8 (28.0- 35.9)	30.4 (26.8- 34.3)	29.2 (22.9- 36.9)	18.8 (15.0- 23.3)
Maryland	32.8 (30.7- 35.0)	33.3 (31.1- 35.6)	33.0 (30.5- 35.7)	36.0 (33.3- 38.9)	29.8 (25.6- 34.6)	24.8 (21.4- 28.6)
North Carolina	25.4 (23.9- 27.0)	26.7 (25.1- 28.4)	26.6 (24.8- 28.4)	29.8 (27.8- 31.8)	20.8 (17.7- 24.3)	18.0 (15.3- 21.0)
South Carolina	23.4 (21.4- 25.6)	24.7 (22.6- 26.9)	24.2 (21.8- 26.8)	27.6 (24.8- 30.5)	21.6 (17.7- 26.0)	18.1 (14.9- 21.8)
Virginia						
West Virginia	24.3 (21.5- 27.5)	28.8 (25.5- 32.5)	24.3 (21.4- 27.5)	29.1 (25.7- 32.9)	~	~
East South Central						
Alabama						
Kentucky	22.8 (20.8- 24.9)	24.3 (22.2- 26.5)	23.2 (21.1- 25.4)	25.2 (22.9- 27.5)	~	~
Mississippi						
Tennessee						

continued

Table 2.12: Cancer of the Breast. *In Situ* Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	21.0 (19.1- 22.9)	21.1 (19.3- 23.1)	21.4 (19.2- 23.8)	23.7 (21.3- 26.3)	19.7 (16.3- 23.6)	16.0 (13.3- 19.2)
Oklahoma						
Texas						
West	27.3 (26.7- 27.9)	26.4 (25.8- 27.0)	27.5 (26.8- 28.1)	27.4 (26.7- 28.0)	20.9 (18.4- 23.6)	16.4 (14.5- 18.5)
Mountain						
Arizona	25.0 (23.0- 27.0)	25.4 (23.4- 27.5)	25.7 (23.6- 27.8)	27.2 (25.0- 29.5)	~	~
Colorado	27.6 (25.4- 30.0)	27.8 (25.5- 30.1)	27.9 (25.6- 30.4)	28.6 (26.3- 31.1)	~	~
Idaho	27.0 (23.0- 31.5)	26.0 (22.2- 30.3)	26.9 (22.9- 31.5)	26.2 (22.3- 30.6)	~	~
Montana	26.4 (22.0- 31.5)	29.1 (24.3- 34.5)	26.5 (22.0- 31.7)	30.2 (25.1- 36.0)	~	~
Nevada						
New Mexico	21.4 (18.5- 24.7)	21.3 (18.3- 24.5)	23.0 (19.8- 26.7)	24.0 (20.7- 27.8)	~	~
Utah	22.5 (19.3- 25.9)	17.3 (14.9- 20.0)	22.9 (19.7- 26.5)	18.0 (15.4- 20.7)	~	~
Wyoming	23.4 (17.8- 30.5)	24.7 (18.8- 31.9)	23.7 (18.0- 30.9)	25.4 (19.3- 32.8)	~	~
Pacific	28.0 (27.3- 28.7)	27.0 (26.4- 27.7)	28.2 (27.4- 29.0)	27.9 (27.1- 28.7)	22.0 (19.3- 24.9)	17.4 (15.3- 19.8)
Alaska	30.8 (23.8- 39.9)	25.1 (19.7- 31.6)	29.7 (21.9- 40.4)	25.6 (19.4- 33.3)	~	~
California	26.6 (25.8- 27.4)	25.1 (24.4- 25.9)	27.3 (26.4- 28.2)	26.4 (25.5- 27.3)	21.5 (18.7- 24.6)	17.6 (15.3- 20.0)
San Francisco-Oakland	31.6 (29.2- 34.1)	33.2 (30.7- 35.8)	30.9 (28.1- 33.9)	33.9 (30.8- 37.1)	25.0 (18.8- 32.6)	22.4 (16.9- 29.1)
San Jose-Monterey	33.0 (29.7- 36.7)	31.0 (27.8- 34.4)	34.7 (30.9- 38.9)	33.5 (29.8- 37.6)	~	~
Los Angeles	24.7 (23.2- 26.2)	22.4 (21.1- 23.8)	26.4 (24.6- 28.3)	23.9 (22.3- 25.5)	20.2 (16.4- 24.6)	18.2 (14.8- 22.1)
Hawaii	35.4 (30.9- 40.4)	38.6 (33.8- 44.0)	28.9 (21.0- 39.2)	29.6 (21.6- 39.6)	~	~
Oregon	30.3 (27.9- 33.0)	33.0 (30.3- 35.9)	30.0 (27.5- 32.7)	33.4 (30.6- 36.4)	~	~
Washington	32.3 (30.3- 34.4)	32.3 (30.2- 34.4)	31.3 (29.2- 33.5)	32.3 (30.2- 34.6)	24.9 (13.9- 42.6)	16.5 (9.4- 26.8)
Seattle-Puget Sound	34.0 (31.5- 36.7)	34.0 (31.5- 36.7)	34.0 (31.4- 36.9)	35.4 (32.6- 38.3)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† *In situ* cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.13: Cancer of the Cervix Uteri. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	9.5 (9.3- 9.6)	9.7 (9.5- 9.9)	8.8 (8.6- 9.0)	9.2 (9.0- 9.4)	13.9 (13.2- 14.6)	12.3 (11.8- 13.0)
Northeast	9.3 (8.9- 9.6)	9.9 (9.5- 10.3)	8.3 (7.9- 8.7)	9.0 (8.6- 9.4)	14.5 (13.2- 15.9)	13.4 (12.2- 14.7)
New England	7.4 (6.8- 8.1)	7.9 (7.2- 8.6)	6.8 (6.2- 7.5)	7.4 (6.7- 8.2)	12.1 (8.6- 16.9)	10.0 (7.2- 13.6)
Connecticut	8.3 (7.0- 9.7)	8.9 (7.6- 10.5)	7.8 (6.5- 9.3)	8.7 (7.2- 10.3)	11.1 (6.3- 19.1)	9.9 (5.7- 16.1)
Maine						
Massachusetts	6.8 (6.0- 7.8)	7.2 (6.3- 8.2)	6.0 (5.2- 6.9)	6.5 (5.6- 7.5)	14.7 (9.2- 22.8)	11.6 (7.4- 17.2)
New Hampshire	6.5 (4.6- 8.8)	6.7 (4.8- 9.1)	6.2 (4.4- 8.6)	6.5 (4.7- 8.9)	~	~
Rhode Island	9.6 (7.1- 12.7)	9.9 (7.4- 13.0)	9.8 (7.2- 13.1)	10.4 (7.7- 13.7)	~	~
Vermont						
Middle Atlantic	9.8 (9.4- 10.3)	10.5 (10.1- 11.0)	8.8 (8.4- 9.3)	9.6 (9.1- 10.0)	14.8 (13.4- 16.3)	13.8 (12.5- 15.2)
New Jersey	10.5 (9.6- 11.5)	11.2 (10.2- 12.3)	10.1 (9.1- 11.2)	11.0 (9.9- 12.2)	16.5 (13.3- 20.3)	15.0 (12.1- 18.3)
New York	9.9 (9.3- 10.6)	10.6 (9.9- 11.2)	8.4 (7.8- 9.1)	9.2 (8.5- 9.9)	14.0 (12.2- 15.9)	13.1 (11.5- 15.0)
Pennsylvania	9.3 (8.6- 10.1)	9.9 (9.1- 10.7)	8.5 (7.8- 9.3)	9.2 (8.4- 10.0)	15.5 (12.5- 19.0)	14.7 (11.8- 18.0)
Midwest						
East North Central						
Illinois	10.7 (10.0- 11.6)	10.9 (10.1- 11.8)	9.4 (8.5- 10.2)	9.7 (8.9- 10.6)	18.4 (15.7- 21.6)	16.2 (13.8- 18.9)
Indiana						
Michigan	8.3 (7.5- 9.1)	8.5 (7.7- 9.3)	7.5 (6.8- 8.4)	7.8 (7.0- 8.7)	13.5 (10.8- 16.6)	11.8 (9.5- 14.6)
Detroit	9.0 (7.8- 10.4)	9.4 (8.2- 10.8)	7.0 (5.8- 8.4)	7.5 (6.2- 9.0)	15.5 (12.3- 19.4)	14.3 (11.3- 17.8)
Ohio	8.7 (8.0- 9.5)	9.0 (8.3- 9.8)	8.6 (7.9- 9.5)	9.0 (8.2- 9.9)	9.5 (7.2- 12.3)	8.6 (6.5- 11.1)
Wisconsin	9.8 (8.6- 11.1)	9.8 (8.6- 11.0)	8.9 (7.7- 10.2)	9.0 (7.8- 10.3)	20.2 (12.5- 32.8)	16.4 (10.6- 24.1)
West North Central	8.6 (8.0- 9.2)	8.7 (8.1- 9.3)	8.1 (7.5- 8.7)	8.3 (7.7- 9.0)	12.6 (9.6- 16.4)	11.0 (8.4- 14.2)
Iowa	10.2 (8.6- 12.0)	10.1 (8.6- 11.9)	9.5 (8.0- 11.3)	9.6 (8.0- 11.3)	~	~
Kansas	9.3 (7.7- 11.1)	9.3 (7.7- 11.0)	8.8 (7.2- 10.7)	8.9 (7.3- 10.8)	~	~
Minnesota	7.5 (6.4- 8.7)	7.6 (6.5- 8.8)	7.1 (6.1- 8.3)	7.4 (6.3- 8.6)	~	~
Missouri	8.8 (7.7- 9.9)	9.1 (8.0- 10.2)	8.3 (7.2- 9.5)	8.7 (7.5- 9.9)	12.5 (8.8- 17.4)	11.3 (7.9- 15.5)
Nebraska	8.5 (6.6- 10.8)	8.3 (6.5- 10.5)	7.9 (6.1- 10.2)	7.8 (6.0- 10.0)	~	~
North Dakota	5.8 (3.4- 9.2)	5.7 (3.4- 8.9)	6.0 (3.5- 9.7)	6.0 (3.6- 9.5)	~	~
South Dakota						
South						
South Atlantic						
Delaware	7.9 (5.4- 11.2)	8.5 (5.9- 12.0)	7.9 (5.1- 11.8)	8.7 (5.7- 12.7)	~	~
District of Columbia	13.5 (9.6- 18.7)	14.8 (10.6- 20.1)	~	~	15.3 (10.2- 22.8)	16.6 (11.1- 23.9)
Florida	11.5 (10.8- 12.3)	12.2 (11.4- 13.0)	10.9 (10.1- 11.7)	11.7 (10.9- 12.6)	17.8 (15.2- 20.7)	14.5 (12.4- 16.8)
Georgia						
Atlanta	10.5 (8.8- 12.5)	10.1 (8.5- 11.9)	7.6 (6.0- 9.7)	8.2 (6.4- 10.4)	17.8 (13.0- 24.2)	12.2 (9.2- 15.8)
Maryland	8.2 (7.2- 9.4)	8.5 (7.4- 9.7)	6.7 (5.6- 8.0)	7.3 (6.1- 8.7)	10.8 (8.4- 13.8)	9.5 (7.4- 11.9)
North Carolina	9.5 (8.6- 10.5)	9.9 (8.9- 10.9)	8.7 (7.7- 9.8)	9.3 (8.2- 10.5)	12.8 (10.4- 15.6)	11.5 (9.4- 14.0)
South Carolina	11.3 (9.9- 12.9)	11.7 (10.3- 13.3)	9.6 (8.1- 11.4)	10.2 (8.6- 12.1)	16.2 (13.0- 20.1)	14.3 (11.4- 17.6)
Virginia						
West Virginia	13.4 (11.2- 16.0)	14.3 (12.0- 17.0)	13.5 (11.3- 16.2)	14.4 (12.1- 17.2)	~	~
East South Central						
Alabama						
Kentucky	10.8 (9.4- 12.3)	11.1 (9.7- 12.7)	10.5 (9.1- 12.0)	10.9 (9.5- 12.5)	14.1 (8.4- 22.2)	12.6 (7.6- 19.7)
Mississippi						
Tennessee						

continued

Table 2.13: Cancer of the Cervix Uteri. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	12.3 (10.9- 13.9)	12.1 (10.7- 13.6)	10.7 (9.1- 12.5)	11.0 (9.4- 12.9)	16.5 (13.5- 20.0)	14.2 (11.6- 17.1)
Oklahoma						
Texas						
West	8.9 (8.6- 9.3)	8.8 (8.5- 9.2)	8.9 (8.5- 9.3)	8.8 (8.5- 9.2)	9.2 (7.7- 11.0)	8.2 (6.8- 9.7)
Mountain						
Arizona	7.7 (6.7- 9.0)	7.6 (6.5- 8.8)	8.0 (6.8- 9.3)	7.9 (6.8- 9.2)	~	~
Colorado	6.6 (5.5- 7.8)	6.6 (5.5- 7.8)	6.5 (5.4- 7.7)	6.6 (5.5- 7.8)	~	~
Idaho	6.2 (4.4- 8.6)	5.9 (4.2- 8.1)	6.4 (4.5- 8.9)	6.1 (4.3- 8.4)	~	~
Montana	8.6 (6.1- 12.0)	8.6 (6.1- 11.8)	8.4 (5.8- 11.9)	8.5 (5.9- 11.9)	~	~
Nevada						
New Mexico	7.6 (5.8- 9.7)	7.4 (5.7- 9.4)	7.9 (6.0- 10.2)	7.9 (6.0- 10.1)	~	~
Utah	6.2 (4.7- 8.1)	5.1 (3.9- 6.7)	6.2 (4.7- 8.2)	5.2 (3.9- 6.8)	~	~
Wyoming	10.0 (6.3- 15.2)	9.6 (6.1- 14.5)	10.3 (6.5- 15.8)	10.1 (6.4- 15.1)	~	~
Pacific	9.5 (9.1- 10.0)	9.5 (9.1- 9.9)	9.5 (9.1- 10.0)	9.5 (9.1- 10.0)	9.8 (8.1- 11.8)	8.7 (7.2- 10.4)
Alaska	7.3 (4.1- 12.9)	6.1 (3.6- 9.7)	~	~	~	~
California	10.1 (9.6- 10.6)	9.9 (9.4- 10.4)	10.3 (9.7- 10.8)	10.1 (9.6- 10.7)	9.8 (8.1- 11.9)	8.9 (7.3- 10.7)
San Francisco-Oakland	6.7 (5.7- 7.9)	7.3 (6.2- 8.5)	6.8 (5.5- 8.3)	7.5 (6.1- 9.1)	7.7 (4.5- 12.4)	7.2 (4.3- 11.4)
San Jose-Monterey	7.6 (6.0- 9.4)	7.4 (5.9- 9.1)	6.9 (5.3- 8.9)	6.9 (5.3- 8.8)	~	~
Los Angeles	12.7 (11.7- 13.8)	12.2 (11.2- 13.2)	13.9 (12.6- 15.2)	13.1 (12.0- 14.4)	10.2 (7.7- 13.4)	10.0 (7.5- 13.0)
Hawaii	9.6 (7.3- 12.4)	9.8 (7.5- 12.7)	11.4 (6.7- 18.5)	11.9 (7.0- 18.7)	~	~
Oregon	8.5 (7.2- 10.0)	8.7 (7.4- 10.2)	8.5 (7.1- 10.0)	8.7 (7.3- 10.3)	~	~
Washington	7.5 (6.6- 8.6)	7.7 (6.7- 8.8)	7.1 (6.1- 8.2)	7.3 (6.3- 8.5)	~	~
Seattle-Puget Sound	6.1 (5.1- 7.3)	6.3 (5.3- 7.6)	6.1 (5.0- 7.4)	6.4 (5.3- 7.8)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.14: Cancer of the Corpus Uteri. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	24.6 (24.3- 24.9)	26.4 (26.1- 26.7)	25.3 (25.0- 25.6)	28.5 (28.2- 28.9)	18.6 (17.8- 19.5)	15.1 (14.4- 15.8)
Northeast	28.3 (27.7- 28.9)	32.0 (31.3- 32.7)	29.1 (28.4- 29.8)	34.5 (33.7- 35.3)	19.8 (18.2- 21.5)	17.4 (16.0- 18.9)
New England	28.4 (27.1- 29.7)	31.1 (29.7- 32.5)	28.6 (27.3- 30.0)	32.6 (31.1- 34.2)	14.6 (10.5- 20.1)	10.5 (7.6- 14.2)
Connecticut	28.2 (25.8- 30.7)	31.7 (29.1- 34.5)	29.2 (26.7- 31.9)	34.2 (31.3- 37.3)	14.1 (8.3- 23.1)	11.1 (6.6- 17.6)
Maine						
Massachusetts	28.8 (27.0- 30.7)	31.5 (29.6- 33.5)	28.7 (26.8- 30.6)	32.8 (30.7- 34.9)	14.9 (9.2- 23.5)	10.1 (6.3- 15.5)
New Hampshire	26.4 (22.4- 30.9)	25.9 (22.1- 30.3)	26.2 (22.3- 30.8)	26.0 (22.1- 30.4)	~	~
Rhode Island	28.5 (24.2- 33.3)	32.7 (27.9- 38.0)	29.3 (24.9- 34.4)	34.9 (29.7- 40.6)	~	~
Vermont						
Middle Atlantic	28.3 (27.6- 29.0)	32.3 (31.5- 33.1)	29.2 (28.5- 30.0)	35.1 (34.2- 36.1)	20.4 (18.7- 22.2)	18.3 (16.8- 19.9)
New Jersey	29.8 (28.3- 31.4)	33.2 (31.5- 35.0)	31.6 (29.8- 33.4)	37.5 (35.4- 39.6)	22.0 (18.1- 26.5)	18.6 (15.4- 22.3)
New York	26.4 (25.5- 27.4)	29.4 (28.3- 30.5)	26.8 (25.7- 27.9)	31.7 (30.4- 33.0)	21.2 (18.9- 23.6)	19.1 (17.1- 21.2)
Pennsylvania	30.1 (28.8- 31.4)	36.0 (34.5- 37.5)	31.0 (29.7- 32.4)	38.2 (36.6- 39.9)	17.0 (13.8- 20.7)	16.0 (13.0- 19.5)
Midwest						
East North Central						
Illinois	24.2 (23.1- 25.5)	25.3 (24.1- 26.6)	25.1 (23.8- 26.5)	27.5 (26.1- 29.0)	17.1 (14.3- 20.3)	14.0 (11.7- 16.5)
Indiana						
Michigan	26.8 (25.4- 28.2)	28.0 (26.6- 29.5)	28.2 (26.7- 29.8)	30.9 (29.2- 32.6)	16.9 (13.8- 20.5)	14.1 (11.5- 17.0)
Detroit	25.7 (23.7- 27.9)	27.6 (25.4- 29.9)	27.6 (25.2- 30.2)	31.8 (29.1- 34.8)	19.1 (15.4- 23.5)	16.8 (13.6- 20.6)
Ohio	26.9 (25.7- 28.3)	29.5 (28.2- 31.0)	27.3 (25.9- 28.7)	30.8 (29.3- 32.4)	18.2 (14.9- 22.1)	15.5 (12.7- 18.8)
Wisconsin	25.9 (24.1- 27.9)	27.5 (25.6- 29.6)	26.4 (24.5- 28.4)	29.1 (27.0- 31.3)	~	~
West North Central	26.8 (25.8- 27.9)	29.3 (28.3- 30.5)	27.0 (26.0- 28.1)	30.5 (29.4- 31.7)	20.6 (16.3- 25.6)	15.2 (12.1- 18.9)
Iowa	28.6 (26.0- 31.3)	32.8 (30.0- 35.9)	28.6 (26.1- 31.4)	33.5 (30.6- 36.7)	~	~
Kansas	26.2 (23.6- 29.0)	28.8 (26.0- 31.8)	26.3 (23.6- 29.2)	29.9 (26.9- 33.1)	~	~
Minnesota	27.4 (25.4- 29.6)	28.1 (26.1- 30.3)	27.2 (25.2- 29.4)	29.1 (26.9- 31.4)	~	~
Missouri	25.9 (24.2- 27.8)	28.8 (26.9- 30.9)	26.5 (24.6- 28.5)	30.5 (28.4- 32.8)	20.4 (15.4- 26.7)	16.7 (12.6- 21.8)
Nebraska	27.8 (24.5- 31.4)	30.8 (27.2- 34.8)	27.8 (24.4- 31.6)	31.6 (27.9- 35.8)	~	~
North Dakota	23.0 (18.3- 28.8)	25.8 (20.5- 32.0)	23.7 (18.8- 29.7)	27.5 (21.9- 34.2)	~	~
South Dakota						
South						
South Atlantic						
Delaware	27.1 (22.3- 32.7)	28.7 (23.6- 34.6)	29.4 (23.9- 35.9)	33.8 (27.5- 41.1)	~	~
District of Columbia	17.2 (13.0- 22.8)	20.2 (15.3- 26.2)	24.8 (15.6- 40.5)	24.7 (15.7- 37.1)	13.2 (8.8- 19.7)	17.2 (11.6- 24.6)
Florida	23.1 (22.1- 24.1)	29.9 (28.7- 31.1)	23.4 (22.3- 24.4)	32.7 (31.3- 34.1)	23.6 (20.4- 27.3)	16.7 (14.4- 19.1)
Georgia						
Atlanta	18.1 (15.6- 20.8)	14.8 (12.8- 16.9)	18.7 (15.8- 21.9)	17.8 (15.1- 20.8)	17.5 (12.4- 24.2)	9.1 (6.5- 12.3)
Maryland	23.5 (21.7- 25.4)	23.7 (21.9- 25.7)	25.9 (23.7- 28.3)	28.8 (26.4- 31.4)	15.6 (12.4- 19.3)	11.6 (9.3- 14.2)
North Carolina	20.0 (18.7- 21.4)	21.6 (20.2- 23.1)	20.2 (18.7- 21.8)	23.3 (21.6- 25.1)	20.2 (17.1- 23.7)	17.1 (14.5- 20.0)
South Carolina	19.3 (17.5- 21.2)	20.6 (18.7- 22.7)	18.8 (16.7- 21.1)	22.0 (19.6- 24.6)	21.0 (17.3- 25.5)	17.5 (14.4- 21.1)
Virginia						
West Virginia	26.2 (23.3- 29.4)	32.0 (28.5- 35.9)	26.3 (23.3- 29.6)	32.3 (28.7- 36.3)	~	~
East South Central						
Alabama						
Kentucky	18.9 (17.1- 20.8)	20.6 (18.7- 22.7)	18.7 (16.9- 20.7)	20.8 (18.8- 23.0)	12.7 (7.3- 20.5)	11.3 (6.6- 18.0)
Mississippi						
Tennessee						

continued

Table 2.14: Cancer of the Corpus Uteri. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	16.1 (14.5- 17.8)	16.4 (14.8- 18.1)	15.5 (13.7- 17.6)	17.5 (15.5- 19.8)	18.5 (15.2- 22.4)	14.7 (12.1- 17.7)
Oklahoma						
Texas						
West	22.3 (21.8- 22.9)	21.8 (21.3- 22.4)	23.0 (22.4- 23.6)	23.2 (22.6- 23.8)	15.9 (13.7- 18.3)	12.2 (10.6- 14.1)
Mountain						
Arizona	18.2 (16.6- 19.9)	19.0 (17.3- 20.9)	18.9 (17.2- 20.8)	20.8 (18.9- 22.8)	~	~
Colorado	19.4 (17.5- 21.4)	18.8 (17.0- 20.8)	19.7 (17.7- 21.8)	19.6 (17.6- 21.7)	~	~
Idaho	25.1 (21.3- 29.4)	24.7 (21.0- 28.9)	25.6 (21.7- 30.0)	25.5 (21.7- 29.9)	~	~
Montana	17.1 (13.6- 21.3)	18.9 (15.1- 23.4)	16.5 (13.0- 20.8)	19.0 (15.0- 23.7)	~	~
Nevada						
New Mexico	19.7 (16.8- 22.8)	19.6 (16.8- 22.7)	20.1 (17.1- 23.5)	21.1 (18.0- 24.7)	~	~
Utah	25.1 (21.8- 28.7)	19.5 (16.9- 22.3)	25.3 (21.9- 29.0)	20.0 (17.4- 23.0)	~	~
Wyoming	16.4 (11.7- 22.5)	17.2 (12.3- 23.3)	16.0 (11.3- 22.1)	17.1 (12.1- 23.3)	~	~
Pacific	23.3 (22.6- 23.9)	22.6 (22.0- 23.3)	24.1 (23.4- 24.9)	24.2 (23.5- 25.0)	17.3 (14.9- 20.0)	13.4 (11.6- 15.5)
Alaska	17.8 (12.7- 25.2)	14.6 (10.6- 19.7)	20.3 (14.0- 29.6)	16.9 (11.9- 23.3)	~	~
California	22.4 (21.6- 23.1)	21.3 (20.6- 22.0)	23.5 (22.6- 24.3)	23.1 (22.3- 24.0)	17.6 (15.1- 20.4)	14.1 (12.1- 16.4)
San Francisco-Oakland	23.2 (21.2- 25.4)	24.5 (22.4- 26.7)	25.6 (23.0- 28.3)	28.3 (25.5- 31.3)	16.9 (12.0- 23.5)	15.2 (10.7- 20.8)
San Jose-Monterey	22.6 (19.9- 25.7)	21.0 (18.5- 23.9)	23.8 (20.6- 27.3)	23.1 (20.0- 26.4)	~	~
Los Angeles	22.0 (20.6- 23.5)	20.2 (18.9- 21.5)	23.7 (22.1- 25.5)	21.9 (20.4- 23.6)	19.2 (15.5- 23.6)	17.3 (14.0- 21.1)
Hawaii	27.0 (23.1- 31.4)	29.1 (24.9- 33.8)	29.6 (21.4- 40.2)	29.0 (21.0- 38.9)	~	~
Oregon	24.2 (22.0- 26.6)	27.0 (24.5- 29.6)	24.3 (22.1- 26.8)	27.9 (25.3- 30.6)	~	~
Washington	27.1 (25.3- 29.1)	27.2 (25.3- 29.1)	27.0 (25.1- 29.1)	28.1 (26.1- 30.2)	~	~
Seattle-Puget Sound	27.0 (24.7- 29.3)	26.8 (24.6- 29.2)	27.6 (25.2- 30.2)	28.8 (26.3- 31.4)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.15: Cancer of the Ovary. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	16.2 (15.9- 16.4)	17.2 (17.0- 17.5)	16.8 (16.6- 17.1)	18.8 (18.5- 19.1)	10.6 (10.0- 11.3)	8.9 (8.4- 9.4)
Northeast	16.9 (16.4- 17.4)	19.0 (18.5- 19.5)	17.4 (16.9- 18.0)	20.5 (19.9- 21.1)	11.1 (10.0- 12.4)	9.8 (8.7- 10.9)
New England	15.8 (14.8- 16.8)	17.5 (16.5- 18.6)	15.9 (14.9- 17.0)	18.4 (17.2- 19.5)	5.6 (3.2- 9.4)	4.3 (2.5- 6.8)
Connecticut	15.7 (14.0- 17.6)	17.9 (16.0- 20.1)	16.1 (14.3- 18.2)	19.3 (17.2- 21.7)	~	~
Maine						
Massachusetts	16.0 (14.7- 17.4)	17.7 (16.3- 19.3)	16.0 (14.7- 17.5)	18.4 (16.9- 20.1)	~	~
New Hampshire	14.1 (11.3- 17.4)	14.3 (11.4- 17.6)	14.3 (11.4- 17.7)	14.6 (11.7- 18.0)	~	~
Rhode Island	16.2 (13.0- 20.0)	18.5 (14.9- 22.6)	16.7 (13.4- 20.7)	19.6 (15.9- 24.1)	~	~
Vermont						
Middle Atlantic	17.2 (16.7- 17.8)	19.4 (18.8- 20.1)	17.9 (17.3- 18.5)	21.2 (20.5- 21.9)	11.7 (10.4- 13.1)	10.5 (9.4- 11.7)
New Jersey	18.0 (16.8- 19.3)	20.0 (18.6- 21.4)	18.9 (17.5- 20.3)	22.2 (20.6- 23.8)	12.5 (9.6- 16.1)	10.5 (8.1- 13.4)
New York	16.4 (15.6- 17.2)	18.0 (17.2- 18.9)	17.2 (16.3- 18.1)	20.0 (18.9- 21.0)	11.2 (9.6- 13.1)	10.1 (8.6- 11.7)
Pennsylvania	18.0 (17.1- 19.1)	21.2 (20.1- 22.4)	18.3 (17.3- 19.4)	22.2 (21.0- 23.5)	12.5 (9.8- 15.8)	11.8 (9.2- 14.8)
Midwest						
East North Central						
Illinois	16.3 (15.4- 17.4)	17.1 (16.1- 18.1)	17.2 (16.1- 18.3)	18.8 (17.6- 20.0)	10.9 (8.7- 13.5)	9.2 (7.4- 11.3)
Indiana						
Michigan	16.6 (15.5- 17.7)	17.4 (16.3- 18.6)	16.9 (15.8- 18.2)	18.5 (17.2- 19.9)	13.6 (10.9- 16.9)	11.7 (9.4- 14.4)
Detroit	16.6 (15.0- 18.4)	17.8 (16.0- 19.6)	17.3 (15.4- 19.4)	19.8 (17.6- 22.1)	15.0 (11.8- 18.9)	13.5 (10.6- 17.0)
Ohio	15.4 (14.5- 16.4)	16.8 (15.7- 17.8)	15.9 (14.9- 17.0)	17.8 (16.6- 19.0)	10.0 (7.6- 12.9)	8.9 (6.8- 11.4)
Wisconsin	13.9 (12.6- 15.4)	14.8 (13.4- 16.4)	14.2 (12.8- 15.7)	15.6 (14.1- 17.3)	~	~
West North Central	16.6 (15.8- 17.4)	17.8 (17.0- 18.7)	16.7 (15.9- 17.5)	18.5 (17.6- 19.5)	9.8 (6.9- 13.4)	7.3 (5.2- 10.0)
Iowa	17.4 (15.4- 19.5)	20.0 (17.8- 22.5)	17.0 (15.1- 19.2)	20.1 (17.8- 22.5)	~	~
Kansas	15.2 (13.2- 17.3)	16.3 (14.2- 18.6)	15.4 (13.4- 17.7)	17.0 (14.8- 19.5)	~	~
Minnesota	17.9 (16.2- 19.6)	18.2 (16.6- 20.0)	17.5 (15.9- 19.3)	18.6 (16.8- 20.4)	~	~
Missouri	15.5 (14.2- 17.0)	17.0 (15.5- 18.6)	16.1 (14.6- 17.7)	18.2 (16.6- 20.0)	10.5 (7.0- 15.3)	8.5 (5.7- 12.3)
Nebraska	17.4 (14.8- 20.4)	18.5 (15.7- 21.6)	17.6 (14.9- 20.7)	19.0 (16.1- 22.2)	~	~
North Dakota	15.8 (11.8- 20.8)	17.3 (13.0- 22.5)	16.1 (12.0- 21.3)	18.1 (13.6- 23.6)	~	~
South Dakota						
South						
South Atlantic						
Delaware	15.5 (11.9- 19.9)	16.3 (12.5- 20.8)	17.0 (12.8- 22.2)	19.1 (14.4- 24.7)	~	~
District of Columbia	10.0 (6.8- 14.6)	11.5 (7.9- 16.3)	~	~	7.5 (4.2- 13.1)	9.2 (5.3- 14.9)
Florida	17.7 (16.9- 18.6)	22.3 (21.2- 23.3)	18.6 (17.7- 19.6)	25.2 (24.0- 26.5)	11.9 (9.7- 14.5)	8.8 (7.2- 10.7)
Georgia						
Atlanta	15.4 (13.2- 17.9)	12.7 (10.9- 14.7)	16.2 (13.5- 19.2)	15.3 (12.8- 18.1)	13.0 (8.8- 18.8)	7.5 (5.2- 10.5)
Maryland	13.2 (11.9- 14.7)	13.4 (12.0- 14.8)	14.9 (13.2- 16.7)	16.5 (14.7- 18.5)	8.6 (6.4- 11.5)	6.6 (4.9- 8.7)
North Carolina	15.1 (13.9- 16.3)	16.0 (14.8- 17.3)	16.7 (15.4- 18.2)	18.8 (17.3- 20.5)	8.9 (6.9- 11.3)	7.8 (6.1- 9.9)
South Carolina	12.8 (11.3- 14.4)	13.6 (12.1- 15.3)	13.4 (11.6- 15.3)	15.6 (13.5- 17.8)	11.0 (8.4- 14.3)	9.4 (7.1- 12.1)
Virginia						
West Virginia	14.6 (12.4- 17.1)	17.6 (15.0- 20.5)	15.0 (12.8- 17.6)	18.2 (15.5- 21.2)	~	~
East South Central						
Alabama						
Kentucky	14.2 (12.7- 15.9)	15.4 (13.8- 17.2)	14.4 (12.8- 16.2)	15.9 (14.1- 17.8)	~	~
Mississippi						
Tennessee						

continued

Table 2.15: Cancer of the Ovary. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	12.9 (11.5- 14.5)	13.1 (11.6- 14.7)	13.8 (12.1- 15.8)	15.4 (13.4- 17.5)	11.2 (8.7- 14.2)	9.3 (7.2- 11.7)
Oklahoma						
Texas						
West	16.3 (15.8- 16.8)	16.0 (15.5- 16.5)	17.0 (16.5- 17.6)	17.2 (16.7- 17.7)	10.7 (9.0- 12.7)	8.7 (7.3- 10.2)
Mountain						
Arizona	13.9 (12.5- 15.5)	14.3 (12.9- 15.9)	14.7 (13.1- 16.3)	15.7 (14.1- 17.5)	~	~
Colorado	16.8 (15.1- 18.7)	16.6 (14.9- 18.5)	17.2 (15.4- 19.2)	17.3 (15.5- 19.3)	~	~
Idaho	16.0 (13.0- 19.5)	15.8 (12.8- 19.2)	16.3 (13.2- 19.9)	16.3 (13.3- 19.9)	~	~
Montana	16.7 (13.3- 20.9)	18.7 (14.9- 23.2)	17.1 (13.5- 21.4)	19.7 (15.7- 24.5)	~	~
Nevada						
New Mexico	17.1 (14.5- 20.1)	17.0 (14.4- 19.9)	17.3 (14.5- 20.5)	18.0 (15.1- 21.3)	~	~
Utah	16.0 (13.5- 19.0)	13.1 (11.1- 15.5)	16.4 (13.8- 19.4)	13.6 (11.5- 16.1)	~	~
Wyoming	12.9 (8.9- 18.5)	13.4 (9.2- 18.9)	12.0 (8.1- 17.6)	12.7 (8.5- 18.2)	~	~
Pacific	16.6 (16.0- 17.1)	16.2 (15.7- 16.7)	17.4 (16.8- 18.1)	17.6 (16.9- 18.2)	11.3 (9.4- 13.5)	9.2 (7.7- 11.0)
Alaska	18.0 (12.3- 26.0)	12.9 (9.1- 17.7)	19.4 (12.8- 29.2)	15.1 (10.4- 21.2)	~	~
California	16.2 (15.6- 16.8)	15.6 (15.0- 16.2)	17.1 (16.4- 17.9)	17.0 (16.3- 17.7)	11.7 (9.7- 14.0)	9.7 (8.1- 11.6)
San Francisco-Oakland	17.0 (15.3- 18.8)	18.1 (16.3- 20.0)	19.0 (16.8- 21.4)	21.3 (18.9- 23.9)	12.1 (8.0- 17.9)	10.8 (7.1- 15.7)
San Jose-Monterey	17.3 (14.9- 20.0)	16.7 (14.4- 19.2)	18.2 (15.5- 21.2)	18.1 (15.4- 21.1)	~	~
Los Angeles	15.6 (14.5- 16.8)	14.6 (13.5- 15.7)	16.7 (15.3- 18.1)	15.5 (14.2- 16.9)	10.8 (8.1- 14.2)	9.8 (7.4- 12.8)
Hawaii	14.4 (11.6- 17.7)	15.4 (12.4- 18.9)	16.4 (10.5- 24.6)	16.5 (10.7- 24.3)	~	~
Oregon	16.3 (14.5- 18.3)	17.9 (15.9- 20.0)	16.7 (14.8- 18.7)	18.7 (16.6- 21.0)	~	~
Washington	19.2 (17.6- 20.8)	19.2 (17.6- 20.9)	19.4 (17.8- 21.2)	20.1 (18.4- 21.9)	~	~
Seattle-Puget Sound	20.6 (18.7- 22.8)	20.7 (18.7- 22.8)	21.6 (19.5- 23.9)	22.6 (20.4- 24.9)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.16: Cancer of the Prostate. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	162.0 (161.2- 162.8)	146.5 (145.8-147.2)	152.3 (151.5- 153.2)	147.1 (146.3-148.0)	229.3 (225.7- 232.9)	140.6 (138.5-142.7)
Northeast	167.0 (165.3- 168.6)	160.3 (158.7-161.9)	158.0 (156.3- 159.7)	162.6 (160.8-164.4)	231.0 (224.1- 238.2)	150.2 (145.9-154.7)
New England	174.0 (170.4- 177.6)	162.8 (159.5-166.2)	167.5 (163.9- 171.1)	165.1 (161.6-168.7)	243.9 (221.3- 268.7)	126.8 (115.6-138.7)
Connecticut	166.5 (160.1- 173.1)	160.5 (154.4-166.9)	156.4 (150.0- 163.1)	159.9 (153.4-166.7)	232.1 (199.3- 270.1)	133.4 (115.4-153.6)
Maine						
Massachusetts	180.1 (175.1- 185.2)	167.8 (163.2-172.5)	173.7 (168.7- 178.8)	171.6 (166.6-176.6)	259.8 (226.5- 298.1)	125.0 (109.9-141.6)
New Hampshire	151.7 (141.1- 163.1)	129.3 (120.3-138.8)	149.8 (139.1- 161.1)	129.3 (120.2-138.9)	~	~
Rhode Island	185.1 (172.9- 198.0)	180.6 (168.7-193.1)	184.9 (172.4- 198.1)	189.5 (176.8-202.8)	233.5 (152.0- 360.5)	111.2 (73.9-160.7)
Vermont						
Middle Atlantic	164.9 (163.0- 166.8)	159.6 (157.8-161.4)	155.0 (153.0- 157.0)	161.7 (159.7-163.8)	229.6 (222.3- 237.1)	153.6 (148.9-158.4)
New Jersey	188.4 (184.0- 192.9)	176.8 (172.7-181.0)	182.0 (177.4- 186.8)	186.6 (181.8-191.4)	273.1 (255.4- 292.0)	172.0 (161.4-183.2)
New York	151.1 (148.4- 153.8)	140.0 (137.5-142.5)	138.5 (135.7- 141.3)	140.0 (137.2-142.9)	210.1 (200.8- 219.7)	139.7 (133.8-145.8)
Pennsylvania	169.0 (165.7- 172.3)	177.5 (174.1-181.0)	159.4 (156.1- 162.7)	175.1 (171.5-178.8)	241.7 (226.4- 258.0)	172.6 (161.7-183.9)
Midwest						
East North Central						
Illinois	155.2 (151.8- 158.7)	132.9 (129.9-135.8)	143.7 (140.2- 147.3)	131.3 (128.1-134.6)	206.1 (193.7- 219.4)	124.1 (116.9-131.8)
Indiana						
Michigan	202.2 (197.9- 206.6)	177.7 (173.9-181.5)	185.8 (181.4- 190.3)	172.1 (168.1-176.2)	290.3 (274.4- 306.9)	193.1 (182.6-203.9)
Detroit	219.0 (212.0- 226.2)	194.4 (188.2-200.6)	196.3 (188.8- 204.0)	186.7 (179.7-193.9)	299.4 (280.9- 318.9)	217.4 (204.1-231.3)
Ohio	153.6 (150.1- 157.1)	141.6 (138.5-144.8)	138.5 (135.1- 142.0)	132.6 (129.4-136.0)	222.1 (207.8- 237.3)	154.1 (144.4-164.3)
Wisconsin	161.2 (156.1- 166.4)	146.6 (142.0-151.3)	156.8 (151.7- 162.1)	149.9 (145.0-154.9)	278.5 (233.9- 332.6)	113.5 (96.7-132.4)
West North Central	162.3 (159.6- 165.1)	150.0 (147.5-152.6)	156.2 (153.4- 159.0)	150.7 (148.0-153.4)	220.0 (202.3- 239.1)	119.2 (109.9-129.1)
Iowa	154.4 (147.9- 161.0)	154.7 (148.2-161.3)	148.2 (141.8- 154.8)	152.1 (145.6-158.8)	311.2 (219.4- 436.2)	141.2 (101.7-190.8)
Kansas	169.4 (162.0- 177.0)	152.4 (145.7-159.2)	159.5 (152.2- 167.1)	149.6 (142.7-156.7)	264.7 (216.3- 321.8)	140.7 (115.6-169.6)
Minnesota	181.7 (175.8- 187.7)	155.7 (150.7-160.8)	177.1 (171.2- 183.1)	159.4 (154.2-164.8)	177.1 (123.9- 252.9)	56.2 (40.7- 75.8)
Missouri	139.9 (135.3- 144.6)	132.6 (128.3-137.1)	133.5 (128.8- 138.3)	133.0 (128.3-137.7)	214.4 (192.9- 237.9)	132.1 (119.1-146.0)
Nebraska	174.4 (165.1- 184.1)	163.0 (154.4-172.0)	164.4 (155.3- 174.0)	159.6 (150.7-168.8)	153.6 (100.2- 234.0)	87.4 (58.5-125.5)
North Dakota	192.9 (177.7- 209.0)	190.2 (175.3-206.1)	193.4 (178.1- 209.8)	200.0 (184.2-216.9)	~	~
South Dakota						
South						
South Atlantic						
Delaware	163.3 (149.9- 178.0)	152.5 (140.1-165.7)	149.7 (135.8- 164.9)	153.4 (139.4-168.4)	243.4 (197.4- 300.1)	148.3 (121.3-179.5)
District of Columbia	234.7 (215.2- 255.6)	222.1 (203.8-241.6)	144.0 (118.5- 175.4)	128.7 (106.3-154.5)	275.0 (248.7- 303.6)	276.9 (250.6-305.2)
Florida	155.5 (152.9- 158.1)	188.5 (185.3-191.6)	148.9 (146.3- 151.7)	201.1 (197.5-204.7)	228.5 (215.9- 241.9)	127.0 (120.4-133.7)
Georgia						
Atlanta	172.4 (163.0- 182.3)	105.8 (100.3-111.5)	142.1 (132.5- 152.4)	102.6 (95.9-109.6)	301.4 (272.4- 333.6)	118.3 (107.8-129.5)
Maryland	184.7 (178.8- 190.7)	153.7 (148.9-158.6)	157.0 (150.9- 163.3)	148.5 (142.8-154.4)	225.6 (210.2- 242.1)	132.0 (123.6-140.9)
North Carolina	140.8 (136.7- 145.0)	124.7 (121.1-128.3)	129.8 (125.5- 134.2)	126.2 (122.1-130.4)	195.9 (183.6- 209.0)	124.4 (116.8-132.4)
South Carolina	176.1 (169.6- 182.9)	154.0 (148.5-159.8)	152.8 (146.0- 159.9)	151.7 (145.1-158.5)	255.8 (238.4- 274.4)	156.2 (145.9-167.2)
Virginia						
West Virginia	144.8 (137.0- 153.0)	151.7 (143.6-160.1)	141.0 (133.2- 149.3)	149.1 (141.0-157.6)	213.0 (156.3- 284.4)	173.9 (127.8-231.3)
East South Central						
Alabama						
Kentucky	155.5 (149.4- 161.7)	135.9 (130.7-141.2)	132.8 (127.0- 138.7)	119.5 (114.4-124.7)	199.9 (170.8- 233.2)	127.4 (109.2-147.8)
Mississippi						
Tennessee						

continued

Table 2.16: Cancer of the Prostate. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	163.1 (157.0- 169.4)	133.9 (129.0-139.0)	147.5 (140.9- 154.4)	138.2 (132.1-144.5)	218.2 (203.5- 233.7)	130.0 (121.4-139.0)
Oklahoma						
Texas						
West	156.3 (154.7- 157.9)	126.5 (125.2-127.8)	150.8 (149.2- 152.5)	127.8 (126.4-129.2)	212.3 (202.9- 222.0)	127.8 (122.3-133.4)
Mountain						
Arizona	114.4 (110.0- 119.1)	106.9 (102.7-111.1)	114.5 (110.0- 119.3)	113.9 (109.4-118.6)	140.9 (105.0- 188.7)	69.5 (53.3- 89.1)
Colorado	166.7 (160.2- 173.5)	130.3 (125.3-135.3)	167.4 (160.7- 174.3)	133.9 (128.7-139.3)	148.4 (116.7- 189.7)	94.6 (75.5-117.0)
Idaho	157.4 (146.8- 168.7)	132.4 (123.6-141.8)	158.6 (147.9- 170.0)	135.5 (126.4-145.1)	~	~
Montana	157.1 (145.5- 169.5)	155.7 (144.2-167.8)	149.8 (138.3- 162.1)	155.9 (144.0-168.5)	~	~
Nevada						
New Mexico	148.2 (139.5- 157.5)	128.1 (120.6-135.9)	153.2 (144.0- 163.0)	142.8 (134.3-151.7)	122.5 (73.1- 199.8)	84.7 (51.7-130.8)
Utah	182.8 (172.8- 193.3)	119.6 (113.1-126.4)	185.3 (175.0- 196.0)	124.0 (117.3-131.1)	~	~
Wyoming	172.0 (154.6- 191.1)	152.2 (137.0-168.6)	172.4 (154.8- 191.7)	155.7 (140.1-172.7)	~	~
Pacific	159.7 (157.9- 161.6)	127.5 (126.0-129.0)	152.3 (150.3- 154.3)	127.1 (125.4-128.8)	222.4 (212.2- 233.0)	135.4 (129.4-141.6)
Alaska	155.8 (136.1- 179.0)	86.1 (76.3- 96.8)	160.6 (138.2- 187.3)	94.7 (83.0-107.6)	377.6 (201.8- 761.0)	134.4 (78.3-215.2)
California	154.7 (152.5- 156.9)	119.9 (118.3-121.6)	144.3 (142.0- 146.6)	117.5 (115.7-119.4)	222.6 (211.9- 233.8)	139.2 (132.7-145.9)
San Francisco-Oakland	162.1 (156.1- 168.3)	140.0 (134.8-145.3)	154.6 (147.7- 161.7)	143.1 (136.8-149.6)	204.5 (183.3- 227.9)	149.7 (134.5-166.2)
San Jose-Monterey	166.1 (157.5- 175.2)	120.3 (114.1-126.7)	156.8 (147.6- 166.5)	121.5 (114.5-128.9)	150.0 (102.9- 230.2)	71.7 (50.0- 99.8)
Los Angeles	156.6 (152.4- 160.9)	113.9 (110.8-117.0)	144.8 (140.2- 149.6)	107.0 (103.6-110.5)	236.9 (220.9- 254.1)	172.4 (161.0-184.4)
Hawaii	135.5 (126.1- 145.5)	131.2 (122.1-140.7)	183.8 (160.9- 209.3)	139.4 (122.1-158.3)	~	~
Oregon	176.2 (169.6- 183.0)	165.8 (159.6-172.2)	173.1 (166.4- 179.9)	168.0 (161.6-174.7)	224.6 (156.2- 319.6)	121.1 (86.1-165.6)
Washington	182.4 (177.0- 187.9)	153.0 (148.5-157.6)	175.2 (169.7- 180.8)	154.5 (149.7-159.4)	207.9 (169.9- 254.8)	107.5 (88.7-129.2)
Seattle-Puget Sound	187.5 (180.8- 194.4)	154.3 (148.9-159.9)	189.4 (182.4- 196.6)	165.3 (159.2-171.5)	217.2 (175.5- 269.1)	111.9 (91.4-135.6)

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.17: Cancer of the Testis. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	5.5 (5.3- 5.6)	5.6 (5.5- 5.8)	6.2 (6.0- 6.3)	6.3 (6.1- 6.5)	1.4 (1.1- 1.6)	1.3 (1.1- 1.5)
Northeast	5.8 (5.5- 6.1)	5.9 (5.6- 6.2)	6.5 (6.2- 6.9)	6.7 (6.3- 7.0)	1.3 (0.9- 1.9)	1.3 (0.9- 1.7)
New England	6.2 (5.6- 6.9)	6.5 (5.9- 7.2)	6.7 (6.0- 7.5)	7.0 (6.3- 7.8)	~	~
Connecticut	6.2 (5.0- 7.6)	6.2 (5.0- 7.6)	6.9 (5.6- 8.5)	6.8 (5.5- 8.4)	~	~
Maine						
Massachusetts	6.4 (5.6- 7.4)	6.9 (6.0- 7.9)	6.9 (5.9- 7.9)	7.4 (6.4- 8.5)	~	~
New Hampshire	6.2 (4.4- 8.7)	6.6 (4.7- 9.0)	6.3 (4.4- 8.8)	6.6 (4.7- 9.0)	~	~
Rhode Island	5.4 (3.5- 8.0)	5.5 (3.6- 8.0)	5.9 (3.8- 8.7)	5.9 (3.9- 8.7)	~	~
Vermont						
Middle Atlantic	5.6 (5.3- 6.0)	5.7 (5.4- 6.1)	6.5 (6.1- 6.9)	6.5 (6.1- 7.0)	1.4 (0.9- 2.0)	1.3 (0.9- 1.9)
New Jersey	5.8 (5.1- 6.6)	5.9 (5.2- 6.8)	6.9 (6.0- 7.9)	7.0 (6.1- 8.0)	~	~
New York	5.5 (5.0- 6.0)	5.7 (5.2- 6.2)	6.5 (5.9- 7.1)	6.6 (6.0- 7.3)	1.2 (0.7- 2.1)	1.2 (0.7- 1.9)
Pennsylvania	5.6 (5.1- 6.3)	5.7 (5.1- 6.3)	6.1 (5.5- 6.8)	6.1 (5.5- 6.9)	~	~
Midwest						
East North Central						
Illinois	5.2 (4.7- 5.9)	5.4 (4.8- 6.0)	5.7 (5.1- 6.4)	5.9 (5.2- 6.6)	~	~
Indiana						
Michigan	5.0 (4.4- 5.7)	5.1 (4.5- 5.8)	5.8 (5.1- 6.6)	5.9 (5.2- 6.7)	~	~
Detroit	4.8 (3.9- 5.9)	5.0 (4.0- 6.0)	5.9 (4.7- 7.3)	6.2 (5.0- 7.6)	~	~
Ohio	5.5 (4.9- 6.2)	5.5 (4.9- 6.2)	6.0 (5.3- 6.7)	6.1 (5.4- 6.8)	~	~
Wisconsin	7.5 (6.5- 8.7)	7.5 (6.5- 8.6)	7.8 (6.7- 9.0)	7.8 (6.7- 9.0)	~	~
West North Central	6.1 (5.6- 6.6)	6.1 (5.5- 6.6)	6.3 (5.8- 6.9)	6.3 (5.8- 6.9)	~	~
Iowa	6.0 (4.7- 7.4)	5.9 (4.7- 7.3)	5.8 (4.6- 7.3)	5.7 (4.5- 7.1)	~	~
Kansas	6.3 (5.0- 7.8)	6.4 (5.1- 7.9)	6.8 (5.4- 8.4)	6.8 (5.4- 8.4)	~	~
Minnesota	7.2 (6.2- 8.4)	7.3 (6.3- 8.5)	7.2 (6.1- 8.5)	7.3 (6.2- 8.5)	~	~
Missouri	4.4 (3.7- 5.3)	4.4 (3.7- 5.3)	4.9 (4.0- 5.9)	4.9 (4.0- 5.9)	~	~
Nebraska	8.0 (6.1- 10.2)	7.7 (5.9- 9.9)	8.4 (6.4- 10.8)	8.1 (6.2- 10.4)	~	~
North Dakota	5.9 (3.5- 9.3)	5.7 (3.4- 9.0)	6.2 (3.7- 10.0)	6.1 (3.6- 9.6)	~	~
South Dakota						
South						
South Atlantic						
Delaware	4.9 (2.9- 8.1)	5.2 (3.1- 8.1)	5.3 (3.0- 9.1)	5.6 (3.2- 9.1)	~	~
District of Columbia	~	~	~	~	~	~
Florida	5.1 (4.6- 5.7)	4.9 (4.4- 5.5)	5.8 (5.2- 6.5)	5.5 (4.9- 6.1)	1.6 (0.9- 3.2)	1.5 (0.9- 2.4)
Georgia						
Atlanta	4.4 (3.4- 5.9)	5.2 (4.0- 6.6)	5.6 (4.2- 7.6)	6.7 (5.1- 8.6)	~	~
Maryland	4.7 (3.9- 5.6)	5.0 (4.1- 5.9)	6.4 (5.2- 7.7)	6.7 (5.5- 8.0)	~	~
North Carolina	4.2 (3.6- 5.0)	4.4 (3.7- 5.1)	5.1 (4.3- 6.0)	5.3 (4.5- 6.2)	~	~
South Carolina	4.1 (3.3- 5.2)	4.3 (3.4- 5.4)	5.3 (4.2- 6.8)	5.6 (4.4- 7.1)	~	~
Virginia						
West Virginia	4.9 (3.5- 6.7)	4.8 (3.5- 6.5)	5.1 (3.7- 7.0)	5.0 (3.6- 6.8)	~	~
East South Central						
Alabama						
Kentucky	5.4 (4.4- 6.6)	5.5 (4.5- 6.6)	5.5 (4.5- 6.8)	5.6 (4.5- 6.8)	~	~
Mississippi						
Tennessee						

continued

Table 2.17: Cancer of the Testis. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	3.7 (2.9- 4.7)	3.6 (2.8- 4.5)	4.9 (3.8- 6.3)	4.9 (3.8- 6.2)	~	~
Oklahoma						
Texas						
West	5.7 (5.4- 5.9)	5.9 (5.6- 6.2)	6.3 (6.0- 6.6)	6.5 (6.2- 6.8)	1.5 (0.9- 2.5)	1.5 (0.9- 2.2)
Mountain						
Arizona	5.5 (4.6- 6.6)	5.4 (4.5- 6.4)	5.9 (4.9- 7.1)	5.8 (4.8- 6.9)	~	~
Colorado	7.5 (6.4- 8.9)	7.7 (6.5- 9.0)	7.6 (6.4- 9.0)	7.7 (6.5- 9.1)	~	~
Idaho	6.3 (4.5- 8.9)	5.9 (4.2- 8.2)	6.4 (4.5- 9.0)	5.9 (4.2- 8.2)	~	~
Montana	6.3 (4.1- 9.4)	5.9 (3.9- 8.7)	6.2 (3.9- 9.4)	5.9 (3.8- 8.8)	~	~
Nevada						
New Mexico	5.7 (4.2- 7.7)	5.5 (4.0- 7.3)	5.8 (4.2- 8.0)	5.5 (4.0- 7.5)	~	~
Utah	4.3 (3.1- 6.0)	4.4 (3.3- 5.9)	4.4 (3.2- 6.1)	4.6 (3.3- 6.1)	~	~
Wyoming	~	~	~	~	~	~
Pacific	5.5 (5.2- 5.9)	5.8 (5.5- 6.2)	6.3 (6.0- 6.7)	6.7 (6.3- 7.1)	1.3 (0.7- 2.4)	1.3 (0.8- 2.0)
Alaska	8.4 (5.5- 15.3)	8.3 (5.5- 12.1)	10.4 (6.7- 19.3)	10.5 (6.8- 15.4)	~	~
California	5.3 (4.9- 5.6)	5.6 (5.2- 6.0)	6.1 (5.7- 6.6)	6.5 (6.1- 7.0)	1.3 (0.7- 2.5)	1.3 (0.7- 2.1)
San Francisco-Oakland	6.3 (5.2- 7.4)	6.9 (5.8- 8.1)	7.9 (6.6- 9.6)	8.8 (7.3- 10.5)	~	~
San Jose-Monterey	5.5 (4.3- 7.1)	6.2 (4.9- 7.8)	6.6 (5.1- 8.5)	7.3 (5.6- 9.3)	~	~
Los Angeles	3.9 (3.4- 4.5)	4.3 (3.7- 4.9)	4.9 (4.2- 5.7)	5.3 (4.6- 6.1)	~	~
Hawaii	5.2 (3.6- 7.5)	5.3 (3.6- 7.5)	~	~	~	~
Oregon	7.2 (5.9- 8.6)	7.2 (6.0- 8.6)	7.4 (6.1- 9.0)	7.4 (6.1- 8.9)	~	~
Washington	6.1 (5.3- 7.1)	6.4 (5.5- 7.4)	6.4 (5.5- 7.5)	6.6 (5.6- 7.7)	~	~
Seattle-Puget Sound	5.9 (4.9- 7.1)	6.3 (5.3- 7.5)	6.5 (5.4- 7.9)	7.0 (5.8- 8.3)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.18.1: Cancer of the Urinary Bladder. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	38.3 (37.9- 38.7)	33.5 (33.2- 33.9)	40.2 (39.8- 40.7)	37.7 (37.3- 38.1)	17.9 (16.9- 19.0)	10.0 (9.5- 10.6)
Northeast	43.0 (42.1- 43.9)	40.0 (39.2- 40.8)	45.4 (44.5- 46.3)	45.6 (44.6- 46.5)	17.6 (15.6- 19.8)	10.4 (9.3- 11.6)
New England	45.3 (43.5- 47.2)	41.5 (39.8- 43.2)	46.0 (44.1- 48.0)	44.5 (42.7- 46.4)	26.1 (18.2- 36.8)	11.0 (7.9- 14.9)
Connecticut	46.0 (42.6- 49.6)	43.5 (40.4- 46.9)	46.7 (43.2- 50.4)	47.1 (43.6- 50.9)	32.2 (19.5- 51.1)	15.1 (9.4- 22.8)
Maine						
Massachusetts	43.5 (41.0- 46.1)	39.5 (37.3- 41.8)	44.0 (41.5- 46.7)	42.6 (40.1- 45.1)	21.3 (11.7- 37.2)	8.6 (5.0- 13.8)
New Hampshire	43.1 (37.3- 49.5)	35.5 (30.9- 40.7)	43.6 (37.8- 50.1)	36.4 (31.6- 41.7)	~	~
Rhode Island	55.8 (49.2- 63.1)	54.3 (47.9- 61.4)	57.2 (50.4- 64.8)	58.6 (51.6- 66.2)	~	~
Vermont						
Middle Atlantic	42.3 (41.3- 43.3)	39.6 (38.7- 40.5)	45.2 (44.1- 46.3)	45.9 (44.8- 47.0)	16.7 (14.7- 19.0)	10.3 (9.1- 11.6)
New Jersey	45.9 (43.7- 48.2)	41.7 (39.8- 43.8)	50.3 (47.8- 52.8)	50.2 (47.8- 52.8)	16.2 (12.0- 21.6)	9.9 (7.4- 12.8)
New York	38.7 (37.3- 40.1)	34.5 (33.3- 35.8)	42.0 (40.4- 43.6)	41.2 (39.7- 42.8)	14.7 (12.2- 17.7)	8.8 (7.4- 10.5)
Pennsylvania	45.0 (43.3- 46.8)	45.9 (44.1- 47.7)	46.2 (44.4- 48.1)	49.4 (47.4- 51.3)	22.1 (17.5- 27.7)	15.0 (11.9- 18.6)
Midwest						
East North Central						
Illinois	37.8 (36.1- 39.6)	31.3 (29.9- 32.7)	39.1 (37.2- 41.0)	34.7 (33.1- 36.4)	18.8 (14.9- 23.4)	10.2 (8.2- 12.5)
Indiana						
Michigan	41.9 (39.9- 44.0)	35.4 (33.8- 37.2)	44.1 (42.0- 46.4)	39.3 (37.4- 41.3)	22.6 (18.3- 27.9)	14.4 (11.6- 17.6)
Detroit	41.5 (38.4- 44.8)	34.9 (32.4- 37.7)	46.5 (42.8- 50.5)	41.8 (38.6- 45.3)	23.8 (18.7- 30.1)	16.6 (13.1- 20.8)
Ohio	41.2 (39.4- 43.1)	36.3 (34.7- 38.0)	41.4 (39.4- 43.4)	38.0 (36.3- 39.8)	22.1 (17.5- 27.8)	13.7 (10.9- 17.0)
Wisconsin	37.6 (35.1- 40.3)	33.5 (31.3- 35.8)	38.3 (35.8- 41.0)	35.9 (33.6- 38.4)	~	~
West North Central	36.8 (35.5- 38.2)	33.2 (32.1- 34.5)	37.1 (35.8- 38.5)	35.0 (33.7- 36.3)	18.7 (13.6- 25.3)	9.6 (7.1- 12.7)
Iowa	38.6 (35.4- 42.1)	38.2 (35.1- 41.6)	38.2 (35.0- 41.7)	38.8 (35.5- 42.2)	~	~
Kansas	34.7 (31.4- 38.3)	30.7 (27.8- 33.9)	34.3 (30.9- 37.9)	31.7 (28.6- 35.0)	~	~
Minnesota	37.5 (34.8- 40.3)	31.5 (29.3- 33.9)	37.2 (34.5- 40.1)	32.9 (30.5- 35.4)	~	~
Missouri	34.7 (32.3- 37.2)	31.6 (29.5- 33.8)	36.1 (33.6- 38.7)	34.5 (32.2- 37.0)	15.6 (10.2- 23.2)	9.7 (6.5- 14.0)
Nebraska	40.4 (35.9- 45.3)	36.7 (32.6- 41.1)	40.5 (36.0- 45.5)	38.3 (34.0- 42.9)	~	~
North Dakota	40.5 (33.6- 48.3)	39.4 (32.7- 46.9)	40.8 (33.9- 48.9)	41.7 (34.7- 49.8)	~	~
South Dakota						
South						
South Atlantic						
Delaware	33.9 (27.8- 41.3)	30.3 (24.9- 36.5)	34.6 (28.1- 42.7)	34.5 (28.1- 42.0)	~	~
District of Columbia	19.9 (14.4- 27.0)	18.0 (13.1- 24.2)	~	~	18.7 (12.2- 27.8)	17.8 (11.6- 26.0)
Florida	41.4 (40.1- 42.8)	49.5 (47.9- 51.2)	43.4 (41.9- 44.9)	57.9 (56.0- 59.8)	12.6 (9.6- 16.5)	6.4 (5.0- 8.0)
Georgia						
Atlanta	29.2 (25.1- 34.0)	15.2 (13.2- 17.5)	32.4 (27.6- 38.1)	20.5 (17.6- 23.7)	18.6 (11.2- 29.8)	5.8 (3.7- 8.7)
Maryland	30.4 (28.0- 33.0)	24.2 (22.4- 26.2)	34.7 (31.8- 37.9)	31.6 (29.0- 34.4)	12.1 (8.8- 16.7)	7.3 (5.4- 9.6)
North Carolina	31.7 (29.6- 33.8)	26.3 (24.7- 28.0)	34.2 (31.9- 36.6)	31.4 (29.4- 33.6)	18.4 (14.4- 23.3)	9.9 (7.8- 12.3)
South Carolina	34.9 (32.0- 38.2)	28.9 (26.5- 31.4)	39.5 (36.0- 43.4)	37.0 (33.8- 40.4)	16.7 (12.3- 22.4)	9.5 (7.0- 12.4)
Virginia						
West Virginia	39.8 (35.7- 44.3)	40.6 (36.5- 45.1)	40.1 (35.9- 44.7)	41.2 (37.0- 45.8)	~	~
East South Central						
Alabama						
Kentucky	37.0 (34.1- 40.2)	31.7 (29.2- 34.3)	37.2 (34.2- 40.5)	32.8 (30.2- 35.6)	23.5 (13.7- 38.1)	13.1 (7.8- 20.7)
Mississippi						
Tennessee						

continued

Table 2.18.1: Cancer of the Urinary Bladder. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	32.9 (30.1- 35.9)	25.7 (23.6- 28.0)	37.5 (34.1- 41.2)	33.4 (30.5- 36.6)	18.7 (14.4- 23.9)	10.5 (8.1- 13.2)
Oklahoma						
Texas						
West	34.8 (34.0- 35.5)	27.3 (26.7- 27.9)	36.6 (35.8- 37.5)	30.2 (29.5- 30.9)	18.3 (15.4- 21.5)	10.1 (8.7- 11.8)
Mountain						
Arizona	39.3 (36.6- 42.1)	35.0 (32.6- 37.4)	40.2 (37.5- 43.2)	38.2 (35.6- 41.0)	~	~
Colorado	32.0 (29.1- 35.1)	24.5 (22.4- 26.8)	31.7 (28.8- 34.9)	24.9 (22.7- 27.3)	~	~
Idaho	35.5 (30.5- 41.1)	29.9 (25.8- 34.5)	35.3 (30.3- 40.9)	30.2 (26.0- 34.9)	~	~
Montana	34.2 (28.8- 40.4)	32.8 (27.6- 38.6)	33.2 (27.9- 39.5)	33.4 (28.0- 39.5)	~	~
Nevada						
New Mexico	27.5 (23.8- 31.8)	22.9 (19.8- 26.4)	28.7 (24.7- 33.2)	25.7 (22.2- 29.6)	~	~
Utah	36.0 (31.5- 40.9)	22.8 (20.0- 25.9)	36.8 (32.2- 41.9)	23.9 (21.0- 27.1)	~	~
Wyoming	42.5 (33.8- 53.1)	35.7 (28.5- 44.0)	43.3 (34.4- 54.0)	37.1 (29.7- 45.8)	~	~
Pacific	34.6 (33.7- 35.5)	26.9 (26.2- 27.6)	37.0 (36.0- 38.0)	30.1 (29.3- 31.0)	18.2 (15.2- 21.7)	10.3 (8.7- 12.1)
Alaska	33.8 (24.1- 47.5)	16.6 (12.5- 21.7)	36.4 (25.1- 52.9)	18.5 (13.6- 24.7)	~	~
California	33.2 (32.1- 34.2)	25.0 (24.2- 25.8)	35.7 (34.5- 36.8)	28.4 (27.5- 29.3)	17.4 (14.4- 21.0)	10.2 (8.5- 12.1)
San Francisco-Oakland	30.2 (27.6- 32.9)	25.7 (23.6- 28.1)	34.4 (31.2- 37.9)	31.7 (28.8- 34.9)	15.6 (9.9- 23.9)	10.6 (6.9- 15.7)
San Jose-Monterey	28.9 (25.3- 32.9)	20.4 (17.9- 23.2)	31.3 (27.2- 35.9)	23.7 (20.6- 27.1)	~	~
Los Angeles	30.3 (28.4- 32.3)	21.1 (19.8- 22.5)	33.3 (31.1- 35.7)	23.9 (22.3- 25.6)	17.6 (13.2- 23.2)	11.5 (8.7- 15.0)
Hawaii	20.9 (17.3- 25.1)	20.2 (16.7- 24.1)	40.2 (29.9- 53.1)	30.7 (22.9- 40.3)	~	~
Oregon	42.8 (39.6- 46.3)	39.7 (36.7- 42.9)	42.6 (39.3- 46.2)	40.8 (37.7- 44.2)	~	~
Washington	40.6 (38.0- 43.3)	32.9 (30.8- 35.1)	39.7 (37.1- 42.5)	34.0 (31.7- 36.3)	~	~
Seattle-Puget Sound	43.1 (39.9- 46.6)	34.1 (31.6- 36.8)	44.0 (40.6- 47.6)	37.1 (34.2- 40.1)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Includes invasive and *in situ*

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.18.2: Cancer of the Urinary Bladder. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	10.0 (9.8- 10.2)	11.4 (11.2- 11.6)	10.4 (10.2- 10.6)	12.7 (12.4- 12.9)	7.1 (6.6- 7.7)	5.4 (5.0- 5.8)
Northeast	11.6 (11.2- 12.0)	14.2 (13.8- 14.7)	12.2 (11.7- 12.6)	16.0 (15.4- 16.5)	6.4 (5.5- 7.4)	5.3 (4.6- 6.2)
New England	12.9 (12.0- 13.7)	15.5 (14.5- 16.6)	12.9 (12.1- 13.9)	16.5 (15.4- 17.6)	7.9 (4.7- 12.5)	4.8 (2.9- 7.4)
Connecticut	13.3 (11.8- 15.1)	16.2 (14.4- 18.3)	13.7 (12.1- 15.6)	17.6 (15.6- 19.9)	~	~
Maine						
Massachusetts	12.3 (11.2- 13.5)	14.8 (13.5- 16.2)	12.3 (11.1- 13.5)	15.7 (14.2- 17.2)	~	~
New Hampshire	12.5 (9.9- 15.6)	13.3 (10.6- 16.5)	12.3 (9.7- 15.4)	13.3 (10.5- 16.5)	~	~
Rhode Island	14.9 (12.1- 18.3)	20.2 (16.5- 24.5)	15.2 (12.3- 18.8)	21.5 (17.6- 26.2)	~	~
Vermont						
Middle Atlantic	11.2 (10.8- 11.7)	13.8 (13.3- 14.4)	11.9 (11.4- 12.4)	15.8 (15.2- 16.4)	6.3 (5.4- 7.4)	5.4 (4.6- 6.3)
New Jersey	11.1 (10.2- 12.1)	13.4 (12.3- 14.5)	11.8 (10.8- 12.9)	15.6 (14.3- 17.0)	6.6 (4.5- 9.4)	5.1 (3.5- 7.2)
New York	11.0 (10.4- 11.6)	13.0 (12.3- 13.7)	12.0 (11.3- 12.8)	15.5 (14.6- 16.4)	4.9 (3.8- 6.2)	4.2 (3.3- 5.3)
Pennsylvania	11.6 (10.9- 12.4)	15.5 (14.5- 16.5)	11.8 (11.0- 12.6)	16.4 (15.3- 17.5)	9.7 (7.3- 12.6)	9.0 (6.8- 11.7)
Midwest						
East North Central						
Illinois	10.2 (9.5- 11.0)	11.4 (10.6- 12.3)	10.4 (9.6- 11.3)	12.5 (11.5- 13.5)	9.3 (7.2- 11.8)	6.8 (5.3- 8.7)
Indiana						
Michigan	10.9 (10.0- 11.8)	11.9 (11.0- 12.9)	11.1 (10.2- 12.1)	12.9 (11.9- 14.1)	8.8 (6.6- 11.5)	7.0 (5.3- 9.2)
Detroit	11.1 (9.8- 12.6)	12.4 (11.0- 14.0)	11.5 (10.0- 13.1)	14.0 (12.2- 16.0)	9.8 (7.2- 13.1)	8.4 (6.2- 11.2)
Ohio	10.8 (10.0- 11.6)	12.5 (11.7- 13.5)	10.7 (9.9- 11.6)	13.1 (12.1- 14.1)	8.0 (5.8- 10.7)	6.5 (4.8- 8.7)
Wisconsin	10.4 (9.3- 11.7)	11.9 (10.6- 13.3)	10.7 (9.5- 11.9)	12.7 (11.4- 14.2)	~	~
West North Central	8.8 (8.2- 9.4)	10.4 (9.7- 11.0)	8.7 (8.1- 9.3)	10.7 (10.0- 11.4)	6.8 (4.4- 10.1)	4.8 (3.1- 7.0)
Iowa	8.4 (7.1- 9.8)	10.8 (9.2- 12.6)	8.2 (6.9- 9.7)	10.8 (9.2- 12.7)	~	~
Kansas	10.2 (8.6- 11.9)	12.2 (10.4- 14.2)	9.8 (8.3- 11.6)	12.3 (10.5- 14.5)	~	~
Minnesota	10.1 (8.9- 11.4)	11.0 (9.7- 12.4)	10.0 (8.8- 11.3)	11.5 (10.1- 12.9)	~	~
Missouri	7.7 (6.8- 8.8)	9.1 (8.0- 10.3)	7.7 (6.8- 8.8)	9.5 (8.3- 10.8)	7.7 (4.7- 12.0)	6.1 (3.7- 9.4)
Nebraska	7.3 (5.7- 9.3)	8.8 (6.9- 11.1)	7.3 (5.7- 9.3)	9.0 (7.1- 11.4)	~	~
North Dakota	8.9 (6.2- 12.6)	11.3 (7.9- 15.7)	8.8 (6.0- 12.6)	11.7 (8.2- 16.3)	~	~
South Dakota						
South						
South Atlantic						
Delaware	13.2 (10.0- 17.2)	14.5 (10.9- 18.8)	13.2 (9.7- 17.7)	16.1 (11.8- 21.3)	~	~
District of Columbia	11.7 (8.3- 16.3)	14.8 (10.6- 20.1)	~	~	10.6 (6.9- 16.5)	14.9 (9.8- 21.9)
Florida	11.1 (10.4- 11.7)	15.9 (15.1- 16.8)	11.5 (10.8- 12.2)	18.3 (17.2- 19.3)	7.9 (6.0- 10.2)	5.2 (4.0- 6.6)
Georgia						
Atlanta	9.8 (8.0- 12.0)	7.2 (5.9- 8.8)	9.1 (7.1- 11.5)	8.1 (6.3- 10.2)	13.2 (8.7- 19.4)	6.2 (4.1- 9.0)
Maryland	9.8 (8.7- 11.0)	10.2 (9.1- 11.5)	10.7 (9.3- 12.2)	13.0 (11.4- 14.8)	5.2 (3.4- 7.7)	3.5 (2.3- 5.1)
North Carolina	8.4 (7.5- 9.3)	9.3 (8.4- 10.3)	9.2 (8.3- 10.3)	11.2 (10.0- 12.5)	4.5 (3.1- 6.3)	3.8 (2.6- 5.3)
South Carolina	7.6 (6.5- 8.8)	8.2 (7.0- 9.6)	7.6 (6.4- 9.1)	9.4 (7.8- 11.1)	7.1 (4.9- 9.8)	5.8 (4.1- 8.1)
Virginia						
West Virginia	13.8 (11.8- 16.1)	17.9 (15.3- 20.9)	13.7 (11.6- 16.1)	17.9 (15.2- 20.9)	~	~
East South Central						
Alabama						
Kentucky	8.9 (7.8- 10.3)	10.1 (8.7- 11.5)	8.9 (7.7- 10.3)	10.3 (8.9- 11.8)	~	~
Mississippi						
Tennessee						

continued

Table 2.18.2: Cancer of the Urinary Bladder. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	7.4 (6.3- 8.6)	7.6 (6.5- 8.8)	7.7 (6.4- 9.1)	8.9 (7.5- 10.6)	6.6 (4.7- 9.1)	5.2 (3.7- 7.1)
Oklahoma						
Texas						
West	8.6 (8.2- 8.9)	8.6 (8.3- 8.9)	9.1 (8.7- 9.5)	9.6 (9.2- 10.0)	6.2 (4.8- 7.8)	4.3 (3.4- 5.5)
Mountain						
Arizona	9.3 (8.2- 10.6)	10.2 (9.0- 11.6)	9.7 (8.5- 11.0)	11.3 (9.9- 12.8)	~	~
Colorado	9.1 (7.8- 10.5)	8.7 (7.4- 10.0)	9.4 (8.0- 10.9)	9.2 (7.9- 10.7)	~	~
Idaho	7.2 (5.2- 9.7)	7.2 (5.2- 9.6)	7.3 (5.3- 9.9)	7.4 (5.4- 9.9)	~	~
Montana	10.4 (7.8- 13.7)	12.4 (9.3- 16.1)	10.5 (7.8- 13.9)	13.2 (9.9- 17.2)	~	~
Nevada						
New Mexico	7.9 (6.1- 10.0)	7.8 (6.1- 9.9)	8.4 (6.5- 10.7)	8.9 (6.9- 11.3)	~	~
Utah	8.3 (6.5- 10.5)	6.5 (5.1- 8.2)	8.4 (6.6- 10.7)	6.8 (5.3- 8.6)	~	~
Wyoming	9.2 (5.8- 14.1)	9.6 (6.1- 14.5)	9.4 (5.9- 14.4)	10.1 (6.4- 15.1)	~	~
Pacific	8.5 (8.1- 8.9)	8.5 (8.1- 8.9)	9.1 (8.6- 9.5)	9.6 (9.1- 10.0)	6.4 (4.9- 8.1)	4.6 (3.6- 5.9)
Alaska	10.8 (6.0- 18.3)	5.4 (3.1- 8.8)	~	~	~	~
California	8.2 (7.8- 8.7)	8.1 (7.7- 8.6)	8.9 (8.4- 9.4)	9.3 (8.8- 9.8)	6.3 (4.8- 8.2)	4.7 (3.6- 6.1)
San Francisco-Oakland	9.0 (7.8- 10.3)	9.9 (8.6- 11.4)	9.9 (8.4- 11.6)	12.0 (10.3- 14.0)	~	~
San Jose-Monterey	7.4 (5.8- 9.2)	7.0 (5.5- 8.7)	7.9 (6.2- 10.0)	8.1 (6.3- 10.2)	~	~
Los Angeles	7.3 (6.5- 8.1)	7.0 (6.2- 7.8)	8.0 (7.1- 9.0)	7.9 (7.0- 8.9)	7.1 (4.9- 10.0)	6.0 (4.1- 8.4)
Hawaii	5.4 (3.8- 7.6)	6.1 (4.3- 8.4)	~	~	~	~
Oregon	9.8 (8.5- 11.4)	11.4 (9.8- 13.1)	9.9 (8.5- 11.5)	11.9 (10.2- 13.7)	~	~
Washington	9.6 (8.5- 10.7)	9.8 (8.6- 11.0)	9.4 (8.3- 10.6)	10.1 (8.9- 11.4)	~	~
Seattle-Puget Sound	10.0 (8.7- 11.5)	10.1 (8.7- 11.6)	10.4 (8.9- 12.0)	11.1 (9.6- 12.8)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Includes invasive and *in situ*

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.19.1: Cancer of the Kidney and Renal Pelvis. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	16.0 (15.8- 16.3)	14.7 (14.5- 14.9)	16.1 (15.8- 16.4)	15.6 (15.4- 15.9)	16.3 (15.4- 17.3)	10.9 (10.3- 11.5)
Northeast	17.3 (16.8- 17.9)	16.7 (16.2- 17.3)	17.6 (17.0- 18.2)	18.0 (17.5- 18.6)	14.8 (13.1- 16.7)	10.2 (9.0- 11.4)
New England	16.8 (15.7- 17.9)	16.0 (14.9- 17.0)	16.6 (15.5- 17.8)	16.6 (15.5- 17.7)	18.8 (13.2- 27.0)	11.0 (7.9- 14.9)
Connecticut	16.3 (14.4- 18.5)	16.0 (14.1- 18.1)	16.3 (14.3- 18.5)	16.8 (14.8- 19.1)	~	~
Maine						
Massachusetts	17.4 (15.9- 19.0)	16.5 (15.0- 18.0)	17.1 (15.6- 18.8)	17.1 (15.5- 18.7)	20.3 (12.5- 33.7)	12.2 (7.8- 18.1)
New Hampshire	13.2 (10.2- 16.9)	11.7 (9.1- 14.8)	13.4 (10.3- 17.1)	12.0 (9.3- 15.1)	~	~
Rhode Island	18.2 (14.5- 22.6)	17.8 (14.2- 22.0)	18.5 (14.7- 23.1)	19.0 (15.1- 23.5)	~	~
Vermont						
Middle Atlantic	17.5 (16.9- 18.1)	17.0 (16.4- 17.6)	17.9 (17.2- 18.6)	18.5 (17.9- 19.2)	14.3 (12.6- 16.3)	10.0 (8.9- 11.3)
New Jersey	18.1 (16.8- 19.6)	17.2 (16.0- 18.6)	18.5 (17.1- 20.1)	19.1 (17.6- 20.7)	17.6 (13.3- 23.3)	11.1 (8.5- 14.2)
New York	17.0 (16.1- 17.9)	15.9 (15.1- 16.8)	17.9 (16.9- 19.0)	18.1 (17.1- 19.2)	10.6 (8.7- 12.9)	7.6 (6.3- 9.2)
Pennsylvania	17.8 (16.8- 18.9)	18.4 (17.3- 19.6)	17.4 (16.3- 18.6)	18.8 (17.6- 20.0)	21.4 (17.1- 26.8)	15.5 (12.4- 19.2)
Midwest						
East North Central						
Illinois	16.4 (15.3- 17.5)	14.3 (13.4- 15.3)	16.2 (15.0- 17.5)	15.0 (13.9- 16.1)	16.9 (13.7- 20.9)	11.7 (9.5- 14.2)
Indiana						
Michigan	16.6 (15.4- 17.9)	15.0 (13.9- 16.1)	16.2 (14.9- 17.6)	15.3 (14.1- 16.6)	20.2 (16.3- 24.8)	14.7 (11.9- 17.9)
Detroit	16.7 (14.8- 18.8)	15.1 (13.4- 16.9)	16.2 (14.1- 18.5)	15.6 (13.6- 17.7)	18.9 (14.6- 24.3)	14.4 (11.1- 18.3)
Ohio	15.8 (14.7- 16.9)	14.8 (13.8- 15.8)	15.7 (14.5- 16.9)	15.2 (14.1- 16.3)	14.9 (11.4- 19.3)	10.6 (8.2- 13.5)
Wisconsin	18.5 (16.8- 20.4)	17.1 (15.6- 18.8)	18.2 (16.5- 20.1)	17.6 (15.9- 19.4)	26.2 (13.5- 50.7)	11.2 (6.4- 18.2)
West North Central	16.8 (15.9- 17.7)	15.6 (14.8- 16.5)	16.6 (15.7- 17.6)	16.1 (15.2- 17.0)	22.0 (16.6- 28.9)	12.4 (9.5- 15.9)
Iowa	17.4 (15.3- 19.7)	17.5 (15.4- 19.8)	17.3 (15.1- 19.6)	17.8 (15.6- 20.1)	~	~
Kansas	15.5 (13.4- 18.0)	14.2 (12.2- 16.4)	15.5 (13.2- 18.0)	14.6 (12.5- 16.9)	~	~
Minnesota	16.1 (14.5- 18.0)	14.5 (13.0- 16.1)	16.0 (14.3- 17.9)	15.0 (13.4- 16.7)	~	~
Missouri	17.5 (15.9- 19.3)	16.5 (14.9- 18.1)	17.3 (15.6- 19.1)	17.0 (15.4- 18.8)	22.9 (16.1- 32.1)	13.5 (9.6- 18.5)
Nebraska	16.0 (13.3- 19.2)	15.0 (12.4- 17.9)	16.2 (13.4- 19.4)	15.6 (12.9- 18.7)	~	~
North Dakota	16.6 (12.4- 21.9)	16.2 (12.1- 21.3)	16.6 (12.3- 22.0)	17.0 (12.6- 22.3)	~	~
South Dakota						
South						
South Atlantic						
Delaware	15.3 (11.3- 20.5)	13.9 (10.4- 18.3)	15.4 (11.1- 21.2)	15.3 (11.1- 20.6)	~	~
District of Columbia	14.8 (10.2- 20.9)	13.9 (9.6- 19.5)	~	~	17.3 (11.1- 26.0)	17.1 (11.1- 25.2)
Florida	16.4 (15.6- 17.3)	18.9 (18.0- 20.0)	16.6 (15.7- 17.6)	21.1 (19.9- 22.3)	13.2 (10.5- 16.7)	8.2 (6.6- 10.1)
Georgia						
Atlanta	16.6 (13.8- 19.9)	11.0 (9.3- 13.0)	14.2 (11.3- 17.9)	10.6 (8.6- 13.1)	25.8 (18.3- 36.6)	12.6 (9.3- 16.6)
Maryland	15.1 (13.5- 16.9)	13.4 (12.0- 14.9)	15.4 (13.6- 17.5)	15.1 (13.3- 17.1)	14.6 (11.2- 19.1)	10.1 (7.8- 12.8)
North Carolina	14.2 (13.0- 15.6)	13.0 (11.8- 14.2)	13.9 (12.5- 15.4)	13.6 (12.3- 15.1)	15.1 (12.0- 19.0)	10.9 (8.7- 13.5)
South Carolina	16.6 (14.7- 18.7)	15.2 (13.5- 17.1)	17.6 (15.3- 20.1)	17.8 (15.6- 20.2)	13.6 (10.0- 18.2)	9.5 (7.0- 12.4)
Virginia						
West Virginia	16.6 (14.1- 19.6)	17.3 (14.7- 20.3)	16.2 (13.6- 19.2)	16.9 (14.3- 19.9)	~	~
East South Central						
Alabama						
Kentucky	16.8 (15.0- 18.9)	15.6 (13.9- 17.5)	16.5 (14.6- 18.7)	15.7 (13.9- 17.7)	22.6 (13.6- 36.0)	14.6 (8.9- 22.5)
Mississippi						
Tennessee						

continued

Table 2.19.1: Cancer of the Kidney and Renal Pelvis. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	19.0 (17.0- 21.2)	16.3 (14.6- 18.1)	18.0 (15.8- 20.5)	17.3 (15.2- 19.7)	22.8 (18.4- 28.2)	14.6 (11.8- 17.8)
Oklahoma						
Texas						
West	14.0 (13.5- 14.5)	11.7 (11.4- 12.1)	14.3 (13.8- 14.8)	12.5 (12.0- 12.9)	14.8 (12.5- 17.6)	9.6 (8.2- 11.3)
Mountain						
Arizona	15.0 (13.4- 16.7)	13.8 (12.3- 15.4)	14.9 (13.3- 16.7)	14.5 (13.0- 16.3)	~	~
Colorado	14.2 (12.4- 16.2)	11.8 (10.3- 13.4)	14.1 (12.2- 16.2)	12.0 (10.5- 13.7)	~	~
Idaho	11.8 (9.1- 15.1)	10.4 (8.0- 13.3)	11.8 (9.1- 15.2)	10.6 (8.1- 13.5)	~	~
Montana	14.5 (11.2- 18.7)	14.6 (11.2- 18.6)	13.9 (10.6- 18.1)	14.5 (11.0- 18.7)	~	~
Nevada						
New Mexico	12.6 (10.1- 15.5)	11.1 (9.0- 13.6)	12.6 (10.0- 15.6)	11.8 (9.4- 14.5)	~	~
Utah	11.9 (9.5- 14.7)	8.4 (6.7- 10.3)	12.0 (9.6- 14.9)	8.6 (6.9- 10.6)	~	~
Wyoming	14.1 (9.4- 20.7)	12.0 (8.1- 17.3)	14.0 (9.2- 20.6)	12.1 (8.0- 17.5)	~	~
Pacific	14.1 (13.5- 14.6)	11.7 (11.2- 12.1)	14.6 (14.0- 15.2)	12.6 (12.0- 13.1)	15.0 (12.5- 18.0)	9.9 (8.3- 11.7)
Alaska	21.6 (14.4- 32.8)	13.5 (9.8- 18.2)	17.8 (11.3- 29.3)	13.3 (9.2- 18.7)	~	~
California	13.7 (13.1- 14.3)	11.0 (10.5- 11.5)	14.4 (13.7- 15.1)	12.1 (11.5- 12.7)	14.6 (12.0- 17.8)	9.7 (8.1- 11.6)
San Francisco-Oakland	13.5 (11.8- 15.3)	12.1 (10.6- 13.7)	15.1 (13.0- 17.4)	14.6 (12.6- 16.7)	12.0 (7.2- 19.4)	8.5 (5.2- 13.1)
San Jose-Monterey	10.3 (8.3- 12.7)	8.3 (6.7- 10.1)	11.1 (8.9- 13.9)	9.4 (7.5- 11.6)	~	~
Los Angeles	13.8 (12.6- 15.1)	10.5 (9.6- 11.5)	14.8 (13.3- 16.3)	11.4 (10.3- 12.5)	13.7 (10.2- 18.4)	10.7 (8.0- 14.0)
Hawaii	13.5 (10.7- 16.9)	13.4 (10.6- 16.7)	19.4 (12.8- 28.5)	17.1 (11.5- 24.6)	~	~
Oregon	15.2 (13.3- 17.2)	14.7 (12.9- 16.7)	14.8 (12.9- 16.9)	14.7 (12.8- 16.8)	~	~
Washington	15.1 (13.6- 16.8)	13.2 (11.9- 14.6)	14.7 (13.2- 16.4)	13.3 (11.9- 14.8)	~	~
Seattle-Puget Sound	15.0 (13.1- 17.0)	12.8 (11.3- 14.5)	14.9 (13.0- 17.1)	13.4 (11.7- 15.2)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.19.2: Cancer of the Kidney and Renal Pelvis. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	8.4 (8.2- 8.5)	9.1 (9.0- 9.3)	8.4 (8.2- 8.6)	9.7 (9.5- 9.9)	8.7 (8.2- 9.3)	7.2 (6.7- 7.7)
Northeast	9.0 (8.7- 9.3)	10.4 (10.1- 10.9)	9.0 (8.6- 9.4)	11.1 (10.7- 11.6)	8.5 (7.5- 9.6)	7.5 (6.6- 8.5)
New England	9.4 (8.7- 10.2)	10.7 (9.8- 11.5)	9.5 (8.7- 10.3)	11.2 (10.3- 12.2)	8.1 (5.2- 12.4)	6.3 (4.1- 9.2)
Connecticut	8.5 (7.2- 9.9)	9.8 (8.3- 11.4)	8.3 (7.0- 9.8)	10.1 (8.6- 11.9)	~	~
Maine						
Massachusetts	9.5 (8.5- 10.6)	10.8 (9.7- 12.0)	9.6 (8.6- 10.8)	11.5 (10.3- 12.8)	~	~
New Hampshire	6.8 (4.9- 9.3)	6.9 (5.0- 9.3)	6.9 (5.0- 9.4)	7.0 (5.1- 9.5)	~	~
Rhode Island	14.2 (11.3- 17.7)	17.1 (13.7- 21.1)	14.6 (11.6- 18.3)	18.2 (14.5- 22.4)	~	~
Vermont						
Middle Atlantic	8.9 (8.5- 9.3)	10.4 (9.9- 10.8)	8.8 (8.4- 9.3)	11.1 (10.5- 11.6)	8.5 (7.4- 9.7)	7.6 (6.7- 8.7)
New Jersey	9.7 (8.9- 10.7)	11.1 (10.2- 12.2)	9.8 (8.9- 10.8)	12.2 (11.0- 13.5)	9.5 (7.1- 12.6)	8.3 (6.2- 10.8)
New York	8.6 (8.0- 9.1)	9.6 (9.0- 10.3)	8.6 (8.0- 9.3)	10.5 (9.8- 11.3)	6.9 (5.6- 8.4)	6.2 (5.0- 7.5)
Pennsylvania	8.8 (8.2- 9.5)	11.0 (10.2- 11.9)	8.5 (7.8- 9.2)	11.1 (10.2- 12.0)	11.7 (9.1- 14.8)	11.1 (8.7- 14.1)
Midwest						
East North Central						
Illinois	9.1 (8.4- 9.9)	9.8 (9.0- 10.6)	9.4 (8.6- 10.2)	10.6 (9.7- 11.5)	8.7 (6.7- 11.1)	6.8 (5.3- 8.7)
Indiana						
Michigan	8.8 (8.0- 9.6)	9.3 (8.5- 10.2)	8.3 (7.5- 9.2)	9.3 (8.4- 10.3)	11.9 (9.3- 15.0)	9.8 (7.7- 12.3)
Detroit	9.0 (7.8- 10.3)	9.8 (8.5- 11.2)	8.6 (7.2- 10.1)	10.1 (8.6- 11.8)	11.2 (8.3- 14.6)	9.7 (7.3- 12.7)
Ohio	8.6 (7.9- 9.3)	9.6 (8.8- 10.4)	8.4 (7.7- 9.2)	9.8 (8.9- 10.7)	8.7 (6.5- 11.5)	7.6 (5.6- 9.9)
Wisconsin	8.9 (7.8- 10.0)	9.6 (8.5- 10.9)	9.0 (7.9- 10.2)	10.2 (8.9- 11.5)	~	~
West North Central	8.6 (8.1- 9.2)	9.6 (9.0- 10.2)	8.5 (7.9- 9.1)	9.8 (9.1- 10.4)	12.6 (9.4- 16.7)	9.4 (7.0- 12.3)
Iowa	8.8 (7.4- 10.3)	10.5 (8.9- 12.3)	8.7 (7.3- 10.3)	10.6 (9.0- 12.5)	~	~
Kansas	8.9 (7.4- 10.6)	9.7 (8.1- 11.5)	8.6 (7.1- 10.4)	9.7 (8.1- 11.6)	~	~
Minnesota	9.0 (7.9- 10.3)	9.3 (8.1- 10.6)	9.1 (7.9- 10.4)	9.8 (8.5- 11.1)	~	~
Missouri	8.6 (7.6- 9.7)	9.7 (8.5- 10.9)	8.2 (7.1- 9.3)	9.5 (8.3- 10.8)	12.4 (8.6- 17.5)	10.3 (7.2- 14.4)
Nebraska	8.8 (7.0- 11.0)	9.6 (7.7- 12.0)	8.9 (7.0- 11.1)	10.0 (8.0- 12.5)	~	~
North Dakota	5.4 (3.3- 8.6)	6.3 (3.8- 9.7)	5.6 (3.4- 9.0)	6.7 (4.1- 10.4)	~	~
South Dakota						
South						
South Atlantic						
Delaware	11.3 (8.2- 15.1)	11.9 (8.7- 15.9)	11.4 (8.1- 15.8)	13.1 (9.3- 17.8)	~	~
District of Columbia	5.9 (3.5- 9.8)	6.5 (3.9- 10.3)	~	~	~	~
Florida	8.1 (7.5- 8.6)	10.9 (10.2- 11.6)	8.2 (7.6- 8.9)	12.2 (11.3- 13.1)	6.7 (5.0- 8.8)	4.9 (3.7- 6.3)
Georgia						
Atlanta	7.2 (5.7- 9.0)	5.9 (4.7- 7.3)	6.2 (4.6- 8.2)	5.7 (4.2- 7.5)	9.7 (6.2- 14.7)	6.4 (4.3- 9.2)
Maryland	8.3 (7.2- 9.5)	8.5 (7.4- 9.6)	8.5 (7.3- 9.9)	9.8 (8.4- 11.4)	7.7 (5.6- 10.4)	6.1 (4.5- 8.1)
North Carolina	8.1 (7.3- 9.1)	8.8 (7.9- 9.7)	8.1 (7.1- 9.1)	9.4 (8.3- 10.5)	7.8 (5.9- 10.0)	6.8 (5.2- 8.8)
South Carolina	8.2 (7.1- 9.5)	8.8 (7.5- 10.1)	7.4 (6.2- 9.0)	8.8 (7.3- 10.5)	10.2 (7.6- 13.3)	8.7 (6.6- 11.4)
Virginia						
West Virginia	8.6 (7.0- 10.5)	11.0 (9.0- 13.3)	8.4 (6.8- 10.3)	10.8 (8.7- 13.1)	~	~
East South Central						
Alabama						
Kentucky	9.0 (7.8- 10.3)	9.8 (8.5- 11.2)	9.0 (7.7- 10.4)	10.0 (8.6- 11.5)	~	~
Mississippi						
Tennessee						

continued

Table 2.19.2: Cancer of the Kidney and Renal Pelvis. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	9.9 (8.7- 11.3)	10.2 (8.9- 11.6)	10.1 (8.7- 11.8)	11.6 (10.0- 13.5)	9.5 (7.2- 12.3)	7.8 (6.0- 10.1)
Oklahoma						
Texas						
West	7.3 (7.0- 7.7)	7.2 (6.9- 7.5)	7.6 (7.3- 8.0)	7.8 (7.5- 8.2)	8.6 (7.0- 10.4)	6.7 (5.5- 8.1)
Mountain						
Arizona	7.7 (6.6- 8.8)	8.1 (7.0- 9.3)	7.8 (6.7- 9.0)	8.7 (7.4- 10.0)	~	~
Colorado	7.2 (6.0- 8.5)	7.0 (5.9- 8.2)	7.2 (6.0- 8.5)	7.2 (6.0- 8.5)	~	~
Idaho	11.3 (8.8- 14.4)	11.0 (8.6- 13.9)	11.4 (8.8- 14.5)	11.2 (8.7- 14.2)	~	~
Montana	9.8 (7.2- 13.1)	11.0 (8.2- 14.6)	9.8 (7.2- 13.2)	11.5 (8.4- 15.2)	~	~
Nevada						
New Mexico	8.6 (6.8- 10.8)	8.6 (6.8- 10.8)	8.9 (7.0- 11.3)	9.5 (7.4- 11.9)	~	~
Utah	5.2 (3.8- 7.0)	4.0 (2.9- 5.4)	5.3 (3.8- 7.1)	4.1 (3.0- 5.6)	~	~
Wyoming	6.6 (3.7- 10.9)	6.7 (3.8- 10.9)	6.7 (3.9- 11.3)	7.0 (4.0- 11.4)	~	~
Pacific	7.2 (6.9- 7.6)	7.1 (6.7- 7.5)	7.6 (7.2- 8.0)	7.7 (7.3- 8.1)	9.1 (7.4- 11.1)	7.3 (5.9- 8.8)
Alaska	8.2 (4.8- 14.0)	6.5 (3.9- 10.1)	~	~	~	~
California	7.0 (6.6- 7.5)	6.8 (6.4- 7.2)	7.4 (6.9- 7.9)	7.4 (7.0- 7.9)	8.8 (7.1- 10.9)	7.2 (5.8- 8.8)
San Francisco-Oakland	6.4 (5.3- 7.5)	6.8 (5.7- 8.1)	6.7 (5.5- 8.2)	7.7 (6.3- 9.4)	7.2 (4.2- 11.8)	6.8 (4.0- 10.9)
San Jose-Monterey	7.4 (5.9- 9.2)	7.0 (5.5- 8.7)	7.7 (6.0- 9.8)	7.8 (6.0- 9.8)	~	~
Los Angeles	7.8 (7.0- 8.7)	7.3 (6.5- 8.1)	8.3 (7.3- 9.3)	7.8 (6.9- 8.8)	10.6 (7.9- 13.9)	9.4 (7.1- 12.4)
Hawaii	5.3 (3.7- 7.5)	5.9 (4.1- 8.2)	~	~	~	~
Oregon	7.8 (6.5- 9.2)	8.6 (7.2- 10.1)	8.0 (6.7- 9.5)	9.1 (7.6- 10.7)	~	~
Washington	8.1 (7.1- 9.2)	8.2 (7.2- 9.3)	8.1 (7.0- 9.2)	8.6 (7.5- 9.8)	~	~
Seattle-Puget Sound	7.7 (6.6- 9.0)	7.8 (6.6- 9.1)	7.7 (6.4- 9.1)	8.1 (6.8- 9.6)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.20.1: Cancer of the Brain and Other Nervous System. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	7.9 (7.7- 8.1)	7.5 (7.3- 7.7)	8.3 (8.1- 8.5)	8.2 (8.0- 8.4)	4.5 (4.1- 5.0)	3.8 (3.4- 4.1)
Northeast	8.1 (7.7- 8.5)	7.9 (7.6- 8.3)	8.4 (8.0- 8.8)	8.5 (8.1- 8.9)	4.8 (3.9- 5.9)	3.9 (3.2- 4.7)
New England	8.6 (7.9- 9.5)	8.3 (7.6- 9.1)	8.8 (8.0- 9.7)	8.7 (8.0- 9.6)	~	~
Connecticut	9.0 (7.6- 10.6)	8.8 (7.4- 10.4)	9.3 (7.8- 11.1)	9.5 (7.9- 11.2)	~	~
Maine						
Massachusetts	8.1 (7.1- 9.2)	7.8 (6.8- 8.9)	8.2 (7.1- 9.3)	8.1 (7.0- 9.2)	~	~
New Hampshire	8.9 (6.5- 12.0)	8.0 (5.8- 10.6)	8.8 (6.4- 12.0)	8.0 (5.8- 10.6)	~	~
Rhode Island	10.6 (7.9- 14.1)	10.7 (8.0- 14.1)	11.1 (8.3- 14.8)	11.4 (8.5- 15.1)	~	~
Vermont						
Middle Atlantic	7.9 (7.5- 8.4)	7.8 (7.4- 8.2)	8.2 (7.8- 8.7)	8.4 (7.9- 8.9)	4.9 (3.9- 6.1)	4.0 (3.3- 4.9)
New Jersey	7.8 (6.9- 8.7)	7.6 (6.8- 8.5)	8.1 (7.1- 9.2)	8.3 (7.3- 9.3)	5.5 (3.4- 8.9)	4.4 (2.8- 6.5)
New York	7.9 (7.3- 8.5)	7.6 (7.0- 8.2)	8.2 (7.5- 8.9)	8.2 (7.6- 9.0)	5.3 (4.0- 7.0)	4.3 (3.3- 5.4)
Pennsylvania	8.1 (7.4- 8.9)	8.3 (7.6- 9.1)	8.3 (7.5- 9.1)	8.7 (7.9- 9.5)	3.3 (1.8- 5.8)	2.9 (1.7- 4.7)
Midwest						
East North Central						
Illinois	7.6 (6.9- 8.4)	7.0 (6.3- 7.7)	7.9 (7.1- 8.8)	7.5 (6.8- 8.4)	4.9 (3.3- 7.2)	3.9 (2.7- 5.4)
Indiana						
Michigan	8.8 (7.9- 9.7)	8.1 (7.4- 9.0)	9.4 (8.4- 10.4)	9.0 (8.1- 9.9)	4.9 (3.1- 7.4)	4.1 (2.7- 5.9)
Detroit	8.7 (7.3- 10.2)	8.1 (6.9- 9.5)	9.6 (8.0- 11.4)	9.4 (7.9- 11.1)	5.2 (3.2- 8.2)	4.6 (2.8- 7.0)
Ohio	7.8 (7.1- 8.6)	7.5 (6.8- 8.2)	8.0 (7.2- 8.8)	7.7 (7.0- 8.6)	4.6 (2.9- 7.2)	4.2 (2.8- 6.2)
Wisconsin	7.6 (6.5- 8.8)	7.2 (6.2- 8.4)	7.7 (6.7- 9.0)	7.6 (6.5- 8.8)	~	~
West North Central	7.9 (7.3- 8.5)	7.5 (7.0- 8.1)	8.1 (7.5- 8.8)	8.0 (7.4- 8.6)	~	~
Iowa	7.9 (6.5- 9.5)	7.9 (6.5- 9.5)	8.0 (6.6- 9.7)	8.2 (6.7- 9.8)	~	~
Kansas	6.8 (5.4- 8.4)	6.4 (5.1- 7.9)	6.9 (5.5- 8.6)	6.6 (5.2- 8.3)	~	~
Minnesota	8.9 (7.7- 10.3)	8.4 (7.3- 9.7)	9.1 (7.9- 10.5)	8.8 (7.6- 10.2)	~	~
Missouri	8.0 (6.9- 9.2)	7.6 (6.6- 8.7)	8.4 (7.3- 9.7)	8.3 (7.1- 9.5)	~	~
Nebraska	7.2 (5.4- 9.4)	7.0 (5.3- 9.1)	7.6 (5.7- 9.8)	7.5 (5.7- 9.7)	~	~
North Dakota	5.3 (3.0- 8.6)	5.1 (2.9- 8.3)	5.4 (3.1- 9.0)	5.4 (3.1- 8.8)	~	~
South Dakota						
South						
South Atlantic						
Delaware	7.0 (4.5- 10.7)	6.8 (4.4- 10.1)	7.6 (4.8- 11.8)	8.0 (5.1- 12.0)	~	~
District of Columbia	10.6 (6.9- 15.8)	10.7 (7.0- 15.6)	~	~	~	~
Florida	7.9 (7.3- 8.5)	8.6 (8.0- 9.3)	8.3 (7.6- 9.0)	9.6 (8.8- 10.4)	4.6 (3.3- 6.8)	3.7 (2.6- 5.0)
Georgia						
Atlanta	7.2 (5.6- 9.3)	6.2 (4.9- 7.7)	8.1 (6.1- 10.7)	7.4 (5.7- 9.4)	~	~
Maryland	7.2 (6.2- 8.5)	6.7 (5.7- 7.8)	7.9 (6.6- 9.4)	7.8 (6.5- 9.2)	5.9 (3.8- 9.3)	4.5 (3.1- 6.4)
North Carolina	8.4 (7.4- 9.4)	7.8 (6.9- 8.7)	9.6 (8.5- 10.9)	9.4 (8.3- 10.6)	2.7 (1.7- 4.6)	2.7 (1.6- 4.1)
South Carolina	7.8 (6.6- 9.3)	7.5 (6.3- 8.9)	8.7 (7.2- 10.5)	9.1 (7.5- 10.8)	4.7 (2.8- 7.8)	3.9 (2.4- 6.0)
Virginia						
West Virginia	7.5 (5.8- 9.7)	7.7 (6.0- 9.8)	7.7 (5.9- 9.9)	7.9 (6.1- 10.0)	~	~
East South Central						
Alabama						
Kentucky	7.4 (6.2- 8.9)	7.0 (5.9- 8.3)	7.6 (6.3- 9.1)	7.2 (6.0- 8.6)	~	~
Mississippi						
Tennessee						

continued

Table 2.20.1: Cancer of the Brain and Other Nervous System. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	6.5 (5.4- 7.8)	5.8 (4.8- 6.9)	7.6 (6.1- 9.3)	7.3 (6.0- 8.9)	3.3 (1.9- 5.7)	2.9 (1.7- 4.5)
Oklahoma						
Texas						
West	7.8 (7.4- 8.1)	7.1 (6.8- 7.4)	8.3 (8.0- 8.7)	7.7 (7.4- 8.1)	4.6 (3.4- 6.2)	3.7 (2.8- 4.7)
Mountain						
Arizona	7.6 (6.5- 8.8)	7.2 (6.2- 8.4)	7.8 (6.7- 9.2)	7.8 (6.6- 9.1)	~	~
Colorado	8.1 (6.8- 9.6)	7.5 (6.4- 8.8)	8.2 (6.9- 9.8)	7.7 (6.5- 9.1)	~	~
Idaho	11.2 (8.6- 14.4)	10.4 (8.0- 13.3)	11.5 (8.8- 14.8)	10.7 (8.3- 13.7)	~	~
Montana	5.1 (3.2- 7.8)	5.2 (3.3- 7.9)	5.2 (3.2- 8.0)	5.4 (3.4- 8.2)	~	~
Nevada						
New Mexico	7.8 (6.0- 10.1)	7.2 (5.6- 9.3)	8.0 (6.1- 10.5)	7.7 (5.8- 10.0)	~	~
Utah	8.0 (6.1- 10.3)	6.5 (5.1- 8.2)	8.1 (6.3- 10.5)	6.6 (5.1- 8.4)	~	~
Wyoming	10.1 (6.3- 15.8)	9.5 (6.0- 14.3)	10.4 (6.5- 16.2)	9.9 (6.3- 14.9)	~	~
Pacific	7.7 (7.3- 8.1)	6.9 (6.6- 7.3)	8.4 (8.0- 8.9)	7.7 (7.3- 8.2)	4.5 (3.2- 6.2)	3.6 (2.6- 4.7)
Alaska	7.2 (3.9- 14.7)	5.2 (3.0- 8.4)	~	~	~	~
California	7.6 (7.1- 8.0)	6.7 (6.3- 7.1)	8.3 (7.7- 8.8)	7.4 (7.0- 7.9)	4.8 (3.5- 6.7)	3.9 (2.9- 5.1)
San Francisco-Oakland	8.2 (6.9- 9.6)	7.7 (6.6- 9.1)	9.3 (7.7- 11.2)	9.3 (7.7- 11.0)	~	~
San Jose-Monterey	8.1 (6.4- 10.1)	7.0 (5.6- 8.7)	8.7 (6.8- 11.2)	7.7 (6.0- 9.7)	~	~
Los Angeles	6.8 (6.0- 7.7)	5.8 (5.1- 6.5)	7.6 (6.6- 8.7)	6.5 (5.7- 7.4)	4.2 (2.5- 7.3)	3.6 (2.2- 5.8)
Hawaii	4.8 (3.2- 6.9)	4.7 (3.2- 6.9)	~	~	~	~
Oregon	8.1 (6.8- 9.6)	8.0 (6.7- 9.5)	8.3 (7.0- 10.0)	8.4 (7.0- 9.9)	~	~
Washington	9.2 (8.1- 10.5)	8.5 (7.5- 9.7)	9.6 (8.4- 10.9)	9.0 (7.9- 10.3)	~	~
Seattle-Puget Sound	9.3 (7.9- 10.9)	8.6 (7.3- 10.0)	10.0 (8.5- 11.8)	9.5 (8.1- 11.1)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.20.2: Cancer of the Brain and Other Nervous System. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	5.7 (5.5- 5.8)	6.0 (5.8- 6.1)	6.0 (5.8- 6.1)	6.5 (6.4- 6.7)	3.6 (3.3- 4.0)	3.2 (2.9- 3.5)
Northeast	5.9 (5.7- 6.2)	6.6 (6.3- 6.9)	6.3 (6.0- 6.6)	7.2 (6.8- 7.5)	3.6 (2.9- 4.3)	3.3 (2.7- 4.0)
New England	6.4 (5.8- 7.0)	6.9 (6.3- 7.6)	6.5 (5.9- 7.2)	7.3 (6.6- 8.0)	~	~
Connecticut	5.9 (4.9- 7.2)	6.5 (5.3- 7.8)	6.1 (4.9- 7.4)	6.8 (5.6- 8.3)	~	~
Maine						
Massachusetts	6.7 (5.9- 7.7)	7.3 (6.4- 8.3)	7.0 (6.1- 8.0)	7.8 (6.8- 8.9)	~	~
New Hampshire	5.4 (3.7- 7.6)	5.3 (3.6- 7.4)	5.3 (3.6- 7.6)	5.2 (3.5- 7.4)	~	~
Rhode Island	6.7 (4.7- 9.2)	8.0 (5.7- 10.8)	6.8 (4.7- 9.5)	8.2 (5.9- 11.3)	~	~
Vermont						
Middle Atlantic	5.8 (5.5- 6.2)	6.5 (6.1- 6.8)	6.2 (5.8- 6.6)	7.2 (6.7- 7.6)	3.6 (2.9- 4.4)	3.3 (2.7- 4.1)
New Jersey	6.4 (5.7- 7.2)	7.0 (6.3- 7.9)	6.9 (6.1- 7.8)	8.0 (7.1- 9.1)	3.5 (2.1- 5.6)	3.2 (1.9- 4.9)
New York	5.8 (5.3- 6.3)	6.3 (5.8- 6.8)	6.3 (5.7- 6.8)	7.1 (6.5- 7.7)	3.4 (2.6- 4.5)	3.2 (2.4- 4.2)
Pennsylvania	5.6 (5.0- 6.2)	6.4 (5.8- 7.0)	5.7 (5.1- 6.4)	6.7 (6.0- 7.4)	4.0 (2.6- 6.0)	3.9 (2.5- 5.8)
Midwest						
East North Central						
Illinois	5.4 (4.8- 5.9)	5.6 (5.0- 6.2)	5.7 (5.0- 6.3)	6.2 (5.5- 6.9)	3.5 (2.4- 5.1)	3.2 (2.1- 4.5)
Indiana						
Michigan	6.0 (5.3- 6.7)	6.3 (5.6- 7.0)	6.3 (5.6- 7.1)	6.9 (6.1- 7.7)	3.4 (2.1- 5.2)	2.9 (1.8- 4.4)
Detroit	5.1 (4.2- 6.1)	5.4 (4.4- 6.5)	5.5 (4.4- 6.8)	6.2 (5.0- 7.6)	3.2 (1.8- 5.3)	2.9 (1.7- 4.8)
Ohio	5.8 (5.2- 6.4)	6.2 (5.6- 6.9)	5.9 (5.3- 6.6)	6.5 (5.8- 7.2)	4.0 (2.6- 6.0)	3.5 (2.2- 5.2)
Wisconsin	6.2 (5.3- 7.2)	6.5 (5.6- 7.6)	6.2 (5.3- 7.2)	6.7 (5.7- 7.8)	~	~
West North Central	5.8 (5.3- 6.3)	6.2 (5.7- 6.7)	6.0 (5.5- 6.5)	6.5 (6.0- 7.1)	~	~
Iowa	5.0 (4.0- 6.3)	5.7 (4.6- 7.1)	5.1 (4.0- 6.4)	5.8 (4.7- 7.2)	~	~
Kansas	5.3 (4.2- 6.7)	5.7 (4.5- 7.1)	5.6 (4.4- 7.0)	6.1 (4.8- 7.6)	~	~
Minnesota	6.1 (5.2- 7.2)	6.2 (5.2- 7.2)	6.4 (5.4- 7.6)	6.6 (5.6- 7.7)	~	~
Missouri	5.9 (5.1- 6.9)	6.5 (5.6- 7.5)	6.3 (5.4- 7.3)	7.0 (6.0- 8.2)	~	~
Nebraska	6.5 (5.0- 8.5)	7.2 (5.5- 9.2)	6.3 (4.7- 8.2)	7.0 (5.3- 9.1)	~	~
North Dakota	4.5 (2.6- 7.5)	5.3 (3.1- 8.6)	4.7 (2.7- 7.9)	5.7 (3.3- 9.1)	~	~
South Dakota						
South						
South Atlantic						
Delaware	6.7 (4.4- 9.8)	7.0 (4.6- 10.2)	7.0 (4.4- 10.7)	7.7 (4.9- 11.5)	~	~
District of Columbia	~	~	~	~	~	~
Florida	5.8 (5.3- 6.4)	6.9 (6.3- 7.5)	6.0 (5.5- 6.6)	7.6 (6.9- 8.3)	3.7 (2.6- 5.2)	3.3 (2.4- 4.5)
Georgia						
Atlanta	5.4 (4.1- 6.9)	4.6 (3.6- 5.9)	6.7 (5.0- 8.7)	6.4 (4.8- 8.3)	~	~
Maryland	5.3 (4.5- 6.3)	5.4 (4.6- 6.4)	5.5 (4.5- 6.7)	6.0 (4.9- 7.2)	4.0 (2.7- 6.0)	3.8 (2.5- 5.4)
North Carolina	4.8 (4.2- 5.6)	5.0 (4.4- 5.8)	5.5 (4.7- 6.4)	5.9 (5.0- 6.8)	2.7 (1.7- 4.1)	2.5 (1.5- 3.7)
South Carolina	5.0 (4.1- 6.1)	5.2 (4.2- 6.3)	5.4 (4.3- 6.8)	5.9 (4.7- 7.4)	4.0 (2.5- 6.2)	3.6 (2.2- 5.4)
Virginia						
West Virginia	6.0 (4.6- 7.8)	6.7 (5.2- 8.6)	6.0 (4.6- 7.8)	6.8 (5.2- 8.7)	~	~
East South Central						
Alabama						
Kentucky	5.1 (4.2- 6.1)	5.4 (4.4- 6.5)	5.1 (4.1- 6.2)	5.5 (4.5- 6.6)	~	~
Mississippi						
Tennessee						

continued

Table 2.20.2: Cancer of the Brain and Other Nervous System. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	4.9 (4.0- 5.9)	4.9 (4.1- 5.9)	5.0 (4.0- 6.3)	5.4 (4.3- 6.7)	4.8 (3.2- 6.9)	4.1 (2.8- 5.8)
Oklahoma						
Texas						
West	5.5 (5.2- 5.8)	5.5 (5.2- 5.7)	5.9 (5.6- 6.2)	6.0 (5.7- 6.3)	3.3 (2.4- 4.4)	2.9 (2.1- 3.9)
Mountain						
Arizona	6.2 (5.3- 7.3)	6.5 (5.5- 7.6)	6.7 (5.6- 7.8)	7.1 (6.0- 8.3)	~	~
Colorado	5.4 (4.4- 6.5)	5.3 (4.3- 6.4)	5.4 (4.4- 6.5)	5.3 (4.3- 6.4)	~	~
Idaho	6.0 (4.2- 8.4)	5.9 (4.2- 8.1)	6.2 (4.4- 8.6)	6.1 (4.3- 8.4)	~	~
Montana	7.0 (4.8- 10.0)	7.4 (5.1- 10.4)	6.9 (4.7- 10.0)	7.6 (5.1- 10.7)	~	~
Nevada						
New Mexico	5.3 (3.9- 7.1)	5.2 (3.8- 6.9)	5.5 (4.0- 7.5)	5.6 (4.1- 7.6)	~	~
Utah	5.3 (3.9- 7.0)	4.7 (3.5- 6.1)	5.4 (4.0- 7.2)	4.8 (3.6- 6.4)	~	~
Wyoming	~	~	~	~	~	~
Pacific	5.4 (5.1- 5.7)	5.4 (5.1- 5.7)	5.9 (5.5- 6.2)	5.9 (5.6- 6.3)	3.4 (2.5- 4.7)	3.1 (2.2- 4.1)
Alaska	7.4 (4.2- 13.1)	5.8 (3.4- 9.2)	~	~	~	~
California	5.2 (4.8- 5.5)	5.1 (4.7- 5.4)	5.7 (5.3- 6.1)	5.7 (5.3- 6.1)	3.5 (2.5- 4.9)	3.2 (2.3- 4.3)
San Francisco-Oakland	5.5 (4.5- 6.6)	5.8 (4.8- 6.9)	6.7 (5.4- 8.2)	7.3 (5.9- 8.9)	~	~
San Jose-Monterey	5.9 (4.6- 7.6)	5.8 (4.5- 7.4)	6.3 (4.7- 8.2)	6.3 (4.8- 8.2)	~	~
Los Angeles	4.8 (4.2- 5.5)	4.6 (4.0- 5.3)	5.5 (4.7- 6.3)	5.3 (4.6- 6.2)	4.5 (2.8- 6.8)	4.2 (2.6- 6.3)
Hawaii	3.8 (2.4- 5.8)	3.9 (2.5- 5.8)	~	~	~	~
Oregon	5.1 (4.1- 6.3)	5.4 (4.3- 6.6)	5.2 (4.1- 6.4)	5.5 (4.4- 6.8)	~	~
Washington	7.2 (6.3- 8.3)	7.2 (6.3- 8.3)	7.4 (6.4- 8.5)	7.5 (6.5- 8.6)	~	~
Seattle-Puget Sound	7.0 (5.9- 8.2)	6.9 (5.8- 8.2)	7.3 (6.1- 8.7)	7.4 (6.2- 8.9)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.21.1: Cancer of the Thyroid. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	3.6 (3.5- 3.7)	3.5 (3.4- 3.6)	3.8 (3.6- 3.9)	3.8 (3.6- 3.9)	1.8 (1.5- 2.1)	1.3 (1.1- 1.5)
Northeast	4.1 (3.8- 4.4)	4.1 (3.8- 4.4)	4.3 (4.0- 4.6)	4.4 (4.2- 4.7)	2.0 (1.4- 2.7)	1.5 (1.1- 2.0)
New England	4.0 (3.5- 4.6)	4.0 (3.5- 4.5)	4.0 (3.5- 4.6)	4.1 (3.6- 4.7)	~	~
Connecticut	4.3 (3.3- 5.4)	4.3 (3.3- 5.4)	4.5 (3.4- 5.7)	4.6 (3.5- 5.8)	~	~
Maine						
Massachusetts	3.9 (3.2- 4.7)	3.8 (3.2- 4.6)	3.8 (3.1- 4.6)	3.9 (3.2- 4.7)	~	~
New Hampshire	4.3 (2.7- 6.5)	4.2 (2.7- 6.2)	4.3 (2.8- 6.6)	4.3 (2.8- 6.4)	~	~
Rhode Island	3.5 (2.1- 5.8)	3.6 (2.1- 5.7)	3.8 (2.2- 6.2)	3.9 (2.3- 6.2)	~	~
Vermont						
Middle Atlantic	4.1 (3.8- 4.4)	4.1 (3.8- 4.4)	4.4 (4.1- 4.7)	4.5 (4.2- 4.9)	2.0 (1.5- 2.9)	1.6 (1.2- 2.2)
New Jersey	4.2 (3.6- 4.9)	4.2 (3.6- 4.9)	4.6 (3.9- 5.4)	4.7 (4.0- 5.6)	~	~
New York	3.9 (3.5- 4.3)	3.8 (3.4- 4.2)	4.2 (3.8- 4.8)	4.3 (3.9- 4.9)	~	~
Pennsylvania	4.4 (3.9- 5.0)	4.6 (4.0- 5.1)	4.4 (3.9- 5.0)	4.7 (4.1- 5.3)	4.1 (2.3- 6.8)	3.1 (1.8- 5.0)
Midwest						
East North Central						
Illinois	3.7 (3.2- 4.3)	3.5 (3.1- 4.0)	3.9 (3.4- 4.6)	3.9 (3.3- 4.5)	~	~
Indiana						
Michigan	3.4 (2.9- 4.0)	3.2 (2.7- 3.8)	3.7 (3.1- 4.3)	3.7 (3.1- 4.3)	~	~
Detroit	3.6 (2.8- 4.6)	3.5 (2.7- 4.4)	4.3 (3.3- 5.5)	4.4 (3.3- 5.6)	~	~
Ohio	3.3 (2.8- 3.8)	3.2 (2.7- 3.7)	3.3 (2.8- 3.8)	3.3 (2.8- 3.8)	~	~
Wisconsin	3.2 (2.5- 4.0)	3.1 (2.4- 3.8)	3.1 (2.4- 3.9)	3.1 (2.4- 3.9)	~	~
West North Central	3.8 (3.4- 4.2)	3.6 (3.2- 4.1)	3.8 (3.4- 4.3)	3.8 (3.4- 4.2)	~	~
Iowa	4.0 (3.1- 5.3)	4.0 (3.0- 5.2)	4.1 (3.1- 5.3)	4.1 (3.1- 5.3)	~	~
Kansas	4.3 (3.3- 5.7)	4.1 (3.1- 5.4)	4.2 (3.1- 5.6)	4.1 (3.0- 5.4)	~	~
Minnesota	3.9 (3.2- 4.9)	3.7 (3.0- 4.6)	4.1 (3.3- 5.1)	4.0 (3.2- 4.9)	~	~
Missouri	3.5 (2.8- 4.3)	3.4 (2.7- 4.2)	3.7 (2.9- 4.6)	3.7 (2.9- 4.5)	~	~
Nebraska	3.3 (2.1- 4.9)	3.1 (2.0- 4.5)	3.3 (2.1- 5.0)	3.1 (2.0- 4.7)	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	~	~	~	~	~	~
District of Columbia	6.3 (3.6- 10.5)	6.6 (3.7- 10.6)	~	~	~	~
Florida	3.2 (2.8- 3.6)	3.5 (3.1- 3.9)	3.4 (3.0- 3.9)	3.9 (3.4- 4.4)	~	~
Georgia						
Atlanta	2.5 (1.6- 4.0)	2.2 (1.5- 3.2)	2.7 (1.6- 4.5)	2.6 (1.6- 3.9)	~	~
Maryland	3.1 (2.4- 3.9)	3.0 (2.3- 3.7)	3.5 (2.7- 4.5)	3.6 (2.8- 4.6)	~	~
North Carolina	2.8 (2.3- 3.5)	2.7 (2.2- 3.2)	3.3 (2.6- 4.1)	3.3 (2.6- 4.0)	~	~
South Carolina	2.9 (2.2- 3.9)	2.8 (2.1- 3.7)	3.2 (2.4- 4.5)	3.4 (2.5- 4.6)	~	~
Virginia						
West Virginia	3.5 (2.4- 5.0)	3.6 (2.4- 5.0)	3.6 (2.4- 5.2)	3.7 (2.5- 5.2)	~	~
East South Central						
Alabama						
Kentucky	3.0 (2.3- 4.0)	3.0 (2.2- 3.8)	3.1 (2.3- 4.1)	3.1 (2.3- 4.0)	~	~
Mississippi						
Tennessee						

continued

Table 2.21.1: Cancer of the Thyroid. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	3.0 (2.3- 4.0)	2.8 (2.1- 3.6)	3.4 (2.5- 4.6)	3.5 (2.6- 4.6)	~	~
Oklahoma						
Texas						
West	3.7 (3.5- 3.9)	3.4 (3.2- 3.6)	3.7 (3.5- 4.0)	3.5 (3.3- 3.7)	1.9 (1.2- 3.0)	1.5 (0.9- 2.2)
Mountain						
Arizona	3.7 (2.9- 4.6)	3.5 (2.8- 4.3)	3.8 (3.0- 4.8)	3.7 (2.9- 4.6)	~	~
Colorado	3.3 (2.6- 4.4)	3.2 (2.5- 4.1)	3.3 (2.5- 4.3)	3.2 (2.4- 4.1)	~	~
Idaho	4.0 (2.6- 6.2)	3.7 (2.3- 5.5)	4.1 (2.6- 6.3)	3.8 (2.4- 5.7)	~	~
Montana	5.5 (3.5- 8.4)	5.5 (3.5- 8.1)	5.4 (3.3- 8.3)	5.4 (3.4- 8.2)	~	~
Nevada						
New Mexico	4.0 (2.8- 5.9)	3.7 (2.6- 5.3)	4.5 (3.1- 6.5)	4.3 (3.0- 6.1)	~	~
Utah	3.8 (2.6- 5.6)	3.1 (2.1- 4.4)	3.8 (2.5- 5.6)	3.1 (2.1- 4.4)	~	~
Wyoming	~	~	~	~	~	~
Pacific	3.6 (3.4- 3.9)	3.4 (3.1- 3.6)	3.6 (3.3- 3.9)	3.4 (3.2- 3.7)	1.8 (1.1- 3.1)	1.4 (0.9- 2.2)
Alaska	6.4 (3.6- 13.6)	5.5 (3.3- 8.7)	~	~	~	~
California	3.4 (3.1- 3.7)	3.0 (2.8- 3.3)	3.5 (3.1- 3.8)	3.2 (2.9- 3.5)	1.9 (1.1- 3.3)	1.5 (0.9- 2.3)
San Francisco-Oakland	3.0 (2.3- 4.0)	3.1 (2.3- 3.9)	3.0 (2.1- 4.1)	3.1 (2.3- 4.2)	~	~
San Jose-Monterey	4.9 (3.6- 6.6)	4.3 (3.2- 5.7)	5.4 (3.9- 7.3)	4.8 (3.5- 6.5)	~	~
Los Angeles	3.5 (2.9- 4.1)	3.0 (2.5- 3.5)	3.6 (3.0- 4.4)	3.1 (2.6- 3.8)	~	~
Hawaii	6.3 (4.5- 8.8)	6.3 (4.4- 8.6)	~	~	~	~
Oregon	3.9 (3.0- 5.0)	3.9 (3.0- 5.0)	3.7 (2.9- 4.9)	3.9 (2.9- 5.0)	~	~
Washington	4.2 (3.5- 5.1)	4.1 (3.3- 4.9)	4.0 (3.3- 4.9)	4.0 (3.2- 4.8)	~	~
Seattle-Puget Sound	4.4 (3.5- 5.5)	4.3 (3.4- 5.3)	4.5 (3.5- 5.7)	4.5 (3.6- 5.7)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.21.2: Cancer of the Thyroid. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	9.9 (9.7- 10.1)	10.0 (9.8- 10.2)	10.2 (10.0- 10.4)	10.4 (10.2- 10.7)	5.9 (5.5- 6.4)	5.4 (5.0- 5.8)
Northeast	11.4 (11.0- 11.8)	11.8 (11.4- 12.2)	11.7 (11.3- 12.2)	12.2 (11.8- 12.7)	6.6 (5.7- 7.6)	6.2 (5.4- 7.1)
New England	10.6 (9.8- 11.4)	11.0 (10.1- 11.8)	10.6 (9.7- 11.5)	11.1 (10.2- 12.0)	7.9 (5.1- 11.9)	6.8 (4.5- 9.8)
Connecticut	10.9 (9.4- 12.6)	11.3 (9.8- 13.0)	11.1 (9.4- 12.9)	11.6 (9.9- 13.4)	~	~
Maine						
Massachusetts	10.6 (9.5- 11.7)	11.0 (9.9- 12.2)	10.5 (9.3- 11.7)	11.1 (9.9- 12.4)	~	~
New Hampshire	7.0 (5.0- 9.4)	7.2 (5.2- 9.7)	7.1 (5.1- 9.6)	7.4 (5.4- 9.9)	~	~
Rhode Island	13.9 (10.9- 17.6)	14.0 (11.0- 17.6)	14.0 (10.8- 17.9)	14.2 (11.0- 18.0)	~	~
Vermont						
Middle Atlantic	11.6 (11.1- 12.1)	12.0 (11.5- 12.5)	12.1 (11.6- 12.6)	12.6 (12.1- 13.2)	6.4 (5.5- 7.5)	6.1 (5.3- 7.1)
New Jersey	11.0 (10.0- 12.0)	11.4 (10.4- 12.5)	11.8 (10.7- 13.1)	12.4 (11.2- 13.6)	5.1 (3.4- 7.5)	4.6 (3.1- 6.6)
New York	11.3 (10.6- 12.0)	11.7 (11.0- 12.4)	12.0 (11.3- 12.9)	12.5 (11.7- 13.4)	5.3 (4.2- 6.6)	5.1 (4.0- 6.2)
Pennsylvania	12.5 (11.6- 13.4)	13.0 (12.1- 13.9)	12.3 (11.4- 13.3)	13.0 (12.0- 14.0)	11.3 (8.7- 14.4)	10.7 (8.2- 13.6)
Midwest						
East North Central						
Illinois	10.1 (9.4- 11.0)	10.1 (9.4- 11.0)	10.9 (10.0- 11.9)	11.0 (10.1- 12.0)	3.7 (2.6- 5.3)	3.5 (2.4- 4.8)
Indiana						
Michigan	10.2 (9.3- 11.1)	10.3 (9.5- 11.3)	10.3 (9.4- 11.3)	10.6 (9.6- 11.6)	8.1 (6.1- 10.6)	7.3 (5.5- 9.5)
Detroit	10.3 (9.0- 11.7)	10.6 (9.3- 12.1)	11.0 (9.4- 12.8)	11.6 (10.0- 13.5)	7.4 (5.2- 10.2)	7.0 (4.9- 9.5)
Ohio	7.6 (6.9- 8.4)	7.8 (7.1- 8.5)	7.8 (7.1- 8.6)	8.1 (7.3- 8.9)	3.5 (2.2- 5.4)	3.2 (2.0- 4.8)
Wisconsin	8.5 (7.5- 9.7)	8.6 (7.5- 9.8)	9.0 (7.8- 10.2)	9.1 (8.0- 10.4)	~	~
West North Central	9.9 (9.3- 10.6)	9.9 (9.3- 10.6)	10.0 (9.3- 10.7)	10.1 (9.5- 10.8)	6.8 (4.6- 9.8)	5.7 (3.9- 8.1)
Iowa	9.7 (8.1- 11.4)	9.8 (8.3- 11.5)	9.6 (8.1- 11.4)	9.8 (8.2- 11.6)	~	~
Kansas	10.5 (8.8- 12.4)	10.5 (8.9- 12.4)	10.5 (8.7- 12.5)	10.6 (8.9- 12.6)	~	~
Minnesota	9.9 (8.7- 11.2)	9.8 (8.6- 11.2)	9.8 (8.6- 11.2)	9.9 (8.6- 11.2)	~	~
Missouri	10.0 (8.9- 11.2)	10.2 (9.0- 11.4)	10.3 (9.1- 11.7)	10.6 (9.3- 12.0)	7.0 (4.2- 10.9)	6.1 (3.7- 9.4)
Nebraska	9.2 (7.3- 11.6)	9.1 (7.1- 11.3)	9.6 (7.5- 12.0)	9.4 (7.4- 11.8)	~	~
North Dakota	9.5 (6.4- 13.7)	9.7 (6.6- 13.8)	9.6 (6.4- 14.0)	10.1 (6.8- 14.4)	~	~
South Dakota						
South						
South Atlantic						
Delaware	13.2 (9.8- 17.3)	13.7 (10.3- 17.9)	13.5 (9.8- 18.3)	14.4 (10.4- 19.4)	~	~
District of Columbia	14.8 (10.8- 20.2)	16.6 (12.2- 22.1)	~	~	14.7 (9.7- 21.9)	16.6 (11.1- 23.9)
Florida	8.8 (8.1- 9.5)	9.2 (8.5- 9.8)	9.4 (8.6- 10.2)	9.9 (9.1- 10.7)	6.1 (4.7- 7.9)	5.3 (4.1- 6.7)
Georgia						
Atlanta	9.4 (7.8- 11.2)	9.3 (7.7- 11.0)	9.9 (8.0- 12.3)	10.4 (8.4- 12.8)	7.5 (4.8- 11.7)	6.4 (4.3- 9.2)
Maryland	10.6 (9.4- 11.9)	10.9 (9.7- 12.2)	11.9 (10.4- 13.6)	12.4 (10.8- 14.2)	7.0 (5.2- 9.4)	6.9 (5.2- 9.0)
North Carolina	6.5 (5.8- 7.4)	6.6 (5.8- 7.5)	7.3 (6.3- 8.3)	7.5 (6.5- 8.5)	3.7 (2.5- 5.3)	3.5 (2.4- 4.9)
South Carolina	6.7 (5.7- 8.0)	7.0 (5.9- 8.2)	7.6 (6.3- 9.2)	8.1 (6.7- 9.8)	4.6 (3.0- 6.8)	4.2 (2.8- 6.2)
Virginia						
West Virginia	10.9 (8.9- 13.3)	11.4 (9.4- 13.8)	11.1 (9.1- 13.6)	11.7 (9.5- 14.1)	~	~
East South Central						
Alabama						
Kentucky	9.0 (7.7- 10.4)	9.2 (8.0- 10.6)	9.1 (7.8- 10.6)	9.4 (8.1- 10.9)	~	~
Mississippi						
Tennessee						

continued

Table 2.21.2: Cancer of the Thyroid. Invasive Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	7.6 (6.5- 8.8)	7.5 (6.4- 8.8)	8.5 (7.1- 10.2)	8.8 (7.4- 10.4)	6.1 (4.3- 8.4)	5.2 (3.7- 7.1)
Oklahoma						
Texas						
West	10.1 (9.7- 10.5)	10.0 (9.6- 10.3)	10.1 (9.7- 10.5)	10.0 (9.6- 10.4)	5.0 (3.9- 6.3)	4.8 (3.8- 6.0)
Mountain						
Arizona	9.6 (8.4- 10.9)	9.3 (8.2- 10.6)	10.0 (8.7- 11.5)	9.9 (8.6- 11.3)	~	~
Colorado	10.7 (9.3- 12.2)	10.9 (9.5- 12.4)	10.6 (9.2- 12.2)	10.9 (9.4- 12.5)	~	~
Idaho	8.5 (6.3- 11.2)	8.1 (6.1- 10.7)	8.4 (6.2- 11.2)	8.1 (6.0- 10.7)	~	~
Montana	15.3 (11.9- 19.5)	15.3 (11.9- 19.4)	15.3 (11.7- 19.7)	15.4 (11.8- 19.6)	~	~
Nevada						
New Mexico	11.5 (9.4- 14.0)	11.3 (9.2- 13.8)	12.4 (10.0- 15.2)	12.5 (10.1- 15.3)	~	~
Utah	12.4 (10.2- 15.0)	10.7 (8.9- 12.9)	12.2 (10.0- 14.8)	10.5 (8.6- 12.7)	~	~
Wyoming	8.3 (5.0- 13.3)	8.0 (4.8- 12.4)	8.3 (4.9- 13.4)	7.9 (4.7- 12.4)	~	~
Pacific	9.9 (9.5- 10.3)	9.8 (9.4- 10.2)	9.8 (9.4- 10.3)	9.8 (9.3- 10.3)	5.1 (3.9- 6.5)	4.9 (3.8- 6.2)
Alaska	10.7 (7.2- 16.5)	10.2 (6.9- 14.5)	9.1 (5.4- 15.8)	9.2 (5.6- 14.1)	~	~
California	9.6 (9.2- 10.1)	9.5 (9.0- 10.0)	9.8 (9.3- 10.4)	9.7 (9.2- 10.3)	4.5 (3.4- 6.0)	4.4 (3.3- 5.7)
San Francisco-Oakland	8.1 (7.0- 9.5)	8.6 (7.4- 10.0)	8.6 (7.2- 10.4)	9.2 (7.7- 11.0)	~	~
San Jose-Monterey	10.1 (8.3- 12.1)	10.2 (8.4- 12.2)	9.8 (7.9- 12.1)	9.9 (7.9- 12.2)	~	~
Los Angeles	10.4 (9.5- 11.4)	10.1 (9.2- 11.0)	11.2 (10.1- 12.4)	10.8 (9.7- 11.9)	4.2 (2.7- 6.4)	4.2 (2.6- 6.3)
Hawaii	12.0 (9.4- 15.2)	12.4 (9.7- 15.5)	~	~	~	~
Oregon	8.6 (7.3- 10.1)	8.8 (7.5- 10.4)	8.8 (7.4- 10.4)	9.1 (7.6- 10.7)	~	~
Washington	11.5 (10.3- 12.8)	11.6 (10.4- 12.9)	10.8 (9.6- 12.2)	11.0 (9.8- 12.4)	~	~
Seattle-Puget Sound	12.2 (10.7- 13.8)	12.4 (10.9- 14.1)	11.9 (10.4- 13.7)	12.4 (10.8- 14.1)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.22.1: Hodgkin Lymphoma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	3.2 (3.1- 3.3)	3.1 (3.0- 3.2)	3.2 (3.1- 3.4)	3.2 (3.1- 3.4)	2.9 (2.6- 3.2)	2.7 (2.4- 3.0)
Northeast	3.6 (3.4- 3.9)	3.6 (3.4- 3.9)	3.7 (3.5- 4.0)	3.8 (3.5- 4.0)	3.2 (2.5- 4.1)	2.8 (2.2- 3.5)
New England	3.7 (3.2- 4.2)	3.7 (3.2- 4.2)	3.8 (3.3- 4.4)	3.9 (3.4- 4.5)	~	~
Connecticut	3.2 (2.4- 4.2)	3.2 (2.4- 4.2)	3.4 (2.5- 4.5)	3.4 (2.5- 4.5)	~	~
Maine						
Massachusetts	3.9 (3.2- 4.7)	3.9 (3.2- 4.7)	4.0 (3.3- 4.8)	4.1 (3.4- 4.9)	~	~
New Hampshire	3.6 (2.3- 5.7)	3.7 (2.3- 5.6)	3.7 (2.3- 5.9)	3.8 (2.4- 5.8)	~	~
Rhode Island	4.2 (2.5- 6.5)	4.2 (2.6- 6.5)	4.3 (2.6- 6.9)	4.3 (2.6- 6.8)	~	~
Vermont						
Middle Atlantic	3.6 (3.3- 3.9)	3.6 (3.3- 3.9)	3.7 (3.4- 4.0)	3.7 (3.4- 4.0)	3.4 (2.6- 4.4)	3.0 (2.4- 3.8)
New Jersey	3.8 (3.2- 4.4)	3.7 (3.1- 4.3)	3.8 (3.2- 4.6)	3.8 (3.1- 4.5)	5.1 (3.0- 8.7)	4.0 (2.6- 6.1)
New York	3.4 (3.1- 3.9)	3.4 (3.1- 3.9)	3.6 (3.1- 4.1)	3.6 (3.2- 4.1)	2.9 (2.0- 4.2)	2.7 (1.9- 3.6)
Pennsylvania	3.7 (3.3- 4.3)	3.8 (3.3- 4.3)	3.8 (3.3- 4.3)	3.8 (3.3- 4.4)	3.2 (1.8- 5.6)	2.9 (1.7- 4.7)
Midwest						
East North Central						
Illinois	3.1 (2.7- 3.6)	3.0 (2.6- 3.5)	3.0 (2.5- 3.5)	3.0 (2.5- 3.5)	2.2 (1.3- 3.9)	2.1 (1.2- 3.3)
Indiana						
Michigan	3.9 (3.3- 4.5)	3.8 (3.3- 4.4)	4.0 (3.4- 4.7)	3.9 (3.4- 4.6)	3.9 (2.5- 6.2)	3.5 (2.2- 5.2)
Detroit	3.8 (2.9- 4.8)	3.7 (2.9- 4.7)	3.8 (2.8- 5.0)	3.8 (2.9- 5.0)	4.1 (2.4- 6.9)	3.7 (2.2- 5.9)
Ohio	3.2 (2.8- 3.8)	3.2 (2.7- 3.7)	3.2 (2.7- 3.7)	3.2 (2.7- 3.7)	2.7 (1.6- 4.9)	2.8 (1.6- 4.4)
Wisconsin	3.4 (2.7- 4.2)	3.4 (2.7- 4.2)	3.3 (2.6- 4.1)	3.3 (2.6- 4.1)	~	~
West North Central	3.5 (3.1- 3.9)	3.4 (3.1- 3.8)	3.5 (3.1- 3.9)	3.5 (3.1- 3.9)	~	~
Iowa	2.8 (2.0- 3.9)	2.9 (2.0- 3.9)	2.8 (2.0- 3.9)	2.9 (2.1- 4.0)	~	~
Kansas	3.8 (2.8- 5.1)	3.8 (2.8- 5.0)	3.8 (2.8- 5.1)	3.8 (2.8- 5.0)	~	~
Minnesota	3.8 (3.0- 4.7)	3.7 (3.0- 4.6)	3.6 (2.9- 4.6)	3.6 (2.8- 4.5)	~	~
Missouri	3.4 (2.7- 4.2)	3.4 (2.7- 4.1)	3.5 (2.7- 4.3)	3.4 (2.7- 4.3)	~	~
Nebraska	3.8 (2.6- 5.5)	3.7 (2.5- 5.3)	4.0 (2.7- 5.8)	3.9 (2.7- 5.6)	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	5.1 (3.1- 8.4)	5.2 (3.1- 8.1)	~	~	~	~
District of Columbia	~	~	~	~	~	~
Florida	3.1 (2.7- 3.5)	3.1 (2.7- 3.5)	3.2 (2.7- 3.7)	3.2 (2.8- 3.7)	2.5 (1.6- 4.2)	2.3 (1.5- 3.4)
Georgia						
Atlanta	2.8 (1.9- 4.3)	2.8 (1.9- 3.8)	2.4 (1.4- 4.3)	2.3 (1.4- 3.6)	~	~
Maryland	3.0 (2.4- 3.8)	3.1 (2.4- 3.8)	3.2 (2.4- 4.2)	3.3 (2.5- 4.2)	2.4 (1.4- 4.7)	2.6 (1.6- 4.2)
North Carolina	2.8 (2.3- 3.4)	2.8 (2.3- 3.4)	2.7 (2.1- 3.4)	2.7 (2.2- 3.4)	2.9 (1.7- 4.8)	2.7 (1.6- 4.1)
South Carolina	2.4 (1.7- 3.3)	2.3 (1.7- 3.2)	2.4 (1.6- 3.5)	2.4 (1.7- 3.4)	~	~
Virginia						
West Virginia	3.4 (2.3- 4.9)	3.4 (2.3- 4.9)	3.4 (2.3- 5.0)	3.5 (2.3- 5.0)	~	~
East South Central						
Alabama						
Kentucky	2.9 (2.2- 3.8)	3.0 (2.3- 3.9)	3.0 (2.3- 4.0)	3.1 (2.3- 4.0)	~	~
Mississippi						
Tennessee						

continued

Table 2.22.1: Hodgkin Lymphoma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	2.6 (2.0- 3.5)	2.6 (1.9- 3.3)	2.3 (1.5- 3.3)	2.3 (1.6- 3.2)	3.4 (2.1- 5.6)	3.2 (2.0- 4.9)
Oklahoma						
Texas						
West	2.8 (2.6- 3.0)	2.7 (2.5- 2.9)	3.0 (2.8- 3.2)	2.9 (2.7- 3.1)	2.1 (1.4- 3.2)	2.1 (1.4- 2.9)
Mountain						
Arizona	2.1 (1.6- 2.9)	2.1 (1.6- 2.8)	2.2 (1.6- 3.0)	2.2 (1.6- 2.9)	~	~
Colorado	3.2 (2.5- 4.2)	3.2 (2.4- 4.1)	3.4 (2.6- 4.4)	3.3 (2.5- 4.2)	~	~
Idaho	~	~	~	~	~	~
Montana	~	~	~	~	~	~
Nevada						
New Mexico	3.5 (2.3- 5.2)	3.3 (2.2- 4.7)	3.8 (2.5- 5.7)	3.7 (2.4- 5.3)	~	~
Utah	2.7 (1.7- 4.1)	2.5 (1.7- 3.7)	2.7 (1.7- 4.1)	2.6 (1.7- 3.8)	~	~
Wyoming	~	~	~	~	~	~
Pacific	2.8 (2.5- 3.0)	2.7 (2.5- 2.9)	3.0 (2.8- 3.3)	2.9 (2.7- 3.2)	2.1 (1.4- 3.2)	2.1 (1.4- 3.0)
Alaska	~	~	~	~	~	~
California	2.7 (2.5- 3.0)	2.6 (2.3- 2.8)	3.0 (2.7- 3.4)	2.9 (2.6- 3.2)	2.2 (1.4- 3.5)	2.2 (1.4- 3.2)
San Francisco-Oakland	2.8 (2.1- 3.7)	2.7 (2.0- 3.5)	2.8 (2.0- 3.9)	2.8 (1.9- 3.8)	~	~
San Jose-Monterey	3.0 (2.1- 4.4)	2.9 (2.0- 4.0)	3.7 (2.5- 5.3)	3.5 (2.4- 5.0)	~	~
Los Angeles	2.8 (2.3- 3.4)	2.6 (2.2- 3.1)	3.3 (2.7- 4.0)	3.0 (2.5- 3.6)	~	~
Hawaii	~	~	~	~	~	~
Oregon	3.0 (2.3- 4.0)	3.1 (2.3- 4.0)	3.1 (2.2- 4.1)	3.1 (2.3- 4.1)	~	~
Washington	3.1 (2.5- 3.9)	3.1 (2.5- 3.8)	3.2 (2.6- 4.0)	3.2 (2.5- 4.0)	~	~
Seattle-Puget Sound	3.0 (2.3- 3.9)	3.0 (2.3- 3.9)	3.3 (2.4- 4.3)	3.3 (2.5- 4.3)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.22.2: Hodgkin Lymphoma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	2.5 (2.4- 2.6)	2.6 (2.5- 2.7)	2.7 (2.6- 2.8)	2.7 (2.6- 2.8)	1.9 (1.7- 2.2)	1.9 (1.7- 2.2)
Northeast	2.8 (2.6- 3.1)	2.9 (2.7- 3.1)	3.0 (2.8- 3.3)	3.1 (2.9- 3.4)	1.8 (1.4- 2.4)	1.9 (1.5- 2.4)
New England	3.1 (2.7- 3.6)	3.2 (2.8- 3.7)	3.2 (2.8- 3.8)	3.3 (2.9- 3.9)	~	~
Connecticut	3.1 (2.3- 4.1)	3.1 (2.4- 4.1)	3.2 (2.3- 4.3)	3.2 (2.3- 4.2)	~	~
Maine						
Massachusetts	3.2 (2.6- 3.8)	3.3 (2.7- 3.9)	3.3 (2.7- 4.1)	3.5 (2.8- 4.2)	~	~
New Hampshire	2.9 (1.7- 4.6)	3.1 (1.9- 4.9)	2.9 (1.8- 4.7)	3.2 (1.9- 5.0)	~	~
Rhode Island	3.0 (1.7- 5.0)	3.1 (1.8- 5.1)	3.3 (1.9- 5.6)	3.4 (1.9- 5.5)	~	~
Vermont						
Middle Atlantic	2.8 (2.5- 3.0)	2.8 (2.6- 3.1)	3.0 (2.7- 3.2)	3.0 (2.8- 3.3)	1.9 (1.4- 2.4)	1.9 (1.5- 2.5)
New Jersey	3.0 (2.5- 3.6)	3.0 (2.5- 3.6)	3.2 (2.6- 3.9)	3.3 (2.7- 3.9)	2.6 (1.5- 4.3)	2.7 (1.6- 4.3)
New York	2.7 (2.4- 3.1)	2.8 (2.5- 3.1)	3.0 (2.6- 3.5)	3.1 (2.7- 3.5)	1.6 (1.1- 2.4)	1.7 (1.1- 2.4)
Pennsylvania	2.6 (2.3- 3.1)	2.8 (2.4- 3.2)	2.7 (2.3- 3.2)	2.9 (2.5- 3.4)	~	~
Midwest						
East North Central						
Illinois	2.4 (2.0- 2.8)	2.4 (2.0- 2.8)	2.6 (2.2- 3.1)	2.6 (2.2- 3.1)	~	~
Indiana						
Michigan	2.7 (2.3- 3.2)	2.7 (2.3- 3.2)	2.8 (2.3- 3.4)	2.9 (2.4- 3.4)	2.4 (1.4- 3.8)	2.4 (1.4- 3.8)
Detroit	3.0 (2.3- 3.9)	3.1 (2.4- 4.0)	3.4 (2.5- 4.4)	3.5 (2.6- 4.6)	~	~
Ohio	2.2 (1.8- 2.6)	2.3 (1.9- 2.7)	2.2 (1.8- 2.7)	2.3 (1.9- 2.8)	~	~
Wisconsin	2.7 (2.1- 3.4)	2.7 (2.1- 3.4)	2.9 (2.2- 3.6)	2.9 (2.3- 3.7)	~	~
West North Central	2.8 (2.5- 3.2)	2.8 (2.5- 3.2)	2.8 (2.4- 3.1)	2.8 (2.4- 3.2)	~	~
Iowa	2.9 (2.1- 3.9)	2.9 (2.1- 3.9)	2.9 (2.1- 4.0)	2.9 (2.1- 3.9)	~	~
Kansas	2.3 (1.5- 3.3)	2.3 (1.6- 3.3)	2.4 (1.6- 3.5)	2.4 (1.6- 3.5)	~	~
Minnesota	3.1 (2.4- 3.9)	3.2 (2.5- 4.0)	2.9 (2.3- 3.7)	3.1 (2.4- 3.9)	~	~
Missouri	2.9 (2.3- 3.6)	2.9 (2.3- 3.6)	2.9 (2.3- 3.7)	2.9 (2.3- 3.7)	~	~
Nebraska	2.7 (1.7- 4.1)	2.7 (1.7- 4.1)	2.3 (1.4- 3.7)	2.4 (1.4- 3.7)	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	~	~	~	~	~	~
District of Columbia	~	~	~	~	~	~
Florida	2.6 (2.2- 3.0)	2.6 (2.3- 3.0)	2.7 (2.3- 3.2)	2.8 (2.4- 3.2)	1.9 (1.1- 3.0)	1.7 (1.1- 2.6)
Georgia						
Atlanta	2.5 (1.7- 3.6)	2.4 (1.6- 3.4)	2.9 (1.8- 4.3)	2.7 (1.8- 4.1)	~	~
Maryland	2.4 (1.8- 3.0)	2.4 (1.9- 3.1)	2.6 (1.9- 3.4)	2.7 (1.9- 3.5)	~	~
North Carolina	2.4 (1.9- 2.9)	2.4 (2.0- 2.9)	2.4 (1.9- 3.1)	2.4 (1.9- 3.1)	2.4 (1.5- 3.7)	2.5 (1.5- 3.7)
South Carolina	2.0 (1.4- 2.7)	2.0 (1.5- 2.8)	2.1 (1.4- 3.1)	2.1 (1.4- 3.0)	~	~
Virginia						
West Virginia	3.0 (2.0- 4.4)	3.2 (2.2- 4.6)	3.1 (2.0- 4.5)	3.2 (2.2- 4.6)	~	~
East South Central						
Alabama						
Kentucky	2.1 (1.5- 2.8)	2.1 (1.5- 2.8)	2.1 (1.5- 2.8)	2.1 (1.5- 2.9)	~	~
Mississippi						
Tennessee						

continued

Table 2.22.2: Hodgkin Lymphoma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	2.7 (2.1- 3.5)	2.8 (2.1- 3.6)	3.0 (2.2- 4.0)	3.0 (2.2- 4.1)	2.3 (1.4- 3.8)	2.4 (1.4- 3.8)
Oklahoma						
Texas						
West	2.3 (2.1- 2.5)	2.3 (2.1- 2.5)	2.4 (2.2- 2.6)	2.4 (2.2- 2.6)	1.7 (1.1- 2.5)	1.7 (1.1- 2.4)
Mountain						
Arizona	2.1 (1.6- 2.8)	2.1 (1.5- 2.7)	2.1 (1.5- 2.8)	2.1 (1.5- 2.8)	~	~
Colorado	2.2 (1.6- 3.0)	2.2 (1.6- 2.9)	2.2 (1.6- 3.0)	2.1 (1.5- 2.9)	~	~
Idaho	2.8 (1.7- 4.5)	2.9 (1.7- 4.5)	2.9 (1.7- 4.7)	3.0 (1.8- 4.7)	~	~
Montana	~	~	~	~	~	~
Nevada						
New Mexico	~	~	~	~	~	~
Utah	2.3 (1.5- 3.5)	2.4 (1.6- 3.6)	2.5 (1.6- 3.7)	2.6 (1.7- 3.7)	~	~
Wyoming	~	~	~	~	~	~
Pacific	2.3 (2.1- 2.5)	2.3 (2.1- 2.5)	2.5 (2.3- 2.8)	2.5 (2.3- 2.8)	1.6 (1.0- 2.5)	1.6 (1.0- 2.5)
Alaska	~	~	~	~	~	~
California	2.3 (2.1- 2.5)	2.3 (2.1- 2.5)	2.5 (2.2- 2.8)	2.5 (2.2- 2.8)	1.5 (0.9- 2.4)	1.5 (0.9- 2.4)
San Francisco-Oakland	2.2 (1.6- 3.0)	2.3 (1.7- 3.1)	2.4 (1.7- 3.5)	2.5 (1.7- 3.5)	~	~
San Jose-Monterey	2.0 (1.3- 3.0)	2.0 (1.3- 3.0)	2.4 (1.5- 3.6)	2.4 (1.5- 3.6)	~	~
Los Angeles	2.7 (2.2- 3.2)	2.7 (2.2- 3.2)	3.0 (2.5- 3.7)	3.0 (2.5- 3.6)	~	~
Hawaii	~	~	~	~	~	~
Oregon	2.7 (1.9- 3.6)	2.6 (1.9- 3.5)	2.7 (1.9- 3.7)	2.6 (1.9- 3.6)	~	~
Washington	2.6 (2.1- 3.3)	2.6 (2.1- 3.3)	2.6 (2.0- 3.3)	2.6 (2.0- 3.3)	~	~
Seattle-Puget Sound	2.9 (2.2- 3.7)	2.9 (2.2- 3.8)	3.2 (2.4- 4.2)	3.2 (2.4- 4.2)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.23.1: Non-Hodgkin Lymphoma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	22.0 (21.7- 22.3)	20.0 (19.7- 20.3)	22.1 (21.8- 22.5)	21.3 (21.0- 21.6)	16.7 (15.8- 17.6)	12.4 (11.7- 13.0)
Northeast	23.2 (22.5- 23.8)	22.2 (21.6- 22.8)	23.0 (22.3- 23.6)	23.3 (22.6- 24.0)	19.0 (17.2- 21.0)	14.7 (13.4- 16.2)
New England	23.3 (22.0- 24.6)	22.1 (20.9- 23.4)	23.1 (21.8- 24.5)	22.9 (21.6- 24.3)	18.2 (12.7- 26.1)	12.1 (8.8- 16.1)
Connecticut	26.2 (23.7- 28.9)	25.5 (23.1- 28.1)	26.4 (23.8- 29.2)	27.0 (24.3- 29.8)	23.8 (14.2- 39.1)	15.7 (10.0- 23.6)
Maine						
Massachusetts	22.4 (20.6- 24.2)	21.1 (19.5- 22.9)	21.9 (20.2- 23.8)	21.8 (20.1- 23.6)	13.0 (7.6- 24.2)	9.7 (5.8- 15.1)
New Hampshire	19.3 (15.6- 23.6)	16.9 (13.8- 20.6)	19.4 (15.7- 23.8)	17.2 (13.9- 20.9)	~	~
Rhode Island	23.8 (19.6- 28.8)	23.1 (19.0- 27.8)	24.1 (19.7- 29.3)	24.3 (19.9- 29.3)	~	~
Vermont						
Middle Atlantic	23.1 (22.4- 23.9)	22.2 (21.6- 22.9)	22.9 (22.2- 23.7)	23.4 (22.6- 24.2)	19.1 (17.2- 21.2)	15.1 (13.7- 16.7)
New Jersey	25.1 (23.5- 26.8)	23.7 (22.2- 25.2)	25.4 (23.7- 27.2)	25.6 (23.9- 27.5)	19.3 (15.3- 24.5)	15.5 (12.4- 19.1)
New York	21.8 (20.8- 22.9)	20.4 (19.4- 21.3)	21.6 (20.5- 22.8)	21.5 (20.4- 22.6)	18.6 (16.1- 21.4)	15.1 (13.2- 17.2)
Pennsylvania	23.6 (22.4- 24.9)	24.1 (22.9- 25.4)	23.1 (21.8- 24.4)	24.5 (23.2- 25.9)	19.5 (15.4- 24.6)	14.8 (11.7- 18.4)
Midwest						
East North Central						
Illinois	23.3 (22.0- 24.7)	20.3 (19.2- 21.5)	23.9 (22.5- 25.4)	22.0 (20.7- 23.3)	14.9 (11.8- 18.6)	10.8 (8.7- 13.2)
Indiana						
Michigan	22.4 (21.0- 23.9)	20.1 (18.8- 21.4)	23.1 (21.6- 24.7)	21.6 (20.2- 23.1)	15.3 (12.0- 19.3)	11.9 (9.5- 14.9)
Detroit	22.3 (20.1- 24.6)	20.0 (18.1- 22.1)	23.8 (21.3- 26.7)	22.6 (20.2- 25.2)	15.4 (11.6- 20.2)	12.2 (9.2- 15.9)
Ohio	21.9 (20.6- 23.2)	20.3 (19.2- 21.6)	21.9 (20.6- 23.4)	21.1 (19.8- 22.4)	16.8 (13.1- 21.4)	12.6 (9.9- 15.7)
Wisconsin	23.0 (21.1- 25.0)	21.0 (19.3- 22.9)	22.6 (20.7- 24.7)	21.6 (19.8- 23.5)	22.9 (12.9- 43.9)	12.6 (7.5- 19.9)
West North Central	22.2 (21.2- 23.3)	20.6 (19.6- 21.5)	22.2 (21.2- 23.3)	21.3 (20.3- 22.3)	15.4 (11.4- 20.8)	10.6 (8.0- 13.9)
Iowa	21.8 (19.4- 24.5)	21.6 (19.2- 24.2)	21.7 (19.3- 24.4)	21.9 (19.5- 24.6)	~	~
Kansas	21.2 (18.6- 24.0)	19.4 (17.1- 22.0)	20.8 (18.2- 23.7)	19.7 (17.3- 22.4)	~	~
Minnesota	25.6 (23.4- 27.9)	22.5 (20.6- 24.5)	25.1 (22.9- 27.4)	23.0 (21.0- 25.1)	~	~
Missouri	20.9 (19.1- 22.9)	19.3 (17.7- 21.1)	21.3 (19.4- 23.3)	20.5 (18.7- 22.4)	14.1 (9.3- 21.1)	10.1 (6.7- 14.4)
Nebraska	19.2 (16.2- 22.6)	18.0 (15.2- 21.2)	19.2 (16.2- 22.7)	18.6 (15.7- 21.9)	~	~
North Dakota	24.0 (18.9- 30.2)	23.5 (18.4- 29.5)	24.4 (19.1- 30.8)	24.8 (19.4- 31.1)	~	~
South Dakota						
South						
South Atlantic						
Delaware	16.5 (12.6- 21.7)	16.1 (12.3- 20.8)	18.3 (13.8- 24.3)	19.2 (14.4- 25.0)	~	~
District of Columbia	19.9 (14.6- 26.6)	19.7 (14.5- 26.1)	21.1 (12.1- 36.9)	19.0 (11.1- 30.5)	18.9 (12.6- 27.8)	19.1 (12.7- 27.7)
Florida	22.6 (21.5- 23.6)	25.3 (24.2- 26.5)	22.7 (21.6- 23.9)	27.9 (26.6- 29.3)	16.2 (13.4- 19.8)	12.2 (10.2- 14.4)
Georgia						
Atlanta	21.7 (18.4- 25.6)	14.8 (12.8- 17.0)	21.7 (18.0- 26.1)	16.5 (13.9- 19.5)	20.2 (13.4- 30.4)	11.3 (8.3- 15.2)
Maryland	20.1 (18.2- 22.1)	17.7 (16.1- 19.4)	20.2 (18.1- 22.6)	19.4 (17.3- 21.5)	14.8 (11.6- 19.1)	11.8 (9.4- 14.7)
North Carolina	18.0 (16.5- 19.5)	16.1 (14.8- 17.4)	19.1 (17.5- 20.9)	18.3 (16.8- 20.0)	11.4 (8.8- 14.8)	8.7 (6.8- 11.1)
South Carolina	18.9 (16.8- 21.3)	16.5 (14.7- 18.4)	19.3 (16.9- 22.1)	18.3 (16.1- 20.8)	16.5 (12.5- 21.6)	11.9 (9.1- 15.2)
Virginia						
West Virginia	22.2 (19.2- 25.6)	22.7 (19.7- 26.1)	22.4 (19.3- 25.9)	23.0 (19.9- 26.5)	~	~
East South Central						
Alabama						
Kentucky	21.0 (18.9- 23.4)	19.0 (17.1- 21.0)	20.5 (18.3- 22.9)	18.9 (17.0- 21.1)	20.3 (12.1- 32.9)	14.6 (8.9- 22.5)
Mississippi						
Tennessee						

continued

Table 2.23.1: Non-Hodgkin Lymphoma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	20.8 (18.6- 23.1)	17.4 (15.7- 19.3)	21.5 (19.0- 24.3)	20.0 (17.7- 22.4)	18.6 (14.7- 23.4)	12.7 (10.2- 15.8)
Oklahoma						
Texas						
West	21.3 (20.8- 21.9)	17.9 (17.4- 18.4)	21.6 (21.0- 22.3)	18.8 (18.3- 19.4)	16.7 (14.2- 19.6)	11.5 (9.9- 13.3)
Mountain						
Arizona	19.2 (17.4- 21.2)	17.7 (16.0- 19.5)	19.9 (18.0- 21.9)	19.3 (17.4- 21.2)	~	~
Colorado	20.6 (18.4- 23.1)	17.0 (15.3- 18.9)	20.9 (18.6- 23.4)	17.6 (15.8- 19.6)	~	~
Idaho	18.8 (15.2- 22.9)	16.2 (13.2- 19.6)	18.7 (15.2- 22.9)	16.3 (13.3- 19.9)	~	~
Montana	20.5 (16.4- 25.4)	20.3 (16.3- 24.9)	20.6 (16.4- 25.6)	21.1 (16.9- 26.1)	~	~
Nevada						
New Mexico	15.9 (13.1- 19.2)	13.8 (11.4- 16.5)	16.5 (13.5- 20.0)	15.1 (12.5- 18.2)	~	~
Utah	23.5 (20.0- 27.4)	16.2 (13.9- 18.8)	23.8 (20.3- 27.9)	16.7 (14.3- 19.5)	~	~
Wyoming	15.0 (10.2- 21.8)	13.3 (9.1- 18.7)	14.5 (9.7- 21.2)	12.9 (8.7- 18.5)	~	~
Pacific	22.0 (21.3- 22.7)	18.3 (17.7- 18.9)	22.3 (21.6- 23.1)	19.3 (18.6- 19.9)	16.8 (14.2- 19.9)	12.0 (10.2- 13.9)
Alaska	19.8 (13.4- 30.0)	13.8 (10.1- 18.5)	21.8 (14.2- 34.5)	15.3 (10.8- 21.0)	~	~
California	21.6 (20.8- 22.4)	17.6 (17.0- 18.3)	22.2 (21.3- 23.1)	18.7 (18.0- 19.5)	16.3 (13.6- 19.5)	11.9 (10.0- 14.0)
San Francisco-Oakland	25.8 (23.5- 28.3)	23.6 (21.5- 25.8)	27.4 (24.6- 30.5)	26.6 (23.9- 29.5)	19.4 (13.6- 27.7)	16.1 (11.4- 22.1)
San Jose-Monterey	20.2 (17.3- 23.5)	15.8 (13.6- 18.2)	19.8 (16.6- 23.4)	16.2 (13.7- 19.0)	~	~
Los Angeles	22.4 (20.8- 24.1)	17.3 (16.1- 18.6)	23.8 (22.0- 25.8)	18.7 (17.3- 20.2)	16.3 (12.4- 21.4)	12.8 (9.8- 16.3)
Hawaii	20.2 (16.7- 24.4)	19.3 (15.9- 23.2)	21.9 (14.7- 31.8)	17.7 (12.0- 25.3)	~	~
Oregon	22.6 (20.3- 25.2)	21.5 (19.3- 23.9)	22.1 (19.8- 24.7)	21.6 (19.3- 24.0)	~	~
Washington	23.7 (21.8- 25.7)	20.8 (19.1- 22.5)	23.2 (21.3- 25.3)	21.2 (19.4- 23.0)	~	~
Seattle-Puget Sound	25.3 (23.0- 27.9)	22.0 (20.0- 24.2)	25.0 (22.6- 27.7)	22.8 (20.5- 25.1)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.23.2: Non-Hodgkin Lymphoma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	15.7 (15.5- 16.0)	17.4 (17.1- 17.6)	16.1 (15.8- 16.3)	18.9 (18.6- 19.1)	10.8 (10.2- 11.4)	9.2 (8.7- 9.7)
Northeast	17.0 (16.5- 17.5)	20.0 (19.5- 20.5)	17.2 (16.7- 17.7)	21.5 (20.9- 22.2)	12.2 (11.0- 13.6)	11.0 (9.9- 12.2)
New England	17.4 (16.4- 18.4)	20.2 (19.1- 21.3)	17.4 (16.4- 18.5)	21.1 (19.9- 22.4)	12.0 (8.2- 17.1)	8.5 (5.9- 11.9)
Connecticut	17.8 (16.0- 19.8)	21.0 (18.9- 23.3)	18.5 (16.5- 20.6)	22.8 (20.5- 25.4)	~	~
Maine						
Massachusetts	16.8 (15.5- 18.2)	19.5 (18.0- 21.1)	16.4 (15.1- 17.8)	20.1 (18.5- 21.8)	16.4 (10.2- 25.5)	11.1 (7.0- 16.6)
New Hampshire	16.3 (13.2- 19.8)	16.7 (13.7- 20.3)	16.2 (13.1- 19.7)	16.8 (13.7- 20.4)	~	~
Rhode Island	20.9 (17.4- 25.0)	25.5 (21.3- 30.2)	21.5 (17.8- 25.9)	27.3 (22.8- 32.4)	~	~
Vermont						
Middle Atlantic	16.9 (16.3- 17.4)	19.9 (19.3- 20.6)	17.1 (16.5- 17.7)	21.7 (21.0- 22.4)	12.3 (11.0- 13.8)	11.3 (10.1- 12.6)
New Jersey	17.8 (16.7- 19.1)	20.7 (19.3- 22.1)	18.2 (17.0- 19.6)	22.9 (21.3- 24.6)	15.7 (12.5- 19.7)	13.4 (10.7- 16.5)
New York	16.5 (15.7- 17.3)	18.7 (17.9- 19.6)	16.8 (15.9- 17.7)	20.6 (19.6- 21.7)	11.8 (10.2- 13.7)	10.9 (9.4- 12.6)
Pennsylvania	16.7 (15.8- 17.6)	21.3 (20.2- 22.5)	16.7 (15.7- 17.7)	22.3 (21.1- 23.6)	10.8 (8.3- 13.8)	10.3 (8.0- 13.2)
Midwest						
East North Central						
Illinois	15.9 (15.0- 16.9)	17.3 (16.2- 18.3)	16.7 (15.6- 17.8)	19.3 (18.1- 20.5)	8.7 (6.7- 11.0)	7.1 (5.6- 9.0)
Indiana						
Michigan	17.0 (15.9- 18.1)	18.3 (17.1- 19.5)	17.6 (16.4- 18.9)	20.0 (18.7- 21.4)	11.8 (9.3- 14.8)	10.1 (8.0- 12.6)
Detroit	16.1 (14.5- 17.9)	17.6 (15.9- 19.5)	17.2 (15.4- 19.3)	20.4 (18.2- 22.8)	11.7 (8.8- 15.2)	10.4 (7.9- 13.5)
Ohio	16.9 (15.9- 17.9)	19.3 (18.2- 20.4)	16.8 (15.8- 17.9)	20.0 (18.8- 21.3)	12.9 (10.2- 16.2)	11.5 (9.1- 14.3)
Wisconsin	15.1 (13.8- 16.6)	16.9 (15.4- 18.6)	15.3 (13.9- 16.8)	17.9 (16.3- 19.6)	~	~
West North Central	16.4 (15.6- 17.2)	18.7 (17.8- 19.6)	16.2 (15.4- 17.0)	19.1 (18.2- 20.0)	15.2 (11.6- 19.7)	11.2 (8.6- 14.4)
Iowa	16.1 (14.2- 18.1)	19.8 (17.6- 22.2)	16.0 (14.2- 18.1)	20.1 (17.9- 22.6)	~	~
Kansas	16.1 (14.1- 18.3)	18.2 (16.0- 20.7)	15.8 (13.7- 18.0)	18.4 (16.1- 21.0)	~	~
Minnesota	18.4 (16.7- 20.1)	19.6 (17.9- 21.4)	17.8 (16.2- 19.6)	19.9 (18.1- 21.8)	~	~
Missouri	15.8 (14.5- 17.3)	18.0 (16.5- 19.7)	15.7 (14.3- 17.2)	18.6 (17.0- 20.4)	16.9 (12.3- 22.7)	13.7 (10.0- 18.3)
Nebraska	15.6 (13.2- 18.3)	18.0 (15.2- 21.1)	15.4 (13.0- 18.2)	18.3 (15.5- 21.6)	~	~
North Dakota	13.4 (9.9- 17.9)	15.7 (11.7- 20.7)	13.6 (10.0- 18.3)	16.4 (12.2- 21.7)	~	~
South Dakota						
South						
South Atlantic						
Delaware	13.2 (9.9- 17.2)	14.2 (10.7- 18.5)	12.3 (8.9- 16.7)	14.7 (10.7- 19.8)	~	~
District of Columbia	10.0 (6.9- 14.5)	11.9 (8.2- 16.7)	~	~	7.5 (4.2- 13.3)	9.2 (5.3- 14.9)
Florida	15.3 (14.5- 16.1)	20.4 (19.4- 21.4)	15.6 (14.8- 16.4)	22.9 (21.7- 24.1)	9.5 (7.6- 11.8)	7.8 (6.3- 9.6)
Georgia						
Atlanta	12.8 (10.7- 15.1)	10.3 (8.7- 12.1)	13.2 (10.8- 16.0)	12.1 (9.9- 14.6)	9.9 (6.6- 14.8)	6.9 (4.7- 9.7)
Maryland	13.3 (11.9- 14.7)	13.7 (12.4- 15.2)	13.7 (12.1- 15.4)	16.1 (14.3- 18.1)	9.7 (7.4- 12.7)	7.9 (6.1- 10.2)
North Carolina	12.0 (11.0- 13.1)	13.1 (12.0- 14.3)	12.8 (11.6- 14.0)	14.9 (13.6- 16.4)	9.1 (7.1- 11.5)	8.0 (6.3- 10.1)
South Carolina	13.2 (11.7- 14.8)	14.1 (12.5- 15.8)	14.3 (12.5- 16.3)	16.9 (14.8- 19.2)	8.7 (6.3- 11.6)	7.5 (5.5- 9.9)
Virginia						
West Virginia	16.8 (14.5- 19.4)	21.3 (18.4- 24.4)	16.6 (14.3- 19.2)	21.2 (18.3- 24.5)	~	~
East South Central						
Alabama						
Kentucky	14.7 (13.2- 16.4)	16.4 (14.6- 18.2)	14.9 (13.3- 16.7)	17.0 (15.1- 18.9)	~	~
Mississippi						
Tennessee						

continued

Table 2.23.2: Non-Hodgkin Lymphoma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	15.6 (14.1- 17.3)	16.0 (14.4- 17.7)	17.8 (15.9- 20.0)	20.5 (18.3- 23.0)	9.5 (7.2- 12.3)	8.0 (6.1- 10.2)
Oklahoma						
Texas						
West	15.2 (14.7- 15.6)	15.1 (14.6- 15.5)	15.6 (15.1- 16.1)	16.1 (15.6- 16.6)	10.5 (8.8- 12.5)	8.4 (7.1- 10.0)
Mountain						
Arizona	13.1 (11.7- 14.6)	14.0 (12.6- 15.6)	13.6 (12.1- 15.1)	15.2 (13.6- 17.0)	~	~
Colorado	17.6 (15.8- 19.5)	17.0 (15.2- 18.8)	17.8 (15.9- 19.8)	17.6 (15.8- 19.6)	~	~
Idaho	17.8 (14.6- 21.5)	17.4 (14.3- 21.0)	17.2 (14.1- 21.0)	17.1 (14.0- 20.8)	~	~
Montana	12.4 (9.5- 15.9)	14.4 (11.1- 18.4)	12.8 (9.9- 16.6)	15.6 (12.0- 19.9)	~	~
Nevada						
New Mexico	13.2 (10.9- 15.9)	13.1 (10.8- 15.7)	13.5 (11.1- 16.3)	14.3 (11.8- 17.3)	~	~
Utah	14.6 (12.1- 17.4)	11.4 (9.4- 13.6)	14.9 (12.4- 17.9)	11.9 (9.8- 14.2)	~	~
Wyoming	13.4 (9.2- 19.0)	13.8 (9.5- 19.4)	13.3 (9.1- 19.0)	14.0 (9.6- 19.8)	~	~
Pacific	15.3 (14.8- 15.9)	15.2 (14.7- 15.7)	15.8 (15.2- 16.4)	16.3 (15.7- 16.9)	11.0 (9.1- 13.2)	9.0 (7.5- 10.7)
Alaska	18.2 (12.8- 26.0)	14.3 (10.3- 19.3)	20.4 (14.0- 29.8)	16.9 (11.9- 23.3)	~	~
California	14.9 (14.3- 15.5)	14.6 (14.0- 15.2)	15.4 (14.8- 16.1)	15.7 (15.0- 16.4)	10.9 (8.9- 13.2)	9.0 (7.4- 10.8)
San Francisco-Oakland	15.0 (13.4- 16.7)	16.4 (14.7- 18.2)	16.0 (14.0- 18.1)	18.8 (16.6- 21.3)	11.1 (7.1- 16.6)	10.0 (6.5- 14.7)
San Jose-Monterey	16.4 (14.1- 19.0)	15.7 (13.5- 18.2)	15.8 (13.2- 18.6)	15.8 (13.3- 18.6)	~	~
Los Angeles	14.4 (13.3- 15.5)	13.7 (12.7- 14.8)	15.6 (14.3- 17.0)	15.2 (13.9- 16.6)	10.0 (7.4- 13.2)	9.1 (6.7- 12.0)
Hawaii	12.2 (9.6- 15.2)	13.6 (10.7- 16.9)	12.9 (7.9- 20.4)	13.2 (8.0- 20.3)	~	~
Oregon	16.0 (14.2- 17.9)	18.0 (16.0- 20.2)	15.9 (14.1- 17.8)	18.3 (16.3- 20.6)	~	~
Washington	17.3 (15.8- 18.9)	17.6 (16.1- 19.2)	17.1 (15.6- 18.8)	18.3 (16.6- 20.0)	~	~
Seattle-Puget Sound	17.5 (15.7- 19.5)	17.6 (15.8- 19.6)	17.8 (15.9- 19.9)	18.9 (16.9- 21.0)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.24.1: Multiple Myeloma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	6.0 (5.8- 6.2)	5.3 (5.2- 5.5)	5.6 (5.4- 5.7)	5.3 (5.1- 5.4)	10.8 (10.0- 11.6)	6.6 (6.2- 7.1)
Northeast	6.1 (5.7- 6.4)	5.7 (5.4- 6.0)	5.6 (5.3- 6.0)	5.7 (5.3- 6.0)	10.2 (8.8- 11.9)	6.5 (5.7- 7.5)
New England	5.8 (5.2- 6.5)	5.4 (4.8- 6.0)	5.7 (5.1- 6.4)	5.6 (4.9- 6.2)	9.3 (5.2- 16.2)	4.6 (2.7- 7.3)
Connecticut	6.4 (5.2- 7.9)	6.1 (5.0- 7.5)	6.3 (5.0- 7.7)	6.3 (5.1- 7.8)	~	~
Maine						
Massachusetts	5.4 (4.5- 6.3)	5.0 (4.2- 5.8)	5.2 (4.4- 6.2)	5.1 (4.3- 6.0)	~	~
New Hampshire	6.8 (4.6- 9.7)	5.6 (3.8- 7.8)	6.8 (4.7- 9.8)	5.7 (3.9- 8.0)	~	~
Rhode Island	5.4 (3.5- 8.1)	5.2 (3.4- 7.7)	5.4 (3.4- 8.2)	5.5 (3.5- 8.2)	~	~
Vermont						
Middle Atlantic	6.1 (5.8- 6.5)	5.8 (5.5- 6.2)	5.6 (5.2- 6.0)	5.7 (5.3- 6.1)	10.4 (8.8- 12.1)	6.8 (5.9- 7.9)
New Jersey	6.4 (5.6- 7.4)	6.0 (5.2- 6.8)	5.9 (5.1- 6.9)	6.0 (5.1- 6.9)	12.1 (8.6- 17.0)	7.7 (5.6- 10.4)
New York	6.3 (5.7- 6.9)	5.7 (5.2- 6.2)	5.9 (5.3- 6.5)	5.8 (5.2- 6.4)	8.4 (6.6- 10.5)	5.7 (4.6- 7.1)
Pennsylvania	5.7 (5.1- 6.3)	5.9 (5.3- 6.5)	5.1 (4.5- 5.8)	5.5 (4.9- 6.2)	13.1 (9.7- 17.6)	8.9 (6.6- 11.8)
Midwest						
East North Central						
Illinois	6.2 (5.5- 6.9)	5.3 (4.7- 5.9)	5.5 (4.8- 6.2)	5.0 (4.3- 5.6)	10.5 (7.9- 13.9)	6.8 (5.1- 8.7)
Indiana						
Michigan	6.9 (6.1- 7.8)	5.9 (5.2- 6.6)	6.2 (5.4- 7.1)	5.6 (4.9- 6.3)	13.1 (9.8- 17.1)	8.6 (6.5- 11.2)
Detroit	7.7 (6.4- 9.2)	6.6 (5.5- 7.8)	6.1 (4.9- 7.7)	5.7 (4.5- 7.0)	14.5 (10.6- 19.5)	10.3 (7.5- 13.6)
Ohio	6.2 (5.5- 7.0)	5.7 (5.1- 6.4)	5.5 (4.9- 6.3)	5.3 (4.6- 6.0)	12.6 (9.3- 16.8)	8.5 (6.3- 11.1)
Wisconsin	5.6 (4.7- 6.7)	5.0 (4.2- 6.0)	5.6 (4.6- 6.6)	5.3 (4.4- 6.3)	~	~
West North Central	5.7 (5.2- 6.3)	5.3 (4.8- 5.8)	5.5 (5.0- 6.1)	5.3 (4.8- 5.8)	11.1 (7.5- 16.2)	6.5 (4.5- 9.1)
Iowa	5.8 (4.6- 7.2)	5.8 (4.6- 7.2)	5.7 (4.5- 7.1)	5.8 (4.6- 7.2)	~	~
Kansas	6.1 (4.8- 7.7)	5.5 (4.3- 6.9)	6.0 (4.7- 7.7)	5.6 (4.4- 7.1)	~	~
Minnesota	6.4 (5.3- 7.6)	5.5 (4.6- 6.5)	6.2 (5.2- 7.5)	5.6 (4.7- 6.7)	~	~
Missouri	5.0 (4.2- 6.0)	4.6 (3.9- 5.5)	4.4 (3.6- 5.4)	4.3 (3.5- 5.2)	11.5 (7.0- 18.3)	7.3 (4.5- 11.1)
Nebraska	6.2 (4.6- 8.3)	5.8 (4.2- 7.7)	6.2 (4.5- 8.3)	5.9 (4.3- 7.9)	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	6.5 (4.0- 10.2)	6.0 (3.8- 9.1)	~	~	~	~
District of Columbia	8.6 (5.2- 13.7)	7.8 (4.7- 12.2)	~	~	~	~
Florida	6.0 (5.5- 6.5)	7.0 (6.4- 7.6)	5.5 (5.0- 6.1)	7.2 (6.5- 7.9)	11.8 (9.1- 15.3)	6.6 (5.2- 8.3)
Georgia						
Atlanta	5.9 (4.2- 8.1)	3.7 (2.8- 5.0)	4.5 (2.9- 6.9)	3.3 (2.2- 4.7)	12.1 (6.8- 21.1)	5.0 (3.1- 7.8)
Maryland	6.3 (5.2- 7.6)	5.1 (4.2- 6.0)	5.3 (4.2- 6.7)	4.8 (3.8- 6.0)	9.9 (6.8- 14.2)	5.8 (4.2- 8.0)
North Carolina	5.2 (4.4- 6.0)	4.5 (3.9- 5.3)	4.7 (3.9- 5.7)	4.5 (3.8- 5.4)	7.7 (5.4- 10.8)	4.8 (3.4- 6.6)
South Carolina	5.5 (4.4- 6.9)	4.9 (3.9- 6.0)	4.6 (3.5- 6.1)	4.6 (3.5- 5.9)	8.3 (5.5- 12.4)	5.4 (3.6- 7.7)
Virginia						
West Virginia	5.3 (3.9- 7.2)	5.4 (4.0- 7.2)	5.4 (3.9- 7.3)	5.5 (4.0- 7.3)	~	~
East South Central						
Alabama						
Kentucky	7.3 (6.1- 8.8)	6.4 (5.4- 7.7)	7.0 (5.7- 8.5)	6.3 (5.2- 7.6)	~	~
Mississippi						
Tennessee						

continued

Table 2.24.1: Multiple Myeloma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	7.0 (5.8- 8.4)	5.8 (4.9- 7.0)	5.3 (4.1- 6.7)	5.2 (4.1- 6.5)	13.1 (9.7- 17.6)	7.6 (5.6- 10.0)
Oklahoma						
Texas						
West	5.8 (5.5- 6.1)	4.6 (4.4- 4.9)	5.6 (5.3- 6.0)	4.7 (4.4- 5.0)	10.9 (8.9- 13.4)	6.5 (5.3- 7.9)
Mountain						
Arizona	4.5 (3.6- 5.5)	3.9 (3.2- 4.8)	4.3 (3.4- 5.3)	4.0 (3.2- 5.0)	~	~
Colorado	6.4 (5.1- 7.9)	4.7 (3.8- 5.8)	6.3 (5.0- 7.8)	4.8 (3.9- 5.9)	~	~
Idaho	7.4 (5.2- 10.3)	6.1 (4.3- 8.3)	7.3 (5.1- 10.2)	6.1 (4.3- 8.4)	~	~
Montana	5.7 (3.6- 8.6)	5.5 (3.5- 8.1)	5.2 (3.2- 8.2)	5.2 (3.2- 7.9)	~	~
Nevada						
New Mexico	5.0 (3.5- 6.9)	4.6 (3.2- 6.2)	4.9 (3.4- 6.9)	4.7 (3.3- 6.6)	~	~
Utah	6.9 (5.0- 9.3)	4.2 (3.1- 5.7)	6.8 (4.9- 9.2)	4.3 (3.1- 5.7)	~	~
Wyoming	~	~	~	~	~	~
Pacific	5.9 (5.5- 6.3)	4.7 (4.4- 5.0)	5.7 (5.3- 6.1)	4.8 (4.4- 5.1)	11.1 (8.9- 13.8)	6.8 (5.5- 8.3)
Alaska	~	~	~	~	~	~
California	5.7 (5.3- 6.2)	4.5 (4.2- 4.8)	5.4 (5.0- 5.9)	4.5 (4.1- 4.8)	11.2 (8.9- 14.0)	7.0 (5.6- 8.6)
San Francisco-Oakland	5.9 (4.8- 7.2)	5.1 (4.2- 6.2)	4.6 (3.5- 6.1)	4.3 (3.3- 5.6)	11.3 (6.8- 18.3)	8.5 (5.2- 13.1)
San Jose-Monterey	3.6 (2.4- 5.2)	2.7 (1.9- 3.8)	3.6 (2.3- 5.4)	2.9 (1.9- 4.2)	~	~
Los Angeles	7.0 (6.1- 7.9)	5.1 (4.4- 5.8)	6.4 (5.4- 7.5)	4.7 (4.0- 5.5)	13.9 (10.2- 18.7)	10.1 (7.5- 13.4)
Hawaii	3.9 (2.4- 6.0)	3.7 (2.3- 5.6)	~	~	~	~
Oregon	6.1 (4.9- 7.6)	5.7 (4.6- 7.0)	6.1 (4.9- 7.5)	5.8 (4.7- 7.2)	~	~
Washington	6.9 (5.9- 8.1)	5.7 (4.9- 6.6)	6.9 (5.8- 8.1)	5.9 (5.0- 6.9)	~	~
Seattle-Puget Sound	7.4 (6.1- 8.9)	5.8 (4.8- 7.0)	7.4 (6.0- 9.0)	6.1 (5.0- 7.4)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.24.2: Multiple Myeloma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	4.1 (4.0- 4.3)	4.6 (4.5- 4.8)	3.7 (3.6- 3.8)	4.5 (4.3- 4.6)	8.2 (7.7- 8.8)	6.4 (6.0- 6.9)
Northeast	4.3 (4.1- 4.5)	5.2 (4.9- 5.5)	3.8 (3.5- 4.0)	4.9 (4.6- 5.2)	8.6 (7.6- 9.8)	7.2 (6.3- 8.1)
New England	3.6 (3.1- 4.0)	4.2 (3.7- 4.8)	3.3 (2.9- 3.8)	4.2 (3.7- 4.8)	6.6 (3.9- 10.8)	4.5 (2.7- 7.1)
Connecticut	3.6 (2.8- 4.6)	4.3 (3.4- 5.4)	3.2 (2.5- 4.2)	4.2 (3.2- 5.4)	~	~
Maine						
Massachusetts	3.4 (2.8- 4.0)	4.0 (3.4- 4.8)	3.1 (2.5- 3.7)	4.0 (3.3- 4.8)	~	~
New Hampshire	3.2 (2.0- 5.1)	3.3 (2.0- 5.1)	3.3 (2.0- 5.1)	3.4 (2.1- 5.2)	~	~
Rhode Island	5.1 (3.5- 7.3)	6.4 (4.4- 9.0)	5.2 (3.5- 7.6)	6.8 (4.6- 9.5)	~	~
Vermont						
Middle Atlantic	4.5 (4.2- 4.8)	5.5 (5.2- 5.9)	3.9 (3.6- 4.2)	5.2 (4.8- 5.5)	8.8 (7.7- 10.1)	7.5 (6.6- 8.6)
New Jersey	4.4 (3.8- 5.0)	5.2 (4.5- 5.9)	3.7 (3.2- 4.4)	4.9 (4.2- 5.7)	9.3 (6.7- 12.5)	7.2 (5.2- 9.6)
New York	4.6 (4.2- 5.0)	5.4 (5.0- 5.9)	4.0 (3.6- 4.4)	5.2 (4.7- 5.7)	7.8 (6.5- 9.4)	6.7 (5.5- 8.0)
Pennsylvania	4.4 (4.0- 4.9)	5.9 (5.3- 6.5)	3.9 (3.4- 4.3)	5.3 (4.7- 6.0)	10.9 (8.3- 13.9)	10.2 (7.8- 13.0)
Midwest						
East North Central						
Illinois	4.8 (4.3- 5.3)	5.2 (4.7- 5.8)	3.7 (3.2- 4.2)	4.4 (3.9- 5.1)	11.7 (9.4- 14.4)	9.4 (7.6- 11.5)
Indiana						
Michigan	4.1 (3.6- 4.7)	4.5 (4.0- 5.1)	3.5 (3.0- 4.1)	4.1 (3.5- 4.8)	8.6 (6.4- 11.3)	6.9 (5.2- 9.1)
Detroit	4.9 (4.0- 5.9)	5.4 (4.5- 6.5)	3.8 (3.0- 4.9)	4.7 (3.7- 6.0)	8.8 (6.3- 11.9)	7.5 (5.4- 10.2)
Ohio	4.0 (3.5- 4.5)	4.5 (4.0- 5.1)	3.6 (3.2- 4.2)	4.3 (3.8- 5.0)	7.2 (5.2- 9.8)	6.1 (4.4- 8.2)
Wisconsin	4.1 (3.4- 4.9)	4.6 (3.8- 5.5)	4.0 (3.3- 4.9)	4.8 (4.0- 5.7)	~	~
West North Central	4.1 (3.7- 4.5)	4.8 (4.3- 5.2)	3.7 (3.3- 4.1)	4.5 (4.1- 5.0)	10.8 (7.8- 14.7)	7.7 (5.6- 10.4)
Iowa	3.7 (2.9- 4.8)	4.9 (3.8- 6.2)	3.8 (2.9- 4.8)	5.0 (3.9- 6.3)	~	~
Kansas	4.3 (3.3- 5.5)	5.0 (3.9- 6.3)	3.7 (2.8- 4.9)	4.5 (3.4- 5.8)	~	~
Minnesota	3.9 (3.1- 4.7)	4.2 (3.4- 5.1)	3.6 (2.9- 4.4)	4.1 (3.3- 5.0)	~	~
Missouri	4.1 (3.4- 4.9)	4.8 (4.1- 5.7)	3.4 (2.8- 4.1)	4.2 (3.4- 5.1)	11.5 (7.8- 16.5)	9.1 (6.2- 13.0)
Nebraska	4.0 (2.8- 5.5)	4.8 (3.5- 6.5)	4.0 (2.8- 5.6)	5.0 (3.6- 6.8)	~	~
North Dakota	5.6 (3.5- 8.8)	6.9 (4.3- 10.5)	5.4 (3.3- 8.7)	7.0 (4.4- 10.8)	~	~
South Dakota						
South						
South Atlantic						
Delaware	4.2 (2.5- 6.7)	4.7 (2.8- 7.4)	4.3 (2.5- 7.3)	5.4 (3.1- 8.7)	~	~
District of Columbia	6.4 (3.9- 10.2)	7.6 (4.7- 11.6)	~	~	7.4 (4.3- 12.8)	9.8 (5.7- 15.6)
Florida	4.1 (3.8- 4.6)	5.8 (5.3- 6.4)	4.0 (3.6- 4.4)	6.2 (5.6- 6.8)	6.5 (4.8- 8.6)	4.1 (3.1- 5.4)
Georgia						
Atlanta	4.4 (3.2- 5.9)	3.4 (2.5- 4.5)	3.4 (2.2- 5.0)	3.1 (2.0- 4.5)	7.9 (4.7- 12.9)	4.2 (2.5- 6.6)
Maryland	4.2 (3.5- 5.0)	4.3 (3.5- 5.2)	3.3 (2.6- 4.2)	4.0 (3.1- 5.0)	7.2 (5.1- 9.9)	5.3 (3.8- 7.2)
North Carolina	3.7 (3.2- 4.4)	4.1 (3.5- 4.8)	3.2 (2.6- 3.9)	3.8 (3.2- 4.6)	6.0 (4.4- 8.0)	5.1 (3.8- 6.9)
South Carolina	4.2 (3.4- 5.2)	4.5 (3.6- 5.6)	3.3 (2.5- 4.4)	3.9 (3.0- 5.1)	7.1 (4.9- 9.9)	5.7 (3.9- 7.9)
Virginia						
West Virginia	3.6 (2.6- 4.9)	4.8 (3.5- 6.4)	3.4 (2.4- 4.7)	4.4 (3.2- 6.1)	~	~
East South Central						
Alabama						
Kentucky	4.6 (3.7- 5.5)	5.1 (4.1- 6.1)	4.3 (3.5- 5.3)	4.9 (4.0- 6.0)	~	~
Mississippi						
Tennessee						

continued

Table 2.24.2: Multiple Myeloma. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	4.8 (3.9- 5.8)	4.9 (4.0- 5.9)	3.4 (2.6- 4.5)	4.0 (3.0- 5.2)	9.0 (6.7- 11.8)	6.9 (5.1- 9.0)
Oklahoma						
Texas						
West	3.8 (3.6- 4.1)	3.8 (3.6- 4.0)	3.7 (3.4- 3.9)	3.8 (3.6- 4.1)	8.7 (7.1- 10.6)	6.3 (5.1- 7.7)
Mountain						
Arizona	3.2 (2.6- 4.0)	3.5 (2.8- 4.3)	3.0 (2.3- 3.8)	3.4 (2.7- 4.3)	~	~
Colorado	4.0 (3.1- 5.0)	3.8 (3.0- 4.8)	4.1 (3.2- 5.1)	4.0 (3.2- 5.0)	~	~
Idaho	3.9 (2.5- 5.9)	4.0 (2.6- 5.9)	4.0 (2.6- 6.0)	4.1 (2.7- 6.1)	~	~
Montana	4.0 (2.4- 6.3)	4.5 (2.8- 7.0)	4.1 (2.5- 6.6)	4.9 (3.0- 7.5)	~	~
Nevada						
New Mexico	3.7 (2.6- 5.3)	3.7 (2.6- 5.2)	3.6 (2.4- 5.2)	3.8 (2.6- 5.5)	~	~
Utah	3.0 (1.9- 4.4)	2.3 (1.5- 3.4)	3.1 (2.0- 4.5)	2.5 (1.6- 3.6)	~	~
Wyoming	~	~	~	~	~	~
Pacific	3.9 (3.7- 4.2)	3.9 (3.6- 4.2)	3.8 (3.5- 4.0)	3.9 (3.6- 4.2)	9.1 (7.3- 11.1)	6.7 (5.4- 8.2)
Alaska	~	~	~	~	~	~
California	4.0 (3.7- 4.3)	3.9 (3.6- 4.2)	3.8 (3.5- 4.1)	3.9 (3.5- 4.2)	8.9 (7.1- 11.1)	6.8 (5.4- 8.4)
San Francisco-Oakland	4.0 (3.2- 4.9)	4.3 (3.5- 5.3)	3.6 (2.7- 4.7)	4.2 (3.2- 5.5)	9.4 (5.7- 14.7)	8.0 (4.9- 12.3)
San Jose-Monterey	4.1 (3.0- 5.5)	3.9 (2.9- 5.2)	4.2 (2.9- 5.8)	4.3 (3.0- 5.9)	~	~
Los Angeles	4.1 (3.5- 4.7)	3.8 (3.3- 4.4)	3.6 (3.0- 4.3)	3.4 (2.9- 4.1)	9.2 (6.7- 12.4)	8.0 (5.8- 10.7)
Hawaii	3.4 (2.1- 5.1)	3.9 (2.5- 5.8)	~	~	~	~
Oregon	3.3 (2.5- 4.2)	3.8 (2.9- 4.8)	3.2 (2.5- 4.2)	3.8 (2.9- 4.9)	~	~
Washington	4.1 (3.4- 4.9)	4.1 (3.4- 4.9)	4.0 (3.2- 4.8)	4.2 (3.5- 5.1)	~	~
Seattle-Puget Sound	4.3 (3.4- 5.3)	4.3 (3.5- 5.3)	4.2 (3.3- 5.2)	4.5 (3.5- 5.6)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.25.1: Leukemias. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	14.5 (14.3- 14.8)	13.0 (12.8- 13.3)	14.8 (14.5- 15.1)	14.0 (13.8- 14.3)	10.5 (9.8- 11.3)	7.2 (6.7- 7.7)
Northeast	14.9 (14.4- 15.4)	14.0 (13.5- 14.5)	15.3 (14.7- 15.8)	15.2 (14.7- 15.8)	9.2 (7.9- 10.8)	6.4 (5.6- 7.4)
New England	13.7 (12.7- 14.8)	12.9 (12.0- 13.9)	13.9 (12.9- 15.0)	13.7 (12.7- 14.7)	~	~
Connecticut	13.2 (11.4- 15.2)	12.7 (11.0- 14.6)	13.2 (11.4- 15.3)	13.3 (11.5- 15.4)	~	~
Maine						
Massachusetts	13.6 (12.2- 15.0)	12.7 (11.5- 14.1)	13.9 (12.5- 15.4)	13.6 (12.2- 15.1)	~	~
New Hampshire	14.2 (11.1- 18.1)	12.4 (9.7- 15.5)	14.2 (11.1- 18.1)	12.5 (9.8- 15.7)	~	~
Rhode Island	16.1 (12.6- 20.3)	15.5 (12.2- 19.5)	16.5 (12.9- 20.9)	16.5 (12.9- 20.7)	~	~
Vermont						
Middle Atlantic	15.2 (14.6- 15.8)	14.3 (13.8- 14.9)	15.7 (15.1- 16.4)	15.7 (15.1- 16.4)	9.5 (8.1- 11.2)	6.8 (5.8- 7.9)
New Jersey	15.3 (14.1- 16.7)	14.0 (12.9- 15.3)	15.8 (14.4- 17.3)	15.5 (14.2- 17.0)	10.7 (7.6- 15.1)	7.7 (5.6- 10.4)
New York	15.0 (14.1- 15.8)	13.6 (12.8- 14.4)	15.7 (14.8- 16.7)	15.4 (14.4- 16.3)	8.4 (6.6- 10.6)	5.9 (4.7- 7.2)
Pennsylvania	15.5 (14.5- 16.6)	15.6 (14.6- 16.7)	15.6 (14.5- 16.7)	16.3 (15.2- 17.5)	10.9 (7.9- 15.0)	8.4 (6.1- 11.2)
Midwest						
East North Central						
Illinois	15.3 (14.2- 16.4)	13.3 (12.4- 14.2)	15.8 (14.6- 17.0)	14.4 (13.3- 15.5)	9.2 (6.9- 12.3)	6.8 (5.1- 8.7)
Indiana						
Michigan	14.7 (13.6- 16.0)	12.9 (11.9- 13.9)	15.2 (14.0- 16.6)	13.9 (12.7- 15.1)	10.3 (7.5- 13.9)	7.1 (5.2- 9.4)
Detroit	15.1 (13.3- 17.1)	13.4 (11.9- 15.2)	16.6 (14.4- 19.0)	15.5 (13.5- 17.7)	10.2 (7.0- 14.5)	7.4 (5.1- 10.4)
Ohio	13.3 (12.3- 14.4)	12.1 (11.2- 13.1)	13.1 (12.1- 14.3)	12.3 (11.3- 13.3)	11.0 (7.9- 15.0)	8.0 (5.9- 10.6)
Wisconsin	15.9 (14.3- 17.6)	14.6 (13.1- 16.1)	15.9 (14.3- 17.7)	15.2 (13.7- 16.8)	~	~
West North Central	16.1 (15.3- 17.1)	14.8 (14.0- 15.6)	15.8 (14.9- 16.8)	15.0 (14.2- 15.9)	12.9 (9.1- 18.1)	8.7 (6.3- 11.6)
Iowa	18.1 (15.9- 20.5)	17.7 (15.6- 20.1)	17.9 (15.7- 20.3)	17.9 (15.7- 20.3)	~	~
Kansas	15.2 (13.0- 17.6)	13.7 (11.8- 15.9)	14.9 (12.7- 17.4)	13.9 (11.9- 16.2)	~	~
Minnesota	18.7 (16.9- 20.7)	16.3 (14.7- 18.0)	17.8 (16.0- 19.8)	16.1 (14.5- 17.9)	~	~
Missouri	14.2 (12.7- 15.8)	12.9 (11.5- 14.3)	14.1 (12.6- 15.8)	13.3 (11.9- 14.9)	15.2 (10.0- 22.7)	10.4 (7.0- 14.8)
Nebraska	14.4 (11.8- 17.4)	13.6 (11.2- 16.4)	13.7 (11.2- 16.7)	13.4 (10.9- 16.2)	~	~
North Dakota	14.5 (10.5- 19.4)	14.3 (10.4- 19.1)	14.9 (10.9- 20.1)	15.3 (11.1- 20.4)	~	~
South Dakota						
South						
South Atlantic						
Delaware	12.9 (9.3- 17.8)	12.0 (8.7- 16.1)	13.8 (9.8- 19.4)	13.6 (9.7- 18.6)	~	~
District of Columbia	11.1 (7.1- 16.6)	10.2 (6.6- 15.1)	~	~	11.9 (6.9- 19.5)	11.6 (6.8- 18.6)
Florida	15.0 (14.2- 15.9)	17.1 (16.1- 18.0)	15.3 (14.4- 16.2)	19.0 (18.0- 20.2)	10.3 (7.8- 13.6)	6.7 (5.3- 8.4)
Georgia						
Atlanta	11.2 (8.9- 14.0)	7.9 (6.4- 9.6)	10.9 (8.4- 14.2)	8.4 (6.6- 10.6)	12.0 (6.7- 21.0)	5.5 (3.5- 8.4)
Maryland	11.7 (10.2- 13.4)	9.6 (8.4- 10.9)	12.0 (10.4- 14.0)	10.9 (9.4- 12.6)	10.6 (7.4- 15.1)	7.0 (5.2- 9.3)
North Carolina	11.7 (10.5- 13.0)	10.3 (9.3- 11.4)	12.5 (11.2- 14.0)	11.8 (10.6- 13.2)	7.8 (5.5- 10.8)	5.4 (3.9- 7.3)
South Carolina	11.8 (10.1- 13.8)	10.0 (8.6- 11.5)	11.8 (9.8- 14.1)	10.7 (9.0- 12.6)	12.5 (8.9- 17.2)	8.5 (6.2- 11.4)
Virginia						
West Virginia	16.8 (14.1- 19.9)	16.5 (13.9- 19.5)	16.5 (13.8- 19.6)	16.2 (13.6- 19.2)	~	~
East South Central						
Alabama						
Kentucky	16.4 (14.5- 18.5)	14.6 (12.9- 16.4)	16.1 (14.2- 18.3)	14.6 (12.9- 16.5)	~	~
Mississippi						
Tennessee						

continued

Table 2.25.1: Leukemias. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Males, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	14.4 (12.7- 16.4)	12.1 (10.7- 13.7)	15.4 (13.3- 17.8)	14.2 (12.3- 16.3)	11.9 (8.8- 16.0)	8.2 (6.2- 10.7)
Oklahoma						
Texas						
West	14.0 (13.6- 14.5)	11.8 (11.4- 12.2)	14.3 (13.8- 14.8)	12.4 (12.0- 12.9)	12.6 (10.4- 15.2)	8.2 (6.9- 9.8)
Mountain						
Arizona	11.3 (9.9- 12.9)	10.5 (9.2- 11.8)	11.6 (10.2- 13.3)	11.3 (9.9- 12.8)	~	~
Colorado	16.4 (14.4- 18.8)	12.4 (10.9- 14.0)	16.8 (14.6- 19.2)	12.9 (11.3- 14.6)	~	~
Idaho	16.7 (13.3- 20.7)	14.1 (11.3- 17.3)	17.0 (13.6- 21.1)	14.5 (11.6- 17.9)	~	~
Montana	16.2 (12.5- 20.7)	15.2 (11.8- 19.4)	15.3 (11.7- 19.8)	15.0 (11.5- 19.2)	~	~
Nevada						
New Mexico	12.8 (10.3- 15.8)	11.1 (9.0- 13.6)	12.9 (10.3- 16.0)	11.8 (9.4- 14.5)	~	~
Utah	13.2 (10.7- 16.2)	10.0 (8.2- 12.1)	13.6 (11.0- 16.7)	10.5 (8.6- 12.7)	~	~
Wyoming	16.3 (11.2- 23.4)	14.1 (9.8- 19.7)	16.7 (11.5- 23.9)	14.7 (10.2- 20.5)	~	~
Pacific	14.1 (13.6- 14.7)	11.8 (11.4- 12.3)	14.4 (13.8- 15.0)	12.5 (12.0- 13.0)	12.5 (10.2- 15.3)	8.3 (6.8- 9.9)
Alaska	11.2 (6.6- 19.9)	7.4 (4.7- 11.0)	10.8 (5.8- 21.1)	7.7 (4.6- 12.0)	~	~
California	13.6 (12.9- 14.2)	11.2 (10.7- 11.7)	13.9 (13.2- 14.6)	11.9 (11.4- 12.5)	11.6 (9.2- 14.5)	7.6 (6.1- 9.3)
San Francisco-Oakland	12.9 (11.2- 14.7)	11.5 (10.0- 13.0)	12.5 (10.6- 14.7)	11.7 (10.0- 13.7)	12.8 (8.0- 20.0)	10.2 (6.5- 15.1)
San Jose-Monterey	11.0 (8.9- 13.5)	8.7 (7.1- 10.5)	11.8 (9.4- 14.7)	9.7 (7.8- 11.9)	~	~
Los Angeles	14.5 (13.2- 15.8)	11.3 (10.3- 12.3)	15.4 (13.9- 16.9)	12.3 (11.1- 13.5)	11.3 (7.9- 15.9)	8.1 (5.8- 11.0)
Hawaii	13.4 (10.6- 16.8)	13.0 (10.3- 16.3)	19.2 (12.5- 28.5)	15.9 (10.5- 23.2)	~	~
Oregon	13.8 (12.0- 15.8)	13.1 (11.4- 15.0)	14.0 (12.1- 16.0)	13.6 (11.8- 15.6)	~	~
Washington	17.4 (15.7- 19.2)	14.7 (13.3- 16.2)	17.0 (15.3- 18.8)	14.9 (13.4- 16.4)	~	~
Seattle-Puget Sound	18.4 (16.3- 20.7)	15.1 (13.4- 16.9)	18.1 (15.9- 20.4)	15.4 (13.6- 17.4)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.1. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

Table 2.25.2: Leukemias. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*†

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
United States	8.8 (8.6- 8.9)	9.6 (9.5- 9.8)	8.9 (8.7- 9.1)	10.3 (10.1- 10.5)	7.0 (6.5- 7.5)	5.9 (5.5- 6.3)
Northeast	9.1 (8.8- 9.5)	10.6 (10.2- 11.0)	9.3 (9.0- 9.7)	11.5 (11.0- 11.9)	6.4 (5.6- 7.4)	5.7 (5.0- 6.6)
New England	9.1 (8.4- 9.8)	10.3 (9.5- 11.1)	9.1 (8.3- 9.9)	10.7 (9.8- 11.6)	7.7 (4.8- 12.0)	6.0 (3.9- 8.9)
Connecticut	8.5 (7.2- 9.9)	9.7 (8.3- 11.3)	8.3 (7.0- 9.8)	9.9 (8.3- 11.6)	~	~
Maine						
Massachusetts	9.4 (8.4- 10.4)	10.6 (9.5- 11.8)	9.4 (8.3- 10.5)	11.1 (9.9- 12.4)	~	~
New Hampshire	10.1 (7.8- 13.0)	10.3 (7.9- 13.2)	10.3 (7.9- 13.2)	10.6 (8.1- 13.5)	~	~
Rhode Island	8.5 (6.3- 11.4)	9.9 (7.4- 13.0)	8.9 (6.5- 12.0)	10.6 (7.8- 13.9)	~	~
Vermont						
Middle Atlantic	9.2 (8.8- 9.6)	10.7 (10.3- 11.2)	9.4 (9.0- 9.9)	11.8 (11.2- 12.3)	6.3 (5.4- 7.3)	5.7 (4.9- 6.6)
New Jersey	8.9 (8.1- 9.8)	10.1 (9.2- 11.2)	9.4 (8.4- 10.4)	11.4 (10.3- 12.6)	6.5 (4.5- 9.3)	5.4 (3.7- 7.6)
New York	9.1 (8.5- 9.7)	10.4 (9.7- 11.1)	9.6 (8.9- 10.3)	11.8 (11.1- 12.7)	4.9 (3.9- 6.2)	4.6 (3.6- 5.7)
Pennsylvania	9.4 (8.7- 10.1)	11.7 (10.8- 12.6)	9.3 (8.6- 10.1)	11.9 (11.0- 12.8)	9.5 (7.2- 12.3)	9.0 (6.8- 11.7)
Midwest						
East North Central						
Illinois	9.2 (8.5- 10.0)	10.0 (9.2- 10.8)	9.4 (8.6- 10.2)	10.7 (9.8- 11.7)	8.1 (6.3- 10.4)	6.9 (5.4- 8.8)
Indiana						
Michigan	9.4 (8.6- 10.2)	10.0 (9.2- 10.9)	9.4 (8.6- 10.4)	10.5 (9.6- 11.5)	8.8 (6.7- 11.5)	7.4 (5.6- 9.7)
Detroit	10.2 (8.9- 11.6)	11.0 (9.6- 12.5)	10.7 (9.2- 12.3)	12.3 (10.6- 14.2)	8.6 (6.2- 11.7)	7.7 (5.5- 10.4)
Ohio	8.4 (7.7- 9.2)	9.5 (8.7- 10.3)	8.7 (7.9- 9.5)	10.1 (9.2- 11.0)	5.8 (4.1- 8.1)	5.2 (3.7- 7.2)
Wisconsin	10.3 (9.2- 11.6)	11.7 (10.4- 13.0)	10.4 (9.2- 11.7)	12.2 (10.8- 13.6)	~	~
West North Central	9.4 (8.8- 10.0)	10.7 (10.0- 11.4)	9.1 (8.5- 9.7)	10.8 (10.1- 11.5)	6.1 (4.0- 8.9)	5.1 (3.4- 7.4)
Iowa	9.0 (7.6- 10.5)	11.3 (9.6- 13.1)	8.8 (7.5- 10.4)	11.3 (9.6- 13.2)	~	~
Kansas	8.3 (6.9- 9.9)	9.3 (7.8- 11.1)	8.1 (6.7- 9.8)	9.4 (7.8- 11.3)	~	~
Minnesota	11.2 (9.9- 12.5)	12.1 (10.7- 13.5)	10.4 (9.1- 11.7)	11.7 (10.3- 13.2)	~	~
Missouri	8.4 (7.4- 9.5)	9.6 (8.5- 10.8)	8.4 (7.4- 9.5)	10.1 (8.8- 11.4)	7.0 (4.3- 10.9)	6.4 (4.0- 9.8)
Nebraska	10.4 (8.5- 12.7)	12.0 (9.8- 14.6)	10.2 (8.2- 12.6)	12.1 (9.8- 14.7)	~	~
North Dakota	8.4 (5.7- 12.1)	9.7 (6.6- 13.8)	8.7 (5.8- 12.6)	10.4 (7.1- 14.8)	~	~
South Dakota						
South						
South Atlantic						
Delaware	8.0 (5.5- 11.3)	8.5 (5.9- 12.0)	7.8 (5.1- 11.5)	9.0 (6.0- 13.1)	~	~
District of Columbia	5.3 (3.0- 9.0)	6.1 (3.6- 9.8)	~	~	~	~
Florida	9.4 (8.8- 10.0)	12.3 (11.5- 13.1)	9.4 (8.7- 10.1)	13.3 (12.4- 14.2)	10.1 (8.1- 12.6)	7.3 (5.8- 8.9)
Georgia						
Atlanta	5.3 (4.0- 6.9)	4.4 (3.4- 5.7)	5.5 (4.0- 7.4)	5.0 (3.7- 6.7)	~	~
Maryland	6.7 (5.8- 7.8)	6.9 (5.9- 8.0)	6.4 (5.3- 7.6)	7.3 (6.1- 8.7)	6.9 (5.0- 9.5)	5.6 (4.0- 7.5)
North Carolina	7.4 (6.6- 8.3)	8.0 (7.1- 8.9)	7.6 (6.7- 8.7)	8.7 (7.7- 9.9)	6.3 (4.7- 8.3)	5.8 (4.3- 7.6)
South Carolina	6.5 (5.4- 7.7)	6.9 (5.8- 8.1)	7.0 (5.7- 8.5)	8.1 (6.7- 9.8)	4.1 (2.6- 6.3)	3.6 (2.2- 5.4)
Virginia						
West Virginia	9.9 (8.1- 12.0)	12.2 (10.0- 14.6)	10.0 (8.1- 12.1)	12.2 (10.0- 14.7)	~	~
East South Central						
Alabama						
Kentucky	9.0 (7.8- 10.3)	9.9 (8.6- 11.4)	9.0 (7.7- 10.4)	10.1 (8.7- 11.6)	~	~
Mississippi						
Tennessee						

continued

Table 2.25.2: Leukemias. Cancer Incidence Rates by U.S. Census Region and Division, State and Metropolitan Area, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria*† *(continued)*

Females, 1999

Area	All Races		White		Black	
	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)	Age-Adjusted Rate‡§ (CI)	Crude Rate‡ (CI)
West South Central						
Arkansas						
Louisiana	8.0 (6.9- 9.2)	8.2 (7.1- 9.5)	7.9 (6.6- 9.4)	9.1 (7.6- 10.7)	8.0 (5.9- 10.6)	6.8 (5.0- 8.9)
Oklahoma						
Texas						
West	8.4 (8.0- 8.7)	8.4 (8.1- 8.8)	8.5 (8.2- 8.9)	8.9 (8.5- 9.3)	6.8 (5.4- 8.4)	5.4 (4.4- 6.7)
Mountain						
Arizona	8.4 (7.3- 9.6)	8.9 (7.7- 10.1)	8.5 (7.4- 9.8)	9.4 (8.1- 10.8)	~	~
Colorado	9.6 (8.3- 11.1)	9.3 (8.0- 10.7)	9.8 (8.4- 11.3)	9.6 (8.3- 11.2)	~	~
Idaho	8.9 (6.8- 11.6)	9.1 (6.9- 11.8)	9.0 (6.8- 11.7)	9.2 (7.0- 12.0)	~	~
Montana	8.2 (5.8- 11.2)	9.2 (6.6- 12.5)	8.3 (5.9- 11.5)	9.7 (7.0- 13.3)	~	~
Nevada						
New Mexico	8.4 (6.6- 10.6)	8.5 (6.7- 10.6)	9.3 (7.3- 11.7)	9.7 (7.6- 12.2)	~	~
Utah	8.1 (6.3- 10.2)	7.1 (5.6- 8.9)	7.5 (5.8- 9.6)	6.8 (5.3- 8.6)	~	~
Wyoming	10.8 (7.0- 16.0)	10.9 (7.1- 16.0)	11.1 (7.2- 16.5)	11.4 (7.4- 16.7)	~	~
Pacific	8.2 (7.9- 8.6)	8.3 (7.9- 8.7)	8.4 (8.0- 8.8)	8.8 (8.4- 9.2)	6.9 (5.5- 8.7)	5.5 (4.4- 6.9)
Alaska	13.1 (7.9- 20.9)	8.5 (5.5- 12.5)	13.4 (7.4- 23.0)	8.2 (4.9- 13.0)	~	~
California	8.0 (7.6- 8.4)	8.0 (7.5- 8.4)	8.2 (7.8- 8.7)	8.5 (8.0- 9.0)	6.7 (5.2- 8.5)	5.4 (4.2- 6.9)
San Francisco-Oakland	7.5 (6.4- 8.7)	8.1 (6.9- 9.4)	7.7 (6.4- 9.3)	9.0 (7.5- 10.7)	~	~
San Jose-Monterey	9.1 (7.4- 11.1)	8.9 (7.2- 10.8)	9.9 (8.0- 12.2)	10.1 (8.1- 12.4)	~	~
Los Angeles	7.4 (6.6- 8.2)	7.1 (6.4- 7.9)	7.7 (6.8- 8.6)	7.7 (6.8- 8.7)	6.4 (4.3- 9.1)	5.6 (3.8- 8.0)
Hawaii	8.2 (6.1- 10.8)	8.6 (6.4- 11.4)	~	~	~	~
Oregon	8.7 (7.4- 10.2)	9.7 (8.3- 11.3)	8.7 (7.4- 10.3)	10.0 (8.5- 11.7)	~	~
Washington	9.1 (8.0- 10.3)	9.3 (8.2- 10.5)	9.1 (8.0- 10.3)	9.7 (8.5- 11.0)	~	~
Seattle-Puget Sound	9.3 (8.0- 10.7)	9.4 (8.1- 10.9)	9.4 (8.0- 10.9)	10.0 (8.6- 11.6)	~	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information. U.S. rates cover approximately 78% of the U.S. population.

† Invasive cancers only

‡ Rates are per 100,000 persons. Population denominators for 1999 are projected from the 1990 census and may not accurately reflect the 1999 population size. Caution should be used in interpreting rates based on these projected populations.

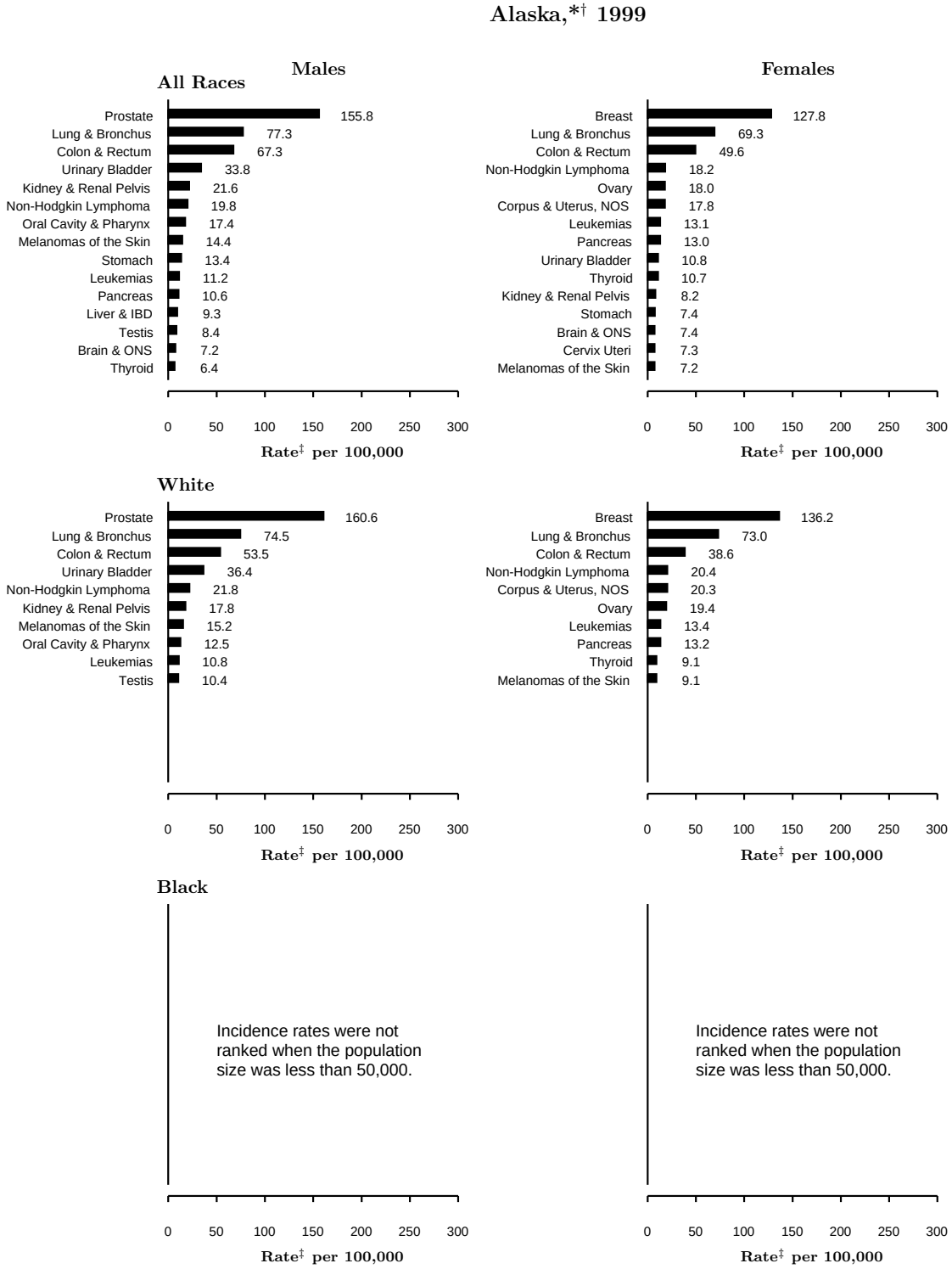
§ Rates are age-adjusted to the 2000 U.S. standard population.

~ Rates are suppressed if fewer than 16 cases were reported in the specific area-race category.

Notes: Cases from suppressed rates are included in the U.S. and region/division rates. Observed region/division age-adjusted incidence rates are presented for regions/divisions with $\geq$ 78% of the population covered by registries that meet the data quality criteria specified above, and if the 95% confidence intervals around the observed region/division rates for each of four major cancers include "bias-corrected" estimated region/division rates (see technical notes) for each of those cancers. U.S rates are as presented in Table 1.2. California, Washington, and Michigan state rates each include cases from the SEER metropolitan areas.

State and Metropolitan Area Incidence Rates for Most Common Cancers

Figure 3.1: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



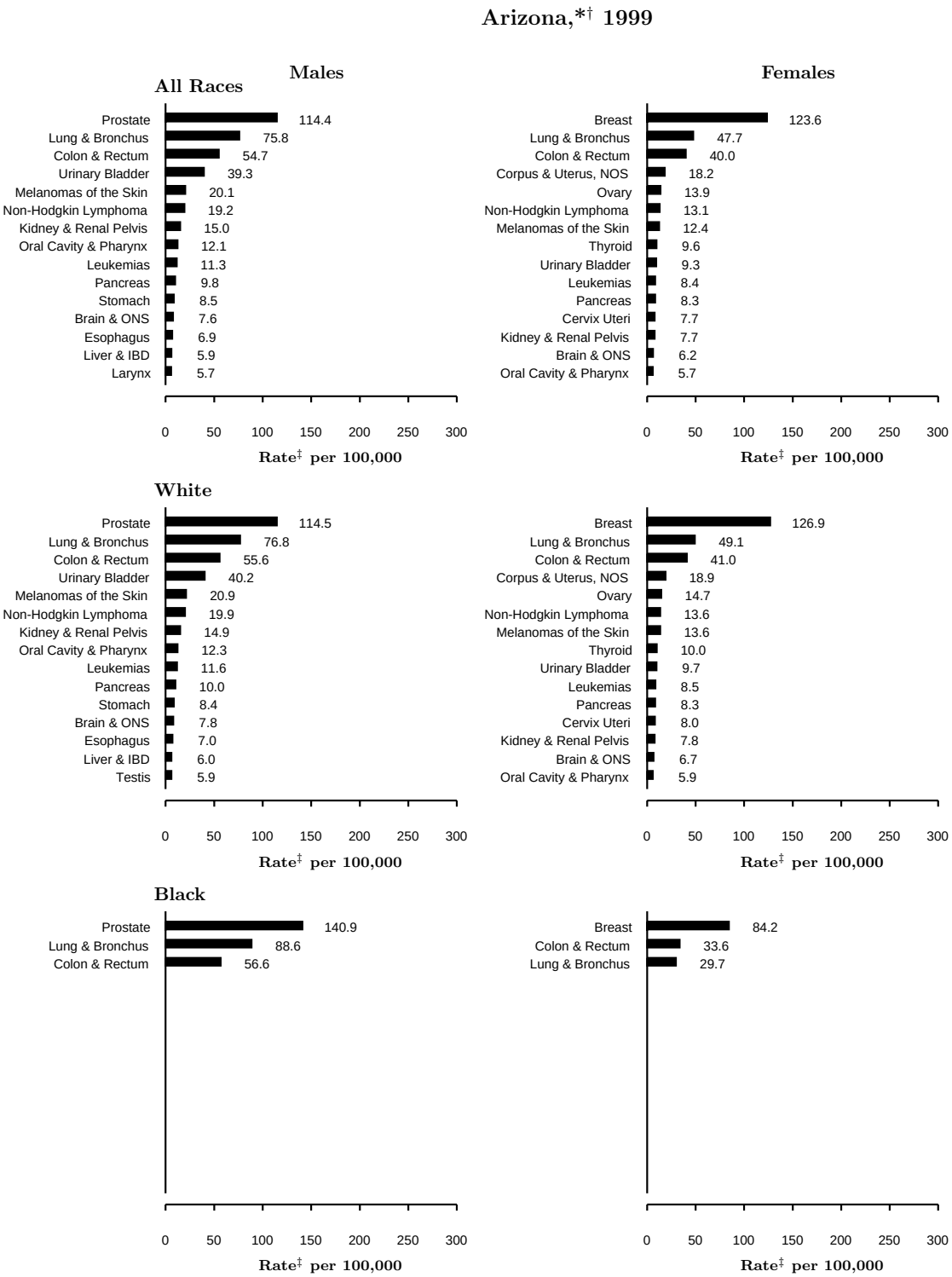
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.2: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

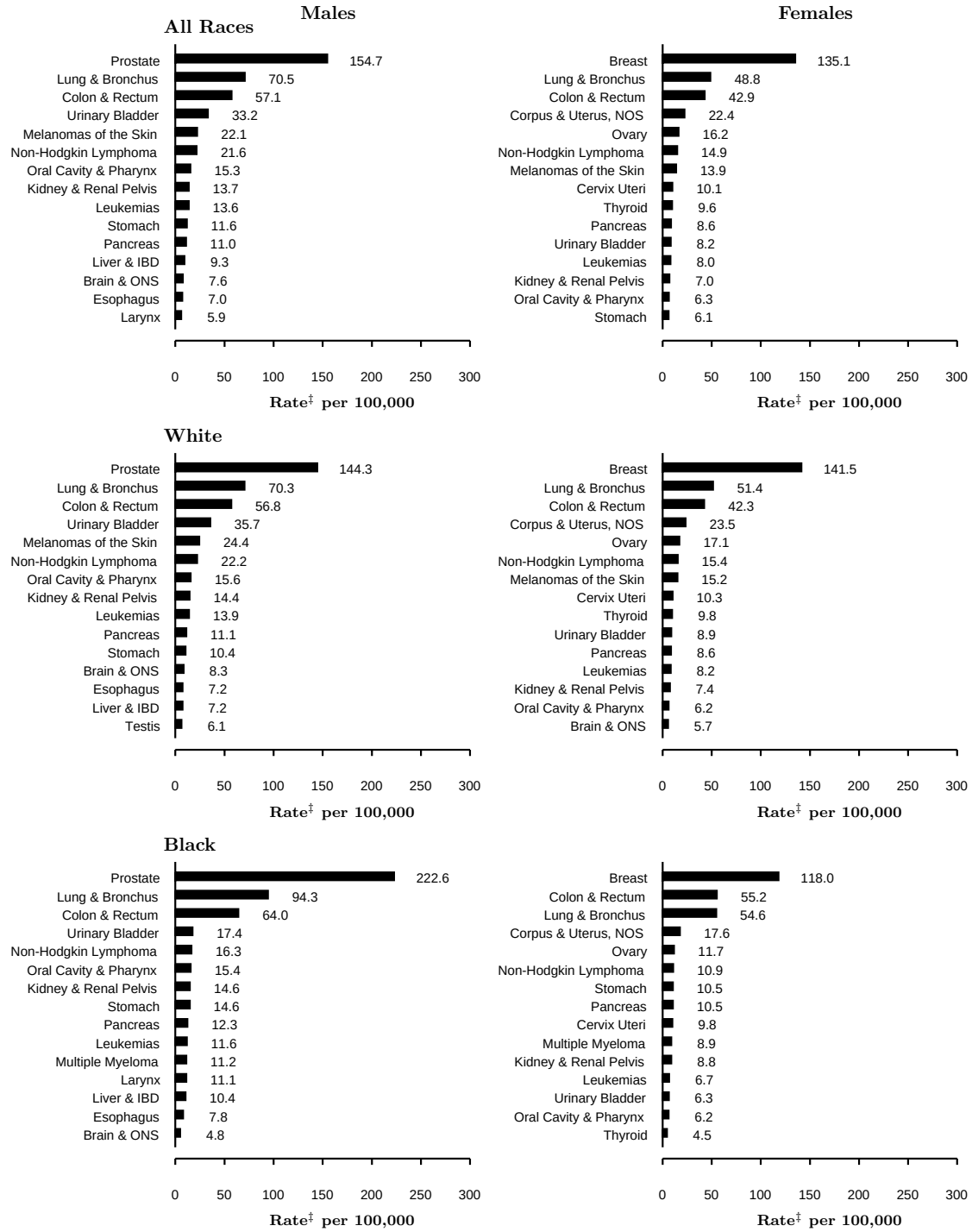
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.3: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

California,*† 1999



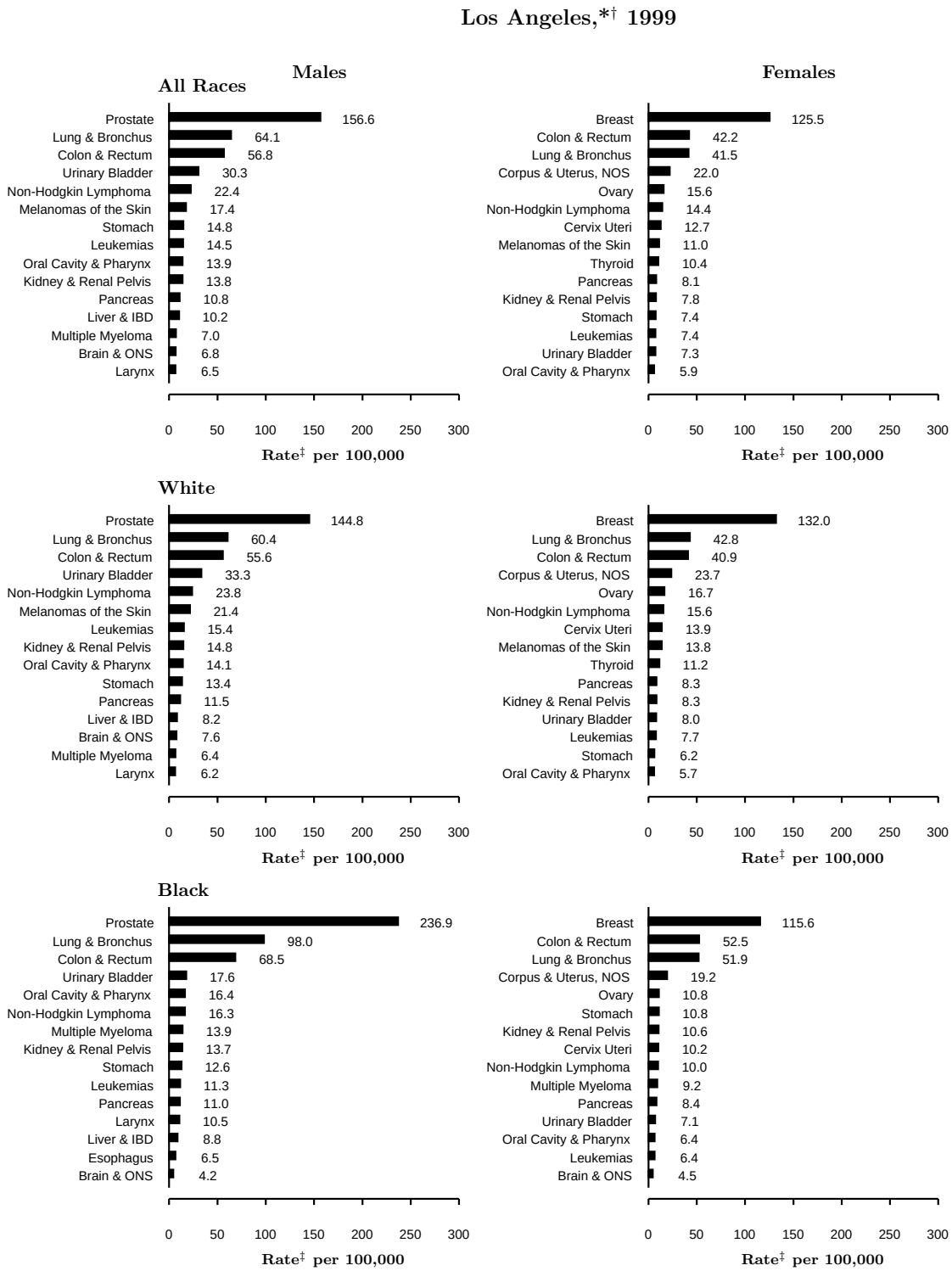
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.4: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

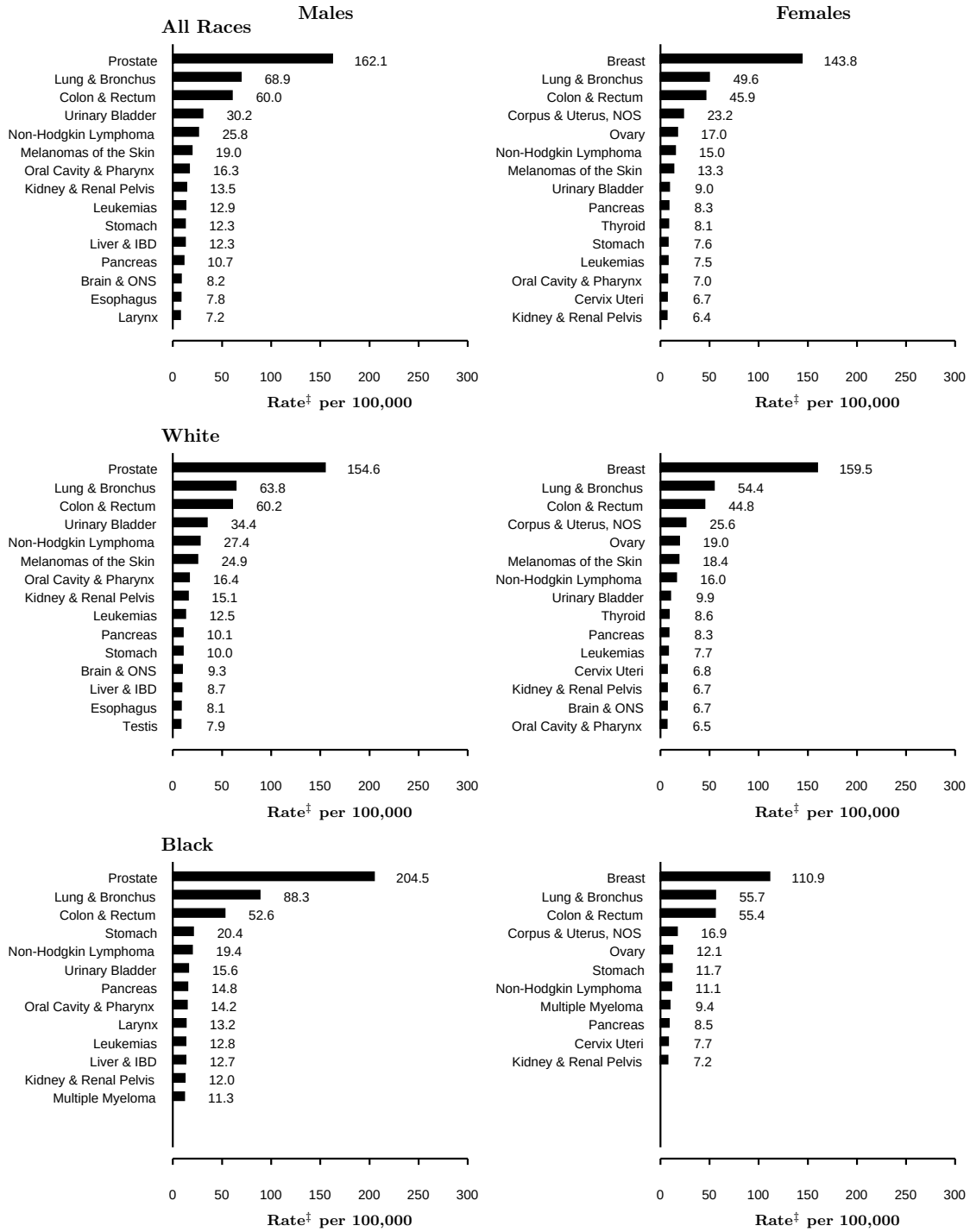
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.5: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

San Francisco-Oakland,*† 1999



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

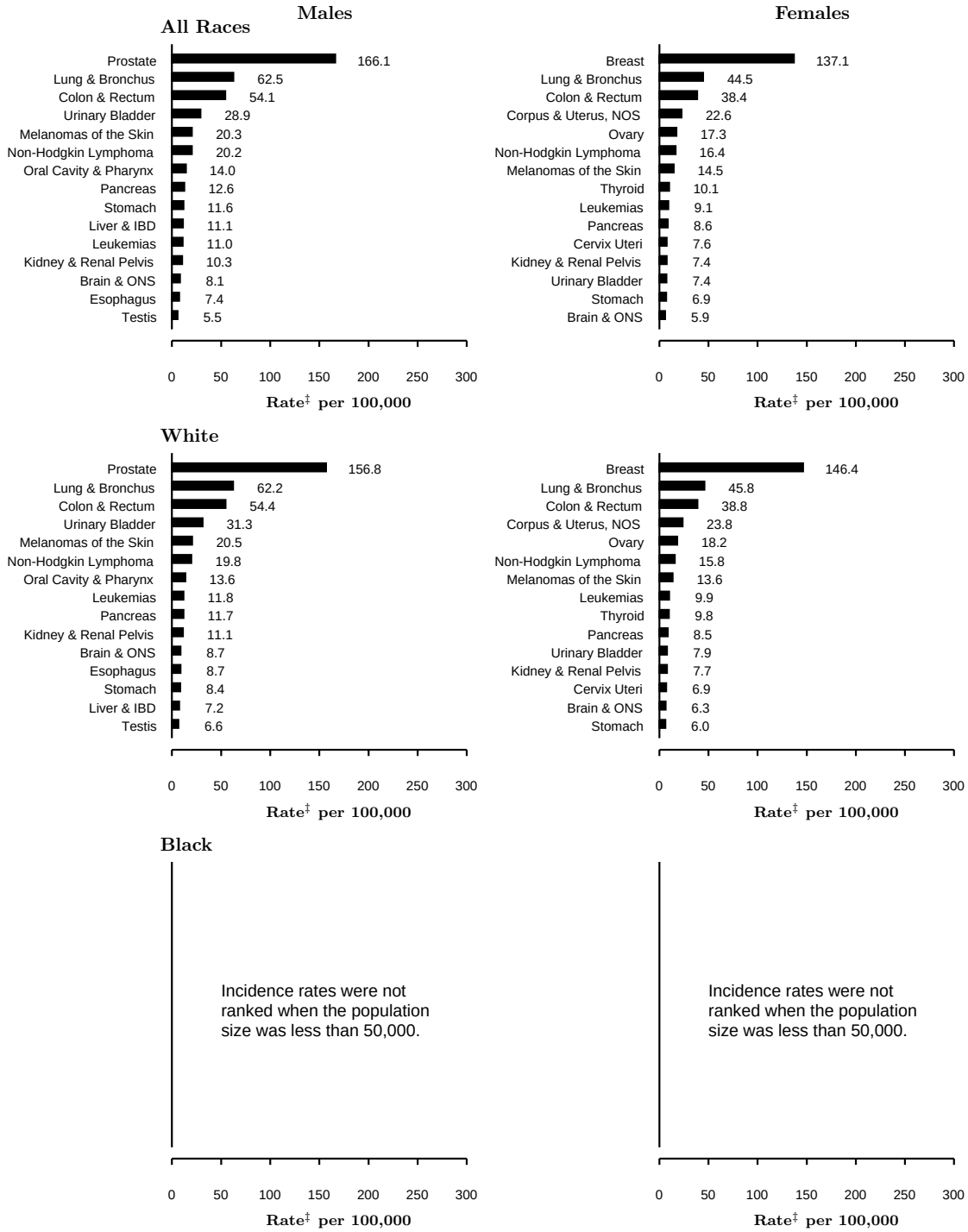
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.6: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

San Jose-Monterey,*† 1999



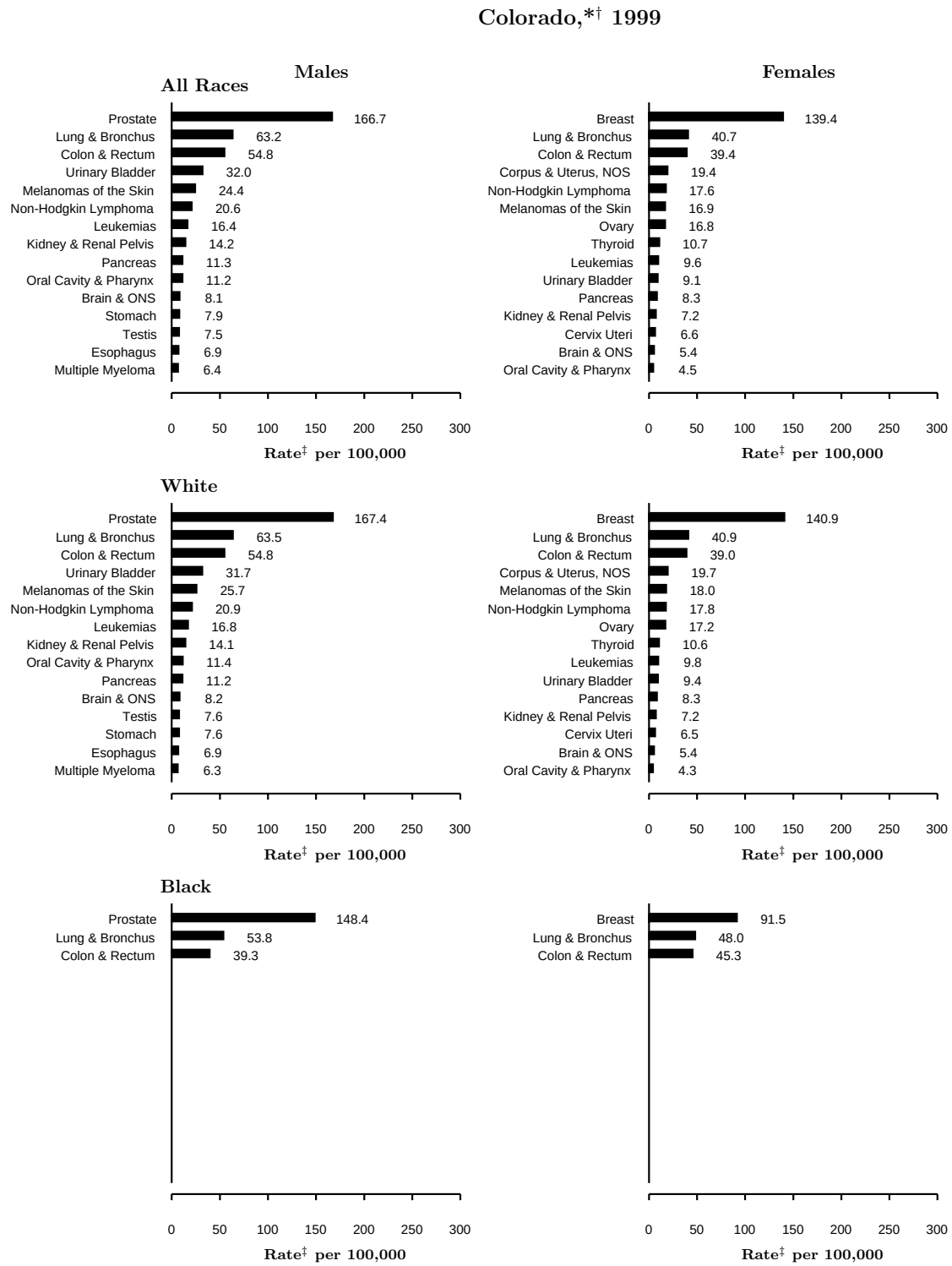
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.7: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



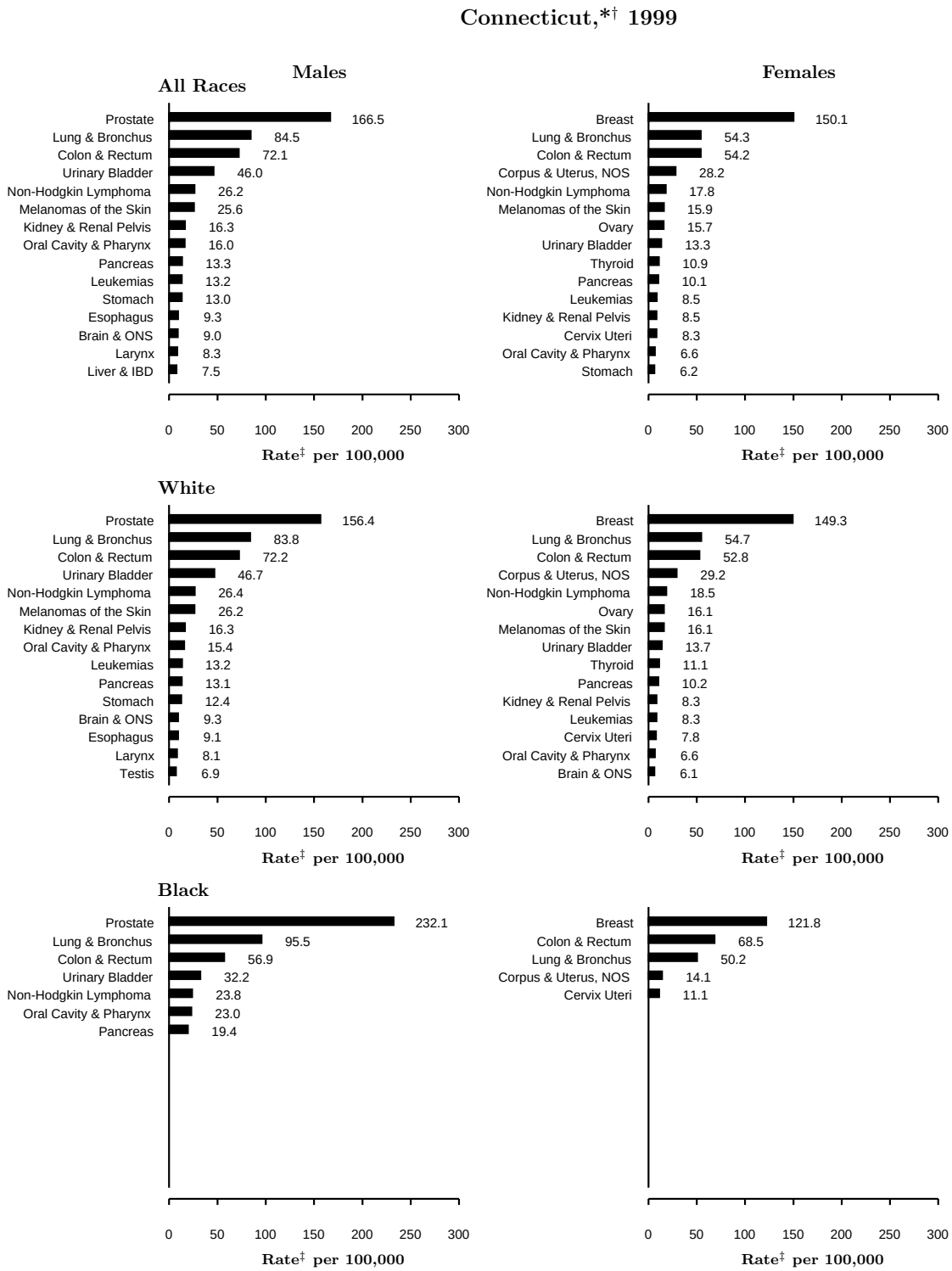
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.8: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



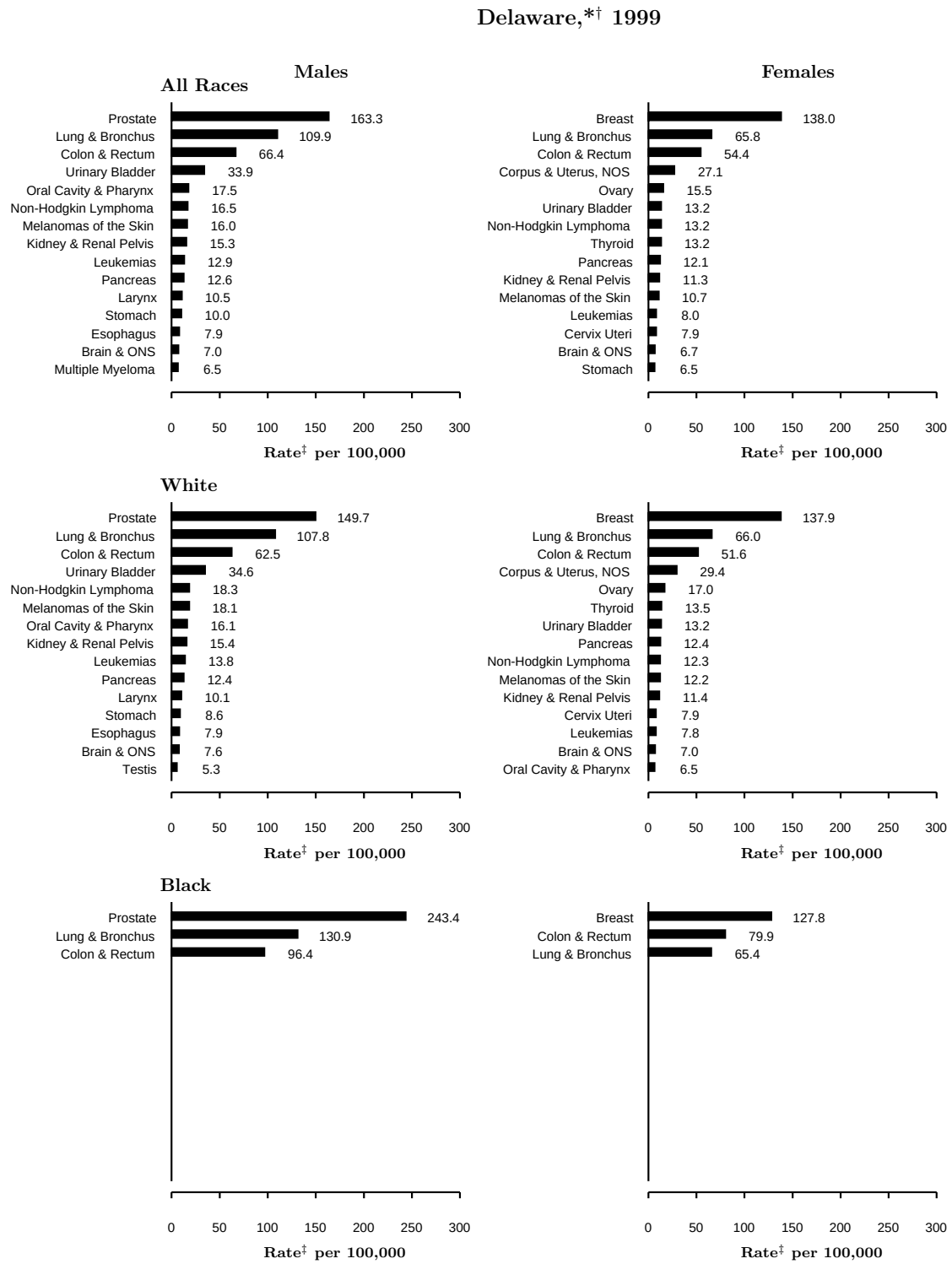
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.9: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

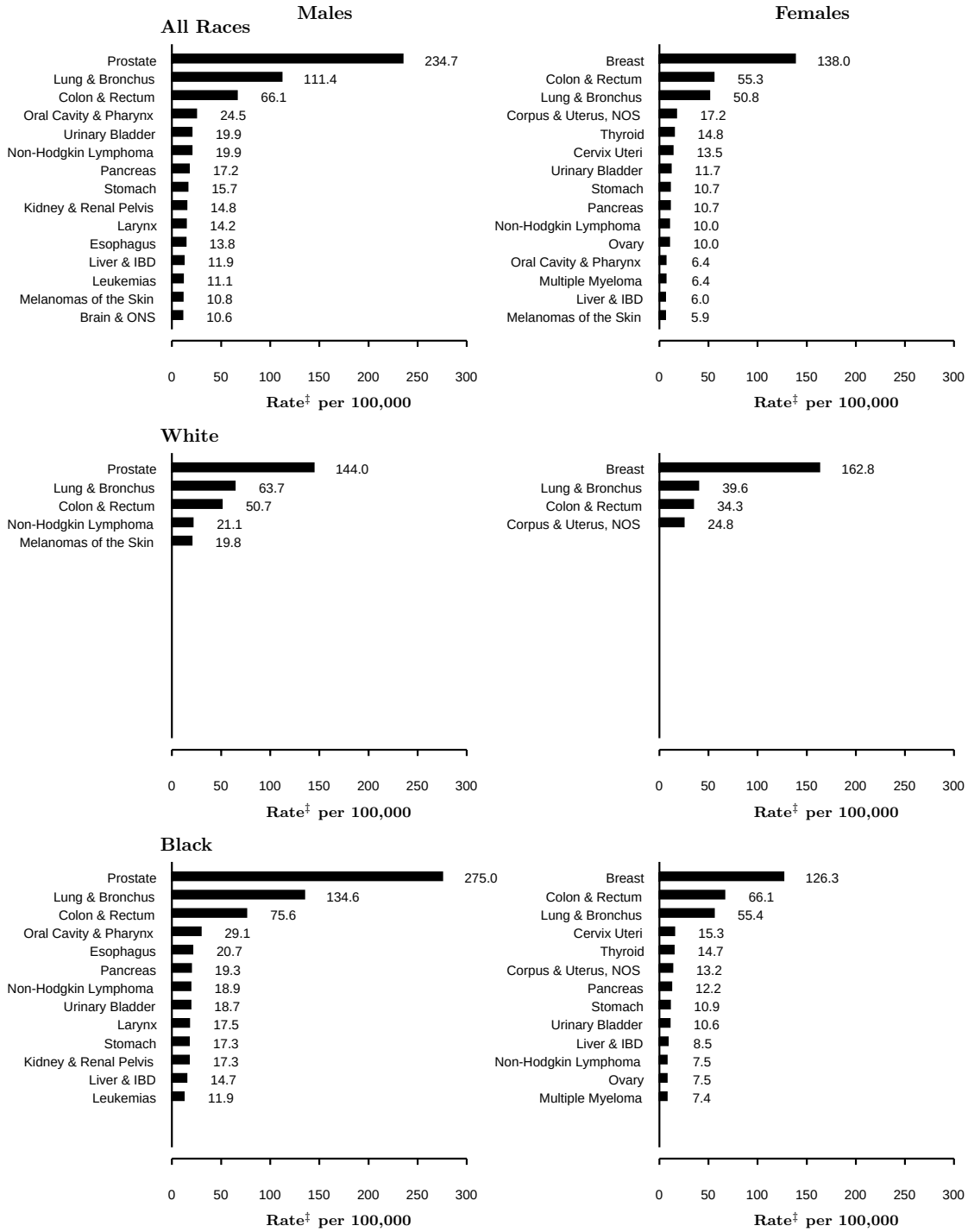
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.10: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

District of Columbia,*† 1999



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

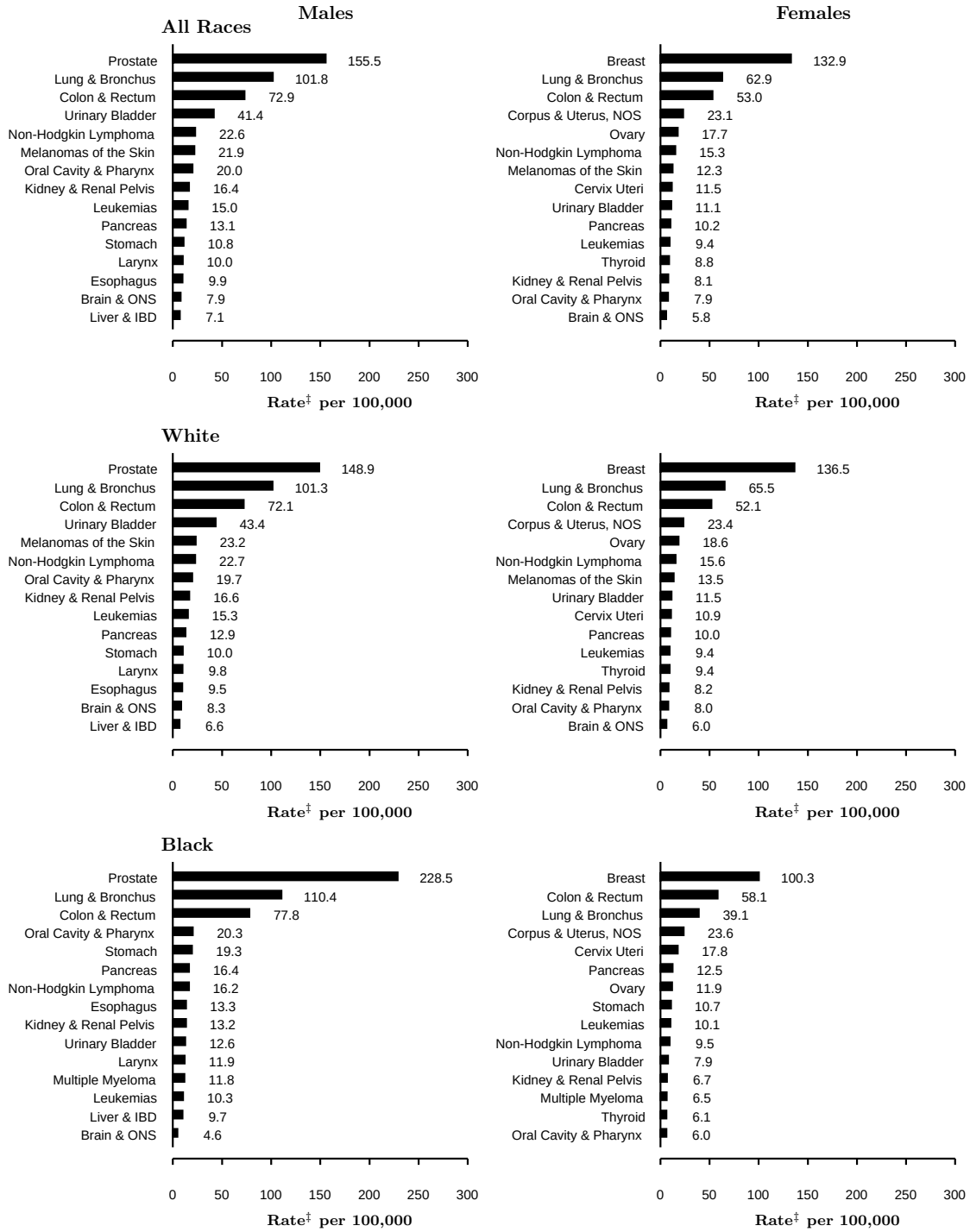
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.11: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Florida,*† 1999



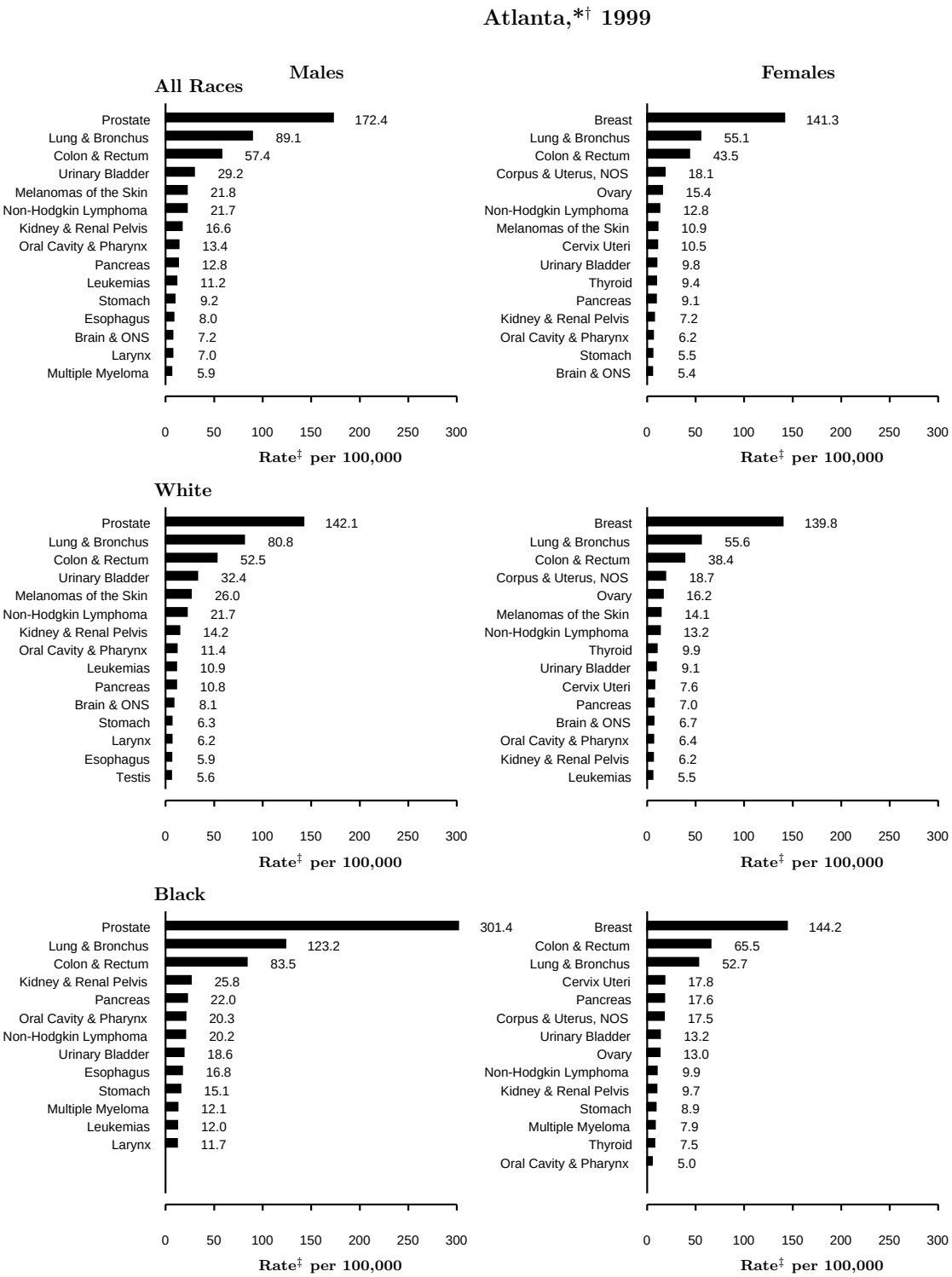
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.12: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

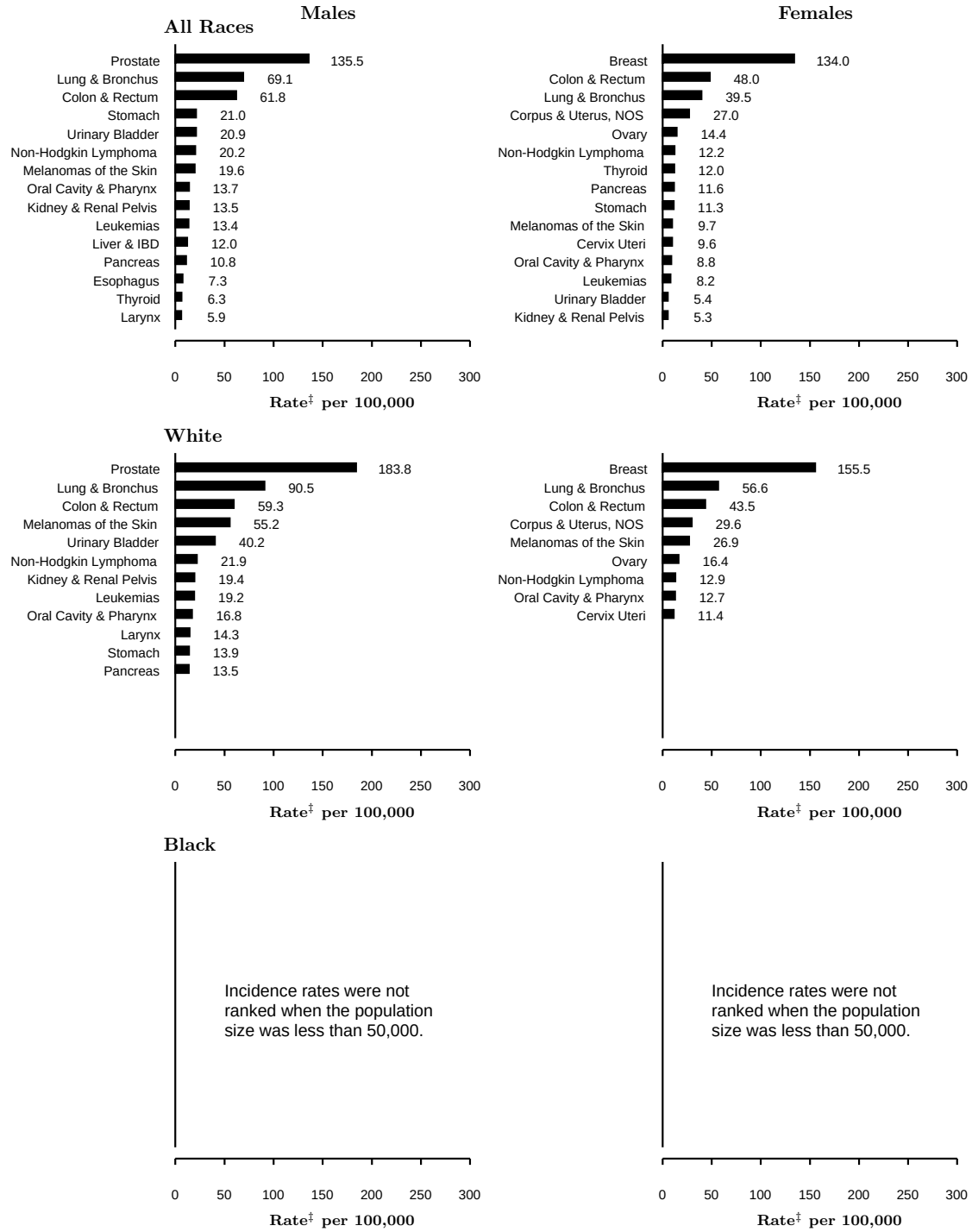
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.13: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Hawaii,*† 1999



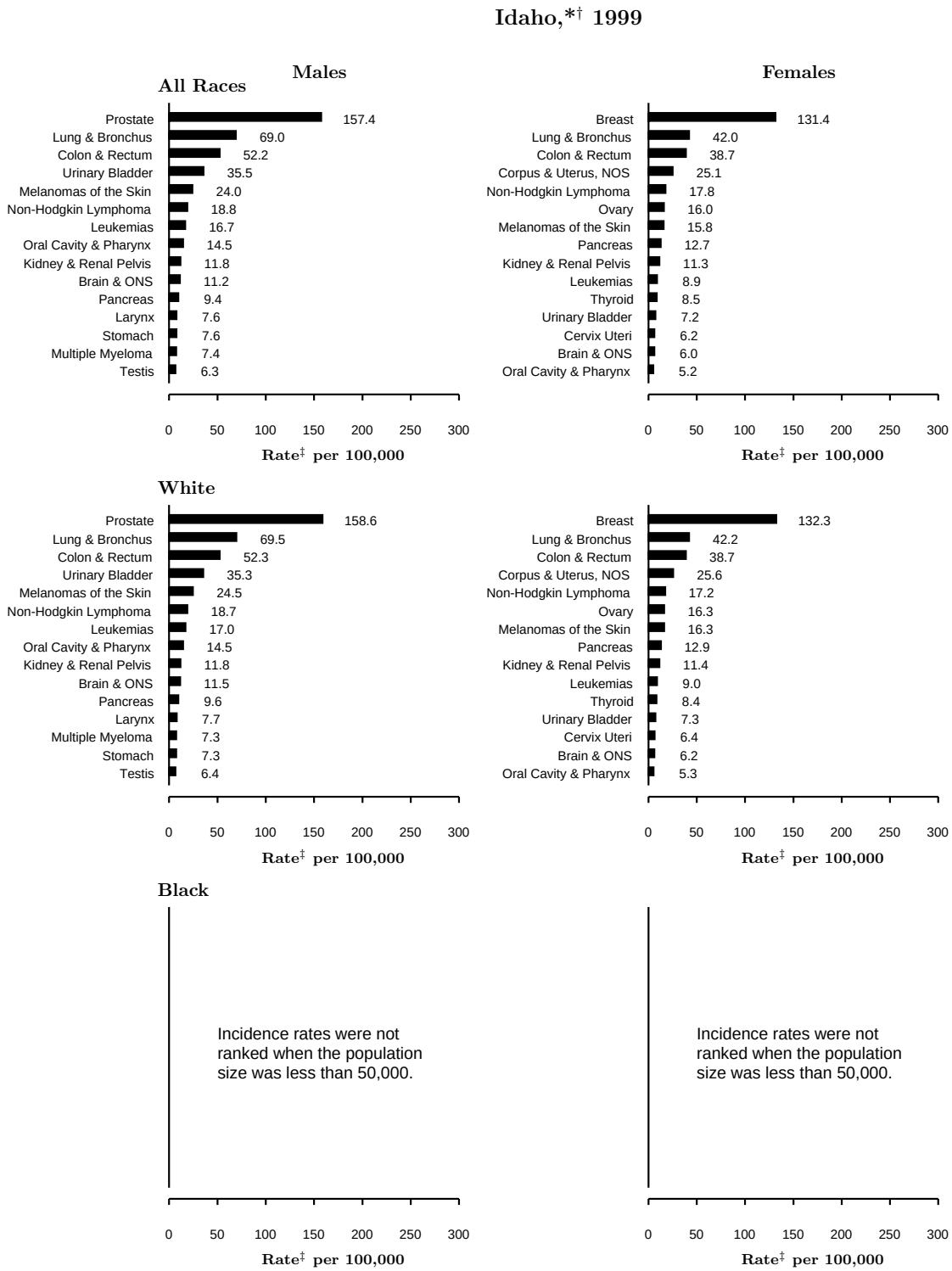
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.14: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

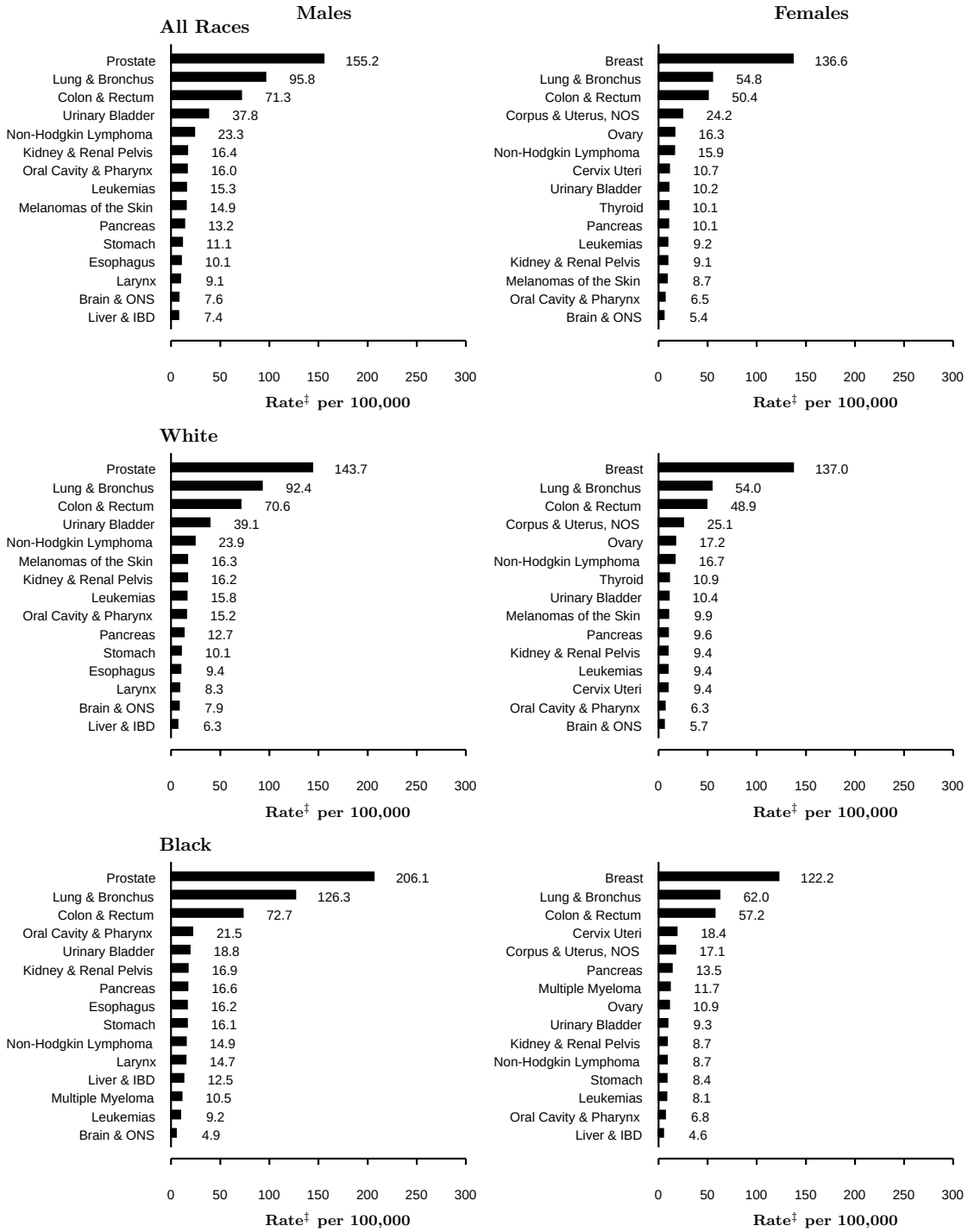
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.15: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Illinois,*† 1999



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

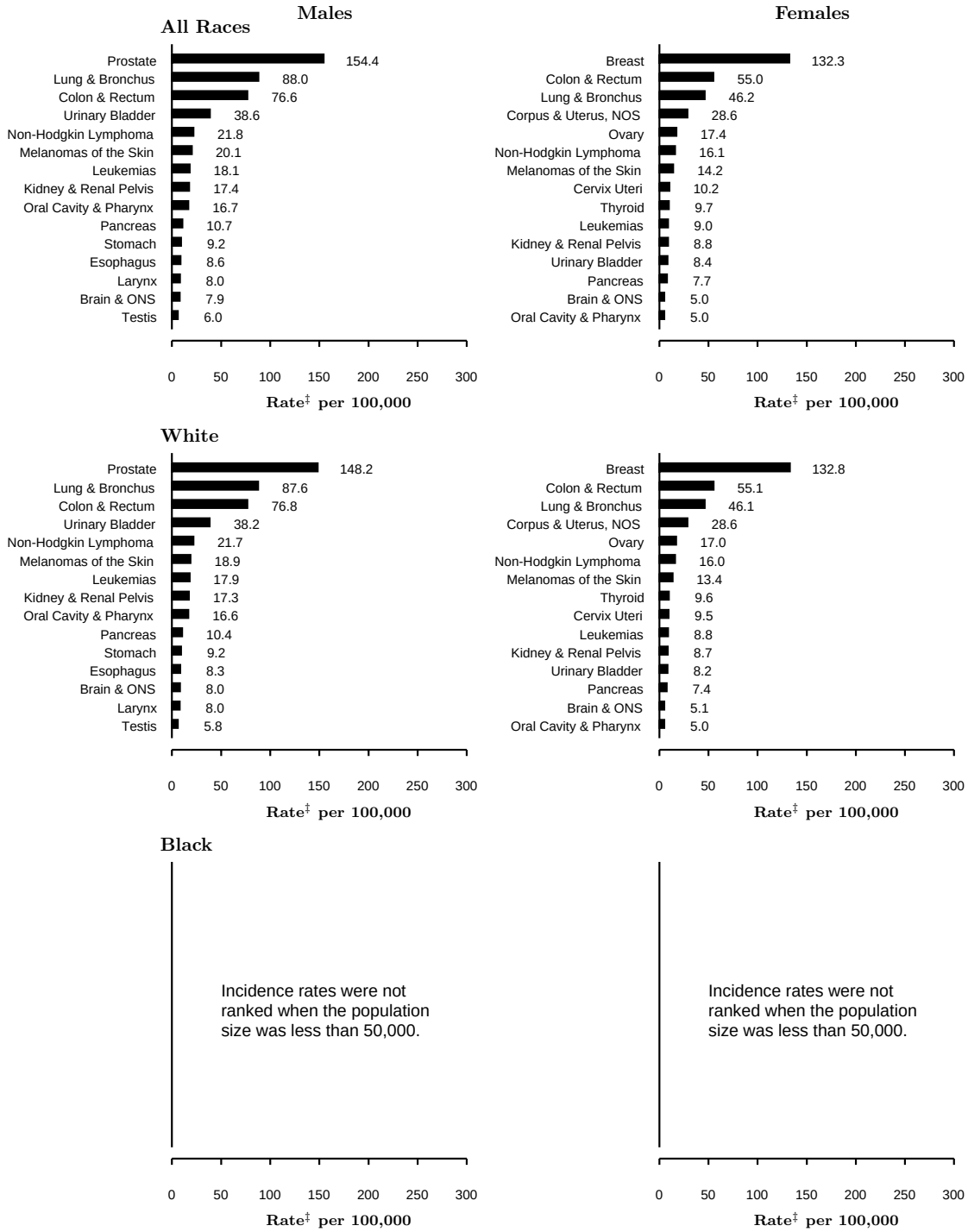
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.16: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Iowa,*† 1999



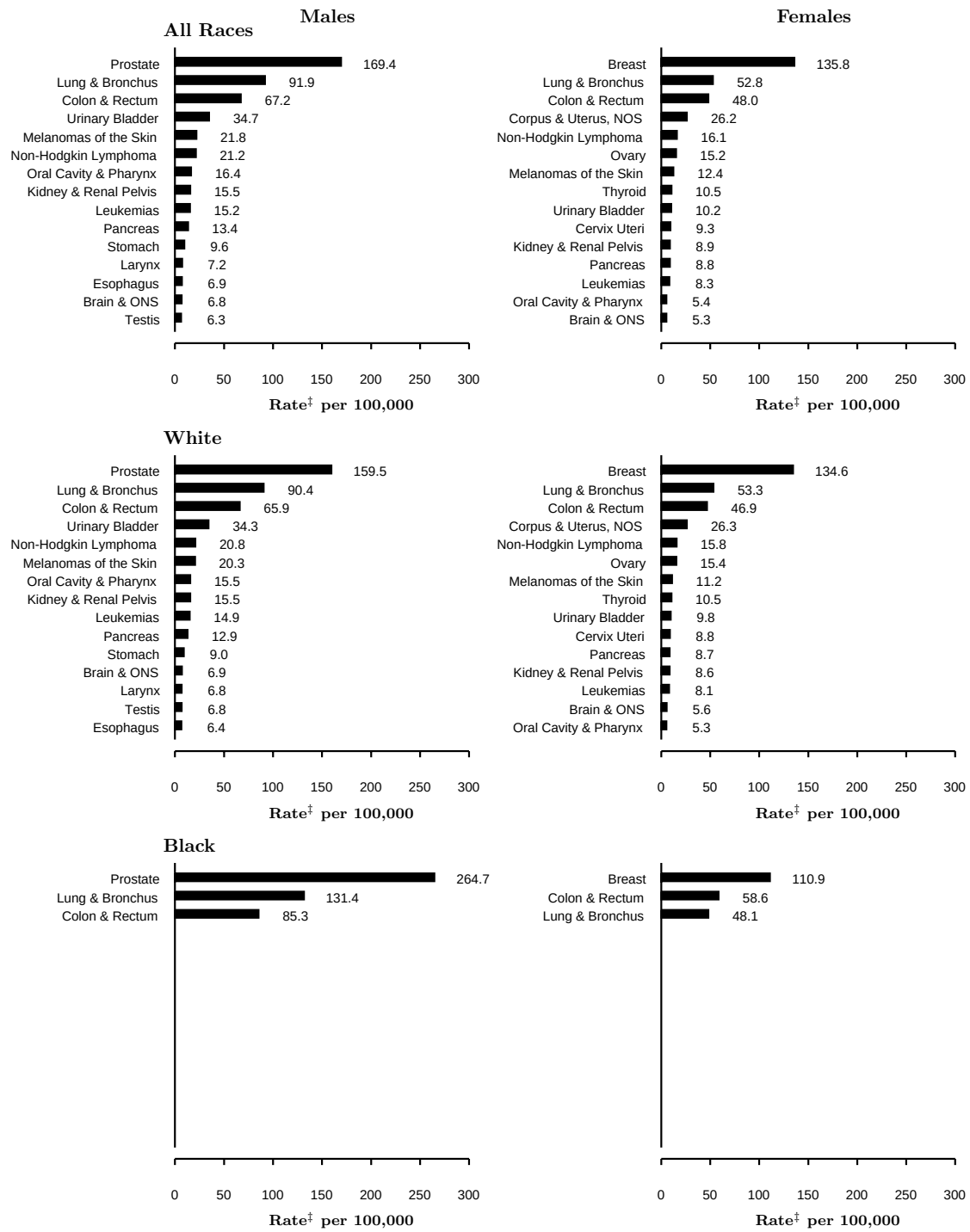
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.17: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



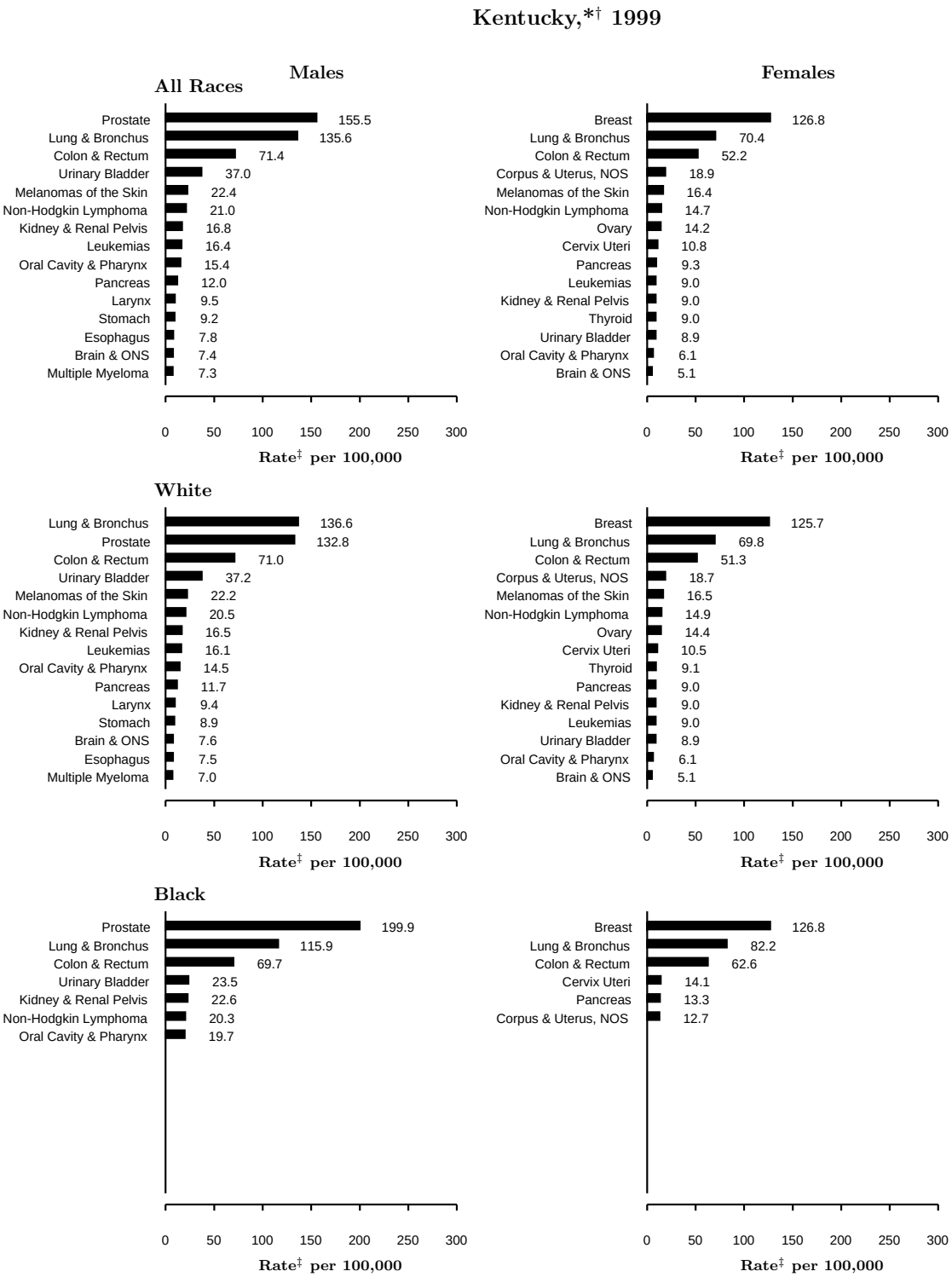
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.18: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

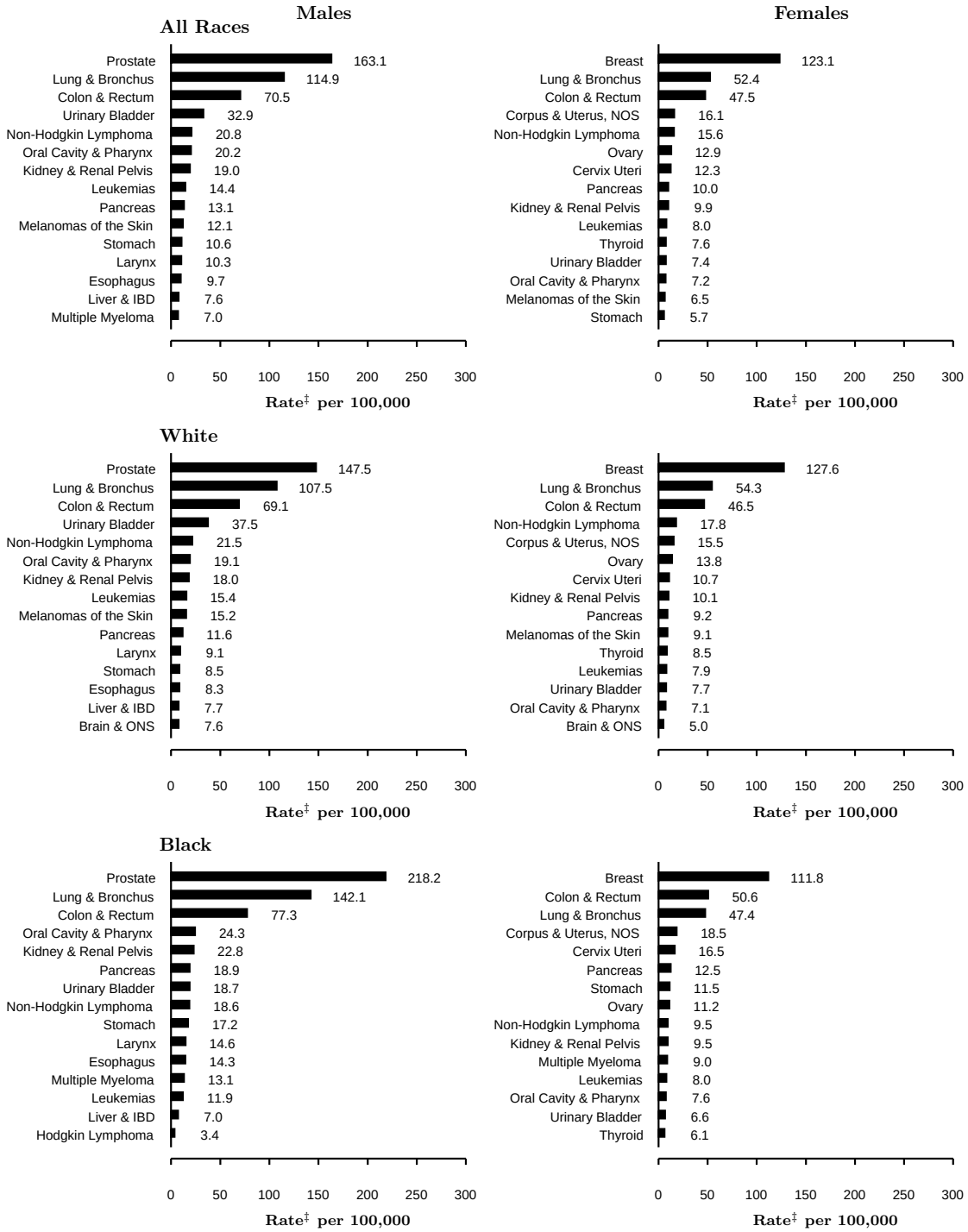
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.19: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Louisiana,*† 1999



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

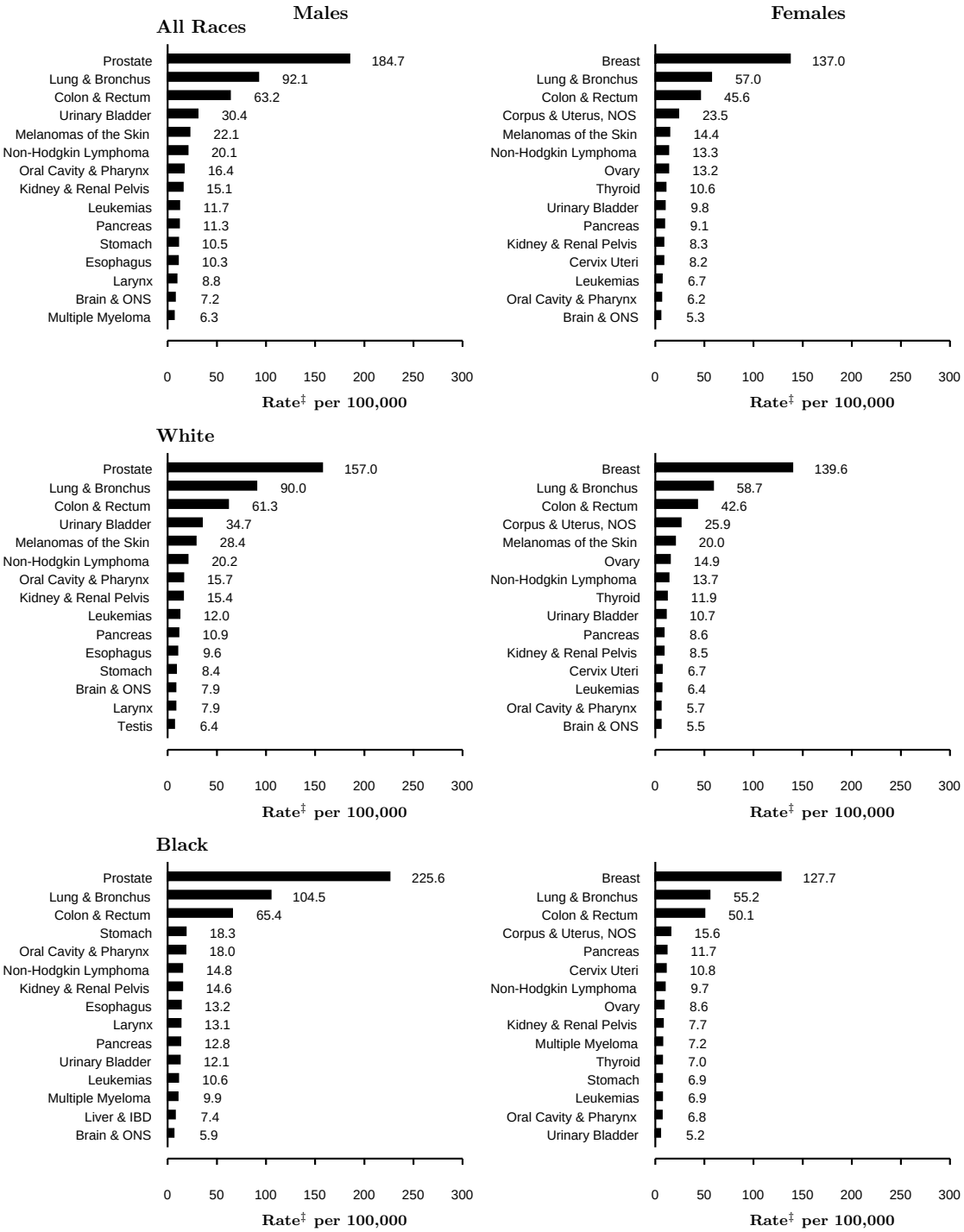
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.20: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Maryland,*† 1999



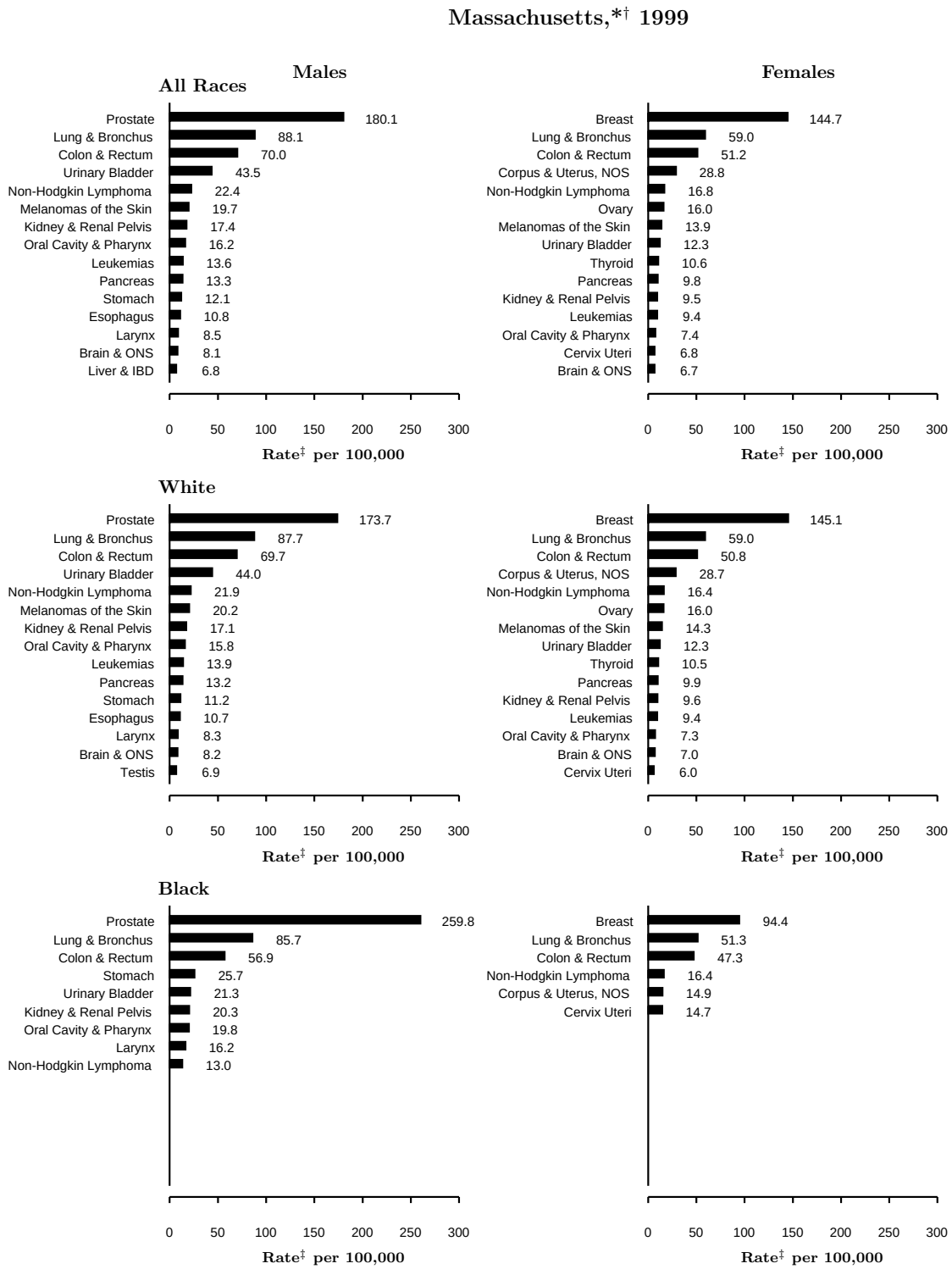
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.21: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

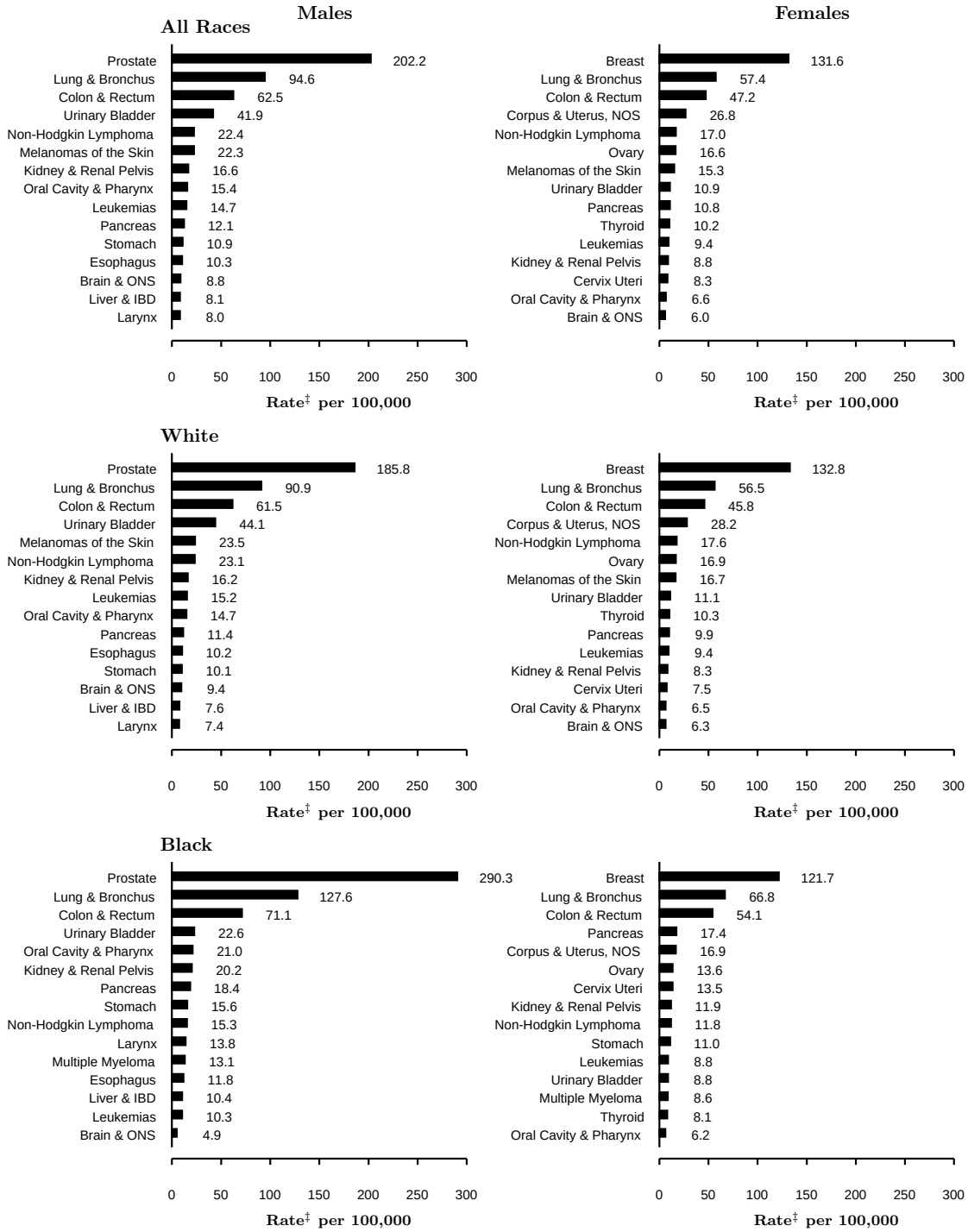
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.22: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Michigan,*† 1999



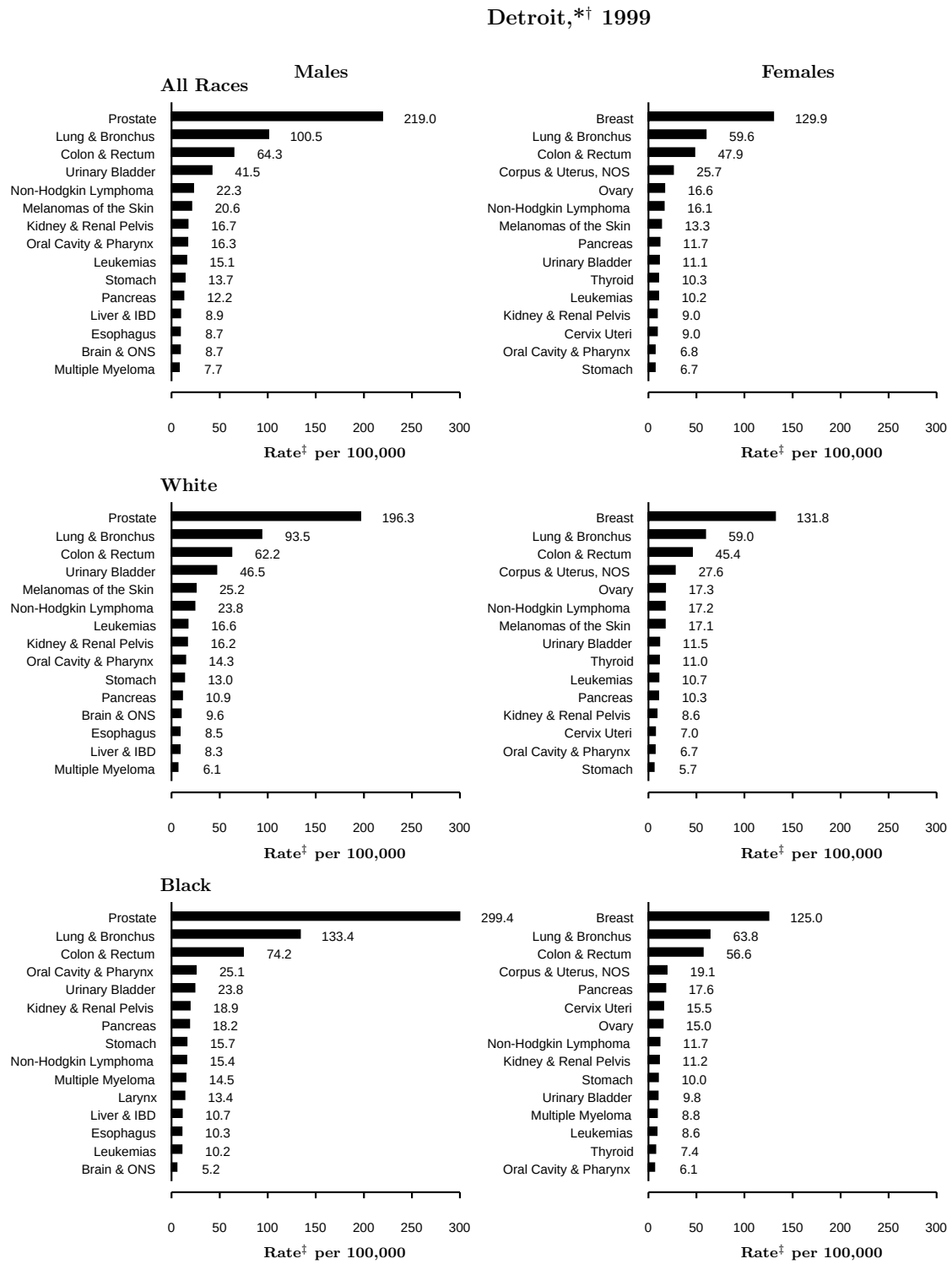
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.23: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

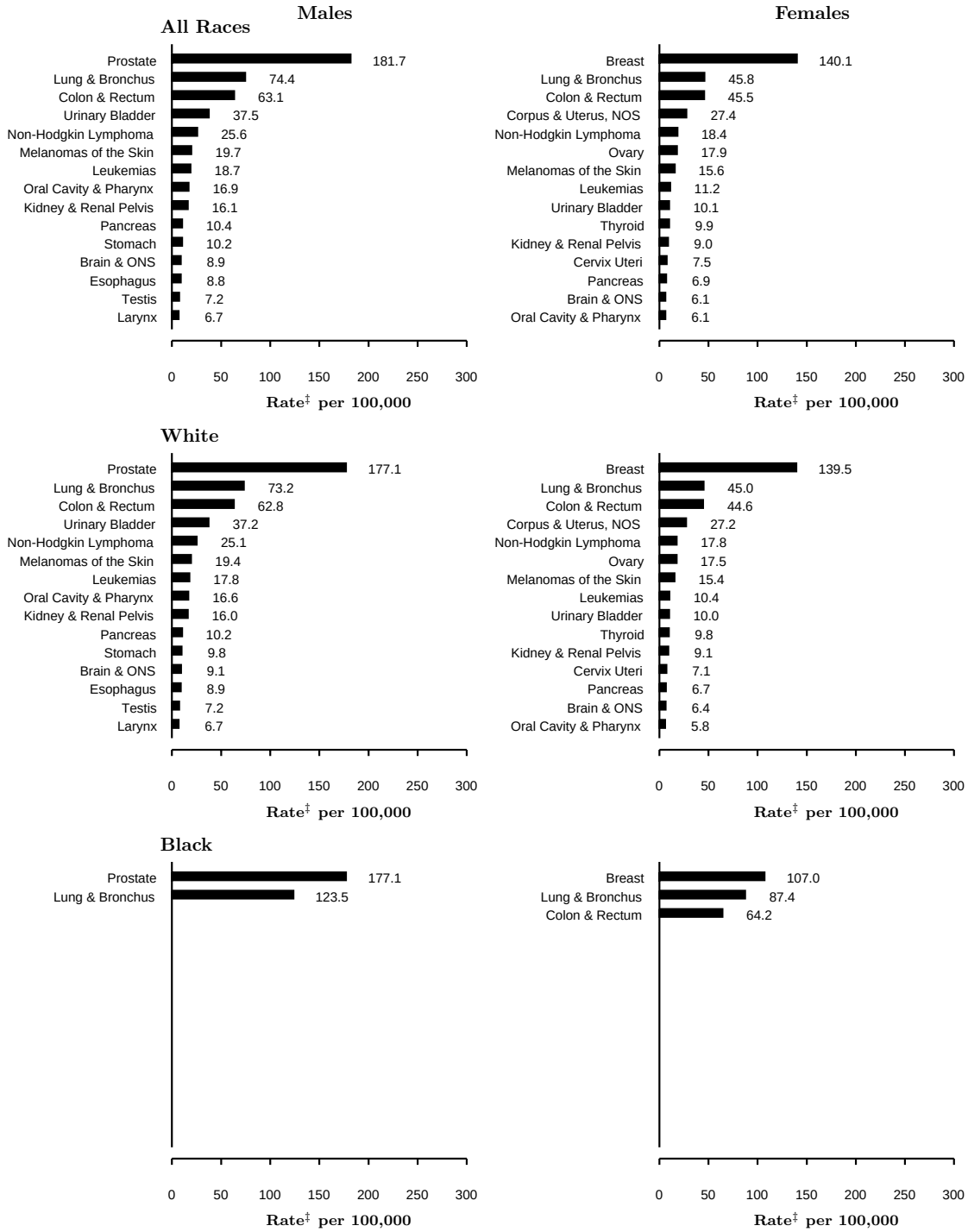
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.24: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Minnesota,*† 1999



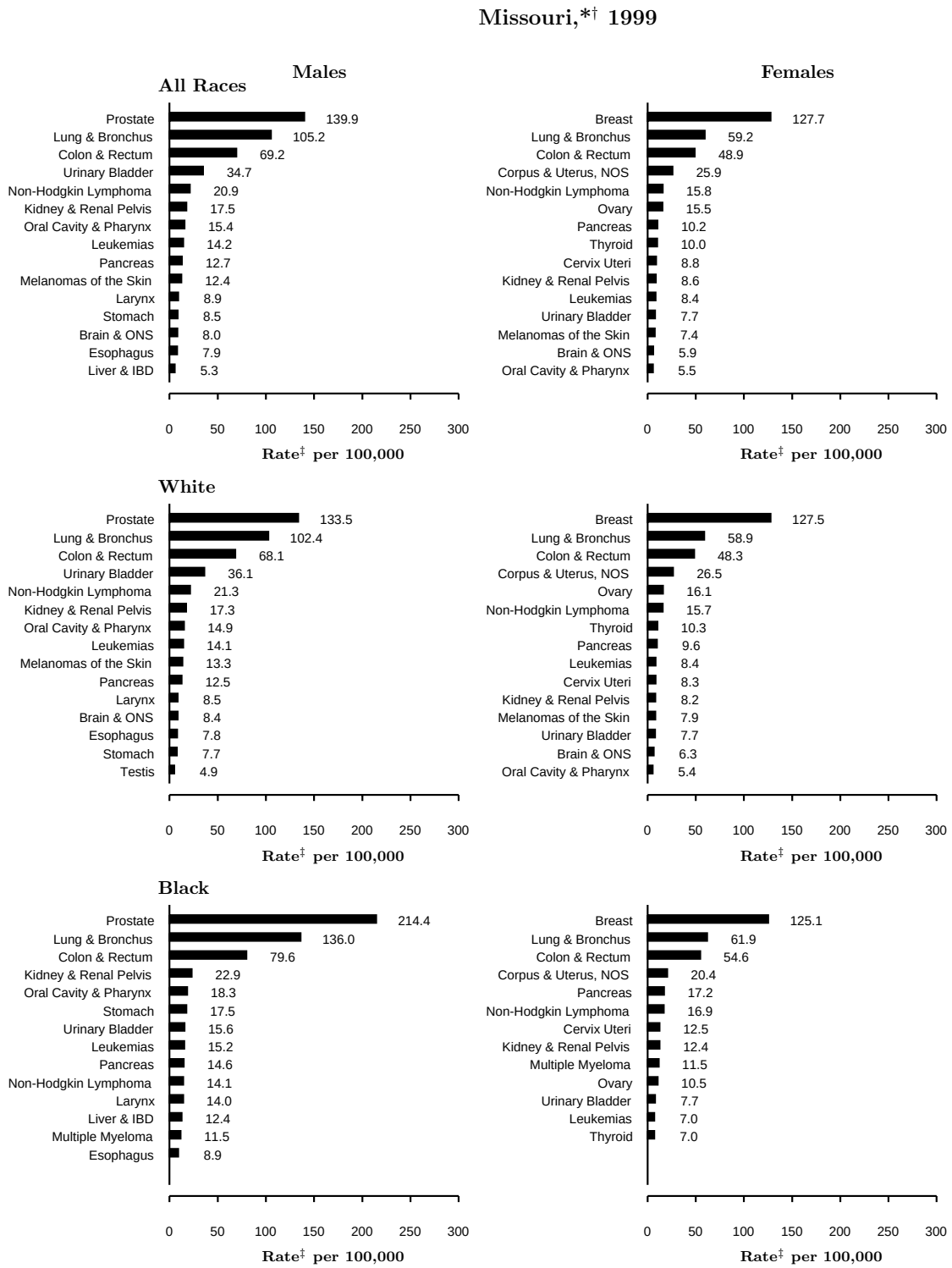
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.25: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



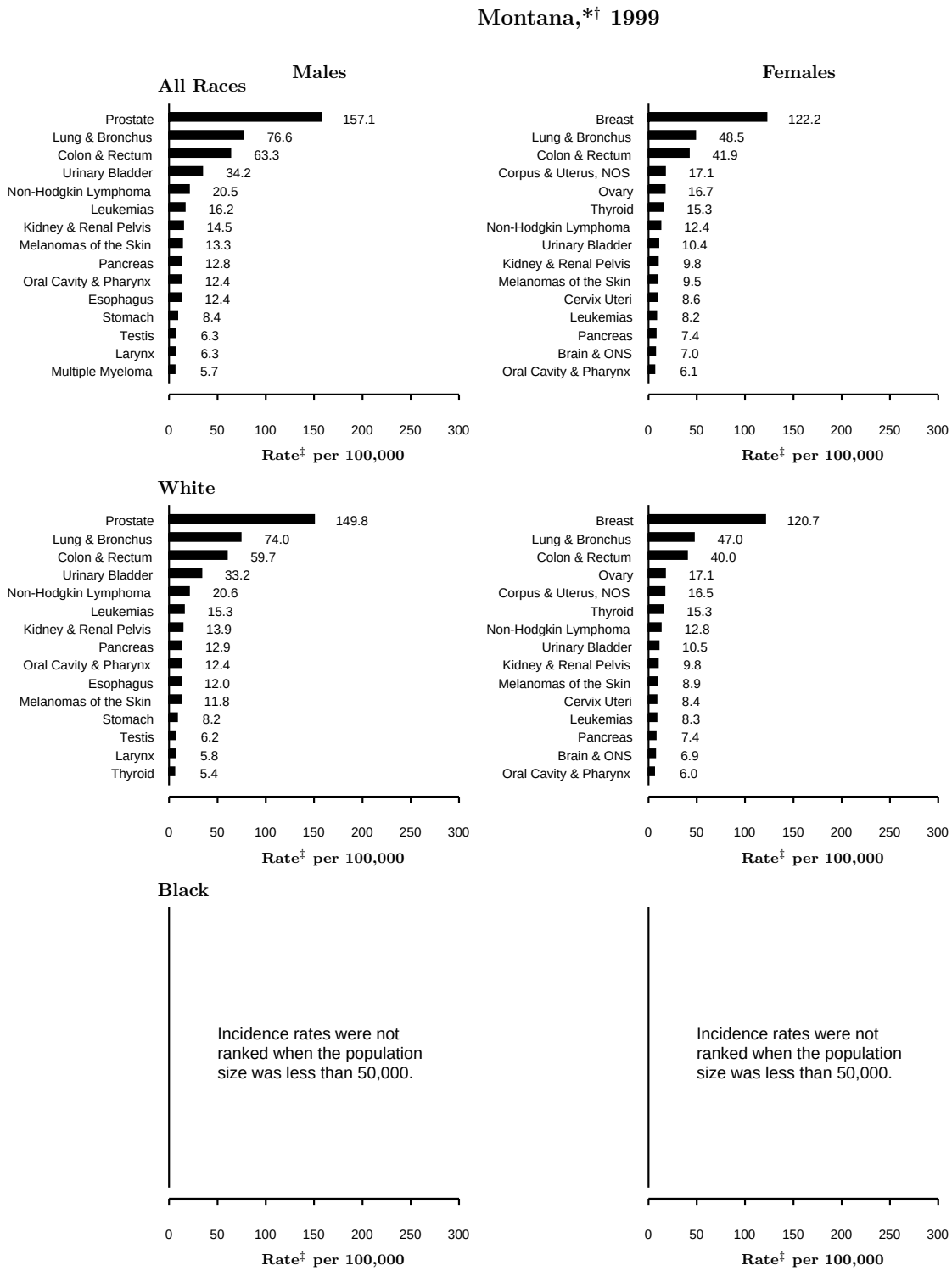
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.26: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

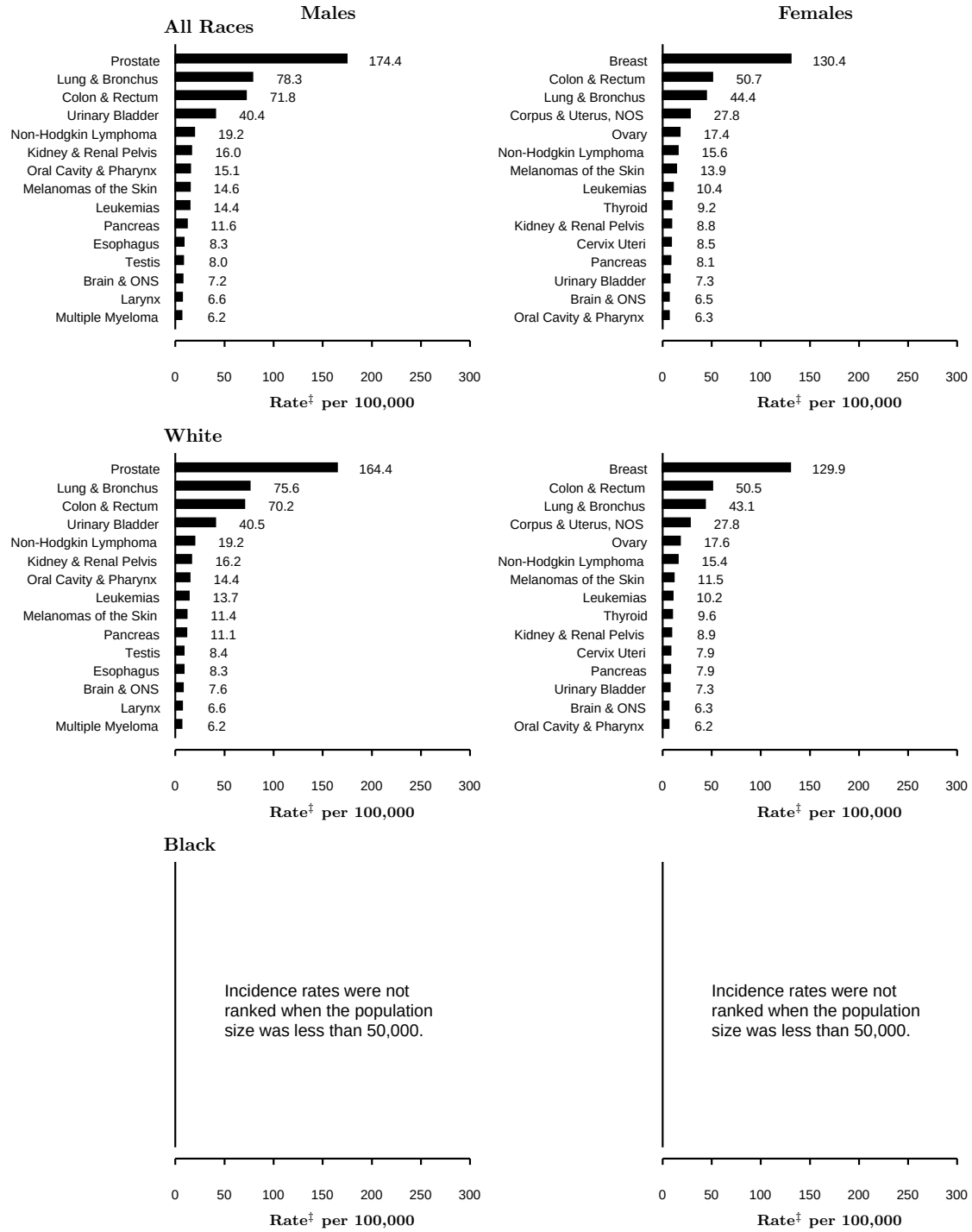
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.27: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Nebraska,*† 1999



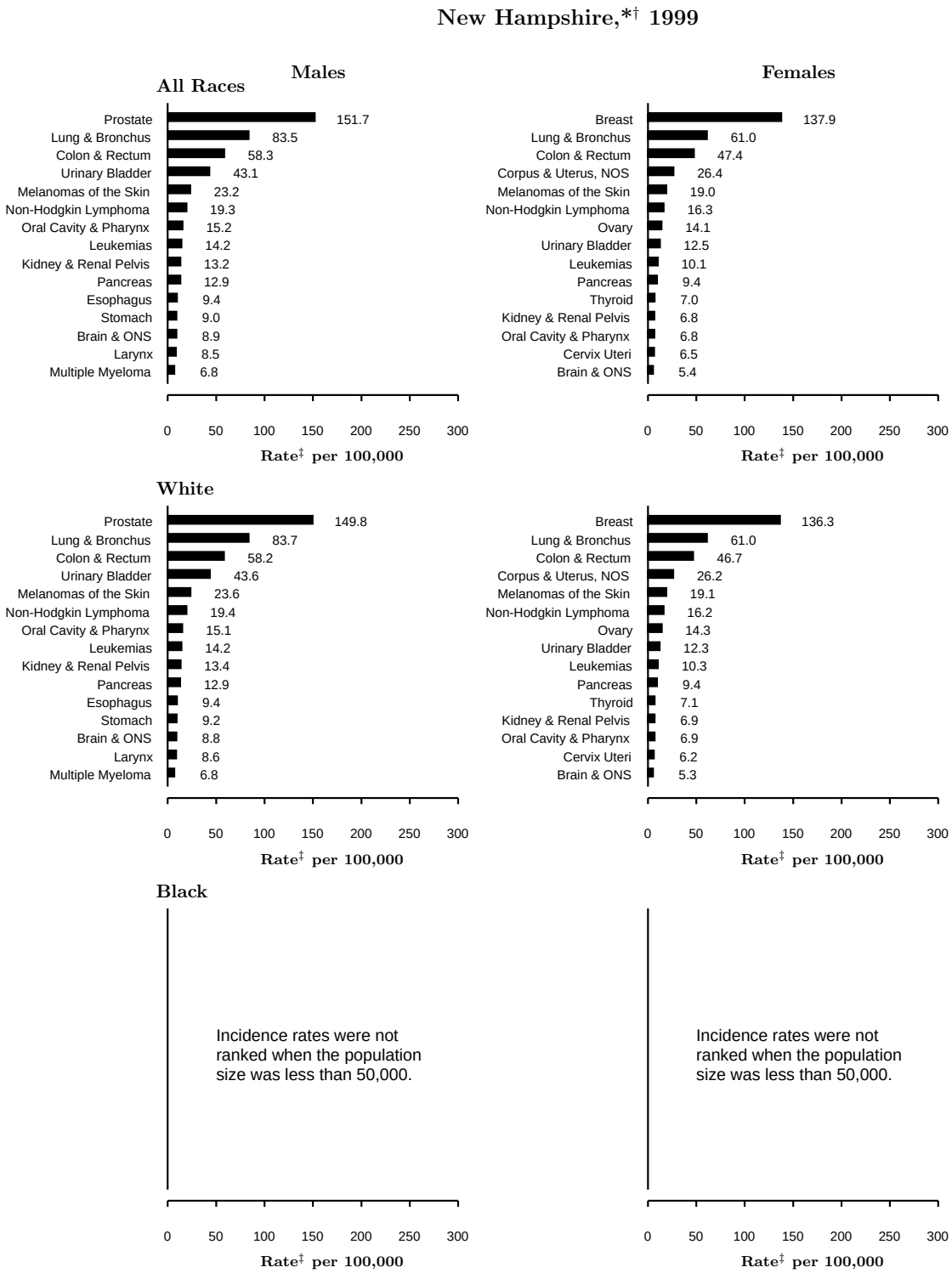
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.28: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



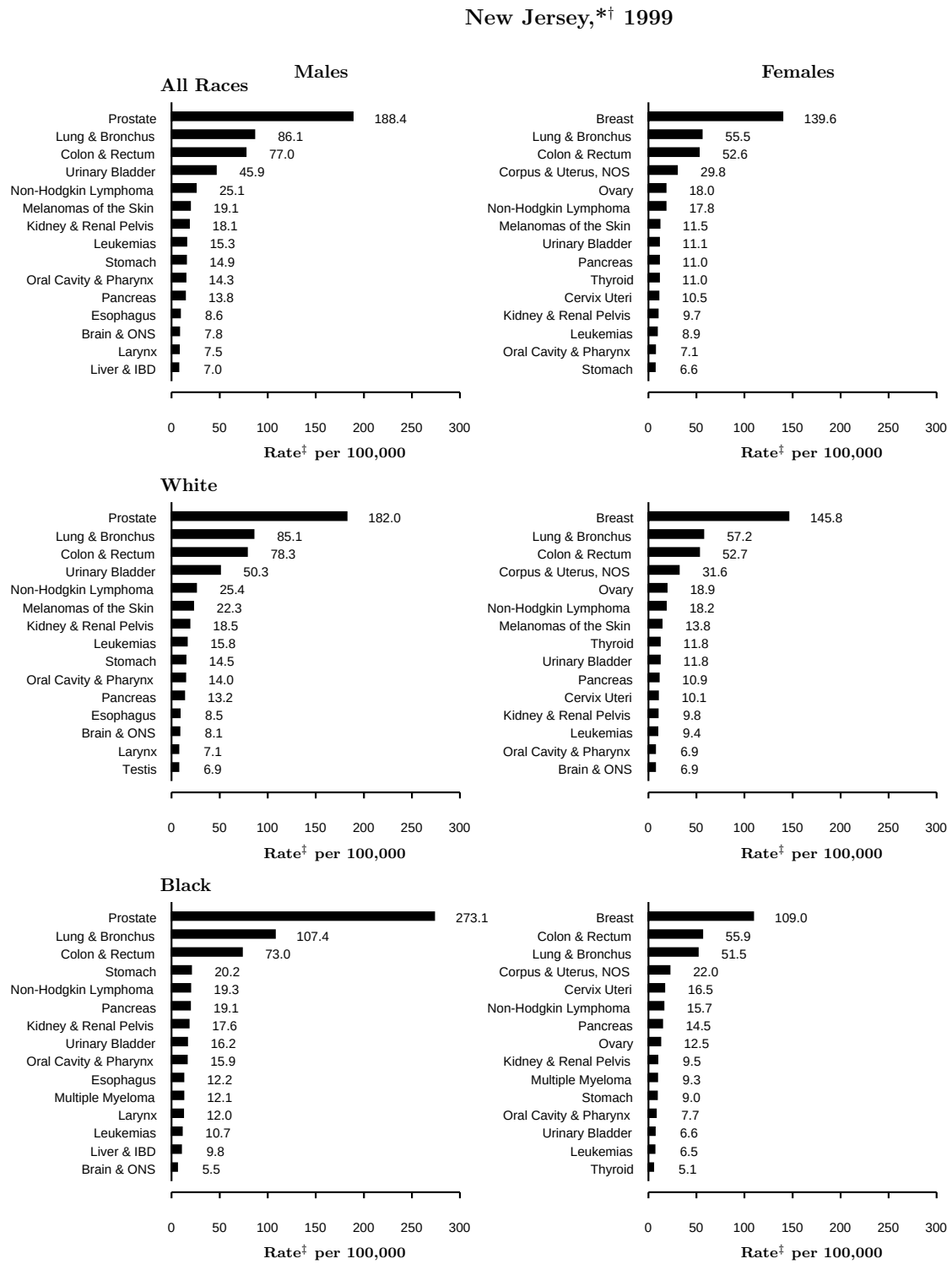
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.29: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



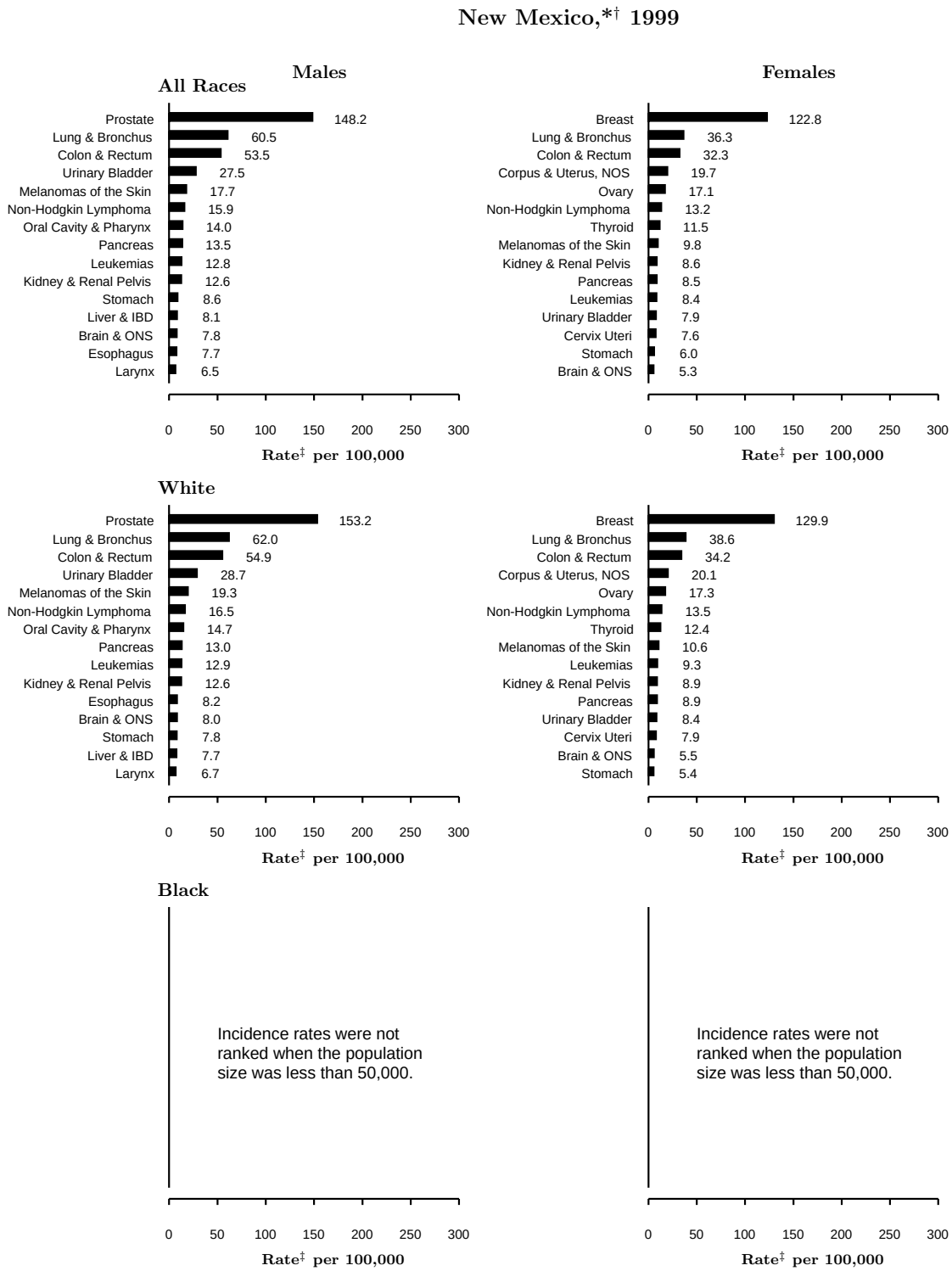
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.30: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



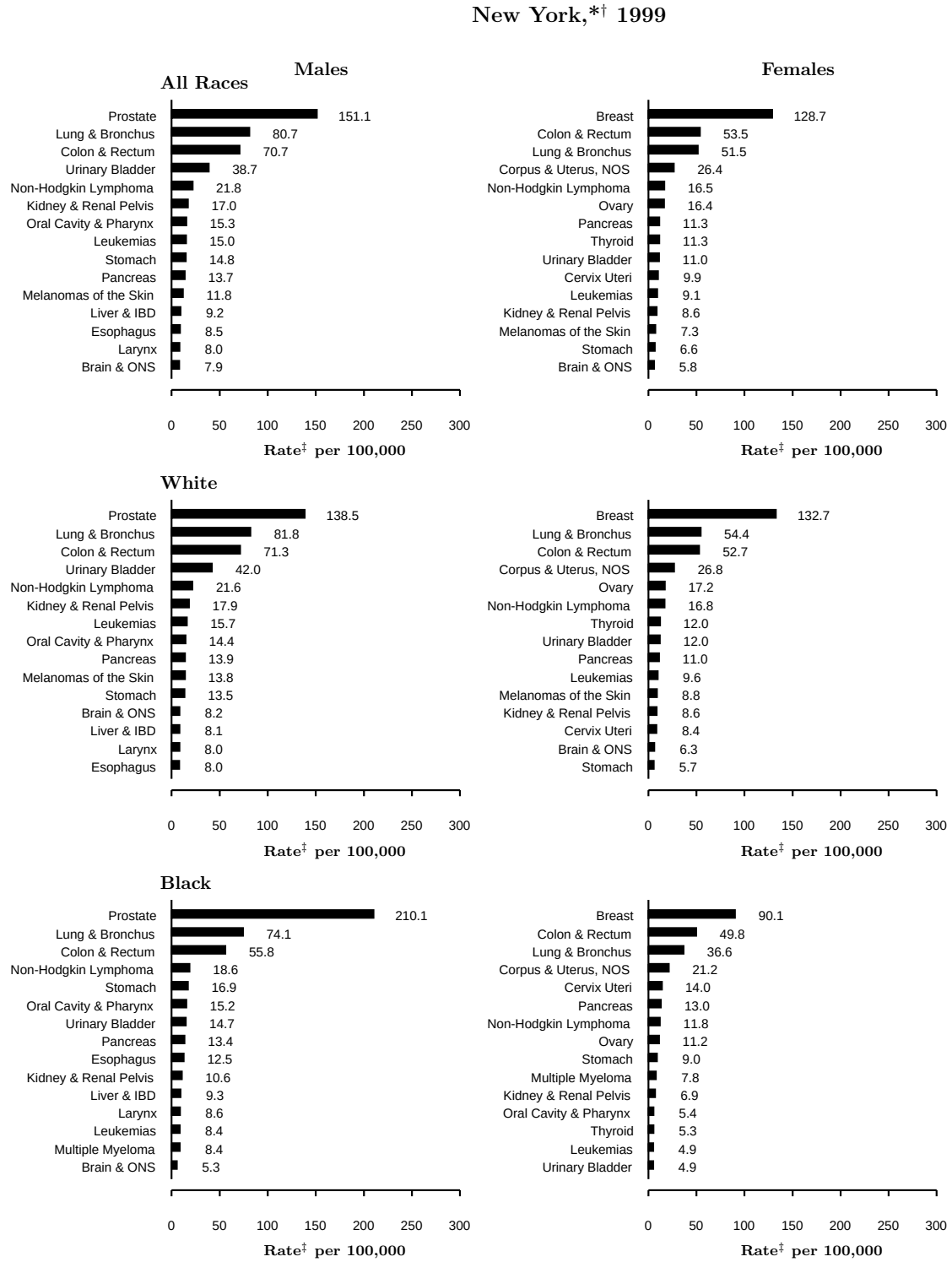
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.31: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



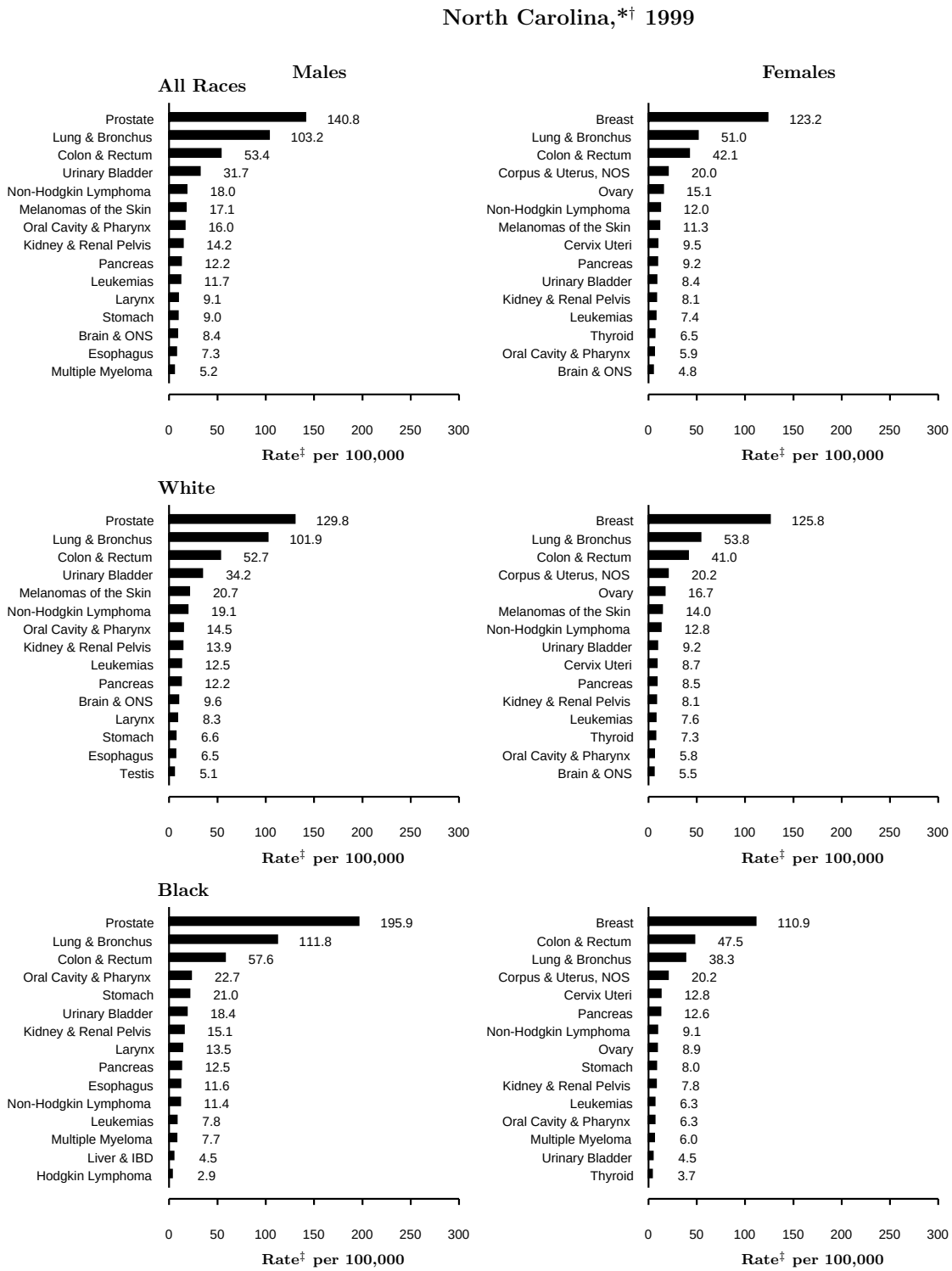
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.32: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



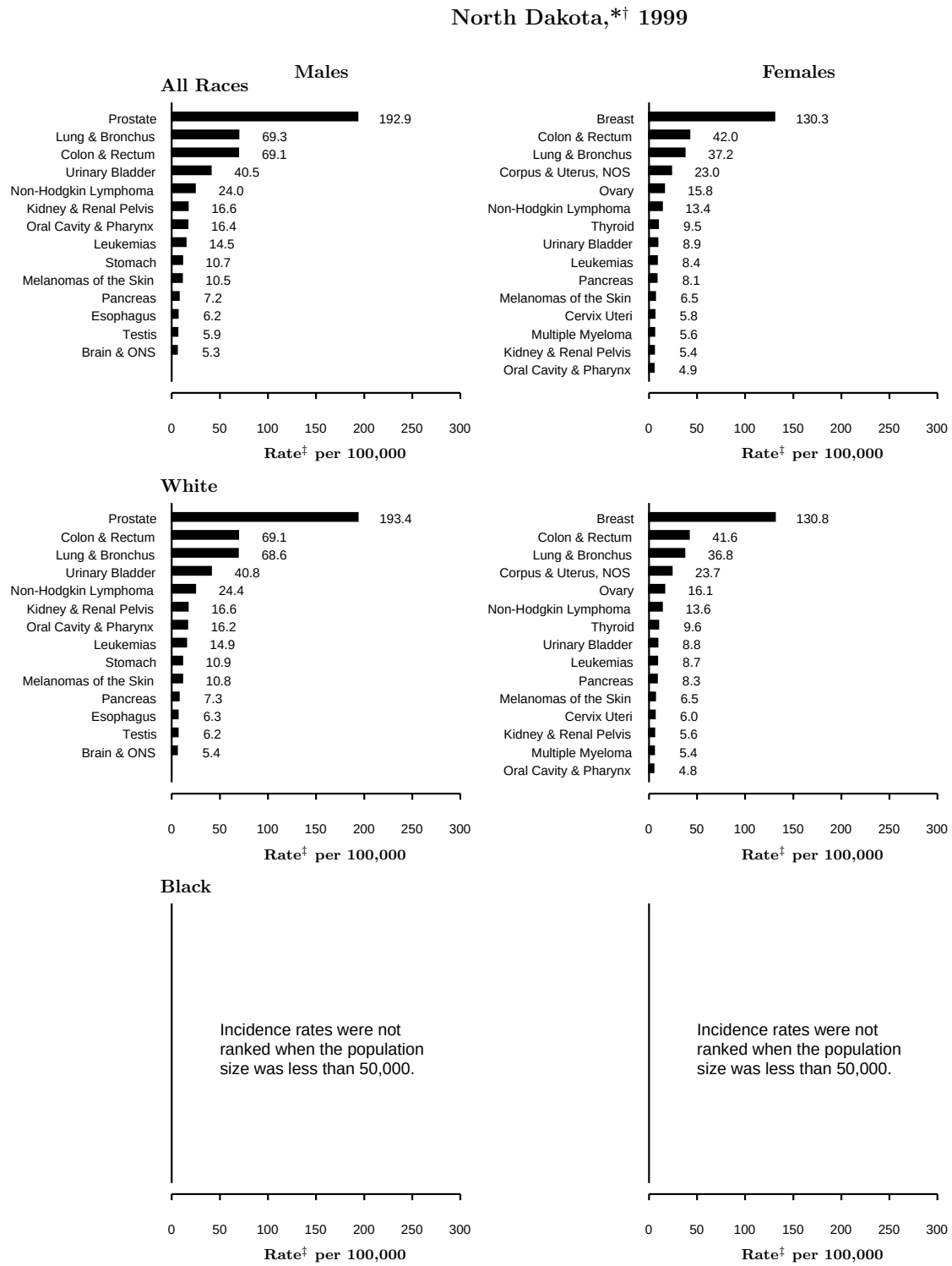
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.33: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



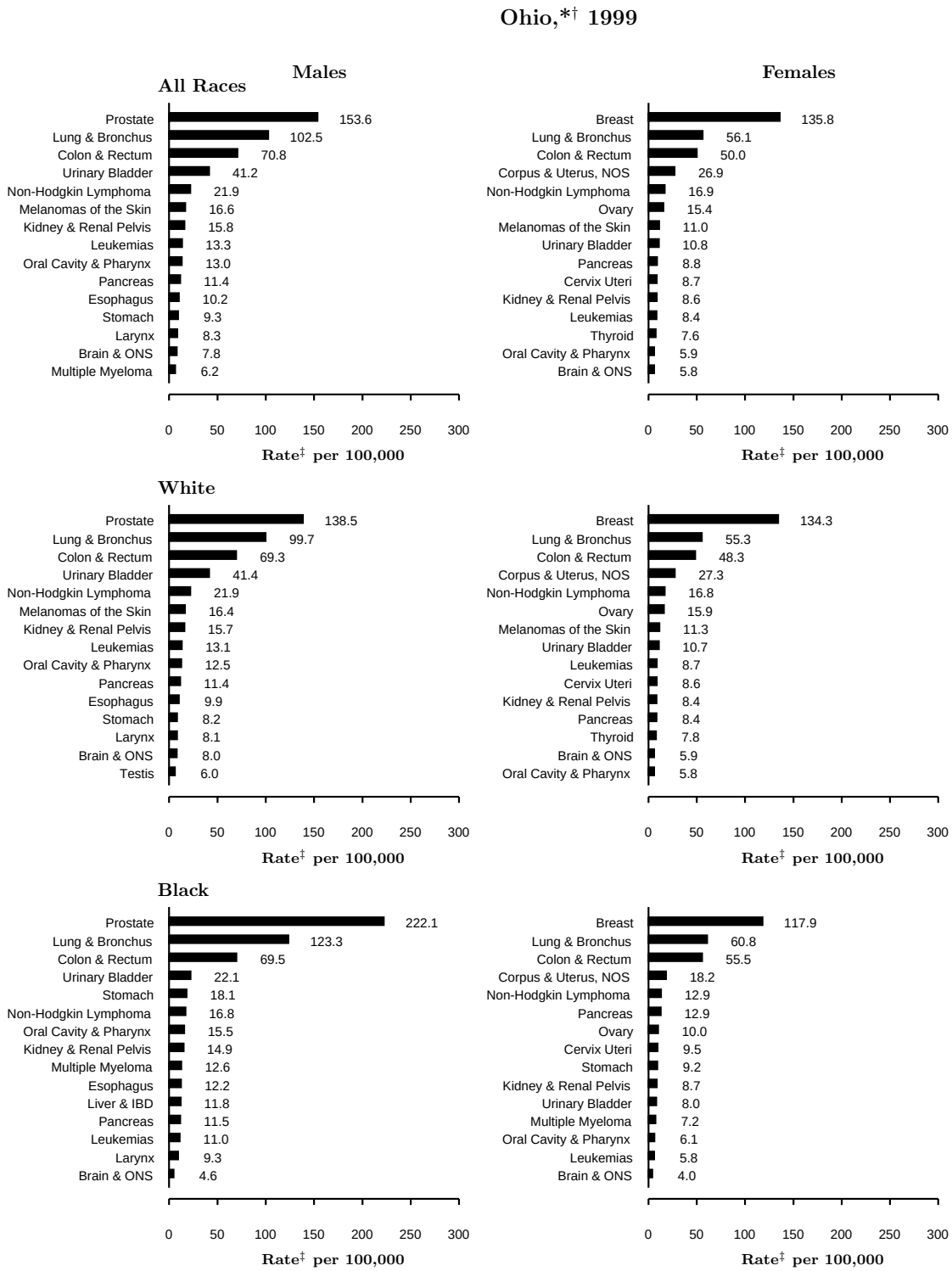
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.34: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

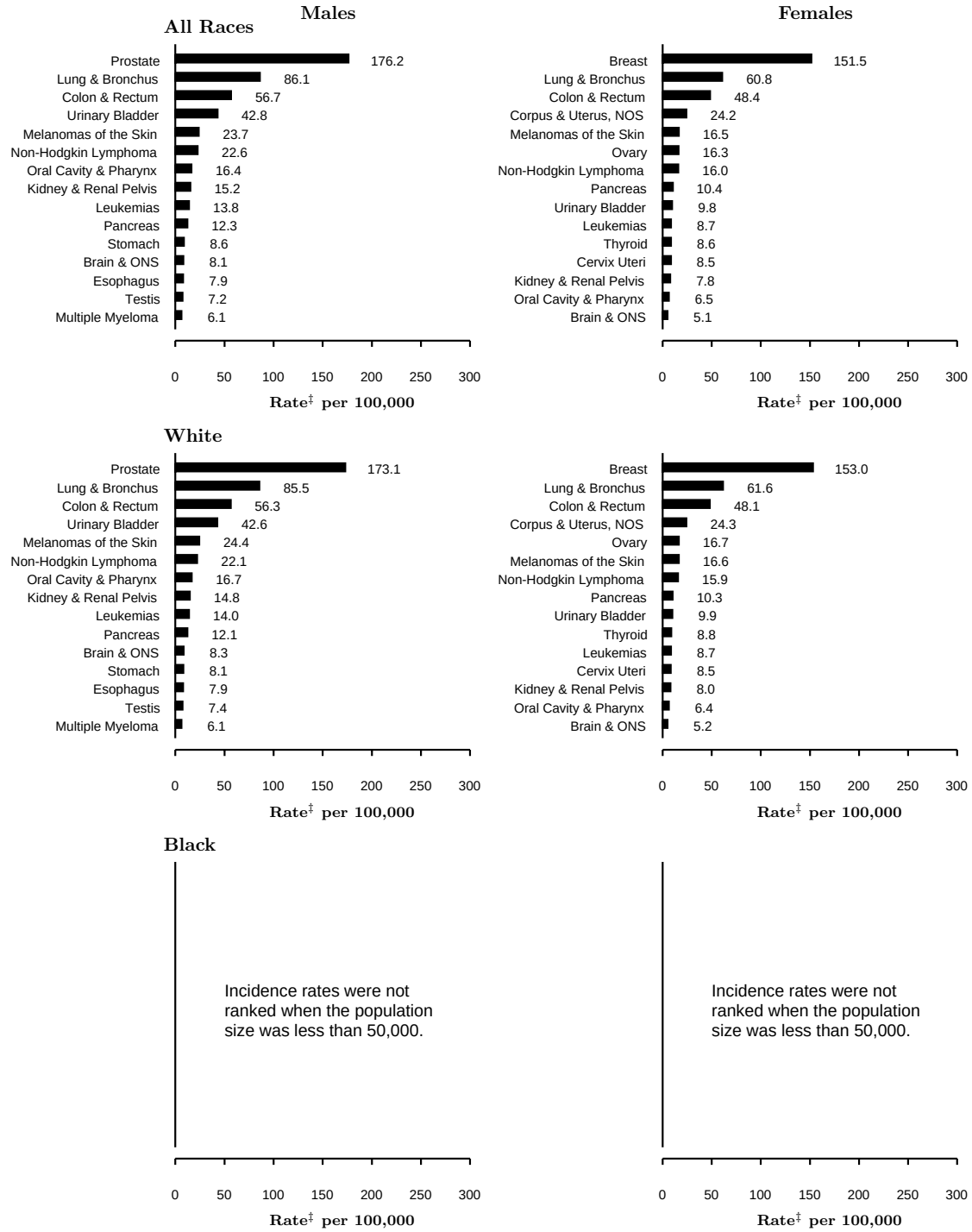
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.35: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Oregon,*† 1999



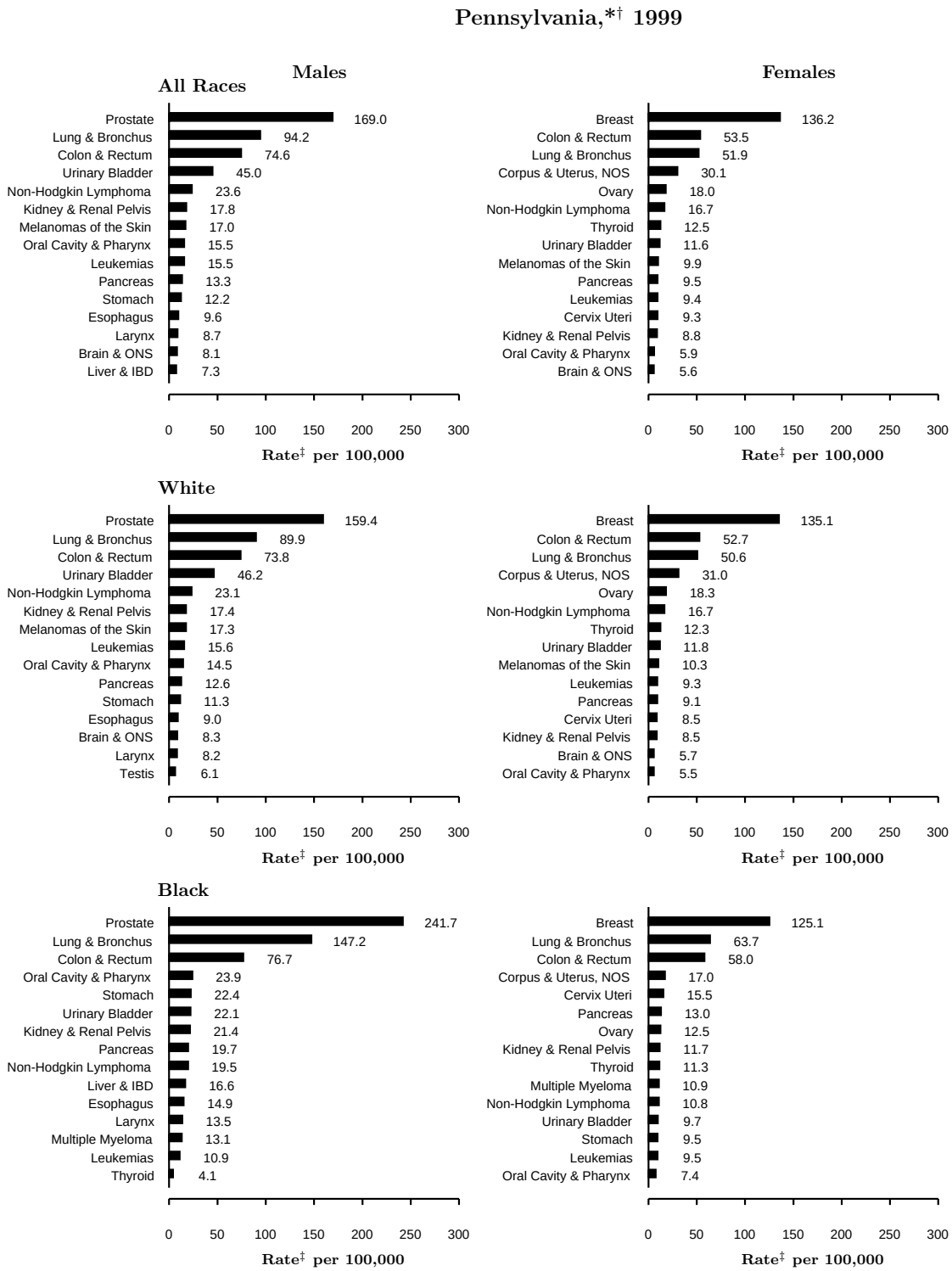
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.36: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



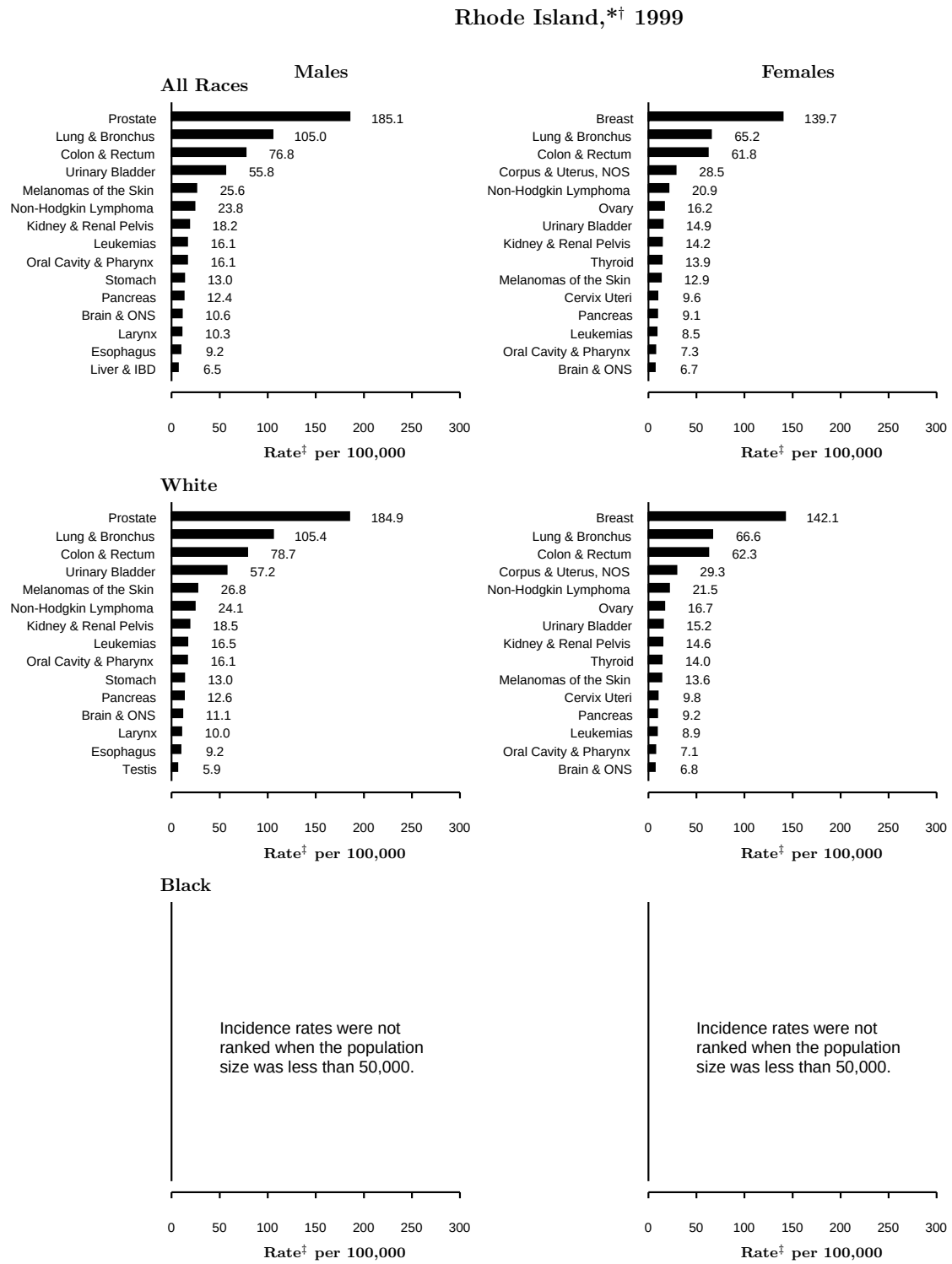
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.37: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



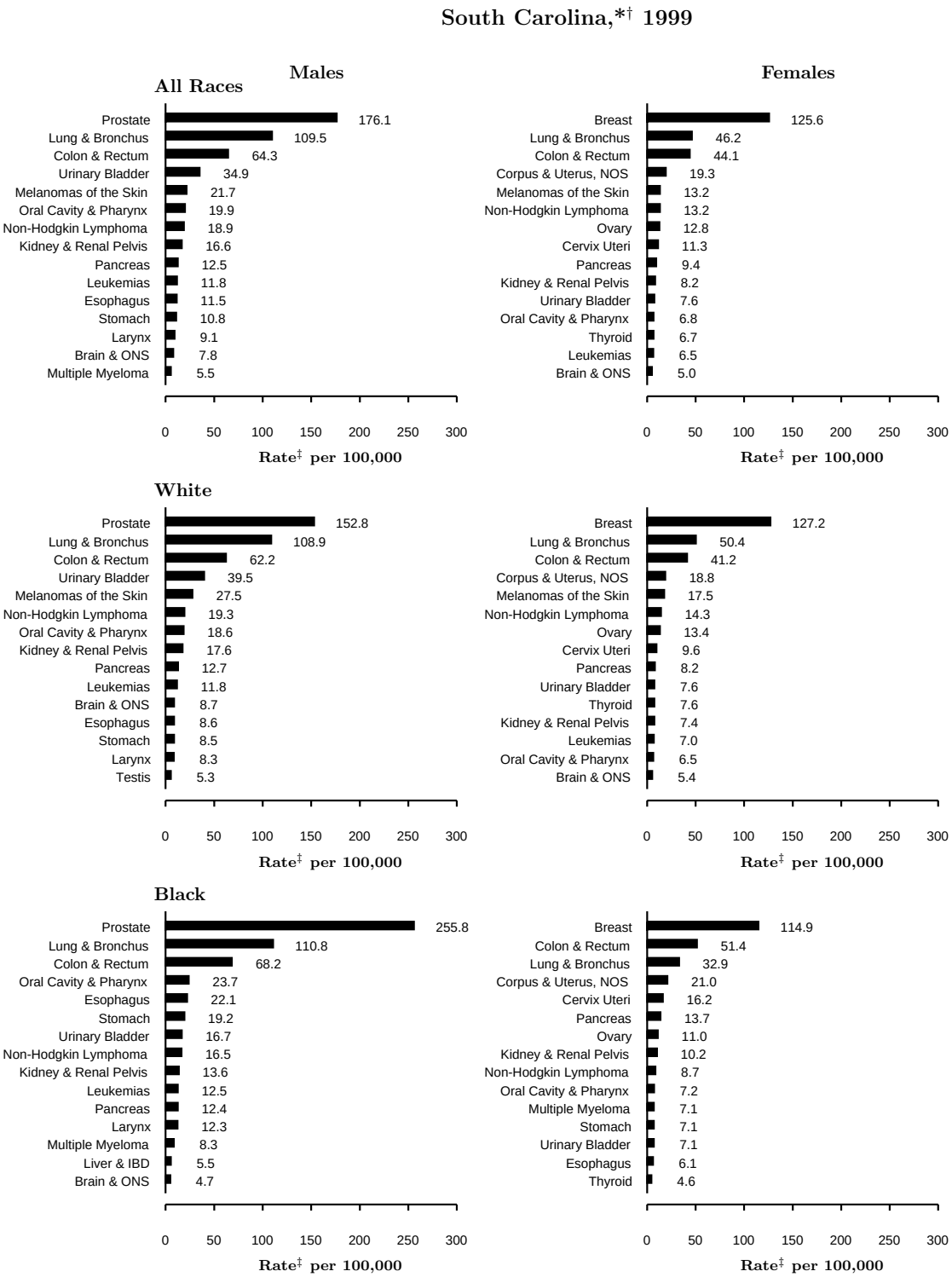
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.38: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



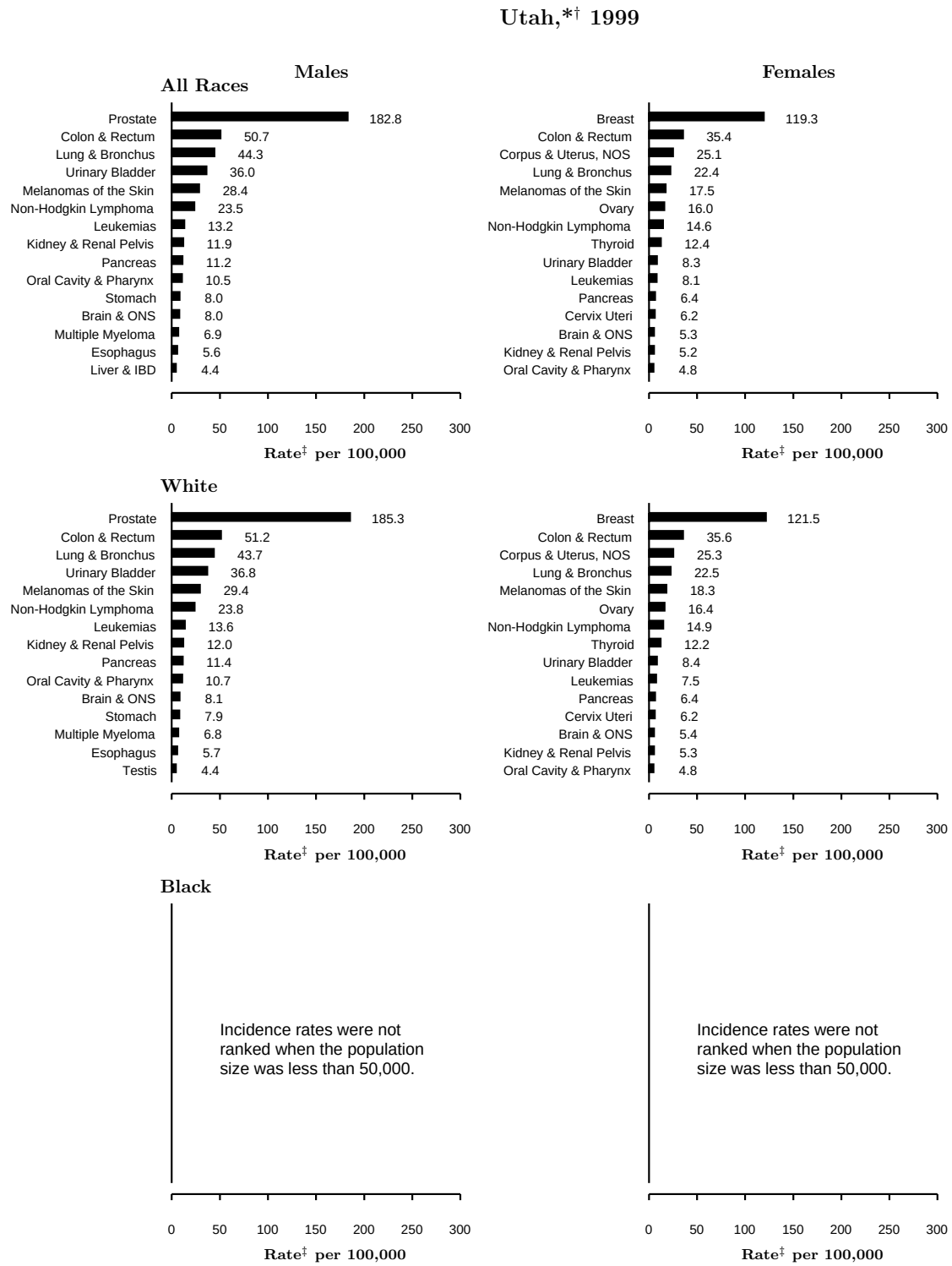
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.39: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



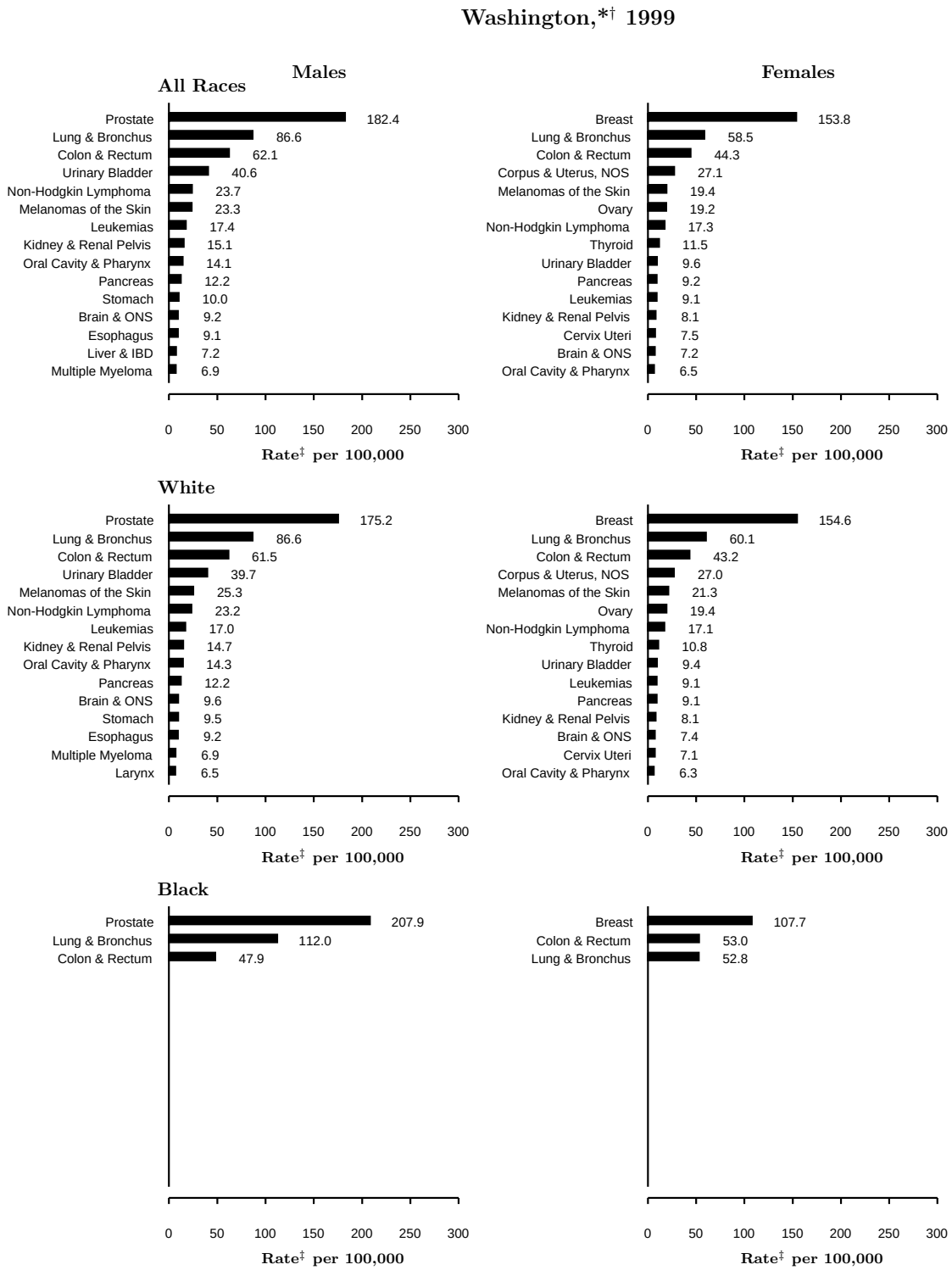
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.40: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

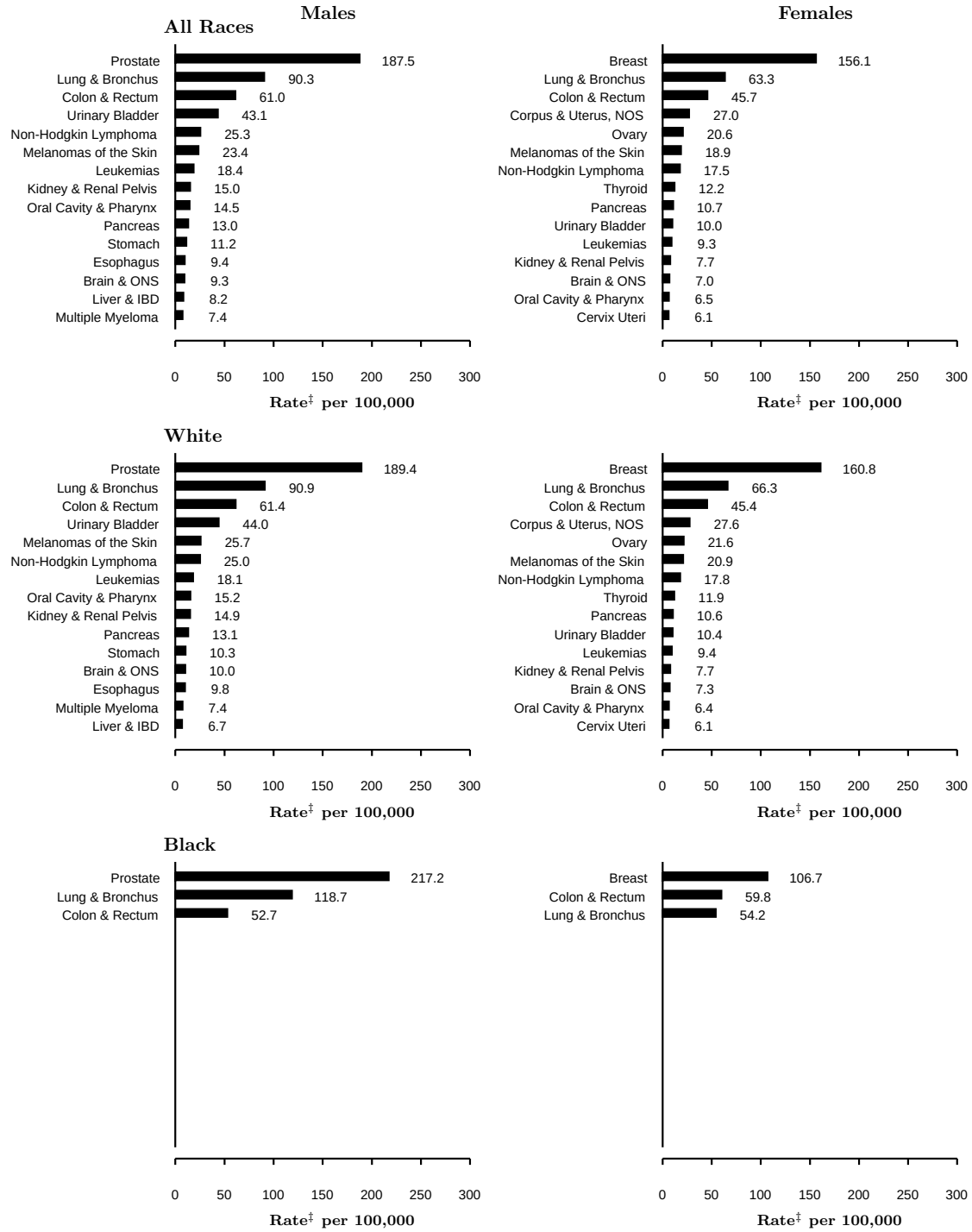
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.41: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories

Seattle-Puget Sound,*† 1999



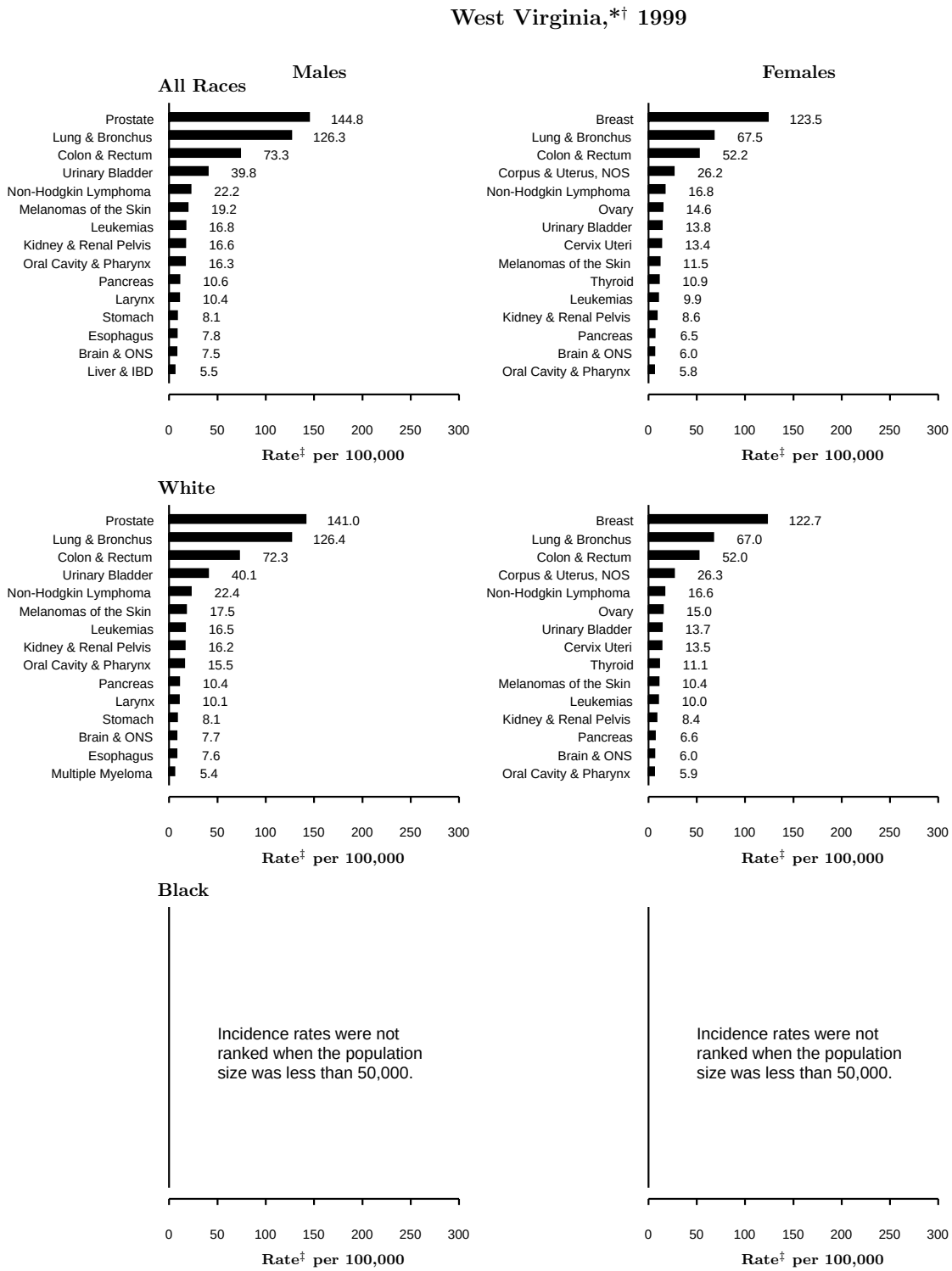
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.42: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



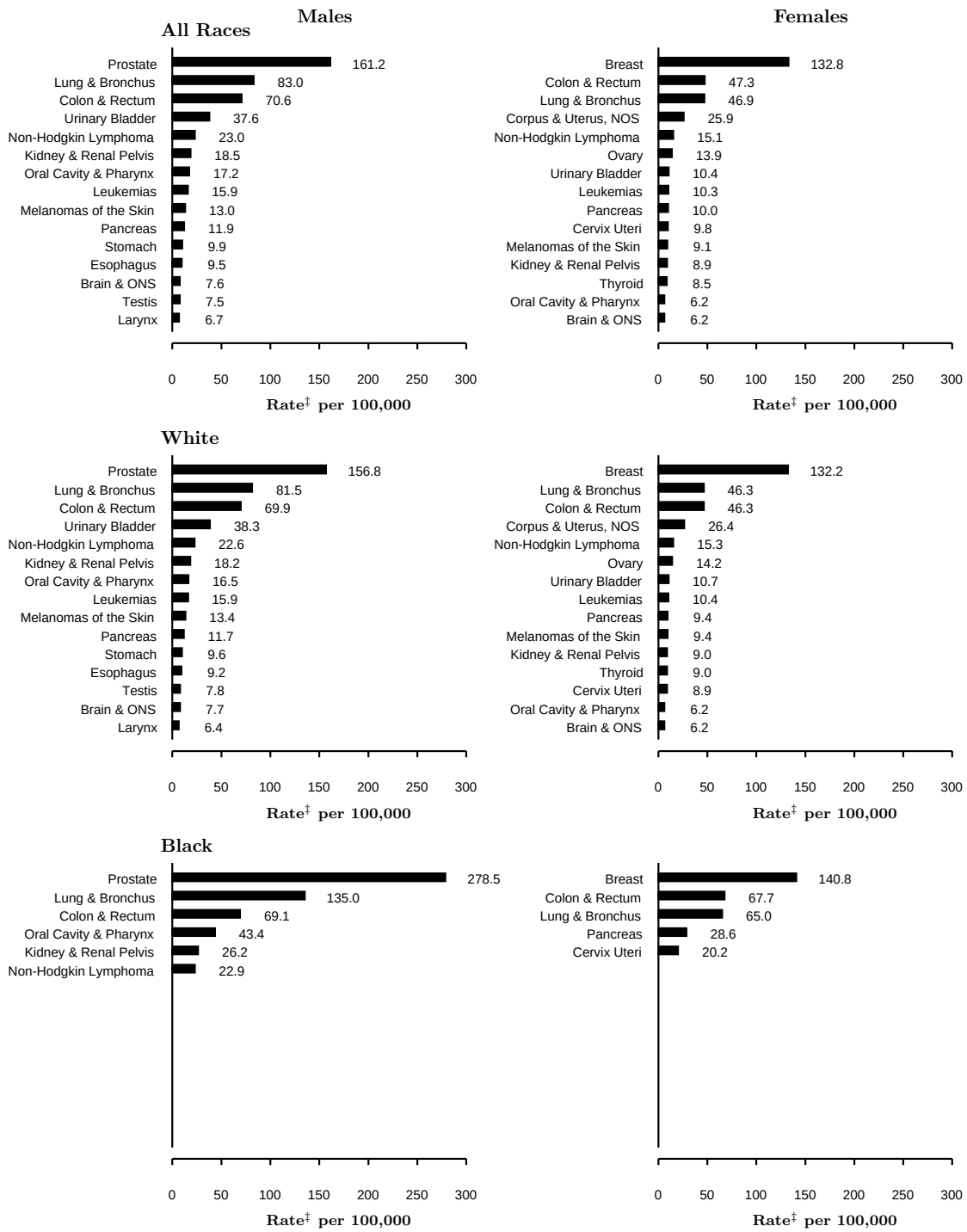
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; ≤ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.43: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



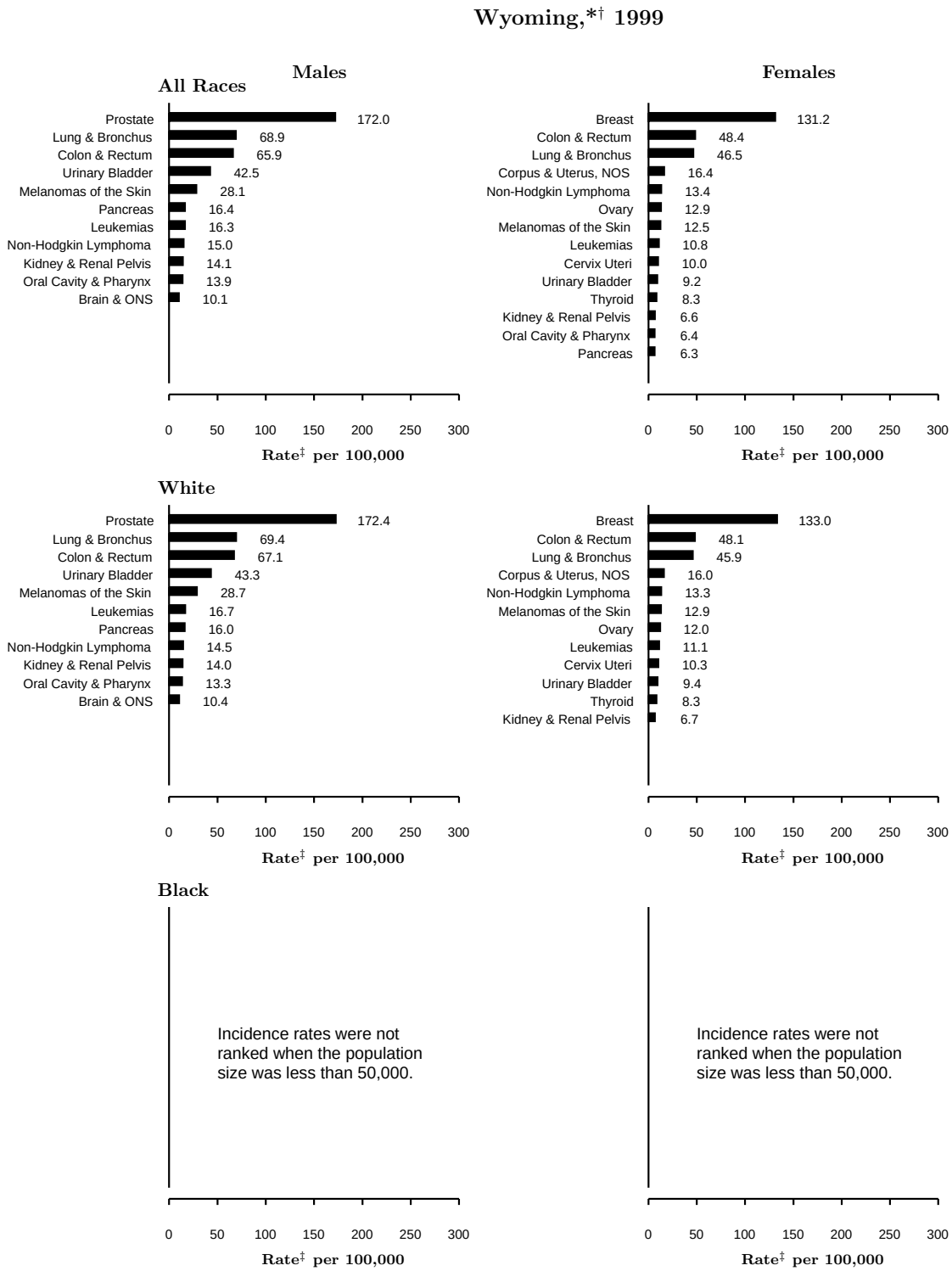
* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Figure 3.44: Invasive Cancer Incidence Rates for the 15 Primary Sites with the Highest Age-Adjusted Incidence Rates within Race- and Sex-Specific Categories



* Data meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

‡ Rates are age-adjusted to the 2000 U.S. standard population. See Table 2.1.1-2.25.2 for 95% confidence intervals for rates and footnote regarding 1999 population denominators. Rates are suppressed and not ranked if case counts are fewer than 16 or if the population of the specific race-sex category is less than 50,000.

Note: ONS - Other Nervous System; NOS - Not Otherwise Specified; IBD - Intrahepatic Bile Duct.
Urinary bladder cases include invasive and *in situ*.

Appendices

Appendix A

State and Metropolitan Area Cancer Registries

National Program of Cancer Registries (NPCR) and Surveillance, Epidemiology, and End Results (SEER) Program

Registries in bold contributed data to this report.

Alabama

Alabama Statewide Cancer Registry
Alabama Department of Public Health
P.O. Box 303017
Montgomery, AL 36130-3017
Phone: (334) 206-5552
Fax: (334) 206-5324
http://www.adph.org/cancer_registry/

Alaska

Alaska Cancer Registry
3601 C Street, Suite 540
P.O. Box 240249
Anchorage, AK 99524-0249
Phone: (907) 269-8000
Fax: (907) 561-1896
http://www.epi.hss.state.ak.us/programs/chronic/

Arizona

Arizona Department of Health Services
Arizona Cancer Registry
2700 North 3rd Street, Suite 4000
Phoenix, AZ 85004
Phone: (602) 542-7308
Fax: (602) 364-0296
http://www.hs.state.az.us/phs/phstats/acr/index.htm

Arkansas

Arkansas Central Cancer Registry
Arkansas Department of Health
Division of Chronic Disease/Disability Prevention
4815 West Markham Street, Slot 7
Little Rock, AR 72205
Phone: (501) 661-2392
Fax: (501) 661-2891
http://www.healthyarkansas.com/arkcancer/arkcancer.html

California

California Department of Health Services
Cancer Surveillance Section
1700 Tribute Road, Suite 100
Sacramento, CA 95815-4402
Phone: (916) 779-0303
Fax: (916) 779-0264
http://www.ccrcal.org/index.htm

Greater Bay Area Cancer Registry

(San Francisco-Oakland and San Jose-Monterey)

Greater Bay Area Cancer Registry
32960 Alvarado-Niles Road, Suite 600
Union City, CA 94578
Phone: (510) 429-2500
Fax: (510) 429-2550
http://www.nccc.org/ResearchandTraining/research_gbareg.html

Los Angeles

Los Angeles Cancer Surveillance Program
1540 Alcazar, CHP-204
Los Angeles, CA 90033
Phone: (323) 442-1574
Fax: (323) 442-2301
http://www.usc.edu/schools/medicine/academic_departments/preventive_med/csp/index.html

Colorado

Colorado Department of Public Health and Environment
Colorado Central Cancer Registry
PPD-CR-A5
4300 Cherry Creek Drive South
Denver, CO 80246
Phone: (303) 692-2542
Fax: (303) 691-7721
http://www.cdphe.state.co.us/pp/cccr/cccrhom.asp

Connecticut

Connecticut Tumor Registry
410 Capitol Avenue
P.O. Box 340308 MS # 13-TMR
Hartford, CT 06134
Phone: (860) 509-7124
Fax: (860) 509-7161
http://www.dph.state.ct.us/OPPE/hptumor.htm

Delaware

Delaware Department of Health and Social Services
Division of Public Health
P.O. Box 637
Dover, DE 19903
Phone: (302) 739-5617
Fax: (302) 739-6617

District of Columbia

District of Columbia Cancer Registry
District of Columbia Department of Health
825 North Capitol Street, N.E., Room 3145
Washington, DC 20002
Phone: (202) 442-5910
Fax: (202) 442-9432
http://www.dchealth.com/dccc/introduction.htm

Florida

Florida Cancer Data System
P.O. Box 016969 (D4-11)
Miami, FL 33101
Phone: (305) 243-3426
Fax: (305) 243-4871
http://fcds.med.miami.edu/

Georgia

Georgia Department of Human Resources
Division of Public Health
2 Peachtree Street, N.W.
14th floor, 14.283
Atlanta, GA 30303
Phone: (404) 657-1943
Fax: (404) 463-0780
http://www.ph.dhr.state.ga.us/programs/cancer/

Atlanta

Georgia Center for Cancer Statistics
1518 Clifton Road, N.E.
Atlanta, GA 30322
Phone: (404) 727-4151
Fax: (404) 727-7261
http://www.sph.emory.edu/GCCS

Hawaii

Hawaii Tumor Registry
1236 Lauhala Street
Honolulu, HI 96813
Phone: (808) 586-9750
Fax: (808) 587-0024
http://planet-hawaii.com/htr/

Idaho

Idaho Hospital Association
Cancer Data Registry of Idaho
615 North 7th Street
Boise, ID 83702
or
P.O. Box 1278
Boise, ID 83701-1278
Phone: (208) 338-5100
Fax: (208) 338-7800
http://www.idcancer.org/

Registries in bold contributed data to this report.

Illinois

Illinois State Cancer Registry
Illinois Department of Public Health
605 West Jefferson Street
Springfield, IL 62761
Phone: (217) 785-1873
Fax: (217) 524-1770
http://www.idph.state.il.us/about/epi/cancer.htm

Indiana

Indiana State Department of Health
State Cancer Registry
2 North Meridian Street, Section 7-D
Indianapolis, IN 46204
Phone: (317) 233-7424
Fax: (317) 233-7722
http://www.state.in.us/isdh/dataandstats/data_and_statistics.htm

Iowa

State Health Registry of Iowa
250 FB Building
Iowa City, IA 52242
Phone: (319) 335-8508
Fax: (319) 335-8610
http://www.shri.us/

Kansas

Kansas Cancer Registry
University of Kansas Medical Center
3901 Rainbow Boulevard
Kansas City, KS 66160-7313
Phone: (913) 588-2744
Fax: (913) 588-2780
http://www.kumc.edu/som/kcr/

Kentucky

Kentucky Cancer Registry
2365 Harrodsburg Road
Lexington, KY 40504
Phone: (859) 219-0773, ext. 225
Fax: (859) 219-0557
http://web.kcr.uky.edu/index.html

Louisiana

Louisiana Tumor Registry
Louisiana State University Health Sciences Center—New Orleans
1600 Canal Street, Suite 900A
New Orleans, LA 70112
Phone: (504) 568-4716
Fax: (504) 568-2493
http://www.lcltfb.org/registry.html

Maine

Maine Cancer Registry
Division of Family and Community Health
Bureau of Health
11 State House Station
Key Bank Plaza 4th Floor
Augusta, ME 04333-0011
For items sent by FedEx, please use the zip code 04330.
Phone: (207) 287-5196
Fax: (207) 287-4631
http://www.state.me.us/dhs/bohdcfh/mcr/index2.html

Maryland

Maryland Cancer Registry
Maryland Department of Health and Mental Hygiene
201 West Preston Street, Suite 400
Baltimore, MD 21201
Phone: (410) 767-4055 *or* **-5521**
Fax: (410) 333-5218

Massachusetts

Massachusetts Department of Public Health
Massachusetts Cancer Registry
250 Washington Street, 6th Floor
Boston, MA 02108-4619
Phone: (617) 624-5645
Fax: (617) 624-5697
http://www.state.ma.us/dph/bhsre/mcr/canreg.htm

Registries in bold contributed data to this report.

Michigan

Michigan Cancer Surveillance Program
Vital Records and Health Data Development Section
Epidemiological Services Division
Bureau of Epidemiology
3423 North Martin Luther King Boulevard
P.O. Box 30691
Lansing, MI 48909
Phone: (517) 335-8702
Fax: (517) 335-8711
www.michigan.gov/mdch/

Detroit

Karmanos Cancer Institute
110 East Warren Avenue
Detroit, MI 48201
Phone: (313) 833-0715, ext. 2329
Fax: (313) 831-7806
http://www.karmanos.org/epid/

Minnesota

Minnesota Cancer Surveillance System
Minnesota Department of Health
Chronic Disease and Environmental Epidemiology
P.O. Box 9441
Minneapolis, MN 55440-9441
Phone: (612) 676-5374
Fax: (612) 676-5099
http://www.health.state.mn.us/divs/dpc/cdee/mcss.htm/

Mississippi

Mississippi Department of Health
P.O. Box 1700
Jackson, MS 39215-1700
Phone: (601) 576-7411
Fax: (601) 576-7407
http://www.cancer.msdh.state.ms.us/

Missouri

Missouri Department of Health
Office of Surveillance, Research and Evaluation
Division of Chronic Disease Prevention and Health Promotion
P.O. Box 570
Jefferson City, MO 65102-0570
Phone: (573) 522-2880
Fax: (573) 522-2882

Montana

Montana Central Tumor Registry
Montana Department of Public Health and Human Services
Health Policy and Services Division
Cogswell Building, P.O. Box 202952
Helena, MT 59620-2952
Phone: (406) 444-6786
Fax: (406) 444-6557
http://www.dphhs.state.mt.us/

Nebraska

Nebraska Department of Health and Human Services
Public Health Assurance Division
Regulation and Licensure
P.O. Box 95007
Lincoln, NE 68509-5007
Phone: (402) 471-0147
Fax: (402) 471-9728

Nevada

Nevada State Cancer Registry
3811 West Charleston Boulevard, Suite 208
Las Vegas, NV 89102
Phone: (702) 486-6260, ext. 224
Fax: (702) 486-7602

Registries in bold contributed data to this report.

New Hampshire

Bureau of Health Statistics and Data Management
New Hampshire Department of Health and Human Services
Office of Community and Public Health
Division of Epidemiology and Vital Statistics
6 Hazen Drive
Concord, NH 03301-6527
Phone: (603) 271-5926
Fax: (603) 271-8710

New Jersey

New Jersey State Cancer Registry
New Jersey Department of Health and Senior Services
P.O. Box 369
Trenton, NJ 08625-0369
Phone: (609) 588-3500
Fax: (609) 588-3638
http://www.state.nj.us/health/cancer/statistics.htm

New Mexico

New Mexico Tumor Registry
2325 Camino de Salud, N.E.
Albuquerque, NM 87131-5306
Phone: (505) 272-5541
Fax: (505) 272-8572
http://hsc.unm.edu/epiccpro/

New York

New York State Cancer Registry
New York State Department of Health
Corning Tower, Room 536
Empire State Plaza
Albany, NY 12237-0679
Phone: (518) 474-2255
Fax: (518) 473-6789
http://www.health.state.ny.us/nysdoh/cancer/cancer.htm

North Carolina

North Carolina Central Cancer Registry
1908 Mail Service Center
Raleigh, NC 27699-1908
Phone: (919) 715-4558
Fax: (919) 733-8485
http://www.schs.state.nc.us/dphmoved.html

North Dakota

North Dakota Department of Health
Division of Health Promotion
600 East Boulevard Avenue, Department 301
Bismarck, ND 58505-0200
Phone: (701) 328-2419
Fax: (701) 328-2036
http://www.health.state.nd.us/cancerregistry

Ohio

Ohio Department of Health
Bureau of Health Surveillance, Information, and Operational Support
P.O. Box 118
Columbus, OH 43266-0118
Phone: (614) 466-5350
Fax: (614) 644-1909
http://www.odh.state.oh.us/ODHPrograms/CI_SURV/ci_surv1.htm

Oklahoma

Oklahoma Central Cancer Registry
Chronic Disease Service
Oklahoma Department of Health
1000 Northeast 10th Street
Oklahoma City, OK 73117-1299
Phone: (405) 271-4072, ext. 57123
Fax: (405) 271-5181
http://www.health.state.ok.us/program/cds/registry.html

Registries in bold contributed data to this report.

Oregon

Oregon State Cancer Registry
Oregon Health Division
800 Northeast Oregon Street, Suite 730
Portland, OR 97232
Phone: (503) 731-4858
Fax: (503) 731-4848
http://www.ohd.hr.state.or.us/oscar/welcome.htm

Pennsylvania

Pennsylvania Cancer Registry
Division of Statistical Registries
Pennsylvania Department of Health
555 Walnut Street, 6th Floor
Harrisburg, PA 17101-1914
Phone: (717) 783-2548
Fax: (717) 772-3258
http://www.health.state.pa.us/stats/

Puerto Rico

Departamento de Salud de Puerto Rico
Registro Central de Puerto Rico
P.O. Box 70184
San Juan, PR 00927
Phone: (787) 274-7866
Fax: (787) 274-3347

Republic of Palau

Ministry of Health, Republic of Palau
P.O. Box 6027
Koror, PW 96940
Phone: 011-(680) 488-4612
Fax: 011-(680) 488-1211

Rhode Island

Rhode Island Department of Health
3 Capitol Hill
Providence, RI 02908-5097
Phone: (401) 222-1172
Fax: (401) 222-3551

South Carolina

South Carolina Department of Health and Environmental Control
PHSIS/SCCCR
2600 Bull Street
Columbia, SC 29201
Phone: (803) 898-3626
Fax: (803) 898-3599

South Dakota

South Dakota Cancer Registry
Office of Health Promotion, Health and Medical Services
Department of Health
615 East 4th Street
Pierre, SD 57501
Phone: (605) 773-5740
Fax: (605) 773-5509

Tennessee

Tennessee Cancer Registry
Cordell Hull Building, 6th Floor North
425 5th Avenue, North
Nashville, TN 37247
Phone: (615) 532-7903
Fax: (615) 532-7904

Texas

Texas Department of Health
Cancer Registry Division
Bureau of Epidemiology
1100 West 49th Street
Austin, TX 78756-3199
Phone: (512) 458-7523
Fax: (512) 458-7681
http://www.tdh.state.tx.us/tcr/

Utah

Utah Cancer Registry
546 Chipeta Way, Suite 410
Salt Lake City, UT 84108
Phone: (801) 581-8407
Fax: (801) 581-4560
http://www.uuhsc.utah.edu/ucr

Registries in bold contributed data to this report.

Vermont
Vermont Cancer Registry
Vermont Department of Health
P.O. Box 70
Burlington, VT 05402-0070
Phone: (802) 863-7644
Fax: (802) 651-1787
http://www.healthyvermonters.info/

Virgin Islands
Virgin Islands Department of Health
3500 Estate Richmond
Charles Harwood Complex
Christiansted, St. Croix, VI 00820-4370
Phone: (340) 773-1311, ext. 3082
Fax: (340) 773-0850

Virginia
Virginia Department of Health
P.O. Box 2448
Room 114
Richmond, VA 23218
Phone: (804) 786-1668
Fax: (804) 371-4061
http://www.vdh.state.va.us/epi/cancer/index.htm

Washington
Washington State Cancer Registry
Department of Health
7211 Cleanwater Lane, Building 10
Olympia, WA 98504-47835
Phone: (360) 236-3676
Fax: (360) 586-2714
http://www.doh.wa.gov

Seattle-Puget Sound
Seattle-Puget Sound Cancer Surveillance System
1100 Fairview Avenue North, MP-826
MP-1146
Seattle, WA 98109-1024
Phone: (206) 667-4707
Fax: (206) 667-4870
http://css.fhcrc.org

West Virginia
West Virginia Department of Health and Human Resources
Bureau for Public Health
West Virginia Cancer Registry
350 Capitol Street, Room 126
Charleston, WV 25301
Phone: (304) 558-6421
Fax: (304) 558-4463
http://www.wvdhhr.org/bph/oehp/sdc/cancerrep.htm

Wisconsin
Wisconsin Department of Health and Family Services
Bureau of Health Information
Division of Health Care Financing
P.O. Box 309
Madison, WI 53701-0309
Phone: (608) 266-8926
Fax: (608) 261-6380
http://www.dhfs.state.wi.us/wcrs/index.htm

Wyoming
Wyoming Cancer Surveillance Program
Wyoming Department of Health
6101 Yellowstone Road, Room 259A
Cheyenne, WY 82002
Phone: (307) 777-3477
Fax: (307) 777-8604
http://wdhfs.state.wy.us/cancer

Registries in bold contributed data to this report.

Appendix B

National Program of Cancer Registries

Scientific Workgroup Members

Toni H. Bounds, PhD, MPH, Tennessee Cancer Registry
Judy Brockhouse, Wyoming Cancer Surveillance Program
Vivien W. Chen, PhD, Louisiana Tumor Registry
Catherine N. Correa, PhD, MPH, Louisiana Tumor Registry
Susan T. Gershman, PhD**,** MS, MPH, CTR, Massachusetts Cancer Registry
Georgette G. Haydu, MS, Ohio Cancer Incidence Surveillance System
Dale Herman, MSPH, North Carolina Central Cancer Registry
Holly L. Howe, PhD, North American Association of Central Cancer Registries
Jeannette Jackson-Thompson, PhD, MSPH, Missouri Cancer Registry
Amy Kahn, MS, CTR, New York State Cancer Registry
Betsy Kohler, MPH, CTR, New Jersey State Cancer Registry
Sue Min Lai, PhD, MS, MBA, Kansas Cancer Registry
Jill A. MacKinnon, CTR, Florida Cancer Data System
Stacey Neloms, MPH, Maryland Cancer Registry
Margaret Parsons, MD, MPH, Maine Cancer Registry
Maria J. Schymura, PhD, New York State Cancer Registry
Tiefu Shen, MD, PhD, Illinois State Cancer Registry
Laura Stephenson, Wisconsin Cancer Reporting System
Thomas C. Tucker, PhD, MPH, Kentucky Cancer Registry
Nancy S. Weiss, PhD, Texas Cancer Registry
Brian D. Wright, BS, Pennsylvania Cancer Registry
William E. Wright, PhD, California Cancer Registry
Xiao Cheng Wu, MD, MPH, CTR, Louisiana Tumor Registry

Logistics Workgroup Members

Toshi Abe, MSW, CTR, New Jersey State Cancer Registry
Glenn Copeland, MBA, Michigan Cancer Surveillance Program
Colleen C. McLaughlin, MPH, CTR, New York State Cancer Registry
Frances Michaud, CTR, Metropolitan Atlanta & Rural Georgia SEER Registry
Lynn A.G. Ries, MS, National Cancer Institute
Frances E. Ross, CTR, Kentucky Cancer Registry
Jennifer E. Seiffert, MLIS, CTR, TRW under contract to CDC
Donald K. Shipley, MS, Oregon State Cancer Registry
Jan Snodgrass, CTR, Illinois State Cancer Registry
Laura Stephenson, Wisconsin Cancer Reporting System
Reda Wilson, MPH, RHIT, CTR, Alabama Statewide Cancer Registry

Appendix C

National Partner Organizations

National partner organizations are crucial to the success of cancer registration and cancer surveillance in the United States. This document, and many advances in cancer surveillance in the United States, would not have been possible without the tireless efforts and many achievements of the following organizations:

American Cancer Society (ACS)
1599 Clifton Road NE
Atlanta, GA 30329-4251
Phone: (404) 329-5738
Fax: (404) 327-6450
http://www.cancer.org

American College of Surgeons (ACoS) Commission on Cancer (COC)
633 North Saint Clair Street
Chicago, IL 60611-3211
Phone: (312) 202-5085
Fax: (312) 202-5009
http://www.facs.org/dept/cancer/index.html

American Joint Committee on Cancer (AJCC)
633 North Saint Clair Street
Chicago, IL 60611-3211
Phone: (312) 202-5000
Fax: (312) 202-5009
http://www.cancerstaging.org

National Cancer Registrars Association (NCRA)
1310 Braddock Place, Suite 102
Alexandria, VA 22314
Phone: (703) 299-6640
Fax: (703) 299-6620
http://www.ncra-usa.org

North American Association of Central Cancer Registries (NAACCR)
2121 West White Oaks Drive, Suite C
Springfield, IL 62704-6495
Phone: (217) 698-0800
Fax: (217) 698-0188
http://www.naaccr.org

Appendix D

Table D.1: Invasive Cancer Incidence, Case Counts by Primary Site, Sex, and Race (All Races, White, Black), United States: NPCR and SEER Program Registries That Meet Quality Criteria, 1999*

	Case Counts					
	Males			Females		
	All Races	White	Black	All Races	White	Black
All Sites	515,975	446,622	46,680	495,954	434,366	41,465
Oral Cavity and Pharynx	15,125	12,770	1,625	7,461	6,365	698
Lip	1,446	1,366	~	397	371	~
Tongue	3,664	3,194	345	1,831	1,587	136
Salivary Gland	1,408	1,254	95	1,015	877	86
Floor of Mouth	1,139	966	142	572	497	58
Gum and Other Mouth	1,972	1,647	245	1,668	1,450	140
Nasopharynx	834	530	99	412	265	59
Tonsil	2,089	1,766	250	686	581	89
Oropharynx	613	470	121	229	185	38
Hypopharynx	1,418	1,135	231	414	349	56
Other Oral Cavity and Pharynx	542	442	87	237	203	29
Digestive System	102,879	88,471	9,625	92,522	79,288	9,382
Esophagus	8,207	6,987	994	2,654	2,203	379
Stomach	10,082	8,077	1,231	6,345	4,896	932
Small Intestine	1,858	1,568	222	1,676	1,390	231
Colon and Rectum	60,642	53,370	4,936	59,892	52,062	5,622
Colon excluding Rectum	42,428	37,201	3,715	45,394	39,321	4,483
Rectum and Rectosigmoid Junction	18,214	16,169	1,221	14,498	12,741	1,139
Anus, Anal Canal and Anorectum	1,114	958	119	1,722	1,523	143
Liver and Intrahepatic Bile Duct	6,664	5,055	782	3,428	2,722	368
Gallbladder	715	609	60	1,863	1,607	163
Other Biliary	1,403	1,244	91	1,392	1,227	99
Pancreas	11,303	9,821	1,124	11,876	10,151	1,332
Retroperitoneum	409	355	35	417	354	50
Peritoneum, Omentum and Mesentery	191	176	~	919	853	37
Other Digestive Organs	291	251	23	338	300	26
Respiratory System	93,162	81,230	9,354	67,128	59,864	5,650
Nose, Nasal Cavity and Middle Ear	804	683	80	625	545	50
Larynx	7,513	6,355	950	2,018	1,708	268
Lung and Bronchus	82,869	72,372	8,233	63,929	57,099	5,305
Pleura	1,651	1,546	60	416	392	16
Trachea and Other Respiratory Organs	325	274	31	140	120	~
Bones and Joints	1,066	924	93	883	758	82
Soft Tissue including Heart	3,215	2,722	332	2,777	2,367	275
Skin excluding Basal and Squamous	20,522	19,027	396	15,084	13,942	237
Melanomas of the Skin	18,178	17,142	94	13,739	12,839	96
Other Non-Epithelial Skin	2,344	1,885	302	1,345	1,103	141
Breast	1,399	1,197	155	155,069	136,064	12,564

continued

Table D.1: Invasive Cancer Incidence, Case Counts by Primary Site, Sex, and Race (All Races, White, Black), United States: NPCR and SEER Program Registries That Meet Quality Criteria, 1999* *(continued)*

	Case Counts					
	Males			Females		
	All Races	White	Black	All Races	White	Black
Female Genital System				62,166	54,131	5,179
Cervix				10,525	8,186	1,634
Corpus				27,748	24,720	1,853
Uterus, NOS				865	686	145
Ovary				18,673	16,730	1,176
Vagina				817	645	127
Vulva				2,802	2,542	173
Other Female Genital Organs				736	622	71
Male Genital System	158,531	132,773	17,087			
Prostate	151,711	126,500	16,855			
Testis	5,815	5,415	159			
Penis	793	687	53			
Other Male Genital Organs	212	171	20			
Urinary System	51,123	46,989	2,559	23,023	20,645	1,722
Urinary Bladder	34,696	32,438	1,202	12,345	11,280	719
Kidney and Renal Pelvis	15,222	13,438	1,304	9,907	8,673	953
Ureter	777	741	19	564	531	18
Other Urinary Organs	428	372	34	207	161	32
Eye and Orbit	828	740	31	738	668	31
Brain and Other Nervous System	7,757	7,022	452	6,466	5,812	427
Brain	7,344	6,666	416	6,033	5,447	384
Cranial Nerves and Other Nervous System	413	356	36	433	365	43
Endocrine System	4,324	3,818	239	11,453	9,790	789
Thyroid	3,622	3,232	159	10,862	9,307	718
Other Endocrine including Thymus	702	586	80	591	483	71
Lymphomas	23,981	21,072	1,804	21,600	19,224	1,468
Hodgkin's Disease	3,248	2,790	321	2,777	2,415	255
Non-Hodgkin's Lymphoma	20,733	18,282	1,483	18,823	16,809	1,213
Multiple Myeloma	5,535	4,546	793	5,028	3,975	851
Leukemias	13,515	12,052	859	10,438	9,197	777
Acute Lymphocytic	1,593	1,382	111	1,254	1,073	96
Chronic Lymphocytic	3,785	3,433	213	2,592	2,336	148
Acute Myeloid	4,133	3,684	277	3,637	3,191	297
Chronic Myeloid	1,691	1,468	123	1,288	1,105	108
Other Leukemias	2,313	2,085	135	1,667	1,492	128
Miscellaneous	13,013	11,269	1,276	14,118	12,276	1,333
Breast, *in situ*				32,579	28,290	2,495

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; ≥ 97% of cases pass a standard set of computerized edits; ≤ 5% of cases were ascertained by death certificate only; ≤ 3% of cases are missing information on sex; ≤ 5% of cases are missing information on race; and ≤ 3% of cases are missing information on age.

~ Case counts are suppressed for site-sex-race categories with fewer than 16 cases.

NPCR = National Program of Cancer Registries; SEER = Surveillance, Epidemiology, and End Results.

Appendix E

Tables E.1–E.25

Table E.1: All Cancer Sites Combined. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	8,907	8,131	530	8,990	8,264	496
Maine						
Massachusetts	16,331	15,179	614	16,488	15,422	479
New Hampshire	2,702	2,663	~	2,662	2,607	~
Rhode Island	2,998	2,901	77	3,005	2,921	59
Vermont						
Middle Atlantic	100,790	86,303	10,596	100,703	86,969	9,769
New Jersey	22,354	19,341	2,480	21,565	18,849	2,106
New York	43,416	35,668	5,296	45,288	37,535	5,125
Pennsylvania	35,020	31,294	2,820	33,850	30,585	2,538
Midwest						
East North Central						
Illinois	28,386	23,756	3,454	28,302	24,029	3,336
Indiana						
Michigan	25,667	21,856	3,202	23,263	20,131	2,720
Detroit	10,973	8,283	2,481	10,037	7,758	2,122
Ohio	27,746	24,051	2,652	27,444	24,363	2,324
Wisconsin	12,744	12,092	452	11,839	11,264	404
West North Central						
Iowa	7,723	7,470	106	7,351	7,187	82
Kansas	6,529	5,978	318	6,214	5,795	230
Minnesota	11,491	10,926	190	10,726	10,223	147
Missouri	13,196	11,847	1,191	12,995	11,683	1,140
Nebraska	4,149	3,868	101	3,886	3,666	78
North Dakota	1,653	1,620	~	1,333	1,298	~
South Dakota						
South						
South Atlantic						
Delaware	1,918	1,589	298	1,893	1,597	258
District of Columbia	1,554	365	1,111	1,373	388	916
Florida	50,472	45,601	4,011	44,912	40,856	3,359
Georgia						
Atlanta	4,375	2,967	1,259	4,576	3,230	1,204
Maryland	11,956	8,764	2,497	11,295	8,544	2,309
North Carolina	16,302	13,233	2,825	15,884	13,006	2,636
South Carolina	9,528	7,179	2,235	8,078	6,084	1,881
Virginia						
West Virginia	5,228	4,999	138	5,017	4,810	141
East South Central						
Alabama						
Kentucky	10,213	9,227	540	9,579	8,897	553
Mississippi						
Tennessee						

continued

Table E.1: All Cancer Sites Combined. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	10,111	7,322	2,729	9,043	6,658	2,337
Oklahoma						
Texas						
West						
Mountain						
Arizona	9,960	9,500	213	9,551	9,141	149
Colorado	7,975	7,557	231	7,818	7,425	200
Idaho	2,678	2,647	~	2,468	2,440	~
Montana	2,177	2,028	~	1,927	1,822	~
Nevada						
New Mexico	3,445	3,270	57	3,174	3,015	27
Utah	3,511	3,448	~	2,984	2,920	~
Wyoming	1,147	1,127	~	958	934	~
Pacific	92,413	77,158	5,014	90,223	76,777	4,213
Alaska	996	791	33	907	691	17
California	66,149	54,574	4,518	65,183	55,197	3,856
San Francisco-Oakland	9,096	6,496	966	9,166	6,908	808
San Jose-Monterey	4,302	3,448	112	4,348	3,626	70
Los Angeles	16,991	12,890	2,142	17,070	13,397	1,853
Hawaii	2,736	857	22	2,544	673	22
Oregon	8,601	8,201	109	8,273	7,972	80
Washington	13,931	12,735	332	13,316	12,244	238
Seattle-Puget Sound	9,632	8,883	307	9,319	8,580	211

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.2: Cancer of the Oral Cavity and Pharynx. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	247	220	23	133	121	~
Maine						
Massachusetts	456	418	20	269	248	~
New Hampshire	80	78	~	41	41	~
Rhode Island	74	71	~	45	41	~
Vermont						
Middle Atlantic	2,736	2,217	338	1,411	1,166	169
New Jersey	543	450	69	339	284	43
New York	1,273	978	174	608	479	83
Pennsylvania	920	789	95	464	403	43
Midwest						
East North Central						
Illinois	852	691	136	423	351	57
Indiana						
Michigan	677	564	104	354	304	39
Detroit	295	200	90	155	120	30
Ohio	666	576	69	385	336	37
Wisconsin	420	385	26	180	171	~
West North Central						
Iowa	233	227	~	90	88	~
Kansas	196	175	~	85	80	~
Minnesota	355	338	~	154	142	~
Missouri	392	344	38	172	155	~
Nebraska	116	107	~	62	58	~
North Dakota	50	48	~	19	18	~
South Dakota						
South						
South Atlantic						
Delaware	61	47	~	23	21	~
District of Columbia	60	~	43	21	~	~
Florida	1,635	1,447	142	798	723	58
Georgia						
Atlanta	133	83	47	67	50	16
Maryland	372	265	91	167	116	41
North Carolina	537	397	133	251	200	49
South Carolina	348	252	92	145	105	39
Virginia						
West Virginia	155	144	~	69	68	~
East South Central						
Alabama						
Kentucky	278	246	20	135	126	~
Mississippi						
Tennessee						

continued

Table E.2: Cancer of the Oral Cavity and Pharynx. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	375	262	112	168	120	48
Oklahoma						
Texas						
West						
Mountain						
Arizona	265	252	~	146	140	~
Colorado	189	181	~	89	81	~
Idaho	81	80	~	33	33	~
Montana	57	55	~	32	30	~
Nevada						
New Mexico	107	103	~	39	38	~
Utah	78	77	~	41	40	~
Wyoming	30	28	~	16	~	~
Pacific	2,814	2,379	136	~	~	70
Alaska	41	26	~	~	~	~
California	2,073	1,735	130	1,013	819	66
San Francisco-Oakland	296	212	25	155	101	~
San Jose-Monterey	131	101	~	55	42	~
Los Angeles	495	377	65	260	192	33
Hawaii	80	25	~	57	19	~
Oregon	262	256	~	124	117	~
Washington	358	337	~	191	169	~
Seattle-Puget Sound	251	240	~	131	116	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.3: Cancer of the Esophagus. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	144	131	~	61	48	~
Maine						
Massachusetts	300	280	~	84	73	~
New Hampshire	48	47	~	16	16	~
Rhode Island	44	42	~	21	20	~
Vermont						
Middle Atlantic	1,577	1,304	230	550	443	95
New Jersey	317	270	44	127	106	19
New York	694	538	129	263	198	57
Pennsylvania	566	496	57	160	139	19
Midwest						
East North Central						
Illinois	514	415	89	139	107	28
Indiana						
Michigan	439	384	54	116	94	21
Detroit	153	117	36	50	33	17
Ohio	514	458	48	159	128	22
Wisconsin	224	208	~	71	65	~
West North Central						
Iowa	120	114	~	32	32	~
Kansas	83	72	~	24	24	~
Minnesota	181	178	~	55	53	~
Missouri	195	177	17	61	49	~
Nebraska	64	62	~	16	16	~
North Dakota	19	19	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	28	24	~	~	~	~
District of Columbia	33	~	31	~	~	~
Florida	837	737	87	279	242	32
Georgia						
Atlanta	66	36	27	26	~	~
Maryland	219	156	58	67	47	18
North Carolina	238	175	60	79	54	24
South Carolina	196	111	85	58	26	31
Virginia						
West Virginia	70	66	~	24	23	~
East South Central						
Alabama						
Kentucky	135	122	~	41	40	~
Mississippi						
Tennessee						

continued

Table E.3: Cancer of the Esophagus. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	169	110	59	51	40	~
Oklahoma						
Texas						
West						
Mountain						
Arizona	149	143	~	43	42	~
Colorado	100	95	~	35	32	~
Idaho	33	33	~	~	~	~
Montana	54	51	~	~	~	~
Nevada						
New Mexico	57	56	~	~	~	~
Utah	41	40	~	~	~	~
Wyoming	~	~	~	~	~	~
Pacific	~	1,127	63	474	416	35
Alaska	~	~	~	~	~	~
California	904	777	57	356	303	35
San Francisco-Oakland	134	99	~	54	40	~
San Jose-Monterey	63	61	~	26	23	~
Los Angeles	212	162	22	83	66	16
Hawaii	42	~	~	~	~	~
Oregon	120	116	~	46	45	~
Washington	223	210	~	64	64	~
Seattle-Puget Sound	157	149	~	47	47	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.4: Cancer of the Stomach. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	197	176	~	134	122	~
Maine						
Massachusetts	323	282	24	191	175	~
New Hampshire	46	46	~	27	26	~
Rhode Island	60	58	~	46	43	~
Vermont						
Middle Atlantic	2,409	1,948	306	1,518	1,185	232
New Jersey	536	452	66	335	267	45
New York	1,158	882	156	741	543	131
Pennsylvania	715	614	84	442	375	56
Midwest						
East North Central						
Illinois	554	436	87	358	277	63
Indiana						
Michigan	440	364	65	296	223	66
Detroit	224	169	50	160	109	47
Ohio	456	365	74	315	255	52
Wisconsin	231	216	~	111	103	~
West North Central						
Iowa	127	125	~	61	59	~
Kansas	112	100	~	54	49	~
Minnesota	205	190	~	116	112	~
Missouri	206	171	31	106	87	~
Nebraska	47	42	~	40	34	~
North Dakota	33	33	~	17	17	~
South Dakota						
South						
South Atlantic						
Delaware	34	25	~	28	20	~
District of Columbia	35	~	25	37	~	26
Florida	921	779	114	539	438	85
Georgia						
Atlanta	76	38	24	57	34	21
Maryland	210	134	63	118	70	39
North Carolina	282	175	100	187	124	61
South Carolina	172	104	67	98	62	36
Virginia						
West Virginia	69	67	~	43	41	~
East South Central						
Alabama						
Kentucky	152	138	~	106	93	~
Mississippi						
Tennessee						

continued

Table E.4: Cancer of the Stomach. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	180	111	66	135	66	67
Oklahoma						
Texas						
West						
Mountain						
Arizona	185	172	~	100	87	~
Colorado	120	108	~	87	77	~
Idaho	38	36	~	24	24	~
Montana	36	34	~	~	~	~
Nevada						
New Mexico	62	52	~	52	43	~
Utah	54	52	~	39	39	~
Wyoming	~	~	~	~	~	~
Pacific	1,999	~	111	1,284	882	106
Alaska	22	~	~	16	~	~
California	1,488	1,118	106	1,001	711	99
San Francisco-Oakland	210	124	32	173	100	25
San Jose-Monterey	98	59	~	76	55	~
Los Angeles	494	345	46	333	213	50
Hawaii	119	18	~	75	~	~
Oregon	131	119	~	56	51	~
Washington	239	213	~	136	106	~
Seattle-Puget Sound	178	151	~	92	68	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.5: Cancer of the Colon and Rectum. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	1,091	1,022	46	1,148	1,052	82
Maine						
Massachusetts	1,904	1,797	57	2,016	1,907	61
New Hampshire	280	276	~	306	298	~
Rhode Island	356	351	~	416	405	~
Vermont						
Middle Atlantic	12,739	11,209	1,109	13,169	11,403	1,356
New Jersey	2,770	2,445	266	2,653	2,326	279
New York	5,566	4,722	545	6,000	4,960	741
Pennsylvania	4,403	4,042	298	4,516	4,117	336
Midwest						
East North Central						
Illinois	3,520	3,033	379	3,505	2,974	444
Indiana						
Michigan	2,580	2,237	308	2,624	2,250	336
Detroit	1,089	829	244	1,134	854	270
Ohio	3,452	3,064	290	3,407	2,988	323
Wisconsin	1,643	1,571	40	1,471	1,393	52
West North Central						
Iowa	1,062	1,048	~	1,068	1,055	~
Kansas	787	733	35	769	716	34
Minnesota	1,267	1,226	~	1,225	1,173	20
Missouri	1,676	1,515	144	1,645	1,486	144
Nebraska	539	512	~	524	504	~
North Dakota	213	209	~	167	162	~
South Dakota						
South						
South Atlantic						
Delaware	214	173	39	231	187	43
District of Columbia	149	38	109	190	37	150
Florida	6,270	5,701	480	5,862	5,285	486
Georgia						
Atlanta	432	304	121	461	307	150
Maryland	1,289	963	262	1,256	919	278
North Carolina	1,701	1,388	290	1,833	1,452	363
South Carolina	1,031	781	234	954	678	263
Virginia						
West Virginia	643	619	~	640	617	20
East South Central						
Alabama						
Kentucky	1,170	1,096	59	1,194	1,104	82
Mississippi						
Tennessee						

continued

Table E.5: Cancer of the Colon and Rectum. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	1,201	892	301	1,113	807	300
Oklahoma						
Texas						
West						
Mountain						
Arizona	1,166	1,120	24	1,053	1,018	17
Colorado	829	782	24	768	722	27
Idaho	271	267	~	250	246	~
Montana	266	242	~	218	202	~
Nevada						
New Mexico	389	371	~	284	276	~
Utah	349	342	~	297	290	~
Wyoming	136	136	~	121	118	~
Pacific	10,027	8,352	519	9,707	8,031	562
Alaska	117	77	~	87	49	~
California	7,232	6,020	475	7,028	5,800	522
San Francisco-Oakland	1,014	742	84	1,051	747	117
San Jose-Monterey	459	374	18	420	352	~
Los Angeles	1,872	1,412	234	1,890	1,414	250
Hawaii	351	79	~	319	67	~
Oregon	864	826	~	947	910	~
Washington	1,463	1,350	29	1,326	1,205	27
Seattle-Puget Sound	965	888	28	927	844	27

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.6: Cancer of the Liver and Intrahepatic Bile Duct. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	116	97	~	54	53	~
Maine						
Massachusetts	190	164	~	98	82	~
New Hampshire	32	31	~	~	~	~
Rhode Island	30	25	~	~	~	~
Vermont						
Middle Atlantic	1,443	1,073	209	732	566	~
New Jersey	256	200	39	137	115	~
New York	750	546	101	403	291	69
Pennsylvania	437	327	69	192	160	26
Midwest						
East North Central						
Illinois	383	282	68	235	187	36
Indiana						
Michigan	344	282	48	149	122	24
Detroit	156	113	37	77	53	22
Ohio	276	210	52	163	139	23
Wisconsin	141	134	~	71	67	~
West North Central						
Iowa	73	67	~	42	40	~
Kansas	56	50	~	45	42	~
Minnesota	109	87	~	54	49	~
Missouri	132	103	24	71	54	~
Nebraska	37	34	~	~	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	16	~	~	~	~	~
District of Columbia	29	~	22	20	~	19
Florida	594	507	68	317	283	28
Georgia						
Atlanta	49	23	~	30	~	~
Maryland	124	77	34	67	48	~
North Carolina	141	111	26	75	58	~
South Carolina	89	66	21	40	29	~
Virginia						
West Virginia	48	43	~	28	27	~
East South Central						
Alabama						
Kentucky	93	84	~	53	47	~
Mississippi						
Tennessee						

continued

Table E.6: Cancer of the Liver and Intrahepatic Bile Duct. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	132	96	32	63	50	~
Oklahoma						
Texas						
West						
Mountain						
Arizona	128	121	~	58	52	~
Colorado	100	91	~	47	43	~
Idaho	20	20	~	17	17	~
Montana	21	19	~	~	~	~
Nevada						
New Mexico	60	52	~	29	26	~
Utah	31	29	~	23	22	~
Wyoming	~	~	~	~	~	~
Pacific	1,607	1,037	99	~	533	37
Alaska	19	~	~	~	~	~
California	1,245	791	89	586	405	33
San Francisco-Oakland	225	112	25	82	38	~
San Jose-Monterey	102	53	~	36	18	~
Los Angeles	353	216	33	198	138	17
Hawaii	70	~	~	29	~	~
Oregon	90	80	~	52	45	~
Washington	183	143	~	97	73	~
Seattle-Puget Sound	139	103	~	75	55	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.7: Cancer of the Pancreas. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	201	185	16	217	205	~
Maine						
Massachusetts	363	341	~	386	368	~
New Hampshire	64	63	~	60	59	~
Rhode Island	56	55	~	64	62	~
Vermont						
Middle Atlantic	2,371	2,030	272	2,639	2,237	329
New Jersey	497	411	66	561	483	65
New York	1,086	924	127	1,282	1,045	189
Pennsylvania	788	695	79	796	709	75
Midwest						
East North Central						
Illinois	664	555	88	706	586	101
Indiana						
Michigan	509	423	84	601	489	105
Detroit	212	149	62	277	195	82
Ohio	567	514	48	605	526	75
Wisconsin	280	266	~	314	288	21
West North Central						
Iowa	148	142	~	151	145	~
Kansas	155	141	~	142	133	~
Minnesota	213	203	~	181	172	~
Missouri	312	282	27	347	298	46
Nebraska	88	82	~	83	79	~
North Dakota	22	22	~	32	32	~
South Dakota						
South						
South Atlantic						
Delaware	41	35	~	51	45	~
District of Columbia	40	~	28	37	~	28
Florida	1,122	1,010	101	1,131	1,016	103
Georgia						
Atlanta	100	64	34	93	55	36
Maryland	238	176	56	250	184	61
North Carolina	386	319	64	408	309	95
South Carolina	194	152	42	203	134	69
Virginia						
West Virginia	96	91	~	80	78	~
East South Central						
Alabama						
Kentucky	198	182	~	215	196	17
Mississippi						
Tennessee						

continued

Table E.7: Cancer of the Pancreas. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	219	147	72	236	163	73
Oklahoma						
Texas						
West						
Mountain						
Arizona	211	203	~	221	208	~
Colorado	167	156	~	161	153	~
Idaho	51	51	~	82	82	~
Montana	53	52	~	40	39	~
Nevada						
New Mexico	101	90	~	75	72	~
Utah	76	75	~	54	52	~
Wyoming	35	33	~	16	~	~
Pacific	1,962	~	105	1,995	~	110
Alaska	19	~	~	21	17	~
California	1,399	1,188	97	1,417	1,188	100
San Francisco-Oakland	187	128	26	191	143	18
San Jose-Monterey	105	81	~	93	76	~
Los Angeles	358	291	41	365	287	40
Hawaii	61	17	~	77	~	~
Oregon	191	181	~	205	197	~
Washington	292	273	~	275	252	~
Seattle-Puget Sound	207	193	~	216	197	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.8: Cancer of the Larynx. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	130	118	~	49	46	~
Maine						
Massachusetts	240	220	16	63	56	~
New Hampshire	44	44	~	~	~	~
Rhode Island	47	44	~	~	~	~
Vermont						
Middle Atlantic	1,467	1,229	192	385	311	~
New Jersey	282	229	48	74	61	~
New York	666	547	90	186	149	32
Pennsylvania	519	453	54	125	101	22
Midwest						
East North Central						
Illinois	475	372	89	98	77	20
Indiana						
Michigan	348	283	62	142	102	38
Detroit	132	86	46	74	45	29
Ohio	426	374	42	97	77	16
Wisconsin	162	148	~	56	52	~
West North Central						
Iowa	113	110	~	29	28	~
Kansas	86	77	~	18	17	~
Minnesota	139	135	~	30	30	~
Missouri	224	195	27	57	50	~
Nebraska	52	50	~	~	~	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	37	30	~	~	~	~
District of Columbia	34	~	26	~	~	~
Florida	844	751	75	228	206	17
Georgia						
Atlanta	59	41	18	20	~	~
Maryland	195	132	57	48	37	~
North Carolina	308	233	71	67	56	~
South Carolina	156	110	46	47	36	~
Virginia						
West Virginia	99	93	~	27	27	~
East South Central						
Alabama						
Kentucky	173	161	~	58	51	~
Mississippi						
Tennessee						

continued

Table E.8: Cancer of the Larynx. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	194	129	64	58	41	17
Oklahoma						
Texas						
West						
Mountain						
Arizona	124	115	~	43	42	~
Colorado	87	84	~	25	24	~
Idaho	41	41	~	~	~	~
Montana	28	25	~	~	~	~
Nevada						
New Mexico	49	47	~	~	~	~
Utah	25	25	~	~	~	~
Wyoming	~	~	~	~	~	~
Pacific	~	~	96	279	242	25
Alaska	~	~	~	~	~	~
California	776	634	88	192	164	20
San Francisco-Oakland	129	93	23	24	20	~
San Jose-Monterey	47	41	~	~	~	~
Los Angeles	220	162	39	47	34	~
Hawaii	34	19	~	~	~	~
Oregon	96	92	~	28	28	~
Washington	160	148	~	47	42	~
Seattle-Puget Sound	98	91	~	29	24	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.9: Cancer of the Lung and Bronchus. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	1,293	1,198	81	1,079	1,009	62
Maine						
Massachusetts	2,440	2,302	83	2,185	2,063	66
New Hampshire	419	415	~	375	370	~
Rhode Island	493	476	~	406	398	~
Vermont						
Middle Atlantic	15,312	13,238	1,707	12,453	10,989	1,190
New Jersey	3,164	2,712	393	2,710	2,407	264
New York	6,480	5,508	748	5,595	4,861	556
Pennsylvania	5,668	5,018	566	4,148	3,721	370
Midwest						
East North Central						
Illinois	4,831	4,050	684	3,654	3,099	489
Indiana						
Michigan	3,973	3,362	571	3,098	2,663	410
Detroit	1,734	1,272	449	1,387	1,074	301
Ohio	5,132	4,529	516	3,712	3,301	360
Wisconsin	1,950	1,850	82	1,366	1,298	55
West North Central						
Iowa	1,232	1,209	20	826	810	~
Kansas	1,079	1,011	57	787	753	28
Minnesota	1,514	1,448	38	1,148	1,096	29
Missouri	2,610	2,332	253	1,894	1,709	164
Nebraska	596	558	24	436	410	~
North Dakota	216	210	~	137	132	~
South Dakota						
South						
South Atlantic						
Delaware	368	311	53	274	234	36
District of Columbia	258	48	197	168	39	125
Florida	8,851	8,081	688	6,767	6,372	340
Georgia						
Atlanta	674	462	199	571	434	126
Maryland	1,904	1,440	428	1,542	1,209	308
North Carolina	3,336	2,742	557	2,208	1,891	289
South Carolina	1,820	1,419	392	1,003	831	167
Virginia						
West Virginia	1,164	1,131	21	817	783	28
East South Central						
Alabama						
Kentucky	2,321	2,205	104	1,580	1,470	106
Mississippi						
Tennessee						

continued

Table E.9: Cancer of the Lung and Bronchus. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	2,005	1,417	578	1,223	935	282
Oklahoma						
Texas						
West						
Mountain						
Arizona	1,643	1,573	42	1,254	1,215	16
Colorado	952	906	27	785	748	25
Idaho	361	358	~	260	257	~
Montana	327	307	~	247	231	~
Nevada						
New Mexico	435	415	~	320	313	~
Utah	306	294	~	185	181	~
Wyoming	144	142	~	116	112	~
Pacific	12,910	10,933	801	11,053	9,744	571
Alaska	140	113	~	125	102	~
California	8,995	7,519	714	7,828	6,834	530
San Francisco-Oakland	1,172	786	151	1,104	863	120
San Jose-Monterey	521	426	19	481	410	~
Los Angeles	2,131	1,546	337	1,826	1,433	250
Hawaii	397	118	~	265	82	~
Oregon	1,319	1,264	22	1,144	1,116	~
Washington	2,059	1,919	62	1,691	1,610	28
Seattle-Puget Sound	1,436	1,324	56	1,248	1,186	25

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.10: Melanomas of the Skin. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	400	376	~	292	266	~
Maine						
Massachusetts	564	542	~	482	460	~
New Hampshire	123	123	~	120	119	~
Rhode Island	118	118	~	77	77	~
Vermont						
Middle Atlantic	2,691	2,584	~	1,995	1,907	~
New Jersey	721	716	~	536	528	~
New York	972	933	~	755	719	~
Pennsylvania	998	935	~	704	660	~
Midwest						
East North Central						
Illinois	791	743	~	558	531	~
Indiana						
Michigan	970	898	~	795	737	~
Detroit	364	351	~	296	283	~
Ohio	845	757	~	677	612	~
Wisconsin	317	313	~	251	243	~
West North Central						
Iowa	278	257	~	228	212	~
Kansas	261	229	~	177	150	~
Minnesota	425	403	~	385	361	~
Missouri	309	302	~	226	215	~
Nebraska	113	84	~	119	93	~
North Dakota	33	33	~	22	21	~
South Dakota						
South						
South Atlantic						
Delaware	55	53	~	43	40	~
District of Columbia	27	17	~	20	~	~
Florida	1,806	1,713	~	1,134	1,068	~
Georgia						
Atlanta	204	184	~	141	126	~
Maryland	486	472	~	397	385	~
North Carolina	575	567	~	461	445	~
South Carolina	368	359	~	275	260	~
Virginia						
West Virginia	174	156	~	120	105	~
East South Central						
Alabama						
Kentucky	403	372	~	350	326	~
Mississippi						
Tennessee						

continued

Table E.10: Melanomas of the Skin. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	214	202	~	149	145	~
Oklahoma						
Texas						
West						
Mountain						
Arizona	434	421	~	301	300	~
Colorado	424	421	~	348	345	~
Idaho	134	134	~	96	96	~
Montana	56	48	~	43	38	~
Nevada						
New Mexico	135	135	~	85	82	~
Utah	216	216	~	157	157	~
Wyoming	62	62	~	31	31	~
Pacific	4,167	3,848	~	3,184	2,872	16
Alaska	27	25	~	19	19	~
California	3,040	2,765	~	2,245	1,973	~
San Francisco-Oakland	348	326	~	291	272	~
San Jose-Monterey	196	158	~	163	121	~
Los Angeles	624	586	~	494	457	~
Hawaii	113	80	~	61	42	~
Oregon	380	373	~	292	277	~
Washington	607	605	~	567	561	~
Seattle-Puget Sound	417	414	~	382	373	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.11: Cancer of the Breast. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	32	28	~	2,865	2,609	159
Maine						
Massachusetts	48	41	~	5,123	4,807	140
New Hampshire	~	~	~	844	823	~
Rhode Island	~	~	~	821	795	20
Vermont						
Middle Atlantic	283	245	27	30,099	26,038	2,742
New Jersey	59	51	~	6,529	5,725	592
New York	123	104	~	13,412	11,117	1,427
Pennsylvania	101	90	~	10,158	9,196	723
Midwest						
East North Central						
Illinois	76	61	~	8,879	7,532	1,004
Indiana						
Michigan	66	59	~	6,977	6,094	778
Detroit	21	16	~	2,951	2,299	610
Ohio	58	50	~	8,631	7,657	712
Wisconsin	36	36	~	3,798	3,609	136
West North Central						
Iowa	~	~	~	2,254	2,218	25
Kansas	~	~	~	1,965	1,831	69
Minnesota	21	17	~	3,484	3,354	40
Missouri	27	22	~	3,914	3,528	343
Nebraska	~	~	~	1,216	1,164	28
North Dakota	~	~	~	460	448	~
South Dakota						
South						
South Atlantic						
Delaware	16	~	~	563	470	79
District of Columbia	~	~	~	435	156	262
Florida	206	183	18	12,934	11,808	927
Georgia						
Atlanta	~	~	~	1,648	1,171	426
Maryland	38	25	~	3,711	2,751	822
North Carolina	34	26	~	5,159	4,204	872
South Carolina	33	25	~	2,667	2,014	615
Virginia						
West Virginia	~	~	~	1,403	1,348	38
East South Central						
Alabama						
Kentucky	17	16	~	2,785	2,581	166
Mississippi						
Tennessee						

continued

Table E.11: Cancer of the Breast. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	36	26	~	2,826	2,119	689
Oklahoma						
Texas						
West						
Mountain						
Arizona	56	54	~	3,099	2,957	51
Colorado	19	18	~	2,829	2,693	65
Idaho	~	~	~	807	796	~
Montana	~	~	~	606	575	~
Nevada						
New Mexico	~	~	~	1,077	1,033	~
Utah	~	~	~	994	978	~
Wyoming	~	~	~	325	321	~
Pacific	185	157	~	29,871	25,582	1,347
Alaska	~	~	~	294	244	~
California	138	112	~	21,439	18,269	1,234
San Francisco-Oakland	~	~	~	3,135	2,413	251
San Jose-Monterey	~	~	~	1,482	1,278	22
Los Angeles	43	31	~	5,460	4,265	580
Hawaii	~	~	~	869	239	~
Oregon	24	24	~	2,792	2,699	28
Washington	20	19	~	4,477	4,131	71
Seattle-Puget Sound	16	~	~	3,109	2,875	63

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.12: Cancer of the Breast. *In Situ* Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	~	~	~	735	666	42
Maine						
Massachusetts	~	~	~	1,589	1,465	38
New Hampshire	~	~	~	222	218	~
Rhode Island	~	~	~	201	198	~
Vermont						
Middle Atlantic	~	40	~	6,922	5,903	639
New Jersey	~	~	~	1,556	1,381	127
New York	19	~	~	3,157	2,558	321
Pennsylvania	19	18	~	2,209	1,964	191
Midwest						
East North Central						
Illinois	~	~	~	1,714	1,451	160
Indiana						
Michigan	~	~	~	1,663	1,436	196
Detroit	~	~	~	881	687	168
Ohio	~	~	~	1,706	1,511	133
Wisconsin	~	~	~	740	703	26
West North Central						
Iowa	~	~	~	418	417	~
Kansas	~	~	~	319	291	~
Minnesota	~	~	~	692	661	~
Missouri	~	~	~	650	600	43
Nebraska	~	~	~	223	218	~
North Dakota	~	~	~	73	72	~
South Dakota						
South						
South Atlantic						
Delaware	~	~	~	157	134	19
District of Columbia	~	~	~	91	34	50
Florida	28	25	~	2,564	2,337	175
Georgia						
Atlanta	~	~	~	358	266	85
Maryland	~	~	~	885	638	191
North Carolina	~	~	~	1,051	874	161
South Carolina	~	~	~	496	377	112
Virginia						
West Virginia	~	~	~	270	262	~
East South Central						
Alabama						
Kentucky	~	~	~	495	470	~
Mississippi						
Tennessee						

continued

Table E.12: Cancer of the Breast. *In Situ* Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	~	~	~	479	350	121
Oklahoma						
Texas						
West						
Mountain						
Arizona	~	~	~	613	582	~
Colorado	~	~	~	568	540	~
Idaho	~	~	~	163	159	~
Montana	~	~	~	129	124	~
Nevada						
New Mexico	~	~	~	188	183	~
Utah	~	~	~	186	183	~
Wyoming	~	~	~	59	58	~
Pacific	30	25	~	5,960	4,909	245
Alaska	~	~	~	74	56	~
California	26	22	~	4,172	3,458	220
San Francisco-Oakland	~	~	~	680	456	56
San Jose-Monterey	~	~	~	356	298	~
Los Angeles	~	~	~	1,056	832	100
Hawaii	~	~	~	228	45	~
Oregon	~	~	~	553	523	~
Washington	~	~	~	933	827	16
Seattle-Puget Sound	~	~	~	675	604	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† *In situ* cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.13: Cancer of the Cervix Uteri. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut				151	128	16
Maine						
Massachusetts				231	186	24
New Hampshire				41	39	~
Rhode Island				51	49	~
Vermont						
Middle Atlantic				2,087	1,526	411
New Jersey				472	365	94
New York				999	658	226
Pennsylvania				616	503	91
Midwest						
East North Central						
Illinois				678	485	159
Indiana						
Michigan				429	328	89
Detroit				200	114	78
Ohio				524	455	59
Wisconsin				261	220	25
West North Central						
Iowa				149	136	~
Kansas				125	110	~
Minnesota				184	166	~
Missouri				255	212	37
Nebraska				71	62	~
North Dakota				18	18	~
South Dakota						
South						
South Atlantic						
Delaware				33	26	~
District of Columbia				41	~	29
Florida				946	750	176
Georgia						
Atlanta				139	72	55
Maryland				226	130	73
North Carolina				390	273	103
South Carolina				236	140	88
Virginia						
West Virginia				134	130	~
East South Central						
Alabama						
Kentucky				227	204	19
Mississippi						
Tennessee						

continued

Table E.13: Cancer of the Cervix Uteri. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana				275	163	107
Oklahoma						
Texas						
West						
Mountain						
Arizona				183	170	~
Colorado				135	124	~
Idaho				37	37	~
Montana				38	35	~
Nevada						
New Mexico				65	60	~
Utah				55	53	~
Wyoming				23	23	~
Pacific				2,087	~	122
Alaska				18	~	~
California				1,643	1,323	111
San Francisco-Oakland				149	101	18
San Jose-Monterey				85	61	~
Los Angeles				574	458	55
Hawaii				58	18	~
Oregon				146	136	~
Washington				222	188	~
Seattle-Puget Sound				126	110	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.14: Cancer of the Corpus Uteri. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut				536	506	18
Maine						
Massachusetts				1,006	937	21
New Hampshire				158	155	~
Rhode Island				168	165	~
Vermont						
Middle Atlantic				6,414	5,611	544
New Jersey				1,395	1,244	117
New York				2,780	2,270	328
Pennsylvania				2,239	2,097	99
Midwest						
East North Central						
Illinois				1,574	1,376	137
Indiana						
Michigan				1,418	1,294	106
Detroit				586	485	92
Ohio				1,717	1,555	107
Wisconsin				735	713	~
West North Central						
Iowa				483	476	~
Kansas				388	368	~
Minnesota				681	655	~
Missouri				812	746	55
Nebraska				262	252	~
North Dakota				82	82	~
South Dakota						
South						
South Atlantic						
Delaware				111	101	~
District of Columbia				56	23	30
Florida				2,324	2,087	202
Georgia						
Atlanta				204	156	41
Maryland				631	510	89
North Carolina				851	684	153
South Carolina				415	301	108
Virginia						
West Virginia				300	291	~
East South Central						
Alabama						
Kentucky				420	389	17
Mississippi						
Tennessee						

continued

Table E.14: Cancer of the Corpus Uteri. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana				372	259	111
Oklahoma						
Texas						
West						
Mountain						
Arizona				459	444	~
Colorado				385	369	~
Idaho				155	155	~
Montana				84	78	~
Nevada						
New Mexico				173	161	~
Utah				209	204	~
Wyoming				41	39	~
Pacific				4,989	4,264	189
Alaska				43	37	~
California				3,537	3,029	177
San Francisco-Oakland				502	381	38
San Jose-Monterey				242	205	~
Los Angeles				953	765	95
Hawaii				172	44	~
Oregon				452	436	~
Washington				785	718	~
Seattle-Puget Sound				533	491	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.15: Cancer of the Ovary. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut				303	286	~
Maine						
Massachusetts				567	527	~
New Hampshire				87	87	~
Rhode Island				95	93	~
Vermont						
Middle Atlantic				3,863	3,385	312
New Jersey				839	736	66
New York				1,704	1,431	173
Pennsylvania				1,320	1,218	73
Midwest						
East North Central						
Illinois				1,061	939	90
Indiana						
Michigan				880	777	88
Detroit				377	301	74
Ohio				974	895	61
Wisconsin				396	383	~
West North Central						
Iowa				295	285	~
Kansas				220	210	~
Minnesota				441	418	~
Missouri				479	446	28
Nebraska				157	151	~
North Dakota				55	54	~
South Dakota						
South						
South Atlantic						
Delaware				63	57	~
District of Columbia				32	~	16
Florida				1,733	1,609	107
Georgia						
Atlanta				175	134	34
Maryland				355	292	51
North Carolina				630	553	70
South Carolina				274	213	58
Virginia						
West Virginia				165	164	~
East South Central						
Alabama						
Kentucky				314	297	~
Mississippi						
Tennessee						

continued

Table E.15: Cancer of the Ovary. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana				297	227	70
Oklahoma						
Texas						
West						
Mountain						
Arizona				346	336	~
Colorado				340	327	~
Idaho				99	99	~
Montana				83	81	~
Nevada						
New Mexico				150	137	~
Utah				141	139	~
Wyoming				32	29	~
Pacific				3,571	3,088	130
Alaska				38	33	~
California				2,587	2,222	122
San Francisco-Oakland				370	287	27
San Jose-Monterey				192	161	~
Los Angeles				688	541	54
Hawaii				91	25	~
Oregon				300	293	~
Washington				555	515	~
Seattle-Puget Sound				411	385	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.16: Cancer of the Prostate. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	2,559	2,242	195			
Maine						
Massachusetts	5,002	4,565	246			
New Hampshire	764	746	~			
Rhode Island	861	828	28			
Vermont						
Middle Atlantic	29,505	24,230	4,024			
New Jersey	6,989	5,859	978			
New York	12,280	9,418	2,100			
Pennsylvania	10,236	8,953	946			
Midwest						
East North Central						
Illinois	7,861	6,334	1,085			
Indiana						
Michigan	8,534	6,933	1,277			
Detroit	3,805	2,700	996			
Ohio	7,709	6,304	945			
Wisconsin	3,787	3,562	162			
West North Central						
Iowa	2,164	2,048	42			
Kansas	1,990	1,785	110			
Minnesota	3,668	3,486	43			
Missouri	3,515	3,087	381			
Nebraska	1,329	1,218	29			
North Dakota	599	590	~			
South Dakota						
South						
South Atlantic						
Delaware	559	440	105			
District of Columbia	542	115	405			
Florida	13,820	12,171	1,417			
Georgia						
Atlanta	1,383	877	470			
Maryland	3,866	2,555	904			
North Carolina	4,630	3,563	982			
South Carolina	2,888	1,994	842			
Virginia						
West Virginia	1,322	1,251	47			
East South Central						
Alabama						
Kentucky	2,613	2,113	175			
Mississippi						
Tennessee						

continued

Table E.16: Cancer of the Prostate. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	2,817	1,944	857			
Oklahoma						
Texas						
West						
Mountain						
Arizona	2,525	2,389	62			
Colorado	2,621	2,486	85			
Idaho	828	821	~			
Montana	684	635	~			
Nevada						
New Mexico	1,096	1,056	20			
Utah	1,269	1,252	~			
Wyoming	367	361	~			
Pacific	28,034	22,519	~			
Alaska	280	235	17			
California	19,886	15,547	1,720			
San Francisco-Oakland	2,785	1,917	353			
San Jose-Monterey	1,413	1,103	35			
Los Angeles	5,261	3,737	851			
Hawaii	774	236	~			
Oregon	2,715	2,572	39			
Washington	4,379	3,929	114			
Seattle-Puget Sound	3,026	2,803	104			

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.17: Cancer of the Testis. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	99	96	~			
Maine						
Massachusetts	205	197	~			
New Hampshire	39	38	~			
Rhode Island	26	26	~			
Vermont						
Middle Atlantic	1,059	981	35			
New Jersey	235	220	~			
New York	497	447	18			
Pennsylvania	327	314	~			
Midwest						
East North Central						
Illinois	318	283	~			
Indiana						
Michigan	245	238	~			
Detroit	97	90	~			
Ohio	302	288	~			
Wisconsin	194	186	~			
West North Central						
Iowa	82	77	~			
Kansas	83	81	~			
Minnesota	172	159	~			
Missouri	117	113	~			
Nebraska	63	62	~			
North Dakota	18	18	~			
South Dakota						
South						
South Atlantic						
Delaware	19	16	~			
District of Columbia	~	~	~			
Florida	361	334	17			
Georgia						
Atlanta	68	57	~			
Maryland	125	115	~			
North Carolina	162	149	~			
South Carolina	81	74	~			
Virginia						
West Virginia	42	42	~			
East South Central						
Alabama						
Kentucky	105	99	~			
Mississippi						
Tennessee						

continued

Table E.17: Cancer of the Testis. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	76	69	~			
Oklahoma						
Texas						
West						
Mountain						
Arizona	128	121	~			
Colorado	154	143	~			
Idaho	37	36	~			
Montana	26	24	~			
Nevada						
New Mexico	47	41	~			
Utah	47	46	~			
Wyoming	~	~	~			
Pacific	1,286	~	18			
Alaska	27	26	~			
California	928	860	16			
San Francisco-Oakland	137	118	~			
San Jose-Monterey	73	66	~			
Los Angeles	197	186	~			
Hawaii	31	~	~			
Oregon	118	113	~			
Washington	182	168	~			
Seattle-Puget Sound	124	118	~			

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.18: Cancer of the Urinary Bladder. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	694	661	22	274	261	~
Maine						
Massachusetts	1,177	1,133	17	474	448	~
New Hampshire	210	210	~	81	79	~
Rhode Island	259	256	~	104	102	~
Vermont						
Middle Atlantic	7,323	6,876	271	2,753	2,523	160
New Jersey	1,650	1,578	56	562	518	32
New York	3,027	2,775	133	1,228	1,108	72
Pennsylvania	2,646	2,523	82	963	897	56
Midwest						
East North Central						
Illinois	1,850	1,674	89	711	625	67
Indiana						
Michigan	1,702	1,584	95	603	542	53
Detroit	684	605	76	264	213	46
Ohio	1,977	1,807	84	729	658	45
Wisconsin	866	854	~	317	312	~
West North Central						
Iowa	535	522	~	159	154	~
Kansas	401	378	~	164	152	~
Minnesota	743	719	~	267	258	~
Missouri	837	802	28	256	232	20
Nebraska	299	292	~	75	72	~
North Dakota	124	123	~	36	35	~
South Dakota						
South						
South Atlantic						
Delaware	111	99	~	56	48	~
District of Columbia	44	~	26	41	~	26
Florida	3,631	3,504	71	1,239	1,166	63
Georgia						
Atlanta	199	175	23	100	71	28
Maryland	610	544	50	272	230	27
North Carolina	976	887	78	366	329	34
South Carolina	542	486	51	165	128	36
Virginia						
West Virginia	354	346	~	168	161	~
East South Central						
Alabama						
Kentucky	610	580	18	205	192	~
Mississippi						
Tennessee						

continued

Table E.18: Cancer of the Urinary Bladder. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	541	470	69	173	132	39
Oklahoma						
Texas						
West						
Mountain						
Arizona	826	802	~	246	242	~
Colorado	493	463	~	177	174	~
Idaho	187	183	~	45	45	~
Montana	144	136	~	55	54	~
Nevada						
New Mexico	196	190	~	69	68	~
Utah	242	241	~	70	69	~
Wyoming	86	86	~	23	23	~
Pacific	5,907	5,340	145	1,872	1,682	65
Alaska	54	46	~	16	~	~
California	4,143	3,753	126	1,347	1,216	59
San Francisco-Oakland	512	425	25	203	162	~
San Jose-Monterey	240	215	~	80	72	~
Los Angeles	977	834	57	329	277	33
Hawaii	119	52	~	36	~	~
Oregon	650	625	~	191	186	~
Washington	941	864	~	282	259	~
Seattle-Puget Sound	669	629	~	200	189	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Includes invasive and *in situ*

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.19: Cancer of the Kidney and Renal Pelvis. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	255	236	~	165	150	~
Maine						
Massachusetts	491	454	24	345	329	~
New Hampshire	69	69	~	42	42	~
Rhode Island	85	83	~	88	86	~
Vermont						
Middle Atlantic	3,140	2,777	263	2,065	1,765	227
New Jersey	681	599	63	468	405	52
New York	1,396	1,218	115	911	753	106
Pennsylvania	1,063	960	85	686	607	69
Midwest						
East North Central						
Illinois	846	722	102	607	528	67
Indiana						
Michigan	721	616	97	472	391	74
Detroit	296	225	66	208	154	53
Ohio	803	722	65	556	493	52
Wisconsin	442	418	16	257	249	~
West North Central						
Iowa	245	239	~	155	151	~
Kansas	185	174	~	131	120	~
Minnesota	341	327	~	225	220	~
Missouri	436	395	39	272	233	34
Nebraska	122	119	~	82	80	~
North Dakota	51	50	~	20	20	~
South Dakota						
South						
South Atlantic						
Delaware	51	44	~	46	39	~
District of Columbia	34	~	25	18	~	~
Florida	1,389	1,275	92	847	777	59
Georgia						
Atlanta	144	91	50	81	50	29
Maryland	338	260	69	225	174	47
North Carolina	482	385	86	345	275	61
South Carolina	285	234	51	176	120	54
Virginia						
West Virginia	151	142	~	103	97	~
East South Central						
Alabama						
Kentucky	300	278	20	199	186	~
Mississippi						
Tennessee						

continued

Table E.19: Cancer of the Kidney and Renal Pelvis. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	342	244	96	231	172	59
Oklahoma						
Texas						
West						
Mountain						
Arizona	326	305	~	195	185	~
Colorado	237	223	~	143	135	~
Idaho	65	64	~	69	68	~
Montana	64	59	~	49	47	~
Nevada						
New Mexico	95	87	~	76	72	~
Utah	89	87	~	43	42	~
Wyoming	29	28	~	16	16	~
Pacific	2,569	2,226	139	1,563	1,357	102
Alaska	44	33	~	19	~	~
California	1,828	1,600	120	1,127	973	90
San Francisco-Oakland	240	195	20	140	104	17
San Jose-Monterey	97	85	~	80	69	~
Los Angeles	487	397	53	344	273	52
Hawaii	79	29	~	35	~	~
Oregon	241	225	~	144	142	~
Washington	377	339	~	238	219	~
Seattle-Puget Sound	251	227	~	155	139	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.20: Cancer of the Brain and Other Nervous System. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	141	133	~	109	101	~
Maine						
Massachusetts	232	215	~	233	222	~
New Hampshire	47	46	~	32	31	~
Rhode Island	51	50	~	41	39	~
Vermont						
Middle Atlantic	1,445	1,259	105	1,283	1,142	99
New Jersey	300	260	25	296	267	20
New York	667	555	64	591	509	55
Pennsylvania	478	444	16	396	366	24
Midwest						
East North Central						
Illinois	413	364	34	348	308	31
Indiana						
Michigan	391	361	27	318	289	22
Detroit	159	136	21	114	94	16
Ohio	407	368	26	360	326	24
Wisconsin	187	181	~	174	164	~
West North Central						
Iowa	110	110	~	84	83	~
Kansas	83	79	~	77	75	~
Minnesota	199	193	~	149	148	~
Missouri	202	192	~	182	172	~
Nebraska	57	57	~	61	56	~
North Dakota	16	16	~	17	17	~
South Dakota						
South						
South Atlantic						
Delaware	25	23	~	27	23	~
District of Columbia	26	~	~	~	~	~
Florida	633	580	41	537	484	40
Georgia						
Atlanta	81	63	~	64	56	~
Maryland	168	134	31	144	106	29
North Carolina	289	265	21	198	173	22
South Carolina	141	119	21	104	81	22
Virginia						
West Virginia	67	66	~	63	61	~
East South Central						
Alabama						
Kentucky	135	128	~	110	102	~
Mississippi						
Tennessee						

continued

Table E.20: Cancer of the Brain and Other Nervous System. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	122	103	19	112	80	31
Oklahoma						
Texas						
West						
Mountain						
Arizona	171	163	~	156	152	~
Colorado	151	143	~	108	100	~
Idaho	65	65	~	37	37	~
Montana	23	22	~	33	31	~
Nevada						
New Mexico	62	57	~	46	43	~
Utah	69	67	~	50	49	~
Wyoming	23	23	~	~	~	~
Pacific	1,525	1,370	50	1,182	1,044	43
Alaska	17	~	~	17	~	~
California	1,105	984	48	843	744	40
San Francisco-Oakland	154	124	~	118	98	~
San Jose-Monterey	82	70	~	67	56	~
Los Angeles	267	227	18	217	186	23
Hawaii	28	~	~	23	~	~
Oregon	131	128	~	90	86	~
Washington	244	230	~	209	192	~
Seattle-Puget Sound	168	161	~	138	127	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.21: Cancer of the Thyroid. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	68	64	~	191	171	~
Maine						
Massachusetts	114	103	~	352	317	~
New Hampshire	25	25	~	44	44	~
Rhode Island	17	17	~	72	67	~
Vermont						
Middle Atlantic	764	681	42	2,390	2,019	182
New Jersey	167	149	~	479	410	29
New York	334	292	~	1,104	898	87
Pennsylvania	263	240	17	807	711	66
Midwest						
East North Central						
Illinois	209	187	~	630	551	34
Indiana						
Michigan	155	147	~	523	445	55
Detroit	68	63	~	226	177	38
Ohio	174	155	~	453	407	22
Wisconsin	79	73	~	229	223	~
West North Central						
Iowa	56	55	~	144	139	~
Kansas	54	49	~	142	131	~
Minnesota	88	87	~	238	222	~
Missouri	90	85	~	286	259	20
Nebraska	25	24	~	77	75	~
North Dakota	~	~	~	31	30	~
South Dakota						
South						
South Atlantic						
Delaware	~	~	~	53	43	~
District of Columbia	16	~	~	46	~	29
Florida	254	234	~	712	630	64
Georgia						
Atlanta	29	22	~	128	91	29
Maryland	75	62	~	290	220	53
North Carolina	99	92	~	261	219	31
South Carolina	53	45	~	140	111	26
Virginia						
West Virginia	31	31	~	107	105	~
East South Central						
Alabama						
Kentucky	57	54	~	188	176	~
Mississippi						
Tennessee						

continued

Table E.21: Cancer of the Thyroid. Invasive Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	59	49	~	171	130	39
Oklahoma						
Texas						
West						
Mountain						
Arizona	82	78	~	225	211	~
Colorado	65	59	~	222	205	~
Idaho	23	23	~	51	49	~
Montana	24	22	~	68	63	~
Nevada						
New Mexico	32	32	~	100	95	~
Utah	33	31	~	115	107	~
Wyoming	~	~	~	19	18	~
Pacific	740	608	20	2,164	~	69
Alaska	18	~	~	30	20	~
California	505	422	18	1,577	1,271	55
San Francisco-Oakland	61	42	~	177	124	~
San Jose-Monterey	51	44	~	117	88	~
Los Angeles	138	109	~	474	375	23
Hawaii	37	~	~	73	~	~
Oregon	64	59	~	148	142	~
Washington	116	101	~	336	282	~
Seattle-Puget Sound	84	77	~	247	211	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.22: Hodgkin Lymphoma. Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	51	48	~	53	47	~
Maine						
Massachusetts	116	109	~	104	99	~
New Hampshire	22	22	~	19	19	~
Rhode Island	20	19	~	16	16	~
Vermont						
Middle Atlantic	664	556	79	564	486	~
New Jersey	145	119	23	128	108	17
New York	302	242	40	264	219	29
Pennsylvania	217	195	16	172	159	~
Midwest						
East North Central						
Illinois	180	144	18	149	132	~
Indiana						
Michigan	184	159	23	138	120	18
Detroit	73	55	17	66	53	~
Ohio	174	150	17	131	117	~
Wisconsin	87	78	~	73	71	~
West North Central						
Iowa	40	39	~	42	41	~
Kansas	49	45	~	31	30	~
Minnesota	87	78	~	77	69	~
Missouri	89	80	~	81	71	~
Nebraska	30	30	~	23	19	~
North Dakota	~	~	~	~	~	~
South Dakota						
South						
South Atlantic						
Delaware	19	~	~	~	~	~
District of Columbia	~	~	~	~	~	~
Florida	225	195	26	204	178	21
Georgia						
Atlanta	36	20	~	33	24	~
Maryland	77	56	18	64	47	~
North Carolina	103	77	21	95	71	22
South Carolina	44	32	~	41	29	~
Virginia						
West Virginia	30	29	~	30	29	~
East South Central						
Alabama						
Kentucky	58	55	~	43	39	~
Mississippi						
Tennessee						

continued

Table E.22: Hodgkin Lymphoma. Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	54	32	21	63	45	18
Oklahoma						
Texas						
West						
Mountain						
Arizona	50	46	~	50	45	~
Colorado	64	61	~	44	40	~
Idaho	~	~	~	18	18	~
Montana	~	~	~	~	~	~
Nevada						
New Mexico	28	27	~	~	~	~
Utah	27	26	~	26	26	~
Wyoming	~	~	~	~	~	~
Pacific	586	518	29	514	443	23
Alaska	~	~	~	~	~	~
California	429	381	27	379	326	19
San Francisco-Oakland	53	37	~	47	34	~
San Jose-Monterey	34	32	~	23	21	~
Los Angeles	120	105	~	125	105	~
Hawaii	~	~	~	~	~	~
Oregon	50	47	~	44	41	~
Washington	88	81	~	76	67	~
Seattle-Puget Sound	59	56	~	58	55	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.23: Non-Hodgkin Lymphoma. Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	407	378	23	355	338	~
Maine						
Massachusetts	630	580	19	624	574	23
New Hampshire	100	99	~	102	100	~
Rhode Island	110	106	~	131	129	~
Vermont						
Middle Atlantic	4,114	3,506	396	3,963	3,460	336
New Jersey	936	805	88	868	761	84
New York	1,786	1,446	227	1,770	1,476	188
Pennsylvania	1,392	1,255	81	1,325	1,223	64
Midwest						
East North Central						
Illinois	1,203	1,060	94	1,072	963	70
Indiana						
Michigan	964	870	79	925	838	76
Detroit	392	327	56	374	311	57
Ohio	1,107	1,002	77	1,120	1,009	79
Wisconsin	543	513	18	452	438	~
West North Central						
Iowa	302	295	~	291	286	~
Kansas	254	235	~	246	227	~
Minnesota	530	502	~	474	447	~
Missouri	512	476	29	508	456	45
Nebraska	147	142	~	153	146	~
North Dakota	74	73	~	50	49	~
South Dakota						
South						
South Atlantic						
Delaware	59	55	~	55	44	~
District of Columbia	48	17	28	33	~	16
Florida	1,858	1,690	136	1,585	1,463	95
Georgia						
Atlanta	193	141	45	142	106	31
Maryland	445	333	81	365	286	61
North Carolina	598	518	69	515	438	72
South Carolina	309	241	64	283	231	46
Virginia						
West Virginia	198	193	~	199	191	~
East South Central						
Alabama						
Kentucky	365	335	20	333	317	~
Mississippi						
Tennessee						

continued

Table E.23: Non-Hodgkin Lymphoma. Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	367	281	84	363	303	60
Oklahoma						
Texas						
West						
Mountain						
Arizona	418	404	~	338	326	~
Colorado	343	327	~	347	332	~
Idaho	101	99	~	109	104	~
Montana	89	86	~	64	64	~
Nevada						
New Mexico	118	112	~	116	109	~
Utah	172	169	~	122	121	~
Wyoming	32	30	~	33	32	~
Pacific	4,023	3,414	168	3,355	2,867	126
Alaska	45	38	~	42	37	~
California	2,918	2,478	147	2,422	2,056	113
San Francisco-Oakland	469	356	38	336	253	25
San Jose-Monterey	185	147	~	181	140	~
Los Angeles	800	652	63	647	530	50
Hawaii	114	30	~	80	20	~
Oregon	352	330	~	302	287	~
Washington	594	538	~	509	467	~
Seattle-Puget Sound	432	386	~	350	322	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.24: Multiple Myeloma. Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	98	89	~	73	62	~
Maine						
Massachusetts	148	136	~	129	113	~
New Hampshire	33	33	~	20	20	~
Rhode Island	25	24	~	33	32	~
Vermont						
Middle Atlantic	1,072	856	179	1,097	825	223
New Jersey	236	187	44	218	162	45
New York	498	388	86	514	371	115
Pennsylvania	338	281	49	365	292	63
Midwest						
East North Central						
Illinois	311	239	59	325	222	92
Indiana						
Michigan	284	224	57	229	173	52
Detroit	129	82	47	115	72	41
Ohio	310	251	52	264	219	42
Wisconsin	130	125	~	123	117	~
West North Central						
Iowa	81	78	~	72	71	~
Kansas	72	67	~	67	55	~
Minnesota	129	123	~	102	92	~
Missouri	123	99	21	136	103	30
Nebraska	47	45	~	41	40	~
North Dakota	~	~	~	22	21	~
South Dakota						
South						
South Atlantic						
Delaware	22	~	~	18	16	~
District of Columbia	19	~	~	21	~	17
Florida	513	436	74	453	396	50
Georgia						
Atlanta	49	28	20	47	27	19
Maryland	128	83	40	114	70	41
North Carolina	168	128	38	162	113	46
South Carolina	91	60	29	91	54	35
Virginia						
West Virginia	47	46	~	45	40	~
East South Central						
Alabama						
Kentucky	124	112	~	103	92	~
Mississippi						
Tennessee						

continued

Table E.24: Multiple Myeloma. Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	123	73	50	111	59	52
Oklahoma						
Texas						
West						
Mountain						
Arizona	93	84	~	84	73	~
Colorado	95	89	~	78	76	~
Idaho	38	37	~	25	25	~
Montana	24	21	~	20	20	~
Nevada						
New Mexico	39	35	~	33	29	~
Utah	45	43	~	25	25	~
Wyoming	~	~	~	~	~	~
Pacific	~	844	95	~	685	94
Alaska	~	~	~	~	~	~
California	744	589	86	647	507	85
San Francisco-Oakland	102	58	20	89	57	20
San Jose-Monterey	32	26	~	45	38	~
Los Angeles	234	165	50	179	120	44
Hawaii	22	~	~	23	~	~
Oregon	93	89	~	63	60	~
Washington	163	150	~	119	108	~
Seattle-Puget Sound	114	104	~	86	76	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Table E.25: Leukemias. Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
Northeast						
New England						
Connecticut	203	187	~	164	146	~
Maine						
Massachusetts	379	362	~	340	317	~
New Hampshire	73	72	~	63	63	~
Rhode Island	74	72	~	51	50	~
Vermont						
Middle Atlantic	2,645	2,356	178	2,134	1,878	169
New Jersey	555	488	44	426	378	34
New York	1,190	1,034	88	982	849	79
Pennsylvania	900	834	46	726	651	56
Midwest						
East North Central						
Illinois	786	694	59	621	537	68
Indiana						
Michigan	619	558	47	507	441	56
Detroit	263	224	34	233	187	42
Ohio	658	583	49	552	509	36
Wisconsin	376	361	~	311	298	~
West North Central						
Iowa	248	241	~	166	160	~
Kansas	179	166	~	126	116	~
Minnesota	384	353	~	292	263	~
Missouri	341	309	30	271	246	21
Nebraska	111	102	~	102	96	~
North Dakota	45	45	~	31	31	~
South Dakota						
South						
South Atlantic						
Delaware	44	39	~	33	27	~
District of Columbia	25	~	17	17	~	~
Florida	1,251	1,153	75	954	848	88
Georgia						
Atlanta	103	72	22	61	44	~
Maryland	241	188	48	183	130	43
North Carolina	382	334	43	313	256	52
South Carolina	187	140	46	138	111	22
Virginia						
West Virginia	144	136	~	114	110	~
East South Central						
Alabama						
Kentucky	280	258	~	202	188	~
Mississippi						
Tennessee						

continued

Table E.25: Leukemias. Cancer Incidence Counts by U.S. Census Region and Division, State and Metropolitan Area, Sex, and Race (All Races, White, Black), United States: SEER and NPCR Registries that Meet Quality Criteria,*† 1999 *(continued)*

Area	Male			Female		
	All Races	White	Black	All Races	White	Black
West South Central						
Arkansas						
Louisiana	255	200	54	186	134	51
Oklahoma						
Texas						
West						
Mountain						
Arizona	247	236	~	214	201	~
Colorado	249	239	~	190	182	~
Idaho	88	88	~	57	56	~
Montana	67	61	~	41	40	~
Nevada						
New Mexico	95	87	~	75	74	~
Utah	106	106	~	76	69	~
Wyoming	34	34	~	26	26	~
Pacific	2,596	2,212	116	1,827	~	78
Alaska	24	19	~	25	18	~
California	1,860	1,580	94	1,319	1,115	68
San Francisco-Oakland	228	157	24	166	121	~
San Jose-Monterey	102	88	~	102	90	~
Los Angeles	521	428	40	336	268	31
Hawaii	77	27	~	51	~	~
Oregon	215	208	~	163	156	~
Washington	420	378	~	269	248	~
Seattle-Puget Sound	296	262	~	187	171	~

* Data are from selected statewide and metropolitan area cancer registries that meet the following data quality criteria for all invasive cancer sites combined: case ascertainment is at least 90% complete; $\geq$ 97% of cases pass a standard set of computerized edits; $\leq$ 5% of cases were ascertained by death certificate only; $\leq$ 3% of cases are missing information on sex; $\leq$ 5% of cases are missing information on race; $\leq$ 3% of cases are missing information on age. See Appendix H for registry-specific data quality information.

† Invasive cancers only

~ Counts are suppressed if fewer than 16 cases were reported in the specific area-sex-race category.

Notes: Cases from suppressed counts are included in region/division counts. Region/division counts are presented for regions/divisions with 100% of the population covered by registries that meet the data quality criteria specified above unless the count for exactly one state in the region or division is suppressed due to a count of less than 16. California, Washington, and Michigan state counts each include cases from the SEER metropolitan areas.

Appendix F

State and Metropolitan Area Cancer Registries by Current Federal Funding Source, 2002

Appendix G

Table G.1: State and Metropolitan Area Cancer Registries by Federal Funding Source and First Diagnosis Year* for Which Cancer Cases Were Reportable to CDC's NPCR or NCI's SEER Program

State or Territory	First Diagnosis Year for Which Cases Were Reportable to NPCR or SEER*	Federal Funding Source	
		1999	2002
Alabama	1996	NPCR	NPCR
Alaska	1996	NPCR	NPCR
Arizona	1995	NPCR	NPCR
Arkansas	1996	NPCR	NPCR
California	1995/2000	NPCR	NPCR/SEER
Los Angeles	1992	SEER	SEER
San Francisco-Oakland	1973	SEER	SEER
San Jose-Monterey	1992	SEER	SEER
Colorado	1995	NPCR	NPCR
Connecticut	1973	SEER	SEER
Delaware	1997	NPCR	NPCR
District of Columbia	1996	NPCR	NPCR
Florida	1995	NPCR	NPCR
Georgia	1995	NPCR	NPCR
Atlanta	1975	SEER	SEER
Hawaii	1973	SEER	SEER
Idaho	1995	NPCR	NPCR
Illinois	1995	NPCR	NPCR
Indiana	1995	NPCR	NPCR
Iowa	1973	SEER	SEER
Kansas	1995	NPCR	NPCR
Kentucky	1995/2000	NPCR	NPCR/SEER
Louisiana	1995/2000	NPCR	NPCR/SEER
Maine	1995	NPCR	NPCR
Maryland	1996	NPCR	NPCR
Massachusetts	1995	NPCR	NPCR
Michigan	1995	NPCR	NPCR
Detroit	1973	SEER	SEER
Minnesota	1995	NPCR	NPCR
Mississippi	1996	NPCR	NPCR
Missouri	1996	NPCR	NPCR
Montana	1995	NPCR	NPCR
Nebraska	1995	NPCR	NPCR
Nevada	1995	NPCR	NPCR

continued

Table G1: State and Metropolitan Area Cancer Registries by Federal Funding Source and First Diagnosis Year* for Which Cancer Cases Were Reportable to CDC's NPCR or NCI's SEER Program *(continued)*

State or Territory	First Diagnosis Year for Which Cases Were Reportable to NPCR or SEER*	Federal Funding Source	
		1999	2002
New Hampshire	1995	NPCR	NPCR
New Jersey	1995/2000	NPCR	NPCR/SEER
New Mexico	1973	SEER	SEER
New York	1996	NPCR	NPCR
North Carolina	1995	NPCR	NPCR
North Dakota	1997	NPCR	NPCR
Ohio	1996	NPCR	NPCR
Oklahoma	1997	NPCR	NPCR
Oregon	1996	NPCR	NPCR
Palau	1999	NPCR	NPCR
Pennsylvania	1995	NPCR	NPCR
Puerto Rico	1998	NPCR	NPCR
Rhode Island	1995	NPCR	NPCR
South Carolina	1996	NPCR	NPCR
South Dakota	2000	NPCR	NPCR
Tennessee	1999	NPCR	NPCR
Texas	1995	NPCR	NPCR
Utah	1973	SEER	SEER
Vermont	1996	NPCR	NPCR
Virgin Islands	1999	NPCR	NPCR
Virginia	1996	NPCR	NPCR
Washington	1995	NPCR	NPCR
Seattle-Puget Sound	1974	SEER	SEER
West Virginia	1995	NPCR	NPCR
Wisconsin	1995	NPCR	NPCR
Wyoming	1996	NPCR	NPCR

* Diagnosis year is the year during which a reported case of cancer was first diagnosed.

CDC = Centers for Disease Control and Prevention; NCI = National Cancer Institute; NPCR = National Program of Cancer Registries; SEER = Surveillance, Epidemiology, and End Results.

Appendix H

Table H.1: Achievement of Selected Data Quality Criteria by State and SEER Metropolitan Area Cancer Registries, 1999

Only data from the shaded states and metropolitan areas are included in *United States Cancer Statistics: 1999 Incidence.**

Cancer Registry	% Case Ascertainment†	% Passing Edits‡	% DCOs§	% Missing Sex	% Missing Race	% Missing Age
Alabama	<90	100.0	3.4	0.04	4.55	0.06
Alaska	≥95	100.0	0.3	0.00	0.95	0.05
Arizona	≥95	100.0	2.1	0.00	0.98	0.01
Arkansas	<90	100.0	0.0	0.00	0.43	0.00
California	≥95	100.0	1.0	0.00	2.61	0.00
Greater Bay¶	90-94	100.0	2.0	0.00	3.96	0.00
Los Angeles	≥95	100.0	0.8	0.00	1.43	0.00
Colorado	≥95	100.0	1.0	0.01	1.13	0.11
Connecticut	≥95	100.0	1.0	0.00	1.06	0.00
Delaware	≥95	100.0	1.4	0.05	0.58	0.00
District of Columbia	≥95	100.0	2.9	0.00	2.83	0.07
Florida	≥95	100.0	3.8	0.02	0.91	0.01
Georgia	<90	100.0	0.8	0.00	1.11	0.01
Atlanta	≥95	100.0	1.7	0.00	0.72	0.00
Hawaii	90-94	100.0	0.5	0.00	3.90	0.00
Idaho	≥95	100.0	2.8	0.00	0.02	0.00
Illinois	≥95	100.0	2.0	0.00	2.10	0.00
Indiana	90-94	100.0	NA	0.00	0.54	0.00
Iowa	≥95	100.0	1.6	0.00	1.07	0.00
Kansas	≥95	100.0	3.7	0.00	2.39	0.00
Kentucky	≥95	100.0	1.8	0.01	2.61	0.00
Louisiana	≥95	100.0	0.8	0.00	0.05	0.00
Maine						
Maryland	≥95	100.0	3.1	0.00	2.39	0.06
Massachusetts	≥95	100.0	2.5	0.00	2.04	0.00
Michigan	≥95	100.0	1.0	0.01	1.24	0.02
Detroit	≥95	100.0	1.0	0.00	0.84	0.00
Minnesota	≥95	99.9	2.2	0.00	1.97	0.01
Mississippi						
Missouri	≥95	100.0	3.3	0.00	0.62	0.00
Montana	90-94	100.0	5.0	0.00	2.73	0.05
Nebraska	≥95	100.0	1.5	0.00	3.31	0.00
Nevada	<90	99.9	9.5	0.03	0.40	0.00
New Hampshire	90-94	100.0	2.6	0.00	1.03	0.02
New Jersey	≥95	100.0	1.1	0.00	0.23	0.01
New Mexico	90-94	100.0	4.1	0.00	0.00	0.00
New York	≥95	100.0	2.5	0.00	2.10	0.00
North Carolina	90-94	100.0	2.0	0.00	0.36	0.01
North Dakota	≥95	100.0	0.0	0.00	0.10	0.00
Ohio	≥95	100.0	3.3	0.00	2.54	0.00
Oklahoma	<90	100.0	NA	0.00	3.53	0.01
Oregon	≥95	100.0	4.1	0.00	1.58	0.00
Pennsylvania	≥95	100.0	0.4	0.00	1.70	0.00
Rhode Island	≥95	100.0	2.6	0.00	0.02	0.00
South Carolina	≥95	100.0	2.2	0.00	0.70	0.00

continued

Table H.1: Achievement of Selected Data Quality Criteria by State and SEER Metropolitan Area Cancer Registries, 1999 *(continued)*

Only data from the shaded states and metropolitan areas are included in *United States Cancer Statistics: 1999 Incidence.**

Cancer Registry	% Case Ascertainment†	% Passing Edits‡	% DCOs§	% Missing Sex	% Missing Race	% Missing Age
South Dakota‖						
Tennessee						
Texas						
Utah	≥95	100.0	0.3	0.00	0.00	0.00
Vermont	<90	100.0	NA	0.04	2.05	0.15
Virginia	90-94	100.0	NA	0.00	0.93	0.02
Washington	≥95	100.0	0.6	0.00	2.69	0.00
Seattle-Puget Sound	≥95	100.0	0.8	0.00	0.73	0.00
West Virginia	≥95	100.0	1.7	0.01	1.32	0.00
Wisconsin	≥95	100.0	2.7	0.00	0.73	0.00
Wyoming	≥95	100.0	1.2	0.00	0.00	0.00

* Registry members of the National Program of Cancer Registries whose data are not included in this report chose whether to have their data quality information listed.

† Completeness of case ascertainment was estimated by methods developed by the North American Association of Central Cancer Registries (Howe 2001; Tucker 1999; Wu 2002).

‡ Computerized edits test the validity and logic of data components reported for selected items.

§ DCOs, or *death-certificate only* cases, are cancer cases ascertained solely on the basis of a death certificate after the registry has completed a routine procedure known as death clearance and followback. [24–26]

¶ Greater Bay includes San Francisco-Oakland and San Jose-Monterey Registries.

‖ Registry reference year is after 1999.

NA = Registry did not conduct death clearance and followback for 1999 cases; SEER = Surveillance, Epidemiology, and End Results.

Appendix I

Table I.1: SEER Site Groups for Primary Cancer Sites Based on ICD–O–2

Primary Site Group	Primary Site/ Histologic Type	Excluding Histologic Type
Buccal cavity and pharynx		
Lip	C000:C009	M-9590:9989
Tongue	C019:C029	M-9590:9989
Salivary gland	C079:C089	M-9590:9989
Floor of mouth	C040:C049	M-9590:9989
Gum & other mouth	C030:C039,C050:C059,C060:C069	M-9590:9989
Nasopharynx	C110:C119	M-9590:9989
Tonsil	C090:C099	M-9590:9989
Oropharynx	C100:C109	M-9590:9989
Hypopharynx	C129,C130:C139	M-9590:9989
Other buccal cavity and pharynx	C140,C142:C148	M-9590:9989
Digestive system		
Esophagus	C150:C159	M-9590:9989
Stomach	C160:C169	M-9590:9989
Small intestine	C170:C179	M-9590:9989
Colon excluding rectum		
Cecum	C180	M-9590:9989
Appendix	C181	M-9590:9989
Ascending colon	C182	M-9590:9989
Hepatic flexure	C183	M-9590:9989
Transverse colon	C184	M-9590:9989
Splenic flexure	C185	M-9590:9989
Descending colon	C186	M-9590:9989
Sigmoid colon	C187	M-9590:9989
Large intestine, NOS	C188:C189,C260	M-9590:9989
Rectum & rectosigmoid		
Rectosigmoid junction	C199	M-9590:9989
Rectum	C209	M-9590:9989
Anus, anal canal & anorectum	C210:C212,C218	M-9590:9989
Liver & intrahepatic bile duct		
Liver	C220	M-9590:9989
Intrahepatic bile duct	C221	M-9590:9989
Gallbladder	C239	M-9590:9989
Other biliary	C240:C249	M-9590:9989
Pancreas	C250:C259	M-9590:9989
Retroperitoneum	C480	M-9590:9989
Peritoneum, omentum & mesentery	C481:C482	M-9590:9989
Other digestive organs	C268:C269,C488	M-9590:9989
Respiratory system		
Nasal cavity, middle ear & accessory sinuses	C300:C301,C310:C319	M-9590:9989
Larynx	C320:C329	M-9590:9989
Lung and bronchus	C340:C349	M-9590:9989
Pleura	C384	M-9590:9989
Trachea, mediastinum & other respiratory organs	C339,C381:C383,C388,C390 C398,C399	M-9590:9989

continued

Table I.1: SEER Site Groups for Primary Cancer Sites Based on ICD–O–2 *(continued)*

Primary Site Group	Primary Site/ Histologic Type	Excluding Histologic Type
Bones and joints	C400:C419	M-9590:9989
Soft tissue (including heart)	C380,C470:C479,C490:C499	M-9590:9989
Skin (excluding basal and squamous)		
Melanomas—skin	C440:C449 (types 8720:8790)	
Other non-epithelial skin	C440:C449	M-8000:8004, 8010:8045, 8050:8082, 8090:8110, 8720:8790, 9590:9989
Breast	C500:C509	M-9590:9989
Female genital system		
Cervix	C530:C539	M-9590:9989
Corpus	C540:C549	M-9590:9989
Uterus, NOS	C559	M-9590:9989
Ovary	C569	M-9590:9989
Vagina	C529	M-9590:9989
Vulva	C510:C519	M-9590:9989
Other female genital organs	C570:C589	M-9590:9989
Male genital system		
Prostate	C619	M-9590:9989
Testis	C620:C629	M-9590:9989
Penis	C600:C609	M-9590:9989
Other male genital organs	C630:C639	M-9590:9989
Urinary system		
Bladder	C670:C679	M-9590:9989
Kidney and renal pelvis	C649,C659	M-9590:9989
Ureter	C669	M-9590:9989
Other urinary organs	C680:C689	M-9590:9989
Eye & orbit	C690:C699	M-9590:9989
Brain and other nervous system		
Brain	C710:C719	M-9530:9539, 9590:9989
Other nervous system	C710:C719 (type 9530:9539)	
	C700:C709,C720:C729	M-9590:9989
Endocrine system		
Thyroid	C739	M-9590:9989
Other endocrine (including thymus)	C379,C740:C749,C750:C759	M-9590:9989

continued

Table I.1: SEER Site Groups for Primary Cancer Sites Based on ICD–O–2 *(continued)*

Primary Site Group	Primary Site/ Histologic Type	Excluding Histologic Type
Lymphomas		
Hodgkin lymphoma	types 9650:9667	
Nodal	for sites:C024,C098,C099,C111, C142,C379,C422,C770:C779	
Extranodal	for all other sites	
Non-Hodgkin lymphoma	types 9590:9595,9670:9717,9823,9827	
Nodal	for sites:C024,C098,C099,C111,C142,C379, C422,C770:C779	
Extranodal	types 9590:9595, 9670:9717	
	for all other sites	
	types 9823,9827	
	for all other sites except C420,C421,C424	
Multiple myeloma	type 9731:9732	
Leukemias		
Lymphocytic		
Acute lymphocytic	types 9821,9828	
Chronic lymphocytic	C420,C421,C424 (type 9823)	
Other lymphocytic	types 9820,9822,9824,9825,9826	
Myeloid		
Acute myeloid	types 9840,9861,9866,9867,9871-9874	
Chronic myeloid	types 9863,9868	
Other myeloid	types 9860,9862,9864	
Monocytic		
Acute monocytic	type 9891	
Chronic monocytic	type 9893	
Other monocytic	types 9890,9892,9894	
Other		
Other acute	types 9801,9841,9931,9932	
Other chronic	types 9803,9842	
Aleukemic, subleukemic and NOS	types 9800,9802,9804,9830,9850,9870, 9880,9900,9910,9930,9940:9941 C420,C421,C424 (type 9827)	
Ill-defined and unspecified sites	types 9720:9723,9740,9741,9760:9764,9950:9989 C760:C768,C809 (types 8000:9589) C420:C424 (types 8000:9589) C770:C779 (types 8000:9589)	
Invalid site	Site or histology code not within valid range or site code not found in this table.	

ICD–O–2 = *International Classification of Diseases for Oncology*, 2nd ed.; SEER = Surveillance, Epidemiology, and End Results.

Source: Ries LAG, Eisner MP, Kosary CL, Hankey BF, Miller BA, Clegg L. Edwards BK, editors. *SEER Cancer Statistics Review, 1973–1999 (Table A–3)*. Bethesda (MD); National Cancer Institute; 2002. Also available from: URL: http://www.seer.cancer.gov/csr/1973_1999. [Accessed 2002, Jun 14].

Appendix J

Table J.1: Projected Population Counts by U.S. Census Region and Division, State and SEER Metropolitan Area, Sex, and Race (All Races, White, Black), 1999*

	Males			Females		
	All Races	**White**	**Black**	**All Races**	**White**	**Black**
United States	133,349,782	110,321,683	16,555,757	139,437,703	114,250,059	18,301,941
Northeast Census Region	25,035,338	20,943,696	2,998,634	26,826,675	22,300,890	3,372,345
New England Division	6,544,836	5,963,667	378,342	6,948,797	6,333,408	403,385
Connecticut	1,594,082	1,402,101	146,123	1,688,963	1,479,609	161,621
Maine	610,143	599,396	3,541	639,568	628,771	2,784
Massachusetts	2,980,618	2,660,527	196,783	3,195,630	2,859,461	207,630
New Hampshire	591,015	577,105	4,983	609,027	595,817	4,104
Rhode Island	476,746	437,037	25,181	514,297	473,324	25,769
Vermont	292,232	287,501	1,731	301,312	296,426	1,477
Middle Atlantic Division	18,490,502	14,980,029	2,620,292	19,877,878	15,967,482	2,968,960
New Jersey	3,952,320	3,140,307	568,465	4,201,145	3,317,317	628,607
New York	8,770,904	6,727,305	1,503,596	9,455,387	7,165,718	1,720,784
Pennsylvania	5,767,278	5,112,417	548,231	6,221,346	5,484,447	619,569
Midwest Census Region	30,840,459	27,033,602	3,039,023	32,402,640	28,213,808	3,382,736
East North Central Division	21,638,223	18,601,007	2,527,657	22,802,600	19,432,832	2,836,020
Illinois	5,916,262	4,824,734	874,010	6,212,197	5,001,499	980,787
Indiana	2,892,566	2,619,519	236,287	3,047,309	2,747,647	261,430
Michigan	4,803,696	4,027,357	661,446	5,062,808	4,194,065	752,675
Detroit†	1,957,737	1,446,258	458,143	2,123,229	1,523,270	546,664
Ohio	5,442,355	4,752,381	613,184	5,811,240	5,041,360	688,298
Wisconsin	2,583,344	2,377,016	142,730	2,669,046	2,448,261	152,830
West North Central Division	9,202,236	8,432,595	511,366	9,600,040	8,780,976	546,716
Iowa	1,399,035	1,346,463	29,753	1,471,690	1,420,081	28,150
Kansas	1,306,160	1,193,279	78,189	1,348,474	1,232,470	78,721
Minnesota	2,355,710	2,186,797	76,451	2,421,214	2,251,774	72,103
Missouri	2,650,374	2,321,542	288,459	2,817,380	2,445,815	328,816
Nebraska	815,142	763,344	33,183	850,699	796,291	34,997
North Dakota	314,940	294,944	2,319	318,184	298,039	1,840
South Dakota	360,875	326,226	3,012	372,399	336,506	2,089
South Census Region	46,959,277	36,882,052	8,818,684	49,554,322	38,344,020	9,860,562
South Atlantic Division	24,072,748	18,352,260	5,080,545	25,495,852	19,114,881	5,686,314
Delaware	366,530	286,792	70,805	386,862	298,836	78,261
District of Columbia	244,005	89,325	146,282	277,059	93,110	174,187
Florida	7,333,414	6,053,646	1,116,074	7,779,773	6,386,787	1,212,852
Georgia	3,791,682	2,660,087	1,043,508	3,994,493	2,714,653	1,187,978
Atlanta†	1,307,258	854,668	397,282	1,380,609	875,331	451,796
Maryland	2,515,847	1,720,562	684,647	2,657,985	1,771,058	769,302

continued

Table J.1: Projected Population Counts by U.S. Census Region and Division, State and SEER Metropolitan Area, Sex, and Race (All Races, White, Black), 1999* *(continued)*

	Males			Females		
	All Races	White	Black	All Races	White	Black
North Carolina	3,713,183	2,822,968	789,314	3,936,974	2,935,607	895,093
South Carolina	1,874,780	1,314,354	538,921	2,009,987	1,368,307	617,229
Virginia	3,361,948	2,565,538	663,972	3,516,603	2,646,613	721,415
West Virginia	871,359	838,988	27,022	936,116	899,910	29,997
East South Central Division	7,998,890	6,354,102	1,560,526	8,586,683	6,705,611	1,790,770
Alabama	2,098,014	1,551,736	526,174	2,273,152	1,637,849	612,716
Kentucky	1,923,406	1,768,730	137,339	2,036,644	1,868,539	150,976
Mississippi	1,328,964	842,050	472,020	1,442,275	887,033	539,741
Tennessee	2,648,506	2,191,586	424,993	2,834,612	2,312,190	487,337
West South Central Division	14,887,639	12,175,690	2,177,613	15,471,787	12,523,528	2,383,478
Arkansas	1,236,966	1,029,547	191,724	1,321,616	1,084,472	220,070
Louisiana	2,103,538	1,406,913	659,208	2,269,021	1,477,392	754,112
Oklahoma	1,646,239	1,366,806	129,815	1,722,683	1,428,407	135,175
Texas	9,900,896	8,372,424	1,196,866	10,158,467	8,533,257	1,274,121
West Census Region	30,514,708	25,462,333	1,699,416	30,654,066	25,391,341	1,686,298
Mountain Division	8,520,945	7,741,954	293,680	8,612,615	7,807,439	280,644
Arizona	2,362,679	2,097,320	89,238	2,411,702	2,138,420	86,006
Colorado	2,012,093	1,856,301	89,868	2,045,614	1,886,188	86,817
Idaho	625,182	606,066	3,959	626,646	606,958	3,588
Montana	439,393	407,282	1,793	443,762	410,303	1,431
Nevada	924,000	794,334	72,141	890,035	756,182	69,684
New Mexico	855,563	739,568	23,607	883,706	761,484	22,353
Utah	1,060,918	1,009,293	10,871	1,072,684	1,019,382	8,777
Wyoming	241,117	231,790	2,203	238,466	228,522	1,988
Pacific Division	21,993,763	17,720,379	1,405,736	22,041,451	17,583,902	1,405,654
Alaska	325,227	248,093	12,647	294,385	218,474	11,372
California	16,579,347	13,228,889	1,235,844	16,589,374	13,089,930	1,252,823
San Francisco-Oakland†	1,989,602	1,339,764	235,788	2,049,064	1,345,945	250,283
San Jose-Monterey†	1,174,520	907,604	48,789	1,149,775	888,746	40,853
Los Angeles†	4,620,176	3,492,101	493,637	4,714,892	3,486,712	550,524
Hawaii	590,114	169,355	19,035	590,366	151,881	14,840
Oregon	1,637,560	1,530,542	32,200	1,676,382	1,565,372	29,816
Washington	2,861,515	2,543,500	106,010	2,890,944	2,558,245	96,803
Seattle-Puget Sound†	1,961,054	1,696,116	92,924	1,985,892	1,706,701	86,208

* The 1999 race- and sex-specific population estimates from the U.S. Bureau of the Census, as available from SEER*Stat (www.SEER.cancer.gov/population), are projected from estimates and do not take into consideration results from the enumerated 2000 census.

† The populations of the metropolitan areas of Detroit, Atlanta, San Francisco-Oakland, San Jose-Monterey, Los Angeles, and Seattle-Puget Sound are shown separately because these populations have separate metropolitan area Surveillance, Epidemiology, and End Results (SEER) cancer registries. State population totals include the populations of the SEER metropolitan areas.

Source: Census Bureau population figures, as modified by the SEER Program. Available from: http://www.seer.cancer.gov/popdata [accessed August 8, 2002].

Appendix K

Table K.1: 1970 and 2000 U.S. Standard Population Weights

Age Category (j)	Year 1970 Standard Weight (w_j)	Year 2000 Standard Weight (w_j)*
All ages	1.000000	1.000000
0-4	0.084416	NA
<1	NA	0.013818
1-4	NA	0.055317
5-9	0.098204	0.072533
10-14	0.102304	0.073032
15-19	0.093845	0.072169
20-24	0.080561	0.066478
25-29	0.066320	0.064529
30-34	0.056249	0.071044
35-39	0.054656	0.080762
40-44	0.058958	0.081851
45-49	0.059622	0.072118
50-54	0.054643	0.062716
55-59	0.049077	0.048454
60-64	0.042403	0.038793
65-69	0.034406	0.034264
70-74	0.026789	0.031773
75-79	0.018871	0.026999
80-84	0.011241	0.017842
85+	0.007435	0.015508

* Department of Health and Human Services policy mandates that, beginning with the 1999 data year, the 2000 U.S. standard population will be used for reporting age-adjusted disease rates.

Sources: Klein, RJ, and Schoenborn, CA. Age adjustment using the 2000 projected U.S. population. *Healthy People Statistical Notes, No. 20*. Hyattsville, MD: National Center for Health Statistics, 2001.
Surveillance, Epidemiology, and End Results (SEER) Program public-use data (1973-1999). Available from: http://www.SEER.cancer.gov.publicdata/ [accessed Aug 8, 2002].

Appendix L

Estimating Bias-Corrected Incidence Rates for U.S. Census Regions and Divisions

The bias-corrected incidence rate for a cancer site was computed on the basis of the relationship between mortality from that cancer site in an entire U.S. census region or division and mortality from that cancer site in the states in the region or division for which incidence data were eligible for inclusion in *United States Cancer Statistics: 1999 Incidence*.

To estimate the bias-corrected incidence rate for a cancer site for a U.S. census region or division, we first calculated the observed age-adjusted incidence rate using data from cancer registries in the region or division whose data are included in this report. In addition, the age-adjusted mortality rate for the same included portion of the region or division was calculated, as well as the age-adjusted mortality rate for the areas in the region or division whose incidence data are not included in the observed incidence rate. The true mortality rate for the region or division was then calculated as the weighted sum of the two age-adjusted mortality rates, where the weights are based on the population in the two areas (i.e., included and excluded) of the region or division. An estimate of the bias in the observed mortality rate was therefore the difference between the true and observed mortality rates expressed as a proportion of the observed mortality rate. This estimate of bias was then used to calculate a bias-corrected estimate of the incidence rate for the region or division.

As an example, consider female invasive breast cancer in the New England census region. Incidence data for Connecticut, Massachusetts, New Hampshire, and Rhode Island (states that have 86.3% of the region's total population) were eligible for inclusion in the calculation of the regional incidence rate; data for Maine and Vermont were not eligible. The invasive female breast cancer mortality rate for the eligible areas is 27.3 per 100,000, and the rate for Maine and Vermont combined is 27.7. The true mortality rate is the weighted sum of the two rates and is computed as follows:

$$27.4 = [0.863 * 27.3 + (1 - 0.863) * 27.7].$$

The observed incidence rate for the region therefore has an estimated bias (expressed as a proportion of the observed rate) of

$$-0.0037 = (27.3–27.4)/27.3.$$

The observed age-adjusted incidence rate for New England is 145.1 per 100,000. Because the sign for the estimated bias is negative, this proportion of the rate must be added to the observed rate to compensate for bias. The bias-corrected rate, then, is

$$145.64 = 145.1 + (0.0037 * 145.1).$$

In this example, the confidence interval for the observed incidence rate (142.2–148.1) includes the bias-corrected rate.

For this report, the bias-corrected, age-adjusted incidence rate was calculated for four major cancer sites (female breast, male prostate, male and female colorectal, male and female lung and bronchus) for each U.S. census region or division. Then, if the bias-corrected, age-adjusted incidence rates for all four sites fell within the confidence interval of the observed age-adjusted incidence rates for all four sites, the rates for *all* cancer sites in the region or division were published.

Appendix M

Table M.1: U.S. Population Median Age in Years by State, Sex, and Race (All Races, White, Black), 2000

State	Males			Females		
	All Races	White	Black	All Races	White	Black
United States	34.0	36.5	28.5	36.5	38.9	31.7
Alabama	34.4	36.8	27.8	37.2	39.5	31.8
Alaska	32.4	35.4	27.8	32.5	35.2	26.7
Arizona	32.9	36.6	29.0	35.5	39.2	29.0
Arkansas	34.6	36.7	25.9	37.4	39.5	29.7
California	32.2	36.2	30.5	34.4	38.5	32.6
Colorado	33.2	35.2	30.3	35.4	37.3	30.3
Connecticut	36.1	38.4	27.9	38.6	40.7	31.5
Delaware	34.9	37.3	28.8	37.1	39.5	31.9
District of Columbia	33.7	34.8	34.3	35.6	34.2	37.6
Florida	37.3	40.1	27.3	40.1	43.1	30.0
Georgia	32.1	35.0	27.7	34.6	37.4	30.7
Hawaii	35.1	38.8	28.2	37.4	41.0	25.6
Idaho	32.2	33.5	25.7	34.2	35.5	21.6
Illinois	33.3	35.9	27.7	36.0	38.5	31.6
Indiana	33.9	35.1	27.8	36.5	37.6	30.7
Iowa	35.2	36.2	25.1	38.0	38.9	25.5
Kansas	33.7	35.5	27.5	36.5	38.2	29.8
Kentucky	34.6	35.4	28.5	37.1	37.9	31.8
Louisiana	32.6	35.9	26.1	35.3	38.2	30.1
Maine	37.6	38.0	24.7	39.6	40.0	20.7
Maryland	34.9	37.5	30.5	37.0	39.5	33.7
Massachusetts	35.4	37.0	28.4	37.7	39.6	30.8
Michigan	34.3	36.2	28.3	36.6	38.4	31.3
Minnesota	34.4	36.0	25.5	36.3	37.9	24.8
Mississippi	32.2	36.2	25.3	35.3	39.1	29.3
Missouri	34.8	36.2	27.7	37.4	38.6	31.2
Montana	36.6	37.9	24.8	38.5	39.6	21.0
Nebraska	34.0	35.6	25.9	36.6	38.1	28.0
Nevada	34.5	37.1	30.4	35.6	38.1	30.9
New Hampshire	36.4	36.8	29.7	37.8	38.2	26.5
New Jersey	35.5	37.9	29.8	38.0	40.6	33.2
New Mexico	33.4	37.6	30.0	35.6	39.8	29.6
New York	34.5	37.2	29.3	37.2	40.0	33.6
North Carolina	33.8	36.2	29.3	36.7	39.0	32.7
North Dakota	34.8	36.1	23.6	37.5	38.7	20.5
Ohio	34.9	36.1	28.7	37.5	38.7	32.1
Oklahoma	33.9	36.9	26.9	36.9	39.6	29.4
Oregon	35.1	37.2	30.0	37.5	39.4	28.8

continued

Table M.1: U.S. Population Median Age in Years by State, Sex, and Race (All Races, White, Black), 2000 *(continued)*

State	Males			Females		
	All Races	White	Black	All Races	White	Black
Pennsylvania	36.5	38.1	29.1	39.4	40.8	33.2
Rhode Island	35.4	37.4	26.0	38.0	40.1	27.6
South Carolina	34.0	36.7	28.4	36.7	39.2	32.3
South Dakota	34.4	36.3	26.9	36.7	38.5	20.4
Tennessee	34.5	36.3	27.6	37.2	38.9	31.1
Texas	31.3	33.9	28.5	33.4	36.2	31.0
Utah	26.7	27.3	26.8	27.7	28.4	21.8
Vermont	36.6	37.0	24.4	38.7	39.0	21.7
Virginia	34.5	36.6	30.4	36.8	38.7	33.4
Washington	34.4	36.4	30.0	36.3	38.3	29.3
West Virginia	37.5	37.9	30.7	40.2	40.5	36.5
Wisconsin	35.0	36.6	23.8	37.1	38.6	26.9
Wyoming	35.3	36.3	26.6	37.1	38.0	26.3

Source: *United States Census 2000 (http://www.census.gov).*

List of Abbreviations

CDC	Centers for Disease Control and Prevention
CI	Confidence interval
ICD–O	*International Classification of Diseases for Oncology*
IBD	Intrahepatic bile duct
NAACCR	North American Association of Central Cancer Registries
NCI	National Cancer Institute
NIH	National Institutes of Health
NOS	Not otherwise specified
NPCR	National Program of Cancer Registries
ONS	Other nervous system
SEER	Surveillance, Epidemiology, and End Results
USCS	United States Cancer Statistics