

A Publication of the New Jersey State Cancer Registry

# ANNUAL REPORT

## Cancer Incidence and Mortality in New Jersey, 2009-2013



Chris Christie, *Governor*  
Kim Guadagno, *Lt. Governor*



Cathleen D. Bennett  
*Commissioner*

# Cancer Incidence and Mortality in New Jersey, 2009 - 2013

Prepared by:

Karen Pawlish, ScD, MPH  
Jie Li, MPH  
Stasia S. Burger, MS, CTR  
Sumathy Vasanthan, MS  
Pamela K. Agovino, MPH  
Gerald Harris, PhD  
Rudmila Chowdhury, BS, CTR  
Nahrin Ahmed, MA  
Natalia Herman, MPH  
Manisha Narang, MPH  
Lisa E. Paddock, PhD, MPH  
Stephanie Hill, MPH, CTR  
Antoinette Stroup, PhD

Cancer Epidemiology Services  
Public Health Services Branch  
New Jersey Department of Health

Christina G. Tan, MD, MPH  
State Epidemiologist/Assistant Commissioner

Cathleen D. Bennett  
Commissioner

Chris Christie, Governor  
Kim Guadagno, Lt. Governor

Cancer Epidemiology Services  
New Jersey Department of Health  
PO Box 369  
Trenton, NJ 08625-0369  
(609) 633-0500  
<http://nj.gov/health/ces/index.shtml>

September 2016

**\*The authors dedicate this report to the memory of our colleague  
XIAOLING NIU, M.S.,  
who was the lead author of our annual reports for many years. We appreciate her  
dedication, statistical expertise, and service to the New Jersey Department of Health and  
the New Jersey State Cancer Registry.**

## ACKNOWLEDGEMENTS

The following staff of the New Jersey State Cancer Registry and the Cancer Research Program of the Cancer Epidemiology Services, the Cancer Surveillance Unit of the Consumer, Environmental and Occupational Health Services and the Rutgers Cancer Institute of New Jersey were involved in the collection, quality assurance and preparation of the data on incident cases of cancer in New Jersey:

Adrian Botchway, CTR	John Murphy, CTR
Maryanne Burhenne	Xiaoling Niu*, MS
Joan Case	Cynthia Nunez
Amanda Crosbie, MS	Maithili Patnaik, CTR
Patricia Davis	Rhena Powell
Thomas English, CTR	Gladys Pyatt-Dickson, CTR
Susan German, MPH	Lisa Roche, MPH, PhD
Sara Ghauri	Maria Rolon
Raj Gona, MPH, MA	Katie Roman, CTR
Essam Hanani, MD, CTR	Maureen Romero
Denise Hansen, CTR	Attia Sarwar
Marilyn Hansen, CTR	Antonio Savillo, MD, CTR
Donna Horn, CTR	Suzanne Schwartz, MS, CTR
Yvette Humphries	Anasuya Shukla
Nicole Jackson	Takesha Smith
Jamal Johnson, CTR	Heather Stabinsky, MS.Ed, CTR
Linda Johnson, CTR	Hannah Stanko, CTR
Catherine Karnicky, CTR	Neeru Suri
Harrine Katz, CTR	Gabrielle Taylor
Fran Krol, CTR	Michael Tumblety
Mireille Lemieux, CTR	Renu Verma
Henry Lewis, MPH	Annette Werts
Ilsia Martin, MS	Jessica Zeppetelli
Kevin Masterson, CTR	

We also acknowledge New Jersey hospitals, laboratories, physicians, dentists, and the states of Connecticut, Delaware, Maryland, New York, North Carolina, and Pennsylvania who reported cancer cases to the New Jersey State Cancer Registry, and the state cancer registries enrolled in the North American Association of Central Cancer Registries (NAACCR) interstate data exchange program.

Cancer Epidemiology Services, including the New Jersey State Cancer Registry, receives support from the Surveillance, Epidemiology, and End Results Program of the National Cancer Institute under contract HHSN 261201300021I and control No. N01PC-2013-00021, the National Program of Cancer Registries, Centers for Disease Control and Prevention under cooperative agreement 5U58DP003931-02, the State of New Jersey, and the Rutgers Cancer Institute of New Jersey.

**TABLE OF CONTENTS**

INTRODUCTION ..... 1

NEW CANCER CASES AND DEATHS IN NEW JERSEY IN 2013..... 2

CANCER INCIDENCE, NEW JERSEY 2009-2013 ..... 4

CANCER INCIDENCE IN NEW JERSEY AND U.S. 2009-2013 ..... 10

CANCER MORTALITY, NEW JERSEY 2009-2013 ..... 11

CANCER MORTALITY IN NEW JERSEY AND U.S. 2009-2013 ..... 14

TECHNICAL NOTES ..... 15

REFERENCES ..... 23

FIGURES AND TABLES

Figure 1. Cancer Incidence Rates in New Jersey Women by Race/Ethnicity, 2009-2013. Five Most Common Cancers..... 5

Figure 2. Cancer Incidence Rates in New Jersey Men by Race/Ethnicity, 2009-2013. Five Most Common Cancers..... 6

Figure 3. Cancer Mortality Rates in New Jersey Women by Race/Ethnicity, 2009-2013. Five Cancers with Highest Mortality Rates ..... 12

Figure 4. Cancer Mortality Rates in New Jersey Men by Race/Ethnicity, 2009-2013. Five Cancers with Highest Mortality Rates ..... 13

Table 1. Ten Most Common Types of Cancer Incidence among New Jersey Females, 2013 ..... 2

Table 2. Ten Most Common Types of Cancer Mortality among New Jersey Females, 2013 ..... 2

Table 3. Ten Most Common Types of Cancer Incidence among New Jersey Males, 2013 ..... 3

Table 4. Ten Most Common Types of Cancer Mortality among New Jersey Males, 2013 ..... 3

Table 5. Ten Most Common Types of Invasive Cancer Diagnosed Among New Jersey Females by Race and Ethnicity, 2009-2013..... 7

Table 6. Ten Most Common Types of Invasive Cancer Diagnosed Among New Jersey Males by Race and Ethnicity, 2009-2013..... 8

Table A1. Age-adjusted Incidence Rates, Females, All Races Combined ..... 26

Table A2. Age-adjusted Incidence Rates, Males, All Races Combined..... 28

Table A3. Age-adjusted Incidence Rates, White Females..... 30

Table A4. Age-adjusted Incidence Rates, White Males ..... 32

Table A5. Age-adjusted Incidence Rates, Black Females ..... 34

Table A6. Age-adjusted Incidence Rates, Black Males..... 36

Table A7. Age-adjusted Incidence Rates, Hispanic Females ..... 38

Table A8. Age-adjusted Incidence Rates, Hispanic Males..... 40

Table A9. Age-adjusted Incidence Rates, Asian and Pacific Islander Females and Males, 2009-2013 combined ..... 42

Table A10. Benign and Borderline Brain Tumor Incidence Rates, New Jersey, 2009-2013 ..... 44

Table A11. Myelodysplastic Syndromes and Chronic Myeloproliferative Disorders Incidence Rates, New Jersey, 2009-2013..... 45

Table A12. Distribution of Stage at Diagnosis for Selected Cancer Sites in New Jersey, Females, 2009-2013 ..... 46

Table A13. Distribution of Stage at Diagnosis for Selected Cancer Sites in New Jersey, Males, 2009-2013 ..... 47

Table A14. Comparative Incidence Rates, New Jersey and U.S., Females, 2009-2013 ..... 48

Table A15. Comparative Incidence Rates, New Jersey and U.S., Males, 2009-2013 ..... 48

Table A16. Age-adjusted Mortality Rates, Females, All Races Combined.....	50
Table A17. Age-adjusted Mortality Rates, Males, All Races Combined .....	52
Table A18. Age-adjusted Mortality Rates, White Females .....	54
Table A19. Age-adjusted Mortality Rates, White Males.....	56
Table A20. Age-adjusted Mortality Rates, Black Females.....	58
Table A21. Age-adjusted Mortality Rates, Black Males .....	60
Table A22. Age-adjusted Mortality Rates, Hispanic Females and Males, 2009-2013 Combined .....	62
Table A23. Age-adjusted Mortality Rates, Asian and Pacific Islander Females and Males, 2009-2013 Combined.....	64
Table A24. Comparative Mortality Rates, New Jersey and U.S., Females, 2009-2013.....	66
Table A25. Comparative Mortality Rates, New Jersey and U.S., Males, 2009-2013 .....	66
Table A26. Population Denominators by Race, Age Group and Year .....	68
Table A27. Age Distribution (%) of Incidence Cases in New Jersey, 2009-2013, All Races, Both Sexes.....	71
Table A28. Median Age of Cancer Patients at Diagnosis, New Jersey 2009-2013, By Primary Cancer Site, Race and Sex.....	72

## INTRODUCTION

This report presents statewide, age-adjusted incidence rates and counts for all cancers diagnosed among New Jersey residents during the period 2009-2013.

The primary goal of this report is to provide 2009-2013 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 and Pacific Islander men, and Asian and 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.

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:

- *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*
- *Childhood Cancer in New Jersey, 1979-2005*
- *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://nj.gov/health/ces/cancer-rates.shtml>. 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*, <http://www.naaccr.org/DataandPublications/CINAPubs.aspx>
- 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 2013**

A total of 49,980 cases of invasive cancer diagnosed in 2013 among New Jersey residents were reported to the New Jersey State Cancer Registry (NJSCR), which is slightly higher compared to 49,272 reported cases diagnosed in 2012. A total of 16,315 deaths occurred in 2013 for which cancer was designated on the death certificate as the underlying cause, a slight decline compared to 16,483 cancer deaths in 2012. The most common cancer diagnosed among New Jersey women in 2013 was breast cancer, but lung and bronchus cancer was the leading cause of cancer related death (Tables 1-2). For NJ women, colon and rectum was the third most common cancer diagnosed in 2013, as well as the third leading cause of cancer death.

**Table 1. Ten Most Common Types of Cancer Incidence among New Jersey Females, 2013\***

Rank	Cancer Site	Rate <sup>^</sup>	Count
	All Sites	458.9	25,698
1	Breast	135.4	7,479
2	Lung and Bronchus	53.2	3,082
3	Colon and Rectum	37.1	2,166
4	Corpus and Uterus, NOS	32.0	1,875
5	Thyroid	29.3	1,435
6	Non-Hodgkin Lymphoma	17.8	1,000
7	Melanoma of the Skin	17.5	950
8	Pancreas	12.2	725
9	Ovary	11.2	640
10	Urinary Bladder	10.4	619

<sup>^</sup>Rates are per 100,000 and age-adjusted to the 2000 US population standard.  
 \*2013 data are preliminary.

**Table 2. Ten Most Common Types of Cancer Mortality among New Jersey Females, 2013**

Rank	Cancer Site	Rate <sup>^</sup>	Count
	All Sites	137.2	8,197
1	Lung and Bronchus	32.8	1,939
2	Breast	23.0	1,356
3	Colon and Rectum	12.4	769
4	Pancreas	10.0	604
5	Ovary	6.7	391
6	Corpus and Uterus, NOS	5.7	336
7	Leukemia	5.1	301
8	Non-Hodgkin Lymphoma	4.1	247
9	Brain and Other Nervous System	2.9	157
10	Urinary Bladder	2.5	155

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

The most common cancer diagnosed among New Jersey men in 2013 was prostate cancer, but lung cancer was the leading cause of cancer related death, followed by colon and rectum cancer (Tables 3 and 4). Prostate cancer was the third leading cause of cancer death in New Jersey men in 2013.

**Table 3. Ten Most Common Types of Cancer Incidence among New Jersey Males, 2013\***

<b>Rank</b>	<b>Cancer Site</b>	<b>Rate<sup>^</sup></b>	<b>Count</b>
	All Sites	525.3	24,282
1	Prostate	123.5	6,079
2	Lung and Bronchus	64.1	2,878
3	Colon and Rectum	47.8	2,177
4	Urinary Bladder	40.7	1,779
5	Melanoma of the Skin	29.0	1,309
6	Non-Hodgkin Lymphoma	25.2	1,143
7	Kidney and Renal Pelvis	22.3	1,060
8	Leukemia	18.7	836
9	Oral Cavity and Pharynx	16.2	781
10	Pancreas	16.4	751

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

\*2013 data are preliminary.

**Table 4. Ten Most Common Types of Cancer Mortality among New Jersey Males, 2013**

<b>Rank</b>	<b>Cancer Site</b>	<b>Rate<sup>^</sup></b>	<b>Count</b>
	All Sites	185.1	8,118
1	Lung and Bronchus	46.8	2,067
2	Colon and Rectum	17.6	773
3	Prostate	17.6	728
4	Pancreas	13.7	615
5	Urinary Bladder	8.2	343
6	Leukemia	8.0	342
7	Esophagus	6.5	301
8	Liver	6.3	300
9	Non-Hodgkin Lymphoma	7.0	297
10	Stomach	5.3	228

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

## CANCER INCIDENCE, NEW JERSEY 2009-2013

### SUMMARY

During the period 2009-2013, a total of 247,159 cases of invasive cancer were diagnosed among New Jersey residents, 50.1% among women and 49.9% among men, 83.0% among whites, 11.2% among blacks, and 3.7% among Asians and Pacific Islanders (API). Hispanics of any race accounted for 8.6% of the total cancer cases.

Primary cancers with the ten highest age-adjusted incidence rates during 2009-2013 in New Jersey were breast, lung, colon and rectum, endometrial (corpus and uterus, NOS), thyroid, non-Hodgkin lymphoma, melanoma of the skin, ovary, pancreas, and urinary bladder for women; and prostate, lung, colon and rectum, urinary bladder, melanoma of the skin, non-Hodgkin lymphoma, kidney and renal pelvis, leukemia, pancreas and oral cavity and pharynx for men. These accounted for 78% of all incident cancers (Tables A1 and A2 in the Appendix).

### GENDER

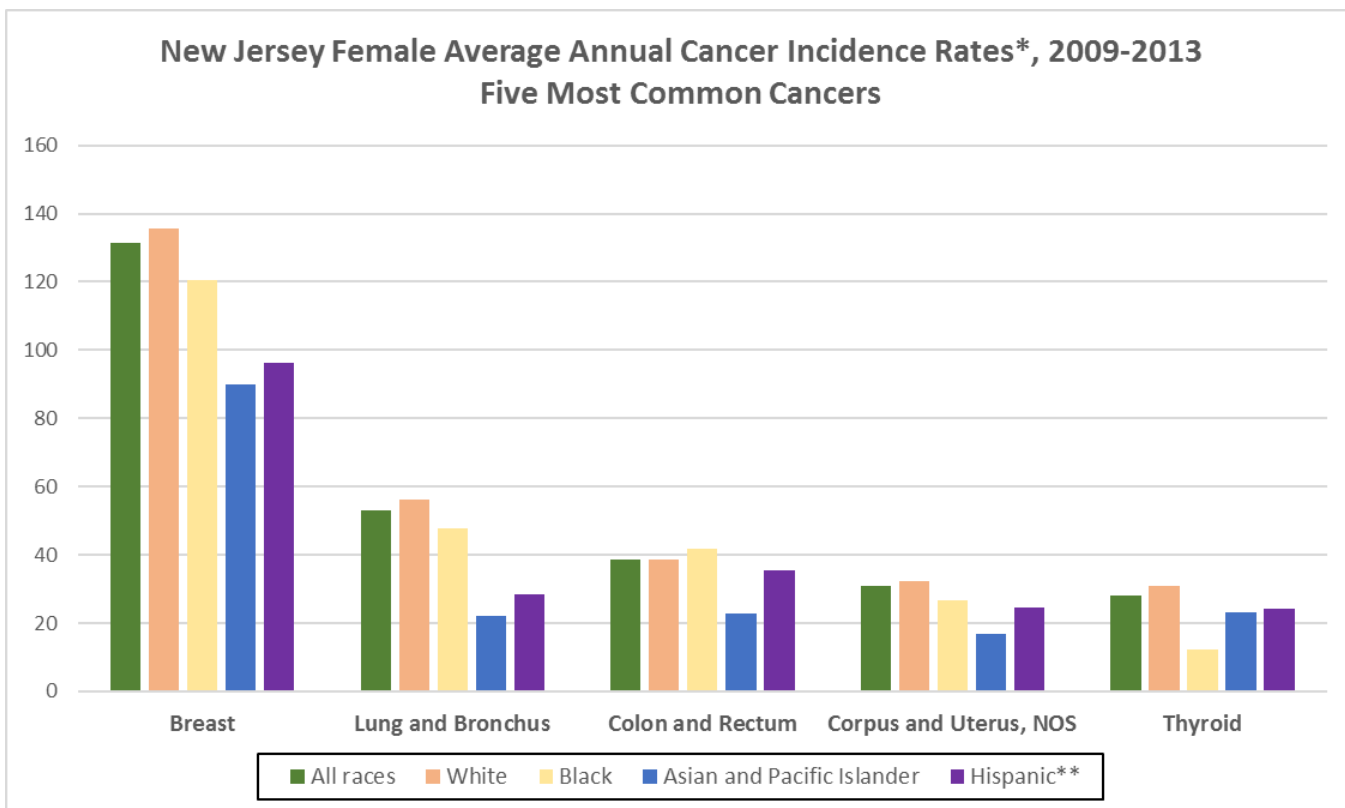
The age-adjusted total cancer incidence rates for all New Jersey women remained fairly stable during 2009-2013. The average annual incidence rate for New Jersey women was 452.8 per 100,000 women during 2009-2013. Incidence rates for some of the most common cancers, including breast, lung, and corpus and uterus, NOS, remained stable while decreasing rates were noted for colon and rectum and cervical cancers among women (Table A1).

In New Jersey, the average age-adjusted total cancer incidence rate for men was 555.1 per 100,000 for the years 2009-2013 combined, with decreasing rates during the five-year period (Table A2). Lung and colon and rectum cancer incidence rates among all men continued to decrease during this time period. New Jersey prostate cancer incidence rates decreased after 2011. A similar decrease in prostate cancer incidence was observed in other U.S. states (Howlader et al., 2016). Incidence rates for bladder cancer and melanoma remained fairly stable for men during 2009-2013 (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 2009-2013 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, Asians and Pacific Islanders, 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-A10 in the Appendix.

**Figure 1. Cancer Incidence Rates\* in New Jersey Women by Race/Ethnicity, 2009-2013. Five Most Common Cancers.**

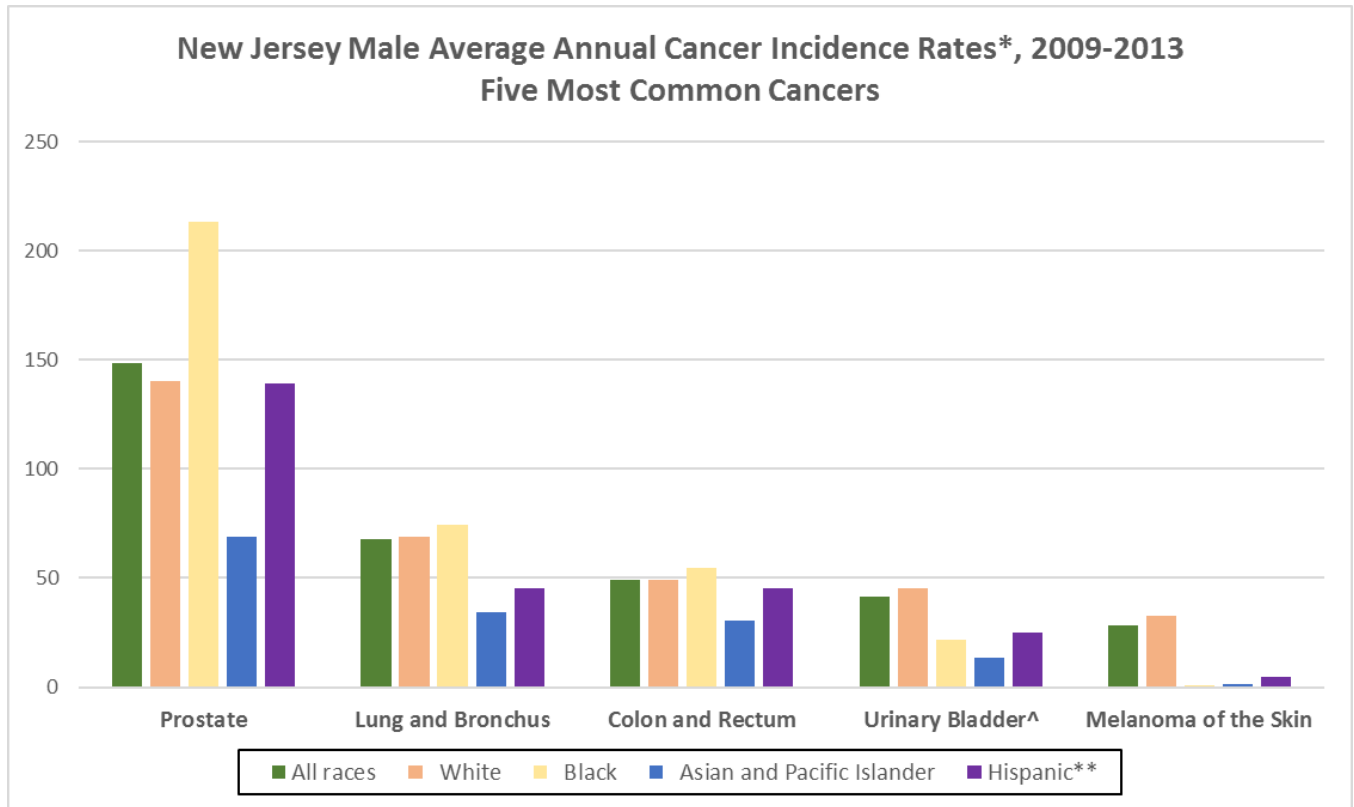


\*Average annual rates are per 100,000 and age-adjusted to the 2000 US population standard.

\*\*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 2009-2013. White women had the highest breast cancer incidence rates, black women had the second highest rates, and Asian/Pacific Islander (API) women had the lowest breast cancer rates.
- 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, while API women had the lowest rates.
- New Jersey white women had the highest endometrial 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 2009-2013, New Jersey Hispanic women had lower incidence rates of breast, lung, colon and rectum, endometrial, and thyroid cancers than the general New Jersey female population rates.

**Figure 2. Cancer Incidence Rates\* in New Jersey Men by Race/Ethnicity, 2009-2013. 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 2009-2013. Black men had the highest prostate cancer incidence rates, with rates approximately 1.5 times higher than rates in white or Hispanic men, and three times higher in Asian/Pacific Islander (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 period, and API men had the lowest rates.
- New Jersey white men had much higher melanoma incidence rates as compared to the other racial/ethnic groups.
- New Jersey Hispanic men had lower incidence rates of prostate, lung, colon and rectum, and bladders cancers and melanoma, during 2009-2013, 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, 2009-2013.**

Rank	Asian/ Pacific Islander	Black	White	Hispanic*
1	Breast (1,803)	Breast (4,267)	Breast (29,006)	Breast (3,097)
2	Thyroid (499)	Lung and Bronchus (1,610)	Lung and Bronchus (12,942)	Colon and Rectum (976)
3	Colon and Rectum (394)	Colon and Rectum (1,404)	Colon and Rectum (9,125)	Thyroid (901)
4	Lung and Bronchus (357)	Corpus and Uterus, NOS (947)	Corpus and Uterus, NOS (7,264)	Corpus and Uterus, NOS (764)
5	Corpus and Uterus, NOS (345)	Pancreas (490)	Thyroid (5,603)	Lung and Bronchus (756)
6	Ovary (180)	Thyroid (444)	Melanoma of the skin (4,254)	Non-Hodgkin Lymphoma (497)
7	Non-Hodgkin Lymphoma (168)	Non-Hodgkin Lymphoma (421)	Non-Hodgkin Lymphoma (4,214)	Cervix Uteri (362)
8	Stomach (114)	Kidney and Renal Pelvis (393)	Ovary (2,900)	Leukemia (325)
9	Pancreas (113)	Myeloma (378)	Pancreas (2,897)	Pancreas (304)^
10	Leukemia (100)	Cervix Uteri (375)	Urinary Bladder** (2,810)	Kidney and Renal Pelvis (304)^

This table is color-coded by cancer type. The numbers of each type of cancer diagnosed during 2009-2013 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*.

^Pancreatic and kidney cancers tied for the 9<sup>th</sup> most common type of cancer diagnosed in Hispanic women.

For the diagnosis years 2009-2013:

- Breast cancer is the most common cancer among New Jersey Asian/Pacific Islander (API), black, white, and Hispanic women.
- Lung and bronchus cancer is the second most common cancer among black and white women.
- Thyroid cancer is the second most common cancer among API women.
- Colon and rectum cancer is the second most common cancer among Hispanic women and the third most common cancer among API, black and white women.

**Table 6. Ten Most Common Types of Invasive Cancer Diagnosed Among New Jersey Males by Race and Ethnicity, 2009-2013.**

Rank	Asian/ Pacific Islander	Black	White	Hispanic*
1	Prostate (1,033)	Prostate (5,348)	Prostate (26,738)	Prostate (3,036)
2	Colon and Rectum (461)	Lung and Bronchus (1,674)	Lung and Bronchus (12,340)	Colon and Rectum (1,019)
3	Lung and Bronchus (457)	Colon and Rectum (1,278)	Colon and Rectum (8,880)	Lung and Bronchus (884)
4	Non-Hodgkin Lymphoma (206)	Kidney and Renal Pelvis (603)	Urinary Bladder** (7,961)	Non-Hodgkin Lymphoma (601)
5	Oral Cavity and Pharynx (205)	Urinary Bladder** (451)	Melanoma of the skin (5,895)	Kidney and Renal Pelvis (468)
6	Liver (203)	Non-Hodgkin Lymphoma (440)	Non-Hodgkin Lymphoma (4,751)	Urinary Bladder** (460)
7	Stomach (184)	Pancreas (412)	Kidney and Renal Pelvis (4,168)	Leukemia (403)
8	Urinary Bladder** (166)	Liver (388)	Leukemia (3,379)	Liver (359)
9	Leukemia (152)	Myeloma (340)	Oral Cavity and Pharynx (3,048)	Stomach (318)
10	Thyroid (147)	Leukemia (326)	Pancreas (2,858)	Oral Cavity and Pharynx (267)

This table is color-coded by cancer type. The numbers of each type of cancer diagnosed during 2009-2013 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 2009-2013:

- Prostate cancer is the most common cancer diagnosed among New Jersey men, as well as men of all four racial and ethnic groups presented.
- Lung and bronchus cancer is the second most common cancer diagnosed among black and white men and the third most common cancer among Asian/Pacific Islander (API) and Hispanic men.
- Colon and rectum cancer is the second most common cancer among API and Hispanic men and the third most common cancer among black and white men.
- Kidney and renal pelvis cancer is the fourth most common cancer among black men, while non-Hodgkin lymphoma is the fourth most common cancer among API and Hispanic men.

The total cancer incidence rate, as well as rates of breast, lung, endometrial, 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 2011-2013 (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 bladder cancer, melanoma, and non-Hodgkin lymphoma incidence rates compared to white men. Black men had higher lung cancer incidence rates than white men before 2013, and rates were similar in 2013. Thyroid cancer rates for white men were more than double the rates for black men, 10.8 per 100,000 versus 4.4, 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, and bladder cancer, and melanoma of the skin (Tables A7 and A8). Hispanic men had lower prostate cancer rates than the general New Jersey male population until 2013, when rates became 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 and Pacific Islanders continue to have much lower cancer incidence rates compared to the general population for all cancers combined and most common types of cancer such as lung, colorectal, female breast and prostate. Stomach, liver and nasopharyngeal cancer incidence rates were higher for Asians and Pacific Islanders than in the general population (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., 2016). New Jersey incidence data for 2009-2013 showed women had higher rates compared to men for these types of tumors. Women also had higher benign intracranial meningioma incidence rates compared to men during this same time period (Table A10).

## **MYELOYDYSPLASTIC 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 2009-2013, the age-adjusted MDS incidence rate was 7.9 per 100,000 in men and 4.2 per 100,000 in women, and the CMD



incidence rate was 2.9 per 100,000 in men and 2.4 per 100,000 in women. White men had higher incidence of MDS compared to any other racial group/ethnicity (Table A11).

## STAGE

Cancers diagnosed at an early stage (*in situ* and local) have better treatment outcomes and better survival. For screenable cancers among New Jersey women diagnosed during 2009-2013, 91% of melanomas of the skin, 71% of breast cancers, 41% 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 A12). Among New Jersey men during this same time period, 89% of melanomas of the skin, 82% of prostate cancers, 41% of colorectal cancers, and 17% of lung cancers were diagnosed at an early stage (Table A13). 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 and melanoma 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 melanoma compared to the New Jersey male population and a higher percentage of early-stage diagnoses for prostate cancer (Tables A12 and A13).

## CANCER INCIDENCE IN NEW JERSEY AND 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 A14 and A15). New Jersey black women had incidence rates for all cancers combined 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 women and 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 bladder cancer rates than U.S. API men, while New Jersey API women had lower rates of endometrial cancer (Tables A14 and A15).

**CANCER MORTALITY, NEW JERSEY 2009-2013**

**SUMMARY**

During the five-year time period 2009-2013, a total of 82,861 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 2009-2013 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 49.3% and 45.0% of the total cancer deaths for women and men, respectively. Overall age-adjusted cancer mortality rates for women and men in New Jersey continued to decline (Table A16 and A17), reflecting the trends seen in U.S. mortality data (Howlader et al., 2016).

**GENDER**

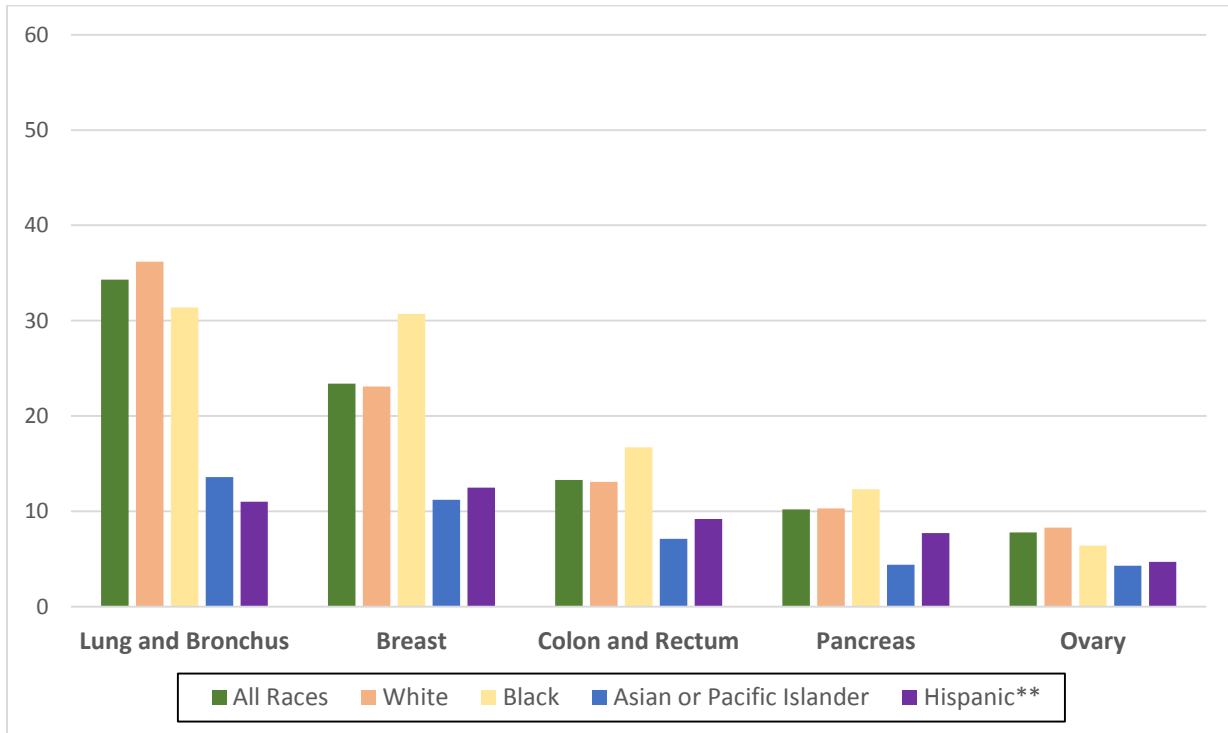
New Jersey all sites cancer mortality rates continued to be higher for men than for women during 2009-2013 (194.7 per 100,000 versus 143.7 per 100,000) (Tables A16 and A17). This pattern was observed among all races and ethnicity groups.

**RACE AND ETHNICITY**

Cancer mortality rates, including all sites, colorectal, prostate, and female breast, for both black men and women continued to be higher compared to white men and women with a few exceptions. Black men also had higher lung cancer mortality rates but lower lymphoma, leukemia, melanoma, bladder and brain cancer mortality rates compared to white men. Black women had lower lymphoma, leukemia, lung and brain cancer mortality rates than white women (Tables A18-A21). 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 A22). New Jersey Asians and Pacific Islanders 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. However, stomach cancer mortality rates for API women were higher than in the New Jersey female general population (Table A23).

The average annual cancer mortality rates by race and ethnicity for the five cancers with the highest rates in New Jersey women and men during 2009-2013 are presented below in Figures 3 and 4. Detailed cancer mortality rates for whites, blacks, Asians and Pacific Islanders, and Hispanics, as well as men and women of all races combined, are presented in Tables A16-A23 in the Appendix.

**Figure 3. Cancer Mortality Rates\* in New Jersey Women by Race/Ethnicity, 2009-2013. Five Cancers with Highest Mortality Rates.**

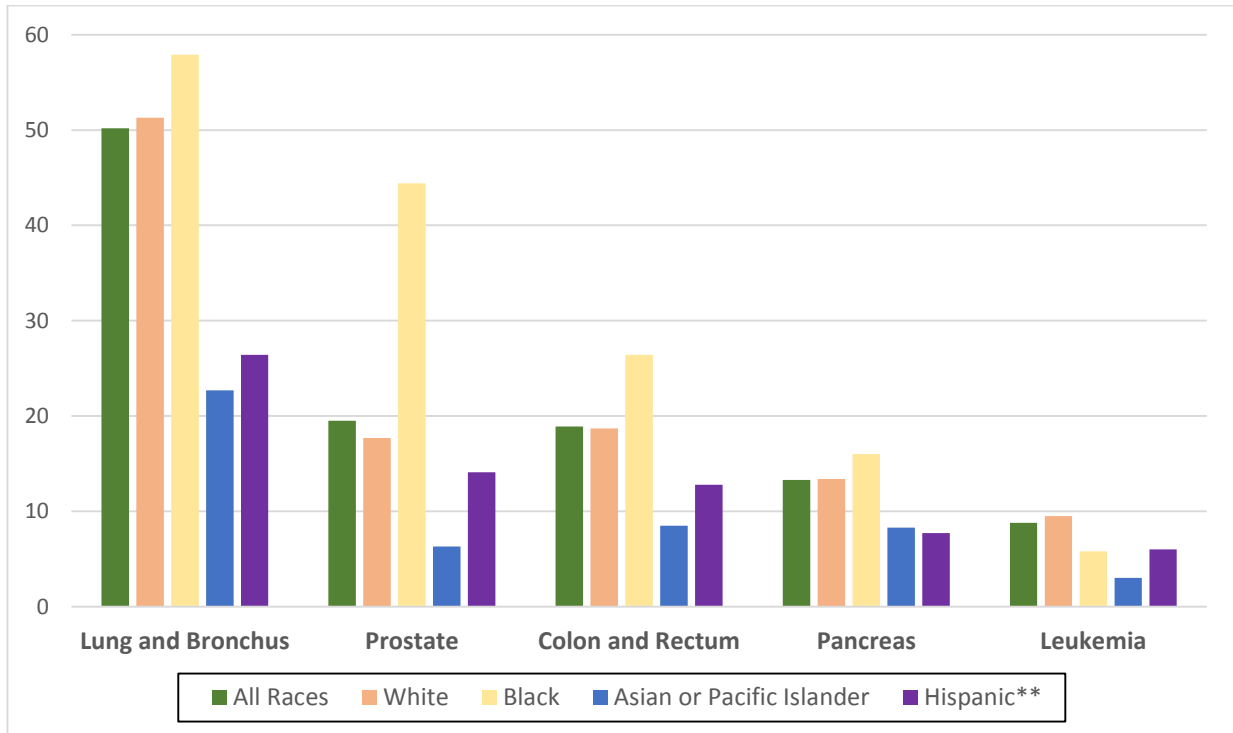


\*Average annual rates are per 100,000 and age-adjusted to the 2000 US population standard.

\*\*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 New Jersey women during 2009-2013, and in New Jersey white, black, and Asian/Pacific Islander (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 2009-2013, 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 Men by Race/Ethnicity, 2009-2013. 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 New Jersey men during 2009-2013, as well as in New Jersey white, black, Asian/Pacific Islander (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 2009-2013, 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 U.S. 2009-2013**

Comparing New Jersey and U.S. age-adjusted mortality rates for women during 2009-2013, New Jersey cancer mortality rates for all cancers were slightly higher for all women than the corresponding rates for the U.S. 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 A24 and A25).

## 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 incidence 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, diagnosing physicians, dentists, and independent clinical laboratories. Every hospital in New Jersey reports cancer cases electronically. In addition, the NJSCR maintains reporting agreements with New York, Pennsylvania, and other surrounding states, as well as other state cancer registries that are enrolled in the North American Association of Central Cancer Registries (NAACCR) interstate data exchange program 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)*, 3<sup>rd</sup> 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**

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 the highest level 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.

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 2013 data, the completeness of case reporting was estimated as 99.45 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 2013, may be considered preliminary.

Other 2013 cancer incidence data quality indicators measured as follows:

- percent death-certificate-only cases: 1.03%
- 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: 10
- number of cases with unknown gender: 3

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' publication.

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.

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, several 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. 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 electronic health records based on the Meaningful Use standards upon the implementation phase for cancer reporting.

One 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. 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 2013. The impact of missing VA hospital cases in New Jersey could result in underestimates of cancer incidence rates for men in 2009 through 2013. NJSCR is exploring the possibility of receiving electronic VA cases through a secure file transfer source.



## DATA SOURCES AND SPECIFICATIONS

### INCIDENCE DATA

New Jersey cancer incidence data were taken from the January 2016 analytic file of the NJSCR. All the counts and rates were tabulated using SEER\*Stat Version 8.2.1 (<http://www.seer.cancer.gov/seerstat/>), a statistical software package distributed by the NCI. U.S. cancer incidence data were obtained from NAACCR's publication, *Cancer in North America 2009-2013* (<http://www.naacr.org/DataandPublications/CINAPubs.aspx>).

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\\_dwhome/index.html](http://seer.cancer.gov/siterecode/icdo3_dwhome/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 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 2009-2013 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, 3<sup>rd</sup> edition (ICD-O-3)*. Cases included in the rate tables are all invasive cancers in ICD-O-3 except 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 before 2013, 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. The “All Sites” rates are higher than in the previous report tables published before 2013 because of the inclusion of these additional types of cancer. MDS and CMD incidence rates are presented separately in Table A11 in the Appendix. These conventions are standard practice for publication of cancer rates in the United States.

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 five years, 2009-2013, 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 2013, 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 2009-2013 is 198, 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 Asian and Pacific Islander, 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 2009-2013 were obtained through the NCI SEER Program from the National Center for Health Statistics (NCHS) and tabulated using SEER\*Stat Version 8.3.2 (<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 2009-2013 New Jersey population estimates for this report were provided by the NCI’s SEER Program released in January 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 2014 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 (NCHS) website ([http://www.cdc.gov/nchs/nvss/bridged\\_race.htm](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, 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 1990-2013.

As a result of applying the NHIA algorithm, the number of cases who were coded as Hispanic increased by 22 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:

<http://www.naacccr.org/LinkClick.aspx?fileticket=6E200T41TcA%3d&tabid=118&mid=458>.

Caution should be used when comparing rates among Hispanics with the rates in the different race groups (e.g., black, white) because ethnicity and race are not mutually exclusive. In New Jersey, the majority 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 2008-2012*, and later had their race updated after the publication of the report. This resulted in a slight increase in the race-specific cancer incidence rates and counts during 2009-2012 in the current report as compared to previous reports.

## **ASIANS AND PACIFIC ISLANDERS**

Asians and Pacific Islanders account for only 3.7% 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 2009-2013, 2.0% 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/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:

<http://www.naacr.org/LinkClick.aspx?fileticket=3HnBhlmhkBs%3d&tabid=118&mid=458>

## **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 Versions 8.2.1 and 8.3.2 (<http://www.seer.cancer.gov/seerstat/>), a statistical software package distributed by the National Cancer Institute. U.S. cancer incidence data were obtained from NAACCR's publication, *Cancer in North America 2009-2013* (<http://www.naacr.org/DataandPublications/CINAPubs.aspx>). 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.

## REFERENCES

- Breslow NE, Day NE. *Statistical Methods in Cancer Research. Volume II – The Design and Analysis of Cohort Studies*. New York: Oxford University Press, 1987.
- Centers for Disease Control and Prevention. *Data collection of primary central nervous system tumors. National Program of Cancer Registries Training Materials*. Atlanta, Georgia: Department of Health and Human Services, Centers for Disease Control and Prevention, 2004.
- Copeland G, Lake A, Firth R, Wohler B, Wu XC, Schymura M, Hofferkamp J, Sherman R, Kohler B (eds). *Cancer in North America: 2009-2013*. Springfield, IL: North American Association of Central Cancer Registries, Inc. June 2016, [URL: <http://www.naaccr.org/DataandPublications/CINAPubs.aspx> , accessed June 10, 2016].
- Howlander N, Noone AM, Krapcho M, Miller D, Bishop K, Altekruse SF, Kosary CL, Yu M, Ruhl J, Tatalovich Z, Mariotto A, Lewis DR, Chen HS, Feuer EJ, Cronin KA (eds). *SEER Cancer Statistics Review, 1975-2013*, National Cancer Institute. Bethesda, MD, [http://seer.cancer.gov/csr/1975\\_2013/](http://seer.cancer.gov/csr/1975_2013/), based on November 2015 SEER data submission, posted to the SEER web site, April 2016, accessed April 13, 2016].
- Ingram DD, Parker JD, Schenker N, et al. United States Census 2000 population with bridged race categories. National Center for Health Statistics. *Vital Health Stat 2(135)*. 2003. [URL: [http://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_135.pdf](http://www.cdc.gov/nchs/data/series/sr_02/sr02_135.pdf), accessed July 11, 2016].
- Martin RM. "Age standardization of death rates in New Jersey: Implications of a change in the standard population." *Topics in Health Statistics*. Center for Health Statistics. 2000;01-02.
- NAACCR Race and Ethnicity Work Group. *NAACCR Guideline for Enhancing Hispanic/Latino Identification: Revised NAACCR Hispanic/Latino Identification Algorithm [NHIA v2.2.1]*. Springfield (IL): North American Association of Central Cancer Registries. September 2011. [URL: <http://www.naaccr.org/LinkClick.aspx?fileticket=6E200T41TcA%3d&tabid=118&mid=458>, accessed July 11, 2016].
- NAACCR Race and Ethnicity Work Group. *NAACCR Asian Pacific Islander Identification Algorithm [NAPIIA v1.2.1]*. Springfield, IL: North American Association of Central Cancer Registries, August 2011. [URL: <http://www.naaccr.org/LinkClick.aspx?fileticket=3HnBhlmhkBs%3d&tabid=92&mid=432>, accessed July 11, 2016].
- National Center for Health Statistics. U.S. census population with bridged race categories, August 2008. [URL: [http://www.cdc.gov/nchs/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm), accessed July 11, 2016].
- Rothman K. *Modern Epidemiology*. U.S. Little, Brown, and Company. 1986.
- Surveillance Research Program, National Cancer Institute SEER\*Stat software (www.seer.cancer.gov/seerstat) version 8.3.2. April 11, 2016.

Surveillance Research Program, National Cancer Institute SEER\*Stat software (www.seer.cancer.gov/seerstat) version 8.2.1. April 7, 2015.

Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER\*Stat Database: Mortality - All COD, Aggregated With State, Total U.S. (1990-2012) <Katrina/Rita Population Adjustment>, National Cancer Institute, DCCPS, Surveillance Research Program, Surveillance Systems Branch, released April 2015. Underlying mortality data provided by the National Center for Health Statistics (NCHS) (www.cdc.gov/nchs).

Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER\*Stat Database: Populations - Total U.S. (1969-2012) <Katrina/Rita Adjustment> - Linked To County Attributes - Total U.S., 1969-2012 Counties, National Cancer Institute, DCCPS, Surveillance Research Program, Surveillance Systems Branch, released January 2016 . [URL. <http://seer.cancer.gov/popdata/>, accessed January 2016].

U.S. Census Bureau. New Jersey QuickFacts from the U.S. Census Bureau. [URL: <http://www.census.gov/quickfacts/table/PST045215/34,001> , accessed July 11, 2016].

Weinstein R, Lee YS, Klotz J. *Cancer Among Hispanics in New Jersey 1990-1996*. New Jersey Department of Health and Senior Services, June 2000. [URL. <http://www.state.nj.us/health/cancer/hispanic/>, accessed July 11, 2016].

APPENDIX

INCIDENCE TABLES



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

Cancer Site	Rates					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>All Sites*</b>	458.7	448.1	448.0	450.4	458.9	123,941	452.8
<b>Oral Cavity and Pharynx</b>	6.6	5.6	6.4	6.1	6.3	1,703	6.2
Lip	0.3	0.2	0.3	0.2	0.3	76	0.3
Tongue	1.8	1.5	1.8	2.0	1.8	488	1.8
Salivary Gland	1.1	1.0	1.1	1.2	1.0	293	1.1
Floor of Mouth	0.4	0.4	0.4	0.2	0.4	104	0.4
Gum and Other Mouth	1.4	1.1	1.3	1.3	1.4	360	1.3
Nasopharynx	0.3	0.4	0.4	0.3	0.4	89	0.3
Tonsil	0.6	0.4	0.6	0.7	0.6	157	0.6
Oropharynx	0.2	0.2	0.2	0.1	0.2	55	0.2
Hypopharynx	0.2	0.3	0.3	0.2	0.2	61	0.2
<b>Digestive System</b>	72.4	70.3	71.8	71.2	70.9	20,366	71.3
Esophagus	2.0	2.0	1.7	2.1	1.9	561	1.9
Stomach	5.6	5.9	5.6	5.8	5.6	1,620	5.7
Small Intestine	2.1	1.7	1.9	2.0	1.9	529	1.9
Colon and Rectum	39.9	39.1	39.1	38.7	37.1	11,094	38.8
Colon excluding Rectum	29.0	29.5	29.3	27.8	27.5	8,250	28.6
Rectum and Rectosigmoid Junction	10.9	9.7	9.8	10.9	9.6	2,844	10.2
Anus, Anal Canal and Anorectum	2.1	1.8	2.0	2.2	2.6	596	2.1
Liver and Intrahepatic Bile Duct	3.7	3.7	3.3	4.0	3.9	1,054	3.7
Liver	3.1	2.7	2.5	3.3	2.9	824	2.9
Intrahepatic Bile Duct	0.6	0.9	0.8	0.7	1.0	230	0.8
Gallbladder	1.8	1.8	1.6	1.5	1.7	483	1.7
Other Biliary	1.4	1.3	1.5	1.5	1.9	447	1.5
Pancreas	12.2	11.4	13.1	12.0	12.2	3,516	12.2
<b>Respiratory System</b>	57.5	53.9	56.3	52.5	54.9	15,488	55.0
Larynx	1.4	1.4	1.3	1.3	1.1	360	1.3
Lung and Bronchus	55.4	52.0	54.3	50.7	53.2	14,957	53.1
<b>Bones and Joints</b>	1.0	1.0	0.9	0.7	1.0	214	0.9
<b>Soft Tissue (Including Heart)</b>	3.2	3.0	3.0	3.3	3.2	809	3.1
<b>Skin (Excluding Basal and Squamous)</b>	18.0	19.0	17.3	19.0	18.9	4,889	18.4
Melanoma of the Skin	16.7	18.0	15.9	17.4	17.5	4,523	17.1
<b>Breast (Invasive)</b>	133.2	129.2	128.5	130.7	135.4	35,518	131.4
<i>In situ</i> (not included in All Sites)	41.3	41.6	40.6	40.8	42.6	10,965	41.4

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* 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					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>Female Genital System</b>	56.5	56.6	54.3	55.3	55.3	15,285	55.6
Cervix Uteri	8.7	8.2	7.8	7.2	7.5	1,949	7.9
Corpus and Uterus, NOS	30.7	30.3	29.7	31.1	32.0	8,658	30.8
Corpus Uteri	29.7	29.4	28.7	30.0	30.7	8,351	29.7
Uterus, NOS	1.0	0.9	1.0	1.1	1.3	307	1.1
Ovary	12.9	13.7	13.0	12.4	11.2	3,459	12.6
Vagina	0.5	0.7	0.7	0.9	0.5	185	0.7
Vulva	2.6	2.6	2.3	2.7	2.4	721	2.5
<b>Urinary System</b>	23.0	21.1	20.7	22.9	22.2	6,190	22.0
Urinary Bladder (Including <i>in situ</i> )	11.8	11.1	10.5	11.2	10.4	3,160	11.0
Kidney and Renal Pelvis	10.7	9.4	9.5	11.0	11.0	2,831	10.3
Ureter	0.5	0.4	0.4	0.4	0.3	122	0.4
<b>Eye and Orbit</b>	0.5	0.4	0.4	0.7	0.6	133	0.5
<b>Brain and Other Nervous System</b>	5.7	6.1	5.5	5.7	6.0	1,468	5.8
Brain	5.1	5.6	5.0	5.3	5.7	1,359	5.3
<b>Endocrine System</b>	29.2	28.2	27.8	28.6	30.3	6,997	28.8
Thyroid	28.2	27.3	27.2	27.7	29.3	6,785	28.0
<b>Lymphomas</b>	20.8	20.5	21.7	20.1	20.7	5,583	20.7
Hodgkin Lymphoma	2.9	2.7	3.3	2.9	2.9	666	2.9
Non-Hodgkin Lymphoma	17.9	17.8	18.4	17.2	17.8	4,917	17.8
<b>Myelomas</b>	5.4	5.8	5.7	5.7	5.6	1,588	5.6
<b>Leukemias</b>	10.4	11.1	12.2	11.7	11.1	3,052	11.3
Lymphocytic Leukemia	5.1	5.8	5.9	5.9	5.4	1,516	5.6
Acute Lymphocytic Leukemia	1.3	1.3	1.6	1.4	1.3	301	1.4
Chronic Lymphocytic Leukemia	3.6	4.2	3.9	4.1	3.7	1,131	3.9
Myeloid and Monocytic Leukemia	4.7	4.9	5.5	5.3	4.9	1,355	5.1
Acute Myeloid Leukemia	3.0	3.1	4.0	3.5	3.1	899	3.3
Acute Monocytic Leukemia	0.2	0.2	0.2	0.2	0.2	51	0.2
Chronic Myeloid Leukemia	1.3	1.5	1.2	1.5	1.5	366	1.4
Other Leukemia	0.6	0.4	0.8	0.6	0.9	181	0.7
<b>Mesothelioma</b>	0.4	0.5	0.6	0.4	0.4	139	0.5
<b>Kaposi Sarcoma</b>	0.2	0.1	0.2	0.2	0.1	43	0.2
<b>Ill-Defined &amp; Unspecified Sites*</b>	14.9	15.6	14.8	15.6	15.8	4,476	15.3

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	2009	2010	Rates			Cases 2009-2013	Rates
			2011	2012	2013 Prelim.		
<b>All Sites*</b>	584.3	563.2	568.1	538.1	525.3	123,218	555.1
<b>Oral Cavity and Pharynx</b>	15.8	15.4	14.9	15.0	16.2	3,626	15.5
Lip	0.8	0.5	0.6	0.5	0.6	125	0.6
Tongue	5.2	4.5	4.7	5.1	4.8	1,152	4.9
Salivary Gland	1.8	2.0	1.8	1.8	2.1	402	1.9
Floor of Mouth	0.6	0.8	0.4	0.5	0.6	148	0.6
Gum and Other Mouth	1.5	1.5	1.9	1.7	1.9	385	1.7
Nasopharynx	1.0	0.9	0.8	0.9	0.9	199	0.9
Tonsil	3.0	3.2	2.6	2.6	3.1	727	2.9
Oropharynx	0.6	0.9	0.7	0.7	0.8	178	0.7
Hypopharynx	1.1	0.9	1.0	1.0	1.1	241	1.0
<b>Digestive System</b>	109.5	104.5	102.5	102.0	103.1	23,030	104.3
Esophagus	8.0	8.9	7.9	7.7	7.4	1,775	7.9
Stomach	11.8	11.6	10.7	11.0	10.4	2,400	11.1
Small Intestine	2.9	1.7	2.6	2.5	2.8	559	2.5
Colon and Rectum	53.7	49.6	48.3	47.9	47.8	10,810	49.4
Colon excluding Rectum	37.1	33.7	32.9	32.1	32.3	7,252	33.6
Rectum and Rectosigmoid Junction	16.6	15.9	15.4	15.8	15.5	3,558	15.8
Anus, Anal Canal and Anorectum	1.4	1.6	1.3	1.2	1.2	306	1.3
Liver and Intrahepatic Bile Duct	11.3	10.8	11.7	11.6	11.8	2,701	11.5
Liver	10.6	9.6	10.5	10.5	10.5	2,461	10.4
Intrahepatic Bile Duct	0.7	1.1	1.2	1.1	1.3	240	1.1
Gallbladder	0.9	1.1	1.1	1.2	1.3	232	1.1
Other Biliary	2.8	2.4	2.8	2.5	2.8	562	2.6
Pancreas	15.7	15.7	15.1	15.2	16.4	3,438	15.6
<b>Respiratory System</b>	79.6	75.5	74.8	73.1	71.3	16,127	74.7
Larynx	6.5	6.0	5.8	5.0	6.2	1,319	5.9
Lung and Bronchus	71.9	68.5	67.9	66.7	64.1	14,554	67.7
<b>Bones and Joints</b>	1.2	1.3	1.3	1.4	1.1	273	1.3
<b>Soft Tissue (Including Heart)</b>	4.3	4.5	4.1	4.3	4.5	940	4.3
<b>Skin (Excluding Basal and Squamous)</b>	30.0	29.9	31.5	30.2	31.9	6,714	30.7
Melanoma of the Skin	27.2	27.9	29.2	27.7	29.0	6,190	28.2

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* 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					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>Breast</b>	1.2	1.7	1.4	1.5	1.5	322	1.5
<b>Male Genital System</b>	174.0	162.3	174.6	139.8	130.8	36,067	155.8
Prostate	167.2	155.7	167.2	133.0	123.5	34,584	148.8
Testis	6.0	5.8	6.2	5.7	6.1	1,257	6.0
Penis	0.7	0.5	1.0	0.9	0.8	168	0.8
<b>Urinary System</b>	66.4	64.4	64.1	65.9	64.6	14,047	65.1
Urinary Bladder (Including <i>in situ</i> )	42.3	41.6	41.1	42.8	40.7	8,738	41.7
Kidney and Renal Pelvis	22.8	20.9	21.6	21.5	22.3	4,974	21.8
Ureter	0.7	1.2	1.1	0.9	0.8	196	0.9
<b>Eye and Orbit</b>	0.7	0.4	0.7	1.0	1.0	172	0.8
<b>Brain and Other Nervous System</b>	8.7	8.7	7.9	8.9	8.3	1,869	8.5
Brain	8.1	8.0	7.3	8.4	7.9	1,749	7.9
<b>Endocrine System</b>	10.0	10.2	11.0	11.2	11.2	2,443	10.7
Thyroid	9.1	9.2	10.1	10.4	10.3	2,238	9.8
<b>Lymphomas</b>	29.6	28.7	28.3	30.3	28.4	6,322	29.1
Hodgkin Lymphoma	4.1	3.8	3.2	3.9	3.2	790	3.7
Non-Hodgkin Lymphoma	25.5	24.9	25.0	26.3	25.2	5,532	25.4
<b>Myelomas</b>	9.1	8.6	8.0	9.1	8.2	1,870	8.6
<b>Leukemias</b>	17.3	20.4	19.1	19.3	18.7	4,103	19.0
Lymphocytic Leukemia	9.1	11.1	10.1	10.6	9.8	2,204	10.1
Acute Lymphocytic Leukemia	1.9	2.3	1.7	1.8	1.6	391	1.9
Chronic Lymphocytic Leukemia	6.6	8.0	7.5	7.8	7.3	1,634	7.5
Myeloid and Monocytic Leukemia	7.2	8.3	8.2	7.9	8.0	1,706	7.9
Acute Myeloid Leukemia	4.1	5.6	5.3	5.3	5.0	1,084	5.1
Acute Monocytic Leukemia	0.4	0.3	0.3	0.2	0.2	67	0.3
Chronic Myeloid Leukemia	2.4	2.1	2.0	2.1	2.5	487	2.2
Other Leukemia	1.0	0.9	0.8	0.9	0.8	193	0.9
<b>Mesothelioma</b>	3.0	2.9	2.4	2.0	2.0	495	2.4
<b>Kaposi Sarcoma</b>	0.9	0.7	0.6	0.6	0.7	147	0.7
<b>Ill-Defined &amp; Unspecified Sites*</b>	22.9	23.2	21.0	22.5	21.6	4,651	22.2

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

Cancer Site	Rates					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>All Sites*</b>	481.1	464.0	463.9	471.4	468.9	102,954	469.8
<b>Oral Cavity and Pharynx</b>	6.8	5.9	6.9	6.2	6.2	1,412	6.4
Lip	0.3	0.3	0.3	0.2	0.2	67	0.3
Tongue	2.0	1.6	2.1	2.0	1.9	419	1.9
Salivary Gland	1.2	1.2	1.1	1.2	1.0	244	1.1
Floor of Mouth	0.5	0.5	0.4	0.2	0.4	92	0.4
Gum and Other Mouth	1.4	1.2	1.4	1.2	1.2	290	1.3
Nasopharynx	0.3	0.2	0.3	0.3	0.3	58	0.3
Tonsil	0.6	0.5	0.6	0.7	0.7	135	0.6
Oropharynx	0.2	0.1	0.2	0.1	0.3	43	0.2
Hypopharynx	0.2	0.3	0.3	0.1	0.2	48	0.2
<b>Digestive System</b>	72.5	68.9	69.6	70.4	69.6	16,496	70.1
Esophagus	2.0	2.0	1.6	1.9	1.8	447	1.9
Stomach	5.0	5.3	4.8	5.5	4.8	1,187	5.1
Small Intestine	2.0	1.5	2.0	2.0	1.9	424	1.9
Colon and Rectum	40.6	38.8	38.1	38.7	37.3	9,125	38.7
Colon excluding Rectum	29.6	29.2	28.5	27.7	27.5	6,814	28.5
Rectum and Rectosigmoid Junction	11.0	9.6	9.6	10.9	9.8	2,311	10.2
Anus, Anal Canal and Anorectum	2.3	2.0	2.0	2.5	2.8	512	2.3
Liver and Intrahepatic Bile Duct	3.6	3.4	3.2	3.7	3.6	804	3.5
Liver	2.9	2.5	2.3	3.0	2.6	609	2.6
Intrahepatic Bile Duct	0.7	0.9	0.9	0.7	1.0	195	0.8
Gallbladder	1.8	1.7	1.4	1.4	1.3	360	1.5
Other Biliary	1.3	1.3	1.3	1.5	1.9	363	1.5
Pancreas	11.9	11.4	13.0	11.9	12.3	2,897	12.1
<b>Respiratory System</b>	60.6	56.2	60.2	55.7	57.9	13,382	58.1
Larynx	1.4	1.5	1.4	1.4	1.1	302	1.3
Lung and Bronchus	58.4	54.3	58.1	53.7	56.3	12,942	56.1
<b>Bones and Joints</b>	0.9	1.1	1.0	0.9	1.0	178	1.0
<b>Soft Tissue (Including Heart)</b>	3.3	3.1	2.9	3.2	3.2	641	3.1
<b>Skin (Excluding Basal and Squamous)</b>	21.8	23.0	20.5	22.8	21.7	4,559	21.9
Melanoma of the Skin	20.5	21.9	19.0	21.1	20.4	4,254	20.6
<b>Breast (Invasive)</b>	138.4	132.8	132.6	136.0	137.6	29,006	135.5
<i>In situ</i> (not included in All Sites)	44.5	43.5	41.2	43.3	43.2	8,901	43.2

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* 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					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>Female Genital System</b>	59.5	58.2	56.8	58.1	56.7	12,638	57.9
Cervix Uteri	8.8	7.8	7.7	7.1	7.1	1,438	7.7
Corpus and Uterus, NOS	32.5	31.4	31.3	33.3	33.2	7,264	32.4
Corpus Uteri	31.6	30.7	30.5	32.4	32.0	7,053	31.5
Uterus, NOS	0.9	0.7	0.8	1.0	1.2	211	0.9
Ovary	13.9	14.3	13.7	12.7	11.5	2,900	13.2
Vagina	0.4	0.7	0.7	0.8	0.5	143	0.6
Vulva	2.8	2.8	2.5	2.9	2.6	631	2.7
<b>Urinary System</b>	24.8	22.1	21.7	24.2	23.1	5,309	23.2
Urinary Bladder (Including <i>in situ</i> )	12.9	11.8	11.3	12.2	11.0	2,810	11.8
Kidney and Renal Pelvis	11.2	9.6	9.6	11.3	11.3	2,330	10.6
Ureter	0.5	0.5	0.5	0.4	0.3	112	0.4
<b>Eye and Orbit</b>	0.5	0.5	0.4	0.9	0.6	121	0.6
<b>Brain and Other Nervous System</b>	6.0	6.7	6.0	6.5	6.5	1,254	6.3
Brain	5.3	6.2	5.6	6.0	6.2	1,167	5.8
<b>Endocrine System</b>	32.7	30.2	29.9	32.1	33.0	5,748	31.6
Thyroid	31.8	29.5	29.2	31.2	32.2	5,603	30.8
<b>Lymphomas</b>	21.9	22.3	22.8	21.6	21.2	4,743	22.0
Hodgkin Lymphoma	3.1	3.2	3.5	3.1	2.8	529	3.1
Non-Hodgkin Lymphoma	18.8	19.2	19.3	18.5	18.4	4,214	18.8
<b>Myelomas</b>	4.6	5.2	4.8	4.8	4.5	1,106	4.8
<b>Leukemias</b>	11.0	11.8	12.4	11.9	10.7	2,510	11.5
Lymphocytic Leukemia	5.5	6.1	5.8	6.1	4.9	1,233	5.7
Acute Lymphocytic Leukemia	1.5	1.4	1.7	1.7	1.3	241	1.5
Chronic Lymphocytic Leukemia	3.8	4.4	3.8	4.1	3.3	929	3.9
Myeloid and Monocytic Leukemia	4.9	5.2	5.8	5.3	5.0	1,130	5.2
Acute Myeloid Leukemia	3.3	3.3	4.3	3.5	3.1	763	3.5
Acute Monocytic Leukemia	0.2	0.3	0.2	0.3	0.2	45	0.2
Chronic Myeloid Leukemia	1.1	1.6	1.2	1.4	1.6	290	1.4
Other Leukemia	0.6	0.4	0.8	0.6	0.8	147	0.6
<b>Mesothelioma</b>	0.5	0.6	0.7	0.5	0.4	130	0.5
<b>Kaposi Sarcoma</b>	0.1	0.1	0.2	^	^	28	0.1
<b>Ill-Defined &amp; Unspecified Sites*</b>	15.2	15.4	14.6	15.5	15.1	3,693	15.1

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

Cancer Site	2009	2010	Rates			Cases 2009-2013	Rates
			2011	2012	2013 Prelim.		
<b>All Sites*</b>	594.4	571.6	572.0	548.6	525.2	102,101	561.8
<b>Oral Cavity and Pharynx</b>	16.3	16.0	15.3	15.5	16.7	3,048	16.0
Lip	0.8	0.6	0.6	0.5	0.5	112	0.6
Tongue	5.7	4.9	4.8	5.6	5.3	1,012	5.3
Salivary Gland	1.9	2.1	1.9	2.0	2.3	358	2.0
Floor of Mouth	0.6	0.8	0.5	0.5	0.6	119	0.6
Gum and Other Mouth	1.3	1.4	1.7	1.5	1.6	278	1.5
Nasopharynx	0.7	0.7	0.6	0.6	0.8	123	0.7
Tonsil	3.3	3.5	3.0	2.8	3.4	650	3.2
Oropharynx	0.6	0.8	0.8	0.7	0.7	139	0.7
Hypopharynx	1.2	0.9	1.0	0.9	1.1	196	1.0
<b>Digestive System</b>	107.9	102.1	101.9	102.5	102.0	18,763	103.3
Esophagus	8.2	8.7	8.4	8.3	7.9	1,535	8.3
Stomach	11.4	11.2	10.5	10.5	9.3	1,894	10.6
Small Intestine	2.6	1.8	2.6	2.5	2.7	441	2.4
Colon and Rectum	53.1	49.3	47.7	48.8	48.0	8,880	49.4
Colon excluding Rectum	36.5	33.6	32.1	32.4	32.7	5,967	33.5
Rectum and Rectosigmoid Junction	16.5	15.7	15.6	16.4	15.3	2,913	15.9
Anus, Anal Canal and Anorectum	1.4	1.4	1.3	1.2	1.2	242	1.3
Liver and Intrahepatic Bile Duct	10.8	9.6	10.8	11.1	11.0	2,038	10.7
Liver	10.0	8.4	9.6	9.8	9.7	1,834	9.5
Intrahepatic Bile Duct	0.8	1.2	1.2	1.2	1.3	204	1.1
Gallbladder	0.9	1.1	1.1	1.1	1.3	192	1.1
Other Biliary	2.8	2.4	2.8	2.5	3.0	482	2.7
Pancreas	15.8	15.6	15.4	15.2	16.4	2,858	15.7
<b>Respiratory System</b>	80.6	76.4	76.3	74.8	72.7	13,634	76.1
Larynx	6.5	5.8	5.9	5.3	6.1	1,093	5.9
Lung and Bronchus	72.8	69.6	69.3	68.2	65.6	12,340	69.0
<b>Bones and Joints</b>	1.4	1.5	1.4	1.5	1.1	227	1.4
<b>Soft Tissue (Including Heart)</b>	4.5	4.8	4.3	4.5	4.8	790	4.6
<b>Skin (Excluding Basal and Squamous)</b>	35.1	34.7	36.2	35.0	36.0	6,347	35.4
Melanoma of the Skin	32.2	32.5	33.8	32.3	33.0	5,895	32.8

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* 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					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>Breast</b>	1.1	1.7	1.4	1.5	1.5	265	1.4
<b>Male Genital System</b>	170.2	156.9	164.6	132.9	121.3	28,055	148.7
Prostate	161.8	149.3	155.9	124.7	112.5	26,738	140.3
Testis	7.5	6.9	7.6	7.1	7.6	1,135	7.3
Penis	0.7	0.4	1.0	0.9	0.8	133	0.7
<b>Urinary System</b>	71.4	69.2	67.7	70.9	67.8	12,419	69.4
Urinary Bladder (Including <i>in situ</i> )	46.1	45.3	44.7	47.0	43.2	7,961	45.3
Kidney and Renal Pelvis	23.8	21.7	21.5	22.3	23.2	4,168	22.5
Ureter	0.8	1.5	1.2	0.9	0.8	185	1.0
<b>Eye and Orbit</b>	0.8	0.5	0.9	1.2	1.2	159	0.9
<b>Brain and Other Nervous System</b>	9.5	9.5	8.5	9.8	9.0	1,612	9.3
Brain	9.0	8.7	7.9	9.3	8.5	1,519	8.7
<b>Endocrine System</b>	10.8	11.3	12.1	12.1	12.0	2,088	11.7
Thyroid	9.9	10.2	11.2	11.3	11.2	1,929	10.8
<b>Lymphomas</b>	31.3	30.2	30.2	32.1	29.5	5,383	30.6
Hodgkin Lymphoma	4.4	3.9	3.6	4.3	3.1	632	3.9
Non-Hodgkin Lymphoma	26.8	26.3	26.6	27.8	26.4	4,751	26.8
<b>Myelomas</b>	8.6	7.9	7.4	8.5	7.5	1,432	8.0
<b>Leukemias</b>	18.0	21.5	19.2	19.7	17.7	3,379	19.2
Lymphocytic Leukemia	9.7	11.7	9.9	10.3	9.0	1,782	10.1
Acute Lymphocytic Leukemia	2.1	2.5	1.7	1.8	1.7	304	2.0
Chronic Lymphocytic Leukemia	7.1	8.3	7.4	7.5	6.4	1,327	7.3
Myeloid and Monocytic Leukemia	7.3	8.8	8.5	8.4	7.9	1,438	8.2
Acute Myeloid Leukemia	4.1	6.1	5.6	5.8	5.1	933	5.3
Acute Monocytic Leukemia	0.5	0.4	0.4	0.2	0.2	63	0.3
Chronic Myeloid Leukemia	2.4	2.1	2.0	2.1	2.3	386	2.2
Other Leukemia	1.0	1.0	0.8	0.9	0.8	159	0.9
<b>Mesothelioma</b>	3.3	3.1	2.7	2.3	2.3	463	2.7
<b>Kaposi Sarcoma</b>	0.7	0.6	0.4	0.4	0.6	93	0.6
<b>Ill-Defined &amp; Unspecified Sites*</b>	22.8	23.6	21.5	23.4	21.7	3,944	22.6

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					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>All Sites*</b>	407.4	412.2	390.0	398.4	399.1	13,878	401.2
<b>Oral Cavity and Pharynx</b>	4.9	4.2	4.3	6.0	4.7	177	4.8
Lip	^	^	^	^	^	^	^
Tongue	0.7	1.2	^	2.1	0.7	39	1.1
Salivary Gland	0.9	^	1.4	0.8	^	29	0.8
Floor of Mouth	^	^	^	^	^	9	0.2
Gum and Other Mouth	1.1	0.8	0.7	1.4	1.4	38	1.1
Nasopharynx	^	0.8	^	^	^	15	0.4
Tonsil	0.8	^	^	^	0.6	19	0.5
Oropharynx	^	^	^	^	^	11	0.3
Hypopharynx	^	^	^	^	^	10	0.3
<b>Digestive System</b>	80.0	83.0	85.1	83.7	79.9	2,772	82.3
Esophagus	2.2	2.3	2.6	3.7	3.1	93	2.8
Stomach	8.8	9.2	8.7	7.5	8.3	282	8.5
Small Intestine	2.9	3.0	1.4	2.6	2.7	85	2.5
Colon and Rectum	40.2	44.5	44.7	43.9	35.4	1,404	41.7
Colon excluding Rectum	28.8	34.8	34.4	33.5	27.6	1,066	31.8
Rectum and Rectosigmoid Junction	11.4	9.8	10.3	10.4	7.8	338	9.9
Anus, Anal Canal and Anorectum	1.8	1.5	2.4	1.8	2.8	72	2.1
Liver and Intrahepatic Bile Duct	3.8	3.9	3.6	4.5	5.1	150	4.2
Liver	3.7	3.3	3.4	4.0	4.7	137	3.8
Intrahepatic Bile Duct	^	^	^	^	^	13	0.4
Gallbladder	1.7	2.3	2.2	2.0	3.2	80	2.3
Other Biliary	1.6	1.5	1.8	0.8	2.3	52	1.6
Pancreas	15.0	13.5	15.8	15.3	14.4	490	14.8
<b>Respiratory System</b>	50.7	53.7	47.1	46.2	50.5	1,680	49.6
Larynx	1.9	1.3	0.8	1.5	1.5	50	1.4
Lung and Bronchus	47.6	51.7	45.7	44.5	48.9	1,610	47.6
<b>Bones and Joints</b>	0.9	0.7	^	^	0.8	22	0.6
<b>Soft Tissue (Including Heart)</b>	3.4	2.9	4.2	2.9	3.0	115	3.3
<b>Skin (Excluding Basal and Squamous)</b>	2.1	1.8	1.6	1.3	1.8	59	1.8
Melanoma of the Skin	1.3	1.0	0.9	0.8	0.8	33	1.0
<b>Breast (Invasive)</b>	123.8	119.8	115.3	119.6	124.0	4,267	120.6
<i>In situ</i> (not included in All Sites)	29.0	32.3	34.3	33.5	32.4	1,169	32.3

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* 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					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>Female Genital System</b>	52.6	55.2	46.5	51.0	48.5	1,788	50.7
Cervix Uteri	11.5	11.8	9.6	9.9	9.9	375	10.5
Corpus and Uterus, NOS	27.1	29.5	24.9	25.9	26.9	947	26.8
Corpus Uteri	24.7	27.4	22.2	23.9	25.0	869	24.6
Uterus, NOS	2.4	2.1	2.8	2.0	1.9	78	2.2
Ovary	10.0	10.4	9.2	11.3	8.5	341	9.9
Vagina	0.8	0.8	^	1.2	^	27	0.7
Vulva	2.0	1.9	1.4	2.1	1.7	66	1.8
<b>Urinary System</b>	19.6	20.4	18.5	20.5	17.5	646	19.2
Urinary Bladder (Including <i>in situ</i> )	7.8	8.9	7.1	7.4	5.7	236	7.3
Kidney and Renal Pelvis	11.5	10.7	10.8	12.1	11.7	393	11.4
Ureter	^	^	^	^	^	6	0.2
<b>Eye and Orbit</b>	^	^	^	^	^	8	0.3
<b>Brain and Other Nervous System</b>	4.5	4.2	3.0	2.6	3.6	125	3.5
Brain	4.0	3.6	2.7	2.2	3.4	112	3.2
<b>Endocrine System</b>	12.6	14.5	13.6	12.8	13.5	484	13.4
Thyroid	11.6	12.7	12.9	12.1	12.1	444	12.3
<b>Lymphomas</b>	16.8	12.6	15.2	12.7	16.7	516	14.8
Hodgkin Lymphoma	2.5	1.6	3.3	1.8	3.9	95	2.7
Non-Hodgkin Lymphoma	14.3	10.9	11.9	11.0	12.8	421	12.1
<b>Myelomas</b>	11.8	11.6	11.3	10.6	10.0	378	11.0
<b>Leukemias</b>	7.4	8.2	7.7	9.8	8.9	281	8.4
Lymphocytic Leukemia	3.1	4.5	3.8	3.5	2.9	116	3.5
Acute Lymphocytic Leukemia	^	0.8	1.0	^	0.9	26	0.8
Chronic Lymphocytic Leukemia	2.3	3.3	2.6	2.4	2.0	81	2.5
Myeloid and Monocytic Leukemia	3.5	3.4	3.4	5.7	5.1	145	4.2
Acute Myeloid Leukemia	1.4	1.9	2.0	3.3	3.5	84	2.4
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	1.6	1.3	1.4	2.3	1.2	53	1.6
Other Leukemia	0.8	^	^	^	0.9	20	0.6
<b>Mesothelioma</b>	^	^	^	^	^	6	0.2
<b>Kaposi Sarcoma</b>	^	^	^	^	^	9	0.3
<b>Ill-Defined &amp; Unspecified Sites*</b>	15.2	18.9	15.5	17.7	14.8	545	16.4

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.

^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	2009	2010	Rates			Cases 2009-2013	Rates
			2011	2012	2013 Prelim.		
<b>All Sites*</b>	644.4	588.9	563.2	535.6	495.2	13,752	563.1
<b>Oral Cavity and Pharynx</b>	12.7	12.6	10.5	13.4	11.3	320	12.1
Lip	^	^	^	^	^	^	^
Tongue	3.1	2.2	3.8	3.2	1.8	77	2.8
Salivary Gland	1.6	1.7	^	^	^	23	0.9
Floor of Mouth	0.9	1.1	^	^	^	19	0.7
Gum and Other Mouth	1.4	1.1	1.3	2.1	1.5	36	1.5
Nasopharynx	1.6	1.2	^	1.4	^	26	0.9
Tonsil	1.8	2.8	1.7	2.8	2.7	63	2.4
Oropharynx	^	1.3	^	0.8	2.0	33	1.1
Hypopharynx	1.5	^	1.4	1.9	1.8	36	1.5
<b>Digestive System</b>	138.1	131.0	104.3	113.1	102.1	2,806	117.0
Esophagus	8.6	11.3	6.1	5.4	6.1	175	7.4
Stomach	15.4	13.1	10.0	14.1	13.4	294	13.2
Small Intestine	6.2	2.2	4.5	3.1	4.0	93	4.0
Colon and Rectum	65.7	60.0	51.4	52.0	45.1	1,278	54.5
Colon excluding Rectum	45.6	42.8	37.5	37.7	31.8	889	38.9
Rectum and Rectosigmoid Junction	20.0	17.2	13.9	14.3	13.2	389	15.6
Anus, Anal Canal and Anorectum	2.0	3.0	2.0	1.5	1.7	58	2.0
Liver and Intrahepatic Bile Duct	14.3	17.7	13.6	12.6	12.9	402	14.2
Liver	14.2	16.6	13.0	12.4	12.3	388	13.6
Intrahepatic Bile Duct	^	1.1	^	^	^	14	0.5
Gallbladder	1.9	1.4	^	1.2	^	24	1.2
Other Biliary	2.9	1.8	1.5	1.9	0.9	37	1.8
Pancreas	19.7	18.1	13.2	19.3	16.9	412	17.4
<b>Respiratory System</b>	95.7	83.7	80.6	81.0	75.3	1,888	82.9
Larynx	8.5	8.1	6.3	4.6	8.6	177	7.2
Lung and Bronchus	86.4	74.2	72.5	75.0	65.1	1,674	74.3
<b>Bones and Joints</b>	0.9	0.7	^	0.8	1.6	30	0.9
<b>Soft Tissue (Including Heart)</b>	4.6	3.6	3.1	3.7	1.9	97	3.3
<b>Skin (Excluding Basal and Squamous)</b>	1.7	2.0	2.2	2.2	2.6	59	2.2
Melanoma of the Skin	^	1.1	1.0	^	1.2	23	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* 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					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>Breast</b>	1.7	2.3	1.5	1.6	3.2	48	2.1
<b>Male Genital System</b>	249.6	232.7	238.5	190.3	175.8	5,420	216.1
Prostate	248.1	229.7	236.3	187.1	172.2	5,348	213.4
Testis	1.1	1.9	1.5	1.9	1.8	48	1.6
Penis	^	^	^	1.3	1.6	20	1.0
<b>Urinary System</b>	47.3	41.5	48.1	46.8	44.5	1,071	45.7
Urinary Bladder (Including <i>in situ</i> )	23.8	20.6	22.4	21.0	21.4	451	21.8
Kidney and Renal Pelvis	22.4	20.6	25.2	24.7	21.8	603	23.0
Ureter	^	^	^	^	^	6	0.3
<b>Eye and Orbit</b>	^	^	^	^	^	^	^
<b>Brain and Other Nervous System</b>	4.9	5.6	4.4	5.2	4.9	137	5.0
Brain	4.4	5.0	4.0	4.7	4.2	121	4.5
<b>Endocrine System</b>	5.4	4.0	4.9	6.2	6.4	148	5.4
Thyroid	4.1	3.2	4.1	5.0	5.2	120	4.4
<b>Lymphomas</b>	22.5	19.8	18.4	19.4	18.2	542	19.6
Hodgkin Lymphoma	3.6	3.7	2.0	3.3	3.5	102	3.2
Non-Hodgkin Lymphoma	18.9	16.0	16.4	16.0	14.7	440	16.4
<b>Myelomas</b>	15.4	14.1	14.2	15.6	13.1	340	14.5
<b>Leukemias</b>	12.8	12.4	12.0	15.4	15.1	326	13.6
Lymphocytic Leukemia	4.7	6.0	5.6	8.7	5.4	151	6.1
Acute Lymphocytic Leukemia	1.5	1.3	0.7	1.1	^	33	1.0
Chronic Lymphocytic Leukemia	2.9	4.7	3.9	7.3	4.6	108	4.7
Myeloid and Monocytic Leukemia	6.3	6.0	5.5	6.0	8.7	153	6.6
Acute Myeloid Leukemia	3.9	3.9	4.2	3.8	5.0	95	4.2
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	2.1	1.8	1.2	1.8	3.4	51	2.1
Other Leukemia	1.8	^	0.9	^	1.0	22	0.9
<b>Mesothelioma</b>	2.4	1.4	^	^	^	25	1.2
<b>Kaposi Sarcoma</b>	1.7	1.1	1.5	1.2	1.1	41	1.3
<b>Ill-Defined &amp; Unspecified Sites*</b>	26.8	20.3	17.3	18.6	17.6	450	20.0

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

Cancer Site	Rates					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>All Sites*</b>	356.0	346.5	351.2	366.3	377.6	10,972	360.0
<b>Oral Cavity and Pharynx</b>	5.9	2.9	5.4	4.6	4.6	144	4.7
Lip	^	^	^	^	^	5	0.2
Tongue	1.3	1.1	2.0	^	1.3	36	1.3
Salivary Gland	^	0.9	0.6	0.8	1.1	27	0.8
Floor of Mouth	^	^	^	^	^	5	0.2
Gum and Other Mouth	1.5	^	1.1	2.0	1.0	36	1.2
Nasopharynx	^	^	^	^	^	11	0.3
Tonsil	1.0	^	^	^	^	13	0.4
Oropharynx	^	^	^	^	^	^	^
Hypopharynx	^	^	^	^	^	5	0.1
<b>Digestive System</b>	71.9	70.7	75.3	73.6	78.8	2,036	74.2
Esophagus	1.3	^	1.6	^	1.4	29	1.1
Stomach	8.5	10.7	8.0	11.6	11.3	281	10.1
Small Intestine	1.6	1.5	2.0	^	1.3	42	1.4
Colon and Rectum	35.1	35.8	35.6	34.8	35.8	976	35.4
Colon excluding Rectum	24.7	26.3	25.6	25.1	27.0	695	25.7
Rectum and Rectosigmoid Junction	10.4	9.5	10.1	9.7	8.8	281	9.7
Anus, Anal Canal and Anorectum	2.5	3.0	2.8	2.4	4.2	88	3.0
Liver and Intrahepatic Bile Duct	5.1	5.1	4.1	6.5	5.9	148	5.4
Liver	3.5	3.7	2.9	5.6	4.1	113	4.0
Intrahepatic Bile Duct	1.6	1.3	1.3	^	1.8	35	1.4
Gallbladder	2.5	2.4	2.5	2.5	2.6	67	2.5
Other Biliary	2.6	1.3	2.7	1.8	2.7	57	2.2
Pancreas	11.3	9.9	14.2	11.2	11.6	304	11.7
<b>Respiratory System</b>	31.6	25.9	30.5	29.9	31.3	802	29.9
Larynx	^	1.5	1.0	1.0	^	25	0.9
Lung and Bronchus	31.0	23.5	28.4	28.6	30.1	756	28.3
<b>Bones and Joints</b>	1.2	1.2	1.0	1.2	1.0	44	1.1
<b>Soft Tissue (Including Heart)</b>	2.5	1.8	1.1	2.7	2.6	76	2.1
<b>Skin (Excluding Basal and Squamous)</b>	4.5	4.7	3.7	5.0	5.7	152	4.8
Melanoma of the Skin	3.9	4.4	3.1	4.0	4.5	130	4.0
<b>Breast (Invasive)</b>	98.2	90.4	91.8	96.1	104.0	3,097	96.2
<i>In situ</i> (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* 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					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>Female Genital System</b>	45.5	52.0	48.1	51.6	48.2	1,552	49.1
Cervix Uteri	9.6	9.6	11.7	10.6	10.9	362	10.5
Corpus and Uterus, NOS	23.4	26.9	23.1	24.9	24.3	764	24.5
Corpus Uteri	22.1	26.4	21.7	23.6	22.8	726	23.3
Uterus, NOS	1.3	^	1.3	1.3	1.5	38	1.2
Ovary	9.2	10.7	9.8	10.4	7.9	300	9.6
Vagina	^	^	^	1.4	0.8	21	0.8
Vulva	1.6	3.0	2.3	2.9	2.6	67	2.5
<b>Urinary System</b>	18.1	15.4	13.6	18.8	19.9	486	17.2
Urinary Bladder (Including <i>in situ</i> )	6.6	8.5	4.6	6.9	7.5	171	6.8
Kidney and Renal Pelvis	11.4	6.7	8.9	11.2	11.7	304	10.0
Ureter	^	^	^	^	^	5	0.2
<b>Eye and Orbit</b>	^	^	^	^	^	15	0.4
<b>Brain and Other Nervous System</b>	5.2	4.3	4.6	5.9	4.4	168	4.9
Brain	4.5	3.9	4.3	5.2	4.2	149	4.4
<b>Endocrine System</b>	23.4	25.3	23.6	27.8	24.8	925	25.0
Thyroid	23.2	24.7	22.7	26.6	24.2	901	24.3
<b>Lymphomas</b>	21.1	21.4	18.3	17.0	19.5	595	19.3
Hodgkin Lymphoma	2.3	2.8	3.1	3.0	1.6	98	2.5
Non-Hodgkin Lymphoma	18.9	18.6	15.1	14.1	17.9	497	16.8
<b>Myelomas</b>	5.9	6.3	7.4	6.9	6.2	180	6.6
<b>Leukemias</b>	10.0	9.9	12.2	9.9	9.6	325	10.3
Lymphocytic Leukemia	4.4	4.7	5.3	4.6	3.1	141	4.4
Acute Lymphocytic Leukemia	1.8	1.6	2.2	2.4	1.5	76	1.9
Chronic Lymphocytic Leukemia	2.4	3.2	2.9	2.1	1.4	60	2.4
Myeloid and Monocytic Leukemia	5.5	4.3	6.0	4.5	5.0	157	5.0
Acute Myeloid Leukemia	4.1	3.2	3.4	3.1	3.7	106	3.5
Acute Monocytic Leukemia	^	^	^	^	^	6	0.2
Chronic Myeloid Leukemia	1.1	1.1	1.7	1.1	1.2	41	1.2
Other Leukemia	^	0.8	1.0	0.8	1.6	27	0.9
<b>Mesothelioma</b>	^	^	^	^	^	11	0.4
<b>Kaposi Sarcoma</b>	^	^	^	^	^	6	0.3
<b>Ill-Defined &amp; Unspecified Sites*</b>	10.2	13.8	12.9	13.9	16.1	358	13.5

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

Cancer Site	Rates					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013 Prelim.		
<b>All Sites*</b>	463.2	469.7	458.1	440.7	428.9	10,270	450.9
<b>Oral Cavity and Pharynx</b>	10.5	12.5	13.6	11.2	8.3	267	11.1
Lip	^	^	1.8	^	^	11	0.6
Tongue	3.5	3.8	3.4	3.6	2.6	77	3.4
Salivary Gland	^	^	^	1.4	^	21	0.8
Floor of Mouth	^	^	^	^	^	7	0.3
Gum and Other Mouth	^	^	2.1	2.3	1.2	33	1.3
Nasopharynx	1.1	1.7	1.7	^	1.2	31	1.3
Tonsil	2.3	2.4	1.6	1.6	^	47	1.7
Oropharynx	^	1.3	^	^	^	14	0.6
Hypopharynx	^	1.7	1.3	^	^	20	0.9
<b>Digestive System</b>	101.4	103.5	103.1	107.3	101.1	2,299	103.3
Esophagus	4.7	8.2	5.0	7.1	5.0	124	6.0
Stomach	17.1	15.6	13.7	14.6	14.6	318	15.0
Small Intestine	1.6	1.4	2.0	2.4	2.9	50	2.1
Colon and Rectum	46.7	44.7	43.6	46.4	44.0	1,019	45.1
Colon excluding Rectum	31.9	31.3	30.5	31.4	33.6	687	31.8
Rectum and Rectosigmoid Junction	14.8	13.4	13.1	15.0	10.3	332	13.2
Anus, Anal Canal and Anorectum	^	2.0	1.5	1.1	1.5	32	1.3
Liver and Intrahepatic Bile Duct	15.2	15.6	16.8	17.9	14.5	385	16.1
Liver	13.9	14.5	15.6	16.3	13.7	359	14.8
Intrahepatic Bile Duct	^	1.1	^	1.6	0.9	26	1.2
Gallbladder	^	^	2.3	^	2.0	26	1.5
Other Biliary	3.6	2.5	2.7	2.9	3.9	61	3.1
Pancreas	10.7	11.0	14.2	12.9	12.0	262	12.2
<b>Respiratory System</b>	50.1	53.8	51.1	54.0	50.4	1,036	51.9
Larynx	7.1	6.7	5.2	4.5	5.7	125	5.8
Lung and Bronchus	42.2	46.0	44.9	48.3	43.9	884	45.1
<b>Bones and Joints</b>	0.7	1.3	0.9	1.1	1.0	38	1.0
<b>Soft Tissue (Including Heart)</b>	4.9	4.3	3.2	3.1	4.2	113	3.9
<b>Skin (Excluding Basal and Squamous)</b>	5.8	5.2	5.6	6.1	5.9	140	5.7
Melanoma of the Skin	3.9	4.5	3.9	5.4	4.4	110	4.4

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* 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	2009	2010	Rates			Cases 2009-2013	Rates
			2011	2012	2013 Prelim.		
<b>Breast</b>	^	^	^	^	^	12	0.6
<b>Male Genital System</b>	159.8	155.1	159.1	127.4	130.1	3,274	145.3
Prostate	154.5	149.0	152.7	121.4	124.0	3,036	139.3
Testis	4.4	4.7	5.1	4.3	4.3	204	4.5
Penis	^	^	1.2	1.5	1.7	28	1.2
<b>Urinary System</b>	43.5	51.3	40.3	43.1	44.4	948	44.4
Urinary Bladder (Including <i>in situ</i> )	26.0	26.9	23.7	27.6	22.5	460	25.2
Kidney and Renal Pelvis	16.7	22.4	15.3	14.4	21.4	468	18.0
Ureter	^	^	^	^	^	8	0.4
<b>Eye and Orbit</b>	^	^	^	^	^	11	0.3
<b>Brain and Other Nervous System</b>	7.0	6.1	6.2	8.9	7.8	234	7.3
Brain	6.4	5.8	5.8	8.5	7.5	217	6.9
<b>Endocrine System</b>	6.1	6.6	7.0	7.5	5.8	214	6.6
Thyroid	5.8	6.0	6.7	7.3	5.6	201	6.3
<b>Lymphomas</b>	25.0	26.9	26.1	26.1	30.4	702	27.1
Hodgkin Lymphoma	3.1	2.8	2.4	3.2	2.3	101	2.8
Non-Hodgkin Lymphoma	21.9	24.1	23.7	22.9	28.1	601	24.3
<b>Myelomas</b>	9.1	8.4	6.4	11.0	7.5	192	8.4
<b>Leukemias</b>	14.2	14.8	15.3	16.9	15.6	403	15.4
Lymphocytic Leukemia	5.9	6.8	8.1	7.8	5.6	189	6.9
Acute Lymphocytic Leukemia	2.8	2.0	2.1	2.7	2.1	97	2.4
Chronic Lymphocytic Leukemia	2.3	3.9	5.1	3.6	2.5	66	3.5
Myeloid and Monocytic Leukemia	6.6	7.5	6.9	8.2	9.2	193	7.7
Acute Myeloid Leukemia	2.5	5.0	4.0	4.4	5.2	110	4.3
Acute Monocytic Leukemia	^	^	^	^	^	7	0.3
Chronic Myeloid Leukemia	3.2	2.2	2.5	2.9	3.1	66	2.8
Other Leukemia	1.7	^	^	0.9	^	21	0.8
<b>Mesothelioma</b>	1.7	^	1.1	^	^	21	1.0
<b>Kaposi Sarcoma</b>	^	0.7	0.9	^	1.2	25	0.8
<b>Ill-Defined &amp; Unspecified Sites*</b>	22.1	17.1	16.8	15.1	13.9	341	16.7

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 A9. Age-adjusted Incidence Rates, Asian and Pacific Islander Females and Males, 2009-2013 Combined.**

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
<b>All Sites*</b>	4,989	266.8	4,206	283.9
<b>Oral Cavity and Pharynx</b>	81	4.4	205	12.5
Lip	^	^	^	^
Tongue	25	1.4	49	2.9
Salivary Gland	12	0.5	17	1.2
Floor of Mouth	^	^	8	0.5
Gum and Other Mouth	18	1.1	60	3.8
Nasopharynx	15	0.6	42	2.3
Tonsil	^	^	10	0.5
Oropharynx	^	^	5	0.3
Hypopharynx	^	^	9	0.7
<b>Digestive System</b>	822	49.1	1,143	79.3
Esophagus	16	0.9	51	3.7
Stomach	114	7.0	184	13.3
Small Intestine	14	0.7	15	0.7
Colon and Rectum	394	22.9	461	30.4
Colon excluding Rectum	254	15.2	280	19.9
Rectum and Rectosigmoid Junction	140	7.7	181	10.5
Anus, Anal Canal and Anorectum	7	0.4	^	^
Liver and Intrahepatic Bile Duct	86	5.3	224	14.9
Liver	67	4.2	203	13.2
Intrahepatic Bile Duct	19	1.1	21	1.7
Gallbladder	36	2.3	16	1.1
Other Biliary	26	1.6	41	2.9
Pancreas	113	7.1	139	11.3
<b>Respiratory System</b>	372	22.8	504	37.6
Larynx	6	0.4	35	2.4
Lung and Bronchus	357	22.0	457	34.5
<b>Bones and Joints</b>	10	0.5	12	0.6
<b>Soft Tissue (Including Heart)</b>	38	1.9	34	1.8
<b>Skin (Excluding Basal and Squamous)</b>	29	1.7	32	2.1
Melanoma of the Skin	19	1.2	18	1.4
<b>Breast (Invasive)</b>	1,803	89.8	6	0.6
<i>In situ</i> (not included in All Sites)	661	31.7	^	^

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* 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 and Pacific Islander Females and Males, 2009-2013 Combined.**

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
<b>Female Genital System</b>	648	33.0	-	-
Cervix Uteri	88	4.3	-	-
Corpus and Uterus, NOS	345	16.9	-	-
Corpus Uteri	332	16.1	-	-
Uterus, NOS	13	0.8	-	-
Ovary	180	9.7	-	-
Vagina	11	0.6	-	-
Vulva	13	1.0	-	-
<b>Male Genital System</b>	-	-	1,077	71.1
Prostate	-	-	1,033	68.7
Testis	-	-	35	1.6
Penis	-	-	7	0.7
<b>Urinary System</b>	133	8.0	314	22.9
Urinary Bladder (Including <i>in situ</i> )	59	3.9	166	13.7
Kidney and Renal Pelvis	68	3.7	138	8.5
Ureter	^	^	5	0.3
<b>Eye and Orbit</b>	^	^	6	0.3
<b>Brain and Other Nervous System</b>	66	3.5	95	5.1
Brain	61	3.3	89	4.8
<b>Endocrine System</b>	516	23.9	165	8.5
Thyroid	499	23.0	147	7.5
<b>Lymphomas</b>	195	10.9	242	15.4
Hodgkin Lymphoma	27	1.3	36	1.8
Non-Hodgkin Lymphoma	168	9.6	206	13.5
<b>Myelomas</b>	54	3.1	58	4.0
<b>Leukemias</b>	100	5.7	152	9.3
Lymphocytic Leukemia	41	2.3	70	4.2
Acute Lymphocytic Leukemia	27	1.3	39	2.1
Chronic Lymphocytic Leukemia	11	0.8	28	2.0
Myeloid and Monocytic Leukemia	53	3.1	74	4.7
Acute Myeloid Leukemia	40	2.4	40	2.5
Acute Monocytic Leukemia	^	^	^	^
Chronic Myeloid Leukemia	10	0.5	28	1.6
Other Leukemia	6	0.3	8	0.4
<b>Mesothelioma</b>	^	^	6	0.6
<b>Kaposi Sarcoma</b>	^	^	5	0.2
<b>Ill-Defined &amp; Unspecified Sites*</b>	114	7.9	150	11.9

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, 2009-2013.**

Population	Site Group	Rates					Cases 2009-2013	Rates 2009-2013
		2009	2010	2011	2012	2013 Prelim.		
Female	Brain	1.1	1.1	1.4	1.3	1.3	298	1.3
	Intracranial Meninges	8.5	8.2	9.0	9.7	10.6	2,527	9.2
	Cranial Nerves and Other CNS	1.7	1.6	1.9	2.0	1.7	451	1.8
	Tumors of the Sellar Region	3.8	4.2	4.0	4.3	4.6	966	4.2
	Spinal Cord	0.5	0.6	0.5	0.6	0.6	138	0.6
	Spinal Meninges	0.8	0.4	0.4	0.3	0.4	129	0.5
	Total	16.4	16.0	17.1	18.2	19.2	4,509	17.4
Male	Brain	1.2	1.1	1.3	1.6	1.4	290	1.3
	Intracranial Meninges	4.6	4.7	4.2	5.2	4.1	983	4.6
	Cranial Nerves and Other CNS	1.7	1.7	1.9	1.8	1.9	413	1.8
	Tumors of the Sellar Region	3.5	2.9	3.7	3.5	3.9	791	3.5
	Spinal Cord	0.5	0.8	0.5	0.4	0.7	129	0.6
	Spinal Meninges	0.3	0.1	0.1	0.2	0.2	45	0.2
	Total	11.8	11.3	11.7	12.7	12.2	2,651	11.9

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, 2009-2013.**

Population		Rates					Cases 2009-2013	Rates
		2009	2010	2011	2012	2013 Prelim.		
<b>Myelodysplastic Syndromes (MDS)</b>								
Female	All Races	3.8	4.2	4.6	3.9	4.3	1,220	4.2
Female	White	3.9	4.3	4.6	3.8	4.5	1,022	4.2
Female	Black	3.9	4.2	3.7	4.9	3.2	132	4.0
Female	API*	^	3.3	3.8	2.8	1.9	36	2.7
Female	Hispanic**	3.9	4.4	2.8	3.4	3.4	88	3.6
Male	All Races	7.9	8.3	7.6	8.3	7.3	1,577	7.9
Male	White	8.0	8.7	8.3	8.7	7.4	1,389	8.2
Male	Black	7.9	5.0	2.2	6.0	6.7	110	5.5
Male	API*	5.4	3.2	5.5	3.4	1.7	43	3.7
Male	Hispanic**	10.0	5.4	7.2	3.4	3.8	107	5.8
<b>Chronic Myeloproliferative Disorders (CMD)</b>								
Female	All Races	3.0	2.4	1.8	2.1	2.9	674	2.4
Female	White	3.0	2.2	1.6	2.3	2.8	540	2.4
Female	Black	2.8	4.0	1.9	1.4	1.8	82	2.4
Female	API	1.7	^	1.4	^	1.4	25	1.3
Female	Hispanic**	1.8	2.7	1.4	1.7	2.7	59	2.1
Male	All Races	3.2	2.4	2.8	2.7	3.3	642	2.9
Male	White	3.1	2.4	2.8	2.8	3.3	516	2.9
Male	Black	4.0	3.0	2.2	2.9	2.5	78	2.9
Male	API	^	^	1.6	1.7	^	22	1.2
Male	Hispanic**	4.6	1.9	3.0	2.6	1.6	64	2.7

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 and 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. Distribution of Stage at Diagnosis for Selected Cancer Sites in New Jersey, Females, 2009-2013.**

	All Races	White	Black	Asian/ Pacific Islander	Hispanic*
<b>Breast</b>					
Total Cases	46,483	37,907	5,436	2,464	4,031
<i>In Situ</i>	23.6%	23.5%	21.5%	26.8%	23.2%
Local	47.5%	48.9%	40.6%	44.6%	43.7%
Regional	21.0%	20.2%	27.3%	21.6%	25.4%
Distant	4.9%	4.7%	7.2%	3.7%	4.6%
Unstaged	3.0%	2.7%	3.4%	3.4%	3.1%
<b>Cervical**</b>					
Total Cases	1,949	1,438	375	88	362
Local	41.1%	42.5%	33.9%	52.3%	45.9%
Regional	36.7%	36.0%	43.5%	31.8%	34.8%
Distant	12.8%	12.3%	16.0%	9.1%	11.0%
Unstaged	9.4%	9.2%	6.7%	6.8%	8.3%
<b>Colorectal</b>					
Total Cases	11,703	9,581	1,517	416	1,035
<i>In Situ</i>	5.2%	4.8%	7.4%	5.3%	5.7%
Local	35.0%	35.2%	34.3%	32.5%	32.4%
Regional	31.9%	32.7%	28.3%	34.9%	34.0%
Distant	18.6%	18.5%	20.4%	20.4%	17.6%
Unstaged	9.3%	8.8%	9.6%	7.0%	10.3%
<b>Lung**</b>					
Total Cases	14,957	12,942	1,610	357	756
Local	21.8%	22.3%	17.0%	23.0%	20.6%
Regional	22.4%	22.6%	22.8%	15.4%	22.1%
Distant	46.5%	45.9%	50.8%	49.0%	48.0%
Unstaged	9.3%	9.2%	9.4%	12.6%	9.3%
<b>Melanoma</b>					
Total Cases	9,261	8,367	43	24	210
<i>In Situ</i>	51.2%	49.2%	23.3%	20.8%	38.1%
Local	40.0%	41.9%	37.2%	41.7%	46.2%
Regional	3.2%	3.5%	11.6%	20.8%	4.8%
Distant	1.8%	1.9%	11.6%	^	5.2%
Unstaged	3.9%	3.6%	16.3%	^	5.7%

\*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 A13. Distribution of Stage at Diagnosis for Selected Cancer Sites in New Jersey, Males, 2009-2013.**

	All Races	White	Black	Asian/ Pacific Islander	Hispanic*
<b>Colorectal</b>					
Total Cases	11,557	9,445	1,401	495	1,082
<i>In Situ</i>	6.5%	6.0%	8.8%	6.9%	5.8%
Local	34.0%	34.8%	28.8%	33.5%	33.3%
Regional	31.5%	32.4%	28.6%	29.9%	33.2%
Distant	19.7%	19.4%	24.5%	18.2%	19.1%
Unstaged	8.4%	7.4%	9.4%	11.5%	8.6%
<b>Lung**</b>					
Total Cases	14,554	12,340	1,674	457	884
Local	17.3%	17.7%	13.9%	16.6%	14.9%
Regional	22.5%	22.8%	20.6%	21.7%	21.9%
Distant	51.4%	51.1%	54.4%	54.5%	54.6%
Unstaged	8.8%	8.5%	11.1%	7.2%	8.5%
<b>Melanoma</b>					
Total Cases	11,675	10,768	34	36	165
<i>In Situ</i>	47.0%	45.3%	32.4%	50.0%	33.3%
Local	42.3%	43.5%	35.3%	27.8%	45.5%
Regional	4.4%	4.7%	-	-	9.7%
Distant	2.5%	2.6%	14.7%	-	4.2%
Unstaged	3.8%	3.9%	-	-	7.3%
<b>Prostate**</b>					
Total Cases	34,584	26,738	5,348	1,033	3,036
Local	81.5%	81.9%	81.7%	79.5%	82.7%
Regional	8.6%	9.1%	6.8%	12.3%	7.3%
Distant	3.9%	3.8%	5.2%	4.2%	4.4%
Unstaged	6.0%	5.2%	6.4%	4.1%	5.5%

\*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 A14. 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
Endometrial (corpus uteri)		29.7	31.5	24.6	16.0	23.3	24.7	25.2	23.0	17.5	20.7
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 and 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 A15. 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 and 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 A16. Age-adjusted Mortality Rates, Females, All Races Combined.**

Cancer Site	Rates					Cases	Rates
	2009	2010	2011	2012	2013	2009-2013	
<b>All Sites</b>	149.4	146.8	146.2	139.5	137.2	41,803	143.7
<b>Oral Cavity and Pharynx</b>	1.4	1.4	0.9	1.1	1.1	340	1.2
Lip	^	^	^	^	^	^	^
Tongue	0.5	0.4	0.3	0.4	0.3	106	0.4
Salivary Gland	^	0.3	^	^	0.2	47	0.2
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	0.2	0.2	^	0.3	0.2	59	0.2
Nasopharynx	^	0.3	^	^	^	36	0.1
Tonsil	^	^	^	^	^	15	0.1
Oropharynx	^	^	^	^	^	25	0.1
Hypopharynx	^	^	^	^	^	^	^
<b>Digestive System</b>	34.8	35.0	32.4	33.1	31.9	9,915	33.4
Esophagus	1.7	1.7	1.6	1.4	1.4	458	1.6
Stomach	3.0	3.0	2.4	2.6	2.4	781	2.7
Small Intestine	0.3	0.4	0.2	0.3	0.3	89	0.3
Colon and Rectum	14.0	13.8	13.0	13.1	12.4	4,014	13.3
Colon excluding Rectum	11.7	11.6	11.2	10.5	10.1	3,350	11.0
Rectum and Rectosigmoid Junction	2.3	2.2	1.8	2.6	2.3	664	2.2
Anus, Anal Canal and Anorectum	0.4	0.3	0.2	0.3	0.5	93	0.3
Liver and Intrahepatic Bile Duct	3.3	3.8	2.9	3.3	3.6	981	3.4
Liver	2.1	2.3	1.6	2.0	2.2	594	2.1
Intrahepatic Bile Duct	1.2	1.5	1.3	1.3	1.3	387	1.3
Gallbladder	0.7	1.1	0.6	0.8	0.7	227	0.8
Pancreas	10.5	10.1	10.1	10.3	10.0	2,993	10.2
<b>Respiratory System</b>	37.1	35.3	36.3	32.9	33.4	10,036	35.0
Larynx	0.5	0.6	0.5	0.4	0.4	146	0.5
Lung and Bronchus	36.4	34.5	35.6	32.4	32.8	9,845	34.3
<b>Bones and Joints</b>	0.3	0.3	0.5	^	0.3	78	0.3
<b>Soft Tissue (Including Heart)</b>	1.3	1.7	1.1	1.4	1.0	351	1.3
<b>Skin (Excluding Basal and Squamous)</b>	2.3	1.9	1.7	1.8	2.0	576	1.9
Melanoma of the Skin	1.7	1.5	1.3	1.4	1.7	451	1.5
<b>Breast</b>	24.0	23.2	24.3	22.6	23.0	6,734	23.4

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 A16 (continued). Age-adjusted Mortality Rates, Females, All Races Combined.**

Cancer Site	Rates					Cases	Rates
	2009	2010	2011	2012	2013	2009-2013	
<b>Female Genital System</b>	16.6	17.8	17.3	16.1	15.1	4,729	16.6
Cervix Uteri	2.5	2.4	2.6	2.3	1.9	622	2.3
Corpus and Uterus, NOS	5.1	6.1	5.3	5.1	5.7	1,573	5.5
Corpus Uteri	2.1	2.4	2.2	2.0	2.1	616	2.1
Uterus, NOS	3.0	3.7	3.2	3.1	3.6	957	3.3
Ovary	8.0	8.5	8.4	7.7	6.7	2,247	7.8
Vagina	^	0.2	0.2	0.2	0.3	57	0.2
Vulva	0.5	0.5	0.4	0.6	0.5	159	0.5
<b>Urinary System</b>	4.8	4.9	4.6	4.6	4.6	1,418	4.7
Urinary Bladder	2.5	2.7	2.5	2.4	2.5	765	2.5
Kidney and Renal Pelvis	2.1	2.0	2.0	2.1	2.0	604	2.0
Ureter	^	^	^	^	^	30	0.1
<b>Eye and Orbit</b>	^	^	^	^	^	11	^
<b>Brain and Other Nervous System</b>	2.9	3.0	3.3	2.8	2.9	815	3.0
<b>Endocrine System</b>	0.6	0.9	0.5	0.7	0.8	195	0.7
Thyroid	0.5	0.6	0.4	0.4	0.6	138	0.5
<b>Lymphomas</b>	4.9	4.5	5.1	4.7	4.3	1,384	4.7
Hodgkin Lymphoma	0.3	0.2	0.4	0.3	0.2	74	0.3
Non-Hodgkin Lymphoma	4.6	4.3	4.7	4.5	4.1	1,310	4.4
<b>Myelomas</b>	2.3	2.2	3.0	2.9	2.3	743	2.5
<b>Leukemias</b>	4.6	4.7	5.0	4.8	5.1	1,398	4.8
Lymphocytic Leukemia	1.1	1.4	1.0	1.2	1.2	352	1.2
Acute Lymphocytic Leukemia	0.3	0.3	0.3	0.3	0.3	80	0.3
Chronic Lymphocytic Leukemia	0.8	1.0	0.6	0.8	0.9	255	0.8
Myeloid and Monocytic Leukemia	2.1	2.2	2.6	2.2	2.2	634	2.3
Acute Myeloid Leukemia	1.9	2.0	2.3	2.0	2.0	565	2.0
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	^	^	0.2	^	^	40	0.1
Other Leukemia	1.4	1.1	1.4	1.3	1.6	412	1.4
<b>Ill-Defined &amp; Unspecified Sites</b>	11.7	10.0	10.3	9.7	9.4	3,080	10.2

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 A17. Age-adjusted Mortality Rates, Males, All Races Combined.**

Cancer Site	Rates					Cases	Rates
	2009	2010	2011	2012	2013	2009-2013	
<b>All Sites</b>	199.3	202.9	195.7	191.6	185.1	41,058	194.7
<b>Oral Cavity and Pharynx</b>	2.8	3.0	3.5	3.2	2.6	682	3.0
Lip	^	^	^	^	^	^	^
Tongue	0.8	0.8	0.9	0.8	0.6	176	0.8
Salivary Gland	0.3	0.3	0.5	0.3	0.4	74	0.3
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	0.3	0.5	0.4	0.6	0.3	94	0.4
Nasopharynx	0.3	0.4	^	0.3	0.3	62	0.3
Tonsil	^	^	0.4	0.2	0.3	58	0.2
Oropharynx	0.3	^	0.3	0.2	^	50	0.2
Hypopharynx	^	^	^	^	^	33	0.1
<b>Digestive System</b>	56.2	55.5	55.8	54.2	54.4	11,911	55.2
Esophagus	6.5	7.8	7.3	7.0	6.5	1,557	7.0
Stomach	5.8	4.8	4.5	5.2	5.3	1,072	5.1
Small Intestine	0.5	0.4	0.4	0.3	0.5	90	0.4
Colon and Rectum	20.2	19.0	18.7	19.0	17.6	3,993	18.9
Colon excluding Rectum	16.5	15.6	15.1	15.1	14.1	3,198	15.2
Rectum and Rectosigmoid Junction	3.7	3.4	3.5	3.9	3.6	795	3.6
Anus, Anal Canal and Anorectum	^	^	^	^	^	37	0.2
Liver and Intrahepatic Bile Duct	8.3	8.3	8.9	8.3	8.5	1,902	8.5
Liver	6.2	6.6	6.7	6.3	6.3	1,462	6.4
Intrahepatic Bile Duct	2.1	1.8	2.2	2.1	2.2	440	2.1
Gallbladder	0.6	0.6	0.6	0.5	0.9	133	0.7
Pancreas	12.8	13.4	14.1	12.6	13.7	2,882	13.3
<b>Respiratory System</b>	54.2	55.7	52.3	51.5	49.5	11,157	52.6
Larynx	1.8	1.9	2.2	1.5	2.3	430	2.0
Lung and Bronchus	52.3	53.5	49.6	49.4	46.8	10,653	50.2
<b>Bones and Joints</b>	0.5	0.4	0.5	0.4	0.6	106	0.5
<b>Soft Tissue (Including Heart)</b>	1.4	2.2	1.7	1.6	1.6	364	1.7
<b>Skin (Excluding Basal and Squamous)</b>	4.8	4.7	4.6	5.2	5.1	1,025	4.9
Melanoma of the Skin	3.6	3.4	3.5	3.8	3.5	756	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 A17 (continued). Age-adjusted Mortality Rates, Males, All Races Combined.**

Cancer Site	Rates					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013		
<b>Breast</b>	0.3	0.6	0.2	0.3	0.3	71	0.3
<b>Male Genital System</b>	19.8	22.1	20.4	19.0	18.0	3,924	19.8
Prostate	19.5	21.8	19.8	18.8	17.6	3,843	19.5
Testis	^	^	0.4	^	0.2	50	0.2
Penis	^	^	^	^	^	23	0.1
<b>Urinary System</b>	13.8	14.7	13.6	13.9	13.3	2,861	13.9
Urinary Bladder	7.9	8.6	8.7	9.0	8.2	1,700	8.5
Kidney and Renal Pelvis	5.6	5.6	4.6	4.6	4.7	1,086	5.0
Ureter	^	^	^	^	^	27	0.1
<b>Eye and Orbit</b>	^	^	^	^	^	14	0.1
<b>Brain and Other Nervous System</b>	4.6	4.7	4.6	5.2	4.5	1,040	4.7
<b>Endocrine System</b>	0.9	0.9	0.7	0.9	1.0	188	0.9
Thyroid	0.5	0.6	0.4	0.5	0.6	114	0.5
<b>Lymphomas</b>	8.0	8.1	7.5	7.8	7.3	1,590	7.7
Hodgkin Lymphoma	0.4	0.6	0.4	0.3	0.3	81	0.4
Non-Hodgkin Lymphoma	7.6	7.5	7.1	7.4	7.0	1,509	7.3
<b>Myeloma</b>	4.6	3.7	4.0	4.2	4.0	853	4.1
<b>Leukemias</b>	8.7	9.1	9.4	8.9	8.0	1,810	8.8
Lymphocytic Leukemia	2.3	2.6	2.8	2.5	2.1	511	2.5
Acute Lymphocytic Leukemia	0.4	0.5	0.3	0.5	0.3	86	0.4
Chronic Lymphocytic Leukemia	1.8	2.0	2.4	1.9	1.6	396	1.9
Myeloid and Monocytic Leukemia	3.5	4.1	4.2	3.8	3.6	806	3.9
Acute Myeloid Leukemia	3.1	3.5	3.6	3.3	3.3	697	3.3
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	0.3	0.3	0.4	0.2	0.2	64	0.3
Other Leukemia	3.0	2.4	2.3	2.5	2.2	493	2.5
<b>Ill-Defined &amp; Unspecified Sites</b>	18.5	17.4	16.8	15.4	15.0	3,462	16.6

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 A18. Age-adjusted Mortality Rates, White Females.**

Cancer Site	Rates					Cases	Rates
	2009	2010	2011	2012	2013	2009-2013	
<b>All Sites</b>	152.9	148.7	147.9	143.3	140.6	35,354	146.6
<b>Oral Cavity and Pharynx</b>	1.5	1.5	0.8	1.1	1.0	287	1.2
Lip	^	^	^	^	^	^	^
Tongue	0.6	0.5	0.2	0.4	0.3	92	0.4
Salivary Gland	^	0.3	^	^	0.2	42	0.2
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	0.2	^	^	0.3	0.2	52	0.2
Nasopharynx	^	0.3	^	^	^	27	0.1
Tonsil	^	^	^	^	^	12	0.1
Oropharynx	^	^	^	^	^	20	0.1
Hypopharynx	^	^	^	^	^	^	^
<b>Digestive System</b>	34.0	34.3	32.6	32.8	32.1	8,244	33.2
Esophagus	1.8	1.6	1.7	1.4	1.3	382	1.6
Stomach	2.7	2.6	2.5	2.3	2.2	602	2.4
Small Intestine	0.3	0.4	0.2	0.3	0.2	69	0.3
Colon and Rectum	13.6	13.5	12.9	13.2	12.5	3,353	13.1
Colon excluding Rectum	11.2	11.3	11.1	10.6	10.1	2,798	10.9
Rectum and Rectosigmoid Junction	2.4	2.3	1.8	2.6	2.3	555	2.3
Anus, Anal Canal and Anorectum	0.5	0.3	^	0.3	0.5	82	0.4
Liver and Intrahepatic Bile Duct	3.3	3.8	2.9	3.3	3.5	808	3.4
Liver	2.2	2.4	1.6	2.0	2.2	493	2.1
Intrahepatic Bile Duct	1.1	1.4	1.3	1.3	1.4	315	1.3
Gallbladder	0.7	1.1	0.6	0.8	0.6	188	0.8
Pancreas	10.3	10.1	10.3	10.2	10.4	2,524	10.3
<b>Respiratory System</b>	39.0	37.2	37.8	35.0	35.6	8,747	36.9
Larynx	0.6	0.5	0.5	0.4	0.4	116	0.5
Lung and Bronchus	38.2	36.5	37.1	34.4	35.0	8,588	36.2
<b>Bones and Joints</b>	0.3	0.3	0.4	^	0.3	64	0.3
<b>Soft Tissue (Including Heart)</b>	1.3	1.8	1.2	1.4	1.0	297	1.3
<b>Skin (Excluding Basal and Squamous)</b>	2.6	2.2	2.0	2.1	2.2	551	2.2
Melanoma of the Skin	2.0	1.8	1.6	1.8	1.9	436	1.8
<b>Breast</b>	24.0	22.7	23.9	22.5	22.5	5,471	23.1

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 A18 (continued). Age-adjusted Mortality Rates, White Females.**

Cancer Site	Rates					Cases	Rates
	2009	2010	2011	2012	2013	2009-2013	
<b>Female Genital System</b>	16.9	18.0	17.2	16.0	15.1	3,879	16.6
Cervix Uteri	2.4	2.1	2.3	2.4	1.7	453	2.2
Corpus and Uterus, NOS	4.6	6.0	4.9	4.7	5.2	1,213	5.1
Corpus Uteri	1.9	2.3	2.1	1.7	2.0	476	2.0
Uterus, NOS	2.7	3.6	2.8	3.0	3.2	737	3.1
Ovary	8.8	9.0	8.9	8.0	7.1	1,953	8.3
Vagina	^	0.2	^	^	0.3	47	0.2
Vulva	0.6	0.5	0.4	0.7	0.6	149	0.6
<b>Urinary System</b>	5.1	5.1	4.7	5.1	4.8	1,259	5.0
Urinary Bladder	2.7	2.8	2.7	2.6	2.5	687	2.6
Kidney and Renal Pelvis	2.3	2.1	1.9	2.3	2.1	531	2.1
Ureter	^	^	^	^	^	28	0.1
<b>Eye and Orbit</b>	^	^	^	^	^	11	^
<b>Brain and Other Nervous System</b>	3.3	3.1	3.6	3.1	3.5	736	3.3
<b>Endocrine System</b>	0.7	0.8	0.4	0.7	0.9	157	0.7
Thyroid	0.5	0.6	0.3	0.4	0.6	113	0.5
<b>Lymphomas</b>	5.2	4.6	5.3	5.2	4.6	1,238	5.0
Hodgkin Lymphoma	0.3	0.2	0.4	0.3	0.2	65	0.3
Non-Hodgkin Lymphoma	4.9	4.4	4.9	4.9	4.3	1,173	4.7
<b>Myelomas</b>	2.2	1.9	2.6	2.8	2.0	573	2.3
<b>Leukemias</b>	5.0	4.8	5.1	5.1	5.5	1,233	5.1
Lymphocytic Leukemia	1.3	1.5	1.1	1.3	1.4	322	1.3
Acute Lymphocytic Leukemia	0.4	0.4	0.3	0.3	0.4	71	0.4
Chronic Lymphocytic Leukemia	0.9	1.1	0.7	0.8	1.0	236	0.9
Myeloid and Monocytic Leukemia	2.3	2.2	2.7	2.5	2.3	560	2.4
Acute Myeloid Leukemia	2.1	2.0	2.4	2.2	2.2	500	2.2
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	^	^	^	^	^	35	0.1
Other Leukemia	1.4	1.1	1.3	1.3	1.8	351	1.4
<b>Ill-Defined &amp; Unspecified Sites</b>	12.0	10.2	10.3	10.0	9.4	2,607	10.3

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 A19. Age-adjusted Mortality Rates, White Males.**

Cancer Site	Rates					Cases	Rates
	2009	2010	2011	2012	2013	2009-2013	
<b>All Sites</b>	199.4	203.3	198.7	196.0	190.7	34,908	197.5
<b>Oral Cavity and Pharynx</b>	2.6	2.7	3.5	3.1	2.5	534	2.9
Lip	^	^	^	^	^	^	^
Tongue	0.8	0.8	0.9	0.9	0.7	149	0.8
Salivary Gland	0.4	0.3	0.5	^	0.4	64	0.4
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	^	0.3	0.4	0.6	0.3	68	0.4
Nasopharynx	^	0.3	^	0.3	^	37	0.2
Tonsil	^	^	0.4	^	^	45	0.2
Oropharynx	^	^	0.3	^	^	40	0.2
Hypopharynx	^	^	^	^	^	25	0.1
<b>Digestive System</b>	56.1	54.2	56.0	54.7	55.0	9,922	55.2
Esophagus	6.8	7.8	8.0	7.6	7.3	1,379	7.5
Stomach	5.4	4.7	4.3	5.0	5.0	850	4.8
Small Intestine	0.6	0.4	0.4	0.4	0.5	81	0.5
Colon and Rectum	20.4	18.5	18.4	18.8	17.6	3,313	18.7
Colon excluding Rectum	16.5	15.1	14.8	14.9	14.0	2,649	15.0
Rectum and Rectosigmoid Junction	3.9	3.4	3.6	3.9	3.6	664	3.7
Anus, Anal Canal and Anorectum	^	^	^	^	^	30	0.2
Liver and Intrahepatic Bile Duct	8.0	7.9	8.9	8.2	8.5	1,525	8.3
Liver	5.9	6.0	6.5	6.1	6.1	1,138	6.1
Intrahepatic Bile Duct	2.2	1.9	2.4	2.1	2.4	387	2.2
Gallbladder	0.6	0.5	0.7	0.6	0.9	113	0.7
Pancreas	12.8	13.3	14.0	13.0	13.9	2,424	13.4
<b>Respiratory System</b>	54.5	57.1	53.0	52.8	51.0	9,518	53.6
Larynx	1.9	1.9	2.1	1.6	2.1	349	1.9
Lung and Bronchus	52.4	55.0	50.6	50.6	48.5	9,108	51.3
<b>Bones and Joints</b>	0.6	0.5	0.5	0.4	0.7	90	0.5
<b>Soft Tissue (Including Heart)</b>	1.4	2.3	1.8	1.9	1.7	316	1.8
<b>Skin (Excluding Basal and Squamous)</b>	5.5	5.4	5.4	6.0	6.0	998	5.7
Melanoma of the Skin	4.2	3.9	4.2	4.3	4.2	740	4.2

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, White Males.**

Cancer Site	Rates					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013		
<b>Breast</b>	0.3	0.5	^	0.3	0.3	57	0.3
<b>Male Genital System</b>	17.8	19.9	18.9	17.1	16.9	3,089	18.1
Prostate	17.5	19.5	18.2	16.8	16.5	3,016	17.7
Testis	^	^	0.4	^	0.3	47	0.3
Penis	^	^	^	^	^	20	0.1
<b>Urinary System</b>	14.5	15.6	14.5	14.9	14.5	2,586	14.8
Urinary Bladder	8.4	9.1	9.3	9.8	9.1	1,570	9.1
Kidney and Renal Pelvis	5.8	5.9	4.9	4.8	4.9	950	5.3
Ureter	^	^	^	^	^	23	0.1
<b>Eye and Orbit</b>	^	^	^	^	^	13	0.1
<b>Brain and Other Nervous System</b>	5.1	5.2	5.0	5.7	5.0	930	5.2
<b>Endocrine System</b>	0.8	1.0	0.8	0.9	0.9	158	0.9
Thyroid	0.5	0.7	0.4	0.5	0.6	101	0.5
<b>Lymphomas</b>	8.4	8.4	8.0	8.3	8.0	1,426	8.2
Hodgkin Lymphoma	0.5	0.6	0.4	0.3	0.3	70	0.4
Non-Hodgkin Lymphoma	7.9	7.8	7.6	8.0	7.7	1,356	7.8
<b>Myelomas</b>	4.0	3.6	3.7	4.1	3.9	672	3.9
<b>Leukemias</b>	9.3	9.7	10.2	9.7	8.8	1,646	9.5
Lymphocytic Leukemia	2.4	2.8	3.1	2.6	2.4	465	2.7
Acute Lymphocytic Leukemia	0.3	0.5	0.3	0.5	0.3	68	0.4
Chronic Lymphocytic Leukemia	2.0	2.1	2.6	1.9	1.9	369	2.1
Myeloid and Monocytic Leukemia	3.8	4.5	4.6	4.3	4.0	738	4.3
Acute Myeloid Leukemia	3.5	3.8	3.8	3.8	3.6	643	3.7
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	^	0.4	0.5	^	^	54	0.3
Other Leukemia	3.1	2.4	2.6	2.8	2.4	443	2.6
<b>Ill-Defined &amp; Unspecified Sites</b>	18.3	17.3	16.9	16.2	15.4	2,953	16.8

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 A20. Age-adjusted Mortality Rates, Black Females.**

Cancer Site	Rates					Cases	Rates
	2009	2010	2011	2012	2013	2009-2013	
<b>All Sites</b>	159.8	164.2	167.0	150.2	154.1	5,307	158.9
<b>Oral Cavity and Pharynx</b>	^	^	^	^	1.7	41	1.2
Lip	^	^	^	^	^	^	^
Tongue	^	^	^	^	^	10	0.3
Salivary Gland	^	^	^	^	^	^	^
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	^	^	^	^	^	^	^
Nasopharynx	^	^	^	^	^	^	^
Tonsil	^	^	^	^	^	^	^
Oropharynx	^	^	^	^	^	^	^
Hypopharynx	^	^	^	^	^	^	^
<b>Digestive System</b>	45.0	45.0	37.1	40.8	38.2	1,352	41.2
Esophagus	2.0	1.9	^	2.1	2.2	64	1.9
Stomach	4.2	6.0	2.8	3.8	4.0	132	4.2
Small Intestine	^	^	^	^	^	17	0.6
Colon and Rectum	19.6	17.0	17.3	15.6	14.2	550	16.7
Colon excluding Rectum	16.6	14.7	15.1	12.7	12.1	469	14.2
Rectum and Rectosigmoid Junction	3.0	2.3	2.2	2.9	2.1	81	2.5
Anus, Anal Canal and Anorectum	^	^	^	^	^	^	^
Liver and Intrahepatic Bile Duct	3.6	4.3	2.5	3.3	4.3	123	3.6
Liver	1.7	2.7	^	1.9	3.1	73	2.2
Intrahepatic Bile Duct	1.8	1.7	^	1.4	^	50	1.4
Gallbladder	^	^	^	^	^	27	0.8
Pancreas	13.4	12.8	10.9	13.9	10.7	399	12.3
<b>Respiratory System</b>	33.1	32.3	36.5	29.7	30.2	1,077	32.3
Larynx	^	1.5	^	^	^	30	0.9
Lung and Bronchus	32.7	30.8	35.7	29.0	29.3	1,047	31.4
<b>Bones and Joints</b>	^	^	^	^	^	10	0.3
<b>Soft Tissue (Including Heart)</b>	1.5	^	^	1.6	^	45	1.3
<b>Skin (Excluding Basal and Squamous)</b>	^	^	^	^	^	16	0.5
Melanoma of the Skin	^	^	^	^	^	^	^
<b>Breast</b>	30.4	31.1	33.1	28.1	31.2	1,060	30.7

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, Black Females.**

Cancer Site	Rates					Cases	Rates
	2009	2010	2011	2012	2013	2009-2013	
<b>Female Genital System</b>	18.9	20.0	21.2	21.4	19.7	688	20.3
Cervix Uteri	3.3	5.0	4.8	3.4	4.0	145	4.1
Corpus and Uterus, NOS	9.7	8.2	9.1	8.4	9.8	304	9.0
Corpus Uteri	3.8	3.1	3.0	3.8	2.8	110	3.3
Uterus, NOS	5.9	5.0	6.1	4.6	7.1	194	5.8
Ovary	4.9	6.6	6.4	8.9	5.2	215	6.4
Vagina	^	^	^	^	^	^	^
Vulva	^	^	^	^	^	^	^
<b>Urinary System</b>	4.4	4.7	5.6	3.3	4.0	140	4.4
Urinary Bladder	2.2	2.8	2.0	1.9	1.9	68	2.2
Kidney and Renal Pelvis	1.9	1.6	3.4	^	2.0	65	2.0
Ureter	^	^	^	^	^	^	^
<b>Eye and Orbit</b>	^	^	^	^	^	^	^
<b>Brain and Other Nervous System</b>	^	2.2	2.8	1.5	^	60	1.7
<b>Endocrine System</b>	^	^	^	^	^	27	0.8
Thyroid	^	^	^	^	^	16	0.5
<b>Lymphomas</b>	2.8	4.1	4.2	2.4	2.6	106	3.2
Hodgkin Lymphoma	^	^	^	^	^	^	^
Non-Hodgkin Lymphoma	2.6	3.9	3.4	2.4	2.6	97	3.0
<b>Myelomas</b>	3.0	5.3	6.1	4.4	5.4	155	4.8
<b>Leukemias</b>	3.1	4.5	3.9	3.9	4.3	126	3.9
Lymphocytic Leukemia	^	^	^	^	^	25	0.8
Acute Lymphocytic Leukemia	^	^	^	^	^	^	^
Chronic Lymphocytic Leukemia	^	^	^	^	^	17	0.6
Myeloid and Monocytic Leukemia	^	2.0	1.8	1.6	2.1	56	1.7
Acute Myeloid Leukemia	^	1.9	^	1.6	1.7	51	1.5
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	^	^	^	^	^	^	^
Other Leukemia	^	^	^	1.5	^	45	1.5
<b>Ill-Defined &amp; Unspecified Sites</b>	14.2	11.0	12.9	10.9	12.6	404	12.3

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. Age-adjusted Mortality Rates, Black Males.**

Cancer Site	Rates					Cases	Rates
	2009	2010	2011	2012	2013	2009-2013	2009-2013
<b>All Sites</b>	259.8	258.1	229.7	222.9	205.2	4,961	234.1
<b>Oral Cavity and Pharynx</b>	5.0	5.1	4.5	3.5	3.9	110	4.4
Lip	^	^	^	^	^	^	^
Tongue	^	^	^	^	^	22	0.9
Salivary Gland	^	^	^	^	^	^	^
Floor of Mouth	^	^	^	^	^	^	^
Gum and Other Mouth	^	^	^	^	^	12	0.5
Nasopharynx	^	^	^	^	^	15	0.5
Tonsil	^	^	^	^	^	12	0.5
Oropharynx	^	^	^	^	^	10	0.4
Hypopharynx	^	^	^	^	^	^	^
<b>Digestive System</b>	70.3	79.1	66.9	63.8	64.8	1,549	68.7
Esophagus	7.6	10.2	5.3	4.6	2.9	143	6.0
Stomach	9.1	5.9	5.7	7.8	8.2	156	7.3
Small Intestine	^	^	^	^	^	^	^
Colon and Rectum	24.5	28.5	28.3	27.2	24.0	568	26.4
Colon excluding Rectum	21.2	23.3	23.7	21.6	19.5	458	21.8
Rectum and Rectosigmoid Junction	3.3	5.2	4.6	5.6	4.5	110	4.7
Anus, Anal Canal and Anorectum	^	^	^	^	^	^	^
Liver and Intrahepatic Bile Duct	11.0	13.8	8.6	8.0	9.0	260	10.0
Liver	9.5	12.4	7.1	7.1	7.8	232	8.7
Intrahepatic Bile Duct	^	^	^	^	^	28	1.3
Gallbladder	^	^	^	^	^	14	0.8
Pancreas	15.4	16.7	16.6	14.5	17.0	364	16.0
<b>Respiratory System</b>	72.6	61.1	58.5	59.1	57.0	1,344	61.4
Larynx	2.5	2.8	3.5	^	5.1	70	3.1
Lung and Bronchus	70.1	57.8	54.5	57.4	51.0	1,266	57.9
<b>Bones and Joints</b>	^	^	^	^	^	13	0.5
<b>Soft Tissue (Including Heart)</b>	^	1.8	1.8	^	^	40	1.4
<b>Skin (Excluding Basal and Squamous)</b>	^	^	^	^	^	19	0.7
Melanoma of the Skin	^	^	^	^	^	10	0.3

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, Black Males.**

Cancer Site	Rates					Cases 2009-2013	Rates
	2009	2010	2011	2012	2013		
<b>Breast</b>	^	^	^	^	^	11	0.5
<b>Male Genital System</b>	47.2	53.0	42.2	47.0	35.2	777	44.7
Prostate	46.8	52.9	41.9	46.9	34.6	769	44.4
Testis	^	^	^	^	^	^	^
Penis	^	^	^	^	^	^	^
<b>Urinary System</b>	10.9	9.7	9.7	11.3	9.6	210	10.3
Urinary Bladder	4.7	4.7	5.1	7.2	4.7	100	5.3
Kidney and Renal Pelvis	6.0	4.5	4.6	4.2	4.4	105	4.7
Ureter	^	^	^	^	^	^	^
<b>Eye and Orbit</b>	^	^	^	^	^	^	^
<b>Brain and Other Nervous System</b>	2.9	2.6	3.5	3.9	2.3	73	3.0
<b>Endocrine System</b>	^	^	^	^	^	18	0.8
Thyroid	^	^	^	^	^	^	^
<b>Lymphomas</b>	6.9	7.3	5.5	5.0	3.4	120	5.5
Hodgkin Lymphoma	^	^	^	^	^	10	0.4
Non-Hodgkin Lymphoma	6.4	6.9	5.0	4.6	3.2	110	5.2
<b>Myelomas</b>	10.9	4.7	6.9	6.5	6.7	149	7.1
<b>Leukemias</b>	6.1	7.6	6.4	5.4	3.6	122	5.8
Lymphocytic Leukemia	^	^	^	2.8	^	31	1.6
Acute Lymphocytic Leukemia	^	^	^	^	^	^	^
Chronic Lymphocytic Leukemia	^	^	^	^	^	22	1.2
Myeloid and Monocytic Leukemia	^	2.9	3.3	^	^	52	2.3
Acute Myeloid Leukemia	^	^	3.0	^	^	40	1.7
Acute Monocytic Leukemia	^	^	^	^	^	^	^
Chronic Myeloid Leukemia	^	^	^	^	^	^	^
Other Leukemia	2.7	2.9	^	^	^	39	2.0
<b>Ill-Defined &amp; Unspecified Sites</b>	23.1	22.8	21.8	14.3	15.0	405	19.2

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, Hispanic Females and Males, 2009-2013 Combined.**

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
<b>All Sites</b>	2,353	87.7	2,467	127.2
<b>Oral Cavity and Pharynx</b>	18	0.7	39	1.7
Lip	^	^	^	^
Tongue	^	^	10	0.4
Salivary Gland	^	^	^	^
Floor of Mouth	^	^	^	^
Gum and Other Mouth	^	^	^	^
Nasopharynx	^	^	^	^
Tonsil	^	^	^	^
Oropharynx	^	^	^	^
Hypopharynx	^	^	^	^
<b>Digestive System</b>	704	27.5	869	42.6
Esophagus	19	0.7	77	4.2
Stomach	96	3.7	129	6.6
Small Intestine	^	^	12	0.7
Colon and Rectum	242	9.2	260	12.8
Colon excluding Rectum	195	7.5	214	10.7
Rectum and Rectosigmoid Junction	47	1.7	46	2.1
Anus, Anal Canal and Anorectum	^	^	^	^
Liver and Intrahepatic Bile Duct	96	3.8	203	9.0
Liver	63	2.5	166	7.2
Intrahepatic Bile Duct	33	1.3	37	1.8
Gallbladder	27	1.1	13	0.9
Pancreas	189	7.7	159	7.7
<b>Respiratory System</b>	298	11.5	543	28.5
Larynx	10	0.4	36	1.8
Lung and Bronchus	286	11.0	502	26.4
<b>Bones and Joints</b>	10	0.3	^	^
<b>Soft Tissue (Including Heart)</b>	27	0.8	24	1.0
<b>Skin (Excluding Basal and Squamous)</b>	16	0.6	15	0.8
Melanoma of the Skin	11	0.4	12	0.7
<b>Breast</b>	371	12.5	^	^

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 A22 (continued). Age-adjusted Mortality Rates, Hispanic Females and Males, 2009-2013 Combined.**

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
<b>Female Genital System</b>	339	12.2	-	-
Cervix Uteri	78	2.6	-	-
Corpus and Uterus, NOS	108	4.0	-	-
Corpus Uteri	38	1.4	-	-
Uterus, NOS	70	2.6	-	-
Ovary	133	4.7	-	-
Vagina	^	^	-	-
Vulva	10	0.5	-	-
<b>Male Genital System</b>	-	-	220	14.6
Prostate	-	-	203	14.1
Testis	-	-	10	0.2
Penis	-	-	^	^
<b>Urinary System</b>	69	2.9	136	7.7
Urinary Bladder	35	1.6	72	4.7
Kidney and Renal Pelvis	31	1.2	61	2.8
Ureter	^	^	^	^
<b>Eye and Orbit</b>	^	^	^	^
<b>Brain and Other Nervous System</b>	57	1.9	83	2.8
<b>Endocrine System</b>	12	0.4	18	0.8
Thyroid	^	^	^	^
<b>Lymphomas</b>	86	3.3	133	6.7
Hodgkin Lymphoma	^	^	^	^
Non-Hodgkin Lymphoma	83	3.2	125	6.4
<b>Myelomas</b>	63	2.6	60	3.2
<b>Leukemias</b>	98	3.5	125	6.0
Lymphocytic Leukemia	25	0.8	34	1.4
Acute Lymphocytic Leukemia	16	0.4	20	0.6
Chronic Lymphocytic Leukemia	^	^	12	0.8
Myeloid and Monocytic Leukemia	47	1.6	59	2.8
Acute Myeloid Leukemia	44	1.5	45	2.2
Acute Monocytic Leukemia	^	^	^	^
Chronic Myeloid Leukemia	^	^	^	^
Other Leukemia	26	1.1	32	1.7
<b>Ill-Defined &amp; Unspecified Sites</b>	185	7.2	190	10.3

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 A23. Age-adjusted Mortality Rates, Asian and Pacific Islander Females and Males, 2009-2013 Combined.**

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
<b>All Sites</b>	1,102	70.7	1,159	94.0
<b>Oral Cavity and Pharynx</b>	12	0.8	38	2.8
Lip	^	^	^	^
Tongue	^	^	^	^
Salivary Gland	^	^	^	^
Floor of Mouth	^	^	^	^
Gum and Other Mouth	^	^	14	1.0
Nasopharynx	^	^	10	0.6
Tonsil	^	^	^	^
Oropharynx	^	^	^	^
Hypopharynx	^	^	^	^
<b>Digestive System</b>	307	20.4	431	33.7
Esophagus	11	0.7	34	2.6
Stomach	47	3.1	65	5.0
Small Intestine	^	^	^	^
Colon and Rectum	106	7.1	108	8.5
Colon excluding Rectum	79	5.2	87	7.1
Rectum and Rectosigmoid Junction	27	1.8	21	1.4
Anus, Anal Canal and Anorectum	^	^	^	^
Liver and Intrahepatic Bile Duct	49	3.3	117	8.4
Liver	28	1.9	92	6.6
Intrahepatic Bile Duct	21	1.4	25	1.9
Gallbladder	11	0.6	^	^
Pancreas	66	4.4	92	8.3
<b>Respiratory System</b>	199	13.8	291	23.9
Larynx	^	^	10	0.8
Lung and Bronchus	197	13.6	276	22.7
<b>Bones and Joints</b>	^	^	^	^
<b>Soft Tissue (Including Heart)</b>	^	^	^	^
<b>Skin (Excluding Basal and Squamous)</b>	^	^	^	^
Melanoma of the Skin	^	^	^	^
<b>Breast</b>	197	11.2	^	^

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, Asian and Pacific Islander Females and Males, 2009-2013 Combined.**

Cancer Site	Female		Male	
	Cases	Rate	Cases	Rate
<b>Female Genital System</b>	158	8.8	-	-
Cervix Uteri	24	1.3	-	-
Corpus and Uterus, NOS	54	3.0	-	-
Corpus Uteri	30	1.6	-	-
Uterus, NOS	24	1.4	-	-
Ovary	77	4.3	-	-
Vagina	^	^	-	-
Vulva	^	^	-	-
<b>Male Genital System</b>	-	-	56	6.3
Prostate	-	-	56	6.3
Testis	-	-	^	^
Penis	-	-	^	^
<b>Urinary System</b>	18	1.2	58	5.2
Urinary Bladder	^	^	25	2.8
Kidney and Renal Pelvis	^	^	29	2.1
Ureter	^	^	^	^
<b>Eye and Orbit</b>	^	^	^	^
<b>Brain and Other Nervous System</b>	19	1.1	36	2.0
<b>Endocrine System</b>	11	0.9	12	1.0
Thyroid	^	^	^	^
<b>Lymphomas</b>	40	2.6	44	3.8
Hodgkin Lymphoma	^	^	^	^
Non-Hodgkin Lymphoma	40	2.6	43	3.7
<b>Myelomas</b>	15	1.0	31	2.5
<b>Leukemias</b>	39	2.8	42	3.0
Lymphocytic Leukemia	^	^	15	1.0
Acute Lymphocytic Leukemia	^	^	^	^
Chronic Lymphocytic Leukemia	^	^	^	^
Myeloid and Monocytic Leukemia	18	1.1	16	1.1
Acute Myeloid Leukemia	14	0.9	14	1.0
Acute Monocytic Leukemia	^	^	^	^
Chronic Myeloid Leukemia	^	^	^	^
Other Leukemia	16	1.3	11	0.8
<b>Ill-Defined &amp; Unspecified Sites</b>	66	4.7	99	8.2

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 A24. Comparative Mortality Rates, New Jersey and U.S., Females, 2009-2013.**

<b>Population:</b>	<b>New Jersey 2009-2013</b>					<b>United States 2009-2013</b>				
<b>Cancer Site</b>	<b>All Races</b>	<b>White</b>	<b>Black</b>	<b>API*</b>	<b>Hispanic*</b>	<b>All Races</b>	<b>White</b>	<b>Black</b>	<b>API*</b>	<b>Hispanic*</b>
All Sites	143.7	146.6	158.9	70.7	87.7	143.4	143.6	163.8	89.6	98.5
Lung	34.3	36.2	31.4	13.6	11.0	37.0	38.3	35.3	18.1	13.5
Breast	23.4	23.1	30.7	11.2	12.5	21.5	21.0	29.6	11.2	14.5
Colorectal	13.3	13.1	16.7	7.1	9.2	12.7	12.3	17.1	9.0	9.4

\*API=Asians and Pacific Islanders; persons of Hispanic ethnicity may be of any race or combination of races. Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.

**Table A25. Comparative Mortality Rates, New Jersey and U.S., Males, 2009-2013.**

<b>Population:</b>	<b>New Jersey 2009-2013</b>					<b>United States 2009-2013</b>				
<b>Cancer Site</b>	<b>All Races</b>	<b>White</b>	<b>Black</b>	<b>API*</b>	<b>Hispanic*</b>	<b>All Races</b>	<b>White</b>	<b>Black</b>	<b>API*</b>	<b>Hispanic*</b>
All Sites	194.7	197.5	234.1	94.0	127.2	204.0	202.9	254.2	125.6	145.0
Lung	50.2	51.3	57.9	22.7	26.4	57.8	57.7	70.6	32.7	28.3
Prostate	19.5	17.7	44.4	6.3	14.1	20.7	19.1	44.2	9.1	17.1
Colorectal	18.9	18.7	26.4	8.5	12.8	18.1	17.6	26.1	12.6	15.4

\*API=Asians and Pacific Islanders; persons of Hispanic ethnicity may be of any race or combination of races. Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.

**SUPPLEMENTAL TABLES: POPULATION AND AGE AT CANCER DIAGNOSIS**

**Table A26. Population Denominators by Race, Age Group and Year.**

**All Races**

	Male						Female					
	2009-13	2009	2010	2011	2012	2013	2009-13	2009	2010	2011	2012	2013
<1	269,993	54,336	53,830	54,888	53,507	53,432	258,582	51,927	51,584	52,326	51,513	51,232
01-04	1,102,813	222,005	222,159	220,480	219,768	218,401	1,058,581	212,995	213,169	211,982	210,866	209,569
05-09	1,433,832	289,149	288,044	286,485	285,944	284,210	1,373,889	276,336	275,663	274,288	274,284	273,318
10-14	1,490,196	301,139	300,002	298,676	296,038	294,341	1,423,733	287,355	286,741	285,371	282,856	281,410
15-19	1,531,333	311,238	309,391	307,614	303,501	299,589	1,437,014	290,724	289,106	288,468	285,764	282,952
20-24	1,418,516	275,079	280,002	283,658	287,401	292,376	1,329,592	257,864	262,369	265,009	269,249	275,101
25-29	1,412,894	277,812	278,738	282,709	285,625	288,010	1,382,712	274,464	275,886	277,314	277,221	277,827
30-34	1,401,321	273,201	276,436	280,545	283,890	287,249	1,423,896	278,132	282,193	285,506	288,054	290,011
35-39	1,423,033	296,477	287,959	280,782	278,520	279,295	1,461,286	306,339	297,103	288,354	285,007	284,483
40-44	1,568,271	321,560	316,857	314,612	310,646	304,596	1,635,802	336,276	331,209	328,324	323,318	316,675
45-49	1,683,407	346,353	343,965	338,079	330,961	324,049	1,764,601	361,102	359,402	354,370	348,740	340,987
50-54	1,658,929	322,289	329,386	333,996	336,043	337,215	1,744,188	340,795	347,558	351,321	352,053	352,461
55-59	1,416,400	266,203	274,444	282,783	292,313	300,657	1,524,849	287,772	295,738	304,189	314,220	322,930
60-64	1,160,561	218,585	228,768	237,408	236,013	239,787	1,291,989	244,474	255,392	264,681	261,908	265,534
65-69	860,475	157,656	162,993	168,770	182,493	188,563	1,002,686	185,659	190,850	196,535	211,713	217,929
70-74	604,441	114,310	116,130	118,731	123,674	131,596	754,111	143,195	145,300	148,390	154,114	163,112
75-79	454,291	91,064	90,106	90,085	90,669	92,367	621,645	126,866	124,823	123,307	122,653	123,996
80-84	345,659	69,018	69,670	69,481	69,064	68,426	541,934	110,720	109,638	108,718	107,425	105,433
85+	293,994	54,622	56,892	58,784	60,967	62,729	627,849	120,511	124,084	125,595	128,005	129,654

**White**

	Male						Female					
	2009-13	2009	2010	2011	2012	2013	2009-13	2009	2010	2011	2012	2013
<1	188,343	37,978	37,791	38,501	37,307	36,766	180,095	36,082	36,093	36,702	35,936	35,282
01-04	777,308	158,401	157,085	155,123	154,105	152,594	741,983	151,206	149,901	148,265	146,886	145,725
05-09	1,029,911	209,362	207,660	205,973	204,606	202,310	981,196	198,910	197,605	196,138	195,225	193,318
10-14	1,083,050	220,090	218,670	217,061	214,671	212,558	1,027,263	208,531	207,329	205,769	203,562	202,072
15-19	1,112,859	226,641	224,401	223,417	220,540	217,860	1,036,040	209,840	208,040	208,188	206,162	203,810
20-24	1,020,332	200,272	203,093	204,205	205,252	207,510	939,418	184,459	186,609	186,978	188,861	192,511
25-29	1,016,855	200,760	201,492	203,392	205,043	206,168	958,441	190,000	191,657	192,323	192,335	192,126
30-34	991,663	194,186	196,173	198,690	200,554	202,060	968,954	190,071	192,267	194,290	195,654	196,672
35-39	1,012,402	214,539	206,173	199,055	196,232	196,403	1,010,897	216,206	207,243	198,730	194,984	193,734
40-44	1,161,962	242,904	237,211	233,361	227,715	220,771	1,184,352	248,410	242,348	238,070	231,431	224,093
45-49	1,292,089	269,381	265,924	259,350	252,123	245,311	1,326,870	275,130	272,384	266,499	260,365	252,492
50-54	1,305,305	256,176	260,033	262,987	263,529	262,580	1,344,541	265,037	268,773	271,071	270,446	269,214
55-59	1,136,433	215,096	221,679	227,194	233,509	238,955	1,193,673	226,878	232,827	238,442	245,061	250,465
60-64	944,413	179,403	186,844	193,561	191,132	193,473	1,023,820	195,835	203,384	209,977	206,202	208,422
65-69	704,518	129,269	133,435	137,968	149,735	154,111	804,500	149,357	153,465	157,708	170,051	173,919
70-74	493,878	94,076	95,048	96,796	100,624	107,334	607,564	116,435	117,320	119,276	123,570	130,963
75-79	383,361	78,483	76,916	75,942	75,645	76,375	516,937	107,620	104,938	102,373	100,858	101,148
80-84	305,410	61,823	62,112	61,526	60,520	59,429	472,542	97,910	96,410	94,935	93,002	90,285
85+	266,322	49,896	51,803	53,309	55,014	56,300	565,487	109,335	112,274	113,192	114,832	115,854

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

**Cancer Incidence and Mortality in New Jersey, 2009-2013**

**Table A26 (continued). Population Denominators by Race, Age Group and Year.**

**Black**

	Male						Female					
	2009-13	2009	2010	2011	2012	2013	2009-13	2009	2010	2011	2012	2013
<1	50,464	9,896	9,879	10,236	10,100	10,353	48,835	9,669	9,546	9,876	9,794	9,950
01-04	198,365	39,131	39,637	39,685	39,905	40,007	191,702	37,690	38,316	38,377	38,612	38,707
05-09	246,904	49,895	49,684	49,190	49,095	49,040	238,331	47,958	47,812	47,365	47,439	47,757
10-14	263,002	53,638	53,039	52,668	52,013	51,644	254,830	51,880	51,589	51,318	50,465	49,578
15-19	282,142	58,408	58,041	56,808	55,180	53,705	272,533	56,687	55,977	54,386	53,190	52,293
20-24	266,499	49,398	51,048	53,250	55,383	57,420	262,632	49,211	51,006	52,704	54,262	55,449
25-29	225,884	44,276	43,962	44,874	45,793	46,979	242,463	48,480	47,906	48,350	48,492	49,235
30-34	216,390	41,658	42,647	43,430	44,036	44,619	246,037	47,861	48,958	49,444	49,832	49,942
35-39	212,391	43,977	42,973	41,892	41,664	41,885	245,237	51,320	49,820	48,424	47,861	47,812
40-44	230,820	46,621	46,264	46,250	46,097	45,588	265,511	53,449	53,301	53,304	53,072	52,385
45-49	234,883	47,102	47,412	47,323	46,835	46,211	272,237	54,415	54,705	54,701	54,508	53,908
50-54	215,665	40,353	42,359	43,434	44,308	45,211	250,832	47,666	49,516	50,436	51,233	51,981
55-59	166,189	30,682	31,390	32,787	34,760	36,570	205,978	38,628	39,539	40,793	42,588	44,430
60-64	125,918	23,186	24,599	25,639	25,903	26,591	167,992	30,901	32,749	34,329	34,727	35,286
65-69	90,304	16,845	17,430	17,818	18,775	19,436	125,545	23,873	24,150	24,541	25,936	27,045
70-74	64,318	12,359	12,519	12,737	13,095	13,608	96,653	18,203	18,830	19,225	19,816	20,579
75-79	43,565	8,203	8,393	8,726	8,950	9,293	72,034	13,767	13,967	14,459	14,698	15,143
80-84	26,603	4,968	5,131	5,301	5,549	5,654	49,358	9,392	9,590	9,833	10,100	10,443
85+	18,439	3,249	3,477	3,665	3,905	4,143	46,884	8,637	9,054	9,343	9,771	10,079

**Asian and Pacific Islander**

	Male						Female					
	2009-13	2009	2010	2011	2012	2013	2009-13	2009	2010	2011	2012	2013
<1	29,008	5,974	5,638	5,823	5,778	5,795	27,536	5,660	5,440	5,467	5,482	5,487
01-04	117,194	22,632	23,219	23,454	23,802	24,087	115,413	22,355	22,888	23,254	23,471	23,445
05-09	144,897	27,695	28,393	28,907	29,703	30,199	142,345	27,337	27,947	28,390	29,062	29,609
10-14	132,707	25,228	26,015	26,642	27,042	27,780	130,706	24,784	25,615	26,118	26,659	27,530
15-19	124,262	23,757	24,463	24,970	25,393	25,679	117,039	22,034	22,804	23,563	24,097	24,541
20-24	117,307	22,537	22,927	23,294	23,906	24,643	116,281	22,029	22,501	23,066	23,874	24,811
25-29	155,548	29,935	30,352	31,485	31,816	31,960	169,720	33,622	33,889	34,204	33,948	34,057
30-34	179,149	34,819	34,822	35,558	36,363	37,587	196,991	37,923	38,603	39,399	40,128	40,938
35-39	186,121	35,736	36,460	37,428	38,126	38,371	194,217	36,716	37,882	39,019	39,941	40,659
40-44	164,416	29,991	31,155	32,737	34,555	35,978	175,608	32,447	33,556	34,866	36,696	38,043
45-49	146,167	27,989	28,619	29,314	29,870	30,375	155,744	29,676	30,368	31,218	31,897	32,585
50-54	129,252	24,180	25,315	25,846	26,388	27,523	140,014	26,479	27,563	28,058	28,541	29,373
55-59	107,365	19,313	20,168	21,503	22,676	23,705	118,432	21,073	22,106	23,593	25,122	26,538
60-64	85,593	15,200	16,445	17,282	17,986	18,680	95,219	16,876	18,325	19,368	19,927	20,723
65-69	62,411	11,007	11,552	12,340	13,274	14,238	69,230	11,842	12,622	13,625	14,986	16,155
70-74	44,333	7,540	8,194	8,823	9,554	10,222	47,411	8,107	8,665	9,375	10,226	11,038
75-79	26,167	4,178	4,587	5,179	5,803	6,420	30,894	5,168	5,605	6,140	6,708	7,273
80-84	12,928	2,119	2,296	2,510	2,833	3,170	18,825	3,196	3,406	3,706	4,077	4,440
85+	8,627	1,379	1,500	1,690	1,916	2,142	14,365	2,352	2,559	2,839	3,154	3,461

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

**Table A26 (continued). Population Denominators by Race, Age Group and Year.**

**Hispanic\***

	Male						Female					
	2009-13	2009	2010	2011	2012	2013	2009-13	2009	2010	2011	2012	2013
<1	76,400	14,417	14,695	15,758	15,580	15,950	73,518	13,915	13,987	15,092	15,114	15,410
01-04	289,807	55,240	56,616	57,832	59,427	60,692	278,834	53,259	54,449	55,592	57,080	58,454
05-09	335,733	63,001	65,255	67,182	69,360	70,935	322,661	60,023	62,477	64,571	66,877	68,713
10-14	315,007	59,900	62,082	63,268	64,197	65,560	299,805	57,059	58,965	59,966	61,194	62,621
15-19	328,774	65,120	66,163	66,117	65,665	65,709	304,477	59,347	60,614	61,398	61,246	61,872
20-24	354,939	67,848	70,263	71,247	72,302	73,279	307,420	57,911	60,438	61,651	63,163	64,257
25-29	360,090	71,424	71,785	72,192	72,157	72,532	320,005	63,599	64,338	64,409	63,809	63,850
30-34	357,405	67,831	69,876	71,857	73,468	74,373	333,241	63,090	65,323	67,085	68,560	69,183
35-39	329,141	63,061	64,260	65,566	67,238	69,016	313,575	60,682	61,632	62,434	63,650	65,177
40-44	304,378	57,670	59,463	61,102	62,510	63,633	301,907	57,729	59,007	60,628	61,842	62,701
45-49	276,069	51,667	53,571	55,637	56,959	58,235	281,165	52,666	54,695	56,599	58,061	59,144
50-54	223,893	39,750	42,351	44,710	47,259	49,823	235,377	42,626	45,114	47,116	49,123	51,398
55-59	163,727	28,803	30,600	32,683	34,760	36,881	183,219	32,527	34,258	36,583	38,944	40,907
60-64	118,471	21,051	22,468	23,833	24,959	26,160	137,516	24,572	26,347	27,742	28,689	30,166
65-69	81,142	14,053	14,915	16,085	17,418	18,671	101,257	17,960	18,842	20,085	21,618	22,752
70-74	55,333	10,121	10,587	11,053	11,514	12,058	74,366	13,422	14,152	14,892	15,510	16,390
75-79	36,903	6,494	6,935	7,355	7,830	8,289	53,419	9,692	10,259	10,684	11,149	11,635
80-84	22,715	4,014	4,277	4,549	4,829	5,046	37,038	6,617	6,945	7,375	7,852	8,249
85+	16,040	2,594	2,849	3,189	3,529	3,879	30,844	5,115	5,548	6,143	6,764	7,274

\*Persons of Hispanic ethnicity may be of any race or combination of races.

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

**Cancer Incidence and Mortality in New Jersey, 2009-2013**

**Table A27. Age Distribution (%) of Incidence Cases in New Jersey, 2009-2013  
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%	4.9%	13.7%	23.3%	25.7%	20.3%	8.8%	100%	247,159
Female	0.9%	2.8%	6.5%	15.9%	21.5%	22.7%	19.6%	10.1%	100%	123,941
Male	1.0%	2.0%	3.2%	11.5%	25.1%	28.8%	20.9%	7.6%	100%	123,218
Oral Cavity and Pharynx	0.5%	2.0%	5.0%	18.5%	30.0%	22.3%	15.4%	6.2%	100%	5,329
Esophagus	0.0%	0.3%	1.7%	11.1%	24.4%	30.2%	22.1%	10.1%	100%	2,336
Stomach	0.0%	1.4%	4.1%	10.8%	19.4%	25.4%	24.5%	14.4%	100%	4,020
Colon and Rectum	0.1%	1.3%	3.9%	13.2%	19.6%	22.9%	24.5%	14.4%	100%	21,904
Female	0.1%	1.2%	3.7%	12.1%	17.5%	20.6%	26.1%	18.6%	100%	11,094
Male	0.0%	1.4%	4.1%	14.4%	21.7%	25.2%	22.9%	10.1%	100%	10,810
Colon excluding Rectum	0.1%	1.1%	3.5%	11.3%	17.7%	23.1%	26.6%	16.6%	100%	15,502
Rectum & Rectosigmoid Junction	0.0%	1.8%	5.0%	17.9%	24.1%	22.5%	19.5%	9.2%	100%	6,402
Liver and Intrahepatic Bile Duct	0.8%	1.0%	2.3%	11.9%	34.8%	23.6%	18.1%	7.6%	100%	3,755
Pancreas	0.0%	0.3%	1.6%	8.7%	20.8%	27.1%	26.9%	14.6%	100%	6,954
Larynx	0.0%	0.2%	2.6%	14.3%	27.4%	29.4%	19.7%	6.5%	100%	1,679
Lung and Bronchus	0.0%	0.2%	1.1%	7.7%	20.3%	31.9%	28.6%	10.2%	100%	29,511
Female	0.0%	0.3%	1.1%	7.9%	19.7%	31.4%	28.7%	10.9%	100%	14,957
Male	0.0%	0.2%	1.1%	7.4%	20.9%	32.5%	28.5%	9.4%	100%	14,554
Bones and Joints	25.3%	16.6%	9.2%	12.5%	11.9%	10.1%	9.4%	4.9%	100%	487
Soft Tissue including Heart	8.2%	8.1%	7.4%	15.3%	18.3%	17.0%	16.9%	8.7%	100%	1,749
Melanoma of the Skin	0.4%	4.3%	7.3%	16.1%	21.3%	22.1%	20.0%	8.5%	100%	10,713
Breast (female)	0.0%	1.7%	9.1%	22.5%	24.1%	21.6%	14.8%	6.2%	100%	35,518
Cervix Uteri	0.2%	9.7%	21.2%	24.3%	19.8%	13.9%	7.3%	3.6%	100%	1,949
Corpus and Uterus, NOS	0.0%	1.0%	3.4%	16.0%	33.3%	28.0%	13.6%	4.7%	100%	8,658
Ovary	1.1%	2.8%	6.0%	19.2%	24.2%	21.8%	16.5%	8.2%	100%	3,459
Prostate	0.0%	0.0%	0.7%	10.4%	33.1%	36.3%	16.2%	3.4%	100%	34,584
Testis	5.3%	45.0%	23.9%	15.2%	7.3%	1.7%	1.4%	0.2%	100%	1,257
Urinary Bladder**	0.0%	0.4%	1.2%	6.2%	17.3%	28.0%	31.6%	15.2%	100%	11,898
Kidney and Renal Pelvis	1.1%	1.7%	5.7%	16.2%	25.6%	26.8%	16.6%	6.3%	100%	7,805
Brain and Other Nervous System	12.3%	8.0%	8.2%	13.6%	20.3%	17.5%	14.8%	5.3%	100%	3,337
Thyroid	1.7%	12.7%	19.5%	25.8%	21.3%	12.3%	5.4%	1.4%	100%	9,023
Hodgkin Lymphoma	12.7%	28.4%	14.1%	12.9%	11.7%	10.1%	7.0%	3.0%	100%	1,456
Non-Hodgkin Lymphoma	1.6%	3.7%	5.6%	12.5%	20.1%	23.9%	22.6%	9.9%	100%	10,449
Myeloma	0.1%	0.7%	3.1%	12.0%	22.6%	27.8%	24.4%	9.3%	100%	3,458
Leukemia	7.4%	3.9%	4.4%	10.7%	17.9%	22.1%	21.9%	11.7%	100%	7,155
Lymphocytic Leukemia	10.3%	2.1%	2.9%	10.3%	18.6%	22.8%	21.9%	11.0%	100%	3,720
Acute Lymphocytic Leukemia	54.5%	9.4%	5.2%	8.7%	6.2%	8.2%	6.2%	1.6%	100%	692
Chronic Lymphocytic Leukemia	0.0%	0.4%	1.9%	9.9%	21.4%	26.9%	26.2%	13.2%	100%	2,765
Acute Myeloid Leukemia	4.6%	5.5%	5.3%	9.4%	17.4%	22.3%	23.6%	11.9%	100%	1,983
Acute Monocytic Leukemia	9.3%	1.7%	4.2%	7.6%	21.2%	25.4%	21.2%	9.3%	100%	118
Chronic Myeloid Leukemia	2.2%	7.3%	8.8%	15.4%	17.6%	20.4%	18.8%	9.6%	100%	853
Other Leukemia	6.4%	5.1%	4.3%	11.0%	13.1%	17.6%	19.8%	22.7%	100%	374
Mesothelioma	0.0%	0.8%	1.6%	6.0%	11.5%	27.6%	33.8%	18.8%	100%	634
Kaposi Sarcoma	0.5%	18.9%	15.3%	12.1%	12.6%	11.6%	15.3%	13.7%	100%	190

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

\*\* Includes *in situ* cancers.

**Table A28. Median Age of Cancer Patients at Diagnosis, New Jersey 2009-2013  
By Primary Cancer Site, Race and Sex.**

Cancer Site	All			White			Black		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
All Sites	66	65	67	67	66	67	63	63	64
Oral Cavity and Pharynx	62	65	62	63	66	62	60	59	60
Esophagus	68	71	67	68	73	68	67	70	66
Stomach	70	72	69	71	74	70	67	68	67
Colon and Rectum	70	72	68	71	74	69	65	66	64
Colon excluding Rectum	72	74	70	73	76	71	66	67	66
Rectum and Rectosigmoid Junction	65	66	64	66	67	65	62	64	61
Liver and Intrahepatic Bile Duct	64	69	63	65	70	64	60	63	59
Pancreas	71	74	69	72	75	69	67	69	65
Larynx	66	65	67	67	65	67	63	63	63
Lung and Bronchus	71	71	71	72	72	71	68	68	68
Bones and Joints	44	45	42	45	46	44	28	28	27
Soft Tissue including Heart	60	60	61	63	62	63	53	52	53
Melanoma of the Skin	65	62	67	65	62	67	58	60	58
Breast	62	62	68	63	62	68	59	59	65
Cervix Uteri	52	52	*	52	52	*	56	56	*
Corpus and Uterus, NOS	63	63	*	64	64	*	65	65	*
Ovary	63	63	*	64	64	*	62	62	*
Prostate	66	*	66	66	*	66	64	*	64
Testis	34	*	34	34	*	34	39	*	39
Urinary Bladder	73	74	73	74	74	74	71	73	70
Kidney and Renal Pelvis	64	66	63	65	67	64	62	65	60
Brain and Other Nervous System	58	59	58	60	61	59	50	46	52
Thyroid	51	50	55	51	50	55	51	50	56
Hodgkin Lymphoma	40	38	43	42	40	44	39	36	43
Non-Hodgkin Lymphoma	67	68	66	68	70	67	59	62	56
Myeloma	68	68	69	70	70	69	65	66	65
Leukemia	67	69	66	68	70	67	62	65	62
Lymphocytic Leukemia	67	69	66	68	70	66	65	68	62
Acute Lymphocytic Leukemia	15	14	16	19	19	19	9	11	8
Chronic Lymphocytic Leukemia	71	73	69	71	73	70	69	74	69
Acute Myeloid Leukemia	68	69	68	69	70	69	61	59	62
Acute Monocytic Leukemia	68	69	67	68	70	67	31	31	*
Chronic Myeloid Leukemia	64	64	64	66	67	65	59	55	61
Other Leukemia	71	73	68	74	77	72	57	69	52
Mesothelioma	75	73	76	76	73	76	68	76	68
Kaposi Sarcoma	56	78	53	67	81	63	43	41	43

\* Non-applicable gender.

