

2011 Cancer Incidence and Mortality in North Carolina

State Center for Health Statistics

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Contributing Editor

Gary Leung, Ph.D.

STATE OF NORTH CAROLINA

Pat McCrory, Governor

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Aldona Z. Wos, M.D., Secretary

DIVISION OF PUBLIC HEALTH

Penelope Slade-Sawyer, Division Director

STATE CENTER FOR HEALTH STATISTICS

Eleanor Howell, M.S., Acting Director

CENTRAL CANCER REGISTRY

Chandrika Rao, Ph.D., Director

www.ncdhhs.gov

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Introduction

Cancer is a group of diseases in which there is an uncontrolled growth of abnormal cells in a part of the body. One out of every two men and one out of every three women in the United States will develop cancer during their lifetimes.¹ In 2011, cancer was the leading cause of death in North Carolina.² In order to determine the effect cancer has on the state's population, the North Carolina Central Cancer Registry (CCR) collects, compiles and tabulates data regarding the occurrence of cancer and reports the deaths due to cancer within the state. This report is a summary of the incidence and mortality due to cancer with the most complete and recent data the CCR has available.

Background

The CCR, located in the State Center for Health Statistics (SCHS), was established in 1986. The CCR operates under the authority granted in North Carolina General Statute 130A-208.³ Legislation declaring cancer reporting to be mandatory in North Carolina became effective in 1947. Authorized funding for establishing a registry, however, was not appropriated until 1986. Between 1986 and 1989, only 50-60 percent of the cases were reported each year. The first year for which relatively complete statewide reporting was achieved was 1990. In 1999, new legislation was passed that requires every healthcare provider that detects, diagnoses or treats cancer cases to report all cases to the CCR.³

On a national level, the CCR reports data to the North American Association of Central Cancer Registries (NAACCR)⁴ and the Centers for Disease Control and Prevention National Program of Cancer Registries (NPCR).⁵ Both organizations annually review the data the CCR submits for its completeness, quality and timeliness. Completeness is the percentage of cases reported. Having high quality data ensures that there are not duplicate records per case and that certain data variables are accurate and complete. In order to meet the timeliness requirement, the data must be submitted within 23 months of the completion of the diagnosis year under review. For the last five years, the CCR has achieved the NAACCR Gold Standard for Registry Certification. This certification is the highest NAACCR standard awarded for completeness, quality and timeliness of data. The CCR continues to meet the requirements for NPCR in order to receive funding and to have data publicized nationally.

Purpose

As a population-based registry, the CCR collects, analyzes and disseminates information on the occurrence of cancer in North Carolina. The data collected include patient demographics (e.g., race, gender and age) and medical information on each cancer diagnosis (e.g., primary site, morphology, stage and first course of treatment). This information is used to improve cancer treatment and identify groups that have higher incidence and mortality from cancer.⁶ The CCR preserves the confidentiality of information obtained for medical, educational, research and statistical purposes. No identifying information regarding patients, hospitals or physicians is released except under the conditions specified in General Statute and North Carolina Administrative Code.³

2011 Cancer Incidence and Mortality in North Carolina is the 18th annual report of the CCR. The contents of this report represent a summary of the information collected on cancer diagnoses and deaths in 2011. The information includes incidence and mortality counts and rates for all

cancers by county, race, gender and age. The primary goal of this report is to provide cancer data to healthcare planners, researchers and the general public.

Data Sources and Collection

Healthcare providers who detect, diagnose and treat cancer report cases to the CCR. The CCR receives data on death due to cancer from the Vital Records (VR) Branch, also located in the SCHS. The data are coded according to standard procedures and guidelines.

Cancer Incidence

Cancer incidence is the number of newly diagnosed cancer cases, not including recurrences, during a particular time period within a certain population. With each cancer diagnosis or treatment, the healthcare providers report the case to the CCR within six months. The CCR releases data approximately two years after the end of the diagnosis year, due to reporting delay, consolidation of records and cleaning of files.

From each case, the CCR collects patient demographics and medical information on the cancer diagnosis. Some demographics the CCR receives regarding an individual diagnosed with cancer include race, ethnicity, gender, age and residence. In addition, the CCR gathers data such as the first location of the cancer (primary site), the form of cancer (morphology), tumor size and the spread of the cancer (stage). Data regarding first course of treatment and vital status are also collected.

The CCR receives the majority of the cancer incidence data from healthcare facilities (hospitals, cancer centers, dermatology centers, urology centers and surgical oncology centers). Incidence data also come from physician offices, pathology reports, interstate data exchange, nursing facilities and death clearance cases. At present, there are 120 hospitals which routinely diagnose and treat cancer patients. Of these, 70 have tumor registries where the data are abstracted and submitted to the CCR. Also, there are 111 physician offices and clinics in North Carolina that report to the CCR. Death clearance cases are cancers reported in death certificates that were previously unreported cancer cases. The CCR received over 67,000 reports from 231 facilities in 2011.

Cancer Mortality

Cancer mortality is the number of deaths due to cancer during a specified time period within a certain population. Death certificates are filed to a county health director within five days. The death certificate is then passed on to VR on the fifth day of the following month.³

Once a year, VR provides the CCR with data on the deceased whose primary cause of death is cancer. This information includes demographics on the deceased including race, ethnicity, gender, age and residence. In addition to demographics, a primary cause of death and date of death are also collected.

Differences in Collecting Incidence and Mortality

For many studies, the CCR examines both incidence and mortality. Therefore, it is important to note differences in obtaining incidence data and mortality data. These differences include, but are not limited to, timeliness in reporting (both in state and out-of-state cases) and case finding.

There is a difference in the timeliness of reporting incidence and mortality data of cases reported in the state for North Carolina residents. For incidence data, the healthcare facility is supposed to report the case to the CCR within six months. However, with mortality data, a report of each death is submitted to the VR within two months.

Some people living near neighboring states go outside North Carolina for health care. Also, people may get diagnosed with or die of cancer outside of the state. North Carolina has an exchange agreement for cancer incidence data with 25 states and Washington, D.C., including its border states of Virginia, Tennessee and South Carolina. In addition, North Carolina has an exchange agreement with the other 49 states, as well as with Washington, D.C., and United States territories, for exchanging death certificates. Typically, incidence data are exchanged twice a year while mortality data, monitored by the National Center for Health Statistics (NCHS), are exchanged between states within two months of a death. However, even with these exchange agreements in place, delays or omissions can occur in the interchange of incidence and mortality records.

Although new cancer cases are required by law to be reported to the CCR, there are many that are not. Cases diagnosed in small hospitals that do not have a cancer registry may be under reported. Physicians associated with a large hospital will often report cases via a hospital registrar, but those not affiliated with a hospital may not have ample staff to report cases to the CCR. In the last few years, more cases are being diagnosed and treated in physician offices or surgical oncology centers and may never be referred to an oncologist nor be reported. The CCR has improved the completeness of reporting by recruiting physician offices and pathology laboratories as well as sending staff to smaller facilities to collect the required data. Despite the efforts of the CCR, incidence data are considered to be incomplete. On the other hand, death data are regarded as complete. Therefore, there may appear to be an excess of deaths compared to the number of cases for some cancers in rural counties.

Cancer Classification

The CCR receives an abstract of each medical record from a reporting facility. Each abstract contains specific medical information about the cancer. The cancers are categorized using codes according to the *International Classification of Diseases for Oncology, Third Edition*.⁷ Each code is comprised of two pieces: topography and morphology. The topography code tells where the tumor began (primary site). The morphology code tells the type of cell (histology), the way it behaves within the body (behavior) and supplementary information about the tumor (grade). Care must be taken when coding lymphomas and leukemia.

The medical record also contains data regarding the cancer stage. The stage at diagnosis indicates how far the cancer has spread when it is first diagnosed. Knowing the extent of the cancer is important in treatment and prognosis. The CCR commonly uses National Cancer Institute's Surveillance, Epidemiology and End Results Program⁸ definitions for staging and groups cancers as in situ, local, regional, distant and unknown.

In the data collected by the CCR, only malignant tumors are included with one exception. Data on benign brain and central nervous system tumors are also reported to the CCR. Only malignant tumors are included in this report. In situ cases are generally reportable to the CCR. However,

these tumors, with the exception of in situ breast and bladder cases, are not used in cancer surveillance or in cancer incidence statistics. Data on basal and squamous cell skin cancers are not collected by the CCR unless they have spread to tissue beyond the original site. Malignant melanoma may occur at many different body sites; however, this report focuses on melanoma of the skin.

Statistical Methods

Populations not only vary in size, but also in their racial, gender and age breakups. Thus, the counts of cancer incidence and mortality have limitations when comparisons are needed.

Rates are used to show the risk of an event occurring in a population and the CCR presents rates per 100,000 persons. The CCR calculates rates for both incidence and mortality data. A crude rate is found by dividing the number of events (e.g., cancer cases or deaths) for a population of interest in a specified time period by the population of interest at risk during the same time period. This ratio is then multiplied by 100,000 to express it as a rate per 100,000 persons. A crude rate can be expressed as

$$\text{crude rate} = \frac{\text{count of events for a population of interest}}{\text{population of interest at risk}} \times 100,000.$$

Crude incidence and mortality rates for 2011 used the population estimates obtained from the NCHS. Incidence reports published by the CCR prior to 2006 were calculated using the State Demographer's population estimates. Hence, rates from reports prior to 2006 are not comparable to rates in this report.

Age-Specific Rates

An age-specific rate is an example of a crude rate where the population of interest is a specific age group. For age group i , an age-specific rate can be calculated as

$$\text{age-specific rate}_i = \frac{\text{count of events for age group}_i}{\text{population of age group}_i \text{ at risk}} \times 100,000.$$

A typical way to divide age groups is in five year increments (0-4, 5-9, ..., 80-84, 85+). In this report, the ages are grouped as 0 to 19 (pediatrics), 20 to 44 (young adults), 45 to 64 (middle-aged adults) and 65 and older (senior adults).

Age-specific rates are used to examine the burden cancer has on a particular age group and to determine the need for services for a given population. In addition, they can be used to compare different population groups of the same age and notice the effect that cancer has on the various populations. Within a population, age-specific rates can be used to examine how cancer burden differs between age groups.

Age-Adjusted Rates

The occurrence of an event may vary with age, and the age structure of a population can vary as well. Therefore, age-specific rates are not always useful for comparisons and as a result must be adjusted to account for these differences. An age-adjusted rate is a weighted average of the age-specific rates expressed as a rate per 100,000 persons. Age-adjusted rates should be used only if the same standard population is used for computing weights. The standard population provides the proportion of the population in specific age groups and includes information regarding age,

but not race, sex or geographic location. The standard population the CCR uses is the 2000 United States Census population.

To calculate age-adjusted rates, multiply each age-specific rate by the proportion of individuals in that age group in the standard population. For example, for age group i ,

$$\text{weighted rate}_i = \text{age-specific rate}_i \times \frac{\text{standard population in age group}_i}{\text{total standard population}}$$

The age-adjusted rate is the sum of all the weighted age-specific rates. For n age groups the age adjusted rate is

$$\text{age-adjusted rate} = \text{weighted rate}_1 + \text{weighted rate}_2 + \dots + \text{weighted rate}_n$$

An age-adjusted rate allows comparison between populations of different age groups, time periods and/or geographic areas. Age-adjusting ensures that discrepancies in rates of various populations are not a result of differences in age distributions.

Gender-Specific Rates

In addition to computing rates by age, rates can be computed by gender. For both incidence and mortality, gender data are collected by the CCR and VR, respectively. Gender-specific rates are used for comparison between different population groups of the same gender and to examine how cancer tendencies differ between males and females. Gender-specific rates are also used when calculating rates that only affect males (e.g., prostate and testes) or females (e.g., ovary and cervix).

Race-Specific Rates

Rates can also be calculated by race. Race-specific rates are used for comparison between different population groups of the race and to examine how the cancer burden varies between racial groups.

Both race and Hispanic ethnicity are collected by the CCR. Race information can be classified as one of the following: white, black, Asian/Pacific Islander, American Indian and other. Although the CCR has five race fields to account for people who are multi-racial, only the primary race is used. Often the CCR reports rates for whites and minorities. Minorities are defined to be blacks, Asian/Pacific Islanders, American Indians and others. To assist in identifying Hispanic ethnicity, the CCR uses the NAACCR Hispanic Identification Algorithm (NHIA). This algorithm uses name, birthplace, gender and race to determine Hispanic ethnicity.⁹ Thus, the CCR can report rates on white non-Hispanics, black non-Hispanics, other races non-Hispanics and Hispanics.

Reliability of Rates

Precautions should always be taken when comparing rates. Rates are not a measure of actual risk. They are used to compare cancer burden between time periods, age groups, gender groups and racial groups. Both the size of the numbers and the characteristics of the population are important indicators of the real value of the rate. Rates based on a small number of cases or for sparsely populated geographic areas should be viewed with caution. Small fluctuations can lead to drastic changes. Therefore, sometimes it is more appropriate to look at the number of cases instead of the rates. When the number of events is small, multiple-year summary rates will

provide a much better measurement of risk. Expanding the period of time studied enlarges the absolute numbers and adds more credence to a statement regarding a rate.¹⁰

Limitations of Data

When comparing rates between two populations, the user should note that age structure is the only difference between the populations for which rates have been adjusted. Since county demographics can vary considerably, one needs to be careful not to misinterpret rates. Racial composition, for example, can have a marked influence on the patterns of cancer incidence and mortality. Under-reporting, due to out-of-state cases or poor case-finding in some non-hospital situations, also needs to be taken into account when making comparisons of cancer data.

Summary of 2011 Cancer Data

The CCR collected approximately 50,764 cases of newly diagnosed cancers and 18,201 deaths due to cancer in 2011 (Table 1). Female breast, prostate, lung and bronchus, and colon and rectum cancers were the leading diagnosed cancers among all gender and races combined. The CCR often refers to these as the top four cancers (Table 2).

Cancer risk is strongly associated with lifestyle and behavior. Dietary patterns, alcohol use, and sexual and reproductive behaviors, which vary by demographic groups, are risk factors of cancer. Cancer is diagnosed more often among older North Carolinians than younger ones. In general, males have a higher burden of cancer compared with females. Overall, non-Hispanic blacks and non-Hispanic whites had the highest incidence and mortality rates when compared with non-Hispanic other races and Hispanics. Lung and bronchus cancer was the most common cause of death due to cancer.

Age

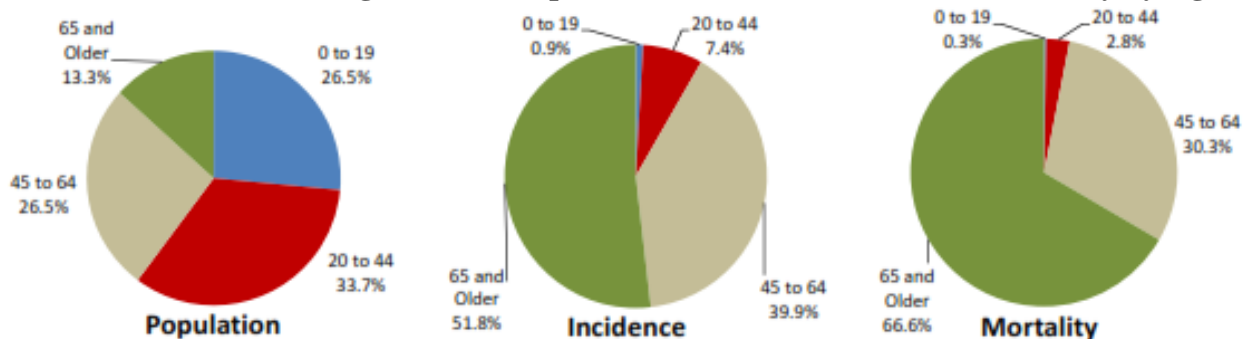
More adults are directly affected by cancer than children. Senior adults (ages 65 and older) made up about 13 percent of the population in 2011,¹¹ but accounted for over 50 percent of newly diagnosed cancer cases and two-thirds of deaths due to cancer. Children (ages 0 to 19) were the second largest age group, but made up less than 1 percent of both newly diagnosed cancers and deaths due to cancer (Chart 1). In 2011, the median age at which cancer was diagnosed was 65, but people ranged in age from 0 to 104. People who died of cancer ranged in age from 0 to 104 with the median age being 71. The median age of incidence and mortality for each age group as well as the percentage of cases and deaths the top four cancers comprise are shown below. In both middle-aged and senior adults, the top four cancers combined accounted for over half of the cancer cases and cancer deaths (Chart 2).

Children had a very different pattern of cancer than adults. Leukemia, brain cancer, endocrine cancer and Non-Hodgkin lymphoma accounted for over 45 percent of cancers diagnosed in people under age 20. Leukemia, brain, bone and soft tissue cancers made up over 75 percent of pediatric cancer deaths (Tables 5 and 6).

Young adults (ages 20 to 44) had a different pattern of cancer than children. In this age group, there was a greater incidence of female breast, cervical, uterine and prostate cancers than in the pediatric age group. On the other hand, the proportion of leukemia, bone, brain and liver cancers was lower. Female breast cancer accounted for over 15 percent of all cancer deaths and had the

highest mortality rate within this age group. The mortality rate for female breast cancer was more than 2.5 times higher than the next highest cancer rate, colon and rectum (Tables 5 and 6). Cancer patterns were different in middle-aged adults (ages 45 to 64) compared with young adults. In this age group, there was a higher frequency of prostate cancer. The percentage of testicular cancer and Hodgkin disease was lower. In addition, the number of deaths due to testicular cancer was lower. The frequency of prostate cancer deaths was higher for middle-aged adults than young adults (Tables 5 and 6).

Chart 1: 2011 Percentages of N.C. Population, Cancer Incidence and Mortality by Age



In senior adults, cancer patterns were similar to middle-aged adults. The incidence of testicular cancer continued to be lower. Lung and bronchus cancer accounted for more deaths than colon and rectum, female breast and prostate cancers combined (Tables 5 and 6).

Chart 2: 2011 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Age Group

	Incidence		Mortality	
	Median Age	Top 4 Sites	Median Age	Top 4 Sites
Children (ages 0-19)	8	2.5%	11	0.0%
Young Adults (ages 20 to 44)	39	35.3%	39	37.7%
Middle-Aged Adults (ages 45 to 64)	57	55.7%	58	49.6%
Senior Adults (ages 65 and older)	74	56.4%	77	51.3%

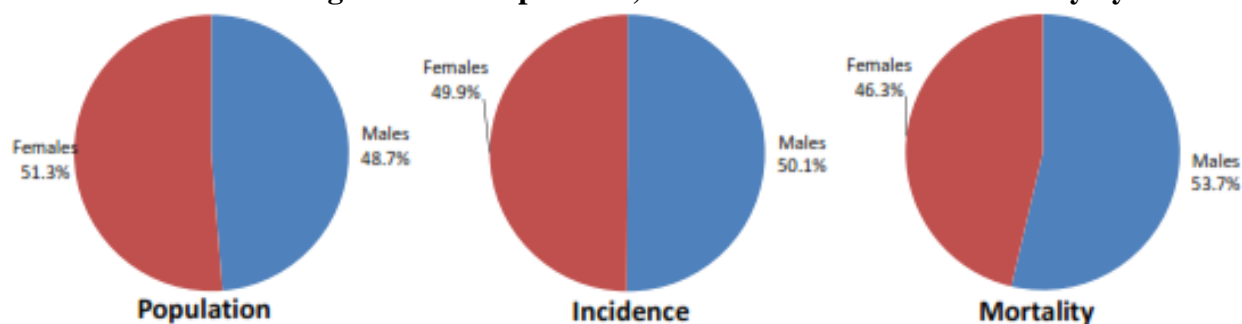
Gender

In 2011, slightly more than 50 percent of the state population was female. However, about half of all cancer cases were diagnosed in males and more than half of deaths due to cancer were in males (Chart 3). The median age of diagnosis for females was slightly younger than males, but the median age of mortality was similar between the genders. The top four sites comprised more than half of both cancer incidence and mortality (Chart 4).

The most frequently occurring cancers among males were prostate, lung and bronchus, colon and rectum, bladder and melanoma. Lung and bronchus, prostate, colon and rectum, pancreatic and leukemia were the leading causes of death due to cancer (Table 8).

Among females, the most frequently occurring cancers were breast, lung and bronchus, colon and rectum, uterine and endocrine. Lung and bronchus, breast, colon and rectum, pancreatic and ovarian were the leading causes of death due to cancer (Table 8).

Chart 3: 2011 Percentages of N.C. Population, Cancer Incidence and Mortality by Gender



Differences between genders could provide clues to factors involved in the development of cancer. Esophageal, laryngeal, bladder, liver and oral cavity cancers had a higher frequency among males compared with females. However, females had a higher frequency of endocrine cancer compared with males. In males, one third of deaths due to cancer came from lung and bronchus cancer, whereas in females, lung and bronchus cancer constituted one quarter of cancer deaths (Table 7).

Chart 4: 2011 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Gender

	Incidence		Mortality	
	Median Age	Top 4 Sites	Median Age	Top 4 Sites
Males	66	52.1%	70	49.6%
Females	64	56.1%	71	51.0%

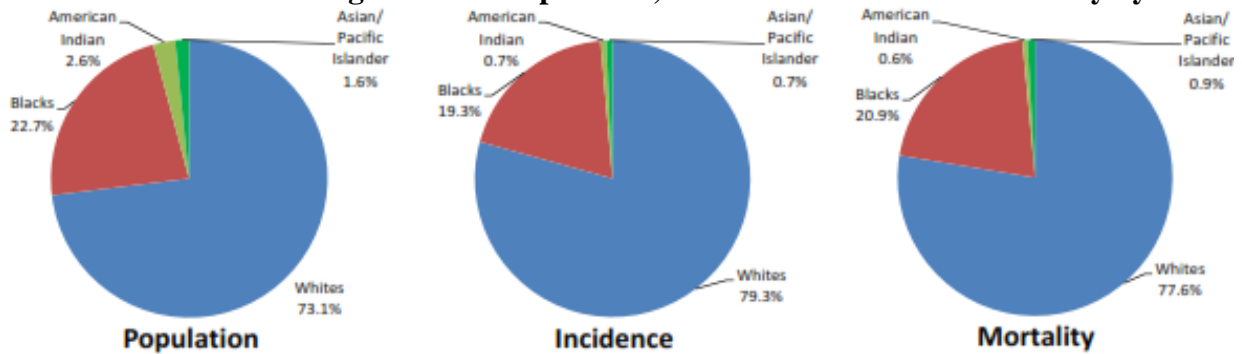
Race and Ethnicity

In 2011, about 73 percent of the North Carolina population was white. Blacks comprised more than one-fifth of the population. Almost 80 percent of cancer cases and more than three-fourths of cancer deaths occurred in whites while almost 20 percent occurred in blacks (Chart 5). The median age and the percentage the top four cancer sites comprise among all cancers for both incidence and mortality are displayed for all racial ethnic groups (Chart 6). Hispanics had the youngest median age of incidence as well as mortality. Approximately 60 percent of cancer diagnosed in non-Hispanic blacks were from the top four sites.

For non-Hispanic whites, besides the top four cancers, melanoma was the next most frequently diagnosed cancer. Pancreatic cancer was the fifth leading cause of death in this group. The number of lung and bronchus cancer deaths was about 1.7 times as large as the number of deaths due to female breast, colon and rectum, and prostate cancers combined (Table 14).

Among non-Hispanic blacks, prostate cancer comprised approximately 18 percent of all diagnosed cancers. Uterine cancer was also among the top five frequently diagnosed cancers for this group. Pancreatic cancer was the next leading cause of death after the top four cancers. The number of lung and bronchus cancer deaths was almost the same as the number of deaths due to female breast, colon and rectum, and prostate cancers combined (Table 14).

Chart 5: 2011 Percentages of N.C. Population, Cancer Incidence and Mortality by Race



For non-Hispanic other races, besides the top four cancers, bladder cancer was another commonly diagnosed cancer. Liver was the fifth leading cause of death due to cancer in this group (Table 14).

For Hispanics, outside of the top four cancers, uterine cancer was the most frequently diagnosed. Lung and bronchus cancer constituted 16 percent of cancer deaths. For other racial and ethnic groups, lung and bronchus cancers made up over 30 percent of cancer deaths. In Hispanics, pancreatic cancer was the fifth leading cause of death due to cancer (Table 14).

Chart 6: 2011 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Race and Ethnicity

	Incidence		Mortality	
	Median Age	Top 4 Sites	Median Age	Top 4 Sites
Non-Hispanic Whites	66	53.0%	72	49.8%
Non-Hispanic Blacks	62	59.8%	67	52.8%
Non-Hispanic Other Races	62	55.3%	68	48.9%
Hispanics	54	40.7%	63	39.5%

Conclusion

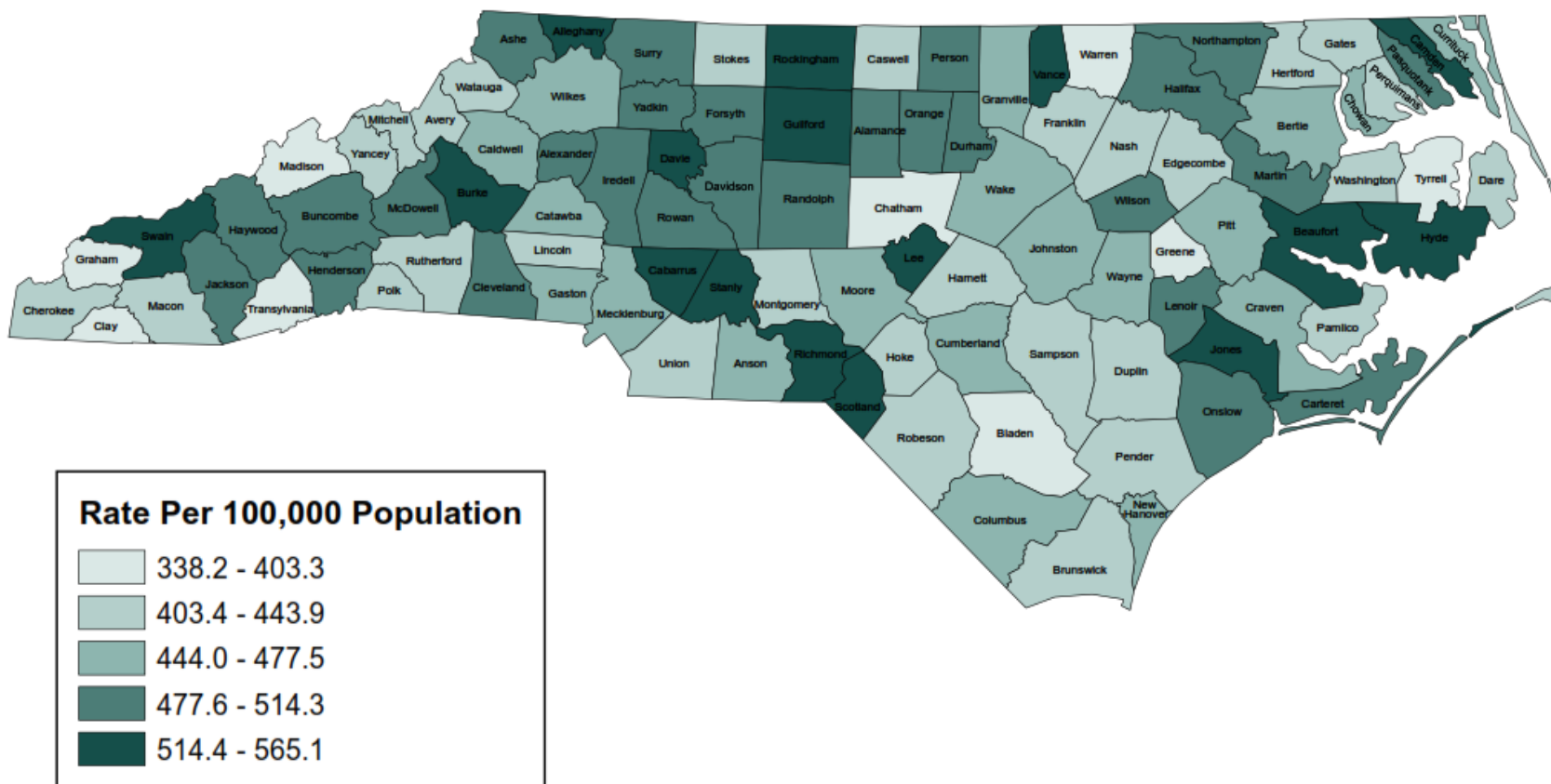
This descriptive report is intended to serve as a reference on cancer incidence and mortality for healthcare planners, researchers and the general public. This publication should not be regarded as a definitive description of the cancer incidence in North Carolina. Although there are important limitations in the use of these data, the observed number of cases and the calculated rates within a county, a gender group, a racial and ethnic group, or an age group have many uses. These uses include planning and evaluating health services at the county and state level and identifying cancer disparities between specific groups. The data provided by the CCR can be used by the Comprehensive Cancer Program in the Division of Public Health and other research organizations for prevention, detection and treatment of cancer.

The editor would like to thank Ann Farmer, Christian Klaus, Eleanor Howell, Chandrika Rao and the other members of the CCR staff for their contributions to this report.

Available Cancer Information

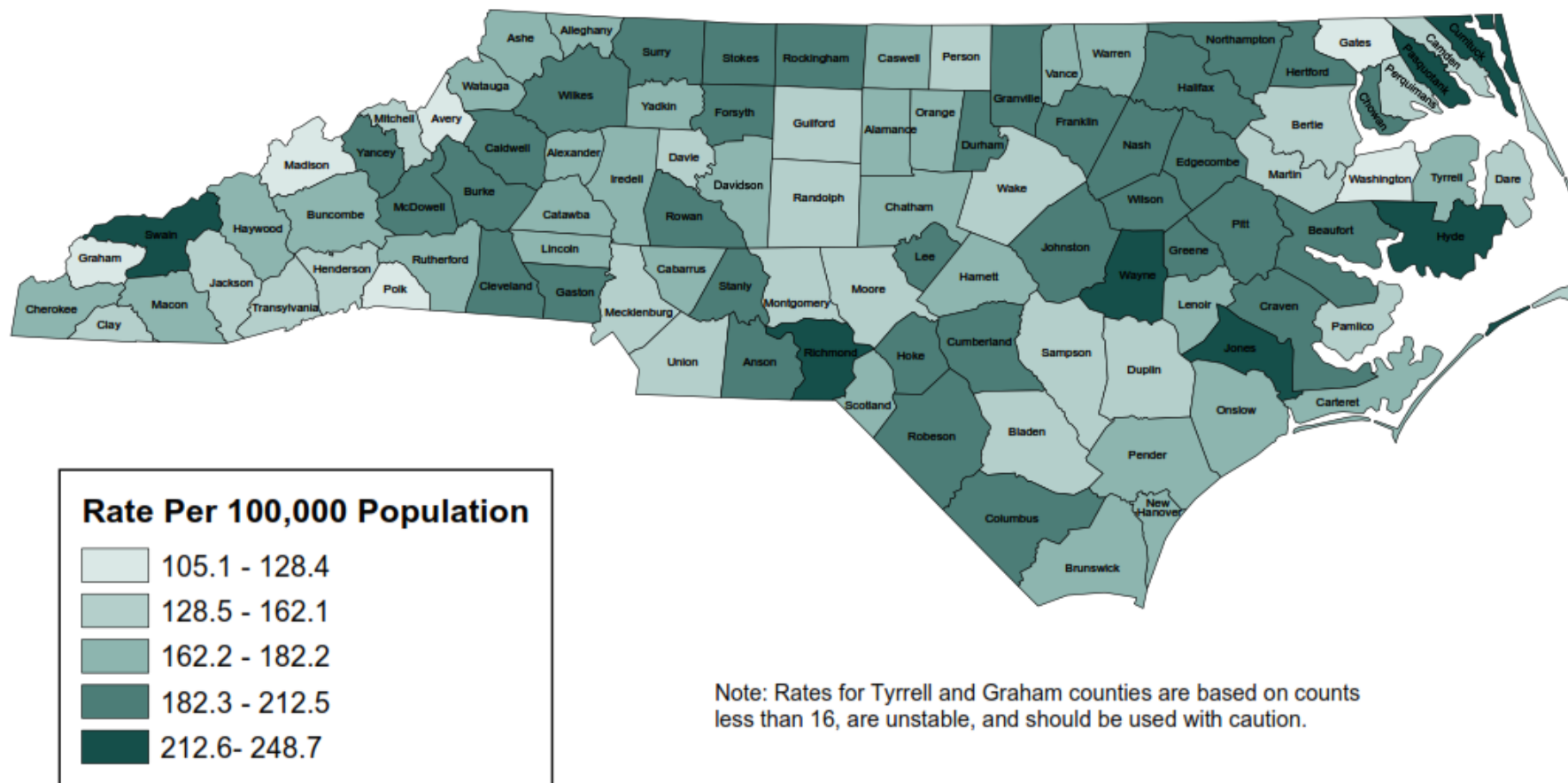
North Carolina Central Cancer Registry www.schs.state.nc.us/units/ccr/	919-715-4574
North Carolina State Center for Health Statistics www.schs.state.nc.us	919-733-4728
North Carolina Breast and Cervical Cancer Control Program http://bcccp.ncdhhs.gov	919-707-5300
North Carolina CCR Rapid Case Ascertainment http://unclineberger.org/rapid-case-ascertainment	919-966-0032
American Cancer Society www.cancer.org	1-800-ACS-2345
National Cancer Institute www.cancer.gov Surveillance Epidemiology and End Results http://seer.cancer.gov Cancer Control P.L.A.N.E.T. http://cancercontrolplanet.cancer.gov NCI State Cancer Profiles http://statecancerprofiles.cancer.gov	1-800-4-CANCER
National Program of Cancer Registries www.cdc.gov/cancer/NPCR	
North American Association of Central Cancer Registries www.naacr.org	
Centers for Disease Control and Prevention www.cdc.gov CDC Wonder United States Cancer Statistics http://wonder.cdc.gov/cancer.html	
Association of North Carolina Cancer Registrars www.ncregistrars.com	
National Cancer Registrars Association www.ncra-usa.org	

Map 1: 2011 North Carolina Cancer Incidence Rates by County



Note: Rates are based on cases reported to the North Carolina Central Cancer Registry and are subject to change as files are updated.

Map 2: 2011 North Carolina Cancer Mortality Rates by County



Note: Rates are based on cases reported to the North Carolina Central Cancer Registry and are subject to change as files are updated.

Table 1: 2011 North Carolina Cancer Incidence and Mortality

	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
All Cancers	50,764	476.7	18,201	174.0
Oral Cavity and Pharynx	1,342	12.3	294	2.7
Lip	54	0.5	4	0.0
Tongue	392	3.6	56	0.5
Salivary Glands	123	1.2	33	0.3
Floor of Mouth	69	0.6	1	0.0
Nasopharynx	55	0.5	24	0.2
Oropharynx	67	0.6	43	0.4
Hypopharynx	101	0.9	11	0.1
Other Mouth and Pharynx	481	4.4	122	1.2
Digestive System	7,987	75.0	4,171	39.5
Esophagus	443	4.0	413	3.8
Stomach	689	6.5	334	3.3
Small Intestine	294	2.7	46	0.4
Colon and Rectum	3,971	37.8	1,472	14.1
Anus and Anal Canal	172	1.6	23	0.2
Liver and Intrahepatic Bile Duct	803	7.2	630	5.7
Gallbladder	89	0.8	61	0.6
Pancreas	1,234	11.6	1,068	10.2
Other Digestive Organs	292	2.7	124	1.2
Respiratory System	7,921	74.1	5,659	53.6
Larynx	460	4.1	127	1.1
Lung and Bronchus	7,310	68.5	5,509	52.3
Other Respiratory Organs	151	1.5	23	0.2
Bones and Joints	104	1.1	50	0.5
Soft Tissue including Heart	352	3.5	139	1.3
Malignant Melanoma of the Skin	2,230	21.5	289	2.8
Breast	9,199	86.4	1,328	12.5
Invasive Breast	7,522	70.8		
In Situ Breast	1,677	15.6		
Female Genital System	2,696	46.7	843	14.3
Cervix Uteri, Invasive	373	7.3	107	1.9
Uterus (Corpus, NOS)	1,453	24.4	248	4.1
Ovary	614	10.7	431	7.4
Other Female Genital Organs	256	4.4	57	1.0

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 1 (continued): 2011 North Carolina Cancer Incidence and Mortality

	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
Male Genital System	7,324	145.7	874	22.8
Prostate	7,055	139.9	854	22.4
Testis	222	4.8	12	0.3
Penis	42	0.9	7	0.2
Other Male Genital Organs	5	0.1	1	0.0
Urinary System	3,892	36.8	832	8.1
Urinary Bladder	1,997	19.1	404	4.0
Kidney and Renal Pelvis	1,797	16.8	403	3.8
Ureter	70	0.7	11	0.1
Other Urinary Organs	28	0.3	14	0.1
Eye and Orbit	87	0.8	12	0.1
Brain and Other CNS	662	6.5	461	4.4
Endocrine System	1,285	12.7	73	0.7
Thyroid Gland	1,213	12.0	53	0.5
Other Endocrine and Thymus	72	0.7	20	0.2
Lymphomas	2,002	19.3	647	6.4
Hodgkin Disease	248	2.6	36	0.4
Non-Hodgkin Lymphoma	1,754	16.8	611	6.0
Multiple Myeloma	727	6.9	375	3.6
Leukemia	1,174	11.5	714	7.1
Acute Lymphocytic Leukemia	69	0.7	40	0.4
Chronic Lymphocytic Leukemia	396	3.7	160	1.6
Acute Myeloid Leukemia	371	3.6	301	3.0
Chronic Myeloid Leukemia	192	1.9	26	0.2
Other Leukemia	146	1.5	187	1.9
Other Cancers - Uncategorized	4,466	43.5	1,440	13.8

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 2: 2011 North Carolina Top Ten Cancer Incidence and Mortality Sites

	Incidence			Mortality	
	Cases	Rate		Deaths	Rate
Female Breast	9,113	158.9	Lung and Bronchus	5,509	52.3
Prostate	7,062	140.0	Prostate	854	22.4
Lung and Bronchus	7,310	68.5	Female Breast	1,309	22.1
Colon and Rectum	3,971	37.8	Colon and Rectum	1,476	14.1
Corpus Uteri	1,453	24.4	Pancreas	1,068	10.2
Melanoma (Skin)	2,230	21.5	Ovary	431	7.4
Urinary Bladder	1,997	19.1	Leukemia	714	7.1
Non-Hodgkin Lymphoma	1,759	16.8	Non-Hodgkin Lymphoma	611	6.0
Kidney	1,797	16.8	Liver	630	5.7
Endocrine	1,285	12.7	Brain and Other CNS	461	4.4

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 3: 2011 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
North Carolina	50,764	476.7	18,201	174.0
Alamance	920	511.5	303	167.1
Alexander	222	482.5	77	175.0
Alleghany	87	523.3	28	177.4
Anson	148	454.4	62	191.5
Ashe	202	511.6	73	170.0
Avery	104	425.1	30	125.2
Beaufort	358	535.4	125	187.4
Bertie	126	448.9	46	156.4
Bladen	175	398.5	66	142.0
Brunswick	755	431.6	309	180.4
Buncombe	1,546	505.7	521	165.3
Burke	617	537.9	220	186.3
Cabarrus	958	528.8	304	174.3
Caldwell	497	475.2	188	184.4
Camden	58	536.8	16	152.2
Carteret	481	484.4	184	182.2
Caswell	133	417.1	56	174.5
Catawba	856	470.5	307	168.4
Chatham	347	373.1	162	168.3
Cherokee	188	438.9	75	164.6
Chowan	105	467.1	44	191.1
Clay	60	338.2	30	144.4
Cleveland	611	510.9	244	205.6
Columbus	327	453.9	142	195.6
Craven	576	460.9	245	190.8
Cumberland	1,312	465.5	511	190.9
Currituck	126	460.8	62	248.7
Dare	192	432.9	66	156.1
Davidson	1,003	509.8	343	176.9
Davie	298	533.7	91	160.5
Duplin	281	414.6	100	149.1
Durham	1,262	496.7	453	186.5
Edgecombe	304	437.2	143	204.2
Forsyth	1,957	501.4	730	186.3

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 3 (continued): 2011 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
Franklin	304	439.2	124	186.0
Gaston	1,094	460.3	461	199.9
Gates	68	437.0	20	128.4
Graham	52	394.7	13	105.1
Granville	322	467.5	131	199.0
Greene	96	403.3	48	209.4
Guilford	2,799	532.8	811	157.5
Halifax	370	514.3	149	201.0
Harnett	461	413.5	179	173.0
Haywood	428	482.0	159	172.2
Henderson	814	483.1	285	157.7
Hertford	140	443.9	64	212.1
Hoke	155	426.2	61	185.1
Hyde	42	552.9	17	246.6
Iredell	876	491.0	309	179.8
Jackson	224	484.2	79	158.0
Johnston	756	454.4	291	186.3
Jones	74	549.1	34	241.4
Lee	346	528.3	139	210.9
Lenoir	392	514.1	139	178.1
Lincoln	403	439.0	148	169.5
McDowell	289	492.3	110	184.3
Macon	247	439.4	102	181.3
Madison	115	399.8	34	110.2
Martin	156	488.1	57	162.1
Mecklenburg	3,873	472.4	1,203	157.4
Mitchell	101	428.5	37	152.2
Montgomery	143	416.9	46	140.0
Moore	647	472.8	237	156.7
Nash	513	441.3	223	190.5
New Hanover	1,060	448.9	414	174.1
Northampton	156	492.9	65	212.5
Onslow	620	497.1	206	180.6
Orange	612	484.5	191	168.0
Pamlico	91	419.2	30	148.8

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 3 (continued): 2011 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
Pasquotank	233	507.2	102	222.4
Pender	298	441.3	111	170.5
Perquimans	91	427.8	32	145.4
Person	236	482.5	79	160.0
Pitt	731	477.5	277	187.1
Polk	137	408.0	48	124.9
Randolph	850	507.0	267	159.5
Richmond	297	541.5	118	217.8
Robeson	598	430.4	251	191.7
Rockingham	661	544.6	226	184.4
Rowan	792	483.5	316	190.9
Rutherford	395	435.7	161	176.5
Sampson	312	412.8	116	154.3
Scotland	230	537.0	68	164.7
Stanly	395	519.3	149	193.4
Stokes	272	436.3	125	198.5
Surry	466	486.7	207	207.6
Swain	104	565.1	41	221.2
Transylvania	225	388.8	90	141.0
Tyrrell	19	347.9	9	164.0
Union	816	426.7	261	150.3
Vance	299	546.9	94	177.3
Wake	3,927	477.5	1,143	157.4
Warren	112	383.5	55	166.0
Washington	82	439.5	24	114.7
Watauga	218	426.2	85	169.5
Wayne	637	469.5	291	217.2
Wilkes	435	470.3	175	189.4
Wilson	469	491.7	177	186.6
Yadkin	239	484.8	83	165.6
Yancey	117	442.8	48	191.4

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 4: 2011 Ten Highest and Lowest Cancer Incidence and Mortality Rates by County

Incidence - Lowest Ten			Mortality - Lowest Ten		
	Cases	Rate		Deaths	Rate
Clay	60	338.2	Graham	13	105.1
Tyrrell	19	347.9	Madison	34	110.2
Chatham	347	373.1	Washington	24	114.7
Warren	112	383.5	Polk	48	124.9
Transylvania	225	388.8	Avery	30	125.2
Graham	52	394.7	Gates	20	128.4
Bladen	175	398.5	Montgomery	46	140.0
Madison	115	399.8	Transylvania	90	141.0
Greene	96	403.3	Bladen	66	142.0
Polk	137	408.0	Clay	30	144.4

Incidence - Highest Ten			Mortality - Highest Ten		
	Cases	Rate		Deaths	Rate
Swain	104	565.1	Currituck	62	248.7
Hyde	42	552.9	Hyde	17	246.6
Jones	74	549.1	Jones	34	241.4
Vance	299	546.9	Pasquotank	102	222.4
Rockingham	661	544.6	Swain	41	221.2
Richmond	297	541.5	Richmond	118	217.8
Burke	617	537.9	Wayne	291	217.2
Scotland	230	537.0	Northampton	65	212.5
Camden	58	536.8	Hertford	64	212.1
Beaufort	358	535.4	Lee	139	210.9

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 5: 2011 Cancer Incidence and Mortality by Age Group

	Incidence				Mortality			
	0-19		20-44		0-19		20-44	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	446	17.4	3,768	115.7	49	1.9	515	15.8
Oral Cavity	10	0.4	97	3.0	1	0.0	5	0.2
Esophagus	0	0.0	10	0.3	0	0.0	11	0.3
Stomach	0	0.0	42	1.3	0	0.0	26	0.8
Colon and Rectum	6	0.2	235	7.2	0	0.0	61	1.9
Liver	10	0.4	25	0.8	2	0.1	10	0.3
Gallbladder	0	0.0	*	*	0	0.0	0	0.0
Pancreas	0	0.0	36	1.1	0	0.0	18	0.6
Larynx	0	0.0	6	0.2	0	0.0	1	0.0
Lung and Bronchus	*	*	102	3.1	0	0.0	51	1.6
Bone	29	1.1	21	0.6	5	0.2	6	0.2
Soft Tissue	29	1.1	74	2.3	5	0.2	23	0.7
Melanoma (Skin)	11	0.4	321	9.9	0	0.0	22	0.7
Female Breast	*	*	943	57.5	0	0.0	81	4.9
Cervix Uteri	0	0.0	152	9.3	0	0.0	20	1.2
Corpus Uteri	0	0.0	106	6.5	0	0.0	3	0.2
Ovary	*	*	57	3.5	0	0.0	15	0.9
Prostate	*	*	51	3.2	0	0.0	1	0.1
Testes	9	0.7	159	9.8	0	0.0	6	0.4
Urinary Bladder	*	*	31	1.0	0	0.0	2	0.1
Kidney	25	1.0	152	4.7	1	0.0	7	0.2
Endocrine	30	1.2	449	13.8	4	0.2	4	0.1
Multiple Myeloma	0	0.0	21	0.6	0	0.0	2	0.1
Leukemia	58	2.3	108	3.3	12	0.5	36	1.1
Brain and Other CNS	88	3.4	100	3.1	15	0.6	37	1.1
Hodgkin Disease	22	0.9	116	3.6	0	0.0	10	0.3
Non-Hodgkin Lymphoma	29	1.1	153	4.7	1	0.0	21	0.6
Other Cancers	83	3.2	200	6.1	3	0.1	36	1.1

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 5 (continued): 2011 Cancer Incidence and Mortality by Age Group

	Incidence				Mortality			
	45-64		65 and above		45-64		65 and above	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	20,273	792.8	26,277	2054.8	5,519	215.8	12,118	947.6
Oral Cavity	693	27.1	542	42.4	121	4.7	167	13.1
Esophagus	197	7.7	236	18.5	178	7.0	224	17.5
Stomach	242	9.5	405	31.7	87	3.4	221	17.3
Colon and Rectum	1,459	57.1	2,271	177.6	482	18.8	933	73.0
Liver	461	18.0	307	24.0	313	12.2	305	23.9
Gallbladder	30	1.2	58	4.5	18	0.7	43	3.4
Pancreas	423	16.5	775	60.6	336	13.1	714	55.8
Larynx	233	9.1	221	17.3	58	2.3	68	5.3
Lung and Bronchus	2,453	95.9	4,753	371.7	1,636	64.0	3,822	298.9
Bone	27	1.1	27	2.1	17	0.7	22	1.7
Soft Tissue	111	4.3	138	10.8	40	1.6	71	5.6
Melanoma (Skin)	858	33.6	1,040	81.3	98	3.8	169	13.2
Female Breast	4,314	324.8	3,855	526.4	526	39.6	702	95.9
Cervix Uteri	145	10.9	76	10.4	40	3.0	47	6.4
Uterus (Corpus, NOS)	721	54.3	626	85.5	78	5.9	167	22.8
Ovary	263	19.8	293	40.0	133	10.0	283	38.6
Prostate	3,065	249.4	3,944	721.8	91	7.4	762	139.5
Testes	46	3.7	8	1.5	4	0.3	2	0.4
Urinary Bladder	554	21.7	1,411	110.3	69	2.7	333	26.0
Kidney	805	31.5	815	63.7	138	5.4	257	20.1
Endocrine	529	20.7	277	21.7	21	0.8	44	3.4
Multiple Myeloma	264	10.3	442	34.6	88	3.4	285	22.3
Leukemia	346	13.5	662	51.8	133	5.2	533	41.7
Brain and Other CNS	237	9.3	237	18.5	185	7.2	224	17.5
Hodgkin Disease	60	2.3	50	3.9	10	0.4	16	1.3
Non-Hodgkin Lymphoma	641	25.1	936	73.2	119	4.7	470	36.8
Other Cancers	1,096	42.9	1,872	146.4	500	19.6	1,234	96.5

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 6: 2011 Top Ten Cancer Incidence and Mortality by Age Group

Ages 0 to 19

Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Brain and Other CNS	88	3.4	Brain and Other CNS	15	0.6
Leukemia	58	2.3	Leukemia	12	0.5
Endocrine	30	1.2	Bone	5	0.2
Non-Hodgkin Lymphoma	29	1.1	Soft Tissue	5	0.2
Soft Tissue	29	1.1	Endocrine	4	0.2
Bone	29	1.1	Liver	2	0.1
Kidney	25	1.0	Non-Hodgkin Lymphoma	1	0.0
Hodgkin Disease	22	0.9	Kidney	1	0.0
Testes	9	0.7	Oral Cavity	1	0.0
Melanoma (Skin)	11	0.4			

Ages 20 to 44

Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Female Breast	943	57.5	Female Breast	81	4.9
Endocrine	449	13.8	Colon and Rectum	61	1.9
Melanoma (Skin)	321	9.9	Lung and Bronchus	51	1.6
Testes	159	9.8	Cervix Uteri	20	1.2
Cervix Uteri	152	9.3	Brain and Other CNS	37	1.1
Colon and Rectum	235	7.2	Leukemia	36	1.1
Corpus Uteri	106	6.5	Ovary	15	0.9
Non-Hodgkin Lymphoma	153	4.7	Stomach	26	0.8
Kidney	152	4.7	Soft Tissue	23	0.7
Hodgkin Disease	116	3.6	Melanoma (Skin)	22	0.7

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 6 (continued): 2011 Top Ten Cancer Incidence and Mortality by Age Group

Ages 45 to 64

Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Female Breast	4,314	324.8	Lung and Bronchus	1,636	64.0
Prostate	3,065	249.4	Female Breast	526	39.6
Lung and Bronchus	2,453	95.9	Colon and Rectum	482	18.8
Colon and Rectum	1,459	57.1	Pancreas	336	13.1
Corpus Uteri	721	54.3	Liver	313	12.2
Melanoma (Skin)	858	33.6	Ovary	133	10.0
Kidney	805	31.5	Prostate	91	7.4
Oral Cavity	693	27.1	Brain and Other CNS	185	7.2
Non-Hodgkin Lymphoma	641	25.1	Esophagus	178	7.0
Urinary Bladder	554	21.7	Corpus Uteri	78	5.9

Ages 65 and above

Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Prostate	3,944	721.8	Lung and Bronchus	3,822	298.9
Female Breast	3,855	526.4	Prostate	762	139.5
Lung and Bronchus	4,753	371.7	Female Breast	702	95.9
Colon and Rectum	2,271	177.6	Colon and Rectum	933	73.0
Urinary Bladder	1,411	110.3	Pancreas	714	55.8
Corpus Uteri	626	85.5	Leukemia	533	41.7
Melanoma (Skin)	1,040	81.3	Ovary	283	38.6
Non-Hodgkin Lymphoma	936	73.2	Non-Hodgkin Lymphoma	470	36.8
Kidney	815	63.7	Urinary Bladder	333	26.0
Pancreas	775	60.6	Liver	305	23.9

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 7: 2011 Cancer Incidence and Mortality by Gender

	Incidence				Mortality			
	Males		Females		Males		Females	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	25,412	532.0	25,330	440.9	9,773	220.2	8,428	142.5
Oral Cavity and Pharynx	932	18.4	410	7.1	209	4.4	85	1.4
Lip	35	0.7	19	0.3	3	0.1	1	0.0
Tongue	276	5.4	116	2.0	43	0.8	13	0.2
Salivary Glands	68	1.5	55	1.0	18	0.4	15	0.3
Floor of Mouth	47	0.9	22	0.4	1	0.0	0	0.0
Nasopharynx	32	0.6	23	0.4	18	0.4	6	0.1
Oropharynx	46	0.9	21	0.3	33	0.7	10	0.2
Hypopharynx	80	1.6	21	0.3	8	0.2	3	0.0
Other Mouth and Pharynx	348	6.8	133	2.3	85	1.9	37	0.6
Digestive System	4,403	92.3	3,577	61.2	2,405	51.8	1,766	29.8
Esophagus	353	7.3	90	1.5	334	7.0	79	1.3
Stomach	426	9.2	261	4.4	207	4.7	127	2.2
Small Intestine	152	3.0	142	2.4	18	0.4	28	0.5
Colon and Rectum	2,051	44.0	1,916	32.9	777	17.2	695	11.7
Anus and Anal Canal	54	1.1	118	2.0	11	0.2	12	0.2
Liver and Intrahepatic Bile Duct	596	11.5	207	3.6	443	8.8	187	3.2
Gallbladder	28	0.6	61	1.0	22	0.5	39	0.6
Pancreas	625	13.1	609	10.4	547	11.9	521	8.8
Other Digestive Organs	118	2.5	173	3.0	46	1.1	78	1.3
Respiratory System	4,590	98.3	3,330	56.1	3,340	73.1	2,319	39.2
Larynx	354	7.0	106	1.7	108	2.2	19	0.3
Lung and Bronchus	4,126	88.8	3,183	53.6	3,215	70.6	2,294	38.8
Other Respiratory Organs	110	2.5	41	0.7	17	0.4	6	0.1
Bones and Joints	61	1.3	43	0.9	23	0.5	27	0.5
Soft Tissue including Heart	192	4.2	160	3.0	60	1.2	79	1.4
Malignant Melanoma of the Skin	1,317	28.6	910	16.6	194	4.4	95	1.6
Breast	86	1.8	9,113	158.9	19	0.4	1,309	22.1
Invasive Breast	73	1.6	7,449	129.8				
In Situ Breast	13	0.3	1,664	29.1				
Female Genital System	.	.	2,696	46.7	.	.	843	14.3
Cervix Uteri, Invasive	.	.	373	7.3	.	.	107	1.9
Uterus (Corpus, NOS)	.	.	1,453	24.4	.	.	248	4.1
Ovary	.	.	614	10.7	.	.	431	7.4
Other Female Genital Organs	.	.	256	4.4	.	.	57	1.0

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 7 (continued): 2011 Cancer Incidence and Mortality by Gender

	Incidence				Mortality			
	Males		Females		Males		Females	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
Male Genital System	7,324	145.7	.	.	874	22.8	.	.
Prostate	7,055	139.9	.	.	854	22.4	.	.
Testis	222	4.8	.	.	12	0.3	.	.
Penis	42	0.9	.	.	7	0.2	.	.
Other Male Genital Organs	5	0.1	.	.	1	0.0	.	.
Urinary System	2,614	56.7	1,276	22.0	543	12.9	289	4.9
Urinary Bladder	1,476	33.3	519	8.8	285	7.1	119	2.0
Kidney and Renal Pelvis	1,080	22.0	717	12.5	247	5.5	156	2.6
Ureter	40	1.0	30	0.5	4	0.1	7	0.1
Other Urinary Organs	18	0.5	10	0.2	7	0.2	7	0.1
Eye and Orbit	44	0.9	43	0.7	10	0.2	2	0.0
Brain and Other CNS	373	7.9	289	5.3	264	5.6	197	3.4
Endocrine System	344	7.0	941	18.1	33	0.7	40	0.7
Thyroid Gland	299	6.1	914	17.6	26	0.5	27	0.5
Other Endocrine and Thymus	45	0.9	27	0.5	7	0.2	13	0.2
Lymphomas	1,127	24.2	875	15.4	351	8.4	296	5.0
Hodgkin Disease	140	3.0	108	2.1	24	0.5	12	0.2
Non-Hodgkin Lymphoma	987	21.2	767	13.3	327	7.8	284	4.8
Multiple Myeloma	383	8.2	344	5.8	193	4.4	182	3.0
Leukemia	658	14.5	516	9.1	402	9.7	312	5.4
Acute Lymphocytic Leukemia	42	0.9	27	0.6	19	0.4	21	0.4
Chronic Lymphocytic Leukemia	235	5.0	161	2.7	97	2.5	63	1.0
Acute Myeloid Leukemia	203	4.5	168	3.0	169	3.9	132	2.3
Chronic Myeloid Leukemia	96	2.2	96	1.7	15	0.4	11	0.2
Other Leukemia	82	1.8	64	1.1	102	2.5	85	1.5
Other Cancers - Uncategorized	2,534	56.2	1,920	34.4	853	19.6	587	9.8

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 8: 2011 Top Ten Cancer Incidence and Mortality Sites by Gender

Males					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Prostate	7,055	139.9	Lung and Bronchus	3,215	70.6
Lung and Bronchus	4,126	88.8	Prostate	854	22.4
Colon and Rectum	2,051	44.0	Colon and Rectum	779	17.3
Urinary Bladder	1,476	33.3	Pancreas	547	11.9
Melanoma (Skin)	1,317	28.6	Leukemia	402	9.7
Kidney	1,080	22.0	Liver	443	8.8
Non-Hodgkin Lymphoma	991	21.2	Non-Hodgkin Lymphoma	327	7.8
Oral Cavity	932	18.4	Urinary Bladder	285	7.1
Leukemia	658	14.5	Esophagus	334	7.0
Pancreas	625	13.1	Brain and Other CNS	264	5.6

Females					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Female Breast	9,113	158.9	Lung and Bronchus	2,294	38.8
Lung and Bronchus	3,183	53.6	Female Breast	1,309	22.1
Colon and Rectum	1,916	32.9	Colon and Rectum	697	11.7
Corpus Uteri	1,453	24.4	Pancreas	521	8.8
Endocrine	941	18.1	Ovary	431	7.4
Melanoma (Skin)	910	16.6	Leukemia	312	5.4
Non-Hodgkin Lymphoma	768	13.3	Non-Hodgkin Lymphoma	284	4.8
Kidney	717	12.5	Corpus Uteri	248	4.1
Ovary	614	10.7	Brain and Other CNS	197	3.4
Pancreas	609	10.4	Liver	187	3.2

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 9: 2011 Cancer Incidence and Mortality by Race

	Incidence				Mortality			
	Whites		Minorities		Whites		Minorities	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	39,732	474.2	10,727	472.9	14,127	168.5	4,071	194.7
Oral Cavity and Pharynx	1,077	12.7	259	10.7	216	2.5	78	3.4
Lip	54	0.6	*	*	4	0.0	0	0.0
Tongue	326	3.9	66	2.8	44	0.5	12	0.4
Salivary Glands	100	1.3	22	0.9	26	0.3	7	0.3
Floor of Mouth	51	0.6	17	0.7	1	0.0	0	0.0
Nasopharynx	38	0.4	17	0.6	15	0.2	9	0.4
Oropharynx	46	0.5	21	0.8	30	0.3	13	0.5
Hypopharynx	72	0.8	29	1.3	8	0.1	3	0.1
Other Mouth and Pharynx	390	4.6	87	3.6	88	1.0	34	1.7
Digestive System	5,940	70.6	2,016	91.3	3,072	36.5	1,098	51.7
Esophagus	349	4.0	93	3.9	336	3.9	77	3.4
Stomach	464	5.6	223	10.6	206	2.5	128	6.4
Small Intestine	214	2.4	77	3.4	30	0.4	16	0.8
Colon and Rectum	3,008	36.2	952	43.7	1,065	12.7	406	19.8
Anus and Anal Canal	132	1.5	40	1.8	22	0.3	1	0.1
Liver and Intrahepatic Bile Duct	575	6.7	221	8.7	450	5.2	180	7.3
Gallbladder	50	0.6	39	2.0	43	0.5	18	1.0
Pancreas	929	11.0	301	14.0	822	9.8	246	11.8
Other Digestive Organs	219	2.6	70	3.3	98	1.2	26	1.3
Respiratory System	6,390	74.8	1,514	69.4	4,540	53.7	1,118	52.8
Larynx	338	3.8	122	5.2	90	1.0	37	1.6
Lung and Bronchus	5,920	69.4	1,375	63.4	4,430	52.4	1,078	51.1
Other Respiratory Organs	132	1.6	17	0.8	20	0.3	3	0.1
Bones and Joints	85	1.2	18	0.7	43	0.5	7	0.3
Soft Tissue including Heart	258	3.4	91	3.7	92	1.1	47	2.0
Malignant Melanoma of the Skin	2,176	26.9	32	1.6	280	3.4	9	0.4
Breast	7,044	84.5	2,127	91.4	964	11.4	364	15.9
Invasive Breast	5,771	69.1	1,727	74.6				
In Situ Breast	1,273	15.3	400	16.9				
Female Genital System	2,076	46.9	611	46.7	636	13.7	207	16.8
Cervix Uteri, Invasive	265	7.1	105	7.8	74	1.7	33	2.6
Uterus (Corpus, NOS)	1,110	24.1	337	25.5	163	3.4	85	6.9
Ovary	490	11.0	124	9.8	351	7.5	80	6.7
Other Female Genital Organs	211	4.7	45	3.6	48	1.0	9	0.7

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 9 (continued): 2011 Cancer Incidence and Mortality by Race

	Incidence				Mortality			
	Whites		Minorities		Whites		Minorities	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
Male Genital System	5,265	130.5	1,938	198.7	582	18.4	292	46.8
Prostate	5,034	123.8	1,902	195.5	566	17.9	288	46.5
Testis	192	5.6	28	2.3	9	0.3	3	0.3
Penis	35	0.9	7	0.8	6	0.2	1	0.1
Other Male Genital Organs	*	*	*	*	1	0.0	0	0.0
Urinary System	3,204	38.2	673	30.5	676	8.1	155	7.6
Urinary Bladder	1,745	20.7	244	12.2	334	4.0	69	3.8
Kidney and Renal Pelvis	1,369	16.4	421	18.0	321	3.8	82	3.7
Ureter	65	0.8	5	0.2	9	0.1	2	0.1
Other Urinary Organs	25	0.3	*	*	12	0.1	2	0.1
Eye and Orbit	80	0.9	7	0.3	11	0.1	1	0.1
Brain and Other CNS	575	7.3	86	3.4	409	5.0	52	2.3
Endocrine System	1,030	13.6	248	10.0	62	0.8	11	0.5
Thyroid Gland	986	13.0	220	8.9	45	0.5	8	0.4
Other Endocrine and Thymus	44	0.6	28	1.1	17	0.2	3	0.1
Lymphomas	1,666	20.5	323	14.0	550	6.7	97	4.8
Hodgkin Disease	185	2.6	62	2.4	29	0.4	7	0.3
Non-Hodgkin Lymphoma	1,481	17.9	261	11.5	521	6.3	90	4.5
Multiple Myeloma	476	5.7	246	11.1	252	3.0	123	6.0
Leukemia	979	12.1	186	8.4	590	7.3	124	6.4
Acute Lymphocytic Leukemia	53	0.8	15	0.6	31	0.4	9	0.5
Chronic Lymphocytic Leukemia	335	3.9	56	2.5	135	1.6	25	1.2
Acute Myeloid Leukemia	317	3.9	53	2.4	250	3.1	51	2.6
Chronic Myeloid Leukemia	153	1.9	38	1.7	23	0.3	3	0.2
Other Leukemia	121	1.5	24	1.2	151	1.9	36	2.0
Other Cancers - Uncategorized	3,930	48.7	493	22.9	1,152	13.7	288	14.1

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 10: 2011 Top Ten Cancer Incidence and Mortality Sites by Race

Whites					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Female Breast	6,981	157.7	Lung and Bronchus	4,430	52.4
Prostate	5,035	123.9	Female Breast	947	20.2
Lung and Bronchus	5,920	69.4	Prostate	566	17.9
Colon and Rectum	3,008	36.2	Colon and Rectum	1,069	12.8
Melanoma (Skin)	2,176	26.9	Pancreas	822	9.8
Corpus Uteri	1,110	24.1	Ovary	351	7.5
Urinary Bladder	1,745	20.7	Leukemia	590	7.3
Non-Hodgkin Lymphoma	1,484	17.9	Non-Hodgkin Lymphoma	521	6.3
Kidney	1,369	16.4	Liver	450	5.2
Endocrine	1,030	13.6	Brain and Other CNS	409	5.0

Minorities					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Prostate	1,903	195.6	Lung and Bronchus	1,078	51.1
Female Breast	2,105	159.0	Prostate	288	46.5
Lung and Bronchus	1,375	63.4	Female Breast	362	27.3
Colon and Rectum	952	43.7	Colon and Rectum	406	19.8
Corpus Uteri	337	25.5	Pancreas	246	11.8
Kidney	421	18.0	Liver	180	7.3
Pancreas	301	14.0	Corpus Uteri	85	6.9
Urinary Bladder	244	12.2	Ovary	80	6.7
Non-Hodgkin Lymphoma	263	11.6	Leukemia	124	6.4
Multiple Myeloma	246	11.1	Stomach	128	6.4

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancers exclude benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 11: 2011 Top Ten Cancer Incidence and Mortality by Race and Gender

White Males					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Prostate	5,034	123.8	Lung and Bronchus	2,553	69.1
Lung and Bronchus	3,301	87.5	Prostate	566	17.9
Colon and Rectum	1,574	42.0	Colon and Rectum	568	15.5
Urinary Bladder	1,305	35.8	Pancreas	424	11.5
Melanoma (Skin)	1,286	34.6	Leukemia	342	10.0
Non-Hodgkin Lymphoma	847	22.6	Non-Hodgkin Lymphoma	278	8.0
Kidney	850	21.7	Liver	316	8.0
Oral Cavity	754	18.8	Urinary Bladder	250	7.5
Leukemia	565	15.6	Esophagus	280	7.2
Pancreas	485	12.6	Brain and Other CNS	235	6.3

White Females					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Female Breast	6,981	157.7	Lung and Bronchus	1,877	39.9
Lung and Bronchus	2,618	55.9	Female Breast	947	20.2
Colon and Rectum	1,432	31.5	Colon and Rectum	501	10.6
Corpus Uteri	1,110	24.1	Pancreas	398	8.5
Melanoma (Skin)	887	21.5	Ovary	351	7.5
Endocrine	740	19.5	Leukemia	248	5.4
Non-Hodgkin Lymphoma	637	14.1	Non-Hodgkin Lymphoma	243	5.1
Kidney	519	11.8	Brain and Other CNS	174	3.9
Ovary	490	11.0	Corpus Uteri	163	3.4
Pancreas	444	9.7	Liver	134	2.9

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

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Table 11 (continued): 2011 Top Ten Cancer Incidence and Mortality by Race and Gender

Minority Males					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Prostate	1,902	195.5	Lung and Bronchus	662	76.3
Lung and Bronchus	814	91.5	Prostate	288	46.5
Colon and Rectum	470	51.6	Colon and Rectum	211	25.8
Kidney	225	23.0	Pancreas	123	13.5
Urinary Bladder	164	20.8	Liver	127	11.4
Oral Cavity	177	17.5	Stomach	72	8.5
Liver	165	14.3	Leukemia	60	7.5
Non-Hodgkin Lymphoma	135	13.9	Multiple Myeloma	59	6.8
Pancreas	136	13.9	Non-Hodgkin Lymphoma	49	6.6
Stomach	118	13.7	Oral Cavity	60	6.4

Minority Females					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Female Breast	2,105	159.0	Lung and Bronchus	416	34.2
Lung and Bronchus	561	44.5	Female Breast	362	27.3
Colon and Rectum	480	37.8	Colon and Rectum	195	16.0
Corpus Uteri	337	25.5	Pancreas	123	10.3
Kidney	196	14.7	Corpus Uteri	85	6.9
Endocrine	196	14.6	Ovary	80	6.7
Pancreas	165	13.5	Leukemia	64	5.5
Non-Hodgkin Lymphoma	128	9.9	Multiple Myeloma	64	5.3
Multiple Myeloma	128	9.9	Stomach	56	4.8
Ovary	124	9.8	Liver	53	4.1

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

**Table 12: 2007 – 2011 Top Five Cancer Incidence and Mortality Sites
by Age Group, Race and Gender**

White Males					
Incidence			Mortality		
Ages 0 to 19					
	Cases	Rate		Deaths	Rate
Leukemia	199	4.4	Leukemia	29	0.6
Brain and Other CNS	161	3.6	Brain and Other CNS	24	0.5
Non-Hodgkin Lymphoma	65	1.4	Bone	15	0.3
Bone	57	1.3	Endocrine	9	0.2
Soft Tissue	54	1.2	Soft Tissue	6	0.1
Ages 20 to 44					
	Cases	Rate		Deaths	Rate
Melanoma (Skin)	727	12.3	Lung and Bronchus	116	2.0
Testes	719	12.1	Brain and Other CNS	112	1.9
Colon and Rectum	446	7.5	Colon and Rectum	108	1.8
Non-Hodgkin Lymphoma	364	6.1	Leukemia	75	1.3
Endocrine	345	5.8	Melanoma (Skin)	59	1.0
Ages 45 to 64					
	Cases	Rate		Deaths	Rate
Prostate	10,565	233.2	Lung and Bronchus	3,637	80.3
Lung and Bronchus	5,271	116.3	Colon and Rectum	928	20.5
Colon and Rectum	3,123	68.9	Liver	625	13.8
Melanoma (Skin)	2,307	50.9	Pancreas	615	13.6
Oral Cavity	1,942	42.9	Esophagus	514	11.3
Ages 65 and above					
	Cases	Rate		Deaths	Rate
Prostate	14,814	698.4	Lung and Bronchus	8,911	420.1
Lung and Bronchus	11,136	525.0	Prostate	2,635	124.2
Urinary Bladder	4,888	230.4	Colon and Rectum	1,903	89.7
Colon and Rectum	4,672	220.3	Pancreas	1,295	61.1
Melanoma (Skin)	3,207	151.2	Leukemia	1,181	55.7

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 12 (continued): 2007 – 2011 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

White Females					
Incidence			Mortality		
Ages 0 to 19					
	Cases	Rate		Deaths	Rate
Leukemia	148	3.5	Brain and Other CNS	25	0.6
Brain and Other CNS	136	3.2	Leukemia	22	0.5
Endocrine	86	2.0	Bone	13	0.3
Hodgkin Disease	50	1.2	Endocrine	10	0.2
Soft Tissue	42	1.0	Soft Tissue	6	0.1
Ages 20 to 44					
	Cases	Rate		Deaths	Rate
Female Breast	3,353	58.9	Female Breast	248	4.4
Endocrine	1,325	23.3	Lung and Bronchus	128	2.2
Melanoma (Skin)	1,116	19.6	Colon and Rectum	97	1.7
Cervix Uteri	521	9.2	Leukemia	71	1.2
Colon and Rectum	408	7.2	Cervix Uteri	57	1.0
Ages 45 to 64					
	Cases	Rate		Deaths	Rate
Female Breast	15,282	322.4	Lung and Bronchus	2,512	53.0
Lung and Bronchus	4,119	86.9	Female Breast	1,671	35.3
Corpus Uteri	2,657	56.1	Colon and Rectum	641	13.5
Colon and Rectum	2,353	49.6	Ovary	506	10.7
Melanoma (Skin)	1,776	37.5	Pancreas	454	9.6
Ages 65 and above					
	Cases	Rate		Deaths	Rate
Female Breast	14,633	521.1	Lung and Bronchus	6,742	240.1
Lung and Bronchus	8,843	314.9	Female Breast	2,770	98.7
Colon and Rectum	4,671	166.4	Colon and Rectum	1,909	68.0
Non-Hodgkin Lymphoma	2,172	77.4	Pancreas	1,536	54.7
Corpus Uteri	2,156	76.8	Ovary	1,177	41.9

Rates are per 100,000 persons.

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Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 12 (continued): 2007 – 2011 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

Minority Males					
Incidence			Mortality		
Ages 0 to 19					
	Cases	Rate		Deaths	Rate
Brain and Other CNS	58	3.0	Leukemia	17	0.9
Leukemia	51	2.6	Brain and Other CNS	13	0.7
Non-Hodgkin Lymphoma	25	1.3	Endocrine	5	0.3
Kidney	20	1.0	Soft Tissue	4	0.2
Hodgkin Disease	16	0.8	Non-Hodgkin Lymphoma	3	0.2
			Bone	2	0.1
Ages 20 to 44					
	Cases	Rate		Deaths	Rate
Colon and Rectum	175	8.3	Colon and Rectum	50	2.4
Non-Hodgkin Lymphoma	143	6.8	Lung and Bronchus	30	1.4
Prostate	128	6.0	Leukemia	28	1.3
Kidney	109	5.2	Stomach	26	1.2
Hodgkin Disease	96	4.5	Brain and Other CNS	25	1.2
			Oral Cavity	21	1.0
Ages 45 to 64					
	Cases	Rate		Deaths	Rate
Prostate	4,987	382.4	Lung and Bronchus	1,355	103.9
Lung and Bronchus	1,891	145.0	Colon and Rectum	387	29.7
Colon and Rectum	1,170	89.7	Liver	358	27.5
Kidney	594	45.6	Pancreas	260	19.9
Oral Cavity	560	42.9	Prostate	224	17.2
Ages 65 and above					
	Cases	Rate		Deaths	Rate
Prostate	4,414	1080.1	Lung and Bronchus	1,822	445.8
Lung and Bronchus	2,191	536.1	Prostate	1,243	304.1
Colon and Rectum	1,057	258.6	Colon and Rectum	546	133.6
Urinary Bladder	477	116.7	Pancreas	290	71.0
Kidney	412	100.8	Multiple Myeloma	180	44.0

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 12 (continued): 2007 – 2011 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

Minority Females

Incidence			Mortality		
Ages 0 to 19					
	Cases	Rate		Deaths	Rate
Leukemia	46	2.4	Leukemia	12	0.6
Brain and Other CNS	38	2.0	Brain and Other CNS	7	0.4
Hodgkin Disease	26	1.4	Bone	4	0.2
Kidney	22	1.2	Kidney	3	0.2
Endocrine	19	1.0	Soft Tissue	2	0.1
			Endocrine	2	0.1
Ages 20 to 44					
	Cases	Rate		Deaths	Rate
Female Breast	1,418	60.6	Female Breast	190	8.1
Endocrine	345	14.7	Colon and Rectum	44	1.9
Colon and Rectum	182	7.8	Lung and Bronchus	38	1.6
Cervix Uteri	173	7.4	Cervix Uteri	35	1.5
Non-Hodgkin Lymphoma	144	6.2	Ovary	28	1.2
Ages 45 to 64					
	Cases	Rate		Deaths	Rate
Female Breast	4,835	311.1	Female Breast	789	50.8
Lung and Bronchus	1,135	73.0	Lung and Bronchus	683	43.9
Colon and Rectum	1,068	68.7	Colon and Rectum	325	20.9
Corpus Uteri	617	39.7	Pancreas	169	10.9
Endocrine	423	27.2	Corpus Uteri	129	8.3
Ages 65 and above					
	Cases	Rate		Deaths	Rate
Female Breast	3,058	471.8	Lung and Bronchus	1,110	171.3
Lung and Bronchus	1,491	230.0	Female Breast	690	106.5
Colon and Rectum	1,238	191.0	Colon and Rectum	582	89.8
Corpus Uteri	662	102.1	Pancreas	470	72.5
Pancreas	498	76.8	Corpus Uteri	268	41.3

Rates are per 100,000 persons.

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Table 13: 2011 Cancer Incidence and Mortality by Race and Ethnicity

	Incidence				Mortality			
	Non-Hispanic Whites		Non-Hispanic Blacks		Non-Hispanic Whites		Non-Hispanic Blacks	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	38,917	481.0	9,651	491.4	13,934	170.2	3,783	206.1
Oral Cavity	1,057	12.9	230	10.9	215	2.6	71	3.6
Esophagus	343	4.1	83	4.0	332	4.0	71	3.5
Stomach	440	5.4	202	11.0	198	2.5	120	6.9
Colon and Rectum	2,951	36.6	873	45.9	1,051	12.9	390	21.6
Liver	546	6.6	189	8.5	436	5.2	158	7.2
Gallbladder	47	0.6	36	2.0	42	0.5	17	1.0
Pancreas	912	11.0	273	14.5	808	9.8	225	12.3
Larynx	332	3.9	113	5.5	90	1.0	36	1.7
Lung and Bronchus	5,867	70.3	1,253	65.8	4,400	53.2	990	53.5
Bone	79	1.2	16	0.7	41	0.5	6	0.3
Soft Tissue	247	3.4	80	3.8	91	1.2	44	2.2
Melanoma (Skin)	2,159	28.1	22	1.3	273	3.4	7	0.4
Female Breast	6,838	160.2	1,880	165.2	929	20.3	343	29.8
Cervix Uteri	238	6.9	88	7.7	70	1.7	33	3.0
Uterus (Corpus, NOS)	1,082	24.3	307	26.7	162	3.4	81	7.5
Ovary	481	11.2	103	9.5	348	7.7	73	7.0
Prostate	4,964	125.2	1,761	208.3	555	17.9	273	49.7
Testes	175	5.9	23	2.4	8	0.3	3	0.3
Urinary Bladder	1,734	21.1	199	11.3	332	4.1	62	3.8
Kidney	1,333	16.6	389	19.3	318	3.9	75	3.8
Endocrine	983	14.0	196	9.6	61	0.8	10	0.5
Multiple Myeloma	464	5.6	235	12.2	249	3.0	118	6.5
Leukemia	948	12.2	160	8.6	575	7.2	115	6.6
Brain and Other CNS	553	7.6	73	3.6	401	5.1	46	2.3
Hodgkin Disease	182	2.8	58	2.8	29	0.4	7	0.3
Non-Hodgkin Lymphoma	1,447	18.1	226	11.7	516	6.4	81	4.6
Other Cancers	2,515	31.1	583	31.3	1,404	17.1	328	18.0

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.).

Table 13 (continued): 2011 Cancer Incidence and Mortality by Race and Ethnicity

	Incidence				Mortality			
	Non-Hispanic Other Races		Hispanics		Non-Hispanic Other Races		Hispanics	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	1,203	469.9	993	332.3	274	128.1	210	97.0
Oral Cavity	34	14.2	21	6.8	7	3.4	1	0.3
Esophagus	10	4.1	7	2.8	5	2.3	5	2.3
Stomach	20	7.4	27	11.9	8	3.8	8	4.9
Colon and Rectum	85	34.6	62	25.4	17	9.3	18	8.1
Liver	32	10.4	36	13.5	22	8.7	14	5.4
Gallbladder	*	*	*	*	1	0.8	1	0.7
Pancreas	30	13.0	19	7.8	19	8.6	16	7.3
Larynx	9	3.7	6	3.6	1	0.8	0	0.0
Lung and Bronchus	124	56.1	66	29.5	86	36.1	33	16.8
Bone	*	*	6	0.6	1	0.9	2	0.3
Soft Tissue	9	3.4	16	3.8	2	1.0	2	0.2
Melanoma (Skin)	24	10.0	25	7.3	2	0.5	7	3.3
Female Breast	213	131.7	182	117.4	16	12.3	21	16.7
Cervix Uteri	14	8.2	33	14.1	0	0.0	4	2.0
Uterus (Corpus, NOS)	28	18.7	36	23.5	3	1.5	2	1.9
Ovary	20	12.8	10	7.4	7	4.9	3	2.9
Prostate	243	226.7	94	87.1	15	25.3	11	20.8
Testes	5	2.5	19	3.2	0	0.0	1	0.2
Urinary Bladder	48	24.1	16	7.5	7	4.6	3	1.2
Kidney	34	12.1	41	11.3	7	3.1	3	0.8
Endocrine	48	13.6	58	11.0	1	0.3	1	0.9
Multiple Myeloma	13	5.4	15	6.8	5	2.7	3	1.4
Leukemia	29	10.2	37	9.2	7	3.9	17	5.6
Brain and Other CNS	12	3.3	24	5.0	5	2.0	9	2.3
Hodgkin Disease	*	*	5	0.5	0	0.0	0	0.0
Non-Hodgkin Lymphoma	42	16.6	44	13.6	9	4.0	5	3.4
Other Cancers	68	29.8	85	27.3	21	10.8	20	10.6

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

* Incidence counts less than five are suppressed.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.).

Table 14: 2011 Top Ten Cancer Incidence and Mortality Sites by Race and Ethnicity

Non-Hispanic Whites					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Female Breast	6,838	160.2	Lung and Bronchus	4,400	53.2
Prostate	4,964	125.2	Female Breast	929	20.3
Lung and Bronchus	5,867	70.3	Prostate	555	17.9
Colon and Rectum	2,951	36.6	Colon and Rectum	1,051	12.9
Melanoma (Skin)	2,159	28.1	Pancreas	808	9.8
Corpus Uteri	1,082	24.3	Ovary	348	7.7
Urinary Bladder	1,734	21.1	Leukemia	575	7.2
Non-Hodgkin Lymphoma	1,447	18.1	Non-Hodgkin Lymphoma	516	6.4
Kidney	1,333	16.6	Liver	436	5.2
Endocrine	983	14.0	Brain and Other CNS	401	5.1

Non-Hispanic Blacks					
Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Prostate	1,761	208.3	Lung and Bronchus	990	53.5
Female Breast	1,880	165.2	Prostate	273	49.7
Lung and Bronchus	1,253	65.8	Female Breast	343	29.8
Colon and Rectum	873	45.9	Colon and Rectum	390	21.6
Corpus Uteri	307	26.7	Pancreas	225	12.3
Kidney	389	19.3	Corpus Uteri	81	7.5
Pancreas	273	14.5	Liver	158	7.2
Multiple Myeloma	235	12.2	Ovary	73	7.0
Non-Hodgkin Lymphoma	226	11.7	Stomach	120	6.9
Urinary Bladder	199	11.3	Leukemia	115	6.6

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naacr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.).

Table 14 (continued): 2011 Top Ten Cancer Incidence and Mortality Sites by Race and Ethnicity

Non-Hispanic Other Races					
	Incidence			Mortality	
	Cases	Rate		Deaths	Rate
Prostate	243	226.7	Lung and Bronchus	86	36.1
Female Breast	213	131.7	Prostate	15	25.3
Lung and Bronchus	124	56.1	Female Breast	16	12.3
Colon and Rectum	85	34.6	Colon and Rectum	17	9.3
Urinary Bladder	48	24.1	Liver	22	8.7
Corpus Uteri	28	18.7	Pancreas	19	8.6
Non-Hodgkin Lymphoma	42	16.6	Ovary	7	4.9
Oral Cavity	34	14.2	Urinary Bladder	7	4.6
Endocrine	48	13.6	Non-Hodgkin Lymphoma	9	4.0
Pancreas	30	13.0	Leukemia	7	3.9

Hispanics					
	Incidence			Mortality	
	Cases	Rate		Deaths	Rate
Female Breast	182	117.4	Prostate	11	20.8
Prostate	94	87.1	Lung and Bronchus	33	16.8
Lung and Bronchus	66	29.5	Female Breast	21	16.7
Colon and Rectum	62	25.4	Colon and Rectum	18	8.1
Corpus Uteri	36	23.5	Pancreas	16	7.3
Cervix Uteri	33	14.1	Leukemia	17	5.6
Non-Hodgkin Lymphoma	44	13.6	Liver	14	5.4
Liver	36	13.5	Stomach	8	4.9
Stomach	27	11.9	Non-Hodgkin Lymphoma	5	3.4
Kidney	41	11.3	Melanoma (Skin)	7	3.3

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

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

Rates based on counts less than 16 are unstable and should be used with caution.

Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.

Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2010;36(1):7-11.).

Table 15: 2011 Cancer Incidence and Mortality Median Age

	Incidence						
	All	Males	Females	Non-Hispanic Whites	Non-Hispanic Blacks	Non-Hispanic Others	Hispanics
All Cancers	65	66	64	66	62	62	54
Oral Cavity	62	62	63	63	59	63.5	54
Esophagus	65	65	67.5	66	61	66	59
Stomach	68	66	69	69	66.5	60	65
Colon and Rectum	67	66	68	68	64	64	56.5
Liver	61	60	64	63	60	57.5	58
Gallbladder	70	70	69	68	70	*	*
Pancreas	69	66	72	70	66	63.5	61
Larynx	64	65	61	65	61	59	70.5
Lung and Bronchus	69	69	69	70	66	69	61
Bone	47	45	48	49	30	*	17.5
Soft Tissue	59	60	57	63	55	10	40
Melanoma (Skin)	63	66	58	63	70.5	63	50
Female Breast	62	.	62	63	59	56	54
Cervix Uteri	47	.	47	47	52	43	41
Uterus (Corpus, NOS)	63	.	63	63	63	54.5	56.5
Ovary	64	.	64	64	64	63	53
Prostate	66	66	.	66.5	64	65	63.5
Testes	34	34	.	36	33	31	28
Urinary Bladder	71	71	72	72	70	70	66
Kidney	63	63	63	64	61	61	52
Endocrine	51	56	49	51	52	42	44
Multiple Myeloma	68	67	69	70	64	64	65
Leukemia	67	66	69	69	62	53	39
Brain and Other CNS	58	57	59	60	42	36	43.5
Hodgkin Disease	41	41.5	39.5	43.5	39.5	*	29
Non-Hodgkin Lymphoma	66	65	67	67	60.5	57.5	47.5
Other Cancers	68	68	67	69	64	65	49

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

*Median ages based on incidence counts less than five are suppressed.

Table 15 (continued): 2011 Cancer Incidence and Mortality Median Age

	Mortality						
	All	Males	Females	Non-Hispanic Whites	Non-Hispanic Blacks	Non-Hispanic Others	Hispanics
All Cancers	71	70	71	72	67	68	63
Oral Cavity	66.5	65	75	69	61	71	58
Esophagus	66	66	66	67	62	65	59
Stomach	70	69	72	72	68.5	62.5	71.5
Colon and Rectum	70	68	73	72	67	74	59
Liver	64	62	71	66	60	59	57.5
Gallbladder	74	76.5	73	73	76	81	71
Pancreas	71	68	74	72	68	65	61
Larynx	66	65.5	66	66.5	64	82	.
Lung and Bronchus	71	70	71	71	67	67	64
Bone	64	66	61	64	66.5	89	42
Soft Tissue	65	63	66	68	59	72.5	22.5
Melanoma (Skin)	68	68	67	68	67	48.5	66
Female Breast	66	.	66	69	59	64.5	64
Cervix Uteri	61	.	61	62.5	61	.	55.5
Uterus (Corpus, NOS)	70	.	70	71	69	60	69
Ovary	71	.	71	72	70	69	69
Prostate	79	79	.	81	76	77	80
Testes	46.5	46.5	.	46.5	62	.	33
Urinary Bladder	77	77	78	78	75.5	76	59
Kidney	70	68	73	73	63	63	48
Endocrine	68	67	70	68	68	58	83
Multiple Myeloma	74	72	75	76	69	77	60
Leukemia	75	74	75	75	72	73	52
Brain and Other CNS	64	62	66	65	55.5	62	45
Hodgkin Disease	62	65	56.5	65	32	.	.
Non-Hodgkin Lymphoma	75	73	77	76	68	65	75
Other Cancers	72	71	74	73.5	68	70	65.5

Cancers of the urinary bladder and female breast include *in situ* cases.

Brain and other central nervous system cancer excludes benign cases.

*Median ages based on incidence counts less than five are suppressed.

Figure 1a: 2000 – 2011 Colorectal Cancer Incidence Trends by Gender and Race

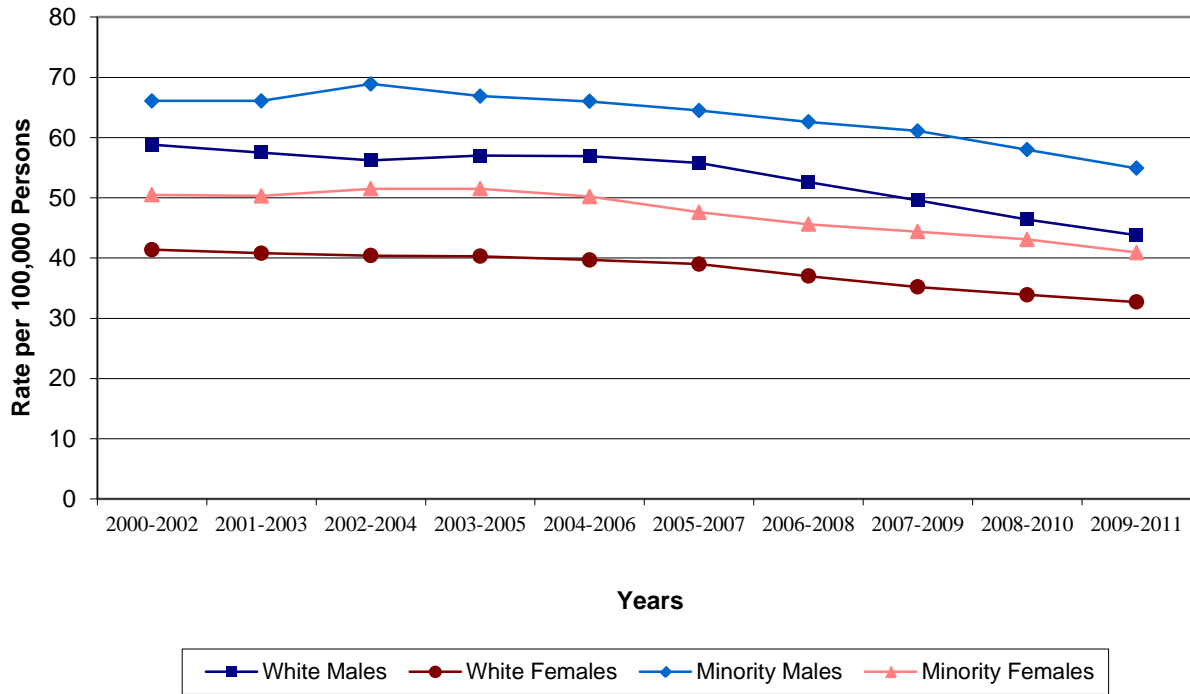


Figure 1b: 2000 – 2011 Colorectal Cancer Mortality Trends by Gender and Race

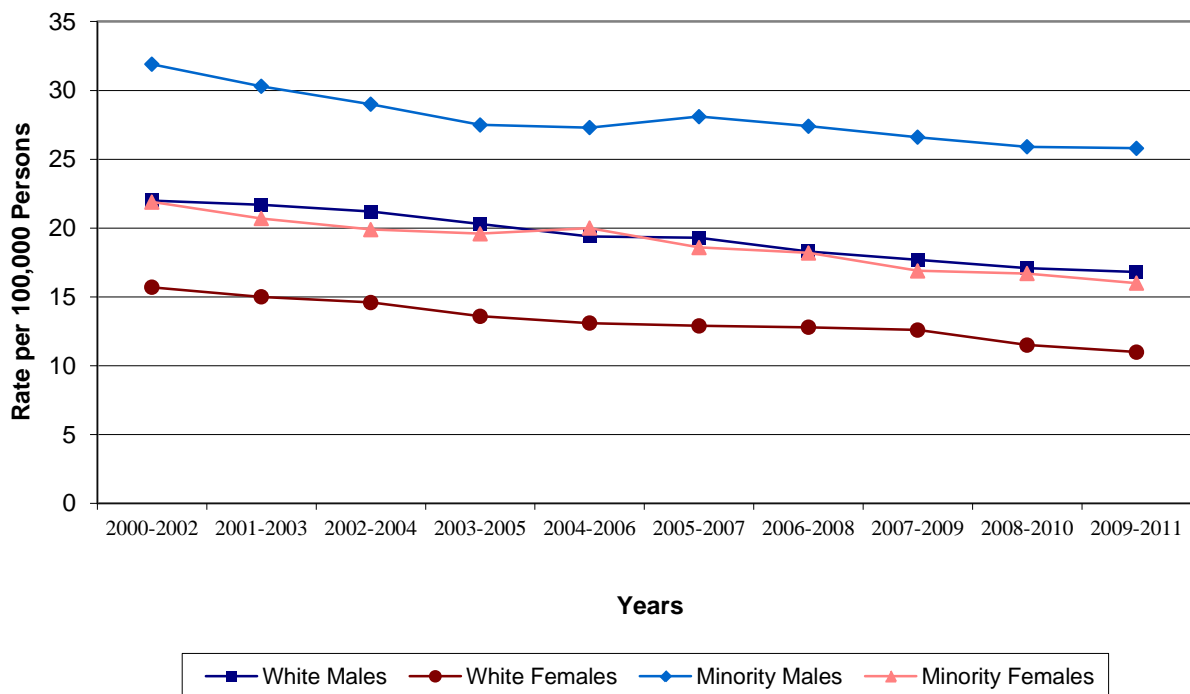


Figure 2a: 2000 – 2011 Lung and Bronchus Cancer Incidence Trends by Gender and Race

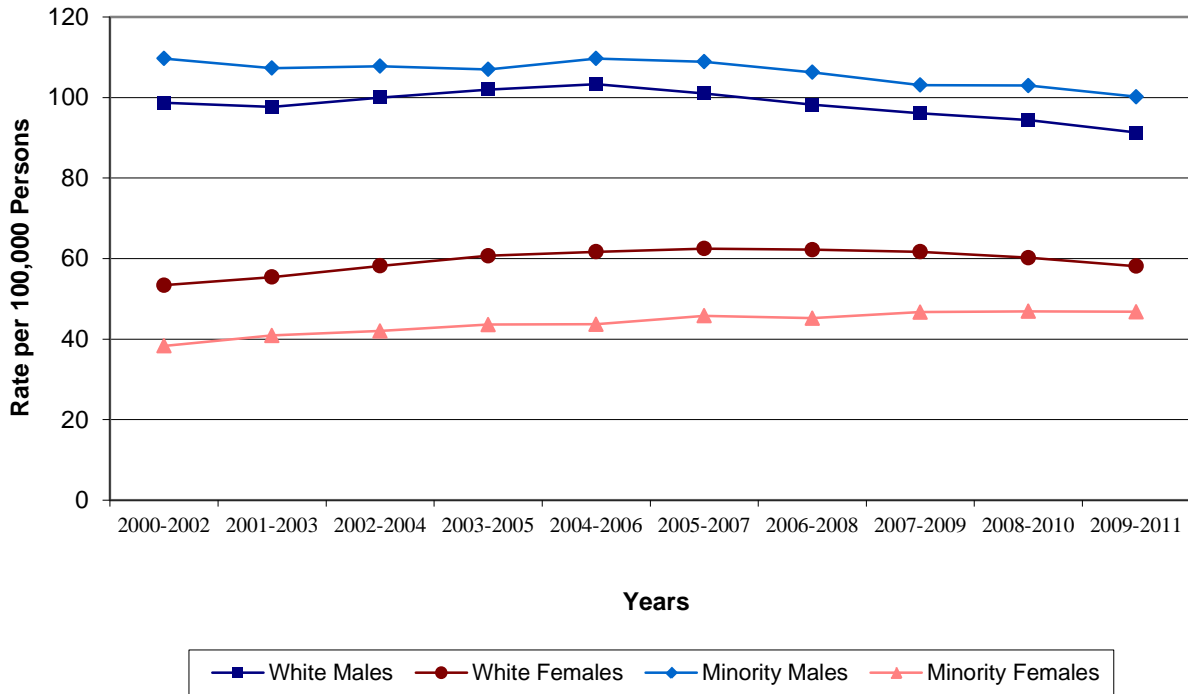


Figure 2b: 2000 – 2011 Lung and Bronchus Cancer Mortality Trends by Gender and Race

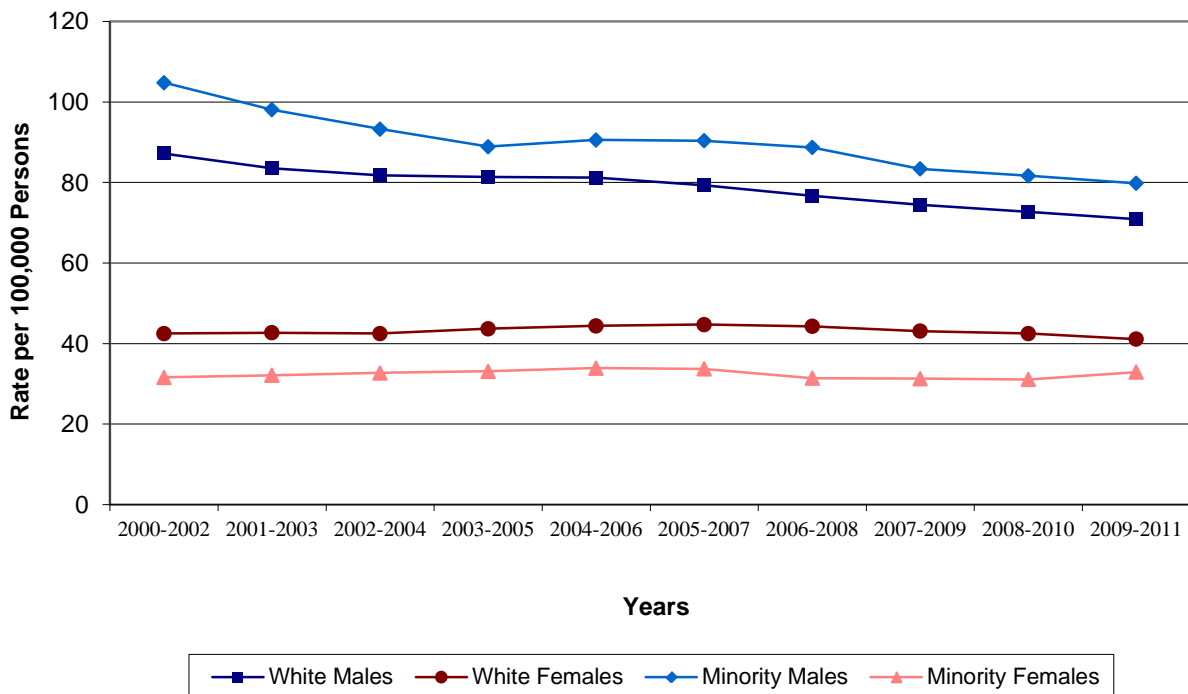


Figure 3a: 2000 – 2011 Female Breast Cancer Incidence Trends by Race

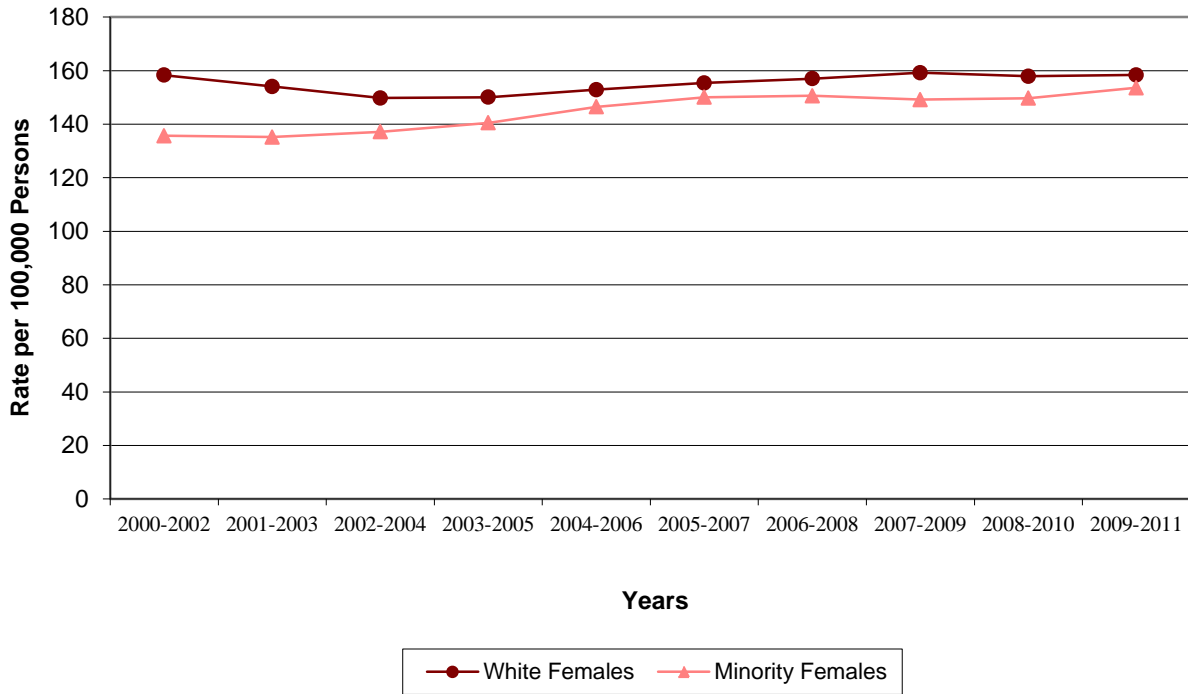


Figure 3b: 2000 – 2011 Female Breast Cancer Mortality Trends by Race

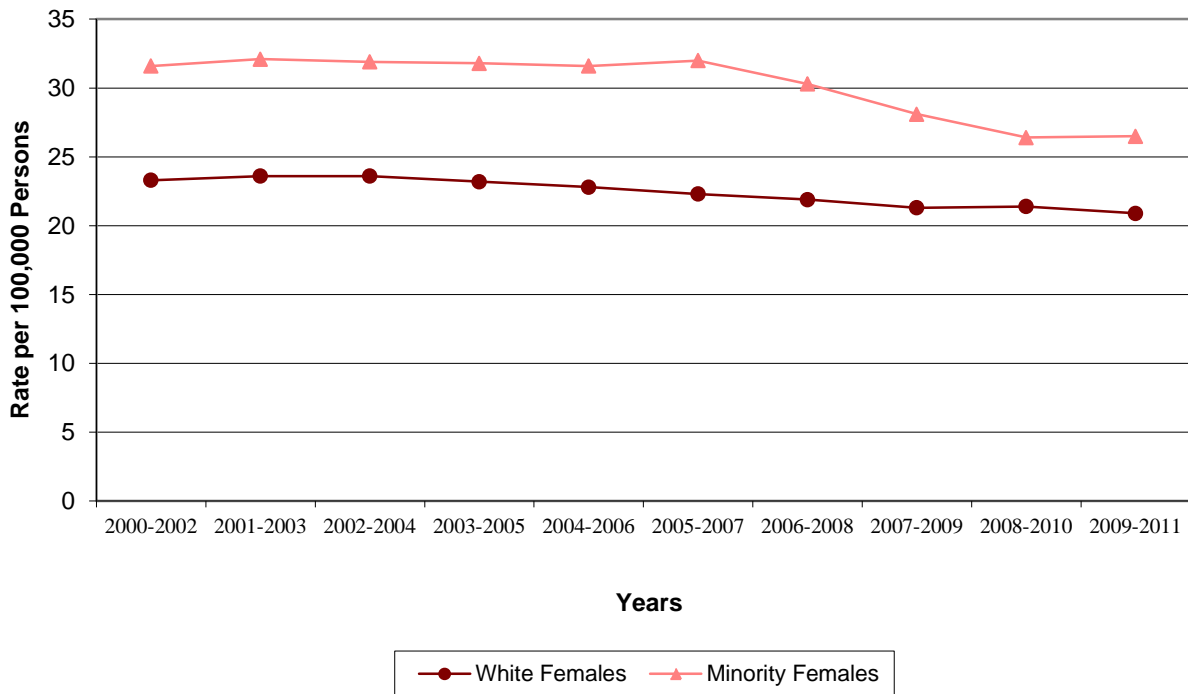


Figure 4a: 2000 – 2011 Prostate Cancer Incidence Trends by Race



Figure 4b: 2000 – 2011 Prostate Cancer Mortality Trends by Race

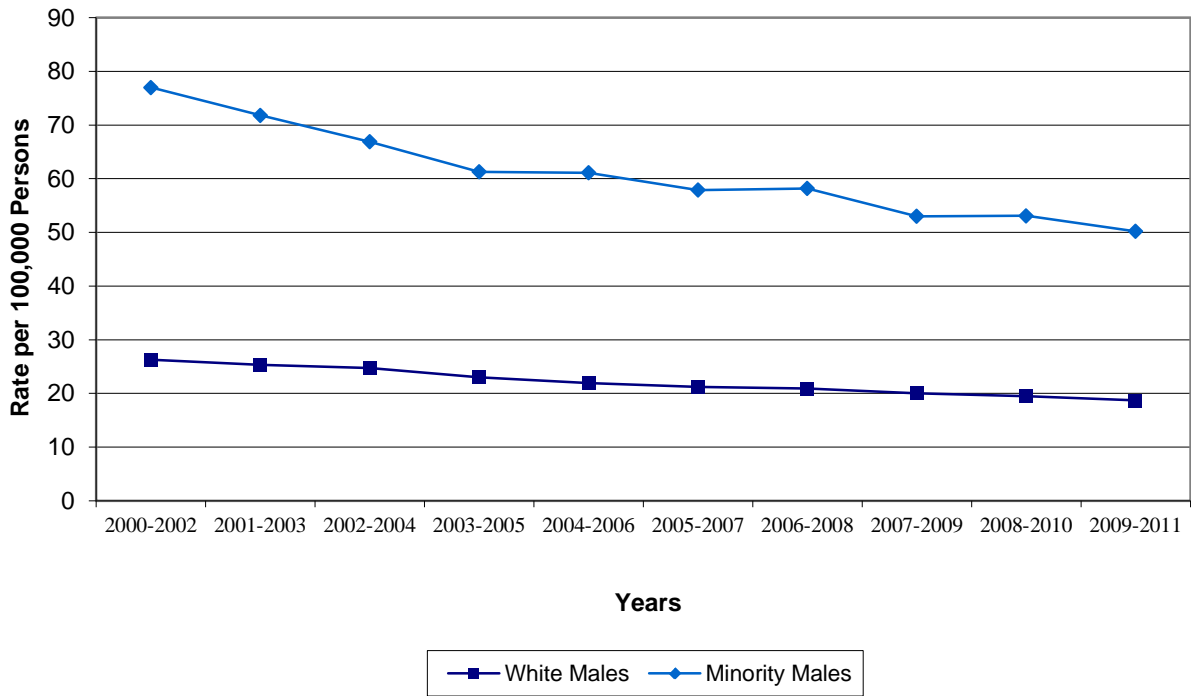


Figure 5: 2000 – 2011 Oral Cavity Cancer Incidence Trends by Gender and Race

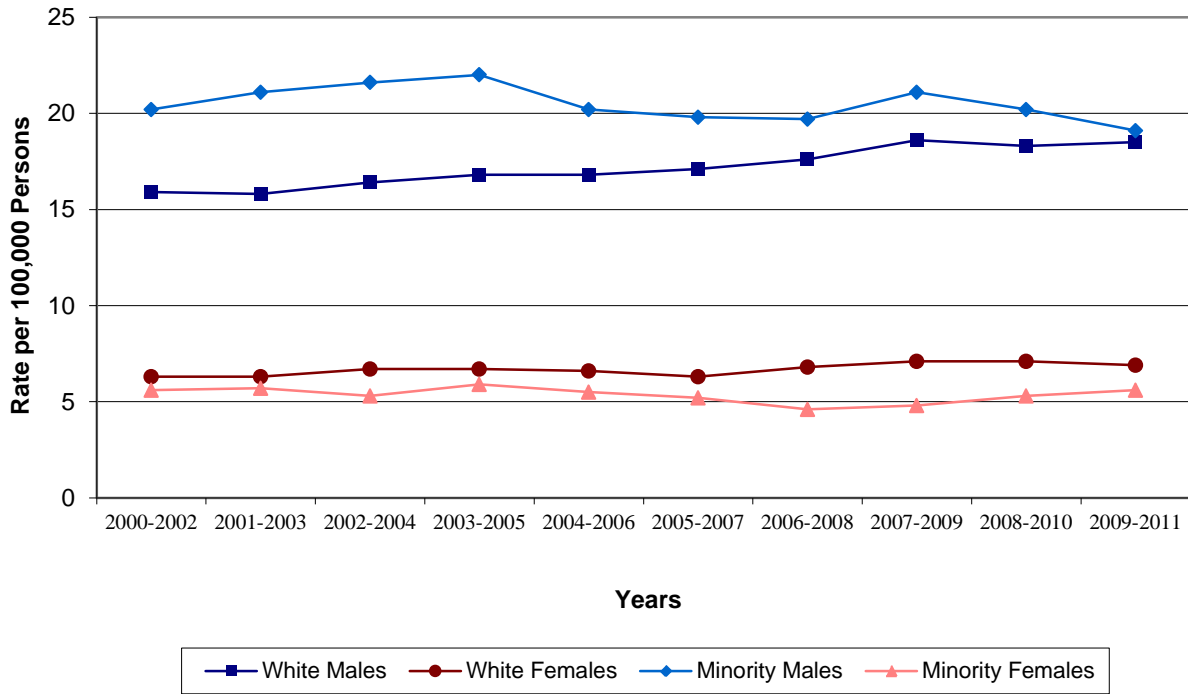


Figure 6: 2000 – 2011 Laryngeal Cancer Incidence Trends by Gender and Race

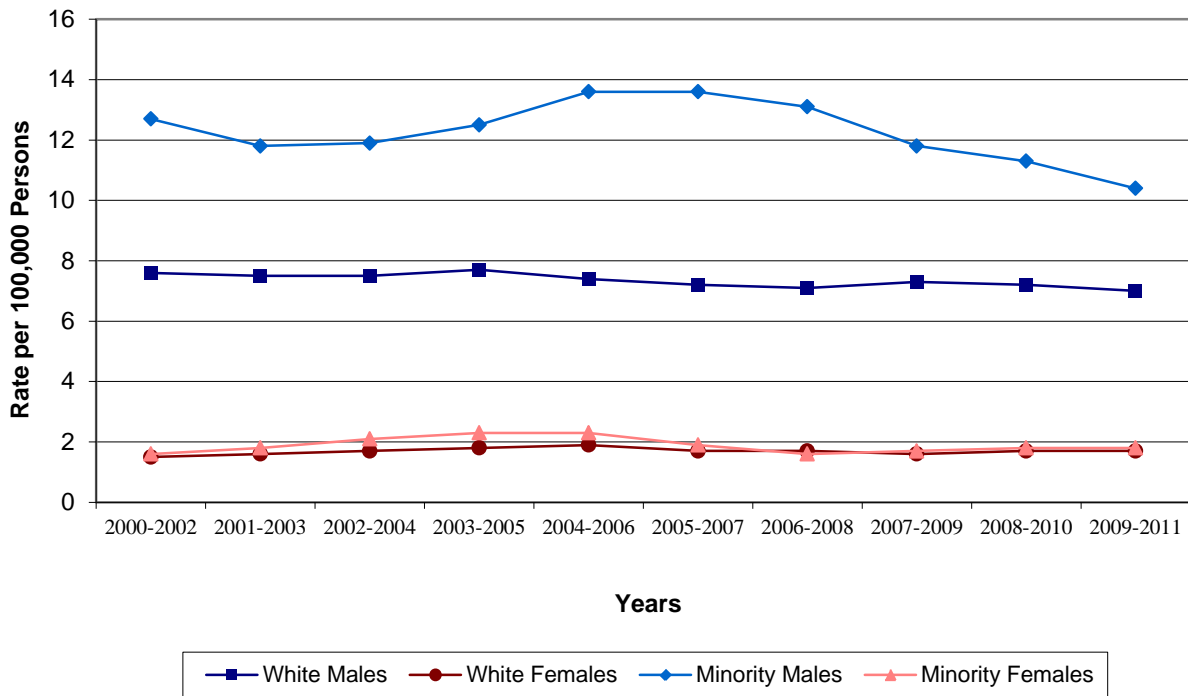


Figure 7: 2000 – 2011 Melanoma Incidence Trends by Gender and Race

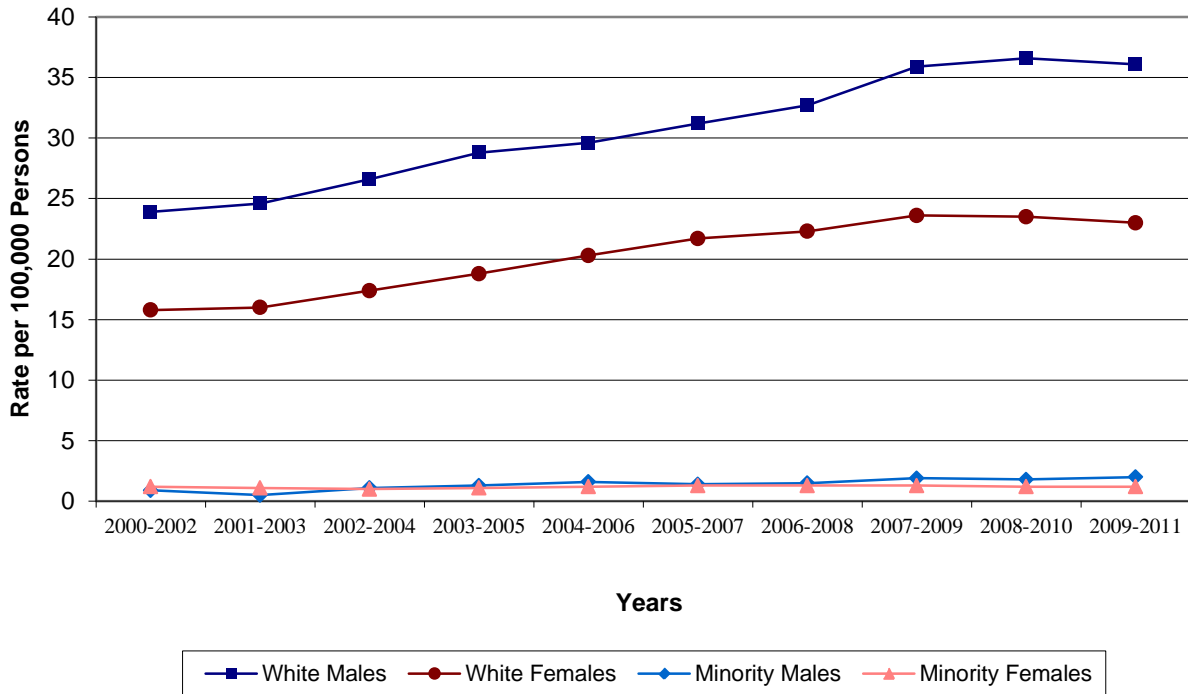


Figure 8: 2000 – 2011 Cervical Cancer Incidence Trends by Race

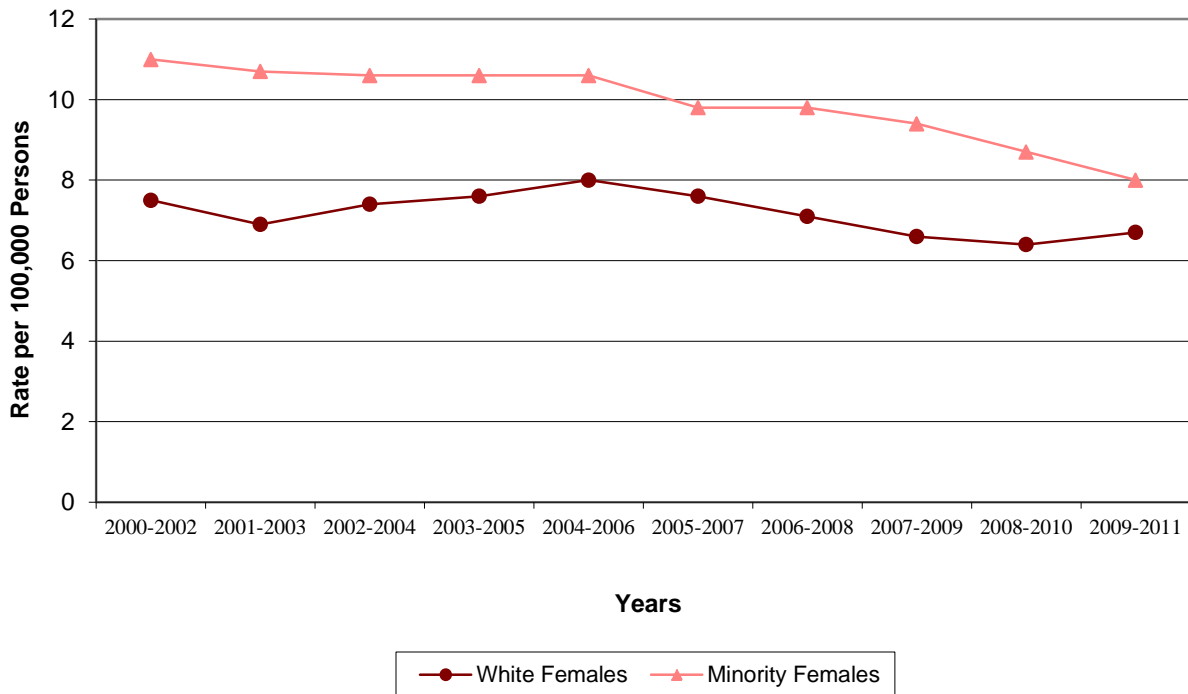


Figure 9: 2000 – 2011 Kidney Cancer Incidence Trends by Gender and Race

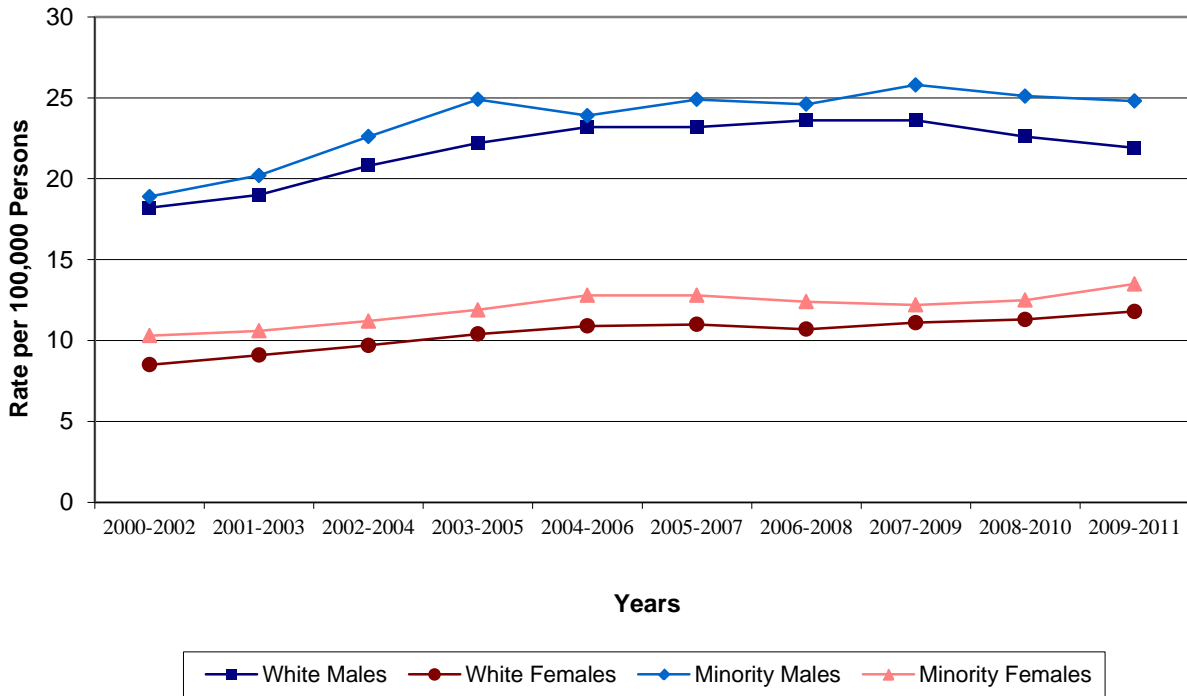


Figure 10: 2000 – 2011 Endocrine Cancer Incidence Trends by Gender and Race

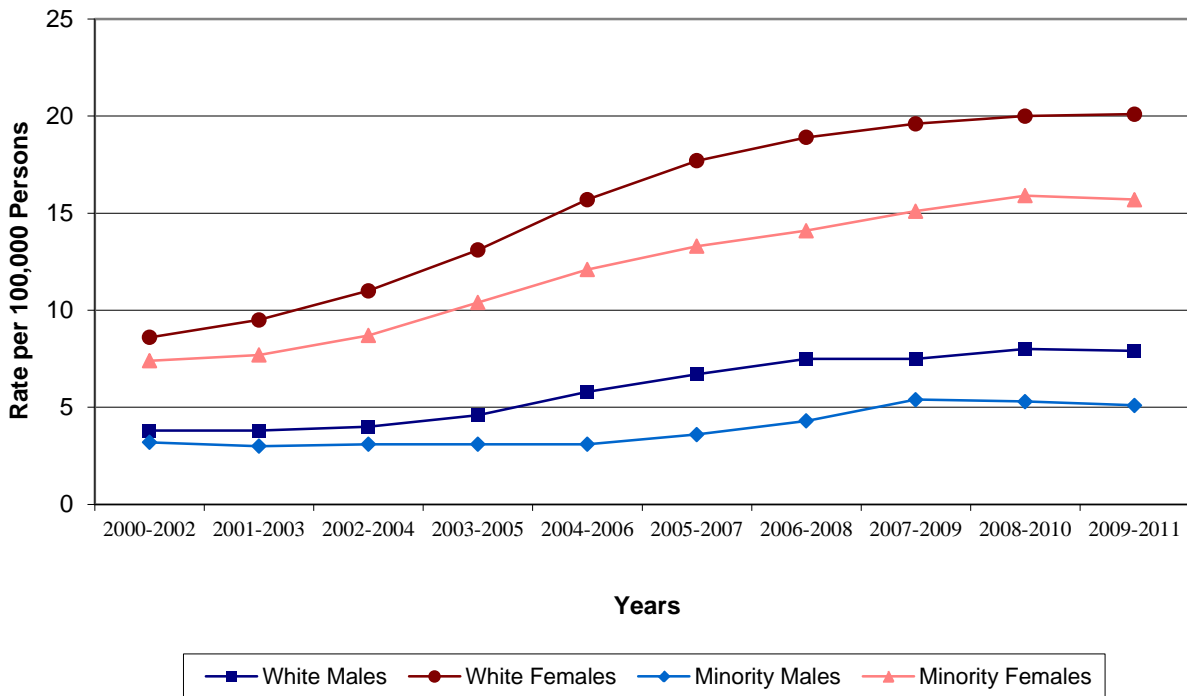


Figure 11: 2000 – 2011 Stomach Cancer Mortality Trends by Gender and Race

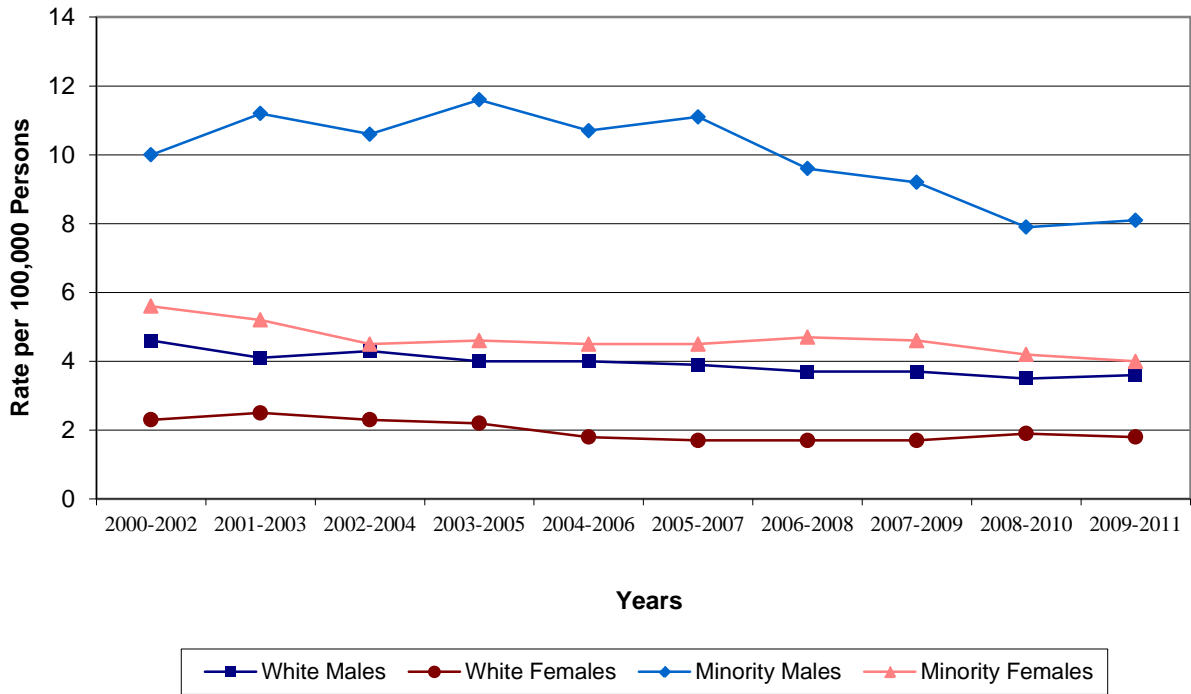


Figure 12: 2000 – 2011 Liver Cancer Mortality Trends by Gender and Race

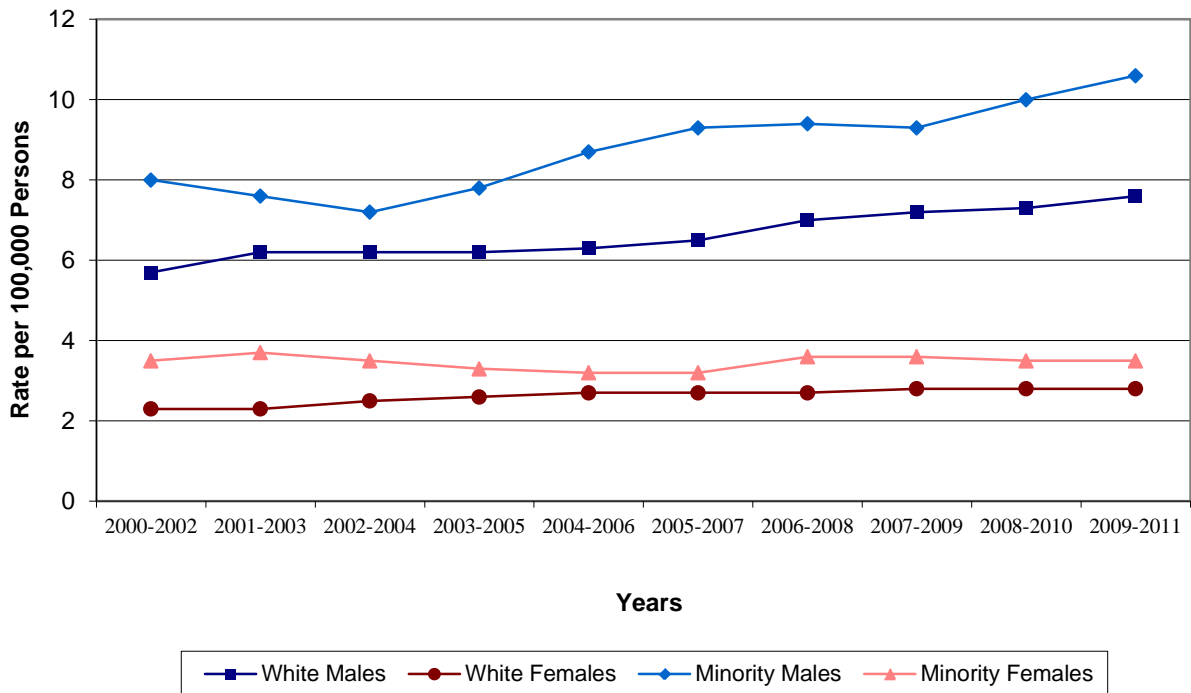


Figure 13: 2000 – 2011 Pancreatic Cancer Mortality Trends by Gender and Race

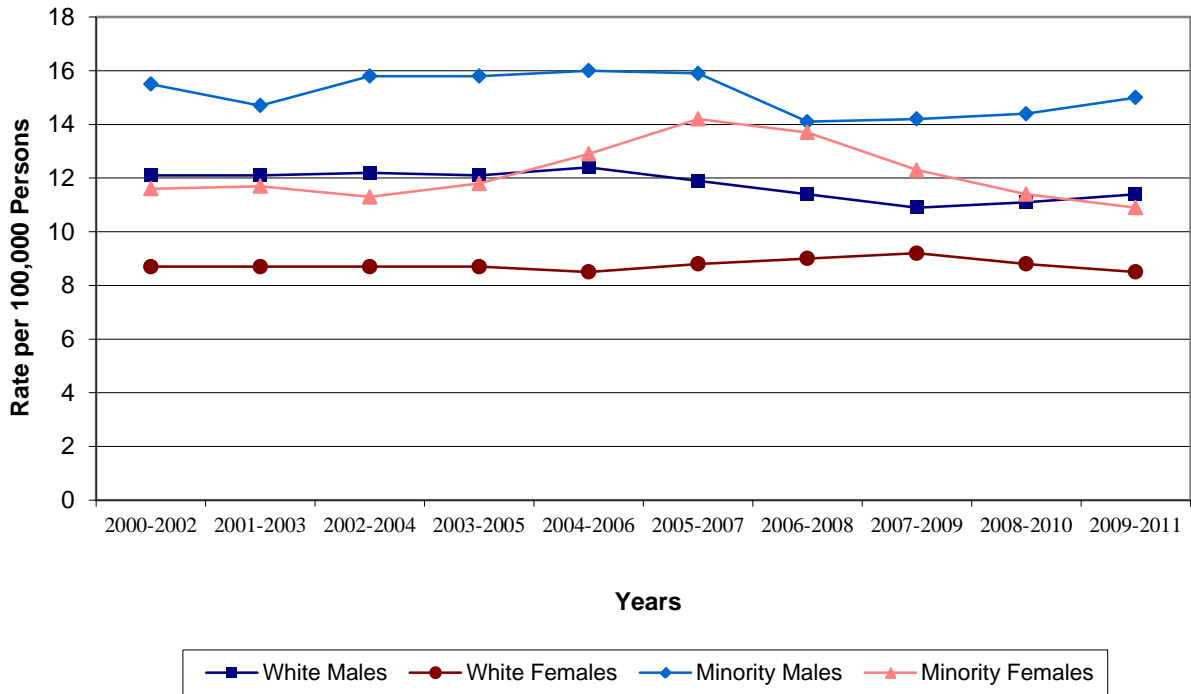


Figure 14: 2000 – 2011 Cervical Cancer Mortality Trends by Race

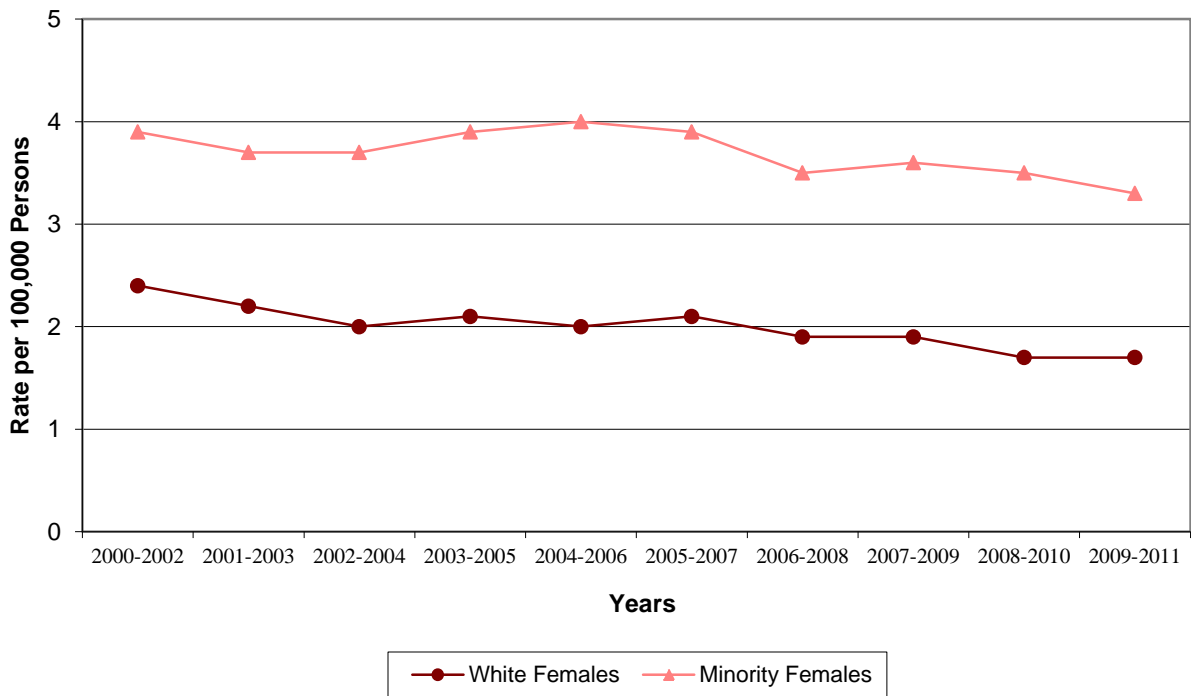
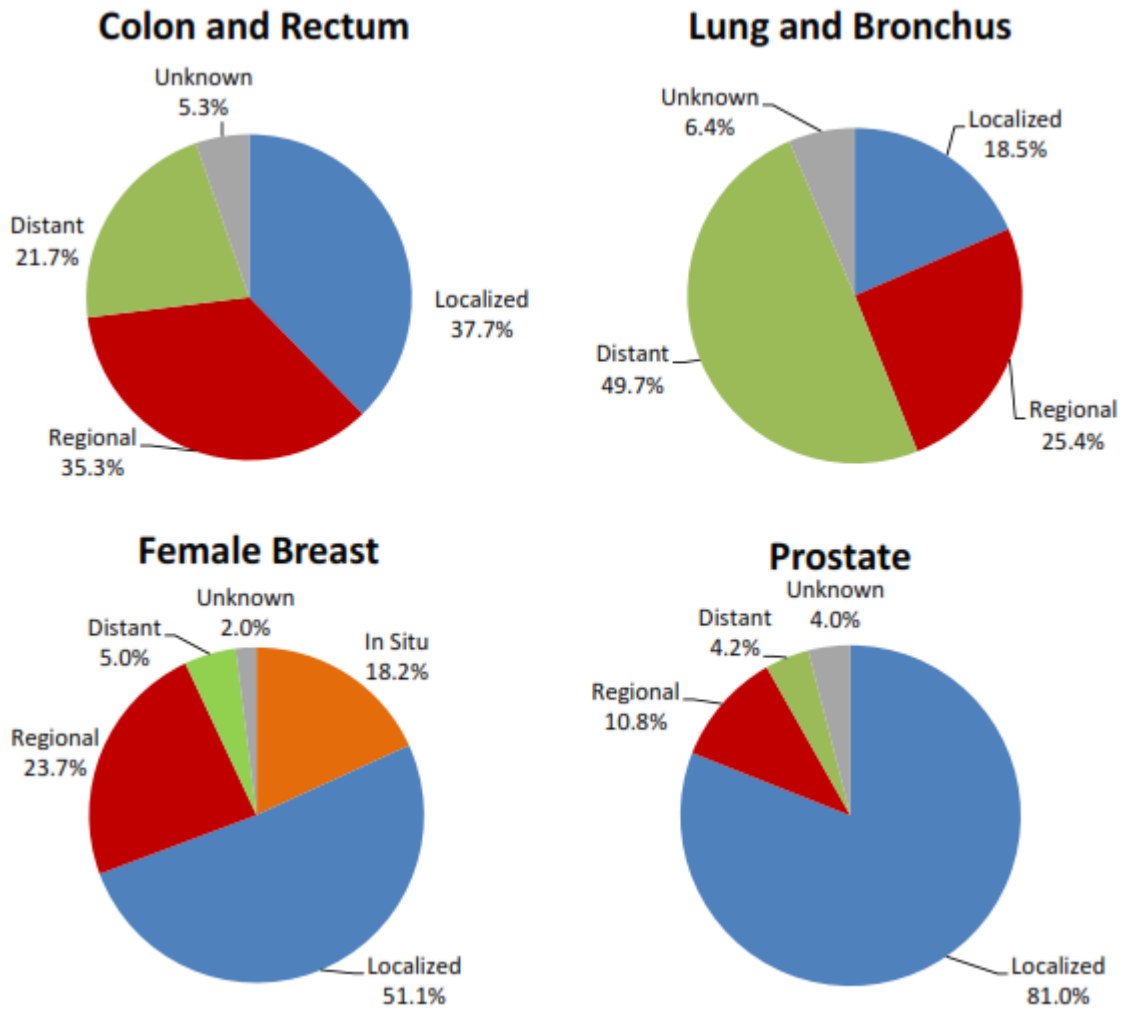


Figure 15: 2011 Percent of Top Four Cancer Cases by Stage



Appendix A: 2011 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
North Carolina	7,057,353	2,188,334	159,075	251,639	9,656,401
Alamance	118,304	30,503	2,204	2,280	153,291
Alexander	34,217	2,298	155	417	37,087
Alleghany	10,708	215	59	70	11,052
Anson	12,982	13,088	216	323	26,609
Ashe	26,624	304	84	131	27,143
Avery	16,624	775	95	78	17,572
Beaufort	34,384	12,589	432	286	47,691
Bertie	7,546	13,103	103	122	20,874
Bladen	21,301	12,542	950	135	34,928
Brunswick	94,995	13,289	989	824	110,097
Buncombe	219,406	17,245	1,451	3,317	241,419
Burke	79,482	6,725	738	3,959	90,904
Cabarrus	146,051	29,704	1,301	4,412	181,468
Caldwell	76,690	4,616	498	591	82,395
Camden	8,315	1,453	52	194	10,014
Carteret	61,426	4,699	432	816	67,373
Caswell	15,100	8,085	124	94	23,403
Catawba	133,190	14,282	873	5,836	154,181
Chatham	53,395	9,042	843	915	64,195
Cherokee	26,003	542	475	174	27,194
Chowan	9,506	5,189	58	100	14,853
Clay	10,334	149	40	40	10,563
Cleveland	75,372	20,885	346	886	97,489
Columbus	37,189	18,158	2,075	290	57,712
Craven	77,011	24,427	760	2,588	104,786
Cumberland	181,951	126,111	6,322	10,501	324,885
Currituck	22,021	1,581	129	224	23,955
Dare	32,702	1,158	178	269	34,307
Davidson	143,314	15,720	1,305	2,358	162,697
Davie	37,980	2,986	264	322	41,552
Duplin	42,217	15,899	858	568	59,542
Durham	148,379	108,263	3,066	13,684	273,392
Edgecombe	22,993	32,478	362	208	56,041
Forsyth	245,055	98,878	3,100	7,919	354,952

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Appendix A (continued): 2011 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
Franklin	43,161	16,947	561	471	61,140
Gaston	169,466	33,310	1,262	2,993	207,031
Gates	7,774	4,146	80	43	12,043
Graham	8,079	79	608	36	8,802
Granville	38,656	20,242	608	470	59,976
Greene	12,808	8,122	486	140	21,556
Guilford	301,055	168,664	3,982	21,578	495,279
Halifax	22,371	29,204	2,142	456	54,173
Harnett	88,368	26,778	2,416	1,694	119,256
Haywood	57,274	917	370	294	58,855
Henderson	101,612	4,081	759	1,475	107,927
Hertford	8,926	15,018	313	176	24,433
Hoke	25,813	17,453	5,081	925	49,272
Hyde	3,867	1,893	38	24	5,822
Iredell	136,002	20,740	981	3,479	161,202
Jackson	34,706	1,054	4,111	414	40,285
Johnston	141,195	28,166	1,704	1,530	172,595
Jones	6,589	3,295	82	54	10,020
Lee	44,895	12,374	773	710	58,752
Lenoir	33,937	24,532	390	480	59,339
Lincoln	73,062	4,938	356	576	78,932
McDowell	42,319	2,034	307	444	45,104
Macon	32,915	667	230	262	34,074
Madison	20,299	343	72	102	20,816
Martin	13,286	10,661	116	117	24,180
Mecklenburg	582,790	304,563	8,124	48,896	944,373
Mitchell	15,092	149	126	78	15,445
Montgomery	21,545	5,425	235	462	27,667
Moore	74,686	12,654	921	1,091	89,352
Nash	56,949	37,136	940	1,091	96,116
New Hanover	169,297	32,198	1,452	3,242	206,189
Northampton	8,862	12,837	133	61	21,893
Onslow	141,207	31,690	1,736	5,086	179,719
Orange	106,861	17,792	992	10,110	135,755
Pamlico	10,251	2,779	92	75	13,197

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Appendix A (continued): 2011 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
Pasquotank	23,998	15,881	236	581	40,696
Pender	42,575	9,928	552	344	53,399
Perquimans	9,954	3,424	46	63	13,487
Person	28,184	10,958	328	167	39,637
Pitt	106,363	60,336	914	3,521	171,134
Polk	19,029	1,032	93	102	20,256
Randolph	129,707	9,421	1,577	1,653	142,358
Richmond	29,750	14,767	1,498	596	46,611
Robeson	45,848	34,468	53,693	1,508	135,517
Rockingham	73,817	18,368	529	615	93,329
Rowan	112,090	23,392	814	1,723	138,019
Rutherford	59,588	7,332	230	388	67,538
Sampson	43,110	18,101	2,036	487	63,734
Scotland	17,282	14,130	4,126	323	35,861
Stanly	52,020	7,080	238	1,288	60,626
Stokes	44,626	2,246	192	178	47,242
Surry	69,523	3,301	395	495	73,714
Swain	9,648	255	4,056	84	14,043
Transylvania	30,930	1,557	139	194	32,820
Tyrrell	2,566	1,674	32	92	4,364
Union	174,144	25,764	1,452	4,103	205,463
Vance	21,662	23,040	344	261	45,307
Wake	661,669	204,877	8,550	54,684	929,780
Warren	8,520	11,101	1,176	64	20,861
Washington	6,321	6,527	74	51	12,973
Watauga	49,385	1,210	179	559	51,333
Wayne	80,112	40,663	980	1,942	123,697
Wilkes	65,092	3,285	244	363	68,984
Wilson	47,405	32,685	488	874	81,452
Yadkin	36,439	1,425	232	183	38,279
Yancey	17,254	244	116	87	17,701

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Appendix B: 2011 Population Estimates by Age Group and County

	0-19	20-44	45-64	65+	Total
North Carolina	2,562,974	3,257,476	2,557,165	1,278,786	9,656,401
Alamance	40,776	48,950	40,860	22,705	153,291
Alexander	9,087	11,345	10,803	5,852	37,087
Alleghany	2,436	2,871	3,376	2,369	11,052
Anson	6,380	8,864	7,424	3,941	26,609
Ashe	5,656	7,494	8,318	5,675	27,143
Avery	3,484	5,880	5,149	3,059	17,572
Beaufort	11,459	12,856	14,262	9,114	47,691
Bertie	4,756	6,112	6,292	3,714	20,874
Bladen	8,725	10,106	10,420	5,677	34,928
Brunswick	22,141	28,605	34,601	24,750	110,097
Buncombe	54,630	79,227	68,395	39,167	241,419
Burke	22,866	26,874	26,213	14,951	90,904
Cabarrus	53,473	60,740	46,384	20,871	181,468
Caldwell	20,145	24,860	24,242	13,148	82,395
Camden	2,780	2,944	2,973	1,317	10,014
Carteret	13,983	18,795	21,469	13,126	67,373
Caswell	5,156	6,771	7,571	3,905	23,403
Catawba	40,032	48,085	43,561	22,503	154,181
Chatham	15,080	17,644	19,331	12,140	64,195
Cherokee	5,583	6,588	8,508	6,515	27,194
Chowan	3,608	3,837	4,461	2,947	14,853
Clay	2,131	2,548	3,339	2,545	10,563
Cleveland	25,338	29,116	28,050	14,985	97,489
Columbus	14,653	17,748	16,274	9,037	57,712
Craven	26,775	35,651	26,025	16,335	104,786
Cumberland	95,989	124,538	73,244	31,114	324,885
Currituck	6,096	7,033	7,645	3,181	23,955
Dare	7,478	10,130	11,280	5,419	34,307
Davidson	41,942	49,785	46,994	23,976	162,697
Davie	10,534	11,400	12,481	7,137	41,552
Duplin	16,468	18,759	15,785	8,530	59,542
Durham	71,151	110,739	64,258	27,244	273,392
Edgecombe	14,925	16,514	16,252	8,350	56,041
Forsyth	96,989	116,649	94,340	46,974	354,952

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Appendix B (continued): 2011 Population Estimates by Age Group and County

	0-19	20-44	45-64	65+	Total
Franklin	16,431	18,952	17,648	8,109	61,140
Gaston	54,101	67,329	57,508	28,093	207,031
Gates	3,069	3,383	3,725	1,866	12,043
Graham	2,066	2,372	2,600	1,764	8,802
Granville	14,671	19,810	17,745	7,750	59,976
Greene	5,441	7,447	5,993	2,675	21,556
Guilford	132,050	172,927	128,266	62,036	495,279
Halifax	13,762	15,405	16,079	8,927	54,173
Harnett	36,619	42,612	27,646	12,379	119,256
Haywood	12,395	16,000	17,703	12,757	58,855
Henderson	23,912	29,130	30,310	24,575	107,927
Hertford	6,142	7,183	7,151	3,957	24,433
Hoke	15,888	19,145	10,618	3,621	49,272
Hyde	1,180	2,000	1,745	897	5,822
Iredell	44,134	50,574	45,272	21,222	161,202
Jackson	9,720	14,079	10,225	6,261	40,285
Johnston	51,719	58,123	44,529	18,224	172,595
Jones	2,308	2,761	3,201	1,750	10,020
Lee	16,561	18,864	15,220	8,107	58,752
Lenoir	15,644	16,789	17,255	9,651	59,339
Lincoln	20,101	24,413	23,632	10,786	78,932
McDowell	10,595	13,745	13,092	7,672	45,104
Macon	7,247	8,359	10,067	8,401	34,074
Madison	4,733	6,022	6,301	3,760	20,816
Martin	5,839	6,378	7,600	4,363	24,180
Mecklenburg	263,260	370,234	225,412	85,467	944,373
Mitchell	3,245	4,199	4,663	3,338	15,445
Montgomery	7,275	8,205	7,852	4,335	27,667
Moore	20,941	23,619	24,464	20,328	89,352
Nash	25,177	29,089	27,975	13,875	96,116
New Hanover	48,058	75,435	53,329	29,367	206,189
Northampton	5,013	5,638	6,784	4,458	21,893
Onslow	52,814	81,963	31,245	13,697	179,719
Orange	35,902	51,386	34,763	13,704	135,755
Pamlico	2,612	3,371	4,303	2,911	13,197

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Appendix B (continued): 2011 Population Estimates by Age Group and County

	0-19	20-44	45-64	65+	Total
Pasquotank	10,636	13,646	10,684	5,730	40,696
Pender	13,346	16,129	15,696	8,228	53,399
Perquimans	2,981	3,442	4,088	2,976	13,487
Person	9,988	11,511	11,970	6,168	39,637
Pitt	47,208	67,801	38,886	17,239	171,134
Polk	4,154	4,661	6,441	5,000	20,256
Randolph	37,872	44,182	39,697	20,607	142,358
Richmond	12,620	14,474	12,753	6,764	46,611
Robeson	41,123	44,800	33,940	15,654	135,517
Rockingham	22,430	27,163	28,186	15,550	93,329
Rowan	35,846	43,457	38,432	20,284	138,019
Rutherford	16,443	19,250	19,848	11,997	67,538
Sampson	17,704	19,706	17,025	9,299	63,734
Scotland	9,971	10,767	10,068	5,055	35,861
Stanly	15,208	18,601	17,135	9,682	60,626
Stokes	11,259	13,510	14,610	7,863	47,242
Surry	18,635	21,601	20,936	12,542	73,714
Swain	3,620	4,078	3,930	2,415	14,043
Transylvania	6,606	8,055	9,493	8,666	32,820
Tyrrell	891	1,507	1,250	716	4,364
Union	66,880	64,814	53,112	20,657	205,463
Vance	12,704	13,651	12,351	6,601	45,307
Wake	265,980	351,361	230,246	82,193	929,780
Warren	4,679	5,711	6,411	4,060	20,861
Washington	3,233	3,302	3,986	2,452	12,973
Watauga	11,630	21,657	11,508	6,538	51,333
Wayne	33,753	40,917	32,535	16,492	123,697
Wilkes	16,619	19,777	20,511	12,077	68,984
Wilson	22,087	24,949	22,558	11,858	81,452
Yadkin	9,665	11,233	11,047	6,334	38,279
Yancey	3,873	4,764	5,331	3,733	17,701

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Appendix C: 2011 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
North Carolina	3,475,774	3,581,579	1,227,948	1,371,100	9,656,401
Alamance	56,720	61,584	16,263	18,724	153,291
Alexander	17,102	17,115	1,691	1,179	37,087
Alleghany	5,281	5,427	190	154	11,052
Anson	6,739	6,243	7,088	6,539	26,609
Ashe	13,096	13,528	267	252	27,143
Avery	8,818	7,806	788	160	17,572
Beaufort	16,806	17,578	6,124	7,183	47,691
Bertie	3,777	3,769	6,587	6,741	20,874
Bladen	10,492	10,809	6,241	7,386	34,928
Brunswick	46,524	48,471	7,313	7,789	110,097
Buncombe	105,519	113,887	10,637	11,376	241,419
Burke	39,129	40,353	6,288	5,134	90,904
Cabarrus	71,820	74,231	16,734	18,683	181,468
Caldwell	37,745	38,945	2,859	2,846	82,395
Camden	4,141	4,174	832	867	10,014
Carteret	30,318	31,108	2,991	2,956	67,373
Caswell	7,699	7,401	4,254	4,049	23,403
Catawba	65,195	67,995	10,347	10,644	154,181
Chatham	25,857	27,538	5,054	5,746	64,195
Cherokee	12,611	13,392	614	577	27,194
Chowan	4,659	4,847	2,428	2,919	14,853
Clay	5,096	5,238	118	111	10,563
Cleveland	36,710	38,662	10,283	11,834	97,489
Columbus	18,223	18,966	10,335	10,188	57,712
Craven	38,846	38,165	13,383	14,392	104,786
Cumberland	91,105	90,846	66,635	76,299	324,885
Currituck	10,964	11,057	925	1,009	23,955
Dare	16,243	16,459	790	815	34,307
Davidson	70,548	72,766	9,270	10,113	162,697
Davie	18,530	19,450	1,669	1,903	41,552
Duplin	21,231	20,986	8,097	9,228	59,542
Durham	72,867	75,512	57,533	67,480	273,392
Edgecombe	11,030	11,963	15,042	18,006	56,041
Forsyth	118,083	126,972	50,426	59,471	354,952

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Appendix C (continued): 2011 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
Franklin	21,658	21,503	8,661	9,318	61,140
Gaston	82,474	86,992	17,576	19,989	207,031
Gates	3,877	3,897	2,043	2,226	12,043
Graham	3,985	4,094	363	360	8,802
Granville	20,341	18,315	11,702	9,618	59,976
Greene	6,820	5,988	4,797	3,951	21,556
Guilford	145,778	155,277	89,875	104,349	495,279
Halifax	10,866	11,505	15,027	16,775	54,173
Harnett	43,701	44,667	14,830	16,058	119,256
Haywood	27,630	29,644	764	817	58,855
Henderson	49,103	52,509	3,059	3,256	107,927
Hertford	4,590	4,336	7,365	8,142	24,433
Hoke	12,912	12,901	11,190	12,269	49,272
Hyde	2,060	1,807	1,181	774	5,822
Iredell	67,327	68,675	11,959	13,241	161,202
Jackson	17,189	17,517	2,797	2,782	40,285
Johnston	69,769	71,426	15,113	16,287	172,595
Jones	3,251	3,338	1,593	1,838	10,020
Lee	22,234	22,661	6,578	7,279	58,752
Lenoir	16,644	17,293	11,739	13,663	59,339
Lincoln	36,255	36,807	2,890	2,980	78,932
McDowell	20,951	21,368	1,547	1,238	45,104
Macon	15,927	16,988	630	529	34,074
Madison	10,014	10,285	278	239	20,816
Martin	6,402	6,884	4,870	6,024	24,180
Mecklenburg	288,493	294,297	167,988	193,595	944,373
Mitchell	7,359	7,733	176	177	15,445
Montgomery	10,591	10,954	2,827	3,295	27,667
Moore	36,092	38,594	6,642	8,024	89,352
Nash	28,029	28,920	18,348	20,819	96,116
New Hanover	82,303	86,994	17,293	19,599	206,189
Northampton	4,476	4,386	6,127	6,904	21,893
Onslow	76,927	64,280	19,688	18,824	179,719
Orange	51,279	55,582	13,458	15,436	135,755
Pamlico	5,139	5,112	1,576	1,370	13,197

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

Appendix C (continued): 2011 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
Pasquotank	11,848	12,150	8,031	8,667	40,696
Pender	21,390	21,185	5,302	5,522	53,399
Perquimans	4,870	5,084	1,617	1,916	13,487
Person	13,801	14,383	5,415	6,038	39,637
Pitt	51,315	55,048	29,379	35,392	171,134
Polk	9,131	9,898	593	634	20,256
Randolph	63,906	65,801	6,280	6,371	142,358
Richmond	14,745	15,005	8,211	8,650	46,611
Robeson	22,838	23,010	43,117	46,552	135,517
Rockingham	35,795	38,022	9,156	10,356	93,329
Rowan	55,371	56,719	12,690	13,239	138,019
Rutherford	28,760	30,828	3,828	4,122	67,538
Sampson	21,459	21,651	9,866	10,758	63,734
Scotland	8,358	8,924	8,982	9,597	35,861
Stanly	25,764	26,256	4,405	4,201	60,626
Stokes	21,743	22,883	1,301	1,315	47,242
Surry	33,937	35,586	2,084	2,107	73,714
Swain	4,692	4,956	2,130	2,265	14,043
Transylvania	14,856	16,074	974	916	32,820
Tyrrell	1,307	1,259	1,083	715	4,364
Union	86,294	87,850	15,093	16,226	205,463
Vance	10,467	11,195	10,792	12,853	45,307
Wake	327,158	334,511	125,580	142,531	929,780
Warren	4,400	4,120	6,155	6,186	20,861
Washington	3,072	3,249	3,029	3,623	12,973
Watauga	24,708	24,677	1,026	922	51,333
Wayne	40,190	39,922	20,355	23,230	123,697
Wilkes	31,969	33,123	2,020	1,872	68,984
Wilson	23,227	24,178	15,671	18,376	81,452
Yadkin	17,955	18,484	898	942	38,279
Yancey	8,478	8,776	239	208	17,701

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012.

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