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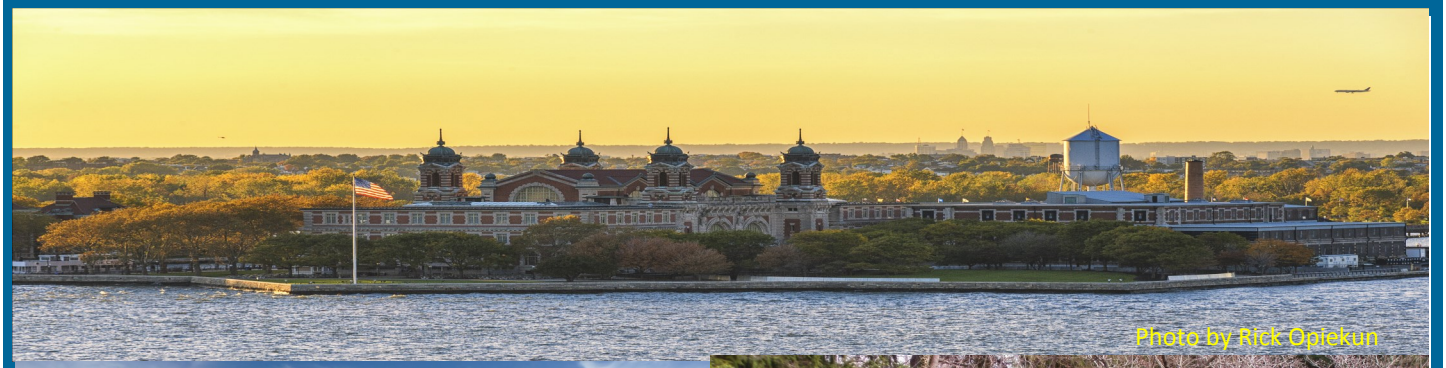
ANNUAL REPORT

Cancer Incidence and Mortality in New Jersey, 2010-2014



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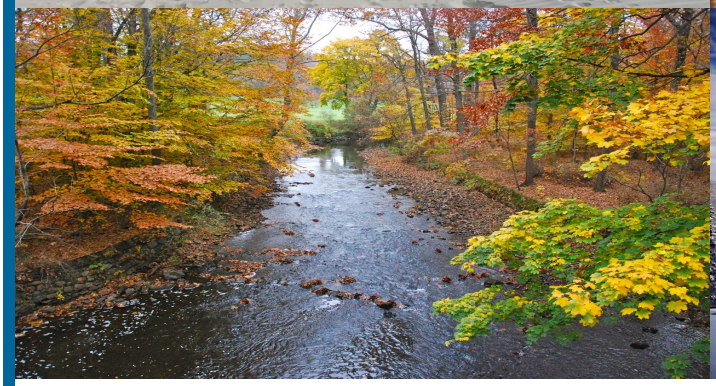

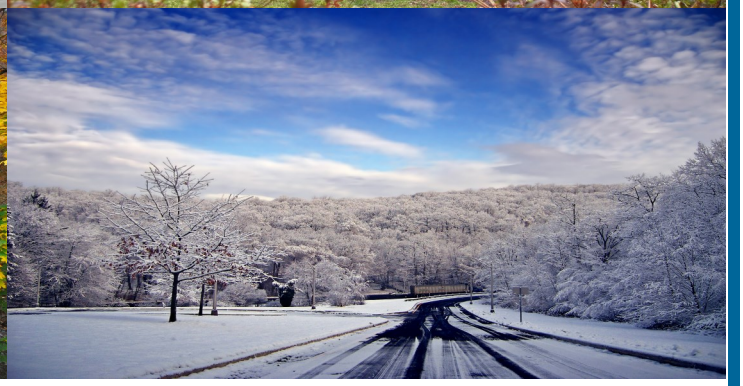

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Kim Guadagno, *Lt. Governor*

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Commissioner

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Cancer Incidence and Mortality in New Jersey, 2010 - 2014

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TABLE OF CONTENTS

FIGURES AND TABLES

INTRODUCTION

This report presents statewide, age-adjusted incidence rates and counts for all cancers diagnosed among New Jersey residents during the period 2010-2014.

The primary goal of this report is to provide 2010-2014 cancer statistics to healthcare planners, researchers and the public. Statistics are presented statewide for eight population subgroups: white men, white women, black men, black women, Hispanic men, Hispanic women, Asian or Pacific Islander men, and Asian or Pacific Islander women. These statistics are also presented by gender for all races combined. The age-adjusted incidence and mortality rates per 100,000 population are presented by major cancer sites and for all sites combined by year of diagnosis. Statistics are presented by stage at diagnosis for selected cancer sites by gender and race/ethnicity. New to this year's report, we provide more detailed statistics on tobacco-related cancers in a special focus section entitled "Tobacco-Related Cancer Mortality in New Jersey".

Additional New Jersey cancer incidence, mortality, survival, and prevalence data are available from the Cancer Epidemiology Services office or on our website, http://nj.gov/health/ces/index.shtml, including:

- *Childhood Cancer in New Jersey, 1979-2013*
- *Melanoma in New Jersey Part 1: Incidence, Mortality and Survival*
- *Cancer Survival in New Jersey, 1979-2005*
- *Cancer Prevalence in New Jersey, 1/1/2009*
- *Cancers with Population-Based Screening Methods – Incidence, Stage at Diagnosis, and Screening Prevalence, New Jersey*
- *Cancer Among Asians and Pacific Islanders in New Jersey, 1990-2007*
- *Adolescent and Young Adult Cancer in New Jersey - 1979-2006*
- *Area Socioeconomic Variations in Cancer Incidence and Stage at Diagnosis in New Jersey, 1996-2002*

Our interactive cancer statistics mapping application provides incidence and mortality counts and rates statewide and at the county level by year, age, sex, race, and ethnicity for the years 1990 and later at http://cancer-rates.info/nj/ . Other New Jersey and U.S. cancer data can be found on the following websites:

- Cancer Control Planet, http://cancercontrolplanet.cancer.gov/
- North American Association of Central Cancer Registries' *Cancer in North America*, https://www.naaccr.org/cancer-in-north-america-cina-volumes/
- Surveillance, Epidemiology and End Results (SEER) Program's *Cancer Statistics Review*, http://www.seer.cancer.gov/
- Centers for Disease Control and Preventions, *United States Cancer Statistics*, https://nccd.cdc.gov/uscs/
- State Cancer Profiles, http://statecancerprofiles.cancer.gov/

NEW CANCER CASES AND DEATHS IN NEW JERSEY IN 2014

A total of 49,506 cases of invasive cancer diagnosed in 2014 among New Jersey residents were reported to the New Jersey State Cancer Registry (NJSCR), which is slightly lower compared to 50,254 reported cases diagnosed in 2013. A total of 16,591 deaths occurred in 2014 for which cancer was designated on the death certificate as the underlying cause, a slight increase compared to 16,315 cancer deaths in 2013. The most common cancer diagnosed among New Jersey women in 2014 was breast cancer, followed by lung and bronchus cancer, but lung and bronchus cancer was the leading cause of cancer related death (Tables 1 and 2). For New Jersey women, colon and rectum was the third most common cancer diagnosed in 2014, as well as the third leading cause of cancer death.

Table 1. Ten Most Common Types of Cancer Incidence among New Jersey Females, 2014*

Rank	Cancer Site	Rate^	Count
	All Sites	450.9	25,547
1	Breast	134.1	7,487
2	Lung and Bronchus	51.7	3,053
3	Colon and Rectum	36.1	2,138
4	Corpus and Uterus, NOS	31.9	1,871
5	Thyroid	27.7	1,358
6	Non-Hodgkin Lymphoma	18.0	1,019
7	Melanoma of the Skin	16.8	926
8	Pancreas	12.8	768
9	Leukemia	12.6	698
10	Ovary	11.9	688

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

*2014 data are preliminary. NOS = not otherwise specified.

Table 2. Ten Most Common Types of Cancer Mortality among New Jersey Females, 2014

Rank	Cancer Site	Rate^	Count
	All Sites	138.9	8,432
1	Lung and Bronchus	33.5	2,008
2	Breast	21.5	1,280
3	Colon and Rectum	11.8	753
4	Pancreas	10.3	640
5	Ovary	6.9	412
6	Corpus and Uterus, NOS	6.5	391
7	Leukemia	5.2	320
8	Non-Hodgkin Lymphoma	4.4	268
9	Brain and Other Nervous System	3.4	192
10	Urinary Bladder	2.5	154

^Rates are per 100,000 and age-adjusted to the 2000 US population standard.
NOS = not otherwise specified.

The most common cancer diagnosed among New Jersey men in 2014 was prostate cancer, but lung and bronchus cancer was the leading cause of cancer related death, followed by prostate cancer and colon and rectum cancer (Tables 3 and 4). Lung and bronchus cancer was the second most common cancer diagnosed in New Jersey men in 2014, and colon and rectum cancer was the third most common cancer.

Table 3. Ten Most Common Types of Cancer Incidence among New Jersey Males, 2014*

Rank	Cancer Site	Rate^	Count
	All Sites	508.2	23,959
1	Prostate	115.5	5,787
2	Lung and Bronchus	60.4	2,774
3	Colon and Rectum	46.5	2,179
4	Urinary Bladder	40.3	1,799
5	Melanoma of the Skin	29.1	1,359
6	Non-Hodgkin Lymphoma	25.3	1,161
7	Kidney and Renal Pelvis	21.5	1,046
8	Leukemia	19.1	859
9	Oral Cavity and Pharynx	16.3	801
10	Pancreas	15.2	719

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

*2014 data are preliminary.

Table 4. Ten Most Common Types of Cancer Mortality among New Jersey Males, 2014

Rank	Cancer Site	Rate^	Count
	All Sites	182.4	8,159
1	Lung and Bronchus	43.1	1,948
2	Prostate	19.3	814
3	Colon and Rectum	16.9	766
4	Pancreas	12.1	564
5	Liver	7.2	357
6	Leukemia	7.8	336
7	Urinary Bladder	7.7	326
8	Non-Hodgkin Lymphoma	7.2	315
9	Esophagus	6.2	288
10	Brain and Other Nervous System	5.5	257

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

CANCER INCIDENCE, NEW JERSEY 2010-2014

SUMMARY

During the period 2010-2014, a total of 248,205 cases of invasive cancer were diagnosed among New Jersey residents, 50.5% among women and 49.5% among men, 82.4% among whites, 11.1% among blacks, and 3.9% among Asians or Pacific Islanders (API). Hispanics of any race accounted for 9.0% of the total cancer cases.

Primary cancers with the ten highest age-adjusted incidence rates during 2010-2014 in New Jersey were breast, lung, colon and rectum, corpus and uterus, NOS (uterus), thyroid, non-Hodgkin lymphoma, melanoma of the skin, pancreas, ovary, and leukemia for women; and prostate, lung, colon and rectum, urinary bladder, melanoma of the skin, non-Hodgkin lymphoma, kidney and renal pelvis, leukemia, oral cavity and pharynx, and pancreas for men. These accounted for 77.9% of all incident cancers (Tables A1 and A2 in the Appendix).

GENDER

The age-adjusted total cancer incidence rates for all New Jersey women remained fairly stable during 2010-2014. The average annual incidence rate for New Jersey women was 452.6 per 100,000 women during 2010-2014. Incidence rates for some of the most common cancers, including breast, lung, uterus, and thyroid, remained stable while decreasing rates were noted for colon and rectum cancers among women (Table A1).

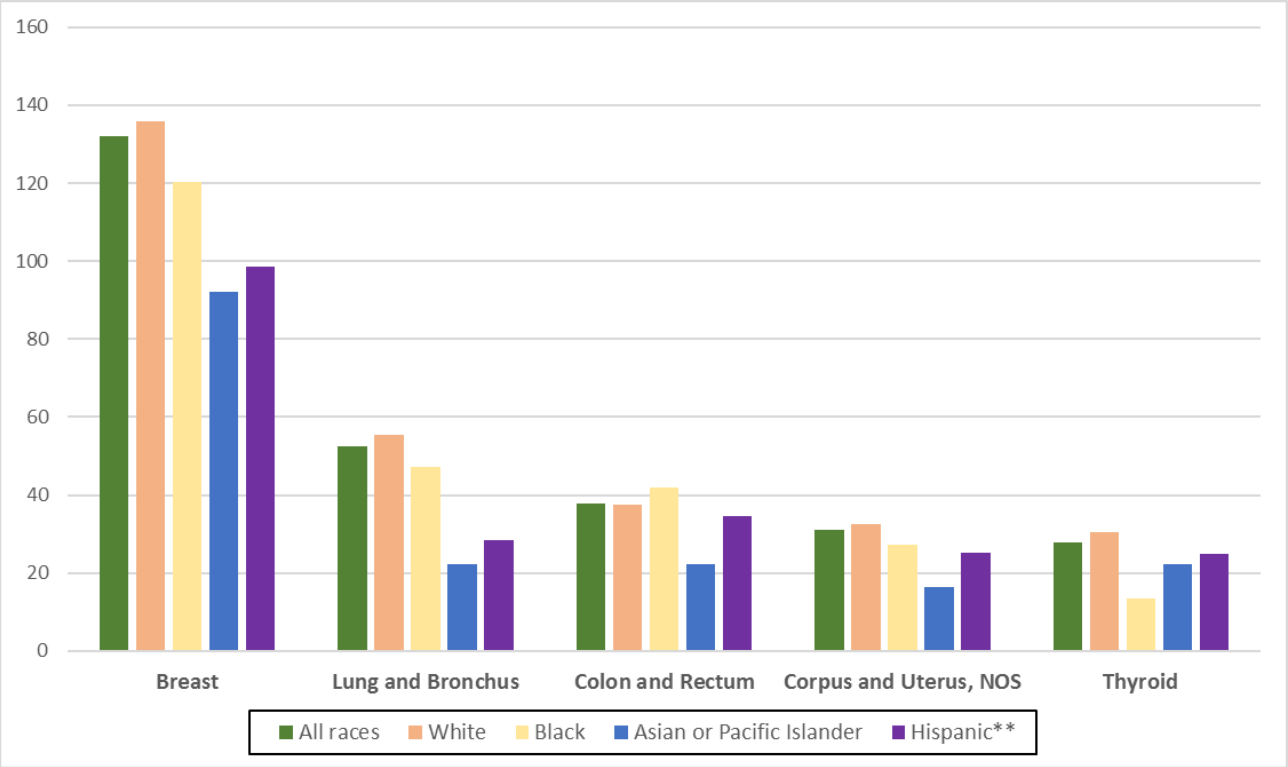
In New Jersey, the average age-adjusted all sites cancer incidence rate for men was 542.7 per 100,000 for the years 2010-2014 combined, with decreasing rates during the five-year period (Table A2). Incidence rates of the most common cancers, prostate, lung, and colon and rectum cancers, continued to decrease in New Jersey men during this time period. Incidence rates for urinary bladder cancer and melanoma remained fairly stable for men during 2010-2014 (Table A2).

RACE AND ETHNICITY

The average annual cancer incidence rates by race and ethnicity for the five cancers with the highest rates in New Jersey women and men during 2010-2014 are presented below in Figures 1 and 2. There is substantial variation by race/ethnicity for some of the cancers. The ten most common types of cancer diagnosed in whites, blacks, APIs, and Hispanics for each gender are below in Tables 5 and 6. Detailed cancer incidence rates for these population subgroups, as well as men and women of all races combined, are presented in Tables A1-A9 in the Appendix.

(text continued on page 9)

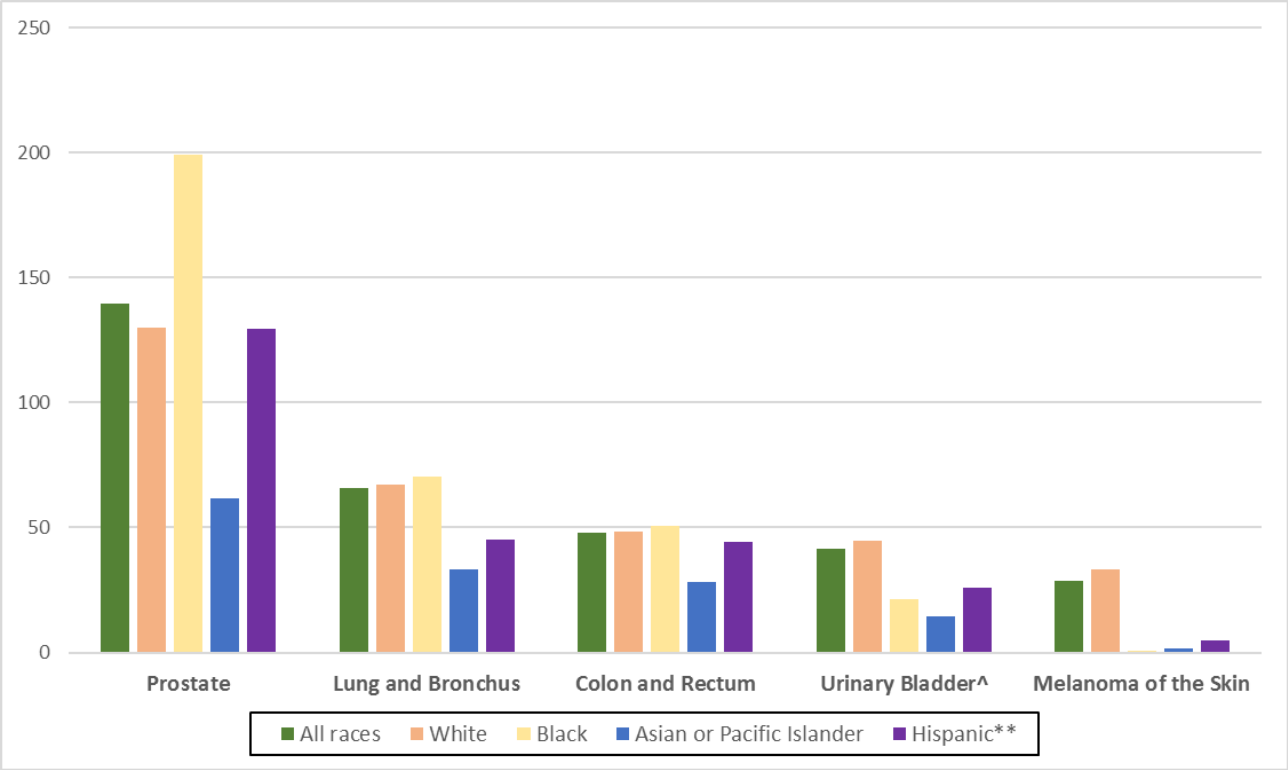
Figure 1. Cancer Incidence Rates* in New Jersey Females by Race/Ethnicity, 2010-2014. Five Most Common Cancers.



*Average annual rates are per 100,000 and age-adjusted to the 2000 US population standard.
**Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.

- Breast cancer was the most common cancer diagnosed among New Jersey women during 2010-2014. White women had the highest breast cancer incidence rates, and black women had the second highest rates. API and Hispanic women had lower breast cancer incidence rates compared to the other groups.
- Among New Jersey women, white women had the highest lung cancer incidence rates during this time period, followed by black women. Hispanic and API women had lower lung cancer incidence rates compared to the other groups.
- New Jersey black women had the highest colon and rectum cancer incidence rates during this time period, while API women had the lowest rates.
- New Jersey white women had the highest uterus cancer incidence rates during this period, and API women had the lowest rates.
- New Jersey white women had the highest thyroid cancer incidence rates, and black women had the lowest thyroid cancer rates.
- During 2010-2014, New Jersey Hispanic women had lower incidence rates of breast, lung, colon and rectum, uterus, and thyroid cancers than the general New Jersey female population rates.

Figure 2. Cancer Incidence Rates* in New Jersey Males by Race/Ethnicity, 2010-2014. Five Most Common Cancers.



*Average annual rates are per 100,000 and age-adjusted to the 2000 US population standard.
**Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
^Urinary bladder includes *in situ* cancers.

- Prostate cancer was the most common cancer diagnosed among New Jersey men during 2010-2014. Black men had the highest prostate cancer incidence rates, with rates approximately one and a half times higher than rates in white or Hispanic men, and more than three times higher than in API men.
- Among New Jersey men, black men had the highest lung cancer incidence rates during this time period, followed by white men. Hispanic and API men had lower lung cancer incidence rates compared to the other groups.
- New Jersey black men had the highest colon and rectum cancer incidence rates, while API men had the lowest rates.
- New Jersey white men had the highest urinary bladder cancer incidence rates during this time period, and API men had the lowest rates.
- New Jersey white men had much higher melanoma of the skin incidence rates as compared to the other racial and ethnic groups.
- During 2010-2014, New Jersey Hispanic men had lower incidence rates of prostate, lung, colon and rectum, and bladder cancers and melanoma of the skin, as compared to the general New Jersey male population rates.

Table 5. Ten Most Common Types of Invasive Cancer Diagnosed Among New Jersey Females by Race and Ethnicity, 2010-2014.

Rank	Cases			
	Asian/ Pacific Islander	Black	White	Hispanic*
1	Breast (1,938)	Breast (4,348)	Breast (29,247)	Breast (3,298)
2	Thyroid (509)	Lung and Bronchus (1,641)	Lung and Bronchus (12,936)	Colon and Rectum (1,010)
3	Colon and Rectum (401)	Colon and Rectum (1,451)	Colon and Rectum (8,915)	Thyroid (953)
4	Lung and Bronchus (376)	Corpus and Uterus, NOS (987)	Corpus and Uterus, NOS (7,384)	Corpus and Uterus, NOS (828)
5	Corpus and Uterus, NOS (352)	Pancreas (507)	Thyroid (5,533)	Lung and Bronchus (802)
6	Ovary (190)	Thyroid (490)	Melanoma of the skin (4,290)	Non-Hodgkin Lymphoma (524)
7	Non-Hodgkin Lymphoma (177)	Non-Hodgkin Lymphoma (431)	Non-Hodgkin Lymphoma (4,234)	Cervix Uteri (378)
8	Stomach (131)	Kidney and Renal Pelvis (394)	Pancreas (2,969)	Leukemia (347)
9	Pancreas (114)	Myeloma (377)	Ovary (2,883)	Ovary (322)
10	Leukemia (112)	Cervix Uteri (368)	Urinary Bladder** (2,711)	Kidney and Renal Pelvis (319)

This table is color-coded by cancer type. The numbers of each type of cancer diagnosed during 2010-2014 are between parentheses.
*Persons of Hispanic ethnicity may be any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
**Includes *in situ*.

For the diagnosis years 2010-2014:

- Breast cancer was the most common cancer among New Jersey API, black, white, and Hispanic females.
- Lung and bronchus cancer was the second most common cancer among both black female and white female New Jerseyans.
- Thyroid cancer was the second most common cancer diagnosed in New Jersey API females and the third most common cancer among New Jersey Hispanic females.
- Colon and rectum cancer was the second most common cancer diagnosed among New Jersey Hispanic females and the third most common among New Jersey API, black, and white females.

Table 6. Ten Most Common Types of Invasive Cancer Diagnosed Among New Jersey Males by Race and Ethnicity, 2010-2014.

Rank	Cases			
	Asian/ Pacific Islander	Black	White	Hispanic*
1	Prostate (1,003)	Prostate (5,169)	Prostate (25,261)	Prostate (2,988)
2	Lung and Bronchus (469)	Lung and Bronchus (1,620)	Lung and Bronchus (12,198)	Colon and Rectum (1,056)
3	Colon and Rectum (468)	Colon and Rectum (1,253)	Colon and Rectum (8,833)	Lung and Bronchus (931)
4	Oral Cavity and Pharynx (223)	Kidney and Renal Pelvis (610)	Urinary Bladder** (8,003)	Non-Hodgkin Lymphoma (630)
5	Non-Hodgkin Lymphoma (219)	Urinary Bladder** (457)	Melanoma of the skin (6,051)	Kidney and Renal Pelvis (501)
6	Liver (204)	Non-Hodgkin Lymphoma (422)	Non-Hodgkin Lymphoma (4,833)	Urinary Bladder** (499)
7	Stomach (193)	Pancreas (407)	Kidney and Renal Pelvis (4,183)	Leukemia (434)
8	Urinary Bladder** (188)	Liver (392)	Leukemia (3,503)	Liver (376)
9	Leukemia (159)	Myeloma (339)^	Oral Cavity and Pharynx (3,100)	Stomach (336)
10	Kidney and Renal Pelvis (151)	Leukemia (339)^	Pancreas (2,926)	Oral Cavity and Pharynx (288)

This table is color-coded by cancer type. The numbers of each type of cancer diagnosed during 2010-2014 are between parentheses.
*Persons of Hispanic ethnicity may be any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
**Includes *in situ*.
^Myeloma and Leukemia tied for the 9th most common type of cancer diagnosed in black males.

For the diagnosis years 2010-2014:

- Prostate cancer was the most common cancer among New Jersey API, black, white, and Hispanic males.
- Lung and bronchus cancer was the second most common cancer among API, black, and white male New Jerseyans and the third most common cancer among Hispanic males.
- Colon and rectum cancer was the second most common cancer diagnosed among New Jersey Hispanic males while being the third most common cancer among New Jersey API, black, and white males.

The total cancer incidence rate, as well as rates of breast, lung, uterus, and thyroid cancers, melanoma and non-Hodgkin lymphoma, for New Jersey black women continued to be lower compared to white women (Tables A3 and A5 in the Appendix). However, black women had higher incidence rates for most digestive system cancers, cervical cancer, and myelomas compared to white women.

Total cancer incidence rates were higher in New Jersey black men than white men before 2011, while rates were higher in white men during 2011-2014 (Tables A4 and A6). This convergence is fueled by decreasing trends in prostate, lung, and colorectal cancer incidence rates. Black men still had higher prostate cancer, lung cancer, and multiple myeloma incidence rates and lower urinary bladder cancer, melanoma, and non-Hodgkin lymphoma incidence rates compared to white men. Thyroid cancer rates for white men were more than double the rates for black men, 11.0 per 100,000 versus 4.4 per 100,000, respectively (Tables A4 and A6).

New Jersey Hispanics continued to have lower incidence rates for all cancers combined and for many of the most common types of cancer in the general population, including lung, female breast, colorectal, uterus, and urinary bladder cancers, and melanoma of the skin (Tables A7 and A8). Hispanic men had lower prostate cancer rates than the general New Jersey male population except in 2013, when rates were similar. Hispanics continued to have higher incidence rates for stomach, liver, and cervical cancers compared with the general population in New Jersey (Tables A7 and A8).

New Jersey Asians or Pacific Islanders continue to have much lower cancer incidence rates compared to the general population for all cancers combined and the most common types of cancer such as lung, colorectal, female breast and prostate. Stomach and liver cancer incidence rates were higher for APIs than in the general New Jersey population. In addition, API males had higher nasopharyngeal cancer incidence rates (Table A9).

BENIGN AND BORDERLINE BRAIN AND CENTRAL NERVOUS SYSTEM TUMORS

A review of the incidence of benign and borderline brain and central nervous system tumors in New Jersey showed that these tumors occurred mostly in intracranial meninges and the sellar region, while invasive brain tumors occurred mostly in the brain proper. This pattern was similar to the results seen in U.S. SEER data (Howlader et al., 2017). New Jersey incidence data for 2010-2014 showed women had higher rates compared to men for benign and borderline intracranial meningioma and tumors of the sellar region (Table A10).

MYELODYSPLASTIC SYNDROMES AND CHRONIC MYELOPROLIFERATIVE DISORDERS

A review of myelodysplastic syndromes (MDS) and chronic myeloproliferative disorders (CMD), which are precursors related to hematologic cancers, showed that they occurred more frequently among men than women in New Jersey. During 2010-2014, the age-adjusted MDS incidence rates were 8.0 per 100,000 in men and 4.3 per 100,000 in women, and the CMD incidence rates were 3.0 per 100,000 in men and 2.4 per 100,000 in women. White men had higher incidence of MDS and CMC compared to any other racial group or ethnicity included in the analyses (Table A11).

IN SITU AND INVASIVE URINARY BLADDER CANCER

For urinary bladder cancer, *in situ* and invasive cancers are included in the incidence rates and counts of bladder cancers, as well as in the incidence rates and counts of urinary system cancers and all sites cancers, as presented in Tables 1, 3, 5 and 6, Figure 2, and Appendix Tables A1-A9, A16 and A17. The inclusion of *in situ* bladder cancers with invasive cancers follows the procedures of the National Cancer Institute (Howlader et al., 2017). Tables A12 and A13 present *in situ* and invasive bladder cancer incidence rates separately for New Jersey women and men of all races and by race and Hispanic ethnicity. During 2010-2014, New Jersey men had both higher *in situ* and invasive bladder cancer incidence rates than women, and this pattern was observed among whites, blacks, API, and Hispanics. Among both New Jersey females and males, whites had the highest incidence rates of both *in situ* and invasive bladder cancers of the four groups analyzed, while API had the lowest rates during this time period. Among New Jersey white men, the incidence rates of invasive bladder cancer tended to be slightly higher than the *in situ* rates, while in black, API, and Hispanic women and men, the differences were more pronounced, with invasive rates higher than *in situ* rates. In New Jersey white women, incidence rates of invasive bladder cancer were slightly higher than *in situ* rates in 2010-2011, but rates of *in situ* bladder cancer were slightly higher after 2011.

STAGE

Cancers diagnosed and treated at an early stage (*in situ* and local) have better outcomes and survival. For screenable cancers among New Jersey women diagnosed during 2010-2014, 91% of melanomas of the skin, 71% of breast cancers, 40% of cervical cancers, and 40% of colorectal cancers were diagnosed at an early stage, and 22% of lung cancers were diagnosed at an early stage (Table A14). Among New Jersey men during this same time period, 89% of melanomas of the skin, 80% of prostate cancers, 40% of colorectal cancers, and 17% of lung cancers were diagnosed at an early stage (Table A15). Black women had lower percentages of early-stage diagnoses for breast, cervical, and lung cancers but a higher percentage of early-stage diagnoses for colorectal cancer compared to white women. Black men had lower percentages of early-stage diagnoses compared to white men for colorectal and lung cancers and melanoma and similar percentages of early-stage diagnoses for prostate cancer. API women had lower percentages of early-stage diagnoses for colorectal cancer compared to the other groups. API men had a lower percentage of early-stage diagnoses for prostate cancer compared to other men. Hispanic women had lower percentages of early-stage diagnoses for breast cancer and melanoma but higher percentages of early-stage diagnoses for cervical cancers compared to the general female population. Hispanic men had a lower percentage of early-stage diagnoses for colorectal and lung cancers and melanoma compared to the New Jersey male population and a slightly higher percentage of early-stage diagnoses for prostate cancer (Tables A14 and A15).

CANCER INCIDENCE IN NEW JERSEY AND THE U.S. 2009-2013

Comparing New Jersey and U.S. age-adjusted incidence rates using data published in *Cancer in North America* by the North American Association of Central Cancer Registries (NAACCR) for 2009-2013, New Jersey incidence rates for all cancers combined continued to be higher

than the U.S. rates, except for rates among API women and black and API men (Tables A16 and A17). New Jersey black women had total cancer incidence rates similar to rates in U.S. black women. Both New Jersey women and men had higher incidence rates compared to the U.S. for the most common cancers with some exceptions. New Jersey lung cancer incidence rates for men of all races combined, as well as black and API women and white, black and API men, were lower than the corresponding U.S. rates. New Jersey colorectal cancer incidence rates for black and API women and men were lower than the U.S. rates. New Jersey female breast cancer and thyroid cancer incidence rates were lower than the U.S. rates for black women. New Jersey melanoma incidence rates for Hispanic women and black and Hispanic men were lower than the U.S. rates, while New Jersey black and API women and API men had melanoma rates similar to the U.S. rates. New Jersey API women and black and API men also had lower non-Hodgkin lymphoma incidence rates compared to the U.S. rates. New Jersey API men had lower urinary bladder cancer rates than U.S. API men, while New Jersey API women had lower rates of uterus cancer (Tables A16 and A17).

CANCER MORTALITY, NEW JERSEY 2010-2014

SUMMARY

During the five-year time period 2010-2014, a total of 82,912 deaths due to cancer occurred among New Jersey residents, 50.4% among women and 49.6% among men. Primary cancers with the highest age-adjusted mortality rates for 2010-2014 in New Jersey were lung, breast, and colon and rectum for women; and lung, prostate, and colon and rectum for men. These cancers accounted for 48.9% and 44.6% of the total cancer deaths for women and men, respectively. In New Jersey women, overall cancer mortality rates declined from 2010-2013, with a slight increase in 2014 (Table A18). Overall age-adjusted cancer mortality rates for men in New Jersey continued to decline (Table A19), reflecting the trends seen in U.S. mortality data (Howlader et al., 2017).

GENDER

New Jersey all sites cancer mortality rates continued to be higher for men than for women during 2010-2014 (191.4 per 100,000 versus 141.7 per 100,000) (Tables A18 and A19). This pattern was observed among all races and ethnicity groups presented (Tables A20-A25).

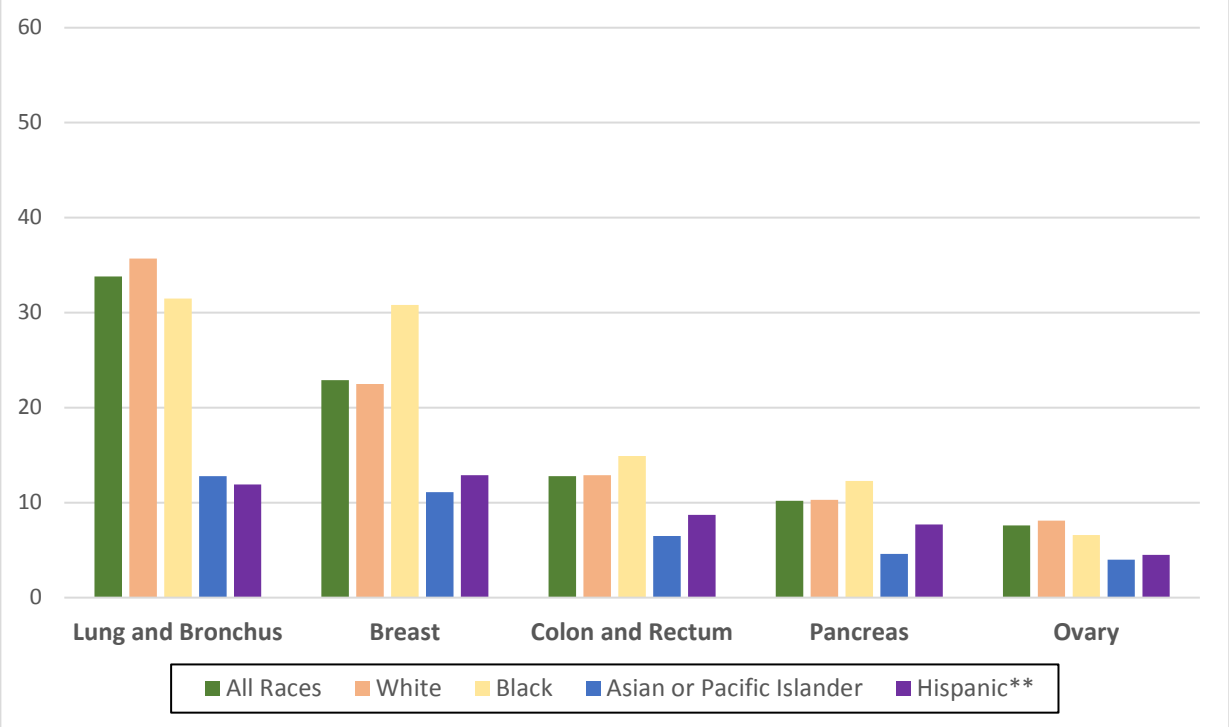
RACE AND ETHNICITY

Cancer mortality rates, including all sites, prostate, and female breast, for both black men and women continued to be higher compared to white men and women. New Jersey black women had higher colorectal cancer mortality rates than white women from 2010-2013 but lower rates in 2014. Black women had lower lymphoma, lung and brain cancer mortality rates than white women. Black men had higher lung and colorectal cancer mortality rates but lower lymphoma, leukemia, melanoma, urinary bladder, and brain cancer mortality rates compared to white men. (Tables A20-A23). Overall cancer mortality rates, as well as mortality rates for many common cancers, for New Jersey Hispanic men and women were lower than rates for all New Jersey men and women, except for slightly higher mortality rates for liver and stomach cancer (Table

A24). New Jersey API males and females had much lower total cancer mortality rates than the New Jersey total population, as well as lower female breast, colorectal, lung, and prostate cancer rates (Table A25).

The average annual cancer mortality rates by race and ethnicity for the five cancers with the highest mortality rates in New Jersey women and men during 2010-2014 are presented below in Figures 3 and 4. Detailed cancer mortality rates for whites, blacks, APIs, and Hispanics, as well as men and women of all races combined, are presented in Tables A18-A25 in the Appendix.

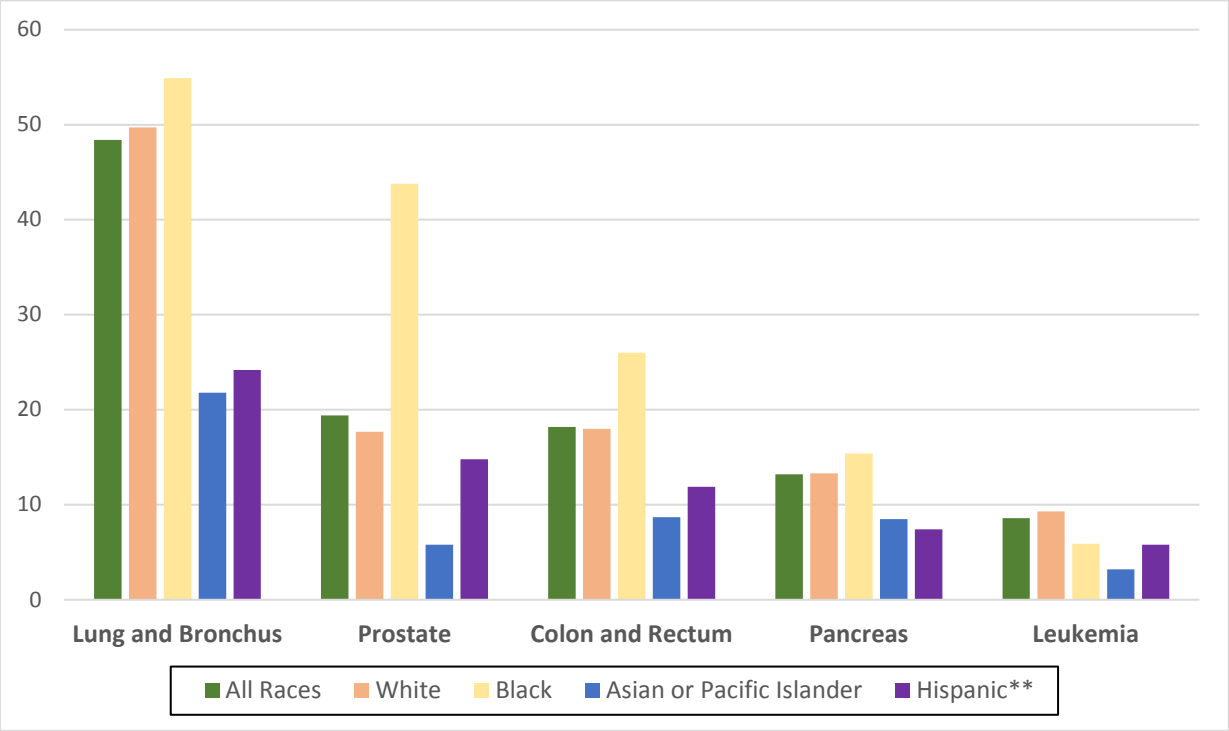
Figure 3. Cancer Mortality Rates* in New Jersey Females by Race/Ethnicity, 2010-2014. Five Cancers with Highest Mortality Rates.



*Average annual rates are per 100,000 and age-adjusted to the 2000 US population standard.
**Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.

- Lung cancer was the leading cause of cancer death in all New Jersey women during 2010-2014, and in New Jersey white, black, and API women. Lung cancer was the second leading cause of cancer death in Hispanic women.
- Among New Jersey women, white women had the highest lung cancer mortality rates during this time period, followed by black women. Hispanic and API women had lower lung cancer mortality rates compared to the other groups.
- Breast cancer was the second leading cause of cancer death in New Jersey women during this period. Black women had the highest breast cancer mortality rates, while API women had the lowest rates.
- New Jersey black women had the highest colon and rectum cancer mortality rates during this period, and API women had the lowest rates.
- During 2010-2014, New Jersey black women had the highest pancreas cancer mortality rates, and API women had the lowest pancreas cancer rates.
- New Jersey white women had the highest ovarian cancer mortality rates, while API women had the lowest rates during this period.

Figure 4. Cancer Mortality Rates* in New Jersey Males by Race/Ethnicity, 2010-2014. Five Cancers with Highest Mortality Rates.



*Average annual rates are per 100,000 and age-adjusted to the 2000 US population standard.
**Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.

- Similar to New Jersey women, lung cancer was the leading cause of cancer death in all New Jersey men during 2010-2014, as well as in New Jersey white, black, API, and Hispanic men.
- Among New Jersey men, black men had the highest lung cancer mortality rates during this time period, followed by white men. API men had lower lung cancer mortality rates compared to the other groups.
- Prostate cancer was the second leading cause of cancer death in New Jersey men during this period. Black men had the highest prostate cancer mortality rates, while API men had the lowest rates.
- New Jersey black men had the highest colon and rectum cancer mortality rates during this period, and API men had the lowest rates.
- During 2010-2014, New Jersey black men had the highest pancreas cancer mortality rates, and Hispanic men had the lowest pancreas cancer rates.
- New Jersey white men had the highest leukemia mortality rates, while API men had the lowest rates during this period.

CANCER MORTALITY IN NEW JERSEY AND THE U.S. 2010-2014

Comparing New Jersey and U.S. age-adjusted mortality rates for women during 2010-2014, New Jersey cancer mortality rates for all cancers were similar to the corresponding rates for U.S. women. New Jersey total cancer mortality rates were higher than the corresponding U.S. rates for white women, but lower for black, API, and Hispanic women. New Jersey women had lower lung cancer mortality rates than U.S. women, and this pattern was observed for women of all racial/ethnic groups. The breast cancer mortality rates for all New Jersey women and New Jersey white and black women were higher than the U.S. rates, while New Jersey Hispanic women had lower breast cancer mortality rates. New Jersey API women had breast cancer mortality rates similar to U.S. API women. New Jersey colorectal cancer mortality rates were higher for white women than the corresponding U.S. rates, but lower for black, API, and Hispanic women. Among all New Jersey men during the same time period, the cancer mortality rates for all cancers, lung and prostate cancers were lower compared to the U.S. mortality rates, with the exception of prostate cancer mortality rates for New Jersey black men. New Jersey colorectal cancer mortality rates for all men, white men, and black men were higher compared to the U.S. rates, while the New Jersey colorectal cancer mortality rates for API and Hispanic men were lower than the U.S. rates (Tables A26 and A27).

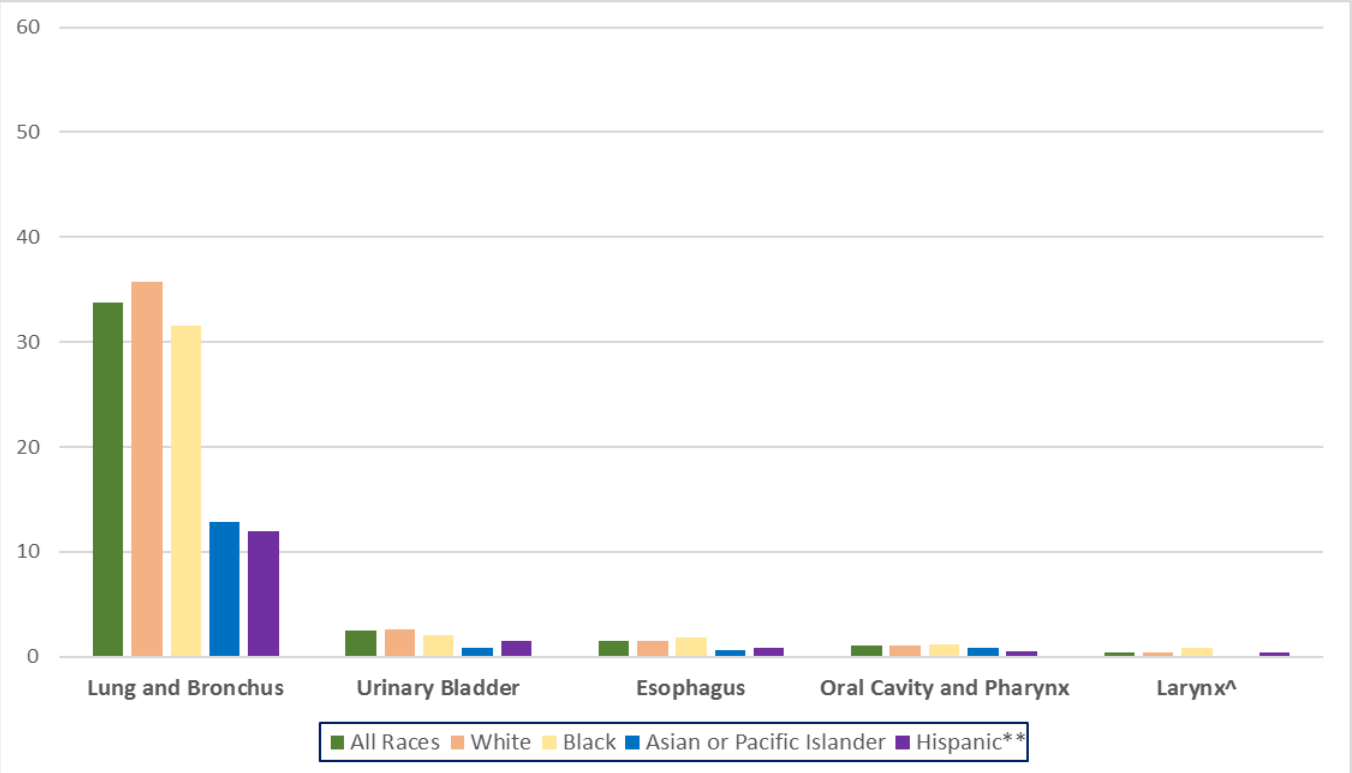
FOCUS: TOBACCO-RELATED CANCER MORTALITY IN NEW JERSEY

Tobacco use causes substantial morbidity and mortality in New Jersey and worldwide. Cigarette smoking is the main cause of lung and bronchus cancer, which is the leading cause of cancer death in New Jersey. Cigarette smoking also causes cancers of the oral cavity and pharynx, nasal cavity and paranasal sinuses, larynx, esophagus, stomach, pancreas, colon and rectum, liver, kidney, ureter, urinary bladder, uterine cervix, and ovary (mucinous), and myeloid leukemia (IARC, 2004; IARC, 2012). In addition, use of smokeless tobacco products such as chewing tobacco and snuff increases the risk for cancers of the oral cavity, esophagus, and pancreas (IARC, 2012). In the United States, the five cancers with the largest proportions of deaths attributable to cigarette smoking are those of the lung, larynx, esophagus, oral cavity and pharynx, and urinary bladder (Siegel, 2015). Among U.S. adults ages 35 and older, estimates of the proportions of deaths caused by smoking for these five cancers, for males and females combined, are as follows (Siegel, 2015):

- Lung and bronchus: 80.2% [95% confidence interval (CI): 79.2%-81.1%]
- Larynx: 76.6% [95% CI: 68.7%-83.5%]
- Esophagus: 50.7% [95% CI: 44.8%-56.5%]
- Oral cavity and pharynx: 47.0% [95% CI: 38.6%-55.5%]
- Urinary bladder: 44.8% [95% CI: 40.1%-49.8%]

Figures 5 and 6 display mortality rates for these five cancers by race and ethnicity for New Jersey females and males respectively.

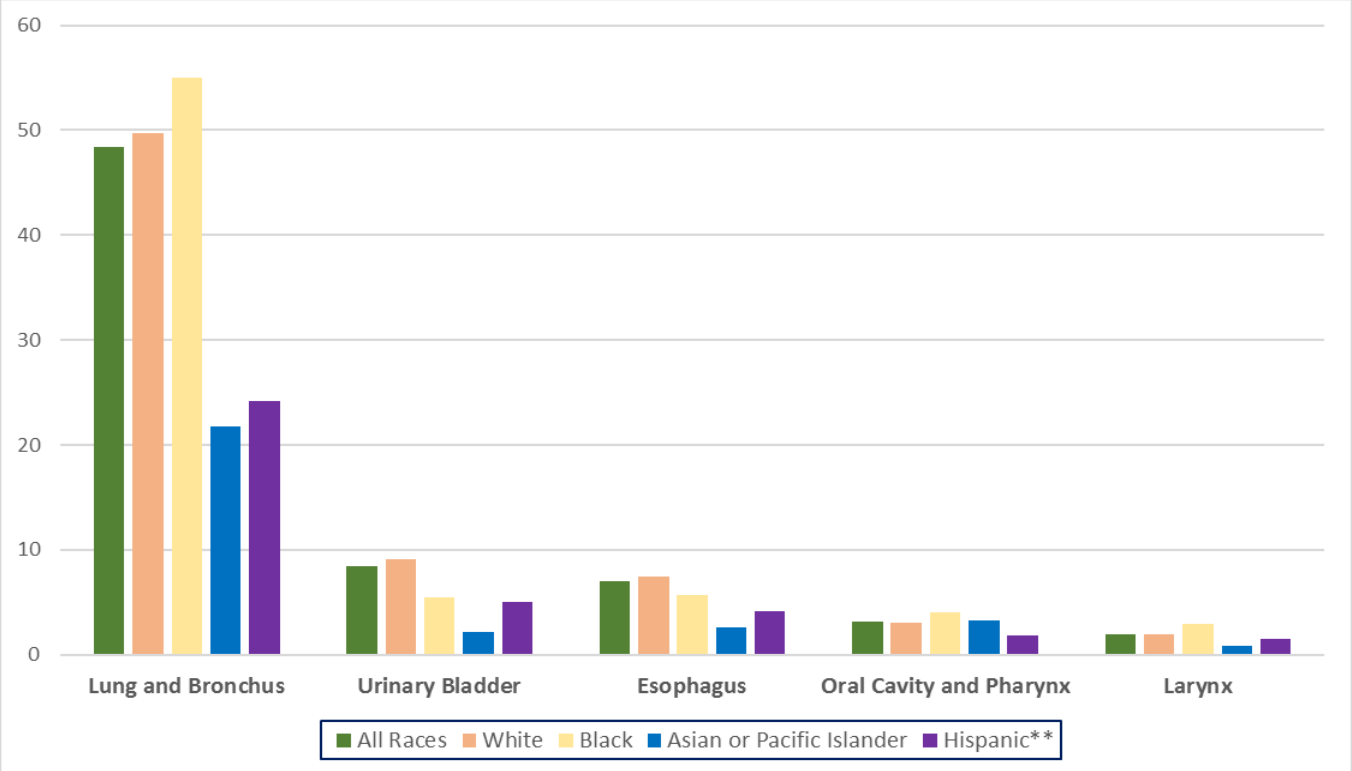
Figure 5. Cancer Mortality Rates* in New Jersey Females by Race/Ethnicity, 2010-2014. Five Cancers with the Largest Smoking-Attributable Proportion of Deaths.



*Average annual rates are per 100,000 and age-adjusted to the 2000 US population standard.
**Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
^The larynx cancer mortality rate among Asian or Pacific Islanders is suppressed due to fewer than 10 deaths.

- Among mortality rates for the five cancers presented, lung cancer mortality rates during 2010-2014 were the highest for New Jersey females, as well as for New Jersey white, black, API, and Hispanic females. New Jersey white females had the highest lung cancer mortality rate, followed by black females. New Jersey Hispanic females had the lowest lung cancer mortality rate.
- Urinary bladder cancer mortality rates were the second highest of the rates for the five cancers presented for New Jersey white, black and Hispanic females and the third highest among New Jersey API females. New Jersey white females had the highest bladder cancer mortality rate during this time period, followed by black females. New Jersey API females had the lowest bladder cancer mortality rate.
- New Jersey black females had the highest esophagus cancer mortality rate of the four groups analyzed, followed by white, Hispanic, and API females.
- New Jersey black females had the highest oral cavity and pharynx cancer mortality rate, followed by white and API females. Hispanic females had the lowest mortality rates for oral cavity and pharynx cancer.
- Among New Jersey females of all races presented and Hispanics, larynx cancer mortality rates were the lowest of the rates for the five tobacco-related cancers presented.

Figure 6. Cancer Mortality Rates* in New Jersey Males by Race/Ethnicity, 2010-2014. Five Cancers with the Largest Smoking-Attributable Proportion of Deaths.



*Average annual rates are per 100,000 and age-adjusted to the 2000 US population standard.
**Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.

- Among mortality rates during 2010-2014 for the five cancers presented, lung cancer mortality rates were the highest for New Jersey males, as well as for New Jersey white, black, API, and Hispanic males. New Jersey black males had the highest lung cancer mortality rate, followed by white males. New Jersey API males had the lowest lung cancer mortality rate.
- Urinary bladder cancer mortality rates were the second highest of the rates for the five cancers presented for New Jersey white and Hispanic males, the third highest among New Jersey black males, and the fourth highest among API males. New Jersey white males had the highest bladder cancer mortality rate during this time period, followed by black males. New Jersey API males had the lowest bladder cancer mortality rate.
- Esophagus cancer mortality rates were the second highest from among rates for the five cancers presented for New Jersey black males, and the third highest among white, API, and Hispanic males. New Jersey white males had the highest rate, followed by black, Hispanic, and API males.
- New Jersey black males had the highest oral cavity and pharynx mortality rate, followed by API, white, and Hispanic males.
- Among New Jersey males of all races presented and Hispanics, larynx cancer mortality rates were the lowest of the rates for the five tobacco-related cancers presented.

TECHNICAL NOTES

NEW JERSEY STATE CANCER REGISTRY (NJSCR)

NJSCR OVERVIEW

The objectives of the NJSCR are to:

- Monitor cancer trends in New Jersey
- Promote scientific research
- Educate the public
- Provide information for planning and evaluating cancer prevention and control activities
- Share and compare cancer data with other states and the nation
- Participate in population-based investigations of cancer etiology, prevention, treatment and outcomes

The NJSCR is a population-based cancer registry that serves the entire state of New Jersey, which has a current estimated population of over 8.9 million people (U.S. Census Bureau). The NJSCR was established by legislation (N.J.S.A. 26:2-104 et seq.) and includes all cases of cancer diagnosed in New Jersey residents since October 1, 1978. New Jersey regulations (N.J.A.C. 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, physicians, dentists, and independent clinical laboratories. Every hospital in New Jersey reports cancer cases electronically. In addition, the NJSCR receives information from state cancer registries that are enrolled in the North American Association of Central Cancer Registries (NAACCR) interstate data exchange program, including New York, Pennsylvania, and other states, so that New Jersey residents diagnosed with cancer outside the state can be identified. Legislation passed in 1996 strengthened the NJSCR by requiring electronic reporting, requiring abstracting by certified tumor registrars, and establishing penalties for late or incomplete reporting.

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. Benign and borderline brain tumors diagnosed on or after January 1, 2004 are reportable according to Public Law 107-260, the Benign Brain Tumor Cancer Registries Act, which was signed in October 2002. 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 stage of disease), first course of treatment and vital status (alive or deceased) 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 Diseases for Oncology (ICD-O), 3rd edition* for cancers diagnosed after 2000. The NJSCR follows the data standards promulgated by the NAACCR, including the use of the Surveillance, Epidemiology, and End Results (SEER) multiple primary rules. An individual may develop more than one 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.

The NJSCR is a member of the 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 (NPCR) sponsored by the Centers for Disease Control and Prevention (CDC) since it began in 1994 and is a member of the National Cancer Institute's (NCI) SEER Program.

NJSCR DATA QUALITY

The NAACCR has awarded the Gold Standard, the highest standard possible, to the NJSCR for the quality of the data for each diagnosis year 1995 through 2013, excluding 2011, for which the NJSCR received the Silver Standard. The NJSCR has consistently achieved high levels of certification for its data since the inception of this award. The criteria used to judge the quality of the data are 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. At the time of publication of this report, the NAACCR had not yet given awards to cancer registries for their 2014 incidence data.

Completeness of reporting to the NJSCR was estimated by comparing New Jersey and U.S. incidence to mortality rate ratios for whites and blacks, 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 formulas, it is possible for the estimation of completeness to be greater than 100 percent. For 2014 data, the completeness of case reporting was estimated as 99.87 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 overall trends over the time period presented in this report. The most recent year of data, in this case 2014, are considered preliminary.

Other 2014 cancer incidence data quality indicators measured are as follows:

- percent death-certificate-only cases: 1.3%
- percent of unresolved duplicates: < 0.1%
- percent of cases with unknown race: 2.8%
- percent of cases with unknown county: 0.02%
- number of cases with unknown age: 3
- number of cases with unknown gender: 1

It should also be noted that there may be minor differences in the New Jersey incidence and mortality rates in this report compared to previous reports, due to delayed reporting, ongoing editing and reviewing of the data. We also included myelodysplastic syndrome (MDS) and

chronic myeloproliferative disorder (CMD) malignancies in the "All Sites" and "Ill-Defined & Unspecified Sites" categories, which made these rates higher than in reports published in 2012 or earlier, which did not include cases of MDS or CMD. Inclusion of MDS and CMD conforms with SEER reporting practices. Changes in the estimated population denominators also affect the incidence rates in this report and on our cancer mapping website compared to the previous years' publications.

The NJSCR continues to work toward improving the timeliness, quality, and completeness of its reporting sources. In 2015, the NJSCR began providing regular feedback to reporting hospitals in order to improve the timeliness of data submissions. In addition, the NJSCR offers electronic reporting options for non-hospital reporting sources, such as: physician offices, radiation therapy centers, and freestanding ambulatory care centers. In the past few years, the NJSCR has participated in two quality improvement projects to increase provider reporting. A targeted outreach to dermatologists and dermatology groups enhanced reporting of melanoma and other skin cancers. Reporting by independent radiation therapy centers improved the number of prostate and urological malignancy reports from urology specialists and radiation oncologists.

The NJSCR has also made significant headway in identifying incident cases in a timely manner by increasing the number of facilities that use electronic pathology laboratory case identification. Currently, over 30 hospital-based laboratories use the Artificial Intelligence in Medicine (AIM) electronic reporting software (E-Path) to automate cancer case identification for hospital tumor registry programs. The NJSCR also uses E-Path to identify cancer reports from national pathology laboratories. One significant use of E-Path by a national laboratory ultimately increased the identification of hematological malignancies for the reporting period. The ultimate goal is to enable electronic pathology laboratory reporting from every laboratory that serves New Jersey, because it is evident that electronic pathology cancer identification has improved the timeliness and completeness of cancer reporting, especially for non-hospitalized case reports. The NJSCR is currently pursuing electronic pathology laboratory reporting from additional national laboratories through the CDC's National Program of Cancer Registries Advancing E-cancer Reporting and Registry Operations (NPCR-AERRO) initiative. Trends in future reporting are driving the NJSCR to develop appropriate systems to identify and receive cancer data from additional sources. The NJSCR began accepting electronic health records from physician practices under the Meaningful Use standards in 2015.

Another limitation that could affect New Jersey cancer incidence data is the federal formal restrictions on the submission of cancer cases from Veterans Health Administration (VA) hospitals to cancer registries. The NJSCR received 0.6% of the total cases exclusively from VA hospitals for the years 2004 and earlier. Since then, the NJSCR received only 0.3% of the total cases from VA hospitals for 2005 and no cases for 2006 through 2014. The impact of missing VA hospital cases in New Jersey could result in underestimates of cancer incidence rates in 2010 through 2014.

DATA SOURCES AND SPECIFICATIONS

INCIDENCE DATA

New Jersey cancer incidence data were taken from the December 2016 analytic file of the NJSCR. All the counts and rates were tabulated using SEER*Stat Versions 8.3.2 and 8.3.4 (http://www.seer.cancer.gov/seerstat/), a statistical software package distributed by the NCI. U.S. cancer incidence data were obtained from the NAACCR's publication, *Cancer in North America 2009-2013* (https://www.naaccr.org/cancer-in-north-america-cina-volumes/). These were the most recent cancer incidence data available for the U.S. at the time of publication of this report.

The cancer categories in this report are based on the primary site and histology data fields as abstracted from the medical records. For detailed definitions of the cancer categories, please visit the SEER program website http://seer.cancer.gov/siterecode/icdo3_dwhoheme/index.html. We used the cancer site recode with mesothelioma and Kaposi sarcoma in separate categories in all incidence tables except for the benign and borderline brain tumor table. For the incidence counts and rates, *in situ* cancers are not included except for urinary bladder cancer *in situ* cases, which are included with invasive urinary bladder, urinary system and all sites. Breast cancer *in situ* cases for women are shown but not included in the totals for all sites combined. Basal and squamous cell skin cancers are not collected and therefore not included in the tables.

Benign and borderline brain tumor incidence data for 2010-2014 are presented separately. Benign and borderline brain tumors are classified into six groups by primary site: brain, intracranial meninges, cranial nerves and other central nervous system, tumor of the sellar region (pituitary gland, craniopharyngeal duct, and pineal gland), spinal cord, and spinal meninges.

The coding scheme for incident cancer cases in this report is derived from *International Classification of Diseases for Oncology, 3rd edition* (*ICD-O-3*). Cases included in the rate tables are all invasive cancers in ICD-O-3 except for the benign and borderline brain tumor table. There are some reportability changes from ICD-O-2 to ICD-O-3 beginning in 2001. Myelodysplastic syndrome (MDS) (9980, 9982-9987, 9989) and chronic myeloproliferative disorder (CMD) (9950, 9960-9962) were defined as malignant in ICD-O-3. In previous reports published prior to 2012, we had only included cases that were reportable in ICD-O-2 and ICD-O-3 to ensure the comparability of rates. Because these cancers were reportable for the entire time period covered by this report, MDS and CMD are included in the rate tables for "All Sites" and in "Ill-Defined & Unspecified Sites" categories. These conventions are standard practice for publication of cancer rates in the United States. MDS and CMD incidence rates are presented separately in Table A11 in the Appendix.

Caution must be used when looking at statistics over time for total cancers or categories that include tumors with revised behavior. In this report, data presented for the most recent 5 years, 2010-2014, include cancers classified as malignant based on ICD-O-3, which is the current standard. However, for any time trends where incidence rates are displayed by year from 1979 to 2014, the practice followed by the National Cancer Institute should be used, excluding most newly-reportable cancers, as well as the tumors that are no longer classified as malignant, for

consistency purposes. The SEER program provides more detailed explanations (see http://www.seer.cancer.gov/behavrecode/).

EXCLUSIONS

For this report, cases where the county of residence is unknown were excluded from the New Jersey rates and counts, in accordance with standard procedures used by SEER, and has been determined to have little effect on the incidence rates. For example, the total number of cases with unknown county for 2010-2014 is 150, representing less than 0.1% of the total cancer cases. The small numbers of cases with unknown age or gender were also excluded from the analyses. Since the number of records affected was very small, the rates were virtually unaffected by the exclusion of these records. Race-specific information is not shown separately for persons who are races other than white, black, or API, but these persons and persons of unknown race are included in the "all races" data.

MORTALITY DATA

New Jersey and U.S. cancer mortality data for 2010-2014 were obtained through the NCI SEER Program from the National Center for Health Statistics and tabulated using SEER*Stat Versions 8.3.2 and 8.3.4 (http://www.seer.cancer.gov/seerstat/).

Mortality data were grouped by cancer site according to the revised SEER Cause of Death Recode 1969+ (4/16/2012). The detailed information can be found on the SEER website (http://seer.cancer.gov/codrecode/).

POPULATION DATA

The 2010-2014 New Jersey population estimates for this report were provided by the NCI's SEER Program released in December 2016 and downloaded from the SEER website (http://www.seer.cancer.gov/popdata/download.html). The population estimates represent a modification of the intercensal and Vintage 2015 annual time series of July 1 county population estimates by age, sex, race, and Hispanic origin produced by the US Census Bureau's Population Estimates Program, in collaboration with the National Center for Health Statistics, and with support from the NCI through an interagency agreement. The bridged single-race estimates and a description of the methodology used to develop them are available on the National Center for Health Statistics website (http://www.cdc.gov/nchs/nvss/bridged_race.htm).

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. Since 2005, the NAACCR made several

revisions to the NHIA algorithm, now NHIA version 2. The most significant change in NHIA version 2 was the two additional options for registries to apply the algorithm to counties in which the Hispanic population is less than five percent. The NJSCR applied the algorithm to all records from patients residing in all New Jersey counties (option 0 of the NHIA algorithm) diagnosed during the years 1990-2014.

As a result of applying the NHIA algorithm, the number of cases who were coded as Hispanic increased by 19 percent for this time period, thereby correcting an under-identification of Hispanics. A more complete description of the NHIA version 2 is available at the following link to the NAACCR website:
https://www.naaccr.org/wp-content/uploads/2016/11/NHIA_v2_2_1_09122011.pdf

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

Caution should also be used when comparing Hispanic mortality data to Hispanic incidence data in this report. 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, resulting in an increased mortality rate of 13% for Hispanic men and 23% for Hispanic women.

RACE

Race information in the NJSCR database is collected from medical records and is not always complete and accurate. The impact of missing race for a relatively small proportion of cases results in slightly lower race-specific cancer incidence rates and counts. A small percentage of cases diagnosed in previous years were reported to the NJSCR with missing information on race at the time of the completion of last year's report, *Cancer Incidence and Mortality in New Jersey 2009-2013*, and later had their race updated after the publication of the report. This resulted in a slight increase in some of the race-specific cancer incidence rates and counts during 2010-2013 in the current report as compared to previous reports.

ASIANS AND PACIFIC ISLANDERS

Asians or Pacific Islanders account for only 3.9% of the total cancer cases in New Jersey, and missing race or misclassification of race may have a relatively greater effect on API cancer rates than rates for other racial groups. For total cancer cases diagnosed during 2010-2014, 2.5% were reported to be of other or unknown race. The NJSCR applied the NAACCR Asian Pacific Islander Identification Algorithm version 1 (NAPIIA v1.2.1) using the birthplace and name fields (first, last, and maiden names) to classify cases directly or indirectly as Asian or Pacific Islander for analytic purposes. The NAPIIA algorithm is focused on coding cases with a race code of other Asian or other Pacific Islander to a more specific Asian or Pacific Islander

race category, and the total API case count did not change after applying the algorithm. A more complete description of the NAPIIA version 1.2.1 is available at the following link to the NAACCR website:

https://www.naaccr.org/wp-content/uploads/2016/11/NAPIIA_v1_2_1_08122011.pdf

DATA PRESENTATION

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 should be interpreted with caution. For this report, incidence rates and counts were suppressed where counts were fewer than five as a way to ensure statistical reliability and patient confidentiality. The mortality data were provided through NCI's SEER program in the SEER*Stat database, and the data were suppressed by default where counts were fewer than ten.

CALCULATION OF RATES

All the counts and rates were tabulated using SEER*Stat Version 8.3.2 and 8.3.4 (http://www.seer.cancer.gov/seerstat/), a statistical software package distributed by the National Cancer Institute. U.S. cancer incidence data were obtained from the NAACCR's publication, *Cancer in North America 2009-2013* https://www.naaccr.org/cancer-in-north-america-cina-volumes/). All rates are age-adjusted to the 2000 U.S. Standard Population (19 age groups-Census P25-1130).

RATE CALCULATION FORMULAS

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.

The first step in the age-standardization procedure is 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 is applied:

$$r_a = \frac{n_a}{t \times P_a}$$

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 is 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:

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

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.

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APPENDIX

INCIDENCE TABLES

Table A1. Age-adjusted Incidence Rates, Females, All Races Combined.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
All Sites*	450.4	449.7	451.6	460.9	450.9	125,381	452.6
Oral Cavity and Pharynx	5.6	6.4	6.1	6.4	5.7	1,687	6.0
Lip	0.2	0.3	0.2	0.3	0.2	70	0.2
Tongue	1.5	1.8	2.0	1.8	1.9	502	1.8
Salivary Gland	1.1	1.1	1.2	1.0	1.2	298	1.1
Floor of Mouth	0.4	0.4	0.2	0.4	0.2	93	0.3
Gum and Other Mouth	1.1	1.3	1.3	1.4	0.8	332	1.2
Nasopharynx	0.4	0.4	0.3	0.4	0.3	90	0.4
Tonsil	0.4	0.6	0.7	0.6	0.5	156	0.5
Oropharynx	0.2	0.2	0.1	0.2	0.3	61	0.2
Hypopharynx	0.3	0.3	0.2	0.2	0.2	63	0.2
Digestive System	70.6	71.8	71.1	70.4	70.2	20,463	70.8
Esophagus	2.0	1.7	2.1	1.9	2.1	572	2.0
Stomach	5.9	5.6	5.8	5.7	5.9	1,651	5.8
Small Intestine	1.8	1.9	2.0	1.9	2.2	549	1.9
Colon and Rectum	39.3	39.1	38.4	36.3	36.1	10,942	37.8
Colon excluding Rectum	29.6	29.3	27.5	26.7	26.2	8,096	27.8
Rectum and Rectosigmoid Junction	9.7	9.8	10.8	9.7	9.9	2,846	10.0
Anus, Anal Canal and Anorectum	1.9	2.0	2.3	2.6	2.0	606	2.1
Liver and Intrahepatic Bile Duct	3.7	3.4	4.0	3.9	4.0	1,103	3.8
Liver	2.8	2.5	3.3	3.0	2.9	839	2.9
Intrahepatic Bile Duct	0.9	0.9	0.7	1.0	1.2	264	0.9
Gallbladder	1.8	1.6	1.5	1.8	1.5	478	1.7
Other Biliary	1.4	1.5	1.5	1.9	1.5	461	1.6
Pancreas	11.4	13.1	12.1	12.3	12.8	3,613	12.4
Respiratory System	54.0	56.4	52.6	55.1	53.6	15,538	54.3
Larynx	1.4	1.3	1.3	1.0	1.2	354	1.2
Lung and Bronchus	52.1	54.4	50.8	53.5	51.7	15,017	52.5
Bones and Joints	1.0	0.9	0.7	1.0	0.8	207	0.9
Soft Tissue (Including Heart)	3.0	3.0	3.3	3.2	3.3	824	3.2
Skin (Excluding Basal and Squamous)	19.0	17.4	19.0	19.2	18.2	4,992	18.6
Melanoma of the Skin	18.0	16.0	17.4	17.7	16.8	4,605	17.2
Breast (Invasive)	129.7	128.9	131.0	135.9	134.1	36,059	132.0
In situ (not included in All Sites)	41.6	40.7	40.8	42.7	41.4	11,097	41.5

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All cancers include all ICD-O-3 invasive reportable cancers and *in situ* urinary bladder cancers
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A1 (continued). Age-adjusted Incidence Rates, Females, All Races Combined.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Female Genital System	56.8	54.5	55.4	55.5	56.4	15,537	55.8
Cervix Uteri	8.2	7.8	7.2	7.5	7.5	1,901	7.6
Corpus and Uterus, NOS	30.4	29.8	31.1	32.1	31.9	8,869	31.1
Corpus Uteri	29.5	28.7	29.9	30.8	30.5	8,526	29.9
Uterus, NOS	0.9	1.1	1.2	1.3	1.5	343	1.2
Ovary	13.7	13.1	12.4	11.3	11.9	3,474	12.5
Vagina	0.7	0.7	0.9	0.5	0.7	202	0.7
Vulva	2.6	2.3	2.7	2.5	2.7	734	2.6
Urinary System	21.2	20.8	23.0	22.5	21.4	6,221	21.8
Urinary Bladder (Including *in situ*)	11.1	10.5	11.2	10.5	9.6	3,093	10.6
Kidney and Renal Pelvis	9.4	9.6	11.1	11.1	11.0	2,910	10.5
Ureter	0.4	0.4	0.4	0.3	0.6	131	0.4
Eye and Orbit	0.4	0.4	0.7	0.6	0.7	145	0.6
Brain and Other Nervous System	6.2	5.5	5.7	6.1	5.6	1,480	5.8
Brain	5.6	5.0	5.3	5.8	5.3	1,382	5.4
Endocrine System	28.3	27.9	28.6	30.4	28.4	7,005	28.7
Thyroid	27.4	27.2	27.7	29.4	27.7	6,798	27.9
Lymphomas	20.7	21.8	20.2	20.8	20.3	5,646	20.7
Hodgkin Lymphoma	2.7	3.3	2.9	2.9	2.4	645	2.8
Non-Hodgkin Lymphoma	17.9	18.5	17.3	17.9	18.0	5,001	17.9
Myelomas	5.9	5.7	5.7	5.7	5.6	1,641	5.7
Leukemias	11.4	12.4	11.8	11.5	12.6	3,248	12.0
Lymphocytic Leukemia	6.0	6.1	6.0	5.6	5.8	1,602	5.9
Acute Lymphocytic Leukemia	1.3	1.7	1.5	1.3	1.8	326	1.5
Chronic Lymphocytic Leukemia	4.4	4.0	4.1	3.9	3.9	1,191	4.1
Myeloid and Monocytic Leukemia	5.0	5.6	5.3	4.9	6.1	1,456	5.4
Acute Myeloid Leukemia	3.1	4.0	3.5	3.1	4.2	979	3.6
Acute Monocytic Leukemia	0.2	0.2	0.2	0.2	0.3	58	0.2
Chronic Myeloid Leukemia	1.5	1.2	1.5	1.5	1.4	381	1.4
Other Leukemia	0.5	0.7	0.6	0.9	0.7	190	0.7
Mesothelioma	0.5	0.6	0.4	0.4	0.4	142	0.5
Kaposi Sarcoma	0.1	0.2	0.2	0.1	0.1	39	0.1
Ill-Defined & Unspecified Sites*	16.1	14.9	15.9	16.0	13.4	4,507	15.2

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All ICD-O-3 invasive reportable cancers are included.
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A2. Age-adjusted Incidence Rates, Males, All Races Combined.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
All Sites*	566.7	570.4	542.1	529.8	508.2	122,824	542.7
Oral Cavity and Pharynx	15.4	15.0	15.0	16.3	16.3	3,725	15.6
Lip	0.5	0.6	0.5	0.6	0.4	115	0.5
Tongue	4.5	4.7	5.1	4.8	4.3	1,126	4.7
Salivary Gland	1.9	1.9	1.8	2.1	2.2	433	2.0
Floor of Mouth	0.8	0.4	0.5	0.6	0.3	135	0.5
Gum and Other Mouth	1.5	1.9	1.7	1.9	2.0	416	1.8
Nasopharynx	0.9	0.8	0.8	0.9	0.8	189	0.8
Tonsil	3.2	2.6	2.6	3.1	4.1	801	3.1
Oropharynx	0.9	0.7	0.7	0.8	0.8	191	0.8
Hypopharynx	0.9	1.0	1.0	1.1	0.9	234	1.0
Digestive System	104.7	102.7	102.0	103.2	100.4	23,160	102.6
Esophagus	8.9	7.9	7.6	7.4	7.2	1,776	7.8
Stomach	11.7	10.7	11.1	10.4	11.0	2,423	11.0
Small Intestine	1.8	2.6	2.5	2.8	2.9	577	2.5
Colon and Rectum	49.7	48.2	47.8	47.4	46.5	10,726	47.9
Colon excluding Rectum	33.8	32.8	31.9	31.9	32.3	7,195	32.5
Rectum and Rectosigmoid Junction	15.9	15.4	15.9	15.5	14.2	3,531	15.4
Anus, Anal Canal and Anorectum	1.6	1.3	1.2	1.3	1.4	313	1.3
Liver and Intrahepatic Bile Duct	10.8	11.8	11.7	12.1	11.5	2,782	11.6
Liver	9.7	10.6	10.6	10.7	10.4	2,523	10.4
Intrahepatic Bile Duct	1.1	1.2	1.1	1.3	1.1	259	1.2
Gallbladder	1.1	1.1	1.1	1.3	1.2	250	1.2
Other Biliary	2.4	2.8	2.5	2.8	2.1	546	2.5
Pancreas	15.7	15.1	15.3	16.7	15.2	3,502	15.6
Respiratory System	75.7	74.9	73.2	71.9	66.8	15,935	72.4
Larynx	6.0	5.8	5.1	6.2	5.4	1,305	5.7
Lung and Bronchus	68.6	68.0	66.8	64.6	60.4	14,380	65.6
Bones and Joints	1.4	1.3	1.4	1.1	1.3	277	1.3
Soft Tissue (Including Heart)	4.5	4.1	4.3	4.6	4.3	953	4.4
Skin (Excluding Basal and Squamous)	30.0	31.5	30.4	32.1	31.9	6,952	31.2
Melanoma of the Skin	28.0	29.2	27.8	29.2	29.1	6,411	28.7

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All cancers include all ICD-O-3 invasive reportable cancers and *in situ* urinary bladder cancers
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A2 (continued). Age-adjusted Incidence Rates, Males, All Races Combined.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Breast	1.7	1.4	1.5	1.5	1.7	354	1.6
Male Genital System	163.2	175.2	142.0	132.4	122.5	34,699	146.4
Prostate	156.5	167.8	135.1	125.0	115.5	33,199	139.4
Testis	5.8	6.2	5.7	6.2	5.7	1,255	5.9
Penis	0.5	1.0	1.0	0.8	1.0	185	0.9
Urinary System	64.6	64.4	66.2	65.5	63.4	14,262	64.8
Urinary Bladder (Including *in situ*)	41.6	41.3	43.0	41.4	40.3	8,883	41.5
Kidney and Renal Pelvis	21.1	21.6	21.5	22.4	21.5	5,027	21.6
Ureter	1.2	1.1	0.9	0.7	0.9	202	1.0
Eye and Orbit	0.5	0.7	1.0	1.1	0.5	173	0.8
Brain and Other Nervous System	8.8	8.0	9.0	8.4	8.4	1,894	8.5
Brain	8.1	7.4	8.5	7.9	8.1	1,782	8.0
Endocrine System	10.2	11.0	11.2	11.2	10.9	2,512	10.9
Thyroid	9.2	10.1	10.4	10.3	10.0	2,306	10.0
Lymphomas	29.0	28.4	30.5	28.8	28.9	6,418	29.1
Hodgkin Lymphoma	3.9	3.2	4.0	3.3	3.6	779	3.6
Non-Hodgkin Lymphoma	25.1	25.2	26.5	25.5	25.3	5,639	25.5
Myelomas	8.9	8.2	9.2	8.3	8.3	1,913	8.6
Leukemias	20.8	19.4	19.7	18.9	19.1	4,283	19.6
Lymphocytic Leukemia	11.4	10.2	10.8	9.9	9.2	2,277	10.3
Acute Lymphocytic Leukemia	2.3	1.7	1.8	1.6	1.8	389	1.9
Chronic Lymphocytic Leukemia	8.3	7.7	7.9	7.4	6.9	1,708	7.6
Myeloid and Monocytic Leukemia	8.4	8.2	7.9	8.2	9.0	1,814	8.4
Acute Myeloid Leukemia	5.6	5.3	5.3	5.1	5.4	1,157	5.3
Acute Monocytic Leukemia	0.3	0.3	0.2	0.2	0.3	62	0.3
Chronic Myeloid Leukemia	2.2	2.1	2.1	2.6	3.0	523	2.4
Other Leukemia	0.9	0.9	1.0	0.9	0.8	192	0.9
Mesothelioma	2.9	2.4	2.0	2.0	1.9	457	2.2
Kaposi Sarcoma	0.7	0.6	0.7	0.7	0.8	152	0.7
Ill-Defined & Unspecified Sites*	23.7	21.2	23.0	21.7	20.8	4,705	22.1

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All ICD-O-3 invasive reportable cancers are included.
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A3. Age-adjusted Incidence Rates, White Females.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
All Sites*	466.8	466.6	472.8	472.8	462.8	103,339	468.3
Oral Cavity and Pharynx	6.0	6.9	6.2	6.3	6.0	1,395	6.3
Lip	0.3	0.3	0.2	0.2	0.2	64	0.3
Tongue	1.7	2.1	2.0	1.9	2.0	429	1.9
Salivary Gland	1.2	1.1	1.2	1.0	1.3	248	1.2
Floor of Mouth	0.5	0.4	0.2	0.4	0.3	83	0.4
Gum and Other Mouth	1.2	1.4	1.2	1.3	0.8	263	1.1
Nasopharynx	0.2	0.3	0.3	0.3	0.2	54	0.3
Tonsil	0.5	0.6	0.7	0.7	0.6	137	0.6
Oropharynx	0.1	0.2	0.1	0.3	0.3	47	0.2
Hypopharynx	0.3	0.3	0.1	0.2	0.2	51	0.2
Digestive System	69.3	69.9	70.2	69.5	68.8	16,431	69.5
Esophagus	2.0	1.6	1.9	1.8	2.2	456	1.9
Stomach	5.3	4.9	5.5	4.9	5.1	1,188	5.1
Small Intestine	1.6	2.0	2.0	1.9	2.0	429	1.9
Colon and Rectum	39.0	38.3	38.3	36.9	35.8	8,915	37.6
Colon excluding Rectum	29.4	28.6	27.4	26.9	26.1	6,626	27.6
Rectum and Rectosigmoid Junction	9.6	9.7	10.9	10.0	9.6	2,289	10.0
Anus, Anal Canal and Anorectum	2.0	2.0	2.6	2.8	2.2	520	2.3
Liver and Intrahepatic Bile Duct	3.5	3.2	3.8	3.6	3.8	837	3.6
Liver	2.5	2.3	3.1	2.6	2.5	611	2.6
Intrahepatic Bile Duct	0.9	0.9	0.7	1.0	1.3	226	1.0
Gallbladder	1.7	1.5	1.4	1.4	1.4	351	1.5
Other Biliary	1.3	1.3	1.5	1.9	1.5	370	1.5
Pancreas	11.4	13.1	11.9	12.4	12.9	2,969	12.3
Respiratory System	56.4	60.3	55.8	58.3	56.4	13,369	57.4
Larynx	1.5	1.4	1.4	1.1	1.1	295	1.3
Lung and Bronchus	54.4	58.2	53.8	56.6	54.6	12,936	55.5
Bones and Joints	1.1	1.0	0.9	1.0	0.7	171	1.0
Soft Tissue (Including Heart)	3.1	2.9	3.2	3.2	3.3	650	3.1
Skin (Excluding Basal and Squamous)	23.0	20.6	22.9	22.2	21.4	4,612	22.0
Melanoma of the Skin	22.0	19.2	21.2	20.7	19.9	4,290	20.6
Breast (Invasive)	133.4	133.3	136.4	138.3	137.5	29,247	135.8
In situ (not included in All Sites)	43.6	41.4	43.4	43.5	42.0	8,866	42.8

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All cancers include all ICD-O-3 invasive reportable cancers and *in situ* urinary bladder cancers
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A3 (continued). Age-adjusted Incidence Rates, White Females.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Female Genital System	58.4	57.0	58.3	57.1	58.4	12,755	57.9
Cervix Uteri	7.9	7.8	7.2	7.2	7.1	1,379	7.4
Corpus and Uterus, NOS	31.5	31.3	33.4	33.4	33.5	7,384	32.6
Corpus Uteri	30.8	30.5	32.3	32.2	31.9	7,139	31.6
Uterus, NOS	0.7	0.8	1.0	1.2	1.5	245	1.1
Ovary	14.4	13.8	12.8	11.7	12.3	2,883	13.0
Vagina	0.7	0.7	0.8	0.5	0.8	162	0.7
Vulva	2.8	2.5	2.9	2.6	2.9	645	2.8
Urinary System	22.1	21.8	24.2	23.4	22.1	5,268	22.7
Urinary Bladder (Including *in situ*)	11.8	11.3	12.2	11.2	10.0	2,711	11.3
Kidney and Renal Pelvis	9.7	9.7	11.4	11.4	11.2	2,374	10.7
Ureter	0.5	0.5	0.4	0.3	0.7	121	0.5
Eye and Orbit	0.5	0.4	0.9	0.6	0.8	131	0.6
Brain and Other Nervous System	6.8	6.1	6.6	6.6	6.1	1,267	6.4
Brain	6.2	5.5	6.1	6.3	5.7	1,188	6.0
Endocrine System	30.3	30.0	32.1	33.1	30.0	5,674	31.1
Thyroid	29.5	29.3	31.2	32.3	29.4	5,533	30.4
Lymphomas	22.5	23.1	21.7	21.3	20.7	4,752	21.9
Hodgkin Lymphoma	3.2	3.5	3.1	2.8	2.7	518	3.1
Non-Hodgkin Lymphoma	19.3	19.5	18.6	18.5	18.0	4,234	18.8
Myelomas	5.2	4.8	4.9	4.7	4.8	1,142	4.9
Leukemias	12.1	12.7	12.1	11.2	12.2	2,635	12.1
Lymphocytic Leukemia	6.3	6.0	6.2	5.2	5.2	1,272	5.8
Acute Lymphocytic Leukemia	1.4	1.7	1.7	1.3	1.6	250	1.6
Chronic Lymphocytic Leukemia	4.6	3.9	4.2	3.6	3.5	959	4.0
Myeloid and Monocytic Leukemia	5.3	5.9	5.3	5.0	6.3	1,210	5.6
Acute Myeloid Leukemia	3.3	4.3	3.5	3.1	4.5	825	3.8
Acute Monocytic Leukemia	0.3	0.2	0.3	0.2	0.3	51	0.2
Chronic Myeloid Leukemia	1.7	1.2	1.4	1.6	1.4	303	1.4
Other Leukemia	0.4	0.8	0.6	0.9	0.7	153	0.7
Mesothelioma	0.6	0.7	0.5	0.4	0.5	130	0.5
Kaposi Sarcoma	0.1	0.2	^	^	^	24	0.1
Ill-Defined & Unspecified Sites*	15.9	14.8	15.7	15.5	13.0	3,686	15.0

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All ICD-O-3 invasive reportable cancers are included.
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A4. Age-adjusted Incidence Rates, White Males.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
All Sites*	575.4	576.0	553.1	532.4	511.9	101,236	549.2
Oral Cavity and Pharynx	16.0	15.4	15.5	16.8	16.4	3,100	16.0
Lip	0.6	0.7	0.5	0.6	0.5	102	0.6
Tongue	4.9	4.8	5.7	5.3	4.5	982	5.0
Salivary Gland	2.1	2.0	2.0	2.3	2.0	369	2.1
Floor of Mouth	0.8	0.5	0.5	0.6	0.3	108	0.5
Gum and Other Mouth	1.4	1.7	1.5	1.6	1.9	305	1.6
Nasopharynx	0.7	0.5	0.6	0.8	0.5	115	0.6
Tonsil	3.5	3.0	2.8	3.5	4.6	709	3.5
Oropharynx	0.8	0.8	0.7	0.7	0.8	149	0.8
Hypopharynx	0.9	1.0	0.9	1.1	0.8	188	1.0
Digestive System	102.4	102.2	102.5	103.0	101.4	18,878	102.3
Esophagus	8.7	8.4	8.3	7.9	8.0	1,549	8.3
Stomach	11.2	10.5	10.6	9.3	10.6	1,897	10.4
Small Intestine	1.9	2.6	2.5	2.6	2.6	454	2.4
Colon and Rectum	49.4	47.8	48.7	48.3	47.4	8,833	48.3
Colon excluding Rectum	33.7	32.2	32.2	32.9	33.0	5,943	32.8
Rectum and Rectosigmoid Junction	15.7	15.7	16.5	15.5	14.4	2,890	15.5
Anus, Anal Canal and Anorectum	1.4	1.3	1.2	1.3	1.2	237	1.3
Liver and Intrahepatic Bile Duct	9.6	10.9	11.1	11.3	11.1	2,101	10.8
Liver	8.5	9.7	9.9	9.9	9.8	1,879	9.6
Intrahepatic Bile Duct	1.2	1.2	1.2	1.3	1.3	222	1.2
Gallbladder	1.1	1.1	1.1	1.3	1.2	203	1.2
Other Biliary	2.4	2.8	2.5	3.0	2.1	464	2.6
Pancreas	15.6	15.4	15.2	16.8	16.0	2,926	15.8
Respiratory System	76.5	76.5	74.9	73.2	69.4	13,479	74.1
Larynx	5.8	6.0	5.3	6.2	5.7	1,087	5.8
Lung and Bronchus	69.7	69.4	68.3	66.1	62.7	12,198	67.2
Bones and Joints	1.6	1.4	1.6	1.1	1.3	225	1.4
Soft Tissue (Including Heart)	4.8	4.4	4.5	4.9	4.5	802	4.6
Skin (Excluding Basal and Squamous)	34.9	36.3	35.3	36.3	36.3	6,515	35.9
Melanoma of the Skin	32.7	33.9	32.5	33.3	33.5	6,051	33.2

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All cancers include all ICD-O-3 invasive reportable cancers and *in situ* urinary bladder cancers
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A4 (continued). Age-adjusted Incidence Rates, White Males.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Breast	1.7	1.4	1.5	1.4	1.8	295	1.6
Male Genital System	157.8	166.2	135.2	123.4	111.8	26,585	138.3
Prostate	150.1	157.4	127.0	114.6	103.4	25,261	130.0
Testis	6.9	7.6	7.1	7.6	7.1	1,126	7.3
Penis	0.4	1.0	0.9	0.8	1.1	148	0.8
Urinary System	69.5	68.1	71.3	69.0	66.1	12,490	68.8
Urinary Bladder (Including *in situ*)	45.4	45.1	47.3	44.1	42.4	8,003	44.8
Kidney and Renal Pelvis	21.9	21.6	22.4	23.4	22.0	4,183	22.3
Ureter	1.5	1.2	0.9	0.8	0.9	189	1.1
Eye and Orbit	0.6	0.9	1.2	1.2	0.6	159	0.9
Brain and Other Nervous System	9.6	8.5	9.9	9.0	9.1	1,624	9.2
Brain	8.8	7.9	9.4	8.6	8.8	1,537	8.7
Endocrine System	11.3	12.2	12.1	12.1	12.1	2,145	12.0
Thyroid	10.2	11.3	11.3	11.2	11.1	1,984	11.0
Lymphomas	30.5	30.4	32.2	30.0	30.5	5,451	30.7
Hodgkin Lymphoma	4.0	3.6	4.3	3.2	3.7	618	3.8
Non-Hodgkin Lymphoma	26.5	26.8	27.9	26.8	26.7	4,833	27.0
Myelomas	8.2	7.5	8.6	7.7	7.7	1,455	8.0
Leukemias	22.1	19.7	20.0	18.2	18.7	3,503	19.7
Lymphocytic Leukemia	12.2	10.3	10.6	9.3	8.7	1,821	10.2
Acute Lymphocytic Leukemia	2.5	1.7	1.8	1.7	2.0	305	2.0
Chronic Lymphocytic Leukemia	8.7	7.7	7.7	6.7	6.2	1,366	7.4
Myeloid and Monocytic Leukemia	8.9	8.6	8.5	8.1	9.2	1,526	8.7
Acute Myeloid Leukemia	6.1	5.6	5.8	5.1	5.7	995	5.7
Acute Monocytic Leukemia	0.4	0.4	0.2	0.2	0.3	57	0.3
Chronic Myeloid Leukemia	2.2	2.0	2.2	2.4	2.8	411	2.3
Other Leukemia	1.0	0.8	1.0	0.8	0.8	156	0.9
Mesothelioma	3.1	2.7	2.3	2.3	2.0	424	2.5
Kaposi Sarcoma	0.6	0.4	0.6	0.6	0.5	92	0.6
Ill-Defined & Unspecified Sites*	24.1	21.8	23.8	22.0	21.8	4,014	22.7

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All ICD-O-3 invasive reportable cancers are included.
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A5. Age-adjusted Incidence Rates, Black Females.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
All Sites*	415.1	392.1	400.2	402.0	397.3	14,201	400.9
Oral Cavity and Pharynx	4.2	4.3	6.0	5.0	4.5	177	4.8
Lip	^	^	^	^	^	^	^
Tongue	1.2	^	2.1	0.7	0.8	40	1.1
Salivary Gland	^	1.4	0.8	^	1.1	31	0.9
Floor of Mouth	^	^	^	^	^	8	0.2
Gum and Other Mouth	0.8	0.7	1.4	1.4	1.3	39	1.1
Nasopharynx	0.8	^	^	^	0.7	19	0.5
Tonsil	^	^	^	0.7	^	16	0.4
Oropharynx	^	^	^	^	^	12	0.3
Hypopharynx	^	^	^	^	^	8	0.2
Digestive System	83.4	85.4	83.7	80.1	81.3	2,872	82.7
Esophagus	2.3	2.6	3.7	3.1	1.8	93	2.7
Stomach	9.2	8.7	7.6	8.3	7.7	282	8.3
Small Intestine	3.0	1.4	2.6	2.6	4.0	96	2.7
Colon and Rectum	44.7	44.8	43.8	35.5	40.8	1,451	41.8
Colon excluding Rectum	34.8	34.4	33.2	27.3	30.2	1,099	31.9
Rectum and Rectosigmoid Junction	10.0	10.4	10.6	8.1	10.6	352	9.9
Anus, Anal Canal and Anorectum	1.5	2.4	1.7	2.8	2.0	75	2.1
Liver and Intrahepatic Bile Duct	4.1	3.6	4.5	5.1	4.8	162	4.4
Liver	3.4	3.4	4.0	4.7	4.3	146	4.0
Intrahepatic Bile Duct	^	^	^	^	^	16	0.5
Gallbladder	2.3	2.2	2.0	3.3	2.2	86	2.4
Other Biliary	1.5	1.8	0.8	2.3	1.5	53	1.6
Pancreas	13.5	15.9	15.5	14.5	14.9	507	14.9
Respiratory System	53.9	46.9	46.5	50.1	48.7	1,709	49.1
Larynx	1.3	0.8	1.5	1.5	1.7	52	1.4
Lung and Bronchus	51.9	45.5	44.8	48.5	46.4	1,641	47.3
Bones and Joints	0.7	^	^	0.8	1.0	22	0.6
Soft Tissue (Including Heart)	2.9	4.2	2.9	3.0	2.8	112	3.2
Skin (Excluding Basal and Squamous)	1.8	1.6	1.3	1.8	1.3	55	1.6
Melanoma of the Skin	1.0	0.9	0.8	0.8	0.6	29	0.8
Breast (Invasive)	120.1	115.9	120.2	124.4	120.4	4,348	120.2
In situ (not included in All Sites)	32.4	34.3	33.5	32.8	32.7	1,224	33.1

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All cancers include all ICD-O-3 invasive reportable cancers and *in situ* urinary bladder cancers
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A5 (continued). Age-adjusted Incidence Rates, Black Females.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Female Genital System	55.5	47.1	51.2	49.1	50.5	1,828	50.6
Cervix Uteri	11.8	9.6	9.9	9.9	9.8	368	10.2
Corpus and Uterus, NOS	29.5	25.2	26.0	27.3	28.1	987	27.2
Corpus Uteri	27.4	22.3	23.9	25.3	26.4	908	25.1
Uterus, NOS	2.1	2.9	2.1	2.0	1.7	79	2.2
Ovary	10.7	9.5	11.3	8.7	9.7	355	10.0
Vagina	0.8	^	1.2	^	0.6	26	0.7
Vulva	1.9	1.4	2.1	1.7	1.2	61	1.7
Urinary System	20.4	18.3	20.5	18.0	16.1	643	18.6
Urinary Bladder (Including *in situ*)	8.9	6.9	7.4	5.8	5.4	229	6.8
Kidney and Renal Pelvis	10.7	10.8	12.1	12.1	10.0	394	11.1
Ureter	^	^	^	^	^	6	0.2
Eye and Orbit	^	^	^	^	^	9	0.3
Brain and Other Nervous System	4.2	2.9	2.4	3.7	3.8	122	3.4
Brain	3.6	2.7	2.2	3.6	3.7	112	3.2
Endocrine System	14.7	13.8	12.8	13.6	18.5	532	14.7
Thyroid	12.8	13.1	12.1	12.2	17.2	490	13.5
Lymphomas	12.6	15.2	13.0	16.7	15.5	520	14.6
Hodgkin Lymphoma	1.6	3.3	1.8	3.9	1.6	89	2.5
Non-Hodgkin Lymphoma	10.9	11.9	11.2	12.8	13.8	431	12.1
Myelomas	12.1	11.7	10.6	10.3	9.4	377	10.8
Leukemias	8.6	8.0	9.8	9.7	9.8	312	9.2
Lymphocytic Leukemia	4.7	3.8	3.5	3.3	4.5	132	3.9
Acute Lymphocytic Leukemia	0.8	1.0	^	0.9	1.9	35	1.0
Chronic Lymphocytic Leukemia	3.5	2.6	2.4	2.4	2.3	87	2.6
Myeloid and Monocytic Leukemia	3.4	3.7	5.7	5.4	4.5	157	4.5
Acute Myeloid Leukemia	1.9	2.3	3.3	3.6	2.4	95	2.7
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	1.3	1.4	2.3	1.4	1.6	54	1.6
Other Leukemia	^	^	^	0.9	0.9	23	0.7
Mesothelioma	^	^	^	^	^	9	0.2
Kaposi Sarcoma	^	^	^	^	^	8	0.2
Ill-Defined & Unspecified Sites*	19.7	15.7	18.5	14.7	12.8	546	16.2

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All ICD-O-3 invasive reportable cancers are included.
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A6. Age-adjusted Incidence Rates, Black Males.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
All Sites*	592.9	567.7	545.0	503.8	466.5	13,458	533.2
Oral Cavity and Pharynx	12.6	10.5	13.4	11.3	13.8	334	12.3
Lip	^	^	^	^	^	^	^
Tongue	2.2	3.8	3.2	1.8	3.2	77	2.9
Salivary Gland	1.7	^	^	^	2.2	27	1.0
Floor of Mouth	1.1	^	^	^	^	17	0.6
Gum and Other Mouth	1.1	1.3	2.1	1.5	1.0	35	1.4
Nasopharynx	1.2	^	1.4	^	0.9	22	0.8
Tonsil	2.8	1.7	2.8	2.7	3.2	74	2.6
Oropharynx	1.3	^	0.8	2.0	0.9	35	1.1
Hypopharynx	^	1.4	1.9	1.8	1.4	36	1.5
Digestive System	131.1	104.7	113.9	102.8	102.1	2,776	110.5
Esophagus	11.3	6.1	5.4	6.1	4.1	157	6.5
Stomach	13.1	10.3	14.4	13.1	12.5	297	12.7
Small Intestine	2.2	4.5	3.1	4.0	4.6	92	3.7
Colon and Rectum	60.0	51.5	52.2	45.4	45.8	1,253	50.7
Colon excluding Rectum	42.8	37.7	37.6	31.8	33.3	882	36.5
Rectum and Rectosigmoid Junction	17.2	13.8	14.6	13.5	12.5	371	14.3
Anus, Anal Canal and Anorectum	3.0	2.0	1.5	1.7	2.7	64	2.2
Liver and Intrahepatic Bile Duct	17.9	13.6	12.5	13.3	13.5	408	14.1
Liver	16.7	13.0	12.3	12.7	13.0	392	13.5
Intrahepatic Bile Duct	1.1	^	^	^	^	16	0.6
Gallbladder	1.4	^	1.2	^	1.1	24	1.1
Other Biliary	1.8	1.5	1.9	1.1	2.2	36	1.7
Pancreas	18.1	13.2	19.7	17.1	13.6	407	16.3
Respiratory System	83.6	80.9	81.1	76.2	70.9	1,822	78.4
Larynx	8.1	6.3	4.8	8.8	4.7	164	6.5
Lung and Bronchus	74.2	72.7	75.0	65.8	65.2	1,620	70.5
Bones and Joints	0.7	^	0.8	1.7	^	29	0.9
Soft Tissue (Including Heart)	3.6	3.1	3.7	1.9	2.9	90	3.0
Skin (Excluding Basal and Squamous)	2.0	2.2	2.2	2.6	1.9	62	2.2
Melanoma of the Skin	1.1	1.0	^	1.2	^	25	0.9

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All cancers include all ICD-O-3 invasive reportable cancers and *in situ* urinary bladder cancers
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A6 (continued). Age-adjusted Incidence Rates, Black Males.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Breast	2.3	1.5	1.6	3.2	1.6	50	2.1
Male Genital System	235.1	241.2	197.2	180.4	163.9	5,244	202.2
Prostate	232.1	239.0	194.1	176.8	161.7	5,169	199.4
Testis	1.9	1.5	1.9	1.8	1.4	50	1.7
Penis	^	^	1.3	1.7	^	20	1.0
Urinary System	41.8	48.8	46.8	45.3	40.8	1,084	44.7
Urinary Bladder (Including *in situ*)	20.8	22.7	21.0	22.1	19.2	457	21.2
Kidney and Renal Pelvis	20.6	25.2	24.7	21.8	21.1	610	22.7
Ureter	^	^	^	^	^	7	0.3
Eye and Orbit	^	^	^	^	^	^	^
Brain and Other Nervous System	5.6	4.4	5.2	4.9	5.3	141	5.1
Brain	5.0	4.0	4.7	4.3	4.6	124	4.5
Endocrine System	4.0	4.9	6.7	6.4	4.0	146	5.2
Thyroid	3.2	4.1	5.5	5.2	3.7	124	4.4
Lymphomas	19.8	18.4	19.5	18.5	18.8	526	19.0
Hodgkin Lymphoma	3.7	2.0	3.4	3.5	3.4	104	3.2
Non-Hodgkin Lymphoma	16.0	16.4	16.0	15.0	15.5	422	15.8
Myelomas	14.5	14.9	15.6	13.7	10.9	339	13.9
Leukemias	12.4	12.0	15.7	15.5	12.8	339	13.7
Lymphocytic Leukemia	6.0	5.6	9.0	5.8	5.2	160	6.3
Acute Lymphocytic Leukemia	1.3	0.7	1.1	^	1.3	31	0.9
Chronic Lymphocytic Leukemia	4.7	3.9	7.6	5.0	3.5	118	4.9
Myeloid and Monocytic Leukemia	6.0	5.5	6.0	8.7	7.3	162	6.8
Acute Myeloid Leukemia	3.9	4.2	3.8	5.0	4.8	104	4.3
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	1.8	1.2	1.8	3.4	2.4	52	2.1
Other Leukemia	^	0.9	^	1.0	^	17	0.7
Mesothelioma	1.4	^	^	^	1.4	22	1.0
Kaposi Sarcoma	1.1	1.5	1.2	1.1	1.0	38	1.2
Ill-Defined & Unspecified Sites*	21.0	17.2	19.4	17.6	13.9	413	17.8

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All ICD-O-3 invasive reportable cancers are included.
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A7. Age-adjusted Incidence Rates, Hispanic Females.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
All Sites*	349.8	356.5	368.8	380.3	367.2	11,632	365.0
Oral Cavity and Pharynx	3.1	5.8	4.5	4.8	3.3	136	4.3
Lip	^	^	^	^	^	^	^
Tongue	1.1	2.3	^	1.3	1.1	38	1.3
Salivary Gland	1.0	0.8	^	1.1	0.7	29	0.8
Floor of Mouth	^	^	^	^	^	5	0.2
Gum and Other Mouth	^	1.1	2.0	1.1	^	31	1.0
Nasopharynx	^	^	^	^	^	11	0.3
Tonsil	^	^	^	^	^	9	0.3
Oropharynx	^	^	^	^	^	^	^
Hypopharynx	^	^	^	^	^	5	0.1
Digestive System	71.1	76.7	72.9	78.4	68.9	2,133	73.6
Esophagus	^	1.6	^	1.4	2.3	36	1.3
Stomach	10.9	8.0	11.6	11.4	8.6	303	10.1
Small Intestine	1.5	2.0	^	1.3	2.2	48	1.5
Colon and Rectum	35.8	36.7	33.7	34.7	32.5	1,010	34.6
Colon excluding Rectum	26.2	26.5	24.5	25.8	23.8	726	25.3
Rectum and Rectosigmoid Junction	9.7	10.2	9.2	8.9	8.7	284	9.3
Anus, Anal Canal and Anorectum	3.0	2.8	2.6	4.4	2.4	94	3.0
Liver and Intrahepatic Bile Duct	5.3	4.6	6.5	6.1	5.8	162	5.7
Liver	4.0	3.3	5.6	4.3	5.0	129	4.5
Intrahepatic Bile Duct	1.3	1.3	^	1.8	0.8	33	1.2
Gallbladder	2.4	2.5	2.5	2.6	1.6	65	2.3
Other Biliary	1.3	2.7	2.0	2.7	1.9	56	2.1
Pancreas	9.9	14.2	11.3	11.8	10.5	315	11.5
Respiratory System	25.7	31.2	30.6	31.6	30.5	852	30.0
Larynx	1.5	1.0	1.0	^	^	24	0.8
Lung and Bronchus	23.0	29.1	29.1	30.3	29.7	802	28.4
Bones and Joints	1.2	1.0	1.2	1.0	0.9	42	1.1
Soft Tissue (Including Heart)	1.8	1.2	2.8	2.9	3.1	85	2.4
Skin (Excluding Basal and Squamous)	4.7	3.7	5.0	6.0	5.6	165	5.1
Melanoma of the Skin	4.4	3.1	4.0	4.8	5.0	143	4.3
Breast (Invasive)	91.5	92.2	96.9	105.0	105.7	3,298	98.7
In situ (not included in All Sites)	25.7	30.1	25.1	26.5	32.5	934	28.1

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
Note: Persons of Hispanic ethnicity may be of any race or combination of races.
*All cancers include all ICD-O-3 invasive reportable cancers and *in situ* urinary bladder cancers
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A7 (continued). Age-adjusted Incidence Rates, Hispanic Females.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Female Genital System	52.8	48.3	52.2	48.4	51.1	1,668	50.5
Cervix Uteri	9.8	11.7	10.6	11.1	10.2	378	10.6
Corpus and Uterus, NOS	27.3	22.9	25.1	24.4	25.9	828	25.1
Corpus Uteri	26.7	21.6	23.6	22.9	24.4	785	23.8
Uterus, NOS	^	1.3	1.5	1.5	1.5	43	1.3
Ovary	11.0	10.2	10.6	8.0	10.5	322	10.0
Vagina	^	^	1.4	0.8	^	23	0.8
Vulva	3.0	2.3	3.0	2.5	2.5	75	2.7
Urinary System	15.4	14.1	18.7	20.1	18.3	520	17.4
Urinary Bladder (Including *in situ*)	8.5	4.6	6.9	7.7	7.1	185	7.0
Kidney and Renal Pelvis	6.7	9.3	11.1	11.7	10.2	319	9.9
Ureter	^	^	^	^	^	8	0.3
Eye and Orbit	^	^	^	^	0.5	16	0.4
Brain and Other Nervous System	4.4	4.8	5.9	4.5	4.9	177	4.9
Brain	3.9	4.4	5.2	4.3	4.5	158	4.5
Endocrine System	25.5	23.6	28.2	24.9	26.1	979	25.7
Thyroid	25.0	22.7	27.0	24.2	25.4	953	24.9
Lymphomas	21.7	19.2	17.4	19.6	20.4	628	19.7
Hodgkin Lymphoma	2.8	3.3	3.0	1.6	2.5	104	2.6
Non-Hodgkin Lymphoma	18.9	15.9	14.4	18.0	17.8	524	17.1
Myelomas	6.5	7.4	7.0	6.4	5.4	189	6.5
Leukemias	9.9	12.4	10.0	10.2	10.8	347	10.6
Lymphocytic Leukemia	4.7	5.4	4.8	3.4	4.7	153	4.6
Acute Lymphocytic Leukemia	1.6	2.2	2.4	1.5	2.3	83	2.0
Chronic Lymphocytic Leukemia	3.2	2.9	2.1	1.6	2.2	62	2.4
Myeloid and Monocytic Leukemia	4.3	6.0	4.4	5.0	4.8	158	4.9
Acute Myeloid Leukemia	3.2	3.4	3.1	3.7	3.1	106	3.3
Acute Monocytic Leukemia	^	^	^	^	^	9	0.3
Chronic Myeloid Leukemia	1.1	1.7	1.0	1.2	0.9	39	1.2
Other Leukemia	0.8	1.0	0.8	1.8	1.2	36	1.1
Mesothelioma	^	^	^	^	^	11	0.4
Kaposi Sarcoma	^	^	^	^	^	6	0.2
Ill-Defined & Unspecified Sites*	13.9	13.4	14.4	15.7	11.6	380	13.7

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
Note: Persons of Hispanic ethnicity may be of any race or combination of races.
*All ICD-O-3 invasive reportable cancers are included.
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A8. Age-adjusted Incidence Rates, Hispanic Males.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
All Sites*	477.0	463.2	445.9	437.4	406.4	10,669	443.9
Oral Cavity and Pharynx	12.6	13.4	11.2	8.3	11.8	288	11.4
Lip	^	1.8	^	^	^	13	0.6
Tongue	3.8	3.4	3.6	2.6	3.1	79	3.3
Salivary Gland	^	^	1.4	^	2.2	27	1.1
Floor of Mouth	^	^	^	^	^	5	0.2
Gum and Other Mouth	^	2.1	2.3	1.2	1.7	42	1.6
Nasopharynx	1.7	1.6	^	1.2	^	29	1.1
Tonsil	2.5	1.6	1.6	^	2.5	52	1.8
Oropharynx	1.3	^	^	^	^	16	0.7
Hypopharynx	1.7	1.3	^	^	^	18	0.8
Digestive System	106.0	104.2	107.1	102.8	100.1	2,424	103.9
Esophagus	8.2	5.0	6.9	5.0	6.8	133	6.3
Stomach	15.9	13.7	14.6	14.6	15.3	336	14.8
Small Intestine	1.6	2.1	2.4	2.8	2.0	55	2.2
Colon and Rectum	45.8	44.6	46.3	44.8	40.3	1,056	44.3
Colon excluding Rectum	32.0	31.0	32.3	34.4	28.3	720	31.6
Rectum and Rectosigmoid Junction	13.8	13.6	14.0	10.4	12.0	336	12.7
Anus, Anal Canal and Anorectum	2.0	1.5	1.1	1.8	^	34	1.3
Liver and Intrahepatic Bile Duct	15.7	16.8	17.9	14.8	15.0	404	16.1
Liver	14.6	15.6	16.4	14.0	14.0	376	14.9
Intrahepatic Bile Duct	1.1	^	1.6	0.9	1.0	28	1.1
Gallbladder	^	2.3	^	2.1	1.4	30	1.6
Other Biliary	3.0	2.7	2.9	3.9	3.1	64	3.1
Pancreas	11.5	14.2	13.0	12.3	14.1	285	13.1
Respiratory System	54.4	51.1	54.9	51.1	46.6	1,084	51.5
Larynx	6.7	5.2	4.5	5.9	5.4	127	5.5
Lung and Bronchus	46.5	44.9	49.2	44.4	40.5	931	45.0
Bones and Joints	1.3	1.0	1.1	1.0	1.6	46	1.2
Soft Tissue (Including Heart)	4.3	3.3	3.1	4.2	3.8	121	3.7
Skin (Excluding Basal and Squamous)	5.4	5.6	6.4	5.9	6.1	156	5.8
Melanoma of the Skin	4.6	3.9	5.7	4.4	4.5	125	4.6

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
Note: Persons of Hispanic ethnicity may be of any race or combination of races.
*All cancers include all ICD-O-3 invasive reportable cancers and *in situ* urinary bladder cancers
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A8 (continued). Age-adjusted Incidence Rates, Hispanic Males.

Cancer Site	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Breast	^	^	^	^	1.5	20	0.9
Male Genital System	156.9	160.3	129.6	132.9	107.8	3,248	136.0
Prostate	150.8	153.9	123.6	126.7	99.6	2,988	129.4
Testis	4.7	5.1	4.3	4.4	5.0	215	4.7
Penis	^	1.2	1.5	1.7	3.0	39	1.7
Urinary System	51.8	40.6	43.8	46.6	43.0	1,024	45.0
Urinary Bladder (Including *in situ*)	27.4	24.1	28.1	24.0	26.0	499	25.9
Kidney and Renal Pelvis	22.4	15.3	14.6	22.1	15.2	501	17.8
Ureter	^	^	^	^	^	10	0.5
Eye and Orbit	^	^	^	^	^	13	0.4
Brain and Other Nervous System	6.3	6.2	9.2	7.9	6.3	244	7.1
Brain	6.0	5.8	8.7	7.6	6.2	230	6.8
Endocrine System	6.6	7.2	7.6	5.8	8.2	235	7.1
Thyroid	6.0	6.9	7.3	5.6	7.1	218	6.6
Lymphomas	26.9	26.2	26.6	30.4	25.8	733	27.2
Hodgkin Lymphoma	2.8	2.4	3.4	2.3	2.9	103	2.8
Non-Hodgkin Lymphoma	24.1	23.8	23.3	28.1	22.9	630	24.5
Myelomas	8.6	7.3	11.0	7.5	7.9	195	8.4
Leukemias	14.8	15.6	17.2	16.0	15.7	434	15.9
Lymphocytic Leukemia	6.8	8.3	7.9	6.0	6.2	193	7.0
Acute Lymphocytic Leukemia	2.0	2.1	2.7	2.1	1.8	90	2.1
Chronic Lymphocytic Leukemia	3.9	5.3	3.8	2.9	3.5	78	3.8
Myeloid and Monocytic Leukemia	7.5	6.9	8.4	9.3	8.5	219	8.1
Acute Myeloid Leukemia	5.0	4.0	4.4	5.2	5.0	130	4.7
Acute Monocytic Leukemia	^	^	^	^	^	7	0.3
Chronic Myeloid Leukemia	2.2	2.5	3.1	3.1	3.1	73	2.8
Other Leukemia	^	^	0.9	^	0.9	22	0.7
Mesothelioma	^	1.1	^	^	1.5	21	1.0
Kaposi Sarcoma	0.7	0.9	^	1.7	0.8	28	0.8
Ill-Defined & Unspecified Sites*	18.2	17.5	15.1	14.0	17.8	355	16.5

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
Note: Persons of Hispanic ethnicity may be of any race or combination of races.
*All ICD-O-3 invasive reportable cancers are included.
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A9. Age-adjusted Incidence Rates, Asian or Pacific Islander Females and Males, 2010-2014 Combined.

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
All Sites*	5,259	268.4	4,323	272.7
Oral Cavity and Pharynx	78	4.1	223	12.8
Lip	^	^	^	^
Tongue	24	1.3	49	2.6
Salivary Gland	11	0.5	25	1.7
Floor of Mouth	^	^	8	0.5
Gum and Other Mouth	17	1.0	63	3.6
Nasopharynx	16	0.6	46	2.4
Tonsil	^	^	12	0.6
Oropharynx	^	^	6	0.4
Hypopharynx	^	^	10	0.8
Digestive System	856	48.5	1,162	75.4
Esophagus	17	1.0	49	3.4
Stomach	131	7.4	193	13.2
Small Intestine	14	0.7	15	1.0
Colon and Rectum	401	22.3	468	28.3
Colon excluding Rectum	264	15.1	269	17.5
Rectum and Rectosigmoid Junction	137	7.2	199	10.7
Anus, Anal Canal and Anorectum	7	0.4	5	0.3
Liver and Intrahepatic Bile Duct	89	5.2	223	14.1
Liver	70	4.2	204	12.6
Intrahepatic Bile Duct	19	1.1	19	1.5
Gallbladder	35	2.0	22	1.6
Other Biliary	30	1.8	44	3.0
Pancreas	114	6.7	135	10.1
Respiratory System	392	23.3	517	36.4
Larynx	5	0.4	34	2.1
Lung and Bronchus	376	22.4	469	33.4
Bones and Joints	8	0.4	17	0.8
Soft Tissue (Including Heart)	38	1.7	38	1.8
Skin (Excluding Basal and Squamous)	27	1.5	34	2.2
Melanoma of the Skin	18	1.0	21	1.6
Breast (Invasive)	1,938	92.2	6	0.4
In situ (not included in All Sites)	718	33.0	^	^

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All cancers include all ICD-O-3 invasive reportable cancers and *in situ* urinary bladder cancers
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A9 (continued). Age-adjusted Incidence Rates, Asian or Pacific Islander Females and Males, 2010-2014 Combined.

Cancer Site	Female Cases	Female Rate	Male Cases	Male Rate
Female Genital System	670	32.4	-	-
Cervix Uteri	90	4.4	-	-
Corpus and Uterus, NOS	352	16.4	-	-
Corpus Uteri	337	15.4	-	-
Uterus, NOS	15	0.9	-	-
Ovary	190	9.6	-	-
Vagina	11	0.6	-	-
Vulva	12	0.8	-	-
Male Genital System	-	-	1,052	64.2
Prostate	-	-	1,003	61.7
Testis	-	-	39	1.7
Penis	-	-	8	0.7
Urinary System	149	8.2	351	23.8
Urinary Bladder (Including *in situ*)	63	3.9	188	14.3
Kidney and Renal Pelvis	79	3.9	151	8.6
Ureter	^	^	6	0.4
Eye and Orbit	^	^	5	0.2
Brain and Other Nervous System	69	3.6	96	5.1
Brain	64	3.3	92	4.9
Endocrine System	525	23.2	166	8.1
Thyroid	509	22.3	145	7.0
Lymphomas	201	10.6	256	15.0
Hodgkin Lymphoma	24	1.1	37	1.8
Non-Hodgkin Lymphoma	177	9.5	219	13.2
Myelomas	62	3.4	68	4.7
Leukemias	112	6.4	159	9.2
Lymphocytic Leukemia	45	2.4	73	4.2
Acute Lymphocytic Leukemia	32	1.5	37	1.9
Chronic Lymphocytic Leukemia	9	0.7	33	2.2
Myeloid and Monocytic Leukemia	62	3.7	74	4.3
Acute Myeloid Leukemia	48	2.9	42	2.5
Acute Monocytic Leukemia	^	^	^	^
Chronic Myeloid Leukemia	10	0.5	27	1.4
Other Leukemia	5	0.3	12	0.7
Mesothelioma	^	^	10	0.7
Kaposi Sarcoma	^	^	7	0.4
Ill-Defined & Unspecified Sites*	126	8.4	156	11.4

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*All ICD-O-3 invasive reportable cancers are included.
- Non-applicable gender.
^Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A10. Benign and Borderline Brain Tumor Incidence Rates, New Jersey, 2010-2014.

Population	Site Group	Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Female	Brain	1.2	1.4	1.4	1.3	1.5	327	1.3
	Intracranial Meninges	8.7	9.2	9.9	11.0	10.0	2,719	9.8
	Cranial Nerves and Other CNS	1.7	2.0	2.0	1.8	2.1	491	1.9
	Tumors of the Sellar Region	4.7	4.3	4.6	4.8	4.8	1,070	4.6
	Spinal Cord	0.6	0.5	0.6	0.6	1.0	164	0.7
	Spinal Meninges	0.4	0.4	0.3	0.4	0.5	114	0.4
	Total	17.2	17.7	18.8	20.0	19.8	4,885	18.7
Male	Brain	1.1	1.3	1.6	1.4	1.5	302	1.4
	Intracranial Meninges	4.9	4.3	5.2	4.3	4.4	1,016	4.6
	Cranial Nerves and Other CNS	1.9	1.9	1.8	2.0	2.1	455	2.0
	Tumors of the Sellar Region	3.2	3.8	3.7	4.1	3.7	844	3.7
	Spinal Cord	0.8	0.5	0.4	0.7	0.6	133	0.6
	Spinal Meninges	0.1	0.1	0.2	0.2	0.2	39	0.2
	Total	12.0	12.0	12.9	12.7	12.5	2,789	12.4

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

Table A11. Myelodysplastic Syndromes and Chronic Myeloproliferative Disorders Incidence Rates, New Jersey, 2010-2014.

Population		Rates 2010	2011	2012	2013	2014 Prelim.	Cases 2010-2014	Rates 2010-2014
Myelodysplatic Syndromes (MDS)								
Female	All Races	4.4	4.7	4.0	4.5	3.8	1,269	4.3
Female	White	4.4	4.8	3.8	4.7	3.5	1,052	4.2
Female	Black	4.9	3.7	4.9	3.2	3.8	138	4.1
Female	API*	2.7	3.8	2.8	1.9	2.1	38	2.6
Female	Hispanic**	4.4	3.3	3.6	3.5	2.8	90	3.5
Male	All Races	8.5	7.8	8.6	7.6	7.6	1,628	8.0
Male	White	8.9	8.4	9.0	7.9	7.9	1,440	8.4
Male	Black	5.5	2.2	6.7	6.7	5.3	108	5.3
Male	API*	3.2	5.5	3.4	2.0	3.4	44	3.4
Male	Hispanic**	5.6	7.9	3.4	3.8	4.4	97	5.0
Chronic Myeloproliferative Disorders (CMD)								
Female	All Races	2.6	1.8	2.2	3.0	2.5	683	2.4
Female	White	2.4	1.7	2.3	3.0	2.6	551	2.4
Female	Black	4.0	2.1	1.7	1.9	1.5	76	2.2
Female	API*	^	1.4	^	1.4	^	23	1.3
Female	Hispanic**	2.7	1.4	1.9	2.7	2.0	65	2.1
Male	All Races	2.6	2.9	2.8	3.4	3.5	690	3.0
Male	White	2.6	2.9	2.9	3.4	3.8	569	3.1
Male	Black	3.0	2.2	2.9	2.5	1.5	67	2.4
Male	API*	1.4	1.6	1.7	^	1.8	28	1.5
Male	Hispanic**	2.0	3.1	2.6	1.6	3.2	65	2.5

Rates are per 100,000 and age-adjusted to the 2000 US standard population.
MDS includes ICD-O-3 histology codes 9980, 9982, 9983, 9984, 9985, 9986, 9987, 9989.
CMD includes ICD-O-3 histology codes 9950, 9960, 9961, 9962, 9963, 9964.
*Asian or Pacific Islander.
**Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
^ Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A12. Urinary Bladder Cancer Incidence Rates, New Jersey Females, 2010-2014.

Population	Behavior	Rates					Cases	Rates
		2010	2011	2012	2013	2014 Prelim.	2010-2014	
All Races	*in situ*	4.9	5.0	5.7	5.1	4.9	1,477	5.1
All Races	Invasive	6.2	5.5	5.5	5.5	4.7	1,616	5.5
White	*in situ*	5.5	5.5	6.3	5.7	5.4	1,334	5.7
White	Invasive	6.3	5.8	5.9	5.5	4.6	1,377	5.6
Black	*in situ*	2.3	2.4	2.9	1.2	0.9	65	1.9
Black	Invasive	6.7	4.6	4.4	4.6	4.4	164	4.9
API*	*in situ*	2.4	1.7	2.3	^	^	28	1.7
API*	Invasive	2.3	1.5	^	3.8	1.9	35	2.2
Hispanic**	*in situ*	3.8	1.6	2.2	2.8	2.8	73	2.6
Hispanic**	Invasive	4.7	2.9	4.7	4.9	4.4	112	4.3

Table A13. Urinary Bladder Cancer Incidence Rates, New Jersey Males, 2010-2014.

Population	Behavior	Rates					Cases	Rates
		2010	2011	2012	2013	2014 Prelim.	2010-2014	
All Races	*in situ*	20.3	19.6	22.0	20.3	20.1	4,413	20.5
All Races	Invasive	21.3	21.7	21.0	21.1	20.2	4,470	21.1
White	*in situ*	22.4	21.5	24.6	21.6	20.9	3,985	22.2
White	Invasive	23.0	23.6	22.7	22.4	21.5	4,018	22.6
Black	*in situ*	8.9	9.2	7.7	7.8	8.2	182	8.3
Black	Invasive	12.0	13.6	13.3	14.4	10.9	275	12.8
API*	*in situ*	4.6	7.0	6.3	8.7	7.0	93	6.8
API*	Invasive	8.9	7.6	8.5	6.8	6.5	95	7.5
Hispanic**	*in situ*	11.3	10.8	14.4	10.4	12.2	243	11.9
Hispanic**	Invasive	16.1	13.3	13.7	13.5	13.8	256	14.0

Rates are per 100,000 population and age-adjusted to the 2000 U.S. population standard.
*Asian or Pacific Islander.
**Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
^ Counts and rates are suppressed when fewer than 5 cases to ensure confidentiality and statistical reliability.

Table A14. Distribution of Stage at Diagnosis for Selected Cancer Sites in New Jersey, Females, 2010-2014.

	All Races	White	Black	Asian/ Pacific Islander	Hispanic*
Breast					
Total Cases	47,156	38,113	5,572	2,656	4,336
In Situ	23.5%	23.3%	22.0%	27.0%	23.9%
Local	47.9%	49.4%	40.9%	45.0%	43.5%
Regional	20.4%	19.6%	26.4%	21.1%	25.0%
Distant	5.0%	4.8%	7.1%	3.5%	4.4%
Unstaged	3.1%	2.8%	3.6%	3.3%	3.2%
Cervical**					
Total Cases	1,901	1,379	368	90	378
Local	39.8%	41.3%	32.3%	46.7%	43.4%
Regional	36.2%	35.5%	43.5%	33.3%	35.7%
Distant	14.0%	13.6%	16.8%	13.3%	13.0%
Unstaged	10.0%	9.6%	7.3%	6.7%	7.9%
Colorectal					
Total Cases	11,442	9,285	1,544	419	1,060
In Situ	4.4%	4.0%	6.0%	4.3%	4.7%
Local	35.7%	35.9%	35.3%	32.0%	34.9%
Regional	32.4%	33.2%	28.2%	37.9%	33.9%
Distant	19.3%	19.2%	21.6%	19.6%	18.7%
Unstaged	8.2%	7.7%	8.8%	6.2%	7.8%
Lung**					
Total Cases	15,017	12,936	1,641	376	802
Local	22.0%	22.5%	17.1%	23.1%	20.2%
Regional	22.6%	22.8%	22.9%	15.4%	23.2%
Distant	46.5%	45.9%	51.0%	51.3%	47.0%
Unstaged	8.9%	8.8%	9.0%	10.1%	9.6%
Melanoma					
Total Cases	9,644	8,523	40	24	232
In Situ	52.3%	49.7%	27.5%	25.0%	38.4%
Local	38.9%	41.2%	32.5%	45.8%	46.1%
Regional	3.0%	3.3%	^	^	3.9%
Distant	1.7%	1.9%	12.5%	^	5.6%
Unstaged	4.2%	4.0%	17.5%	^	6.0%

*Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.

^ Data are suppressed for fewer than 5 cases to ensure confidentiality and statistical reliability.

***In situ* cases not presented due to small numbers. *In situ* cervical cancers are not reportable.

Table A15. Distribution of Stage at Diagnosis for Selected Cancer Sites in New Jersey, Males, 2010-2014.

	All Races	White	Black	Asian/ Pacific Islander	Hispanic*
Colorectal					
Total Cases	11,377	9,324	1,368	494	1,111
In Situ	5.7%	5.3%	8.4%	5.3%	5.0%
Local	34.4%	35.1%	29.5%	33.4%	33.2%
Regional	31.7%	32.7%	28.5%	30.8%	33.2%
Distant	20.5%	20.2%	25.1%	19.6%	21.1%
Unstaged	7.6%	6.8%	8.5%	10.9%	7.6%
Lung**					
Total Cases	14,380	12,198	1,620	469	931
Local	17.3%	17.8%	13.0%	16.2%	14.7%
Regional	22.6%	22.9%	20.4%	22.2%	23.0%
Distant	51.3%	50.8%	55.4%	53.7%	54.5%
Unstaged	8.8%	8.4%	11.2%	7.9%	7.8%
Melanoma					
Total Cases	12,349	11,190	34	38	176
In Situ	48.1%	45.9%	26.5%	44.7%	29.0%
Local	41.3%	42.9%	38.2%	31.6%	49.4%
Regional	4.2%	4.5%	^	^	7.4%
Distant	2.6%	2.8%	17.6%	^	6.3%
Unstaged	3.8%	3.9%	^	^	8.0%
Prostate**					
Total Cases	33,199	25,261	5,169	1,003	2,988
Local	80.4%	81.0%	80.7%	77.7%	81.8%
Regional	8.7%	9.3%	7.2%	13.4%	7.3%
Distant	4.3%	4.2%	5.6%	4.8%	4.5%
Unstaged	6.6%	5.5%	6.5%	4.2%	6.5%

*Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
^ Data are suppressed for fewer than 5 cases to ensure confidentiality and statistical reliability.
***In situ* cases not presented due to small numbers.

Table A16. Comparative Incidence Rates, New Jersey and U.S., Females, 2009-2013.

Cancer Site	New Jersey 2009-2013					U.S. 2009-2013				
Population	All Races	White	Black	API*	Hispanic*	All Races	White	Black	API*	Hispanic*
All Sites**	452.9	469.7	401.1	266.0	360.0	418.5	424.3	401.0	287.1	329.6
Breast (invasive)	131.4	135.5	120.5	89.6	96.1	123.3	124.3	122.6	89.3	91.7
Lung and Bronchus	53.1	56.1	47.6	22.1	28.3	53.5	55.1	50.0	28.3	25.6
Colorectal	38.8	38.7	41.5	22.7	35.5	35.6	34.7	42.0	27.8	29.8
Corpus and uterus, NOS	30.8	32.4	26.8	16.9	24.5	25.6	26.0	24.7	18.1	21.7
Thyroid	28.0	30.8	12.3	23.0	24.2	20.8	21.8	13.3	20.9	19.7
Non-Hodgkin Lymphoma	17.8	18.8	12.1	9.6	16.8	15.9	16.4	11.9	10.6	15.2
Melanoma	17.1	20.6	1.0	1.2	4.0	16.1	18.6	1.0	1.2	4.3
Bladder**	11.0	11.8	7.3	3.9	6.8	8.9	9.4	6.6	3.7	5.1

*API=Asians or Pacific Islanders. Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
**Includes *in situ* bladder cancers.
Source: NAACCR Age-adjusted rates per 100,000 (2000 U.S. population standard).

Table A17. Comparative Incidence Rates, New Jersey and U.S., Males, 2009-2013

Cancer Site	New Jersey 2009-2013					U.S. 2009-2013				
Population	All Races	White	Black	API*	Hispanic*	All Races	White	Black	API*	Hispanic*
All Sites**	555.2	561.5	562.9	283.6	451.2	512.1	506.7	566.2	310.2	398.1
Prostate	148.7	140.2	213.1	68.5	139.5	123.2	113.2	195.0	63.5	104.9
Lung and Bronchus	67.7	69.0	74.3	34.4	45.1	75.0	74.6	88.6	46.6	42.2
Colorectal	49.5	49.4	54.5	30.5	45.1	46.9	45.7	57.1	37.8	42.8
Bladder**	41.6	45.2	21.8	13.7	25.2	36.2	38.4	19.5	15.2	20.0
Melanoma	28.2	32.7	0.9	1.4	4.4	25.9	29.0	1.1	1.5	5.1
Non-Hodgkin Lymphoma	25.4	26.8	16.4	13.5	24.3	23.0	23.6	17.0	15.6	20.0
Thyroid	9.8	10.8	4.4	7.5	6.3	7.0	7.5	3.7	6.7	5.2

*API=Asians or Pacific Islanders. Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
**Includes *in situ* bladder cancers.
Source: NAACCR Age-adjusted rates per 100,000 (2000 U.S. population standard).

MORTALITY TABLES

Table A18. Age-adjusted Mortality Rates, Females, All Races Combined.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
All Sites	146.8	146.2	139.5	137.3	138.9	41,773	141.7
Oral Cavity and Pharynx	1.4	0.9	1.1	1.1	0.9	323	1.1
Lip	^	^	^	^	^	^	^
Tongue	0.4	0.3	0.4	0.3	0.3	96	0.3
Salivary Gland	0.3	^	^	0.2	^	45	0.2
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	0.2	^	0.3	0.2	0.2	56	0.2
Nasopharynx	0.3	^	^	^	^	37	0.1
Tonsil	^	^	^	^	^	14	0.1
Oropharynx	^	^	^	^	^	23	0.1
Hypopharynx	^	^	^	^	^	^	^
Digestive System	35.0	32.4	33.2	32.0	31.6	9,886	32.8
Esophagus	1.7	1.6	1.4	1.4	1.4	445	1.5
Stomach	3.0	2.4	2.6	2.4	2.2	747	2.5
Small Intestine	0.4	0.2	0.3	0.3	0.3	93	0.3
Colon and Rectum	13.8	13.0	13.1	12.4	11.8	3,941	12.8
Colon excluding Rectum	11.6	11.2	10.5	10.1	10.1	3,301	10.7
Rectum and Rectosigmoid Junction	2.2	1.8	2.6	2.3	1.7	640	2.1
Anus, Anal Canal and Anorectum	0.3	0.2	0.3	0.5	0.2	79	0.3
Liver and Intrahepatic Bile Duct	3.8	2.9	3.3	3.6	3.4	1,005	3.4
Liver	2.3	1.6	2.0	2.2	2.1	606	2.1
Intrahepatic Bile Duct	1.5	1.3	1.3	1.3	1.3	399	1.4
Gallbladder	1.1	0.6	0.8	0.7	0.8	231	0.8
Pancreas	10.1	10.2	10.3	10.0	10.3	3,035	10.2
Respiratory System	35.3	36.3	32.9	33.4	33.9	10,008	34.4
Larynx	0.6	0.5	0.4	0.4	0.2	130	0.5
Lung and Bronchus	34.5	35.6	32.4	32.9	33.5	9,834	33.8
Bones and Joints	0.3	0.5	^	0.3	0.3	79	0.3
Soft Tissue (Including Heart)	1.7	1.1	1.4	1.0	1.3	356	1.3
Skin (Excluding Basal and Squamous)	1.9	1.7	1.8	2.0	2.0	570	1.9
Melanoma of the Skin	1.5	1.3	1.4	1.7	1.6	448	1.5
Breast	23.2	24.3	22.6	23.0	21.5	6,666	22.9

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A18 (continued). Age-adjusted Mortality Rates, Females, All Races Combined.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
Female Genital System	17.8	17.3	16.1	15.1	16.4	4,786	16.5
Cervix Uteri	2.4	2.6	2.3	1.9	1.9	602	2.2
Corpus and Uterus, NOS	6.1	5.3	5.1	5.7	6.5	1,679	5.8
Corpus Uteri	2.4	2.2	2.0	2.1	2.4	644	2.2
Uterus, NOS	3.7	3.2	3.1	3.6	4.1	1,035	3.5
Ovary	8.5	8.4	7.7	6.7	6.9	2,210	7.6
Vagina	0.2	0.2	0.2	0.3	0.2	62	0.2
Vulva	0.5	0.4	0.6	0.5	0.6	164	0.5
Urinary System	4.9	4.6	4.6	4.6	4.7	1,431	4.7
Urinary Bladder	2.7	2.5	2.4	2.5	2.5	768	2.5
Kidney and Renal Pelvis	2.0	2.0	2.1	2.0	2.1	615	2.0
Ureter	^	^	^	^	^	30	0.1
Eye and Orbit	^	^	^	^	^	15	0.1
Brain and Other Nervous System	3.0	3.3	2.8	2.9	3.4	852	3.1
Endocrine System	0.9	0.5	0.7	0.8	0.9	209	0.8
Thyroid	0.6	0.4	0.4	0.6	0.5	141	0.5
Lymphomas	4.5	5.1	4.7	4.3	4.5	1,377	4.6
Hodgkin Lymphoma	0.2	0.4	0.3	0.2	^	68	0.2
Non-Hodgkin Lymphoma	4.3	4.7	4.5	4.1	4.4	1,309	4.4
Myelomas	2.2	3.0	2.9	2.3	2.3	762	2.5
Leukemias	4.7	5.0	4.8	5.1	5.2	1,454	4.9
Lymphocytic Leukemia	1.4	1.0	1.2	1.2	0.9	346	1.1
Acute Lymphocytic Leukemia	0.3	0.3	0.3	0.3	0.2	78	0.3
Chronic Lymphocytic Leukemia	1.0	0.6	0.8	0.9	0.6	249	0.8
Myeloid and Monocytic Leukemia	2.2	2.6	2.2	2.2	2.6	672	2.4
Acute Myeloid Leukemia	2.0	2.3	2.0	2.0	2.2	591	2.1
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	^	0.2	^	^	^	41	0.1
Other Leukemia	1.1	1.4	1.3	1.6	1.7	436	1.4
Ill-Defined & Unspecified Sites	10.0	10.3	9.7	9.4	9.8	2,999	9.9

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A19. Age-adjusted Mortality Rates, Males, All Races Combined.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
All Sites	202.9	195.7	191.6	185.5	182.4	41,139	191.4
Oral Cavity and Pharynx	3.0	3.5	3.2	2.6	3.4	725	3.2
Lip	^	^	^	^	^	^	^
Tongue	0.8	0.9	0.9	0.6	0.8	183	0.8
Salivary Gland	0.3	0.5	0.3	0.4	0.3	73	0.3
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	0.5	0.4	0.6	0.3	0.6	108	0.5
Nasopharynx	0.4	^	0.3	0.3	0.2	60	0.3
Tonsil	^	0.4	0.2	0.3	0.4	72	0.3
Oropharynx	^	0.3	0.2	^	0.3	51	0.2
Hypopharynx	^	^	^	^	^	30	0.1
Digestive System	55.5	55.8	54.2	54.5	51.6	11,959	54.3
Esophagus	7.8	7.3	7.0	6.5	6.2	1,562	7.0
Stomach	4.8	4.5	5.2	5.3	4.6	1,038	4.9
Small Intestine	0.4	0.4	0.3	0.5	0.6	97	0.4
Colon and Rectum	19.0	18.7	19.0	17.7	16.9	3,946	18.2
Colon excluding Rectum	15.6	15.1	15.1	14.1	13.8	3,161	14.7
Rectum and Rectosigmoid Junction	3.4	3.5	3.9	3.6	3.1	785	3.5
Anus, Anal Canal and Anorectum	^	^	^	^	0.2	39	0.2
Liver and Intrahepatic Bile Duct	8.3	8.9	8.3	8.5	9.4	1,996	8.7
Liver	6.6	6.7	6.3	6.3	7.2	1,545	6.6
Intrahepatic Bile Duct	1.8	2.2	2.1	2.2	2.1	451	2.1
Gallbladder	0.6	0.6	0.5	0.9	0.6	136	0.6
Pancreas	13.4	14.1	12.6	13.7	12.1	2,912	13.2
Respiratory System	55.7	52.3	51.5	49.6	45.2	10,969	50.7
Larynx	1.9	2.2	1.5	2.3	1.7	428	1.9
Lung and Bronchus	53.5	49.6	49.4	46.9	43.1	10,459	48.4
Bones and Joints	0.4	0.5	0.4	0.6	0.5	106	0.5
Soft Tissue (Including Heart)	2.2	1.7	1.6	1.6	1.7	380	1.8
Skin (Excluding Basal and Squamous)	4.7	4.6	5.2	5.1	5.1	1,063	5.0
Melanoma of the Skin	3.4	3.5	3.8	3.5	3.9	783	3.6

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A19 (continued). Age-adjusted Mortality Rates, Males, All Races Combined.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
Breast	0.6	0.2	0.3	0.3	0.4	74	0.3
Male Genital System	22.1	20.4	19.0	18.1	19.8	4,014	19.9
Prostate	21.8	19.8	18.8	17.7	19.3	3,923	19.4
Testis	^	0.4	^	0.2	0.3	55	0.3
Penis	^	^	^	^	^	26	0.1
Urinary System	14.7	13.6	13.9	13.4	12.9	2,871	13.7
Urinary Bladder	8.6	8.7	9.0	8.2	7.7	1,719	8.4
Kidney and Renal Pelvis	5.6	4.6	4.6	4.7	5.0	1,079	4.9
Ureter	^	^	^	^	^	30	0.1
Eye and Orbit	^	^	^	^	^	14	0.1
Brain and Other Nervous System	4.7	4.6	5.2	4.5	5.5	1,099	4.9
Endocrine System	0.9	0.7	0.9	1.0	0.9	190	0.9
Thyroid	0.6	0.4	0.5	0.6	0.5	114	0.5
Lymphomas	8.1	7.5	7.8	7.3	7.7	1,608	7.7
Hodgkin Lymphoma	0.6	0.4	0.3	0.3	0.5	85	0.4
Non-Hodgkin Lymphoma	7.5	7.1	7.4	7.0	7.2	1,523	7.3
Myeloma	3.7	4.0	4.2	4.0	4.1	845	4.0
Leukemias	9.1	9.4	8.9	8.0	7.8	1,805	8.6
Lymphocytic Leukemia	2.6	2.8	2.5	2.1	2.1	512	2.4
Acute Lymphocytic Leukemia	0.5	0.3	0.5	0.3	0.5	91	0.4
Chronic Lymphocytic Leukemia	2.0	2.4	1.9	1.6	1.5	393	1.9
Myeloid and Monocytic Leukemia	4.1	4.2	3.8	3.6	3.4	814	3.8
Acute Myeloid Leukemia	3.5	3.6	3.3	3.3	2.6	689	3.2
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	0.3	0.4	0.2	0.2	0.5	74	0.3
Other Leukemia	2.4	2.3	2.5	2.2	2.4	479	2.4
Ill-Defined & Unspecified Sites	17.4	16.8	15.4	15.0	15.8	3,417	16.1

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A20. Age-adjusted Mortality Rates, White Females.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
All Sites	148.7	147.9	143.3	140.8	142.0	35,142	144.5
Oral Cavity and Pharynx	1.5	0.8	1.1	1.0	0.9	267	1.1
Lip	^	^	^	^	^	^	^
Tongue	0.5	0.2	0.4	0.3	0.2	79	0.3
Salivary Gland	0.3	^	^	0.2	^	39	0.2
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	^	^	0.3	0.2	^	48	0.2
Nasopharynx	0.3	^	^	^	^	28	0.1
Tonsil	^	^	^	^	^	14	0.1
Oropharynx	^	^	^	^	^	17	0.1
Hypopharynx	^	^	^	^	^	^	^
Digestive System	34.3	32.6	32.8	32.2	31.6	8,207	32.7
Esophagus	1.6	1.7	1.4	1.3	1.4	368	1.5
Stomach	2.6	2.5	2.3	2.2	1.9	564	2.3
Small Intestine	0.4	0.2	0.3	0.2	0.3	70	0.3
Colon and Rectum	13.5	12.9	13.2	12.5	12.4	3,326	12.9
Colon excluding Rectum	11.3	11.1	10.6	10.2	10.4	2,783	10.7
Rectum and Rectosigmoid Junction	2.3	1.8	2.6	2.3	1.9	543	2.2
Anus, Anal Canal and Anorectum	0.3	^	0.3	0.5	0.2	70	0.3
Liver and Intrahepatic Bile Duct	3.8	2.9	3.3	3.5	3.2	814	3.4
Liver	2.4	1.6	2.0	2.2	1.8	484	2.0
Intrahepatic Bile Duct	1.4	1.3	1.3	1.4	1.4	330	1.4
Gallbladder	1.1	0.6	0.8	0.6	0.8	191	0.8
Pancreas	10.1	10.3	10.2	10.4	10.2	2,546	10.3
Respiratory System	37.2	37.8	35.0	35.6	35.8	8,687	36.3
Larynx	0.5	0.5	0.4	0.4	0.2	99	0.4
Lung and Bronchus	36.5	37.1	34.4	35.0	35.5	8,546	35.7
Bones and Joints	0.3	0.4	^	0.3	0.3	65	0.3
Soft Tissue (Including Heart)	1.8	1.2	1.4	1.0	1.3	298	1.3
Skin (Excluding Basal and Squamous)	2.2	2.0	2.1	2.2	2.5	551	2.2
Melanoma of the Skin	1.8	1.6	1.8	1.9	2.0	437	1.8
Breast	22.7	23.9	22.5	22.5	20.9	5,359	22.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A20 (continued). Age-adjusted Mortality Rates, White Females.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
Female Genital System	18.0	17.2	16.0	15.1	16.8	3,917	16.6
Cervix Uteri	2.1	2.3	2.4	1.7	1.9	436	2.1
Corpus and Uterus, NOS	6.0	4.9	4.8	5.2	6.5	1,310	5.5
Corpus Uteri	2.3	2.1	1.7	2.0	2.4	505	2.1
Uterus, NOS	3.6	2.8	3.0	3.2	4.0	805	3.4
Ovary	9.0	8.9	8.0	7.1	7.4	1,905	8.1
Vagina	0.2	^	^	0.3	^	49	0.2
Vulva	0.5	0.4	0.7	0.6	0.7	155	0.6
Urinary System	5.1	4.7	5.1	4.8	4.9	1,258	4.9
Urinary Bladder	2.8	2.7	2.6	2.5	2.6	687	2.6
Kidney and Renal Pelvis	2.1	1.9	2.3	2.1	2.1	529	2.1
Ureter	^	^	^	^	^	28	0.1
Eye and Orbit	^	^	^	^	^	15	0.1
Brain and Other Nervous System	3.1	3.6	3.1	3.5	3.7	759	3.4
Endocrine System	0.8	0.4	0.7	0.9	0.8	165	0.7
Thyroid	0.6	0.3	0.4	0.6	0.5	114	0.5
Lymphomas	4.6	5.3	5.2	4.6	4.8	1,220	4.9
Hodgkin Lymphoma	0.2	0.4	0.3	0.2	^	61	0.3
Non-Hodgkin Lymphoma	4.4	4.9	4.9	4.3	4.6	1,159	4.6
Myelomas	1.9	2.6	2.8	2.0	2.0	572	2.3
Leukemias	4.8	5.1	5.1	5.5	5.3	1,264	5.2
Lymphocytic Leukemia	1.5	1.1	1.3	1.4	0.9	310	1.2
Acute Lymphocytic Leukemia	0.4	0.3	0.3	0.4	0.2	66	0.3
Chronic Lymphocytic Leukemia	1.1	0.7	0.8	1.0	0.7	228	0.8
Myeloid and Monocytic Leukemia	2.2	2.7	2.5	2.3	2.6	585	2.5
Acute Myeloid Leukemia	2.0	2.4	2.2	2.2	2.3	518	2.2
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	^	^	^	^	^	33	0.1
Other Leukemia	1.1	1.3	1.3	1.8	1.7	369	1.5
Ill-Defined & Unspecified Sites	10.2	10.3	10.0	9.4	10.3	2,538	10.0

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A21. Age-adjusted Mortality Rates, White Males.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
All Sites	203.4	198.7	196.1	191.1	187.1	34,984	195.2
Oral Cavity and Pharynx	2.7	3.5	3.1	2.5	3.4	574	3.0
Lip	^	^	^	^	^	^	^
Tongue	0.8	0.9	0.9	0.7	0.9	156	0.8
Salivary Gland	0.3	0.5	^	0.4	0.3	62	0.3
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	0.3	0.4	0.6	0.3	0.5	81	0.4
Nasopharynx	0.3	^	0.3	^	^	36	0.2
Tonsil	^	0.4	^	^	0.5	59	0.3
Oropharynx	^	0.3	^	^	0.3	42	0.2
Hypopharynx	^	^	^	^	^	23	0.1
Digestive System	54.2	56.0	54.7	55.1	52.0	9,936	54.4
Esophagus	7.8	8.0	7.6	7.3	6.7	1,388	7.5
Stomach	4.7	4.3	5.0	5.0	4.4	824	4.6
Small Intestine	0.4	0.4	0.4	0.5	0.7	88	0.5
Colon and Rectum	18.5	18.4	18.8	17.6	16.8	3,244	18.0
Colon excluding Rectum	15.1	14.8	14.9	14.0	13.7	2,598	14.5
Rectum and Rectosigmoid Junction	3.4	3.6	3.9	3.6	3.1	646	3.5
Anus, Anal Canal and Anorectum	^	^	^	^	^	30	0.2
Liver and Intrahepatic Bile Duct	7.9	8.9	8.2	8.5	9.2	1,597	8.5
Liver	6.0	6.5	6.1	6.1	7.0	1,203	6.3
Intrahepatic Bile Duct	1.9	2.4	2.1	2.4	2.2	394	2.2
Gallbladder	0.5	0.7	0.6	0.9	0.6	112	0.6
Pancreas	13.3	14.0	13.0	13.9	12.5	2,451	13.3
Respiratory System	57.1	53.0	52.8	51.0	46.2	9,350	52.0
Larynx	1.9	2.1	1.6	2.1	1.9	349	1.9
Lung and Bronchus	55.0	50.6	50.6	48.6	44.0	8,936	49.7
Bones and Joints	0.5	0.5	0.4	0.7	0.5	88	0.5
Soft Tissue (Including Heart)	2.3	1.8	1.9	1.7	1.8	332	1.9
Skin (Excluding Basal and Squamous)	5.4	5.4	6.0	6.1	6.1	1,040	5.8
Melanoma of the Skin	3.9	4.2	4.3	4.3	4.7	768	4.3

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A21 (continued). Age-adjusted Mortality Rates, White Males.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
Breast	0.5	^	0.3	0.3	0.4	60	0.3
Male Genital System	19.9	18.9	17.1	17.0	18.2	3,156	18.2
Prostate	19.5	18.2	16.8	16.6	17.6	3,074	17.7
Testis	^	0.4	^	0.3	0.3	51	0.3
Penis	^	^	^	^	^	23	0.1
Urinary System	15.6	14.5	14.9	14.5	14.1	2,597	14.7
Urinary Bladder	9.1	9.3	9.8	9.1	8.5	1,589	9.2
Kidney and Renal Pelvis	5.9	4.9	4.8	4.9	5.3	943	5.2
Ureter	^	^	^	^	^	26	0.2
Eye and Orbit	^	^	^	^	^	13	0.1
Brain and Other Nervous System	5.2	5.0	5.7	5.0	6.2	986	5.4
Endocrine System	1.0	0.8	0.9	0.9	1.0	165	0.9
Thyroid	0.7	0.4	0.5	0.6	0.5	103	0.6
Lymphomas	8.4	8.0	8.3	8.1	8.5	1,452	8.3
Hodgkin Lymphoma	0.6	0.4	0.3	0.3	0.6	75	0.4
Non-Hodgkin Lymphoma	7.8	7.6	8.0	7.8	7.9	1,377	7.8
Myelomas	3.6	3.7	4.1	3.9	4.0	680	3.9
Leukemias	9.7	10.2	9.7	8.8	8.3	1,630	9.3
Lymphocytic Leukemia	2.8	3.1	2.6	2.4	2.3	463	2.6
Acute Lymphocytic Leukemia	0.5	0.3	0.5	0.3	0.5	75	0.4
Chronic Lymphocytic Leukemia	2.1	2.6	1.9	1.9	1.7	361	2.0
Myeloid and Monocytic Leukemia	4.5	4.6	4.3	4.0	3.5	736	4.2
Acute Myeloid Leukemia	3.8	3.8	3.8	3.6	2.7	623	3.5
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	0.4	0.5	^	^	0.6	67	0.4
Other Leukemia	2.4	2.6	2.8	2.4	2.5	431	2.5
Ill-Defined & Unspecified Sites	17.3	16.9	16.2	15.4	16.3	2,925	16.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A22. Age-adjusted Mortality Rates, Black Females.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
All Sites	164.2	167.0	150.2	154.1	154.2	5,422	157.7
Oral Cavity and Pharynx	^	^	^	1.7	^	42	1.2
Lip	^	^	^	^	^	^	^
Tongue	^	^	^	^	^	13	0.4
Salivary Gland	^	^	^	^	^	^	^
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	^	^	^	^	^	^	^
Nasopharynx	^	^	^	^	^	^	^
Tonsil	^	^	^	^	^	^	^
Oropharynx	^	^	^	^	^	^	^
Hypopharynx	^	^	^	^	^	^	^
Digestive System	45.0	37.1	40.8	38.2	36.6	1,338	39.5
Esophagus	1.9	^	2.1	2.2	1.8	65	1.9
Stomach	6.0	2.8	3.8	4.0	4.5	139	4.2
Small Intestine	^	^	^	^	^	19	0.6
Colon and Rectum	17.0	17.3	15.6	14.2	11.1	508	14.9
Colon excluding Rectum	14.7	15.1	12.7	12.1	10.3	440	12.9
Rectum and Rectosigmoid Junction	2.3	2.2	2.9	2.1	^	68	2.0
Anus, Anal Canal and Anorectum	^	^	^	^	^	^	^
Liver and Intrahepatic Bile Duct	4.3	2.5	3.3	4.3	3.7	129	3.6
Liver	2.7	^	1.9	3.1	2.7	83	2.3
Intrahepatic Bile Duct	1.7	^	1.4	^	^	46	1.3
Gallbladder	^	^	^	^	^	27	0.8
Pancreas	12.8	10.9	13.9	10.7	13.0	409	12.3
Respiratory System	32.3	36.5	29.7	30.2	33.4	1,110	32.4
Larynx	1.5	^	^	^	^	30	0.8
Lung and Bronchus	30.8	35.7	29.0	29.3	33.0	1,080	31.5
Bones and Joints	^	^	^	^	^	^	^
Soft Tissue (Including Heart)	^	^	1.6	^	2.1	49	1.4
Skin (Excluding Basal and Squamous)	^	^	^	^	^	13	0.4
Melanoma of the Skin	^	^	^	^	^	^	^
Breast	31.1	33.1	28.1	31.2	30.6	1,092	30.8

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A22 (continued). Age-adjusted Mortality Rates, Black Females.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
Female Genital System	20.0	21.2	21.4	19.7	18.6	706	20.2
Cervix Uteri	5.0	4.8	3.4	4.0	3.0	147	4.0
Corpus and Uterus, NOS	8.2	9.1	8.4	9.8	8.7	307	8.9
Corpus Uteri	3.1	3.0	3.8	2.8	3.0	108	3.1
Uterus, NOS	5.0	6.1	4.6	7.1	5.7	199	5.7
Ovary	6.6	6.4	8.9	5.2	5.9	227	6.6
Vagina	^	^	^	^	^	11	0.3
Vulva	^	^	^	^	^	^	^
Urinary System	4.7	5.6	3.3	4.0	4.8	150	4.5
Urinary Bladder	2.8	2.0	1.9	1.9	1.8	68	2.1
Kidney and Renal Pelvis	1.6	3.4	^	2.0	3.0	77	2.2
Ureter	^	^	^	^	^	^	^
Eye and Orbit	^	^	^	^	^	^	^
Brain and Other Nervous System	2.2	2.8	1.5	^	1.9	67	1.9
Endocrine System	^	^	^	^	^	30	0.9
Thyroid	^	^	^	^	^	17	0.5
Lymphomas	4.1	4.2	2.4	2.6	3.4	112	3.3
Hodgkin Lymphoma	^	^	^	^	^	^	^
Non-Hodgkin Lymphoma	3.9	3.4	2.4	2.6	3.4	105	3.1
Myelomas	5.3	6.1	4.4	5.4	5.6	175	5.3
Leukemias	4.5	3.9	3.9	4.3	5.5	146	4.4
Lymphocytic Leukemia	^	^	^	^	^	31	0.9
Acute Lymphocytic Leukemia	^	^	^	^	^	^	^
Chronic Lymphocytic Leukemia	^	^	^	^	^	19	0.6
Myeloid and Monocytic Leukemia	2.0	1.8	1.6	2.1	2.4	67	2.0
Acute Myeloid Leukemia	1.9	^	1.6	1.7	1.7	57	1.7
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	^	^	^	^	^	^	^
Other Leukemia	^	^	1.5	^	1.9	48	1.5
Ill-Defined & Unspecified Sites	11.0	12.9	10.9	12.6	9.5	383	11.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A23. Age-adjusted Mortality Rates, Black Males.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
All Sites	258.1	229.6	223.0	205.5	217.7	4,935	226.0
Oral Cavity and Pharynx	5.1	4.5	3.5	3.9	3.6	105	4.1
Lip	^	^	^	^	^	^	^
Tongue	^	^	^	^	^	22	0.9
Salivary Gland	^	^	^	^	^	^	^
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	^	^	^	^	^	^	^
Nasopharynx	^	^	^	^	^	13	0.4
Tonsil	^	^	^	^	^	12	0.5
Oropharynx	^	^	^	^	^	^	^
Hypopharynx	^	^	^	^	^	^	^
Digestive System	79.1	66.9	63.8	64.9	62.0	1,560	67.0
Esophagus	10.2	5.3	4.6	2.9	5.6	137	5.7
Stomach	5.9	5.7	7.8	8.2	7.2	154	7.0
Small Intestine	^	^	^	^	^	^	^
Colon and Rectum	28.5	28.3	27.2	24.0	22.6	580	26.0
Colon excluding Rectum	23.2	23.7	21.6	19.5	18.6	467	21.2
Rectum and Rectosigmoid Junction	5.2	4.6	5.6	4.5	4.0	113	4.8
Anus, Anal Canal and Anorectum	^	^	^	^	^	^	^
Liver and Intrahepatic Bile Duct	13.8	8.6	8.0	9.0	12.3	274	10.3
Liver	12.4	7.1	7.1	7.8	10.4	245	8.9
Intrahepatic Bile Duct	^	^	^	^	^	29	1.4
Gallbladder	^	^	^	^	^	15	0.8
Pancreas	16.7	16.6	14.5	17.0	12.2	359	15.4
Respiratory System	61.1	58.4	59.2	57.0	56.4	1,319	58.4
Larynx	2.8	3.5	^	5.1	^	67	2.9
Lung and Bronchus	57.8	54.5	57.4	51.1	54.3	1,240	54.9
Bones and Joints	^	^	^	^	^	13	0.4
Soft Tissue (Including Heart)	1.8	1.8	^	^	^	41	1.4
Skin (Excluding Basal and Squamous)	^	^	^	^	^	16	0.7
Melanoma of the Skin	^	^	^	^	^	10	0.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A23 (continued). Age-adjusted Mortality Rates, Black Males.

Cancer Site	Rates 2010	2011	2012	2013	2014	Cases 2010-2014	Rates 2010-2014
Breast	^	^	^	^	^	12	0.6
Male Genital System	53.0	42.2	47.0	35.3	44.3	798	44.2
Prostate	52.8	41.9	46.9	34.6	43.5	789	43.8
Testis	^	^	^	^	^	^	^
Penis	^	^	^	^	^	^	^
Urinary System	9.7	9.7	11.3	9.7	9.8	212	10.0
Urinary Bladder	4.7	5.1	7.2	4.7	5.5	104	5.5
Kidney and Renal Pelvis	4.5	4.6	4.2	4.4	4.3	104	4.4
Ureter	^	^	^	^	^	^	^
Eye and Orbit	^	^	^	^	^	^	^
Brain and Other Nervous System	2.6	3.5	3.9	2.3	3.1	75	3.1
Endocrine System	^	^	^	^	^	14	0.7
Thyroid	^	^	^	^	^	^	^
Lymphomas	7.3	5.5	5.0	3.4	3.3	108	4.8
Hodgkin Lymphoma	^	^	^	^	^	^	^
Non-Hodgkin Lymphoma	6.9	4.9	4.6	3.2	3.0	99	4.4
Myelomas	4.7	6.9	6.5	6.7	6.6	137	6.3
Leukemias	7.6	6.4	5.4	3.6	6.5	127	5.9
Lymphocytic Leukemia	^	^	2.8	^	^	35	1.6
Acute Lymphocytic Leukemia	^	^	^	^	^	^	^
Chronic Lymphocytic Leukemia	^	^	^	^	^	27	1.3
Myeloid and Monocytic Leukemia	2.9	3.3	^	^	2.7	56	2.3
Acute Myeloid Leukemia	^	3.0	^	^	2.4	47	1.9
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	^	^	^	^	^	^	^
Other Leukemia	2.9	^	^	^	^	36	1.9
Ill-Defined & Unspecified Sites	22.7	21.8	14.3	15.0	18.8	397	18.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A24. Age-adjusted Mortality Rates, Hispanic Females and Males, 2010-2014 Combined.

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
All Sites	2,502	88.8	2,551	123.5
Oral Cavity and Pharynx	16	0.6	42	1.8
Lip	^	^	^	^
Tongue	^	^	10	0.4
Salivary Gland	^	^	^	^
Floor of Mouth	^	^	^	^
Gum and Other Mouth	^	^	^	^
Nasopharynx	^	^	^	^
Tonsil	^	^	^	^
Oropharynx	^	^	^	^
Hypopharynx	^	^	^	^
Digestive System	738	27.4	896	41.5
Esophagus	24	0.9	81	4.2
Stomach	104	3.7	142	6.9
Small Intestine	^	^	^	^
Colon and Rectum	239	8.7	261	11.9
Colon excluding Rectum	198	7.3	212	9.9
Rectum and Rectosigmoid Junction	41	1.5	49	2.0
Anus, Anal Canal and Anorectum	^	^	^	^
Liver and Intrahepatic Bile Duct	107	4.0	212	8.9
Liver	69	2.6	181	7.5
Intrahepatic Bile Duct	38	1.4	31	1.5
Gallbladder	27	1.0	14	0.8
Pancreas	200	7.7	161	7.4
Respiratory System	334	12.4	533	26.0
Larynx	10	0.4	33	1.5
Lung and Bronchus	322	11.9	494	24.2
Bones and Joints	^	^	10	0.3
Soft Tissue (Including Heart)	27	0.8	27	0.9
Skin (Excluding Basal and Squamous)	12	0.4	18	0.9
Melanoma of the Skin	^	^	12	0.6
Breast	401	12.9	^	^

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
Note: Persons of Hispanic ethnicity may be of any race or combination of races.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A24 (continued). Age-adjusted Mortality Rates, Hispanic Females and Males, 2010-2014 Combined.

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
Female Genital System	361	12.2	-	-
Cervix Uteri	76	2.4	-	-
Corpus and Uterus, NOS	125	4.4	-	-
Corpus Uteri	41	1.5	-	-
Uterus, NOS	84	2.9	-	-
Ovary	136	4.5	-	-
Vagina	^	^	-	-
Vulva	13	0.5	-	-
Male Genital System	-	-	247	15.4
Prostate	-	-	230	14.8
Testis	-	-	10	0.2
Penis	-	-	^	^
Urinary System	72	2.8	147	7.8
Urinary Bladder	36	1.5	81	5.0
Kidney and Renal Pelvis	34	1.2	63	2.7
Ureter	^	^	^	^
Eye and Orbit	^	^	^	^
Brain and Other Nervous System	54	1.7	89	2.9
Endocrine System	14	0.4	16	0.7
Thyroid	11	0.4	^	^
Lymphomas	94	3.5	143	6.8
Hodgkin Lymphoma	^	^	10	0.4
Non-Hodgkin Lymphoma	90	3.3	133	6.4
Myelomas	65	2.5	58	3.0
Leukemias	110	3.8	128	5.8
Lymphocytic Leukemia	26	0.8	38	1.6
Acute Lymphocytic Leukemia	14	0.3	23	0.7
Chronic Lymphocytic Leukemia	11	0.4	13	0.8
Myeloid and Monocytic Leukemia	51	1.7	56	2.6
Acute Myeloid Leukemia	48	1.6	38	1.8
Acute Monocytic Leukemia	^	^	^	^
Chronic Myeloid Leukemia	^	^	11	0.5
Other Leukemia	33	1.3	34	1.6
Ill-Defined & Unspecified Sites	195	7.2	194	9.8

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
Note: Persons of Hispanic ethnicity may be of any race or combination of races.
- Non-applicable gender
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A25. Age-adjusted Mortality Rates, Asian or Pacific Islander Females and Males, 2010-2014 Combined.

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
All Sites	1,169	70.9	1,193	90.6
Oral Cavity and Pharynx	14	0.9	46	3.3
Lip	^	^	^	^
Tongue	^	^	^	^
Salivary Gland	^	^	^	^
Floor of Mouth	^	^	^	^
Gum and Other Mouth	^	^	18	1.3
Nasopharynx	^	^	11	0.7
Tonsil	^	^	^	^
Oropharynx	^	^	^	^
Hypopharynx	^	^	^	^
Digestive System	330	20.5	456	33.9
Esophagus	11	0.7	36	2.6
Stomach	44	2.6	59	4.3
Small Intestine	^	^	^	^
Colon and Rectum	105	6.5	119	8.7
Colon excluding Rectum	77	4.7	93	7.0
Rectum and Rectosigmoid Junction	28	1.8	26	1.7
Anus, Anal Canal and Anorectum	^	^	^	^
Liver and Intrahepatic Bile Duct	61	3.8	125	8.7
Liver	39	2.4	97	6.5
Intrahepatic Bile Duct	22	1.4	28	2.2
Gallbladder	12	0.7	^	^
Pancreas	74	4.6	101	8.5
Respiratory System	198	13.1	296	23.0
Larynx	^	^	11	0.9
Lung and Bronchus	195	12.8	280	21.8
Bones and Joints	^	^	^	^
Soft Tissue (Including Heart)	^	^	^	^
Skin (Excluding Basal and Squamous)	^	^	^	^
Melanoma of the Skin	^	^	^	^
Breast	208	11.1	^	^

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A25 (continued). Age-adjusted Mortality Rates, Asian or Pacific Islander Females and Males, 2010-2014 Combined.

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
Female Genital System	159	8.6	-	-
Cervix Uteri	19	1.0	-	-
Corpus and Uterus, NOS	60	3.3	-	-
Corpus Uteri	31	1.7	-	-
Uterus, NOS	29	1.6	-	-
Ovary	76	4.0	-	-
Vagina	^	^	-	-
Vulva	^	^	-	-
Male Genital System	-	-	58	5.8
Prostate	-	-	58	5.8
Testis	-	-	^	^
Penis	-	-	^	^
Urinary System	22	1.5	55	4.4
Urinary Bladder	12	0.8	21	2.2
Kidney and Renal Pelvis	^	^	30	1.9
Ureter	^	^	^	^
Eye and Orbit	^	^	^	^
Brain and Other Nervous System	26	1.5	37	2.0
Endocrine System	14	1.0	11	0.8
Thyroid	10	0.8	^	^
Lymphomas	44	2.7	48	3.8
Hodgkin Lymphoma	^	^	^	^
Non-Hodgkin Lymphoma	44	2.7	47	3.8
Myelomas	15	1.0	27	2.0
Leukemias	44	3.0	47	3.2
Lymphocytic Leukemia	^	^	14	0.9
Acute Lymphocytic Leukemia	^	^	^	^
Chronic Lymphocytic Leukemia	^	^	^	^
Myeloid and Monocytic Leukemia	20	1.2	21	1.4
Acute Myeloid Leukemia	16	1.0	18	1.3
Acute Monocytic Leukemia	^	^	^	^
Chronic Myeloid Leukemia	^	^	^	^
Other Leukemia	19	1.3	12	0.9
Ill-Defined & Unspecified Sites	76	5.2	92	7.1

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.
- Non-applicable gender
^Counts and rates are suppressed when fewer than 10 cases to ensure confidentiality and statistical reliability.

Table A26. Comparative Mortality Rates, New Jersey and U.S., Females, 2010-2014.

Population:	New Jersey 2010-2014					United States 2010-2014				
Cancer Site	All Races	White	Black	API*	Hispanic*	All Races	White	Black	API*	Hispanic*
All Sites	141.7	144.5	157.7	70.9	88.8	141.5	141.9	161.8	88.8	97.7
Lung	33.8	35.7	31.5	12.8	11.9	36.3	37.5	34.6	18.0	13.4
Breast	22.9	22.5	30.8	11.1	12.9	21.2	20.6	29.2	11.3	14.4
Colorectal	12.8	12.9	14.9	6.5	8.7	12.4	12.1	16.5	8.8	9.2

*API=Asians or Pacific Islanders; persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.

Table A27. Comparative Mortality Rates, New Jersey and U.S., Males, 2010-2014.

Population:	New Jersey 2010-2014					United States 2010-2014				
Cancer Site	All Races	White	Black	API*	Hispanic*	All Races	White	Black	API*	Hispanic*
All Sites	191.4	195.2	226.0	90.6	123.5	200.5	199.8	247.3	122.7	142.6
Lung	48.4	49.7	54.9	21.8	24.2	55.9	55.9	68.0	31.7	27.3
Prostate	19.4	17.7	43.8	5.8	14.8	20.1	18.7	42.0	8.8	16.5
Colorectal	18.2	18.0	26.0	8.7	11.9	17.7	17.2	25.3	12.4	15.0

*API=Asians or Pacific Islanders; persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.

SUPPLEMENTAL TABLES: POPULATION AND AGE AT CANCER DIAGNOSIS

Table A28. Population Denominators by Race, Age Group and Year.

All Races

	Male						Female					
	2010-2014	2010	2011	2012	2013	2014	2010-2014	2010	2011	2012	2013	2014
<1	268,448	53,951	54,877	53,532	53,196	52,892	257,180	51,691	52,318	51,503	51,016	50,652
01-04	1,099,489	222,159	220,576	219,810	218,478	218,466	1,055,496	213,170	212,078	210,914	209,549	209,785
05-09	1,425,152	288,044	286,461	285,794	284,017	280,836	1,367,829	275,663	274,267	274,292	273,394	270,213
10-14	1,481,977	300,001	298,641	296,010	294,298	293,027	1,417,780	286,742	285,339	282,875	281,516	281,308
15-19	1,517,262	309,405	307,711	303,585	299,519	297,042	1,426,158	289,107	288,542	285,779	282,823	279,907
20-24	1,437,997	280,017	283,685	287,245	292,008	295,042	1,350,269	262,380	265,029	268,905	274,357	279,598
25-29	1,425,845	278,743	282,716	285,627	287,900	290,859	1,387,272	275,889	277,302	277,312	277,878	278,891
30-34	1,418,226	276,446	280,542	283,890	287,241	290,107	1,436,865	282,193	285,521	288,154	290,238	290,759
35-39	1,407,836	287,960	280,770	278,529	279,255	281,322	1,441,904	297,105	288,357	285,029	284,577	286,836
40-44	1,545,399	316,858	314,624	310,691	304,781	298,445	1,607,183	331,208	328,317	323,135	316,367	308,156
45-49	1,652,897	343,971	338,078	330,795	323,723	316,330	1,736,121	359,411	354,394	348,694	340,855	332,767
50-54	1,673,114	329,384	334,007	335,985	337,044	336,694	1,755,655	347,562	351,323	351,942	352,219	352,609
55-59	1,457,025	274,441	282,780	292,237	300,510	307,057	1,566,459	295,739	304,196	314,170	322,831	329,523
60-64	1,187,942	228,768	237,402	235,958	239,667	246,147	1,319,290	255,397	264,691	261,940	265,741	271,521
65-69	898,217	162,991	168,770	182,445	188,487	195,524	1,043,527	190,852	196,542	211,707	217,991	226,435
70-74	626,427	116,130	118,729	123,638	131,553	136,377	779,360	145,301	148,387	154,104	163,072	168,496
75-79	457,746	90,104	90,100	90,665	92,313	94,564	621,268	124,821	123,300	122,683	124,139	126,325
80-84	343,998	69,670	69,478	69,051	68,265	67,534	533,532	109,631	108,707	107,324	105,130	102,740
85+	302,893	56,890	58,778	60,974	62,426	63,825	636,898	124,086	125,599	127,970	129,010	130,233

White

	Male						Female					
	2010-2014	2010	2011	2012	2013	2014	2010-2014	2010	2011	2012	2013	2014
<1	187,620	37,897	38,589	37,433	36,990	36,711	179,506	36,193	36,787	36,032	35,414	35,080
01-04	771,527	157,087	155,218	154,227	152,830	152,165	737,310	149,902	148,348	147,066	146,032	145,962
05-09	1,019,192	207,660	205,952	204,529	202,237	198,814	972,232	197,605	196,119	195,260	193,411	189,837
10-14	1,073,511	218,669	217,040	214,565	212,414	210,823	1,020,142	207,332	205,749	203,505	202,019	201,537
15-19	1,101,686	224,413	223,491	220,520	217,630	215,632	1,027,066	208,043	208,229	206,080	203,576	201,138
20-24	1,027,400	203,103	204,217	204,920	206,817	208,343	949,495	186,617	187,005	188,616	191,997	195,260
25-29	1,022,269	201,494	203,401	204,948	205,843	206,583	960,091	191,659	192,307	192,388	192,172	191,565
30-34	1,001,153	196,181	198,673	200,536	202,046	203,717	976,013	192,265	194,302	195,686	196,686	197,074
35-39	994,525	206,173	199,042	196,132	196,187	196,991	989,443	207,242	198,731	195,045	193,922	194,503
40-44	1,132,582	237,214	233,363	227,743	220,856	213,406	1,151,155	242,345	238,061	231,306	223,903	215,540
45-49	1,260,065	265,930	259,340	252,046	245,148	237,601	1,295,687	272,389	266,504	260,319	252,365	244,110
50-54	1,309,773	260,031	262,993	263,486	262,473	260,790	1,346,806	268,775	271,071	270,338	269,019	267,603
55-59	1,163,720	221,677	227,199	233,405	238,747	242,692	1,221,147	232,828	238,458	245,035	250,411	254,415
60-64	962,737	186,842	193,556	191,054	193,306	197,979	1,040,560	203,388	209,977	206,202	208,508	212,485
65-69	734,373	133,434	137,963	149,694	153,996	159,286	835,174	153,466	157,711	170,050	173,953	179,994
70-74	510,953	95,045	96,790	100,612	107,343	111,163	625,840	117,318	119,272	123,548	130,867	134,835
75-79	382,283	76,912	75,946	75,625	76,262	77,538	511,750	104,938	102,376	100,903	101,233	102,300
80-84	301,411	62,111	61,522	60,519	59,283	57,976	461,259	96,409	94,928	92,930	90,044	86,948
85+	273,009	51,801	53,303	55,013	55,984	56,908	571,005	112,277	113,194	114,800	115,182	115,552

Source: The National Cancer Institute's SEER Program (URL: http://www.seer.cancer.gov/popdata/).

Table A28 (continued). Population Denominators by Race, Age Group and Year.

Black

	Male						Female					
	2010-2014	2010	2011	2012	2013	2014	2010-2014	2010	2011	2012	2013	2014
<1	50,445	9,897	10,191	10,052	10,130	10,175	48,844	9,565	9,837	9,747	9,843	9,852
01-04	199,248	39,636	39,701	39,836	39,847	40,228	192,919	38,315	38,395	38,593	38,637	38,979
05-09	245,642	49,683	49,186	49,024	48,919	48,830	238,069	47,812	47,356	47,410	47,723	47,768
10-14	260,594	53,039	52,656	52,080	51,720	51,099	251,873	51,585	51,310	50,485	49,630	48,863
15-19	277,020	58,044	56,829	55,270	53,864	53,013	267,467	55,979	54,418	53,255	52,346	51,469
20-24	275,530	51,051	53,255	55,467	57,539	58,218	269,330	51,012	52,700	54,250	55,383	55,985
25-29	231,242	43,964	44,873	45,895	47,180	49,330	244,522	47,909	48,349	48,430	49,116	50,718
30-34	219,592	42,650	43,448	44,014	44,580	44,900	247,636	48,960	49,447	49,834	49,949	49,446
35-39	211,468	42,974	41,899	41,732	41,978	42,885	242,641	49,822	48,424	47,877	47,858	48,660
40-44	229,603	46,262	46,259	46,129	45,686	45,267	263,047	53,303	53,303	52,994	52,237	51,210
45-49	233,235	47,411	47,322	46,796	46,140	45,566	270,840	54,710	54,707	54,523	53,915	52,985
50-54	220,885	42,356	43,438	44,313	45,197	45,581	255,813	49,517	50,442	51,197	51,893	52,764
55-59	173,535	31,391	32,782	34,755	36,543	38,064	213,351	39,539	40,788	42,602	44,455	45,967
60-64	130,318	24,599	25,648	25,922	26,582	27,567	173,375	32,749	34,335	34,754	35,351	36,186
65-69	93,682	17,424	17,821	18,766	19,438	20,233	130,064	24,152	24,541	25,943	27,071	28,357
70-74	66,008	12,525	12,740	13,089	13,590	14,064	99,563	18,831	19,229	19,819	20,565	21,119
75-79	44,813	8,394	8,730	8,935	9,269	9,485	73,813	13,965	14,460	14,677	15,129	15,582
80-84	27,497	5,132	5,305	5,548	5,649	5,863	50,795	9,585	9,832	10,103	10,446	10,829
85+	19,527	3,477	3,666	3,909	4,134	4,341	48,829	9,054	9,348	9,777	10,100	10,550

Asian or Pacific Islander

	Male						Female					
	2010-2014	2010	2011	2012	2013	2014	2010-2014	2010	2011	2012	2013	2014
<1	28,373	5,630	5,771	5,730	5,765	5,477	26,908	5,427	5,414	5,425	5,436	5,206
01-04	119,149	23,219	23,441	23,798	24,090	24,601	116,005	22,889	23,246	23,357	23,185	23,328
05-09	147,675	28,393	28,904	29,711	30,215	30,452	145,012	27,947	28,393	29,070	29,649	29,953
10-14	136,238	26,015	26,638	27,048	27,811	28,726	134,602	25,617	26,116	26,703	27,617	28,549
15-19	126,665	24,463	24,969	25,425	25,707	26,101	120,140	22,803	23,573	24,135	24,600	25,029
20-24	120,916	22,929	23,304	23,992	24,854	25,837	119,788	22,498	23,059	23,750	24,602	25,879
25-29	157,488	30,353	31,480	31,797	31,941	31,917	170,629	33,889	34,210	34,068	34,203	34,259
30-34	182,929	34,822	35,553	36,411	37,642	38,501	201,047	38,601	39,390	40,186	41,141	41,729
35-39	189,208	36,462	37,427	38,154	38,438	38,727	198,620	37,882	39,024	39,882	40,501	41,331
40-44	171,871	31,156	32,740	34,542	35,981	37,452	182,428	33,554	34,865	36,710	38,061	39,238
45-49	149,027	28,620	29,322	29,825	30,285	30,975	159,696	30,368	31,227	31,886	32,580	33,635
50-54	133,438	25,319	25,845	26,362	27,475	28,437	143,959	27,562	28,053	28,577	29,431	30,336
55-59	112,913	20,166	21,502	22,709	23,788	24,748	124,812	22,107	23,586	25,083	26,479	27,557
60-64	89,917	16,446	17,274	17,989	18,736	19,472	100,094	18,326	19,372	19,936	20,776	21,684
65-69	66,646	11,555	12,341	13,277	14,273	15,200	74,619	12,620	13,631	14,973	16,158	17,237
70-74	47,410	8,195	8,823	9,535	10,184	10,673	51,366	8,667	9,373	10,238	11,102	11,986
75-79	29,340	4,587	5,183	5,835	6,500	7,235	33,811	5,604	6,133	6,716	7,350	8,008
80-84	14,300	2,294	2,508	2,825	3,166	3,507	20,204	3,404	3,703	4,043	4,371	4,683
85+	9,689	1,500	1,689	1,920	2,159	2,421	15,828	2,561	2,835	3,143	3,455	3,834

Source: The National Cancer Institute's SEER Program (URL: http://www.seer.cancer.gov/popdata/).

Table A28 (continued). Population Denominators by Race, Age Group and Year.

Hispanic*

	Male						Female					
	2010-2014	2010	2011	2012	2013	2014	2010-2014	2010	2011	2012	2013	2014
<1	77,633	14,762	15,796	15,640	15,448	15,987	74,850	14,038	15,134	15,177	15,093	15,408
01-04	297,453	56,617	57,893	59,548	60,924	62,471	286,482	54,450	55,647	57,216	58,685	60,484
05-09	344,401	65,256	67,181	69,282	70,812	71,870	332,586	62,477	64,573	66,937	68,839	69,760
10-14	322,589	62,082	63,263	64,279	65,704	67,261	307,338	58,966	59,970	61,201	62,637	64,564
15-19	329,916	66,167	66,177	65,612	65,529	66,431	306,919	60,604	61,431	61,115	61,590	62,179
20-24	359,043	70,264	71,247	72,070	72,711	72,751	314,220	60,436	61,656	63,107	64,030	64,991
25-29	361,337	71,787	72,201	72,075	72,317	72,957	320,757	64,339	64,396	63,767	63,824	64,431
30-34	364,421	69,880	71,850	73,398	74,278	75,015	339,778	65,321	67,097	68,602	69,169	69,589
35-39	336,507	64,258	65,556	67,175	68,867	70,651	320,421	61,633	62,434	63,708	65,332	67,314
40-44	311,902	59,463	61,104	62,513	63,699	65,123	307,100	59,006	60,624	61,734	62,505	63,231
45-49	282,868	53,574	55,645	56,856	58,019	58,774	287,973	54,699	56,611	58,014	59,030	59,619
50-54	236,117	42,347	44,714	47,245	49,805	52,006	245,913	45,116	47,126	49,059	51,282	53,330
55-59	173,531	30,599	32,681	34,695	36,733	38,823	193,647	34,257	36,581	38,927	40,878	43,004
60-64	124,962	22,469	23,832	24,914	26,092	27,655	144,535	26,348	27,743	28,635	30,109	31,700
65-69	86,697	14,915	16,090	17,369	18,613	19,710	107,367	18,843	20,090	21,603	22,736	24,095
70-74	57,877	10,587	11,053	11,509	12,076	12,652	77,883	14,154	14,893	15,510	16,394	16,932
75-79	39,009	6,936	7,362	7,805	8,221	8,685	56,273	10,260	10,685	11,193	11,740	12,395
80-84	23,985	4,280	4,550	4,818	5,026	5,311	38,822	6,943	7,372	7,792	8,175	8,540
85+	17,720	2,848	3,186	3,528	3,878	4,280	33,552	5,550	6,145	6,747	7,266	7,844

*Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
Source: The National Cancer Institute's SEER Program (URL: http://www.seer.cancer.gov/popdata/).

Table A29. Age Distribution (%) of Incidence Cases in New Jersey, 2010-2014 All Races, Both Sexes.

Cancer Site	0-19	20-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages	Total Cases
All Sites*	0.9%	2.4%	4.8%	13.4%	23.4%	26.1%	20.0%	9.0%	100%	248,205
Female	0.9%	2.8%	6.4%	15.4%	21.7%	23.3%	19.4%	10.1%	100%	125,381
Male	0.9%	2.0%	3.1%	11.3%	25.1%	29.1%	20.7%	7.8%	100%	122,824
Oral Cavity and Pharynx	0.4%	2.0%	4.8%	17.9%	30.6%	22.7%	15.0%	6.6%	100%	5,412
Esophagus	0.0%	0.3%	1.5%	11.1%	24.4%	30.7%	22.2%	9.8%	100%	2,348
Stomach	0.0%	1.5%	4.2%	11.4%	19.9%	25.1%	24.0%	13.8%	100%	4,074
Colon and Rectum	0.1%	1.3%	3.8%	13.3%	20.4%	23.3%	23.7%	14.1%	100%	21,668
Female	0.1%	1.2%	3.7%	12.2%	17.9%	21.2%	25.5%	18.3%	100%	10,942
Male	0.1%	1.4%	4.0%	14.5%	22.9%	25.4%	21.8%	9.9%	100%	10,726
Colon excluding Rectum	0.1%	1.2%	3.4%	11.4%	18.6%	23.4%	25.8%	16.1%	100%	15,291
Rectum & Rectosigmoid Junction	0.0%	1.7%	4.8%	18.1%	24.7%	22.8%	18.5%	9.4%	100%	6,377
Liver and Intrahepatic Bile Duct	0.7%	0.8%	2.0%	11.0%	34.5%	25.0%	18.5%	7.5%	100%	3,885
Pancreas	0.0%	0.4%	1.5%	8.4%	20.9%	27.5%	26.6%	14.8%	100%	7,115
Larynx	0.0%	0.3%	2.2%	13.3%	26.8%	30.5%	19.7%	7.2%	100%	1,659
Lung and Bronchus	0.0%	0.3%	1.1%	7.4%	20.2%	32.5%	28.3%	10.3%	100%	29,397
Female	0.0%	0.3%	1.1%	7.6%	19.7%	31.7%	28.5%	11.2%	100%	15,017
Male	0.0%	0.3%	1.0%	7.2%	20.7%	33.3%	28.2%	9.4%	100%	14,380
Bones and Joints	24.2%	15.7%	10.1%	11.4%	12.6%	12.0%	9.5%	4.5%	100%	484
Soft Tissue including Heart	7.3%	8.7%	8.3%	14.7%	17.8%	17.6%	16.4%	9.2%	100%	1,777
Melanoma of the Skin	0.4%	4.1%	6.9%	15.4%	21.8%	22.5%	19.7%	9.1%	100%	11,016
Breast (female)	0.0%	1.6%	8.9%	21.9%	24.3%	22.5%	14.6%	6.1%	100%	36,059
Cervix Uteri	0.2%	10.2%	20.5%	23.9%	20.5%	13.1%	8.3%	3.4%	100%	1,901
Corpus and Uterus, NOS	0.0%	1.2%	3.6%	15.5%	33.2%	28.6%	13.5%	4.5%	100%	8,869
Ovary	1.1%	2.4%	6.3%	18.3%	24.6%	22.9%	15.7%	8.7%	100%	3,474
Prostate	0.0%	0.0%	0.6%	10.3%	33.0%	36.6%	15.9%	3.5%	100%	33,199
Testis	4.3%	46.8%	22.6%	16.2%	6.9%	2.0%	1.0%	0.2%	100%	1,255
Urinary Bladder**	0.0%	0.4%	1.2%	6.1%	17.6%	28.3%	30.8%	15.6%	100%	11,976
Kidney and Renal Pelvis	1.1%	1.8%	5.6%	15.8%	26.3%	26.9%	16.1%	6.4%	100%	7,937
Brain and Other Nervous System	11.9%	8.7%	8.1%	13.7%	19.7%	18.1%	14.6%	5.2%	100%	3,374
Thyroid	1.9%	12.9%	19.0%	25.3%	21.6%	12.6%	5.5%	1.2%	100%	9,104
Hodgkin Lymphoma	11.7%	28.3%	14.6%	12.9%	11.9%	10.4%	7.4%	2.8%	100%	1,424
Non-Hodgkin Lymphoma	1.6%	3.6%	5.4%	12.0%	20.1%	24.6%	22.6%	10.1%	100%	10,640
Myeloma	0.1%	0.5%	3.1%	12.1%	22.8%	28.1%	23.4%	10.0%	100%	3,554
Leukemia	7.1%	4.0%	4.4%	10.1%	17.5%	22.7%	22.2%	12.0%	100%	7,531
Lymphocytic Leukemia	10.0%	1.9%	2.8%	10.1%	18.5%	23.5%	21.8%	11.4%	100%	3,879
Acute Lymphocytic Leukemia	53.6%	8.8%	5.5%	8.3%	7.4%	8.1%	7.1%	1.3%	100%	715
Chronic Lymphocytic Leukemia	0.0%	0.3%	1.7%	9.7%	21.2%	27.7%	25.8%	13.6%	100%	2,899
Acute Myeloid Leukemia	4.0%	5.7%	5.3%	9.1%	17.0%	22.6%	24.0%	12.3%	100%	2,136
Acute Monocytic Leukemia	8.3%	1.7%	3.3%	7.5%	21.7%	23.3%	25.0%	9.2%	100%	120
Chronic Myeloid Leukemia	2.2%	7.6%	9.0%	12.9%	16.4%	20.7%	20.7%	10.5%	100%	904
Other Leukemia	6.8%	5.5%	5.0%	9.4%	11.8%	20.9%	19.4%	21.2%	100%	382
Mesothelioma	0.0%	1.2%	1.5%	5.5%	12.0%	27.4%	33.2%	19.2%	100%	599
Kaposi Sarcoma	0.0%	17.8%	14.7%	15.2%	12.0%	13.6%	15.7%	11.0%	100%	191

* Includes all invasive cancers in ICD-O-3 and *in situ* bladder cancers.
**Includes *in situ* cancers.

Table A30. Median Age of Cancer Patients at Diagnosis, New Jersey 2010-2014 By Primary Cancer Site, Race, Hispanic Ethnicity, and Sex.

Cancer Site	All			White			Black		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
All Sites	66	66	67	67	67	68	63	63	64
Oral Cavity and Pharynx	63	65	62	63	66	62	60	61	60
Esophagus	68	71	68	68	72	68	68	70	67
Stomach	70	71	69	71	72	70	67	69	66
Colon and Rectum	69	71	67	71	73	68	65	66	64
Colon excluding Rectum	71	74	69	73	75	70	66	67	65
Rectum and Rectosigmoid Junction	65	66	64	66	67	65	61	62	61
Liver and Intrahepatic Bile Duct	65	69	63	66	70	65	61	63	60
Pancreas	71	74	69	72	75	70	67	69	64
Larynx	67	65	67	67	66	68	63	63	64
Lung and Bronchus	71	71	71	71	72	71	68	68	68
Bones and Joints	45	46	43	48	49	46	35	44	25
Soft Tissue including Heart	60	60	61	63	62	63	53	53	54
Melanoma of the Skin	65	62	67	65	62	67	61	64	58
Breast	62	62	67	63	63	68	60	60	65
Cervix Uteri	52	52	*	52	52	*	56	56	*
Corpus and Uterus, NOS	64	64	*	64	64	*	64	64	*
Ovary	63	63	*	64	64	*	62	62	*
Prostate	66	*	66	66	*	66	64	*	64
Testis	34	*	34	34	*	34	41	*	41
Urinary Bladder^^	73	74	73	74	74	74	70	72	70
Kidney and Renal Pelvis	64	66	63	65	67	64	62	64	61
Brain and Other Nervous System	58	59	58	60	61	59	50	49	50
Thyroid	51	50	54	52	51	55	51	50	56
Hodgkin Lymphoma	41	38	44	42	40	45	38	37	41
Non-Hodgkin Lymphoma	67	68	66	68	70	67	60	62	58
Myeloma	69	69	68	70	70	69	65	66	65
Leukemia	68	69	66	69	70	67	63	64	62
Lymphocytic Leukemia	67	69	66	68	70	67	65	66	64
Acute Lymphocytic Leukemia	16	14	17	20	20	20	10	10	9
Chronic Lymphocytic Leukemia	71	73	69	71	73	70	69	72	67
Acute Myeloid Leukemia	69	70	68	70	71	68	62	60	63
Acute Monocytic Leukemia	68	70	65	68	70	65	72	^	^
Chronic Myeloid Leukemia	65	65	65	67	68	67	59	54	62
Other Leukemia	70	72	68	72	74	72	55	65	41
Mesothelioma	75	75	75	76	76	76	67	63	68
Kaposi Sarcoma	56	77	53	66	81	60	44	43	45

* Non-applicable gender.
^ Data are suppressed for fewer than 5 cases to ensure confidentiality and statistical reliability.
^^Includes *in situ* cancers.

Table A30 (continued). Median Age of Cancer Patients at Diagnosis, New Jersey 2010-2014 By Primary Cancer Site, Race, Hispanic Ethnicity, and Sex.

Cancer Site	Asian/Pacific Islander			Hispanic**		
	Total	Female	Male	Total	Female	Male
All Sites	61	58	64	61	59	63
Oral Cavity and Pharynx	58	59	58	61	59	62
Esophagus	69	72	67	68	70	68
Stomach	66	63	67	64	63	64
Colon and Rectum	63	64	63	64	65	63
Colon excluding Rectum	65	66	65	65	67	64
Rectum and Rectosigmoid Junction	60	62	60	61	61	61
Liver and Intrahepatic Bile Duct	65	69	64	63	67	61
Pancreas	68	67	70	68	70	66
Larynx	69	75	67	65	66	65
Lung and Bronchus	70	69	70	69	68	69
Bones and Joints	29	33	29	22	24	21
Soft Tissue including Heart	50	49	52	46	46	48
Melanoma of the Skin	68	64	72	56	52	58
Breast	55	55	67	56	56	63
Cervix Uteri	51	51	*	47	47	*
Corpus and Uterus, NOS	58	58	*	59	59	*
Ovary	55	55	*	59	59	*
Prostate	66	*	66	66	*	66
Testis	29	*	29	29	*	29
Urinary Bladder^^	70	69	70	71	71	71
Kidney and Renal Pelvis	59	61	57	58	58	57
Brain and Other Nervous System	45	47	45	46	48	45
Thyroid	45	44	46	47	46	51
Hodgkin Lymphoma	29	28	33	32	31	34
Non-Hodgkin Lymphoma	62	62	62	60	63	58
Myeloma	65	63	66	65	67	63
Leukemia	55	51	57	55	57	54
Lymphocytic Leukemia	43	10	51	53	52	53
Acute Lymphocytic Leukemia	10	5	15	15	10	18
Chronic Lymphocytic Leukemia	70	75	67	71	73	70
Acute Myeloid Leukemia	63	69	54	58	62	54
Acute Monocytic Leukemia	64	^	^	66	67	65
Chronic Myeloid Leukemia	50	49	55	58	58	58
Other Leukemia	60	41	63	50	51	50
Mesothelioma	67	68	67	^	59	67
Kaposi Sarcoma	58	76	48	^	78	45

* Non-applicable gender.
**Persons of Hispanic ethnicity may be of any race or combination of races. The categories of race and ethnicity are not mutually exclusive.
^ Data are suppressed for fewer than 5 cases to ensure confidentiality and statistical reliability.
^^Includes *in situ* cancers.