Cancer Incidence and Mortality in New Jersey 1997 - 2001

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INTRODUCTION

This report presents statewide, age-adjusted incidence rates and counts for all cancers diagnosed among New Jersey residents during the period 1997-2001, age-adjusted mortality rates and counts for the period 1997-2000 and comparisons of state and national rates for 1996-2000. The incidence data for 2001 should be considered preliminary.

The primary goal of this report is to provide 1997-2001 data to health planners, researchers and the public. Data are provided statewide for six population subgroups: white men, white women, black men, black women, Hispanic men and Hispanic women. Data are also provided by gender for all races combined. Due to the growing Hispanic population and interest in their cancer rates, we began including Hispanic cancer data in our annual incidence and mortality reports starting with last year's report (1996-2000).

For each year, the age-adjusted incidence and mortality rates per 100,000 population are shown for 66 categories of invasive cancer and for all sites combined. For women, breast cancer *in situ* statistics are shown but not included in the totals for all sites combined. For both men and women, bladder cancer *in situ* cases are included with invasive urinary bladder, urinary system and all sites. Basal and squamous cell skin cancers are not collected and therefore not included in the data tables. These conventions are standard practice for publication of cancer rates in the United States.

SUMMARY OF NEW JERSEY CANCER INCIDENCE DATA, 1997-2001

(*Standardized to U.S. 2000 Population*)

A total of 45,517 cases of invasive cancer diagnosed in 2001 among New Jersey residents were reported to the New Jersey State Cancer Registry (NJSCR), compared to 45,249 reported cases diagnosed in 2000. During the period 1997-2001, a total of 225,330 cases of invasive cancer were diagnosed among New Jersey residents, 51 percent among men and 49 percent among women.

In New Jersey, between 1997 and 2001, overall age-adjusted cancer incidence rates declined for men and women through 2000 and rose slightly in 2001, while national cancer incidence rates for both men and women tended to remain stable through 2000. In New Jersey, black men continued to have the highest cancer incidence rates, and black women continued to have the lowest cancer incidence rates for all sites combined. Lung cancer incidence rates for men continued the marked decline that began in 1999. However, lung cancer incidence rates for women were stable over the period covered in this report.

Incidence rates for colorectal cancer decreased for men and remained stable for women from 1997 to 2001. Prostate cancer rates for all men combined remained stable over this period. Invasive breast cancer incidence rates for women continued to decline, while *in situ* breast cancer rates are still rising. These findings are consistent with continued improvements in screening and early detection.

Thyroid cancer incidence rates continued to increase steadily for women, but may be leveling off for men as indicated by a slight drop in 2001. We have included a set of tables on thyroid cancer to highlight this observation. Prior to 1996, New Jersey thyroid cancer rates were lower than those of the nation, but for the period 1996-2000, the rates appear to be similar to or slightly higher than U.S. rates (see Tables 8. and 9.). Incidence rates for malignant melanoma among both sexes and non-Hodgkin lymphoma among men appeared to be fluctuating slightly, while the incidence rates for non-Hodgkin lymphoma among women declined somewhat. These cancer types (malignant melanoma and non-Hodgkin lymphoma) had previously been rising rapidly in New Jersey and the nation.

As noted in our previous report, *Cancer Among Hispanics in New Jersey, 1990-1996* (http://www.state.nj.us/health/cancer/hispanic/.), Hispanics continued to have higher incidence rates for cervical, stomach, gallbladder and liver cancers compared with the general population (see Table 7). Hispanics also have lower incidence rates for all cancers combined and for many of the most common types of cancer in the general population including lung, colorectal, breast, bladder, and melanoma of the skin.

New Jersey Cancer Incidence Rates by Gender, Race and Ethnicity, 1997-2001

Tables 1 through 7 display the total counts of all newly diagnosed cases of cancer in New Jersey and the age-adjusted incidence rates by race (all races, white, black) and by Hispanic ethnicity for each gender for the period 1997 through 2001. Rates are presented separately for each year except for Hispanics where the data are grouped for the five years due to low numbers (see technical notes).

In the paragraphs below, we note the most striking patterns shown in these tables according to gender, race and ethnic subgroups, also taking into account fluctuations and trends in incidence data for the years prior to 1997. Incidence data for earlier years can be viewed on the NJDHSS website, http://www.state.nj.us/health/cancer/statistics.htm and can be found in our previous annual cancer incidence reports.

Males (Tables 1, 3 & 5): During the years 1997-2001, the overall cancer incidence rate declined for all men, but rose slightly in 2001. The overall cancer incidence rates among black men declined at a faster rate than among white men, demonstrating a promising trend toward closing the gap between these two groups. Black men had higher incidence rates for prostate, lung, oropharyngeal, stomach and esophageal cancers than white men.

Lung cancer incidence rates continued to drop for all men, with the rate of decline more pronounced among black men. Overall prostate cancer incidence rates appeared to be stable among both white and black men with a notable drop in 1998 for both race groups. The fluctuation of prostate cancer rates over this period of time may be a function of variability in year-to-year trends in prostate-specific antigen (PSA) screening. Incidence rates for colorectal cancer among white men demonstrated a steady decrease from 1997 to 2001. In contrast to the trend seen among white men, colorectal cancer incidence rates for black men remained relatively unchanged over this period. For white men, incidence rates increased slightly for pancreatic cancer and decreased for oropharyngeal cancer between 1997 and 2001. Liver cancer among men increased among both whites and blacks, although the increase was larger for black men.

Thyroid cancer incidence rates have increased for men, a trend similar to that for the U.S. (See Table 8). Incidence rates for cancer of the small intestine appear to be leveling off. Incidence rates for laryngeal cancer continued to decrease slightly. Incidence rates for non-Hodgkin lymphoma and malignant melanoma of the skin fluctuated slightly for white men over this period.

Females (Tables 2, 4 & 6): During the period 1997-2001, the overall cancer incidence rate for women peaked in 1998 and then dropped in 1999. Since 1999, the overall rate appeared to be relatively stable for both white and black women. Black women had a lower rate for all cancer sites combined than white women, due primarily to lower rates of breast cancer, uterine cancer, ovarian cancer, lung cancer and non-Hodgkin lymphoma. Incidence rates of lung cancer were stable for both white and black women with the exception of a slight increase in 1998 and a slight drop in 2000 for black women. Colorectal cancer incidence rates declined since 1998 for white and black women. Since 1997, invasive breast cancer incidence rates declined steadily for

white women but fluctuated for black women. *In situ* breast cancer rates rose during these years for both white and black women. Cervical cancer rates declined among both white and black women since 1997, although the decline among black women appears to be at a faster rate, narrowing the gap between the two races. Black and white women demonstrated an overall decline in oropharyngeal cancer.

Thyroid cancer incidence rates for both white and black women nearly doubled from 1997 to 2001; the rates for white women remained higher than for black women. The most recent data indicate that New Jersey thyroid cancer incidence rates for white women are slightly higher than those for the U.S, while the rate for black women remains slightly lower (see Table 9). Incidence rates for non-Hodgkin lymphoma have declined steadily from 1997 to 2001 among both black and white women. The incidence rates for malignant melanoma of the skin for white women increased from 1997 to 2001. The pancreatic cancer incidence rate in 2001 was the lowest since 1997, for both white and black women. As noted in last year's report, pancreatic cancer increased from 1998 to 2000 for black women.

Hispanic, Males & Females (Table 7): The overall cancer incidence rates for Hispanic men and women for the combined years 1997-2001 were lower than for all men and women during this same time period. Rates by individual years could not be presented due to small numbers. Hispanic men continue to have higher incidence rates compared to Hispanic women, consistent with differences in cancer rates between the genders in the overall population. Incidence rates for 1997-2001 were somewhat higher than those seen in the last annual report representing 1996-2000 data. This was in part due of new intercensal populations for Hispanics and the revision to the Hispanic algorithm (see the technical notes).

Comparison of Cancer Incidence Data for New Jersey with the United States, 1996-2000

Tables 10 and 11 compare New Jersey age-adjusted incidence rates to those of the U.S. using data published in *Cancer in North America* by the North American Association of Central Cancer Registries (NAACCR). The most recent detailed data available from NAACCR are for the years 1996 through 2000. These tables show the comparable incidence rates for total cancer and for three of the most common sites of cancer for men and women, as well as for two types of cancer that have been increasing nationally during the past decade, melanoma and non-Hodgkin lymphoma. Historically, New Jersey rates have been representative of the Northeast region, which tends to have higher cancer incidence rates than the U.S. as a whole.

For men all races combined (Table 10), total cancer incidence rates were 12 percent higher for New Jersey than the U.S. during the period 1996-2000. The cancers with higher rates among white New Jersey men compared with white U.S. men were prostate cancer, colorectal cancer and non-Hodgkin lymphoma. For the U.S., the overall trend has been that incidence rates for black men have decreased steadily since the early 1990's, although a slight increase occurred in 2001 (Weir, Thun and Hankey, et al). For black men, the cancer sites with higher incidence rates for New Jersey compared with the U.S. were non-Hodgkin lymphoma, prostate cancer and colorectal cancer. Lung cancer incidence rates for New Jersey were very similar for both white

and black men compared to the nation. Melanoma incidence rates for New Jersey and U.S. men continued to be similar.

For women of all races combined (Table 11), total cancer incidence rates were 8 percent higher for New Jersey than the U.S. during the period 1996-2000. For white women, the cancer sites with higher incidence rates for New Jersey compared with the U.S. were non-Hodgkin lymphoma followed by colorectal cancer and breast cancer. For black women, the cancer sites with higher incidence rates for New Jersey compared with U.S. were non-Hodgkin lymphoma followed by colorectal cancer. As with men, melanoma incidence rates for New Jersey women and the U.S. continued to be similar.

SUMMARY OF NEW JERSEY CANCER MORTALITY DATA, 1997-2000

(*Standardized to U.S. 2000 Population*)

The New Jersey cancer mortality data through 2000 reflect many trends observed throughout the nation. U.S. cancer mortality rates have been on the decline since 1994 and stabilized from 1998 to 2000. In New Jersey, the decline since 1999 was more apparent among men than women. Advances in treatment and increased screening are believed to have helped reduce mortality from cancer. Declines in smoking rates are also believed to have contributed to the decreases, especially in men. The stabilization of mortality rates in recent years may be partially due to the recent cause of death code revisions, resulting in a slight increase seen in 1998 and after among white women [1] (see the technical notes).

New Jersey Cancer Mortality Rates by Gender, Race & Ethnicity, 1997-2000

There were 18,072 deaths in 2000 for which cancer was designated on the death certificates as the underlying cause. During the period 1997-2000, 72,442 deaths from cancer occurred among New Jersey residents, 49 percent among men and 51 percent among women. Tables 12-17 display the total counts of deaths from cancer in New Jersey and age-adjusted mortality rates by race and gender for the period 1997 through 2000. Table 18 displays age-adjusted mortality rates and counts by gender for those of Hispanic ethnicity in New Jersey for the combined years 1997-2000.

In the paragraphs below, we note the most striking patterns indicated in Tables 12 through 18 according to gender and population subgroups.

Males (Tables 12, 14 & 16): During the years 1997-2000, the overall cancer mortality rate for men steadily decreased (Table 12). In particular, downward trends in cancer mortality rates were seen for lung, prostate, stomach, larynx and melanoma of the skin. A slight decline in non-Hodgkin lymphoma and oropharyngeal and soft tissue cancer mortality rates was also seen. There was a slight increase in esophageal cancer mortality rates among men for this period of time.

For white men (Table 14), the trends for the most common cancers were similar to those for all men combined. Prostate cancer mortality rates steadily decreased among white men. A slight increase in thyroid cancer mortality rates follows the pattern of increasing incidence rates. Mortality rates for lung, oropharnygeal, larynx, stomach cancers and melanoma of the skin also decreased for white men.

Cancer mortality rates for black men (Table 16) fluctuated over this period, but continued to be significantly higher than for white men. For black men, mortality rates continued to show a downward trend for lung, stomach and kidney cancers. A slight increasing trend was seen for liver and pancreatic cancer mortality rates among black men from 1997 to 2000.

Females (Tables 13, 15 & 17): During the years 1997-2000, cancer mortality rates for women decreased, but not as much as the decrease among men (Table 13). Breast cancer mortality rates decreased through 1999 with a slight increase in 2000. The female mortality rate for lung cancer appears to have peaked in 1997 and now appears to be decreasing slightly. There was a slight downward trend in oropharyngeal cancer and liver cancer as well as melanoma of the skin and non-Hodgkin lymphoma mortality rates. Mortality rates for female colorectal, ovarian, uterine corpus and cervical cancers continued to be stable.

For white women the cancer mortality trends for most common cancers were similar to those for all women combined (Table 15). The overall cancer mortality rates for white women have been stable since 1998; slight decreases were seen for breast, melanoma of the skin, stomach and cervical cancers. Overall mortality rates for black women (Table 17) were somewhat higher than those for white women. The decline in cancer mortality rates for black women was greater than the decline for white women. Mortality rates for colorectal, lung and breast cancers for black women decreased slightly. Mortality rates for breast cancer for black women remained higher than for white women, despite lower incidence rates, and appear to be stabilizing after a previous downward trend. Ovarian cancer mortality rates for black women appear to be increasing while the incidence rate has decreased from 1997 to 2001.

Hispanic Males & Females (Table 18): Overall cancer mortality rates for men and women of Hispanic ethnicity were much lower than for all men and women in New Jersey. Rates by individual years could not be presented due to small numbers. Mortality rates were generally higher for Hispanic men compared with Hispanic women, which is consistent with the pattern seen among all races/ethnicities combined. Hispanic cancer mortality rates for 1997-2000 are somewhat higher than those for the years 1996-1999. This was in part due to new intercensal populations for Hispanics and the revised Hispanic algorithm (see the technical notes).

Comparison of Cancer Mortality Data for New Jersey with the United States, 1996-2000 (Tables 19-20)

For all cancer sites combined, New Jersey cancer mortality rates for all men were higher than the corresponding rates for the U.S. However, mortality rates for black men were somewhat lower in New Jersey than in the U.S. Lung cancer mortality rates in men were lower in New Jersey than for the nation. Prostate cancer mortality rates in New Jersey were similar to the U.S., except for black men whose prostate cancer mortality rates were lower in New Jersey than the U.S. Mortality rates among men for colorectal cancer were higher in New Jersey than the U.S.

Among women, the mortality rates for all sites combined, lung, and breast cancers were higher in New Jersey than the U.S. during this four-year period. Colorectal cancer mortality rates for New Jersey women were also higher than the corresponding rates for the U.S., except among black women whose cancer mortality rates were similar.

TECHNICAL NOTES

Registry Overview

The objectives of the New Jersey State Cancer Registry (NJSCR) are to:

* monitor cancer trends in New Jersey
* promote scientific research
* respond to New Jersey residents about cancer concerns
* educate the public
* provide information for planning and evaluating cancer prevention and control activities and
* share and compare cancer data with other states and the nation.

The New Jersey State Cancer Registry is a population-based cancer incidence registry that serves the entire state of New Jersey, with a population of over 8.4 million people. The NJSCR was established by legislation (NJSA 26:2-104 et. seq.) and includes all cases of cancer diagnosed in New Jersey residents since October 1, 1978. New Jersey regulations (NJAC 8:57A) require the reporting of all newly diagnosed cancer cases to the NJSCR within three months of hospital discharge or six months of diagnosis, whichever is sooner. Reports are filed by hospitals, diagnosing physicians, dentists, and independent clinical laboratories. Every hospital in New Jersey is now reporting cancer cases electronically. In addition, reporting agreements are maintained with New York, Pennsylvania, Delaware, Florida, Maryland, and North Carolina so that New Jersey residents diagnosed with cancer outside the state can be identified. Legislation in 1996 strengthened the Registry by (1) requiring electronic reporting, (2) requiring abstracting by certified tumor registrars and (3) establishing penalties for late or incomplete reporting. Timely reporting of cancer data is required by law.

All primary invasive and *in situ* neoplasms are reportable to the NJSCR, except cervical cancer *in situ* diagnosed after 1994 and certain carcinomas of the skin. The information collected by the NJSCR includes basic patient identifiers, demographic characteristics of the patient, medical information on each cancer diagnosis (such as the anatomic site, histologic type and summary stage of disease), and vital status (alive or deceased) determined annually. For deceased cases, the underlying cause of death is also included. The primary site, behavior, grade, and histology of each cancer are coded according to the *International Classification of Disease for Oncology (ICD-O), 2nd edition* for cancers diagnosed through 2000 and the *3rd edition* for cancers diagnosed in 2001. The NJSCR follows the data standards promulgated by the North American Association of Central Cancer Registries (NAACCR), including the use of the Surveillance, Epidemiology, and End Results (SEER) multiple primary rules.

The NJSCR is a member of NAACCR, an organization that sets standards for cancer registries, facilitates data exchange, and publishes cancer data. The NJSCR has been a participant of the National Program of Cancer Registries sponsored by the Centers for Disease Control and Prevention since it began in 1994 and is one of the National Cancer Institute's (NCI) SEER expansion registries.

Data Sources

New Jersey cancer incidence data were taken from the May 2003 analytic file and tabulated using SEER*Stat (http://seer.cancer.gov/ScientificSystems/SEERStat/), a statistical software package distributed by the National Cancer Institute. New Jersey cancer mortality data were obtained through the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) Program from the National Center for Health Statistics and also tabulated using SEER*Stat. U.S. cancer incidence and mortality data were obtained from NAACCR's publication, *Cancer in North America 1996-2000*. At the time of this report, year 2001 mortality data were unavailable. The 1997-2000 population estimates were provided by the National Cancer Institute's SEER Program. Since the 2001 population data were not available at the time the 2001 incidence rates were calculated, 2000 population data were used for 2001.

Out of state residents are excluded from New Jersey rates and counts. Persons of unknown age and or gender are also excluded. Race-specific information is not shown separately for persons who are races other than white or black (including unknown race), but these persons are included in the “all races” data.

The NJSCR also follows the guidelines and standard practices of the SEER Program in determining multiple primary cancers for an individual. An individual may develop more than one type of cancer. Following the SEER multiple primary rules, patients could therefore be counted more than once if they were diagnosed with two or more primary cancers.

Data Quality

NAACCR has awarded the Gold Standard, the highest standard possible, to the NJSCR for the quality of the 1995 through 2000 data. The NJSCR has consistently achieved the highest level of certification for its data since the inception of this award. The criteria used to judge the quality of the data were completeness of cancer case ascertainment, completeness of certain information on the cancer cases, percent of death certificate only cases, percent of duplicate cases, passing an editing program, and timeliness.

Completeness of reporting was estimated by comparing New Jersey and U.S. incidence to mortality ratios for whites standardized for age, gender, and cancer site. The data used to generate these ratios were the cancer incidence rates for all SEER registries combined. Using these standard formulae, it is possible for the estimation of completeness to be greater than 100 percent. For 2001, the completeness of case reporting was estimated as 104.9 percent at the time this report was prepared.

While our estimates of completeness are very high, some cases of cancer among New Jersey residents who were diagnosed and/or treated in out-of-state facilities may not yet have been reported to the NJSCR by other state registries. This should be considered in interpreting the data for the more recent years. However, these relatively few cases will not significantly affect the cancer rates, or alter the overall trends presented in this report.

Other 2001 cancer incidence data quality indicators measured were as follows:

Percent death-certificate-only cases: 1.9 percent
Percent of unresolved duplicates: < 0.1 percent
Percent of unknown race: 1.5 percent
Number of unknown age: 11
Number of unknown gender: 12

It should also be noted that minor fluctuations may be seen from previous incidence reports due to ongoing editing and review of the data. Compared to preliminary data for 2000 published in our last report, 2000 incidence rates for total cancer in this report increased by 1.7 percent for men and 1.3 percent for women. Similarly, the 2001 incidence rates presented here are expected to increase by the time all data are complete.

Description of Algorithm for Designating Hispanic Ethnicity

In 2003, the NJSCR adopted the NAACCR Hispanic Identification Algorithm (NHIA) to assign Hispanic ethnicity to cases. This method uses data on birthplace, marital status, gender, race and surname match to the 1990 Hispanic surname list to augment the number of cases and decedents reported as Hispanic in the registry during the years 1994-2001. Reliable estimates of the Hispanic population by gender and age are available only for the years 1994 and after.

Prior to the development of the NHIA, the NJSCR used a method to assign Hispanic ethnicity to cases that was adapted from algorithms developed by the Illinois State Cancer Registry (ISCR) and by the NJSCR. The NJSCR's past and current algorithms for assigning Hispanic ethnicity are both based on the ISCR algorithm, so there is high agreement between the cases previously determined to be Hispanic and those currently determined to be Hispanic.

The NHIA uses the 1990 U.S. Census surname list to assign Hispanic ethnicity. The Census list includes 25,276 Spanish surnames, which were classified into 28 categories based upon the proportion of householders who identified themselves as Hispanic in the 1990 census. These categories were then collapsed into six broad categories: "heavily Hispanic", "generally Hispanic", "moderately Hispanic", "occasionally Hispanic", "rarely Hispanic", and "no match."

These categories are defined as follows:

Spanish Surname Classification	Proportion of Householders who Identified Themselves as Hispanic
Heavily Hispanic	> 75%
Generally Hispanic	51% - 75%
Moderately Hispanic	26% - 50%
Occasionally Hispanic	6% - 25%
Rarely Hispanic	≤ 5%
No Match	No matching surname on the census list

Birthplace also plays a role in assigning Hispanic ethnicity. There were two groups of birthplaces pertaining to Hispanic ethnicity: (a) birthplaces associated with a high probability of Hispanic ethnicity, and (b) birthplaces associated with a high prevalence of Spanish surnames but low probability of Hispanic ethnicity. The groups are as follows:

High Probability of Hispanic Ethnicity	High Prevalence of Spanish Surnames but Low Probability of Hispanic Ethnicity
Puerto Rico, Mexico, Cuba, Dominican Republic, Central America (Guatemala, Belize, Honduras, El Salvador, Nicaragua, Costa Rica, Panama), Latin America, South America (Colombia, Venezuela, Ecuador, Peru, Bolivia, Chile, Argentina, Paraguay, and Uruguay), Spain including Canary Islands, Balearic Island, and Andorra	Atlantic/Caribbean Area (except Cuba, Dominican Republic and Puerto Rico); Panama Canal Zone, Pacific Area, Brazil, Guyana, Surinam, French Guyana, Europe (except Spain) including Portugal; and Asia including the Philippines

The procedures of the algorithm are summarized as follows.

1. If the information received from the cancer reporting source has already identified the patient as Hispanic, then the case retains the classification of Hispanic ethnicity.

2. If individuals have heavily Hispanic surnames (maiden names for ever-married women, last names for men, and last names for never-married women or ever-married women without maiden names), they are assigned Hispanic ethnicity with the following exceptions: 1) those who were born in a birthplace associated with high Spanish surname prevalence but low probability of Hispanic ethnicity remain non-Hispanic, and 2) those who were reported as American Indian, Filipino or Hawaiian remain non-Hispanic.

3. The algorithm assigns those whose birthplace is associated with a high probability of Hispanic ethnicity as Hispanic, regardless of surname.

As a result of using the above algorithm, the NJSCR was able to assign an additional 28 percent of cases as Hispanic to the incidence data. For a more complete description of the NHIA and a copy of the NHIA SAS program visit the following link at the NAACCR website:

http://www.naaccr.org/index.asp?Col_SectionKey=6&Col_ContentID=177

Caution should be used when comparing the cancer incidence rates for Hispanics in this report with previous reports due to 1) modifications to the Hispanic algorithm resulting in a slight increase in the number of incident cases determined to be Hispanic and 2) improvements in health care facility practices to obtain accurate ethnicity resulting in additional cases being designated as Hispanic. To illustrate this point, the number of Hispanic men diagnosed with cancer in 1997-2001 was 7.6 percent greater than the number in 1996-2000. The number of Hispanic women diagnosed with cancer in 1997-2001 was 2.4 percent greater than the number in 1996-2000.

Caution also should be used when comparing rates among Hispanics with the rates in the different race groups (e.g. black, white) because ethnicity and race are not mutually exclusive. In New Jersey, the majority (89 percent) of Hispanics identify themselves as white. The Hispanics who identify themselves as white are included in the white race category as well as the all races category.

Hispanic mortality data for this report were obtained from NCI's SEER Program and did not have the NHIA algorithm applied to them. In our detailed report, *Cancer Among Hispanics in New Jersey, 1990-1996,* our previous Hispanic algorithm was applied to mortality data from the New Jersey Center for Health Statistics. This produced somewhat higher rates than are seen here for 1997-2000.

Incidence and Mortality Coding

Beginning with the year 2001, the coding scheme for incident cancer cases changed from the *International Classification of Disease for Oncology, 2nd edition (ICD-0-2)* to the *3rd edition* (*ICD-0-3*). Several newly reportable cancers were added to the *ICD-0-3* manual and are presently being grouped under "Ill-Defined and Unspecified" sites. The addition of chronic myelproferative disorders and myelodisplastic syndromes are responsible for a marked increase in the "Ill-Defined and Unspecified" sites in 2001 from previous years. The following SEER web link contains additional information on the transition from *ICD-0-2* to *ICD-0-3*:

http://training.seer.cancer.gov/module_icdo3/downloadables/ICDO3%20abstract%20n%20article%20NEW%20PDF.pdf

Beginning with the year 1999, coding and classification for cause of death is in accordance with the *10th edition* of the World Health Organization's *International Classification of Diseases (ICD-10).* From 1979-1998, cause of death coding is based on the 9th *edition (ICD-9).* Changes in classification detail, coding rules, and classification code numbers with this new version have caused some discontinuities in trends for cancer deaths. Although these discontinuities vary, research has found that using ICD-10 assigns approximately 0.7 percent more deaths to the category of cancer, which may slightly increase some site-specific mortality rates for 1999 and later.

Age-adjusted Rates and the Year 2000 Standard

The U.S. Department of Health and Human Services requires that health data be age-adjusted using the U.S. Year 2000 population as a standard, beginning with the 1999 reporting year. Our prior report *Cancer Incidence and Mortality in New Jersey 1996-2000*, issued December 2002 was the first time the 2000 population standard was used for our reports. Prior to the release of 1999 data, various federal and state agencies calculated disease rates using different U.S. population standards, including the 1940 and 1970 standard populations. Our report *Cancer Incidence and Mortality in New Jersey, 1995-1999*, issued September 2001, used the former 1970 population standard for all five years and also illustrated the effect on 1999 incidence rates of changing the population standard from 1970 to 2000.

Today, people are living longer than in the past and the average age of the U.S. population is greater than it was thirty years ago. Consequently, since cancer occurs more frequently in older people, today's U.S. population will have more cases of cancer than in the past. Calculation of disease rates based on the 2000 population structure provides a more realistic and consistent standard of measurement.

The age-adjusted rate is calculated by applying a series of weights to the age-specific rates. The weights are the respective proportions of the standard population in each age group. The new 2000 population standard reflects the age distribution of the current U.S. population and therefore has higher weights in older age groups. For example, the 2000 standard population has higher weights than the 1970 standard population for all groups age 70 and over. A more complete discussion of this topic is available in a previous incidence report, *Cancer Incidence in New Jersey, 1995-1999*, which can be found through our web site at the following link:

http://www.state.nj.us/health/cancer/statistics.htm

Calculations using the 2000 standard population do not indicate a change in cancer incidence or occurrence—only a different representation of the rates of reported cancer. Using the new 2000 population calculations will produce standardized cancer rates that appear to be about 20 percent higher than previously reported.

Population Denominators for 2000

With the inclusion of the year 2000 population data, we must take into account the new way in which the U.S. Bureau of the Census collected population data. With the 2000 Census, individuals were given the opportunity to categorize themselves as more than one race. For the first time, individuals could "mark [X] one or more races to indicate what this person considers himself/herself to be". Because of this change, 2000 populations for "White only" and "Black only" in earlier cancer incidence and mortality reports, are 4-6 percent lower than the 1999 populations for "White only" and "Black only" in New Jersey. Therefore, caution must be taken when comparing the age-adjusted incidence rates for 2000 and 2001 by race to earlier years since it is not clear if an apparent rate change is actual or an artifact of the new way in which the U.S. Bureau of the Census collected race data for 2000.

Newly Released Intercensal Population Estimates

Furthermore, 2000 population estimates used to calculate rates for the years 1991 through 1999 for previous reports have been found to differ from the actual 2000 census counts, especially the specific race and ethnicity estimates. Therefore, the 1991-1999 intercensal population estimates were revised by the Census Bureau by distributing the difference between the original post-1990 census estimates of the 2000 population and the actual April 1, 2000 census. The new population estimates impacted primarily smaller populations such as race or Hispanic ethnicity subgroups. For example, in this report, overall cancer incidence and mortality rates have increased due to the changes in intercensal population estimates. The increase in estimated Hispanic populations among younger age groups and the decrease in population among older age groups, where cancer is more prevalent, produced higher overall cancer rates.

Calculation of Rates

A cancer incidence rate is defined as the number of new cases of cancer detected during a specified time period in a specified population. Cancer rates are most commonly expressed as cases per 100,000 population. Cancer occurs at different rates in different age groups, and population subgroups defined by gender and race have different age distributions. Therefore, before a valid comparison can be made between rates, it is necessary to standardize the rates to the age distribution of a standard population. In this report, the 2000 U.S. population standard was used. Records that were missing gender, age, or race were not included in the rates presented in this report. Since the number of records so affected was very small, the rates were virtually unaffected by the non-inclusion of these records.

The first step in the age-standardization procedure was to determine the age-specific rates. For each age group for a given time interval (within each race-gender group, for the entire state), the following formula was applied:

$$r_a = \frac{n_a}{t \; x \; P_a}$$

where:

- r_a = the age-specific rate for age group a,
- n_a = the number of events (cancer diagnoses) in the age group during the time interval,
- t = the length of the time interval (in years), and
- P_a = average size of the population in the age group during the time interval (mid- year population or average of mid-year population sizes).

In order to determine the age-adjusted rate, a weighted average of the age-specific rates was calculated, using the age distribution of the standard population to derive the age-specific weighting factors (Rothman, 1986). This is the technique of direct standardization, which uses the following formula:

$$R = \frac{\sum_{a=1}^{n} r_a \; x \; Std.P_a}{\sum_{a=1}^{n} Std.P_a}$$

where:

- R = the age-adjusted rate
- r_a = the age-specific rate for age group a, and
- $Std.P_a$ = the size of the standard population in each age group a.

While age standardization facilitates the comparison of rates among different populations, there can be important age-specific differences in disease occurrence, which are not apparent in comparisons of the age-adjusted rates (Breslow and Day, 1987).

Analogous definitions and calculations apply for cancer mortality rates.

Suppression of Rates and Counts Under Five

It should also be noted that the annual rates for relatively uncommon cancers tend to fluctuate substantially from year to year because of small numbers of cases, particularly in minority populations. Rates generated from small numbers may not accurately reflect the true rates and should be interpreted with caution. For this report, rates were suppressed where counts were less than 5 as a way to ensure a greater level of statistical reliability.

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TABLES

Table 1. Age-adjusted Incidence Rates, Males All Races Combined

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
All Sites	115,026	638.2	631.6	619.6	623.7	628.0
Oral Cavity and Pharynx	2,910	16.4	16.0	14.5	15.3	14.3
Lip	138	1.0	0.9	0.6	0.7	0.7
Tongue	803	3.7	4.8	3.9	4.0	4.3
Salivary Gland	314	1.8	1.9	1.4	1.8	1.7
Floor of Mouth	219	1.5	1.2	1.2	0.8	0.9
Gum and Other Mouth	374	2.3	2.1	1.8	2.0	1.8
Nasopharynx	190	0.9	0.9	1.1	1.1	0.8
Tonsil	361	1.7	2.0	1.6	2.1	1.8
Oropharynx	121	0.9	0.4	0.6	0.9	0.4
Hypopharynx	285	1.5	1.3	1.5	1.6	1.6
Digestive System	23,323	132.5	135.2	130.8	126.8	125.4
Esophagus	1,634	8.8	9.5	8.7	8.9	8.4
Stomach	2,577	15.7	15.3	15.1	12.5	13.6
Small Intestine	383	1.7	2.1	2.2	2.2	2.1
Colon and Rectum	13,805	80.0	80.4	78.4	76.1	72.5
Colon excluding Rectum	9,621	56.9	56.7	55.4	53.0	50.9
Rectum and Rectosigmoid Junction	4,184	23.2	23.7	23.0	23.1	21.7
Anus, Anal Canal and Anorectum	197	1.3	1.1	1.2	0.7	1.1
Liver and Intrahepatic Bile Duct	1,509	7.1	8.0	7.1	9.0	9.6
Liver	1,334	6.0	6.9	6.2	8.0	8.6
Intrahepatic Bile Duct	175	1.1	1.1	0.9	1.0	0.9
Gallbladder	205	1.5	1.3	0.8	1.1	1.1
Pancreas	2,461	13.3	13.8	14.1	13.5	14.1
Respiratory System	18,707	108.6	109.1	98.9	100.1	96.5
Larynx	1,561	9.2	8.6	7.6	8.1	8.2
Lung and Bronchus	16,424	95.3	96.4	87.7	87.8	84.2
Bones and Joints	225	1.0	1.2	1.0	1.0	1.4
Soft Tissue (Including Heart)	720	3.7	4.0	3.9	3.6	3.7
Skin (Excluding Basal and Squamous)	4,364	24.7	22.7	22.0	22.6	24.6
Melanoma of the Skin	3,840	22.0	19.7	19.6	19.6	21.7

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

Table 1 (continued). Age-adjusted Incidence Rates, Males All Races Combined

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
Breast	346	1.6	1.4	1.7	2.2	2.4
Male Genital System	37,436	207.2	191.7	200.0	207.7	206.6
Prostate	36,076	201.0	185.0	193.4	200.8	199.5
Testis	1,149	5.1	5.3	5.6	5.5	5.8
Penis	163	0.8	1.1	0.7	1.1	0.9
Urinary System	11,827	62.9	66.0	67.1	65.7	66.7
Urinary Bladder (Including in situ)	8,092	44.5	45.2	46.8	45.4	46.3
Kidney and Renal Pelvis	3,449	17.1	19.0	18.4	18.4	19.2
Ureter	194	1.0	1.3	1.1	1.1	1.0
Eye and Orbit	196	1.2	1.2	0.6	1.2	0.9
Brain and Other Nervous System	1,587	8.5	8.7	8.0	8.4	7.5
Brain	1,477	8.0	8.1	7.3	7.9	6.9
Endocrine System	1,022	4.2	4.8	5.1	6.1	5.5
Thyroid	840	3.4	3.9	4.2	5.2	4.4
Lymphomas	5,508	28.7	30.9	29.2	28.1	29.9
Hodgkin Lymphoma	712	3.5	3.7	3.8	3.2	3.6
Non-Hodgkin Lymphoma	4,796	25.2	27.2	25.5	24.9	26.3
Myelomas	1,292	7.2	7.5	6.7	7.5	7.0
Leukemias	2,888	16.2	16.3	16.1	14.4	15.7
Lymphocytic Leukemia	1,342	6.8	7.9	7.5	6.7	7.6
Acute Lymphocytic Leukemia	319	1.5	2.1	1.8	1.2	1.5
Chronic Lymphocytic Leukemia	880	4.6	5.2	5.1	4.8	5.2
Myeloid and Monocytic Leukemia	1,333	8.2	7.1	7.1	6.5	7.2
Acute Myeloid Leukemia	861	5.0	4.3	4.8	4.0	5.1
Acute Monocytic Leukemia	52	0.2	0.3	0.4	0.3	0.1
Chronic Myeloid Leukemia	382	2.7	2.2	1.8	2.0	1.7
Other Leukemia	213	1.2	1.3	1.5	1.3	1.0
Ill-Defined & Unspecified Sites	2,675	13.7	15.0	14.0	13.0	* 20.0

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

*** Increase in Ill-Defined & Unspecified rates is due to newly reportable ill-defined cases for 2001.**

Table 2. Age-adjusted Incidence Rates, Females All Races Combined

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
All Sites	110,304	459.2	461.7	448.8	449.4	451.5
Oral Cavity and Pharynx	1,517	6.2	6.2	7.1	5.7	6.0
Lip	74	0.3	0.3	0.3	0.2	0.3
Tongue	376	1.4	1.5	1.8	1.5	1.7
Salivary Gland	251	1.1	1.2	0.9	1.0	1.1
Floor of Mouth	107	0.6	0.6	0.4	0.4	0.4
Gum and Other Mouth	331	1.3	1.3	1.7	1.2	1.1
Nasopharynx	68	0.3	0.3	0.4	0.2	0.3
Tonsil	123	0.5	0.4	0.8	0.4	0.5
Oropharynx	56	0.1	0.2	0.4	0.3	0.2
Hypopharynx	76	0.4	0.3	0.3	0.3	0.3
Digestive System	21,508	86.5	86.8	82.6	82.9	82.6
Esophagus	618	2.6	2.3	2.4	2.5	2.4
Stomach	1,703	7.0	7.6	6.6	6.3	5.8
Small Intestine	322	1.1	1.3	1.5	1.3	1.4
Colon and Rectum	13,895	55.8	56.7	52.6	52.9	53.8
Colon excluding Rectum	10,487	41.7	42.4	39.2	39.3	41.2
Rectum and Rectosigmoid Junction	3,408	14.1	14.3	13.3	13.6	12.6
Anus, Anal Canal and Anorectum	344	1.7	1.2	1.3	1.4	1.5
Liver and Intrahepatic Bile Duct	738	2.9	2.7	2.8	3.1	3.1
Liver	542	2.3	1.7	2.1	2.2	2.5
Intrahepatic Bile Duct	196	0.6	1.0	0.7	0.9	0.6
Gallbladder	436	1.7	1.8	1.7	1.5	1.7
Pancreas	2,835	11.4	11.1	11.1	11.5	10.1
Respiratory System	14,420	58.5	59.6	58.4	57.5	57.6
Larynx	410	1.7	2.2	1.6	1.6	1.6
Lung and Bronchus	13,700	55.4	56.2	55.5	54.7	54.9
Bones and Joints	219	1.0	1.3	0.8	0.9	0.9
Soft Tissue (Including Heart)	677	3.3	2.7	2.4	3.1	3.0
Skin (Excluding Basal and Squamous)	3,233	14.4	13.1	12.5	13.6	14.9
Melanoma of the Skin	2,947	13.0	11.7	11.5	12.5	13.8
Breast (Invasive)	32,707	141.0	140.2	138.5	136.8	133.8
in situ (not included in All Sites)	7,456	29.6	32.2	33.9	33.3	33.5

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

Table 2 (continued). Age-adjusted Incidence Rates, Females All Races Combined

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
Female Genital System	14,438	61.3	63.1	61.2	59.9	59.6
Cervix Uteri	2,390	11.1	10.8	10.5	9.8	10.1
Corpus and Uterus, NOS	6,889	28.1	29.7	29.5	28.2	29.3
Corpus Uteri	6,602	26.8	28.2	28.3	27.3	28.2
Uterus, NOS	287	1.3	1.5	1.2	1.0	1.1
Ovary	4,197	17.9	18.7	18.0	17.9	16.2
Vagina	172	0.9	0.5	0.6	0.8	0.8
Vulva	611	2.5	2.6	2.1	2.4	2.4
Urinary System	5,410	22.0	21.1	21.5	21.4	22.2
Urinary Bladder (Including in situ)	3,041	12.0	11.5	11.1	12.8	12.4
Kidney and Renal Pelvis	2,225	9.4	9.1	9.6	8.1	9.2
Ureter	104	0.5	0.4	0.5	0.3	0.4
Eye and Orbit	173	0.7	0.9	0.5	0.7	0.8
Brain and Other Nervous System	1,389	5.9	6.3	6.4	6.0	5.2
Brain	1,271	5.4	5.5	5.9	5.5	4.9
Endocrine System	2,702	8.8	10.1	11.3	14.8	15.2
Thyroid	2,545	8.1	9.3	10.8	14.2	14.4
Lymphomas	5,172	22.1	22.7	20.9	21.0	20.5
Hodgkin Lymphoma	661	2.8	3.1	3.0	3.2	3.1
Non-Hodgkin Lymphoma	4,511	19.3	19.6	17.8	17.8	17.4
Myelomas	1,290	5.1	5.5	4.5	5.2	5.3
Leukemias	2,287	10.1	9.3	9.3	9.5	8.8
Lymphocytic Leukemia	972	4.4	3.7	4.1	4.3	3.8
Acute Lymphocytic Leukemia	268	1.3	1.3	1.2	1.5	1.2
Chronic Lymphocytic Leukemia	648	2.8	2.2	2.7	2.5	2.4
Myeloid and Monocytic Leukemia	1,084	4.5	4.6	4.3	4.4	4.6
Acute Myeloid Leukemia	741	2.9	3.0	3.0	3.0	3.3
Acute Monocytic Leukemia	39	0.2	0.2	0.1	0.2	0.1
Chronic Myeloid Leukemia	269	1.3	1.1	1.1	1.1	1.0
Other Leukemia	231	1.2	1.0	0.9	0.8	0.5
Ill-Defined & Unspecified Sites	3,162	12.5	12.6	10.9	10.3	* 15.0

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

*** Increase in Ill-Defined & Unspecified rates is due to newly reportable ill-defined cases for 2001.**

Table 3. Age-adjusted Incidence Rates, White Males

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
All Sites	99,013	632.0	627.3	618.1	624.2	616.9
Oral Cavity and Pharynx	2,330	15.4	14.5	14.2	14.6	13.4
Lip	134	1.2	1.0	0.7	0.8	0.8
Tongue	656	3.6	4.5	3.7	3.9	4.2
Salivary Gland	267	1.8	1.8	1.5	1.9	1.6
Floor of Mouth	174	1.5	1.0	1.2	0.9	0.7
Gum and Other Mouth	304	2.0	2.0	1.9	1.9	1.8
Nasopharynx	125	0.7	0.6	1.0	0.8	0.7
Tonsil	288	1.7	1.7	1.5	2.1	1.7
Oropharynx	92	0.8	0.3	0.6	0.8	0.3
Hypopharynx	209	1.4	0.9	1.4	1.2	1.5
Digestive System	20,004	130.7	132.5	129.3	126.1	121.7
Esophagus	1,328	8.1	8.8	8.6	8.5	7.6
Stomach	2,108	14.9	14.5	14.5	11.8	12.2
Small Intestine	312	1.6	1.9	2.0	2.1	2.0
Colon and Rectum	12,138	80.9	80.7	79.1	77.0	71.8
Colon excluding Rectum	8,443	57.3	56.8	55.3	53.4	50.1
Rectum and Rectosigmoid Junction	3,695	23.5	23.9	23.8	23.6	21.7
Anus, Anal Canal and Anorectum	160	1.2	1.0	1.1	0.7	1.1
Liver and Intrahepatic Bile Duct	1,166	6.2	7.2	6.5	8.5	8.4
Liver	1,018	5.2	6.2	5.7	7.4	7.4
Intrahepatic Bile Duct	148	0.9	1.0	0.9	1.1	1.0
Gallbladder	180	1.5	1.3	0.8	1.1	1.2
Pancreas	2,131	13.1	13.6	13.5	13.6	14.4
Respiratory System	16,065	106.5	107.4	97.5	98.9	95.3
Larynx	1,280	8.8	8.4	7.2	7.6	7.7
Lung and Bronchus	14,127	93.7	94.5	86.4	86.8	83.5
Bones and Joints	191	1.1	1.3	1.1	1.2	1.5
Soft Tissue (Including Heart)	622	3.7	4.3	4.0	3.7	3.9
Skin (Excluding Basal and Squamous)	4,182	27.4	25.3	24.9	25.7	27.1
Melanoma of the Skin	3,767	25.1	22.5	22.7	22.7	24.3

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

Table 3 (continued). Age-adjusted Incidence Rates, White Males

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
Breast	296	1.5	1.5	1.6	2.3	2.3
Male Genital System	31,336	198.4	186.6	193.4	201.5	195.2
Prostate	30,079	191.3	179.0	185.7	193.6	187.1
Testis	1,077	6.1	6.3	6.7	6.6	6.9
Penis	137	0.8	1.1	0.6	1.0	0.9
Urinary System	10,914	65.8	69.8	71.4	69.2	70.5
Urinary Bladder (Including in situ)	7,626	47.3	48.4	50.9	48.4	49.3
Kidney and Renal Pelvis	3,018	17.1	19.3	18.6	18.8	19.8
Ureter	187	1.1	1.4	1.2	1.2	1.1
Eye and Orbit	183	1.4	1.2	0.7	1.4	1.0
Brain and Other Nervous System	1,396	9.3	8.9	8.3	9.1	7.6
Brain	1,306	8.7	8.3	7.6	8.6	7.2
Endocrine System	885	4.3	5.2	5.5	6.4	5.6
Thyroid	734	3.6	4.3	4.5	5.4	4.5
Lymphomas	4,756	29.8	31.1	29.4	29.3	29.9
Hodgkin Lymphoma	594	3.6	3.8	3.8	3.3	3.9
Non-Hodgkin Lymphoma	4,162	26.2	27.3	25.6	26.0	26.0
Myelomas	1,015	6.5	6.6	6.1	7.0	6.2
Leukemias	2,534	16.3	16.6	16.7	15.1	16.2
Lymphocytic Leukemia	1,196	6.9	8.3	7.9	7.1	8.1
Acute Lymphocytic Leukemia	267	1.5	2.2	1.8	1.3	1.6
Chronic Lymphocytic Leukemia	802	4.5	5.5	5.4	5.0	5.4
Myeloid and Monocytic Leukemia	1,154	8.3	7.1	7.3	6.7	7.1
Acute Myeloid Leukemia	761	5.2	4.4	5.1	4.2	5.2
Acute Monocytic Leukemia	42	0.2	0.3	0.4	0.4	-
Chronic Myeloid Leukemia	317	2.7	2.2	1.6	2.0	1.6
Other Leukemia	184	1.1	1.2	1.5	1.3	1.0
Ill-Defined & Unspecified Sites	2,304	13.7	14.6	14.0	12.8	* 19.6

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

*** Increase in Ill-Defined & Unspecified rates is due to newly reportable ill-defined cases for 2001.**

- Counts and rates are suppressed when less than 5 cases to ensure confidentiality and statistical reliability.

Table 4. Age-adjusted Incidence Rates, White Females

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
All Sites	96,038	468.2	471.0	460.9	461.7	459.2
Oral Cavity and Pharynx	1,274	6.1	5.8	7.0	5.8	5.8
Lip	68	0.4	0.3	0.3	0.3	0.3
Tongue	322	1.3	1.5	1.7	1.6	1.6
Salivary Gland	208	1.1	1.1	0.9	1.0	1.0
Floor of Mouth	94	0.6	0.5	0.4	0.4	0.4
Gum and Other Mouth	284	1.3	1.2	1.8	1.2	1.1
Nasopharynx	40	0.3	0.2	0.2	0.1	0.2
Tonsil	105	0.5	0.4	0.8	0.4	0.5
Oropharynx	45	0.2	0.2	0.3	0.2	0.2
Hypopharynx	62	0.3	0.3	0.3	0.3	0.3
Digestive System	18,515	85.3	85.4	81.3	81.3	80.6
Esophagus	491	2.1	2.1	2.3	2.2	2.3
Stomach	1,340	6.5	6.9	5.9	5.5	4.9
Small Intestine	262	1.0	1.3	1.3	1.3	1.3
Colon and Rectum	12,153	55.7	56.6	52.5	53.0	53.3
Colon excluding Rectum	9,164	41.7	42.0	38.7	39.5	40.5
Rectum and Rectosigmoid Junction	2,989	14.0	14.5	13.8	13.5	12.8
Anus, Anal Canal and Anorectum	304	1.7	1.3	1.4	1.5	1.6
Liver and Intrahepatic Bile Duct	612	2.8	2.7	2.6	2.7	2.9
Liver	432	2.2	1.6	1.8	1.9	2.3
Intrahepatic Bile Duct	180	0.7	1.1	0.8	0.8	0.6
Gallbladder	360	1.8	1.5	1.7	1.4	1.6
Pancreas	2,443	11.3	10.9	10.9	11.2	9.8
Respiratory System	12,786	59.8	60.5	60.0	59.6	59.3
Larynx	350	1.8	2.0	1.5	1.6	1.8
Lung and Bronchus	12,164	56.6	57.4	57.2	56.8	56.4
Bones and Joints	183	1.1	1.4	0.8	1.0	0.9
Soft Tissue (Including Heart)	554	3.1	2.7	2.5	3.0	3.0
Skin (Excluding Basal and Squamous)	3,117	16.3	15.1	14.7	16.2	17.3
Melanoma of the Skin	2,866	14.9	13.7	13.7	15.0	16.2
Breast (Invasive)	28,421	145.4	144.5	144.3	141.3	137.0
in situ (not included in All Sites)	6,520	31.4	34.1	36.4	34.8	34.9

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

Table 4 (continued). Age-adjusted Incidence Rates, White Females

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
Female Genital System	12,409	61.8	64.6	63.1	61.6	61.1
Cervix Uteri	1,796	10.2	9.8	10.0	9.0	9.5
Corpus and Uterus, NOS	6,092	28.8	31.1	31.1	29.8	30.7
Corpus Uteri	5,873	27.8	29.8	30.1	28.8	29.7
Uterus, NOS	219	1.0	1.2	1.0	1.0	1.1
Ovary	3,696	18.6	19.6	18.8	18.9	17.0
Vagina	137	0.9	0.5	0.5	0.7	0.7
Vulva	544	2.6	2.8	2.1	2.5	2.4
Urinary System	4,858	22.7	21.9	22.2	22.8	22.7
Urinary Bladder (Including in situ)	2,797	12.6	12.2	11.8	13.8	13.0
Kidney and Renal Pelvis	1,936	9.4	9.2	9.7	8.5	9.1
Ureter	101	0.5	0.5	0.5	0.3	0.5
Eye and Orbit	164	0.8	1.1	0.6	0.8	0.9
Brain and Other Nervous System	1,228	6.2	6.6	6.9	6.5	5.5
Brain	1,124	5.7	5.9	6.4	6.0	5.1
Endocrine System	2,293	9.3	11.2	12.3	15.5	15.8
Thyroid	2,161	8.7	10.3	11.7	14.8	15.0
Lymphomas	4,549	23.1	23.6	21.4	22.0	21.3
Hodgkin Lymphoma	569	3.2	3.5	3.2	3.4	3.4
Non-Hodgkin Lymphoma	3,980	19.9	20.1	18.2	18.6	17.9
Myelomas	980	4.4	4.6	3.9	4.4	4.9
Leukemias	2,010	10.4	9.6	9.7	9.9	9.1
Lymphocytic Leukemia	868	4.6	3.9	4.4	4.5	4.0
Acute Lymphocytic Leukemia	233	1.5	1.4	1.4	1.6	1.3
Chronic Lymphocytic Leukemia	586	2.8	2.4	2.8	2.7	2.5
Myeloid and Monocytic Leukemia	946	4.5	4.7	4.5	4.6	4.7
Acute Myeloid Leukemia	667	3.2	3.2	3.2	3.2	3.5
Acute Monocytic Leukemia	37	0.2	0.2	-	0.3	0.1
Chronic Myeloid Leukemia	216	1.1	1.1	1.1	1.1	1.0
Other Leukemia	196	1.2	1.0	0.9	0.8	0.4
Ill-Defined & Unspecified Sites	2,697	12.5	12.3	10.2	10.2	* 14.1

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

*** Increase in Ill-Defined & Unspecified rates is due to newly reportable ill-defined cases for 2001.**

- Counts and rates are suppressed when less than 5 cases to ensure confidentiality and statistical reliability.

Table 5. Age-adjusted Incidence Rates, Black Males

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
All Sites	12,750	730.6	723.2	698.4	697.7	704.8
Oral Cavity and Pharynx	460	23.8	27.8	16.3	22.8	20.0
Lip	-	-	-	-	-	-
Tongue	114	4.6	7.3	5.4	5.5	4.9
Salivary Gland	37	1.4	3.5	-	.9	2.0
Floor of Mouth	43	2.4	2.4	1.2	-	3.0
Gum and Other Mouth	56	5.1	2.0	1.3	3.6	1.8
Nasopharynx	27	1.5	-	-	1.6	1.1
Tonsil	68	2.2	5.1	2.4	2.9	2.7
Oropharynx	27	2.0	1.5	-	2.3	-
Hypopharynx	63	2.7	4.5	2.1	4.2	2.6
Digestive System	2,568	148.3	151.8	148.5	146.0	145.6
Esophagus	271	14.1	17.1	12.5	15.0	15.4
Stomach	344	22.4	19.5	21.6	18.6	20.8
Small Intestine	51	2.4	3.4	3.6	2.6	2.3
Colon and Rectum	1,321	75.3	79.8	76.4	80.0	75.6
Colon excluding Rectum	962	56.1	58.3	58.2	58.2	57.1
Rectum and Rectosigmoid Junction	359	19.1	21.4	18.2	21.8	18.4
Anus, Anal Canal and Anorectum	37	1.9	1.8	1.9	.9	1.7
Liver and Intrahepatic Bile Duct	213	11.4	8.5	9.9	10.5	16.3
Liver	194	8.6	6.9	8.7	10.2	15.7
Intrahepatic Bile Duct	19	2.7	1.6	-	-	-
Gallbladder	16	1.8	1.6	-	-	-
Pancreas	263	16.0	15.4	19.6	15.3	10.8
Respiratory System	2,313	140.2	141.8	124.6	123.8	121.6
Larynx	250	15.2	11.2	12.0	14.7	13.7
Lung and Bronchus	2,012	121.1	128.3	110.6	107.7	104.1
Bones and Joints	17	0.9	0.7	-	-	-
Soft Tissue (Including Heart)	73	2.3	1.8	4.3	3.6	3.4
Skin (Excluding Basal and Squamous)	104	5.2	5.2	3.4	2.4	4.1
Melanoma of the Skin	19	1.3	-	-	-	1.3

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
- Counts and rates are suppressed when less than 5 cases to ensure confidentiality and statistical reliability.

Table 5 (continued). Age-adjusted Incidence Rates, Black Males

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
Breast	42	3.3	-	2.1	2.0	3.3
Male Genital System	4,974	294.8	265.4	288.2	287.8	286.4
Prostate	4,912	292.6	262.7	286.5	284.5	283.1
Testis	41	1.0	1.3	1.2	1.3	2.0
Penis	17	-	-	-	1.7	1.3
Urinary System	684	41.7	43.0	37.9	41.6	38.4
Urinary Bladder (Including in situ)	335	23.8	23.3	17.1	23.5	21.8
Kidney and Renal Pelvis	339	18.0	19.1	19.8	17.4	16.1
Ureter	-	-	-	-	-	-
Eye and Orbit	7	-	0.9	-	-	-
Brain and Other Nervous System	116	4.9	6.5	5.5	4.3	4.5
Brain	108	4.5	6.4	5.4	4.1	3.9
Endocrine System	84	3.5	2.1	3.2	5.7	3.4
Thyroid	59	2.3	1.6	2.3	4.0	2.5
Lymphomas	526	18.8	26.5	25.3	20.2	22.6
Hodgkin Lymphoma	91	3.5	3.5	5.2	3.0	2.4
Non-Hodgkin Lymphoma	435	15.3	23.0	20.1	17.1	20.2
Myelomas	237	13.8	14.9	12.4	14.0	14.3
Leukemias	240	15.1	14.4	10.4	8.3	13.1
Lymphocytic Leukemia	93	6.5	5.7	4.2	3.1	4.8
Acute Lymphocytic Leukemia	26	0.9	1.3	1.2	-	-
Chronic Lymphocytic Leukemia	59	5.2	3.8	2.5	2.6	4.0
Myeloid and Monocytic Leukemia	127	6.6	6.9	5.0	4.9	7.9
Acute Myeloid Leukemia	73	3.4	3.7	3.0	2.2	4.7
Acute Monocytic Leukemia	6	0.9	1.3	1.2	-	-
Chronic Myeloid Leukemia	46	2.8	2.8	-	2.5	2.7
Other Leukemia	20	2.0	1.8	1.2	-	-
Ill-Defined & Unspecified Sites	305	13.8	19.2	15.6	14.9	* 23.5

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

*** Increase in Ill-Defined & Unspecified rates is due to newly reportable ill-defined cases for 2001.**

- Counts and rates are suppressed when less than 5 cases to ensure confidentiality and statistical reliability.

Table 6. Age-adjusted Incidence Rates, Black Females

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
All Sites	11,061	428.3	441.5	403.3	408.1	403.1
Oral Cavity and Pharynx	172	6.8	8.1	7.7	4.7	4.1
Lip	-	-	-	-	-	-
Tongue	42	1.5	1.3	2.5	0.9	1.2
Salivary Gland	26	1.1	1.1	-	-	1.0
Floor of Mouth	13	-	1.1	-	-	-
Gum and Other Mouth	33	1.3	2.2	-	1.3	-
Nasopharynx	10	-	-	-	-	-
Tonsil	15	-	-	1.0	-	-
Oropharynx	11	-	-	0.9	-	-
Hypopharynx	12	-	-	-	-	-
Digestive System	2,433	98.9	101.6	93.7	93.2	95.7
Esophagus	108	5.9	3.8	3.6	4.8	2.7
Stomach	267	11.6	11.5	9.2	9.8	11.2
Small Intestine	51	1.4	1.3	3.4	-	3.0
Colon and Rectum	1,459	59.7	60.5	55.6	54.8	57.6
Colon excluding Rectum	1,128	44.2	47.1	44.5	41.5	46.1
Rectum and Rectosigmoid Junction	331	15.5	13.4	11.1	13.3	11.5
Anus, Anal Canal and Anorectum	30	2.1	-	-	0.9	1.2
Liver and Intrahepatic Bile Duct	79	2.4	2.3	3.3	4.0	3.7
Liver	68	2.2	1.8	3.1	2.8	3.5
Intrahepatic Bile Duct	11	-	-	-	1.1	-
Gallbladder	56	1.8	3.9	1.6	2.1	1.9
Pancreas	335	12.7	14.4	14.4	15.3	12.1
Respiratory System	1,437	56.1	62.5	54.1	51.8	53.3
Larynx	55	1.8	3.7	2.3	2.0	-
Lung and Bronchus	1,356	52.8	58.0	51.3	48.6	52.1
Bones and Joints	18	-	0.8	0.8	-	-
Soft Tissue (Including Heart)	95	3.4	3.1	2.1	4.2	3.6
Skin (Excluding Basal and Squamous)	55	2.7	2.4	1.4	1.4	1.8
Melanoma of the Skin	29	1.9	1.1	-	1.0	-
Breast (Invasive)	3,185	118.7	120.5	109.6	122.1	111.4
in situ (not included in All Sites)	628	20.0	22.6	22.9	22.1	24.9

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
- Counts and rates are suppressed when less than 5 cases to ensure confidentiality and statistical reliability.

Table 6 (continued). Age-adjusted Incidence Rates, Black Females

Cancer Site	Total Cases	Rates 1997	1998	1999	2000	2001 Prelim.
Female Genital System	1,560	62.2	61.2	55.2	54.4	51.8
Cervix Uteri	486	19.5	17.7	16.5	17.5	14.0
Corpus and Uterus, NOS	621	24.2	26.1	21.8	20.7	23.8
Corpus Uteri	555	20.8	22.5	19.6	19.3	22.0
Uterus, NOS	66	3.4	3.6	2.3	1.3	1.8
Ovary	348	14.4	14.7	12.5	11.9	10.6
Vagina	30	1.3	-	0.9	1.4	1.3
Vulva	50	1.5	1.5	2.6	2.1	1.5
Urinary System	451	19.9	18.4	17.0	14.9	17.9
Urinary Bladder (Including in situ)	189	8.9	8.5	6.7	7.6	7.8
Kidney and Renal Pelvis	246	10.7	9.5	9.3	6.8	9.4
Ureter	-	-	-	-	-	-
Eye and Orbit	5	-	-	-	-	-
Brain and Other Nervous System	106	3.7	4.9	3.6	3.2	3.5
Brain	97	2.9	4.2	3.4	3.2	3.5
Endocrine System	205	5.7	4.0	5.2	10.0	9.6
Thyroid	188	4.8	3.3	5.0	9.6	8.8
Lymphomas	465	17.0	17.5	18.2	15.3	13.9
Hodgkin Lymphoma	79	1.7	2.7	2.6	2.9	2.3
Non-Hodgkin Lymphoma	386	15.4	14.7	15.5	12.4	11.7
Myelomas	274	10.5	13.0	10.4	12.6	7.6
Leukemias	213	10.2	8.1	6.8	8.0	7.2
Lymphocytic Leukemia	76	3.6	2.8	2.4	3.1	2.4
Acute Lymphocytic Leukemia	24	-	1.1	0.7	-	-
Chronic Lymphocytic Leukemia	48	2.9	1.5	1.3	2.2	1.8
Myeloid and Monocytic Leukemia	107	5.3	3.9	3.9	3.3	3.8
Acute Myeloid Leukemia	56	2.1	2.2	2.0	2.3	1.8
Acute Monocytic Leukemia	-	-	-	-	-	-
Chronic Myeloid Leukemia	41	2.5	1.3	1.1	0.8	1.9
Other Leukemia	30	1.3	1.4	-	1.6	1.1
Ill-Defined & Unspecified Sites	387	11.8	15.2	17.7	12.1	* 20.6

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.

*** Increase in Ill-Defined & Unspecified rates is due to newly reportable ill-defined cases for 2001.**

- Counts and rates are suppressed when less than 5 cases to ensure confidentiality and statistical reliability.

Table 7. Age-adjusted Incidence Rates, Hispanic Males and Females 1997-2001 Combined

Cancer Site	Male Rate	Male Cases	Female Rate	Female Cases
All Sites	543.5	6,358	358.6	6,174
Oral Cavity and Pharynx	13.2	176	4.9	80
Lip	0.5	6	-	-
Tongue	4.3	57	1.2	20
Salivary Gland	0.7	11	1.0	17
Floor of Mouth	0.6	8	0.4	5
Gum and Other Mouth	2.0	24	1.1	18
Nasopharynx	0.8	12	-	-
Tonsil	1.3	20	0.4	6
Oropharynx	1.3	13	-	-
Hypopharynx	1.6	23	-	-
Digestive System	123.6	1,384	81.5	1,214
Esophagus	8.2	92	2.3	30
Stomach	19.3	235	8.2	129
Small Intestine	1.4	20	1.4	23
Colon and Rectum	64.4	697	46.5	698
Colon excluding Rectum	45.4	471	33.9	501
Rectum and Rectosigmoid Junction	19.0	226	12.6	197
Anus, Anal Canal and Anorectum	0.6	6	1.6	27
Liver and Intrahepatic Bile Duct	12.3	151	5.5	80
Liver	11.0	140	4.2	62
Intrahepatic Bile Duct	1.3	11	1.2	18
Gallbladder	1.9	21	3.4	49
Pancreas	12.6	132	9.7	136
Respiratory System	71.8	789	26.8	403
Larynx	6.5	86	1.0	17
Lung and Bronchus	63.6	672	25.1	372
Bones and Joints	1.0	23	1.3	31
Soft Tissue (Including Heart)	3.4	60	3.4	67
Skin (Excluding Basal and Squamous)	9.2	138	4.4	85
Melanoma of the Skin	6.2	79	3.6	67
Breast (Invasive)	0.6	11	103.8	1,884
in situ (not included in All Sites)	-	-	21.3	413

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard
** Non-applicable gender
- Counts and rates are suppressed when less than 5 cases to ensure confidentiality and statistical reliability.

Table 7 (continued). Age-adjusted Incidence Rates, Hispanic Males and Females 1997-2001 Combined

Cancer Site	Male Rate	Male Cases	Female Rate	Female Cases
Female Genital System	**	**	51.3	972
Cervix Uteri	**	**	15.1	334
Corpus and Uterus, NOS	**	**	20.3	348
Corpus Uteri	**	**	19.2	329
Uterus, NOS	**	**	1.1	19
Ovary	**	**	12.0	227
Vagina	**	**	0.7	13
Vulva	**	**	2.7	37
Male Genital System	195.4	2,146	**	**
Prostate	190.0	2,019	**	**
Testis	3.1	99	**	**
Penis	2.0	25	**	**
Urinary System	47.3	507	16.4	248
Urinary Bladder (Including in situ)	32.1	313	8.4	114
Kidney and Renal Pelvis	14.5	187	7.9	131
Ureter	-	-	-	-
Eye and Orbit	0.4	5	0.3	7
Brain and Other Nervous System	8.0	132	5.8	116
Brain	7.4	120	5.0	104
Endocrine System	4.2	81	12.8	299
Thyroid	3.5	64	11.9	281
Lymphomas	27.9	445	18.9	344
Hodgkin Lymphoma	3.5	83	2.3	54
Non-Hodgkin Lymphoma	24.5	362	16.6	290
Myelomas	9.3	91	6.2	88
Leukemias	13.8	211	8.5	164
Lymphocytic Leukemia	4.6	81	4.0	80
Acute Lymphocytic Leukemia	1.6	45	2.0	52
Chronic Lymphocytic Leukemia	2.6	26	1.8	23
Myeloid and Monocytic Leukemia	7.1	112	3.6	69
Acute Myeloid Leukemia	3.4	62	2.4	48
Acute Monocytic Leukemia	-	-	-	-
Chronic Myeloid Leukemia	3.0	42	0.9	16
Other Leukemia	2.2	18	1.0	15
Ill-Defined & Unspecified Sites	14.2	159	12.3	172

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
** Non-applicable gender.
- Counts and rates are suppressed when less than 5 cases to ensure confidentiality and statistical reliability.

Table 8. Comparative Incidence Rates, 5-Year Thyroid Cancer
New Jersey and U.S.
1981-2000
Males

	1981-1985		1986-1990		1991-1995		1996-2000	
	NJ	**US**	**NJ**	**US**	**NJ**	**US**	**NJ**	**US**
All races	2.5	2.8	3.0	2.9	3.0	3.4	3.9	3.6
White	2.6	2.7	3.2	3.0	3.1	3.5	4.2	3.8
Black	1.0	1.8	1.8	1.4	1.8	2.0	2.5	2.0

US Rate Source-SEER Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

Table 9. Comparative Incidence Rates, 5-Year Thyroid Cancer
New Jersey and U.S.
1981-2000
Females

	1981-1985		1986-1990		1991-1995		1996-2000	
	NJ	**US**	**NJ**	**US**	**NJ**	**US**	**NJ**	**US**
All races	5.6	6.6	6.6	7.4	7.2	8.2	10.3	9.9
White	5.7	6.6	6.9	7.4	7.5	8.4	11.0	10.3
Black	4.1	3.8	4.4	4.3	4.9	4.7	5.3	5.6

US Rate Source-SEER Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

Table 10. Comparative Incidence Rates
New Jersey and U.S.
1996-2000
Males

Cancer Site	New Jersey 1996-2000			United States 1996-2000		
Population:	All Races Combined	White	Black	All Races Combined	White	Black
All Sites	626.7	623.3	713.7	560.0	551.5	647.0
Colorectal	78.9	79.6	76.9	67.7	67.4	70.2
Lung	92.2	90.7	117.7	91.5	90.3	117.7
Prostate	193.9	186.0	281.1	160.4	151.7	238.5
Melanoma	19.9	22.9	0.8	19.0	20.5	1.2
Non-Hodgkin Lymphoma	25.8	26.3	20.6	22.7	23.0	17.2

Source-NAACCR Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

Table 11. Comparative Incidence Rates
New Jersey and U.S.
1996-2000
Females

Cancer Site	New Jersey 1996-2000			United States 1996-2000		
Population:	All Races Combined	White	Black	All Races Combined	White	Black
All Sites	452.3	463.6	412.0	419.9	424.7	387.9
Colorectal	54.4	54.5	56.5	48.9	48.3	53.9
Lung	55.2	56.7	51.7	53.4	54.5	51.0
Breast (invasive)	138.2	143.1	115.7	131.7	134.1	112.6
Melanoma	11.8	13.9	1.1	12.0	13.3	0.9
Non-Hodgkin Lymphoma	18.3	18.9	14.0	15.9	16.3	10.8

Source-NAACCR Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

Table 12. Age-adjusted Mortality Rates, Males All Races Combined

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
All Sites	35,853	263.2	260.5	258.2	250.5
Oral Cavity and Pharynx	600	4.6	4.2	4.0	3.6
Lip	7	0.0	0.1	0.1	0.1
Tongue	155	1.1	0.9	1.2	1.0
Salivary Gland	47	0.4	0.3	0.3	0.3
Floor of Mouth	12	0.0	0.1	0.1	0.1
Gum and Other Mouth	81	0.8	0.7	0.4	0.2
Nasopharynx	63	0.5	0.4	0.2	0.5
Tonsil	41	0.2	0.3	0.4	0.1
Oropharynx	58	0.6	0.3	0.4	0.3
Hypopharynx	32	0.2	0.3	0.2	0.2
Digestive System	9,412	68.2	65.6	69.0	66.9
Esophagus	1,160	7.6	8.0	7.9	8.2
Stomach	1,201	9.6	8.8	8.5	7.4
Small Intestine	73	0.3	0.4	0.7	0.5
Colon and Rectum	3,885	29.6	27.2	28.7	28.6
Colon excluding Rectum	3,298	25.9	22.9	24.6	23.7
Rectum and Rectosigmoid Junction	587	3.7	4.2	4.0	4.9
Anus	18	0.1	0.2	0.1	0.1
Liver and Intrahepatic Bile Duct	1,002	6.5	6.9	6.7	7.6
Liver	829	5.6	5.6	5.4	6.2
Intrahepatic Bile Duct	173	1.0	1.3	1.2	1.5
Gallbladder	82	0.7	0.6	0.7	0.4
Pancreas	1,795	12.3	12.3	13.8	12.7
Respiratory System	11,007	78.8	80.7	75.6	73.6
Larynx	393	3.2	2.9	2.7	2.0
Lung and Bronchus	10,525	75.0	77.0	72.2	71.2
Bones and Joints	77	0.6	0.5	0.5	0.4
Soft Tissue (Including Heart)	259	2.0	2.0	1.6	1.5
Skin (Excluding Basal and Squamous)	779	5.8	5.9	5.2	5.1
Melanoma of the Skin	614	4.5	4.6	4.0	4.0

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 12 (continued). Age-adjusted Mortality Rates, Males All Races Combined

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
Breast	59	0.4	0.3	0.4	0.5
Male Genital System	4,055	34.2	34.0	30.9	30.3
Prostate	3,999	34.0	33.7	30.5	29.8
Testis	30	0.1	0.2	0.2	0.2
Penis	22	0.1	0.1	0.2	0.2
Urinary System	2,082	15.6	15.2	15.7	15.6
Urinary Bladder	1,214	9.5	9.0	9.7	9.4
Kidney and Renal Pelvis	828	5.8	6.1	5.6	5.8
Ureter	21	0.1	0.1	0.2	0.2
Eye	11	0.1	0.1	0.0	0.1
Brain and Other Nervous System	724	4.8	5.1	4.4	4.9
Endocrine System	111	0.5	0.6	0.9	1.0
Thyroid	60	0.2	0.4	0.6	0.5
Lymphomas	1,726	12.6	12.7	11.7	11.7
Hodgkin Lymphoma	90	0.5	0.6	0.7	0.6
Non-Hodgkin Lymphoma	1,636	12.1	12.2	11.0	11.1
Multiple Myeloma	633	4.9	4.6	4.1	4.7
Leukemias	1,503	11.2	10.6	11.3	10.0
Lymphocytic Leukemia	417	2.7	3.3	3.5	2.7
Acute Lymphocytic Leukemia	83	0.5	0.7	0.7	0.5
Chronic Lymphocytic Leukemia	305	2.1	2.4	2.6	2.0
Myeloid and Monocytic Leukemia	632	4.8	4.3	4.5	4.0
Acute Myeloid Leukemia	467	3.5	3.0	3.4	3.0
Acute Monocytic Leukemia	9	0.1	0.1	0.0	0.1
Chronic Myeloid Leukemia	140	1.1	1.1	0.9	0.9
Other Leukemia	454	3.6	3.1	3.4	3.2
Ill-Defined & Unspecified Sites	2,815	19.0	18.2	22.7	20.7

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 13. Age-adjusted Mortality Rates, Females All Races Combined

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
All Sites	36,589	186.6	179.2	178.7	178.6
Oral Cavity and Pharynx	306	1.6	1.6	1.5	1.3
Lip	-	-	-	-	-
Tongue	84	0.5	0.5	0.3	0.4
Salivary Gland	36	0.2	0.2	0.2	0.1
Floor of Mouth	11	0.1	0.1	0.0	0.0
Gum and Other Mouth	61	0.3	0.3	0.4	0.2
Nasopharynx	19	0.1	0.1	0.1	0.1
Tonsil	24	0.1	0.1	0.1	0.1
Oropharynx	15	0.0	0.1	0.1	0.1
Hypopharynx	8	0.1	0.0	0.0	0.0
Digestive System	8,688	42.1	41.8	42.1	40.6
Esophagus	412	2.2	1.9	2.0	1.9
Stomach	887	4.3	4.6	4.5	3.7
Small Intestine	55	0.3	0.3	0.3	0.3
Colon and Rectum	4,168	19.8	20.4	19.8	19.2
Colon excluding Rectum	3,627	17.1	18.1	17.2	16.5
Rectum and Rectosigmoid Junction	541	2.7	2.4	2.6	2.7
Anus	22	0.1	0.1	0.2	0.1
Liver and Intrahepatic Bile Duct	593	2.8	2.9	2.8	2.9
Liver	395	2.0	2.0	1.9	1.8
Intrahepatic Bile Duct	198	0.9	0.9	1.0	1.1
Gallbladder	226	1.1	1.1	1.2	1.0
Pancreas	2,090	10.7	9.4	10.1	10.4
Respiratory System	8,463	43.8	42.6	40.6	42.1
Larynx	111	0.5	0.7	0.6	0.5
Lung and Bronchus	8,302	43.0	41.7	39.7	41.4
Bones and Joints	56	0.4	0.2	0.3	0.3
Soft Tissue (Including Heart)	277	1.6	1.4	1.3	1.5
Skin (Excluding Basal and Squamous)	439	2.5	2.3	2.1	1.9
Melanoma of the Skin	369	2.2	1.9	1.8	1.5
Breast	6,116	33.4	30.8	28.8	31.0

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 13 (continued). Age-adjusted Mortality Rates, Females All Races Combined

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
Female Genital System	3,695	19.0	18.5	18.2	18.7
Cervix Uteri	573	3.4	2.8	3.2	2.8
Corpus and Uterus, NOS	1,016	5.1	5.4	4.5	5.1
Corpus Uteri	438	2.5	2.4	1.8	2.1
Uterus, NOS	578	2.6	3.1	2.7	3.1
Ovary	1,891	9.6	9.3	9.5	9.7
Vagina	42	0.2	0.2	0.3	0.1
Vulva	128	0.5	0.6	0.5	0.8
Urinary System	1,188	6.4	5.5	5.3	5.6
Urinary Bladder	589	3.2	2.6	2.5	2.6
Kidney and Renal Pelvis	570	3.1	2.7	2.6	2.8
Ureter	21	0.1	0.1	0.1	0.1
Eye	13	0.1	0.0	0.0	0.1
Brain and Other Nervous System	662	3.7	3.3	3.8	3.1
Endocrine System	163	0.9	0.8	0.7	0.8
Thyroid	113	0.7	0.4	0.6	0.5
Lymphomas	1,603	7.8	8.2	7.8	7.4
Hodgkin Lymphoma	92	0.5	0.4	0.5	0.6
Non-Hodgkin Lymphoma	1,511	7.3	7.8	7.3	6.8
Multiple Myeloma	704	3.3	3.5	3.3	3.5
Leukemias	1,210	6.0	6.0	6.2	5.5
Lymphocytic Leukemia	314	1.4	1.5	1.8	1.3
Acute Lymphocytic Leukemia	61	0.3	0.4	0.3	0.3
Chronic Lymphocytic Leukemia	234	1.1	0.9	1.3	1.0
Myeloid and Monocytic Leukemia	498	2.5	2.6	2.5	2.5
Acute Myeloid Leukemia	378	1.9	2.0	1.9	1.8
Acute Monocytic Leukemia	-	-	-	-	-
Chronic Myeloid Leukemia	105	0.5	0.6	0.5	0.6
Other Leukemia	398	2.2	1.9	1.9	1.7
Ill-Defined & Unspecified Sites	3,006	14.1	12.5	16.7	15.2

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 14. Age-adjusted Mortality Rates, White Males

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
All Sites	30,923	258.8	255.4	254.1	245.6
Oral Cavity and Pharynx	441	4.0	3.7	3.3	3.0
Lip	7	0.0	0.1	0.1	0.1
Tongue	116	1.0	0.8	1.0	0.8
Salivary Gland	36	0.2	0.3	0.3	0.3
Floor of Mouth	9	0.0	0.1	0.1	0.1
Gum and Other Mouth	66	0.7	0.7	0.4	0.2
Nasopharynx	42	0.5	0.2	0.2	0.4
Tonsil	31	0.2	0.3	0.3	0.1
Oropharynx	36	0.5	0.2	0.2	0.2
Hypopharynx	21	0.2	0.2	0.1	0.1
Digestive System	8,033	66.5	64.2	66.6	65.4
Esophagus	971	7.1	7.9	7.5	8.2
Stomach	981	8.7	8.3	7.8	7.2
Small Intestine	59	0.3	0.5	0.7	0.4
Colon and Rectum	3,414	29.7	27.0	28.8	28.1
Colon excluding Rectum	2,897	25.9	22.8	25.0	22.8
Rectum and Rectosigmoid Junction	517	3.7	4.2	3.8	5.2
Anus	12	0.1	0.1	0.1	0.1
Liver and Intrahepatic Bile Duct	799	6.1	6.5	6.1	7.0
Liver	651	5.2	5.2	4.9	5.5
Intrahepatic Bile Duct	148	0.9	1.3	1.2	1.5
Gallbladder	73	0.6	0.6	0.8	0.4
Pancreas	1,547	12.4	12.2	13.0	12.8
Respiratory System	9,497	77.4	79.1	75.2	72.0
Larynx	315	3.1	2.7	2.6	1.6
Lung and Bronchus	9,104	73.7	75.7	71.8	70.0
Bones and Joints	71	0.7	0.5	0.6	0.5
Soft Tissue (Including Heart)	225	1.9	1.9	1.7	1.6
Skin (Excluding Basal and Squamous)	751	6.4	6.5	5.9	5.5
Melanoma of the Skin	605	5.1	5.3	4.5	4.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 14 (continued). Age-adjusted Mortality Rates, White Males

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
Breast	47	0.3	0.3	0.4	0.4
Male Genital System	3,351	32.4	30.9	28.9	27.3
Prostate	3,300	32.1	30.6	28.4	26.8
Testis	27	0.1	0.2	0.2	0.3
Penis	20	0.1	0.1	0.2	0.2
Urinary System	1,884	15.5	15.9	15.9	16.2
Urinary Bladder	1,131	9.9	9.5	10.0	9.7
Kidney and Renal Pelvis	717	5.3	6.2	5.5	6.1
Ureter	21	0.2	0.1	0.2	0.2
Eye	11	0.1	0.1	0.0	0.1
Brain and Other Nervous System	666	5.0	5.5	4.7	5.5
Endocrine System	92	0.5	0.6	0.8	0.9
Thyroid	53	0.2	0.4	0.6	0.6
Lymphomas	1,538	12.9	13.0	11.8	12.0
Hodgkin Lymphoma	75	0.5	0.5	0.6	0.7
Non-Hodgkin Lymphoma	1,463	12.3	12.6	11.2	11.4
Multiple Myeloma	521	4.5	4.2	3.9	4.5
Leukemias	1,348	11.6	10.8	11.6	10.3
Lymphocytic Leukemia	371	2.7	3.3	3.6	2.9
Acute Lymphocytic Leukemia	66	0.3	0.7	0.7	0.5
Chronic Lymphocytic Leukemia	282	2.2	2.5	2.7	2.1
Myeloid and Monocytic Leukemia	557	4.9	4.4	4.4	4.0
Acute Myeloid Leukemia	416	3.7	3.2	3.4	3.0
Acute Monocytic Leukemia	9	0.1	0.1	0.0	0.1
Chronic Myeloid Leukemia	118	1.1	1.2	0.8	0.8
Other Leukemia	420	4.0	3.1	3.6	3.3
Ill-Defined and Unspecified Sites	2,447	19.0	17.9	22.6	20.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 15. Age-adjusted Mortality Rates, White Females

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
All Sites	32,075	187.5	179.3	179.5	179.5
Oral Cavity and Pharynx	248	1.4	1.6	1.3	1.3
Lip	-	-	-	-	-
Tongue	74	0.5	0.5	0.3	0.4
Salivary Gland	35	0.2	0.2	0.2	0.2
Floor of Mouth	6	0.1	0.0	0.0	0.0
Gum and Other Mouth	50	0.2	0.3	0.4	0.2
Nasopharynx	11	0.1	0.0	0.1	0.1
Tonsil	15	0.1	0.1	0.0	0.1
Oropharynx	13	0.0	0.1	0.1	0.1
Hypopharynx	6	0.1	0.0	0.0	0.0
Digestive System	7,530	40.5	41.0	41.4	40.1
Esophagus	327	1.9	1.7	1.8	1.8
Stomach	731	4.0	4.3	3.9	3.5
Small Intestine	45	0.3	0.3	0.3	0.2
Colon and Rectum	3,655	19.0	20.2	19.8	19.2
Colon excluding Rectum	3,166	16.4	17.8	17.2	16.3
Rectum and Rectosigmoid Junction	489	2.7	2.4	2.6	2.9
Anus	22	0.1	0.2	0.2	0.1
Liver and Intrahepatic Bile Duct	512	2.8	2.9	2.8	2.7
Liver	336	1.9	2.0	1.7	1.8
Intrahepatic Bile Duct	176	0.9	0.9	1.1	1.0
Gallbladder	190	1.0	1.0	1.1	1.0
Pancreas	1,835	10.6	9.4	10.1	10.3
Respiratory System	7,528	44.7	43.2	41.4	43.4
Larynx	93	0.5	0.7	0.6	0.5
Lung and Bronchus	7,389	43.9	42.3	40.5	42.8
Bones and Joints	50	0.4	0.2	0.3	0.3
Soft Tissue (Including Heart)	241	1.7	1.4	1.3	1.5
Skin (Excluding Basal and Squamous)	426	2.9	2.6	2.4	2.0
Melanoma of the Skin	361	2.6	2.2	2.1	1.6
Breast	5,289	33.3	31.0	29.0	30.8

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 15 (continued). Age-adjusted Mortality Rates, White Females

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
Female Genital System	3,189	19.2	18.6	18.0	18.4
Cervix Uteri	414	3.1	2.5	2.6	2.4
Corpus and Uterus, NOS	858	5.0	5.3	4.3	4.9
Corpus Uteri	382	2.4	2.4	1.8	2.0
Uterus, NOS	476	2.5	2.9	2.5	2.9
Ovary	1,720	10.2	9.8	10.0	9.9
Vagina	36	0.2	0.2	0.3	0.1
Vulva	120	0.6	0.6	0.5	0.8
Urinary System	1,060	6.4	5.3	5.5	5.6
Urinary Bladder	526	3.1	2.4	2.6	2.7
Kidney and Renal Pelvis	509	3.2	2.7	2.8	2.8
Ureter	19	0.1	0.1	0.1	0.1
Eye	13	0.1	0.0	0.1	0.1
Brain and Other Nervous System	612	4.0	3.7	4.1	3.3
Endocrine System	142	0.9	0.9	0.7	0.9
Thyroid	101	0.7	0.4	0.6	0.6
Lymphomas	1,463	8.2	8.5	8.1	7.8
Hodgkin Lymphoma	83	0.6	0.5	0.5	0.6
Non-Hodgkin Lymphoma	1,380	7.6	8.0	7.6	7.2
Multiple Myeloma	572	3.1	3.2	2.9	3.3
Leukemias	1,088	6.3	6.1	6.5	5.6
Lymphocytic Leukemia	290	1.5	1.5	1.9	1.4
Acute Lymphocytic Leukemia	58	0.3	0.5	0.4	0.3
Chronic Lymphocytic Leukemia	216	1.1	0.9	1.4	0.9
Myeloid and Monocytic Leukemia	439	2.6	2.7	2.6	2.5
Acute Myeloid Leukemia	341	2.0	2.1	2.0	1.9
Acute Monocytic Leukemia	-	-	-	-	-
Chronic Myeloid Leukemia	85	0.5	0.5	0.4	0.6
Other Leukemia	359	2.2	1.9	1.9	1.7
Ill-Defined & Unspecified Sites	2,624	14.5	12.2	16.6	14.9

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 16. Age-adjusted Mortality Rates, Black Males

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
All Sites	4,433	343.9	350.4	336.0	348.7
Oral Cavity and Pharynx	143	9.8	9.7	10.5	9.6
Lip	-	-	-	-	-
Tongue	39	1.8	1.9	2.7	3.9
Salivary Gland	7	1.0	0.2	0.5	0.2
Floor of Mouth	-	-	-	-	-
Gum and Other Mouth	13	1.9	0.9	0.6	0.2
Nasopharynx	15	0.4	1.8	0.4	1.6
Tonsil	9	0.6	0.6	1.1	0.2
Oropharynx	21	1.7	0.9	2.0	1.3
Hypopharynx	10	0.5	0.6	0.7	0.7
Digestive System	1,182	91.6	80.8	91.4	90.7
Esophagus	175	13.7	10.4	13.6	11.0
Stomach	181	17.7	13.2	13.7	12.7
Small Intestine	12	0.6	0.0	0.8	2.1
Colon and Rectum	436	35.8	32.3	31.8	37.2
Colon excluding Rectum	372	30.8	26.9	24.1	35.2
Rectum and Rectosigmoid Junction	64	5.0	5.4	7.6	2.0
Anus	6	0.4	0.4	0.4	0.0
Liver and Intrahepatic Bile Duct	138	8.9	8.8	8.1	9.9
Liver	123	6.9	7.6	7.6	8.9
Intrahepatic Bile Duct	15	2.0	1.2	0.5	1.0
Gallbladder	-	-	-	-	-
Pancreas	213	12.5	14.4	20.2	16.0
Respiratory System	1,405	107.1	112.9	96.6	103.1
Larynx	72	5.5	6.3	4.3	4.9
Lung and Bronchus	1,323	100.8	106.1	91.8	97.4
Bones and Joints	6	0.4	0.6	0.2	0.1
Soft Tissue (Including Heart)	29	2.0	2.1	1.2	1.2
Skin (Excluding Basal and Squamous)	22	0.7	1.4	1.0	1.9
Melanoma of the Skin	7	0.2	0.2	0.4	0.6

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 16 (continued). Age-adjusted Mortality Rates, Black Males

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
Breast	12	1.7	0.5	0.7	0.6
Male Genital System	668	61.5	74.8	59.9	71.4
Prostate	664	61.5	74.6	59.5	71.0
Testis	-	-	-	-	-
Penis	-	-	-	-	-
Urinary System	176	17.1	10.2	17.9	11.7
Urinary Bladder	76	6.6	4.7	9.3	6.8
Kidney and Renal Pelvis	96	10.5	5.5	8.4	3.8
Ureter	-	-	-	-	-
Eye	-	-	-	-	-
Brain and Other Nervous System	48	3.6	4.0	2.7	2.3
Endocrine System	13	0.3	0.5	1.2	1.0
Thyroid	5	0.3	0.4	0.5	0.2
Lymphomas	163	11.0	10.0	10.4	10.2
Hodgkin Lymphoma	15	0.5	0.9	1.4	0.4
Non-Hodgkin Lymphoma	148	10.6	9.1	9.0	9.8
Multiple Myeloma	104	9.6	9.7	6.2	7.3
Leukemias	129	8.1	9.7	8.8	8.6
Lymphocytic Leukemia	41	3.0	3.2	3.3	1.4
Acute Lymphocytic Leukemia	13	1.5	0.9	0.4	0.2
Chronic Lymphocytic Leukemia	22	1.5	1.6	2.3	1.0
Myeloid and Monocytic Leukemia	61	3.9	2.4	5.2	4.8
Acute Myeloid Leukemia	42	2.7	1.5	3.2	3.0
Acute Monocytic Leukemia	-	-	-	-	-
Chronic Myeloid Leukemia	17	1.2	0.6	1.6	1.7
Other Leukemia	27	1.1	4.1	0.2	2.4
Ill-Defined & Unspecified Sites	333	19.5	23.5	27.3	28.7

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 17. Age-adjusted Mortality Rates, Black Females

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
All Sites	4,049	208.8	198.5	198.7	196.7
Oral Cavity and Pharynx	54	3.3	2.6	3.3	1.7
Lip	-	-	-	-	-
Tongue	10	0.5	0.2	0.8	0.4
Salivary Gland	-	-	-	-	-
Floor of Mouth	5	0.4	0.6	0.0	0.0
Gum and Other Mouth	10	0.9	0.7	0.4	0.2
Nasopharynx	6	0.0	0.7	0.6	0.0
Tonsil	9	0.4	0.2	0.8	0.4
Oropharynx	-	-	-	-	-
Hypopharynx	-	-	-	-	-
Digestive System	1,016	58.9	51.0	52.1	47.1
Esophagus	77	5.3	4.4	3.4	2.5
Stomach	121	6.3	5.7	7.8	4.7
Small Intestine	7	0.0	0.5	0.2	0.6
Colon and Rectum	470	29.2	24.3	22.1	22.1
Colon excluding Rectum	424	26.0	22.2	19.2	20.6
Rectum and Rectosigmoid Junction	46	3.2	2.1	2.9	1.5
Anus	-	-	-	-	-
Liver and Intrahepatic Bile Duct	60	3.1	2.5	3.5	2.9
Liver	44	2.6	1.4	3.4	1.5
Intrahepatic Bile Duct	16	0.4	1.1	0.2	1.4
Gallbladder	28	2.2	1.2	1.7	0.8
Pancreas	234	12.3	10.9	12.5	12.7
Respiratory System	858	41.9	45.3	42.3	39.9
Larynx	18	0.6	1.3	0.6	0.9
Lung and Bronchus	836	41.2	44.0	41.3	38.9
Bones and Joints	5	0.2	0.1	0.2	0.4
Soft Tissue (Including Heart)	30	1.3	1.1	0.9	1.8
Skin (Excluding Basal and Squamous)	10	0.3	0.4	0.7	0.7
Melanoma of the Skin	6	0.3	0.2	0.3	0.5
Breast	753	39.6	33.8	32.2	38.0

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 17 (continued). Age-adjusted Mortality Rates, Black Females

Cancer Site	Total Cases	Rates 1997	1998	1999	2000
Female Genital System	448	22.1	19.0	22.2	23.3
Cervix Uteri	140	7.0	5.7	7.8	5.4
Corpus and Uterus, NOS	144	7.7	6.8	6.3	8.2
Corpus Uteri	51	3.5	2.5	1.4	2.8
Uterus, NOS	93	4.3	4.3	4.9	5.3
Ovary	147	6.9	5.6	7.1	8.8
Vagina	-	-	-	-	-
Vulva	8	0.0	0.2	0.8	0.5
Urinary System	118	7.3	7.6	4.1	5.8
Urinary Bladder	58	4.1	4.1	1.8	2.5
Kidney and Renal Pelvis	56	3.0	3.2	2.0	3.2
Ureter	-	-	-	-	-
Eye	-	-	-	-	-
Brain and Other Nervous System	41	1.9	1.5	2.2	1.9
Endocrine System	20	1.0	0.7	1.0	0.8
Thyroid	11	0.8	0.2	0.7	0.3
Lymphomas	121	6.4	6.1	5.6	4.9
Hodgkin Lymphoma	9	0.6	0.1	0.0	0.6
Non-Hodgkin Lymphoma	112	5.8	6.0	5.6	4.3
Multiple Myeloma	126	6.5	6.9	6.2	6.2
Leukemias	108	5.2	6.2	5.1	5.1
Lymphocytic Leukemia	24	0.9	1.4	0.9	1.7
Acute Lymphocytic Leukemia	-	-	-	-	-
Chronic Lymphocytic Leukemia	18	0.7	1.0	0.8	1.3
Myeloid and Monocytic Leukemia	49	2.2	3.1	2.1	2.1
Acute Myeloid Leukemia	29	0.8	2.1	1.2	1.6
Acute Monocytic Leukemia	-	-	-	-	-
Chronic Myeloid Leukemia	18	1.4	1.0	0.7	0.4
Other Leukemia	35	2.1	1.7	2.0	1.3
Ill-Defined & Unspecified Sites	341	13.1	16.4	20.6	19.1

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

Table 18. Age-adjusted Mortality Rates, Hispanic Males and Females 1997-2000 Combined

Cancer Site	Male Rate	Male Cases	Female Rate	Female Cases
All Sites	148.5	1,187	91.4	1,092
Oral Cavity and Pharynx	2.4	21	1.0	11
Lip	-	-	-	-
Tongue	0.5	6	0.6	6
Salivary Gland	-	-	-	-
Floor of Mouth	-	-	-	-
Gum and Other Mouth	0.7	6	^	^
Nasopharynx	-	-	-	-
Tonsil	-	-	-	-
Oropharynx	-	-	-	-
Hypopharynx	-	-	-	-
Digestive System	47.0	378	25.9	282
Esophagus	5.0	41	0.6	6
Stomach	8.1	71	3.6	44
Small Intestine	-	-	-	-
Colon and Rectum	16.9	128	10.6	118
Colon excluding Rectum	13.0	100	9.1	101
Rectum and Rectosigmoid Junction	3.8	28	1.5	17
Anus	-	-	-	-
Liver and Intrahepatic Bile Duct	7.6	63	3.3	34
Liver	6.6	57	2.7	27
Intrahepatic Bile Duct	1.0	6	0.6	7
Gallbladder	-	-	1.5	15
Pancreas	7.4	58	4.9	52
Respiratory System	37.2	306	11.0	129
Larynx	1.6	15	-	-
Lung and Bronchus	35.4	289	10.6	123
Bones and Joints	-	-	-	-
Soft Tissue (Including Heart)	0.6	9	0.7	12
Skin (Excluding Basal and Squamous)	1.6	14	0.5	6
Melanoma of the Skin	1.3	11	0.5	6
Breast	-	-	16.1	211

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard
* Non-applicable gender
^ Rates not calculated for fewer than five cases

Table 18 (continued). Age-adjusted Mortality Rates, Hispanic Males and Females 1997-2000 Combined

Cancer Site	Male Rate	Male Cases	Female Rate	Female Cases
Female Genital System	*	*	10.4	133
Cervix Uteri	*	*	2.2	38
Corpus and Uterus, NOS	*	*	3.2	36
Corpus Uteri	*	*	1.3	15
Uterus, NOS	*	*	1.8	21
Ovary	*	*	4.5	54
Vagina	*	*	-	-
Vulva	*	*	-	-
Male Genital System	20.7	111	*	*
Prostate	20.2	105	*	*
Testis	-	-	*	*
Penis	-	-	*	*
Urinary System	6.9	51	2.6	28
Urinary Bladder	4.6	29	1.6	15
Kidney and Renal Pelvis	2.2	21	1.0	13
Ureter	-	-	-	-
Eye	-	-	-	-
Brain and Other Nervous System	1.8	24	1.2	20
Endocrine System	-	-	0.8	9
Thyroid	-	-	0.6	6
Lymphomas	7.3	80	4.2	50
Hodgkin Lymphoma	0.4	6	-	-
Non-Hodgkin Lymphoma	6.9	74	4.1	48
Multiple Myeloma	3.1	19	2.9	31
Leukemias	7.3	71	3.6	52
Lymphocytic Leukemia	1.6	19	0.8	12
Acute Lymphocytic Leukemia	0.6	14	0.3	8
Chronic Lymphocytic Leukemia	-	-	-	-
Myeloid and Monocytic Leukemia	3.7	35	1.4	23
Acute Myeloid Leukemia	2.6	26	1.0	15
Acute Monocytic Leukemia	-	-	-	-
Chronic Myeloid Leukemia	1.0	7	0.4	8
Other Leukemia	2.0	17	1.4	17
Ill-Defined & Unspecified Sites	11.6	90	10.2	115

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

* Non-applicable gender

^ Rates not calculated for fewer than five cases

Table 19. Comparative Mortality Rates, New Jersey and U.S., 1996-2000
Males

Cancer Site	New Jersey 1996-2000			United States 1996-2000		
Population:	All Races Combined	White	Black	All Races Combined	White	Black
All Sites	261.4	256.7	349.8	255.5	249.5	356.2
Lung	74.9	73.8	100.0	79.5	78.1	107.0
Prostate	32.9	30.4	68.9	32.9	30.2	73.0
Colorectal	29.5	29.4	35.9	25.8	25.3	34.6

Source-NAACCR Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

Table 20. Comparative Mortality Rates, New Jersey and U.S., 1996-2000
Females

Cancer Site	New Jersey 1996-2000			United States 1996-2000		
Population:	All Races Combined	White	Black	All Races Combined	White	Black
All Sites	181.7	182.1	203.0	168.3	166.9	198.6
Lung	41.6	42.5	41.8	40.7	41.5	40.0
Breast	31.3	31.2	37.2	27.7	27.2	35.9
Colorectal	20.1	19.8	24.6	18.0	17.5	24.6

Source-NAACCR Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

Table 21. Population Denominators

	1996 All races Males	All races Females	White Males	White Females	Black Males	Black Females	1997 All races Males	All races Females	White Males	White Females	Black Males	Black Females
00-04	296,485	283,460	226,387	216,461	52,977	50,574	291,241	278,418	220,857	211,060	51,912	49,550
05-09	299,943	285,971	228,417	217,558	54,407	52,526	305,335	291,166	231,234	220,103	55,824	53,980
10-14	274,315	260,668	208,766	197,467	48,803	47,054	278,141	264,393	211,123	199,987	49,591	47,756
15-19	261,599	245,765	197,333	183,726	48,707	47,227	264,428	248,198	199,032	184,964	48,986	47,711
20-24	242,227	235,277	183,310	175,087	43,415	44,051	241,636	234,097	182,359	173,347	42,808	44,255
25-29	282,318	283,318	217,660	213,008	45,970	49,340	278,306	279,191	212,017	207,683	45,895	49,215
30-34	350,436	356,248	280,102	275,170	51,403	56,706	344,012	350,098	273,418	267,596	51,119	56,523
35-39	358,164	366,024	288,488	289,504	47,682	54,017	362,091	369,846	290,264	291,383	48,976	55,173
40-44	313,518	327,615	256,638	261,438	38,078	46,009	324,306	337,654	264,160	268,700	39,968	47,349
45-49	283,558	299,442	235,070	242,669	32,438	39,991	281,179	297,042	231,222	238,518	33,063	40,967
50-54	222,548	239,105	185,533	195,625	24,820	31,703	241,369	259,163	202,215	212,878	25,870	32,974
55-59	172,680	188,484	143,088	153,976	21,081	26,265	179,335	195,671	148,412	159,118	21,591	27,399
60-64	150,360	168,771	127,533	141,025	17,045	21,765	150,228	168,283	126,453	139,526	17,222	22,067
65-69	143,183	174,961	125,515	151,507	14,069	18,676	140,100	170,794	121,985	146,793	14,163	18,898
70-74	122,028	165,215	109,991	147,620	9,436	13,950	121,441	163,811	108,983	145,615	9,666	14,280
75-79	89,383	137,158	81,654	124,284	6,191	10,638	91,464	139,321	83,419	125,985	6,404	10,914
80-84	52,771	96,721	48,886	88,686	3,041	6,781	54,442	99,111	50,369	90,647	3,163	7,096
85+	32,746	87,131	30,274	80,388	2,042	6,013	34,086	89,411	31,483	82,479	2,116	6,106
Total	3,948,262	4,201,334	3,174,645	3,355,199	561,605	623,286	3,983,140	4,235,668	3,189,005	3,366,382	568,337	632,213

	1998 All races Males	All races Females	White Males	White Females	Black Males	Black Females	1999 All races Males	All races Females	White Males	White Females	Black Males	Black Females
00-04	288,014	275,502	216,765	207,231	51,523	49,113	287,462	275,114	215,439	205,559	51,197	49,174
05-09	308,255	293,705	232,213	220,859	56,729	54,763	309,684	295,052	232,333	220,962	57,043	54,943
10-14	284,481	270,522	215,139	204,138	51,097	49,257	294,507	280,131	222,127	210,858	53,153	51,437
15-19	267,577	250,965	200,911	186,514	49,344	48,027	269,267	252,487	202,095	187,761	49,142	47,814
20-24	241,812	233,415	182,059	172,121	42,854	44,232	243,493	234,381	182,461	171,854	43,430	44,790
25-29	276,266	277,108	208,919	204,468	45,358	49,078	274,458	274,353	205,803	201,011	44,775	48,643
30-34	335,211	341,302	265,316	258,417	50,212	56,169	325,341	331,258	252,770	249,456	48,809	54,912
35-39	363,391	371,013	289,596	290,215	50,016	56,232	362,946	370,291	287,608	287,859	50,519	56,716
40-44	334,545	347,078	271,216	275,070	41,797	48,936	343,088	354,841	276,591	280,256	43,413	50,334
45-49	285,035	300,883	233,688	240,691	33,632	41,630	291,544	307,297	238,700	245,709	34,346	42,147
50-54	247,349	266,183	206,161	217,355	26,890	34,353	256,150	276,145	212,492	224,316	28,355	35,929
55-59	190,559	207,611	158,367	169,421	22,124	28,177	197,560	215,229	164,332	175,638	22,454	28,751
60-64	152,252	170,210	127,184	140,134	17,742	22,833	154,981	173,309	128,537	141,767	18,376	23,705
65-69	136,296	166,219	117,751	141,495	14,136	19,186	133,493	161,967	114,537	136,884	14,099	19,161
70-74	122,443	163,338	109,418	144,441	10,048	14,715	121,915	161,468	108,283	142,034	10,470	15,057
75-79	92,982	140,874	84,484	126,928	6,663	11,265	94,572	143,041	85,790	128,649	6,799	11,515
80-84	56,042	100,887	51,759	92,337	3,320	7,049	57,365	102,699	52,939	93,898	3,431	7,210
85+	35,740	92,353	33,006	84,954	2,191	6,467	37,495	95,208	34,542	87,341	2,367	6,826
Total	4,018,250	4,269,168	3,203,952	3,376,789	575,676	641,482	4,055,321	4,304,271	3,217,379	3,391,812	582,178	649,064

	2000 All races Males	All races Females	White* Males	White* Females	Black* Males	Black* Females	2001 All races Males	All races Females	White* Males	White* Females	Black* Males	Black* Females
00-04	288,085	275,700	215,325	205,215	51,029	49,201	288,085	275,700	215,325	205,215	51,029	49,201
05-09	309,563	294,966	231,229	219,965	57,164	54,977	309,563	294,966	231,229	219,965	57,164	54,977
10-14	302,708	287,869	228,324	216,573	54,568	52,911	302,708	287,869	228,324	216,573	54,568	52,911
15-19	271,020	254,196	203,344	189,181	49,138	47,784	271,020	254,196	203,344	189,181	49,138	47,784
20-24	244,628	235,451	182,795	171,654	43,836	45,420	244,628	235,451	182,795	171,654	43,836	45,420
25-29	272,873	272,044	203,510	197,786	43,919	48,346	272,873	272,044	203,510	197,786	43,919	48,346
30-34	319,031	325,092	244,213	243,708	48,070	54,130	319,031	325,092	244,213	243,708	48,070	54,130
35-39	360,230	367,694	283,192	284,391	50,618	56,724	360,230	367,694	283,192	284,391	50,618	56,724
40-44	348,061	359,121	279,472	282,982	44,492	51,213	348,061	359,121	279,472	282,982	44,492	51,213
45-49	297,845	313,512	243,476	250,731	35,012	42,592	297,845	313,512	243,476	250,731	35,012	42,592
50-54	263,357	284,184	218,022	230,037	29,407	37,320	263,357	284,184	218,022	230,037	29,407	37,320
55-59	202,559	220,779	168,298	180,164	22,896	29,116	202,559	220,779	168,298	180,164	22,896	29,116
60-64	156,073	174,573	128,846	142,091	18,669	24,137	156,073	174,573	128,846	142,091	18,669	24,137
65-69	132,558	160,638	113,157	135,079	14,194	19,320	132,558	160,638	113,157	135,079	14,194	19,320
70-74	121,639	159,834	107,609	139,863	10,728	15,431	121,639	159,834	107,609	139,863	10,728	15,431
75-79	95,560	144,571	86,497	129,846	6,968	11,646	95,560	144,571	86,497	129,846	6,968	11,646
80-84	58,291	104,046	53,621	94,948	3,595	7,388	58,291	104,046	53,621	94,948	3,595	7,388
85+	38,732	97,267	35,621	89,065	2,457	7,053	38,732	97,267	35,621	89,065	2,457	7,053
Total	4,082,813	4,331,537	3,226,551	3,403,279	586,760	654,709	4,082,813	4,331,537	3,226,551	3,403,279	586,760	654,709

Source: The National Cancer Institute's SEER Program and U S Census Bureau (year 2000). * Pops for Races White, Black = Alone

Table 21. Population Denominators

Hispanic Populations, 1997-2001

	All races Total Males	1997 Males	1998 Males	1999 Males	2000 Males	2001 Males	All races Total Females	1997 Females	1998 Females	1999 Females	2000 Females	2001 Females
00-04	247,147	47,595	48,331	49,705	50,758	50,758	236,385	45,433	46,203	47,523	48,613	48,613
05-09	238,429	44,398	46,356	48,253	49,711	49,711	228,095	42,597	44,584	46,220	47,347	47,347
10-14	216,285	39,578	41,481	43,686	45,770	45,770	207,939	37,790	39,765	42,036	44,174	44,174
15-19	235,217	45,050	46,469	47,418	48,140	48,140	209,460	40,316	41,267	42,145	42,866	42,866
20-24	267,321	48,802	51,956	54,339	56,112	56,112	229,581	43,270	45,127	46,500	47,342	47,342
25-29	271,039	50,551	52,414	54,762	56,656	56,656	240,107	45,137	46,897	48,513	49,780	49,780
30-34	276,751	54,769	55,613	55,617	55,376	55,376	253,552	49,548	50,367	50,979	51,329	51,329
35-39	250,954	46,660	49,118	51,158	52,009	52,009	240,340	44,707	46,976	48,757	49,950	49,950
40-44	194,599	35,345	37,244	39,458	41,276	41,276	198,524	36,431	38,439	40,182	41,736	41,736
45-49	147,269	27,344	28,506	29,679	30,870	30,870	156,254	29,159	30,339	31,500	32,628	32,628
50-54	115,837	21,096	22,329	23,548	24,432	24,432	127,557	23,468	24,712	25,761	26,808	26,808
55-59	85,057	15,983	16,702	17,164	17,604	17,604	95,519	17,836	18,664	19,369	19,825	19,825
60-64	65,804	12,292	12,772	13,318	13,711	13,711	74,889	13,982	14,498	15,099	15,655	15,655
65-69	46,026	8,799	8,999	9,186	9,521	9,521	57,773	10,812	11,206	11,693	12,031	12,031
70-74	31,187	5,718	6,004	6,365	6,550	6,550	42,511	7,898	8,293	8,606	8,857	8,857
75-79	17,579	3,193	3,329	3,531	3,763	3,763	28,312	5,195	5,467	5,710	5,970	5,970
80-84	9,285	1,728	1,817	1,886	1,927	1,927	17,735	3,462	3,508	3,545	3,610	3,610
85+	6,276	1,131	1,185	1,242	1,359	1,359	14,784	2,685	2,856	2,993	3,125	3,125
Total	2,722,062	510,032	530,625	550,315	565,545	565,545	2,659,317	499,726	519,168	537,131	551,646	551,646

Source: The National Cancer Institute's SEER Program and U S Census Bureau (year 2000).