

Cancer Incidence in North Carolina 2005

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Introduction

Background

The North Carolina Central Cancer Registry (CCR), located within the State Center for Health Statistics, was established in 1986. The CCR operates under the authority granted in North Carolina General Statute 130A-208.

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. Calendar year 1990 is the first year for which relatively complete statewide reporting was achieved. 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.

The CCR collects, analyzes, and disseminates information on newly diagnosed cancer patients in North Carolina with respect to demographics and medical characteristics. There are 132 hospitals in North Carolina which routinely diagnose and treat cancer patients; more than 58 of these hospitals have their own tumor registries. One hundred and eighty five facilities reported their 2005 incidence data to the CCR. Incidence data are reported to the CCR by a secure internet-based database.

Purpose

Cancer Incidence in North Carolina 2005 is the twelfth annual report of the CCR. The contents of this report represent a summary of the information collected on cancer diagnosed among North Carolina residents in 2005. Previous volumes are located on the State Center for Health Statistics web site located at <http://www.schs.state.nc.us/SCHS/data/cancer.cfm>, under the title “Cancer Incidence in North Carolina, County-Specific Numbers.”

Confidentiality

The CCR is committed to preserving the confidentiality of information obtained for medical, educational, research, and statistical purposes. Thus the CCR demands strict confidentiality and the protection of the identity of both cancer patients and reporting sources in registry data. The CCR does not release any identifying information regarding patients, hospitals, or physicians except under the authority of the General Statute guidelines.

Technical Notes

Overview and Definitions

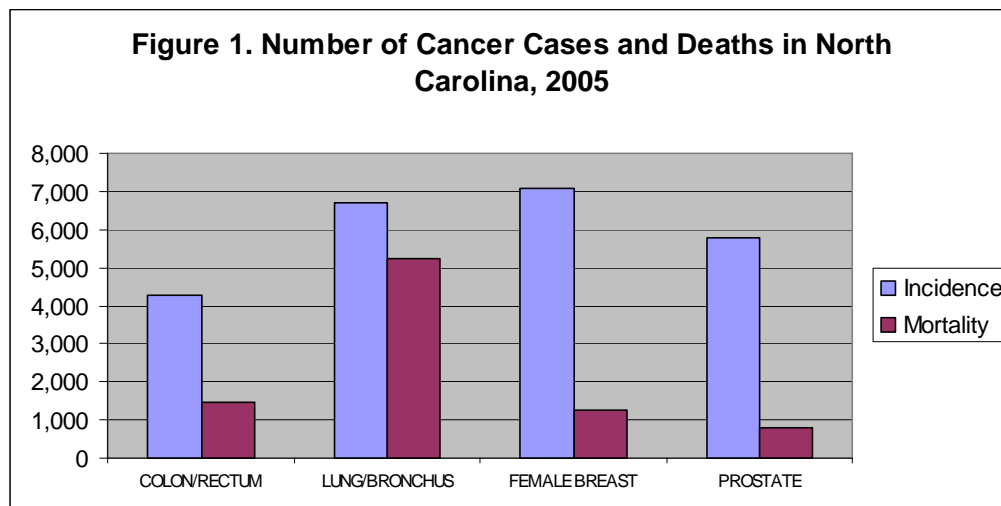
This report presents frequency counts, age-specific rates, and age-adjusted rates to describe newly diagnosed cases of cancer and mortality due to cancer.

Cancer Incidence and Mortality

Cancer incidence is the number of newly diagnosed cancer cases for each county whereas cancer mortality is the number of deaths due to cancer for each county. See Figure 1.

We assume that death certificates provide complete and accurate data on all causes of death. However, the accuracy of recording the cause of death varies for many cancers. For example, at the time of death, the history of cancer may not be known by the physician, or may not be considered to have contributed to the death. Nonetheless, mortality data have been historically used widely to analyze cancer risk in populations.

Instances of under-reporting of cancer incidence have occurred. For some cancers (e.g., melanomas), under-reporting may lead to more cancer deaths being shown than incidence cases. Also, survival following a cancer diagnosis varies by cancer site. In populations with low use of health care services (e.g., rural and minority populations), more cancers are diagnosed at advanced stages when therapies are less successful; or the cases may not be diagnosed until death.



Cancer incidence, mortality, and age-adjusted rates for each county are presented in Table 5 and presented by site in Tables 6-9 for colon/rectum, lung/bronchus, female breast, and prostate cancers, respectively.

Differences in Reporting Cancer Incidence and Mortality Data

Many people living near the Virginia border go outside North Carolina for health care. It is known that Norfolk and Danville, Virginia attract patients for secondary and tertiary care. The State of North Carolina has an exchange agreement with all 50 states for exchanging death certificates, but only has an exchange agreement for cancer incidence data with 24 states, including our border states of Virginia, Tennessee and South Carolina.

Because death certificate data are available more quickly than incidence data, the 2005 mortality data include deaths of North Carolina residents who died in other states, but the incidence data may not include all cases diagnosed out-of-state.

Some counties have been found to under-report their cancer incidence due to poor case-finding procedures. These counties, especially rural counties where small hospitals do not have the services of trained tumor registrars, may have inadequate case finding. This results in incomplete reporting of new cancer cases. Death data are considered to be complete. This also contributes to what appears to be an excess of deaths compared to the number of cases for some cancer sites in some of the rural counties.

In the last few years, more cases are being diagnosed and treated outside of a hospital, in physician offices. This is particularly true for cancers of the skin and prostate, as well as some lymphoma and leukemia cases. Although physicians are required to report all cases to the CCR, many of them do not have the staff to do so. Physicians associated with a hospital will often report cases via a hospital registrar, but those not affiliated with a hospital may not report cases to the CCR. As a result, reporting for some cancers is known to be incomplete. Due to recent efforts by the CCR to improve the completeness of reporting by physician offices and pathology laboratories, the incidence of melanoma and prostate cancers has increased.

Incidence Rates

Two types of rates are presented in this report: age-adjusted and age-specific, each of which has a specific purpose. Both rates are expressed in this report as annual or five-year rates per 100,000 population.

Age-Adjusted Rates

An age-adjusted rate accurately describes the cancer experience that the population would have had if it had exactly the same age distribution as the comparison or standard population. Age-adjusted rates provide a single, summary rate for each area. The direct method was used to calculate all age-adjusted rates in this report by multiplying each age-specific rate by the proportion of people within that age group in the standard population and then summing these products. Age-adjusted rates should not be compared with any other type of rate or be used as

absolute measurements of vital events; their sole purpose is to provide summary rates that can be compared between populations that have different age structures. The standard population used in the calculation was the 2000 United States Census population. Incidence and mortality rates for 2005 used the bridged-race population estimates obtained from the National Center for Health Statistics (NCHS), available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>. Incidence reports published prior to 2005 were calculated using the State Demographer's population estimates. Hence, rates from previous diagnosis years may differ slightly due to this factor.

Age-Specific Rates

The age-specific cancer incidence is the number of cancer cases that occur in the age groups from 0-4 to 85+. Age-specific rates are used to compare rates between different population groups of the same age and to examine age patterns for particular cancers. As expected, age-specific rates have a general tendency to increase with age. More than half of cancer cases occur among persons age 65 and older (Figure 2). North Carolina has attracted a large number of retirement-age people over the last decade. Understanding migration patterns is important for interpreting the data and is one reason for showing the data by age group. The largest proportionate concentrations of older-age residents are in the mountain counties, along the coast, and in the sandhills (along the mid-southern border).

Cancer patterns vary by age group. Children have a very different pattern of cancer than do adults. Leukemia, brain cancer, endocrine, and lymphomas are the main cancers in people under age 20. In general, North Carolina's pediatric cancer patterns are quite consistent with national patterns.

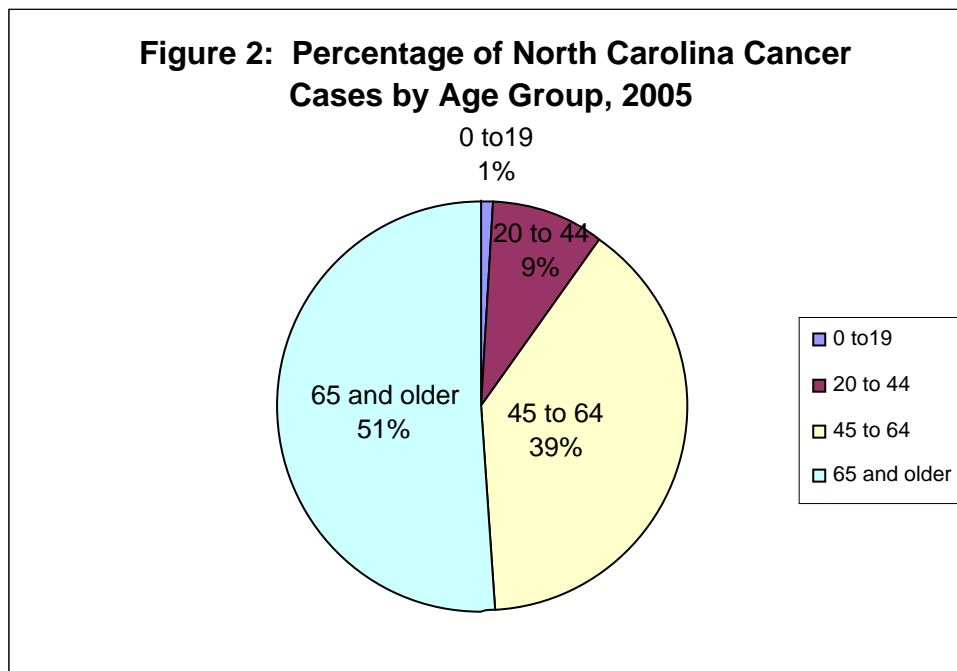
Young adults (20-44) have a different pattern of cancer than do children. In this age group, lymphomas are even more common, as are some digestive and reproductive tissue cancers. All of these cancers are quite rare and cancer rates in these ages are generally lower than for other age groups.

In the middle ages (45-64), cancer rates begin to rise, and the common cancers (lung, breast, and colon) emerge. The incursion of these cancers into younger age groups is the subject of considerable research at this time.

All cancer rates are at a maximum in the 70+ age categories. Prostate cancer is almost exclusively a disease of older men.

These age-specific patterns offer significant direction for screening priorities. For most cancers, the prospect for a normal life expectancy is good when the diagnosis is made early in the disease process. North Carolina legislation and federal programs are focused on increasing the access to screening services in this state. Older and underprivileged people are priority groups for these programs.

Age-specific cancer incidence and rates are presented in Table 10. The age-specific incidence rates demonstrate how cancer is a disease primarily of the older population.

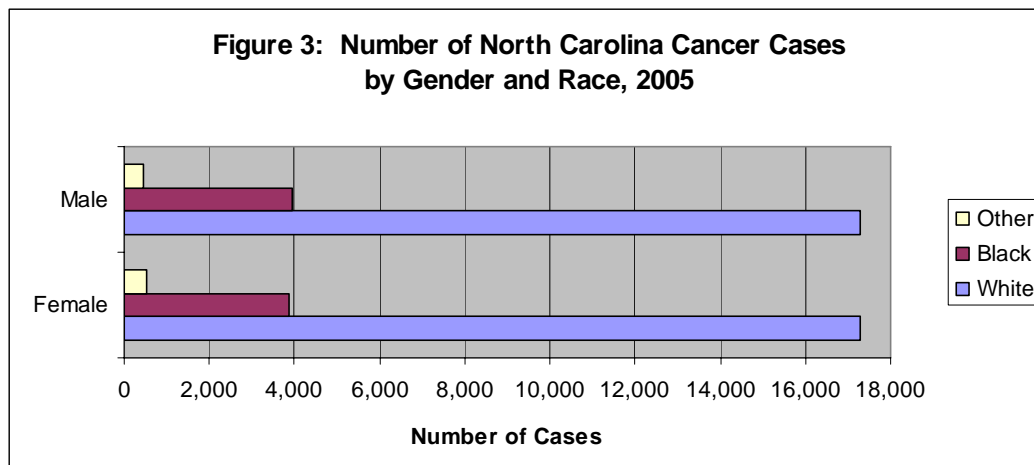


Race/Gender Specific Cases and Rates

The race/gender-specific cancer incidence is the number of cancer cases that occurred in each race/gender group. See Figure 3.

These data are provided because race is an important factor in interpreting cancer patterns in North Carolina. Cancer rates vary by race, race distributions vary across the state, and health care use has been found to vary by race. Because cancer risk is strongly associated with lifestyle and behavior, differences among ethnic and cultural groups can provide clues to factors involved in the development of cancer such as dietary patterns, alcohol use, and sexual and reproductive behaviors involved in the development of cancer.

Cancer cases and age-adjusted rates for North Carolina are presented by gender in Table 1 and by race in Table 3.



Reliability of Rates

Precautions should always be taken when comparing rates. Both the size of the numbers and the size of the population are important indicators of a rate's real value. Rates based on small numbers of events over a given period of time or for sparsely populated geographic areas should be viewed with caution. These rates show considerable variation from year to year, thus limiting their usefulness in comparisons and estimation of rare occurrences. See the section titled "Small Numbers" on page 7.

Age-adjusted rates offer a standard method to compare cancer risk across geographic areas or time periods. However, there are limitations to their use and one should be familiar with these types of rates before using them. As already mentioned, age-adjusted rates are to be used only for comparison purposes and only if the same standard population was used in the calculation. This publication uses the 2000 U.S. Census as the standard population.

For assistance in interpreting these data, please contact the CCR statistical staff at (919) 715-4574.

Morphology (Cell Type) and Behavior

The specific morphology codes for these primary site categories have been provided in the Appendix in the table "Primary Site Definitions" to clarify counting of these cases. The lymphoma category includes all lymphoma cases with the morphology codes shown regardless of body site. 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. Please note that lymphomas are not grouped consistently by all researchers. In these data, only malignant tumors are included. Data on benign central nervous system and brain and unspecified types are also reported to the CCR and are included in this report. Only invasive cervical cancer cases are

included. Also, in situ cancers except those of the urinary bladder and female breast are excluded in the report.

Limitations of Data

The user should be cautious when making county-to-county comparisons of the data in this report. Under-reporting in areas close to neighboring states and under-reporting for cancers that may not be diagnosed in hospitals must be considered when interpreting cancer incidence data. In addition, comparison of rates (computed with the number of cases and population data) can be problematic. The age distributions and racial percentages in counties vary considerably.

Consider a comparison of Henderson and Orange counties. In 2005 over 22% percent of the Henderson County population was at least 65 years old, while less than 10% percent of the Orange County population was 65 and over. A larger proportion of the Henderson County population can be expected to have cancer than the Orange County population just because of the difference in the age pattern for these two counties. The use of age-adjusted rates will facilitate comparisons of risk.

On the other hand, almost 65% percent of Hertford County's population was comprised of minorities while over 97% percent of Ashe County's population is white. This difference in the racial composition of the populations of the two counties can also have a marked influence on the patterns of cancer incidence and mortality. Age-adjusted rates control for differences in the age structures of populations, but they do not control for differences in racial composition.

Interpretations of melanoma data should be treated with caution since the thoroughness of case-finding is suspect due to the likelihood that cases may be treated outside of hospitals and not reported to the CCR.

Small Numbers

Small numbers of cases are a problem for statistical reports of health data. Even for the most common cancers, some counties can expect to have only one or two cases in a year. For example, Tyrrell County, which has the smallest population of any county in the state, can expect to have only one case of female lung cancer each year (based on state lung cancer rates). Between 2001 and 2005, there were 6 cases of female breast cancer in Tyrrell County reported to the CCR. The majority of the cases were reported in 2001. It would appear that the county had an excessive amount of breast cancer in females in 2001. However, over the five-year period, the county averages to what was expected.

All statistics are subject to chance variation. Rates based on a very small number of events over a specified period of time or for a sparsely populated geographic area should be of particular concern and caution. 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.

Interpretation

This descriptive report is intended to serve as a baseline report for future reference. Because of the limitations described above, this publication should not be regarded as a definitive description of the cancer incidence in North Carolina. With additional training of hospital staff, collaboration from neighboring states, and increased physician and pathology laboratories reporting, the problems of under-reporting have declined. Although there are important limitations in the use of these data, the observed number of cases within a gender group in a specific county can be used for:

- ◆ planning health services at the county level;
- ◆ identifying high cancer incidence within a county;
- ◆ educating the public;
- ◆ motivating facilities such as hospitals and physicians to report incidence data accurately and in a timely manner; and
- ◆ encouraging more hospitals to organize tumor registries to provide better service to their cancer patients.

Comparison to National Data

This report was prepared to provide data for evaluation of cancer incidence and mortality patterns in North Carolina. The Annual Report to the Nation on the Status of Cancer, 1975-2004, produced by the North American Association of Cancer Registries (NAACCR) and the National Program of Cancer Registries (NPCR) at <http://www.cdc.gov/cancer/npcr/index.htm> is available for comparison with North Carolina's observed incidence cases for 2004 and previous years.

Available Cancer Information

Cancer is the second leading cause of death (first being heart disease) in the United States. In 2006, cancer was the leading cause of death in North Carolina. It is estimated that by the year 2015, cancer will be the leading cause of death in the United States.

Cancer is expected to strike one in three people sometime during their lifetime. For more information about cancer, contact a local office of the American Cancer Society or call 1-800-ACS-2345. Many communities also have hospital-based cancer programs through which local data and/or cancer-related services may be obtained. In many counties, local health departments have active cancer control programs. Another source of information on cancer is the Cancer Information Service, 1-800-4CANCER (1-800-422-6237). The Cancer Information Service, located at Duke University, is a national program funded by the National Cancer Institute that provides cancer information.

The CCR produces other reports on cancer in North Carolina, many of which are available on the website at <http://www.schs.state.nc.us/SCHS/CCR/>. A notable one is the American Cancer

Society's *South Atlantic Division Cancer Facts and Figures* available on the website at <http://health.state.ga.us/pdfs/chronic/cancer/ACSSAD07.pdf>. Also, other units with the State Center for Health Statistics (SCHS) publish many reports on other diseases and on health care measures. For more information about other reports from the CCR please call (919) 715-4574. For information from other programs of the SCHS, please call (919) 733-4728, or write:

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Support for Cancer Research and Control

The CCR is actively involved with cancer research programs at universities in North Carolina, as well as with federal agencies and research institutes located within the state. One feature of this participation is the rapid identification of cancer patients for projects that are designed to collect information before the patient's first course of treatment is completed (e.g., genetic studies). Several organizations in North Carolina work to prevent cancer or to provide for early detection. Others work to promote a higher quality of life for cancer patients undergoing treatment and for cancer survivors. Still others are working to understand and reduce the racial/ethnic gaps in cancer diagnosis and mortality.

The state Comprehensive Cancer Control Program and the Breast and Cervical Cancer Control Program are located in the Chronic Disease and Injury Section of the North Carolina Division of Public Health and are state agencies committed to reducing the cancer burden among North Carolinians. The CCR provides statistical and data analysis support for these programs. Also, the CCR is associated with organizations such as the American Cancer Society and the state's Advisory Committee for Cancer Coordination and Control.

Table 1: 2005 Incidence Rates By Sex

<i>Site</i>	<i>Males</i>		<i>Females</i>	
	<i>Cases</i>	<i>Rate¹</i>	<i>Cases</i>	<i>Rate¹</i>
All Sites	21,689	563.3	21,640	447.0
Oral Cavity and Pharynx	713	17.5	306	6.3
Lip	29	0.8	*	*
Tongue	183	4.5	81	1.7
Salivary Glands	60	1.6	36	0.8
Floor of Mouth	41	1.0	20	0.4
Nasopharynx	30	0.7	*	*
Oropharynx	47	1.1	11	0.2
Hypopharynx	60	1.5	24	0.5
Other Mouth and Pharynx	263	6.3	116	2.4
Digestive System	3,913	102.6	3,389	68.5
Esophagus	318	8.1	114	2.3
Stomach	322	8.6	193	3.9
Small Intestine	105	2.6	85	1.7
Colon and Rectum	2,197	57.9	2,067	41.8
Anus and Anal Canal	48	1.2	84	1.7
Liver and Intrahepatic Bile Duct	324	8.2	141	2.9
Gallbladder	17	0.5	53	1.0
Pancreas	490	13.2	506	10.2
Other Digestive Organs	92	2.5	146	3.0
Respiratory System	4,258	112.6	2,992	60.8
Larynx	330	8.3	90	1.9
Lung and Bronchus	3,845	102.0	2,854	57.9
Other Respiratory Organs	83	2.2	48	1.0
Bones and Joints	45	1.1	31	0.7
Soft Tissues	159	4.0	127	2.7
Melanoma of the Skin	944	24.2	757	16.2
Breast	64	1.6	7,098	147.5
Invasive Breast	51	1.3	5,786	120.3
In Situ Breast	13	0.3	1,312	27.3
Female Genital System	.	.	2,148	44.6
Cervix Uteri	.	.	378	8.2
Uterus (Corpus, NOS)	.	.	1,004	20.5
Ovary	.	.	599	12.4
Other Female Genital Organs	.	.	167	3.4
Male Genital System	6,021	153.5	.	.
Prostate	5,780	147.8	.	.
Testis	201	4.6	.	.
Penis	29	0.8	.	.
Other Male Genital Organs	11	0.3	.	.
Urinary System	2,157	57.6	1,011	20.6
Bladder (incl. in situ)	1,248	34.6	437	8.8
Kidney and Renal Pelvis	872	22.0	549	11.3
Ureter	29	0.8	18	0.4
Other Urinary System	*	*	*	*
Eye and Orbit	51	1.3	37	0.8
Brain and CNS (includes benign brain/CNS)	580	14.3	749	15.7
Endocrine System	293	7.0	755	16.7
Thyroid	178	4.2	611	13.5
Other Endocrine and Thymus	115	2.7	144	3.2
Lymphomas	951	24.6	838	17.4
Hodgkins Disease	119	2.8	105	2.3
Non-Hodgkin's Lymphoma	832	21.8	733	15.1
Multiple Myeloma	283	7.4	249	5.0
Leukemia	526	13.9	467	9.7
Acute Lymphocytic Leukemia	60	1.4	49	1.2
Chronic Lymphocytic Leukemia	178	4.8	140	2.8
Acute Myeloid Leukemia	147	3.8	148	3.1
Chronic Myeloid Leukemia	60	1.6	48	1.0
Other Leukemia	81	2.3	82	1.7
Ill-Defined and Unspecified	654	17.9	328	12.5
All Other Cancers-Uncategorized	77	2.1	58	1.2

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Cases less than 5 are suppressed.

In situ cancers except those of the urinary bladder and female breast are excluded

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

**Table 2: 2001 - 2005 Ten Most Frequently Diagnosed Cancers
By Sex**

Cancer	Males			
	Incidence		Mortality	
	Cases	Rate¹	Deaths	Rate¹
Prostate	28,757	156.1	4,341	30.2
Lung/Bronchus	18,082	100.9	15,010	85.4
Colon/Rectum	10,285	57.4	3,759	22.2
Bladder	5,950	34.8	1,078	7.0
Melanoma (skin)	3,975	21.3	740	4.1
Kidney	3,854	20.5	1,161	6.7
Non-Hodgkin's Lymphoma	3,822	20.9	1,533	9.0
Oral Cavity	3,311	17.2	771	4.2
Leukemia	2,477	13.8	1,606	9.6
Pancreas	2,259	12.8	2,237	12.8

Cancer	Females			
	Incidence		Mortality	
	Cases	Rate¹	Deaths	Rate¹
Female Breast	34,156	148.2	6,026	25.6
Lung/Bronchus	12,832	54.4	9,846	41.5
Colon/Rectum	9,959	41.9	3,793	15.6
Corpus Uteri	4,839	20.7	961	4.0
Non-Hodgkin's Lymphoma	3,520	15.0	1,407	5.8
Melanoma (Skin)	3,022	13.4	463	2.0
Ovary	2,850	12.2	2,080	8.7
Endocrine	2,554	11.6	129	0.6
Kidney	2,327	10.0	643	2.7
Pancreas	2,311	9.6	2,246	9.3

¹ Rates per 100,000 Population are age-adjusted to the 2000 U.S. Census

In situ cancers except those of the urinary bladder and female breast are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at

<http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 3: 2005 Incidence Rates By Race

Site	Whites		Minorities	
	Cases	Rate ¹	Cases	Rate ¹
All Sites	34,559	490.1	8,504	484.7
Oral Cavity and Pharynx	786	11.1	230	12.3
Lip	36	0.5	*	*
Tongue	224	3.2	39	2.2
Salivary Glands	73	1.0	23	1.3
Floor of Mouth	51	0.7	10	0.5
Nasopharynx	27	0.4	12	0.6
Oropharynx	32	0.4	26	1.4
Hypopharynx	61	0.8	23	1.2
Other Mouth and Pharynx	282	4.0	95	5.1
Digestive System	5,611	79.5	1,651	97.1
Esophagus	333	4.7	96	5.5
Stomach	334	4.8	180	11.0
Small Intestine	140	2.0	49	2.7
Colon and Rectum	3,353	47.5	891	52.3
Anus and Anal Canal	114	1.6	18	0.9
Liver and Intrahepatic Bile Duct	323	4.6	137	7.5
Gallbladder	53	0.8	17	1.1
Pancreas	757	10.7	231	14.3
Other Digestive Organs	204	2.9	32	1.9
Respiratory System	5,949	83.6	1,271	74.9
Larynx	300	4.1	118	6.9
Lung and Bronchus	5,539	77.9	1,132	66.9
Other Respiratory Organs	110	1.6	21	1.2
Bones and Joints	64	1.0	12	0.6
Soft Tissues	219	3.2	64	3.2
Melanoma of the Skin	1,652	23.9	15	0.9
Breast	5,625	79.7	1,508	81.9
Invasive Breast	4,585	65.1	1,229	67.0
In Situ Breast	1,040	14.7	279	14.9
Female Genital System	1,694	24.0	440	24.8
Cervix Uteri	272	7.8	102	9.6
Uterus (Corpus, NOS)	799	20.7	200	20.2
Ovary	485	12.8	110	10.5
Other Female Genital Organs	138	3.6	28	2.6
Male Genital System	4,458	61.9	1,513	88.6
Prostate	4,253	132.0	1,478	214.5
Testis	178	5.4	23	2.3
Penis	21	0.7	*	*
Other Male Genital Organs	*	*	*	*
Urinary System	2,674	37.9	486	28.2
Bladder (incl. in situ)	1,505	21.4	175	11.0
Kidney and Renal Pelvis	1,113	15.7	305	16.9
Ureter	46	0.7	*	*
Other Urinary System	10	0.1	*	*
Eye and Orbit	80	1.2	*	*
Brain and CNS (includes benign brain/CNS)	1,104	16.0	218	11.6
Endocrine System	834	12.3	209	10.4
Thyroid	640	9.5	144	7.1
Other Endocrine and Thymus	194	2.8	65	3.3
Lymphomas	1,523	21.9	259	13.6
Hodgkins Disease	180	2.7	42	1.9
Non-Hodgkin's Lymphoma	1,343	19.2	217	11.7
Multiple Myeloma	350	5.0	179	10.6
Leukemia	836	12.1	147	8.2
Acute Lymphocytic Leukemia	87	1.4	19	0.9
Chronic Lymphocytic Leukemia	272	3.8	43	2.6
Acute Myeloid Leukemia	260	3.7	33	1.8
Chronic Myeloid Leukemia	86	1.3	22	1.2
Other Leukemia	131	1.9	30	1.7
Ill-Defined and Unspecified	998	14.3	266	15.9
All Other Cancers-Uncategorized	102	1.5	29	1.4

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Cases less than 5 are suppressed.

In situ cancers except those of the urinary bladder and female breast are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

**Table 4: 2001-2005 Ten Most Frequently Diagnosed Cancers
By Race**

Cancer	Cases	Whites		
		Incidence		Mortality
		Rate¹	Deaths	Rate¹
Female Breast	27,342	150.5	4,458	23.6
Lung/Bronchus	25,545	74.9	20,408	60.1
Prostate	21,053	138.2	2,854	23.8
Colon/Rectum	15,853	46.9	5,753	17.2
Bladder	7,198	21.3	1,374	4.1
Melanoma (skin)	6,843	20.5	1,159	3.5
Non-Hodgkin's Lymphoma	6,240	18.6	2,549	7.6
Kidney	4,874	14.3	1,461	4.3
Corpus Uteri	3,854	20.9	666	3.4
Leukemia	3,726	11.3	2,420	7.3

Cancer	Cases	Minorities		
		Incidence		Mortality
		Rate¹	Deaths	Rate¹
Prostate	7,534	237.4	1,487	63.5
Female Breast	6,717	136.0	1,568	32.2
Lung/Bronchus	5,317	66.9	4,448	57.0
Colon/Rectum	4,341	54.5	1,799	23.4
Kidney	1,299	15.4	343	4.4
Non-Hodgkin's Lymphoma	1,084	12.5	391	5.0
Oral Cavity	1,081	12.3	320	3.8
Pancreas	1,055	13.7	1,019	13.5
Corpus Uteri	974	20.7	295	6.5
Bladder	828	11.0	256	3.5

¹ Rates per 100,000 Population are age-adjusted to the 2000 U.S. Census

In situ cancers except those of the urinary bladder and female breast are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 5 : 2005 Total Cancer Incidence and Mortality Rates By County

<i>County</i>	<i>Cases</i>	<i>Rate</i> ¹	<i>Deaths</i>	<i>Rate</i> ¹
NORTH CAROLINA	43,335	492.2	16,675	192.5
<i>Alamance</i>	748	495.9	295	188.8
<i>Alexander</i>	197	507.3	62	167.7
<i>Alleghany</i>	57	362.8	28	175.4
<i>Anson</i>	117	417.8	57	201.6
<i>Ashe</i>	180	515.9	65	179.5
<i>Avery</i>	110	496.5	44	190.9
<i>Beaufort</i>	318	544.8	148	249.3
<i>Bertie</i>	106	450.7	54	224.9
<i>Bladen</i>	165	440.7	88	244.5
<i>Brunswick</i>	528	460.4	238	204.6
<i>Buncombe</i>	1,316	505.2	479	179.5
<i>Burke</i>	439	431.4	212	207.2
<i>Cabarrus</i>	820	581.2	297	215.1
<i>Caldwell</i>	442	499.9	181	205.5
<i>Camden</i>	48	554.9	16	178.0
<i>Carteret</i>	434	526.2	169	202.3
<i>Caswell</i>	96	349.3	54	189.0
<i>Catawba</i>	795	497.4	290	183.3
<i>Chatham</i>	285	451.0	97	147.8
<i>Cherokee</i>	165	433.6	78	198.2
<i>Chowan</i>	80	426.5	48	239.4
<i>Clay</i>	79	556.0	22	132.7
<i>Cleveland</i>	563	508.1	194	174.5
<i>Columbus</i>	286	455.4	113	179.9
<i>Craven</i>	562	553.8	214	211.1
<i>Cumberland</i>	1,179	478.6	464	201.5
<i>Currituck</i>	81	349.9	46	201.9
<i>Dare</i>	150	379.8	72	189.6
<i>Davidson</i>	844	503.4	330	200.5
<i>Davie</i>	223	503.5	74	164.3
<i>Duplin</i>	224	418.0	121	225.1
<i>Durham</i>	1,084	516.7	383	190.7
<i>Edgecombe</i>	340	604.7	131	238.9
<i>Forsyth</i>	1,770	527.4	667	200.6
<i>Franklin</i>	249	481.1	123	250.8
<i>Gaston</i>	1,132	544.9	402	197.9
<i>Gates</i>	39	297.0	31	250.2
<i>Graham</i>	40	355.0	20	178.7
<i>Granville</i>	326	620.2	127	246.4
<i>Greene</i>	89	454.2	46	236.3
<i>Guilford</i>	2,313	517.2	766	172.8
<i>Halifax</i>	321	490.5	151	226.1
<i>Harnett</i>	404	454.9	151	178.9
<i>Haywood</i>	430	560.3	159	189.4
<i>Henderson</i>	682	493.4	277	183.8
<i>Hertford</i>	120	435.4	75	278.3
<i>Hoke</i>	152	526.3	58	220.1
<i>Hyde</i>	38	577.6	20	279.9
<i>Iredell</i>	684	468.9	271	189.3
<i>Jackson</i>	174	454.0	67	176.7

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Cases less than 5 are suppressed.

Report includes benign brain/CNS.

In situ cancers are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 5 (continued) : 2005 Total Cancer Incidence and Mortality Rates By County

County	Cases	Rate¹	Deaths	Rate¹
NORTH CAROLINA	43,335	492.2	16,675	192.5
<i>Johnston</i>	591	459.9	220	185.7
<i>Jones</i>	45	350.8	22	164.5
<i>Lee</i>	286	469.0	104	172.3
<i>Lenoir</i>	392	572.3	145	205.0
<i>Lincoln</i>	374	526.4	142	208.0
<i>McDowell</i>	255	510.7	93	183.9
<i>Macon</i>	192	399.4	92	177.0
<i>Madison</i>	123	471.7	61	225.4
<i>Martin</i>	154	517.8	70	228.2
<i>Mecklenburg</i>	3,042	461.2	1,052	177.0
<i>Mitchell</i>	104	478.9	42	179.6
<i>Montgomery</i>	115	384.3	51	169.6
<i>Moore</i>	604	524.1	246	195.9
<i>Nash</i>	498	500.5	194	196.4
<i>New Hanover</i>	902	471.0	344	179.1
<i>Northampton</i>	112	383.7	68	223.6
<i>Onslow</i>	560	553.4	211	221.6
<i>Orange</i>	549	527.2	185	187.3
<i>Pamlico</i>	96	523.9	41	218.5
<i>Pasquotank</i>	191	481.7	88	215.4
<i>Pender</i>	225	416.5	106	199.7
<i>Perquimans</i>	89	529.9	32	187.2
<i>Person</i>	209	511.1	90	222.2
<i>Pitt</i>	616	512.0	246	209.5
<i>Polk</i>	108	369.7	69	194.1
<i>Randolph</i>	716	490.7	269	188.5
<i>Richmond</i>	258	507.2	102	196.8
<i>Robeson</i>	536	465.9	243	218.4
<i>Rockingham</i>	524	474.8	211	189.1
<i>Rowan</i>	733	495.6	295	193.4
<i>Rutherford</i>	387	497.0	169	208.3
<i>Sampson</i>	281	434.3	117	182.7
<i>Scotland</i>	125	335.2	85	234.5
<i>Stanly</i>	366	545.4	131	195.4
<i>Stokes</i>	248	480.1	97	189.6
<i>Surry</i>	437	501.8	192	210.9
<i>Swain</i>	52	337.0	30	178.6
<i>Transylvania</i>	205	450.6	87	186.3
<i>Tyrrell</i>	24	523.5	15	308.0
<i>Union</i>	627	471.2	219	184.8
<i>Vance</i>	220	495.6	95	215.3
<i>Wake</i>	2,871	485.1	888	172.6
<i>Warren</i>	110	447.9	43	170.2
<i>Washington</i>	73	434.9	35	205.1
<i>Watauga</i>	193	486.4	71	171.1
<i>Wayne</i>	493	426.3	239	211.7
<i>Wilkes</i>	402	499.7	160	194.7
<i>Wilson</i>	389	476.5	163	198.1
<i>Yadkin</i>	185	429.0	88	204.7
<i>Yancey</i>	110	445.0	42	165.3

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Cases less than 5 are suppressed.

Report includes benign brain/CNS.

In situ cancers are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 6: 2005 Colon/Rectum Cancer Incidence Rates By County

County	Cases	Rate ¹
NORTH CAROLINA	4,265	48.8
<i>Alamance</i>	80	52.2
<i>Alexander</i>	18	47.3
<i>Alleghany</i>	6	35.4
<i>Anson</i>	15	54.7
<i>Ashe</i>	13	34.8
<i>Avery</i>	5	21.0
<i>Beaufort</i>	42	71.7
<i>Bertie</i>	14	58.6
<i>Bladen</i>	22	59.7
<i>Brunswick</i>	57	48.7
<i>Buncombe</i>	134	50.0
<i>Burke</i>	46	45.3
<i>Cabarrus</i>	91	65.9
<i>Caldwell</i>	47	52.2
<i>Camden</i>	6	62.1
<i>Carteret</i>	29	35.6
<i>Caswell</i>	14	52.0
<i>Catawba</i>	83	52.8
<i>Chatham</i>	22	34.8
<i>Cherokee</i>	26	68.7
<i>Chowan</i>	7	38.3
<i>Clay</i>	12	81.5
<i>Cleveland</i>	60	54.9
<i>Columbus</i>	24	37.3
<i>Craven</i>	58	55.2
<i>Cumberland</i>	112	48.7
<i>Currituck</i>	8	32.5
<i>Dare</i>	12	27.5
<i>Davidson</i>	83	49.2
<i>Davie</i>	30	67.6
<i>Duplin</i>	19	35.4
<i>Durham</i>	93	45.0
<i>Edgecombe</i>	52	90.9
<i>Forsyth</i>	151	45.2
<i>Franklin</i>	33	66.9
<i>Gaston</i>	124	59.7
<i>Gates</i>	5	36.9
<i>Graham</i>	*	*
<i>Granville</i>	30	60.4
<i>Greene</i>	5	25.2
<i>Guilford</i>	207	46.6
<i>Halifax</i>	37	54.6
<i>Harnett</i>	51	60.5
<i>Haywood</i>	42	52.8
<i>Henderson</i>	55	39.1
<i>Hertford</i>	14	49.7
<i>Hoke</i>	11	42.2
<i>Hyde</i>	*	*
<i>Iredell</i>	61	42.2
<i>Jackson</i>	20	53.7

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Cases less than 5 are suppressed.

In situ cancers are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 6 (continued) : 2005 Colon/Rectum Cancer Incidence Rates By County

County	Cases	Rate ¹
NORTH CAROLINA	4,265	48.8
<i>Johnston</i>	62	47.4
<i>Jones</i>	6	43.7
<i>Lee</i>	35	55.9
<i>Lenoir</i>	46	67.6
<i>Lincoln</i>	36	53.6
<i>McDowell</i>	16	32.1
<i>Macon</i>	29	53.3
<i>Madison</i>	*	*
<i>Martin</i>	20	65.6
<i>Mecklenburg</i>	279	44.3
<i>Mitchell</i>	11	45.5
<i>Montgomery</i>	13	41.5
<i>Moore</i>	58	48.2
<i>Nash</i>	57	57.0
<i>New Hanover</i>	74	38.4
<i>Northampton</i>	9	34.9
<i>Onslow</i>	47	52.5
<i>Orange</i>	33	30.6
<i>Pamlico</i>	8	40.7
<i>Pasquotank</i>	16	41.0
<i>Pender</i>	17	30.1
<i>Perquimans</i>	9	52.5
<i>Person</i>	13	31.6
<i>Pitt</i>	61	51.2
<i>Polk</i>	11	42.4
<i>Randolph</i>	73	50.7
<i>Richmond</i>	26	52.7
<i>Robeson</i>	59	50.1
<i>Rockingham</i>	61	54.7
<i>Rowan</i>	86	57.3
<i>Rutherford</i>	48	59.9
<i>Sampson</i>	29	44.6
<i>Scotland</i>	15	42.0
<i>Stanly</i>	32	46.6
<i>Stokes</i>	30	58.8
<i>Surry</i>	39	43.8
<i>Swain</i>	*	*
<i>Transylvania</i>	23	44.8
<i>Tyrrell</i>	*	*
<i>Union</i>	58	43.7
<i>Vance</i>	33	74.9
<i>Wake</i>	255	45.2
<i>Warren</i>	8	28.9
<i>Washington</i>	6	36.7
<i>Watauga</i>	22	57.2
<i>Wayne</i>	49	42.5
<i>Wilkes</i>	30	37.0
<i>Wilson</i>	49	60.0
<i>Yadkin</i>	29	67.8
<i>Yancey</i>	12	49.4

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Cases less than 5 are suppressed.

In situ cancers are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 7: 2005 Lung/Bronchus Cancer Incidence Rates By County

County	Cases	Rate¹
NORTH CAROLINA	6,699	76.4
<i>Alamance</i>	111	72.6
<i>Alexander</i>	35	87.5
<i>Alleghany</i>	10	58.9
<i>Anson</i>	22	77.8
<i>Ashe</i>	30	80.6
<i>Avery</i>	20	88.6
<i>Beaufort</i>	61	98.6
<i>Bertie</i>	17	73.8
<i>Bladen</i>	27	71.8
<i>Brunswick</i>	106	89.6
<i>Buncombe</i>	206	78.1
<i>Burke</i>	75	72.3
<i>Cabarrus</i>	122	89.9
<i>Caldwell</i>	69	77.7
<i>Camden</i>	9	99.3
<i>Carteret</i>	55	65.0
<i>Caswell</i>	14	52.2
<i>Catawba</i>	126	79.6
<i>Chatham</i>	35	53.8
<i>Cherokee</i>	28	69.5
<i>Chowan</i>	12	63.1
<i>Clay</i>	13	86.9
<i>Cleveland</i>	88	78.3
<i>Columbus</i>	42	65.5
<i>Craven</i>	100	97.8
<i>Cumberland</i>	204	86.1
<i>Currituck</i>	17	73.0
<i>Dare</i>	20	52.4
<i>Davidson</i>	149	87.7
<i>Davie</i>	26	56.7
<i>Duplin</i>	36	65.6
<i>Durham</i>	156	76.7
<i>Edgecombe</i>	52	90.7
<i>Forsyth</i>	279	83.4
<i>Franklin</i>	37	71.3
<i>Gaston</i>	203	97.3
<i>Gates</i>	11	81.7
<i>Graham</i>	5	44.9
<i>Granville</i>	50	96.3
<i>Greene</i>	15	76.3
<i>Guilford</i>	325	73.6
<i>Halifax</i>	55	82.6
<i>Harnett</i>	60	67.3
<i>Haywood</i>	74	88.4
<i>Henderson</i>	110	73.1
<i>Hertford</i>	16	57.2
<i>Hoke</i>	20	70.5
<i>Hyde</i>	6	85.5
<i>Iredell</i>	117	81.3
<i>Jackson</i>	23	58.8

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Rates based on less than 10 cases are unstable and therefore suppressed.

In situ cancers are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 7 (continued) : 2005 Lung/Bronchus Cancer Incidence Rates By County

County	Cases	Rate¹
NORTH CAROLINA	6,699	76.4
<i>Johnston</i>	84	68.7
<i>Jones</i>	11	84.3
<i>Lee</i>	44	70.1
<i>Lenoir</i>	48	68.0
<i>Lincoln</i>	71	99.2
<i>McDowell</i>	53	104.2
<i>Macon</i>	29	61.1
<i>Madison</i>	23	86.6
<i>Martin</i>	25	80.0
<i>Mecklenburg</i>	379	63.5
<i>Mitchell</i>	15	60.9
<i>Montgomery</i>	25	83.2
<i>Moore</i>	104	83.6
<i>Nash</i>	75	74.2
<i>New Hanover</i>	167	87.3
<i>Northampton</i>	15	50.2
<i>Onslow</i>	94	97.2
<i>Orange</i>	67	67.5
<i>Pamlico</i>	18	98.1
<i>Pasquotank</i>	30	74.8
<i>Pender</i>	43	77.4
<i>Perquimans</i>	12	68.7
<i>Person</i>	36	89.1
<i>Pitt</i>	91	77.4
<i>Polk</i>	16	52.4
<i>Randolph</i>	112	75.6
<i>Richmond</i>	53	100.5
<i>Robeson</i>	91	82.5
<i>Rockingham</i>	101	90.7
<i>Rowan</i>	133	89.0
<i>Rutherford</i>	56	71.9
<i>Sampson</i>	46	68.3
<i>Scotland</i>	25	71.0
<i>Stanly</i>	67	101.8
<i>Stokes</i>	33	62.2
<i>Surry</i>	92	101.2
<i>Swain</i>	9	58.7
<i>Transylvania</i>	22	44.9
<i>Tyrrell</i>	*	*
<i>Union</i>	88	71.1
<i>Vance</i>	37	83.4
<i>Wake</i>	306	57.9
<i>Warren</i>	8	30.9
<i>Washington</i>	11	66.6
<i>Watauga</i>	15	36.2
<i>Wayne</i>	90	77.9
<i>Wilkes</i>	53	65.3
<i>Wilson</i>	70	85.9
<i>Yadkin</i>	21	46.4
<i>Yancey</i>	25	96.9

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Cases less than 5 are suppressed.

In situ cancers are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 8: 2005 Female Breast Cancer Incidence Rates By County

County	Cases	Rate ¹
NORTH CAROLINA	7,098	147.5
<i>Alamance</i>	105	129.5
<i>Alexander</i>	30	142.5
<i>Alleghany</i>	*	*
<i>Anson</i>	15	114.0
<i>Ashe</i>	19	108.9
<i>Avery</i>	19	167.1
<i>Beaufort</i>	39	125.4
<i>Bertie</i>	22	175.5
<i>Bladen</i>	27	127.3
<i>Brunswick</i>	92	155.9
<i>Buncombe</i>	208	143.0
<i>Burke</i>	68	125.1
<i>Cabarrus</i>	121	153.1
<i>Caldwell</i>	76	161.1
<i>Camden</i>	9	196.3
<i>Carteret</i>	73	164.1
<i>Caswell</i>	12	87.7
<i>Catawba</i>	125	142.0
<i>Chatham</i>	48	143.9
<i>Cherokee</i>	23	108.9
<i>Chowan</i>	18	170.5
<i>Clay</i>	14	199.2
<i>Cleveland</i>	99	163.1
<i>Columbus</i>	43	128.0
<i>Craven</i>	76	147.2
<i>Cumberland</i>	226	159.2
<i>Currituck</i>	12	104.2
<i>Dare</i>	31	145.6
<i>Davidson</i>	134	147.6
<i>Davie</i>	28	117.6
<i>Duplin</i>	38	130.0
<i>Durham</i>	184	157.2
<i>Edgecombe</i>	63	198.0
<i>Forsyth</i>	308	166.7
<i>Franklin</i>	51	178.5
<i>Gaston</i>	156	137.0
<i>Gates</i>	7	93.3
<i>Graham</i>	5	81.8
<i>Granville</i>	39	138.7
<i>Greene</i>	15	138.6
<i>Guilford</i>	371	149.0
<i>Halifax</i>	57	165.5
<i>Harnett</i>	71	147.1
<i>Haywood</i>	70	179.0
<i>Henderson</i>	95	133.1
<i>Hertford</i>	21	144.5
<i>Hoke</i>	20	119.7
<i>Hyde</i>	7	218.7
<i>Iredell</i>	105	132.0
<i>Jackson</i>	29	134.9

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Cases less than 5 are suppressed.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 8 (continued) : 2005 Female Breast Cancer Incidence Rates By County

County	Cases	Rate ¹
NORTH CAROLINA	7,098	147.5
<i>Johnston</i>	107	147.8
<i>Jones</i>	5	79.3
<i>Lee</i>	53	164.2
<i>Lenoir</i>	62	159.7
<i>Lincoln</i>	60	155.3
<i>McDowell</i>	41	148.4
<i>Macon</i>	25	95.7
<i>Madison</i>	18	128.7
<i>Martin</i>	27	170.2
<i>Mecklenburg</i>	596	157.0
<i>Mitchell</i>	11	94.1
<i>Montgomery</i>	17	113.2
<i>Moore</i>	96	170.7
<i>Nash</i>	75	137.4
<i>New Hanover</i>	137	134.3
<i>Northampton</i>	21	124.4
<i>Onslow</i>	92	161.7
<i>Orange</i>	95	163.2
<i>Pamlico</i>	16	168.5
<i>Pasquotank</i>	32	145.3
<i>Pender</i>	33	120.7
<i>Perquimans</i>	19	201.1
<i>Person</i>	35	153.6
<i>Pitt</i>	106	158.7
<i>Polk</i>	15	88.0
<i>Randolph</i>	91	116.9
<i>Richmond</i>	29	99.7
<i>Robeson</i>	77	118.5
<i>Rockingham</i>	79	130.9
<i>Rowan</i>	124	161.9
<i>Rutherford</i>	62	149.5
<i>Sampson</i>	46	136.6
<i>Scotland</i>	13	61.8
<i>Stanly</i>	58	164.1
<i>Stokes</i>	34	118.8
<i>Surry</i>	58	127.6
<i>Swain</i>	12	145.8
<i>Transylvania</i>	33	137.4
<i>Tyrrell</i>	6	257.1
<i>Union</i>	103	135.9
<i>Vance</i>	31	123.8
<i>Wake</i>	561	163.9
<i>Warren</i>	25	225.7
<i>Washington</i>	11	108.3
<i>Watauga</i>	28	131.4
<i>Wayne</i>	97	151.6
<i>Wilkes</i>	58	136.3
<i>Wilson</i>	59	128.6
<i>Yadkin</i>	23	99.1
<i>Yancey</i>	16	116.7

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Cases less than 5 are suppressed.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 9: 2005 Prostate Cancer Incidence Rates By County

County	Cases	Rate ¹
NORTH CAROLINA	5,780	147.8
<i>Alamance</i>	94	148.3
<i>Alexander</i>	33	190.4
<i>Alleghany</i>	11	134.6
<i>Anson</i>	16	128.6
<i>Ashe</i>	33	201.1
<i>Avery</i>	16	157.7
<i>Beaufort</i>	43	153.2
<i>Bertie</i>	16	174.1
<i>Bladen</i>	23	127.4
<i>Brunswick</i>	46	76.0
<i>Buncombe</i>	147	125.7
<i>Burke</i>	56	121.9
<i>Cabarrus</i>	104	173.7
<i>Caldwell</i>	49	128.4
<i>Camden</i>	10	259.6
<i>Carteret</i>	69	166.3
<i>Caswell</i>	15	124.9
<i>Catawba</i>	122	168.5
<i>Chatham</i>	44	152.2
<i>Cherokee</i>	20	105.8
<i>Chowan</i>	*	*
<i>Clay</i>	15	193.3
<i>Cleveland</i>	70	144.6
<i>Columbus</i>	53	187.5
<i>Craven</i>	82	173.7
<i>Cumberland</i>	140	132.0
<i>Currituck</i>	9	71.3
<i>Dare</i>	19	101.3
<i>Davidson</i>	101	128.1
<i>Davie</i>	24	111.1
<i>Duplin</i>	26	112.9
<i>Durham</i>	169	187.8
<i>Edgecombe</i>	40	180.3
<i>Forsyth</i>	202	140.8
<i>Franklin</i>	27	118.2
<i>Gaston</i>	151	167.9
<i>Gates</i>	*	*
<i>Graham</i>	*	*
<i>Granville</i>	42	168.1
<i>Greene</i>	16	179.7
<i>Guilford</i>	370	192.9
<i>Halifax</i>	45	160.3
<i>Harnett</i>	34	85.6
<i>Haywood</i>	62	167.9
<i>Henderson</i>	84	127.4
<i>Hertford</i>	18	138.8
<i>Hoke</i>	19	158.1
<i>Hyde</i>	7	245.8
<i>Iredell</i>	110	169.9
<i>Jackson</i>	21	114.9

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Rates based on less than 10 cases are unstable and therefore suppressed.

In situ cancers are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 9 (continued) : 2005 Prostate Cancer Incidence Rates By County

<i>County</i>	<i>Cases</i>	<i>Rate</i> ¹
NORTH CAROLINA	5,780	147.8
<i>Johnston</i>	76	144.9
<i>Jones</i>	6	89.3
<i>Lee</i>	39	140.3
<i>Lenoir</i>	68	233.7
<i>Lincoln</i>	52	160.0
<i>McDowell</i>	33	140.0
<i>Macon</i>	21	83.6
<i>Madison</i>	22	189.7
<i>Martin</i>	21	171.1
<i>Mecklenburg</i>	423	143.9
<i>Mitchell</i>	11	114.4
<i>Montgomery</i>	12	85.6
<i>Moore</i>	99	173.5
<i>Nash</i>	69	152.4
<i>New Hanover</i>	92	101.5
<i>Northampton</i>	23	182.8
<i>Onslow</i>	66	146.1
<i>Orange</i>	82	170.6
<i>Pamlico</i>	17	182.7
<i>Pasquotank</i>	24	139.3
<i>Pender</i>	28	112.2
<i>Perquimans</i>	14	171.6
<i>Person</i>	26	148.5
<i>Pitt</i>	86	177.0
<i>Polk</i>	13	99.2
<i>Randolph</i>	97	150.1
<i>Richmond</i>	28	132.2
<i>Robeson</i>	95	188.8
<i>Rockingham</i>	64	130.3
<i>Rowan</i>	80	123.3
<i>Rutherford</i>	40	115.6
<i>Sampson</i>	21	72.7
<i>Scotland</i>	21	112.1
<i>Stanly</i>	44	148.0
<i>Stokes</i>	15	66.7
<i>Surry</i>	49	122.0
<i>Swain</i>	5	65.7
<i>Transylvania</i>	29	128.2
<i>Tyrrell</i>	*	*
<i>Union</i>	80	136.7
<i>Vance</i>	25	135.2
<i>Wake</i>	420	162.0
<i>Warren</i>	21	181.1
<i>Washington</i>	12	160.5
<i>Watauga</i>	27	131.8
<i>Wayne</i>	53	106.3
<i>Wilkes</i>	78	205.4
<i>Wilson</i>	42	122.4
<i>Yadkin</i>	26	133.7
<i>Yancey</i>	10	84.2

¹ Rates per 100,000 Population and are age-adjusted to the 2000 U.S. Census

* Rates based on less than 10 cases are unstable and therefore suppressed.

In situ cancers are excluded.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 10: Five Most Frequently Diagnosed Cancers By Age Group, 2005

The cancers listed are the five most frequently diagnosed cancers for each age group. Different age groups are at higher risks for different types of cancer. As age increases, the risk of cancer increases.

Ages 0-14			Ages 15-19		
Type	Cases	Rate*	Type	Cases	Rate*
Leukemia	81	4.5	Brain/CNS (includes benign brain/CNS)	29	4.9
Brain/CNS (includes benign brain/CNS)	77	4.3	Endocrine	23	3.9
Endocrine	23	1.3	Melanoma(Skin)	15	2.5
NH Lymphoma	16	0.9	Hodgkin's Disease	14	2.4
Kidney	16	0.9	Leukemia	12	2.0
Ages 20-24			Ages 25-29		
Type	Cases	Rate*	Type	Cases	Rate*
Melanoma(Skin)	42	7.0	Endocrine	58	9.3
Endocrine	37	6.2	Melanoma(Skin)	35	5.6
Hodgkin's Disease	28	4.7	Testes ¹	33	10.1
Testes ¹	21	6.7	Brain/CNS (includes benign brain/CNS)	32	5.1
Brain/CNS (includes benign brain/CNS)	18	3.0	NH Lymphoma	28	4.5
Ages 30-34			Ages 35-39		
Type	Cases	Rate*	Type	Cases	Rate*
Female Breast ¹	100	32.4	Female Breast ¹	239	75.6
Endocrine	85	13.5	Endocrine	90	14.1
Melanoma(Skin)	67	10.7	Melanoma(Skin)	85	13.3
Brain/CNS (includes benign brain/CNS)	56	8.9	Colon/Rectum	56	8.8
Testes ¹	40	12.5	Brain/CNS (includes benign brain/CNS)	54	8.5
Ages 40-44			Ages 45-49		
Type	Cases	Rate*	Type	Cases	Rate*
Female Breast ¹	514	152.6	Female Breast ¹	785	241.1
Colon/Rectum	147	22.1	Lung/Bronchus	273	42.9
Melanoma(Skin)	130	19.5	Colon/rectum	211	33.1
Endocrine	128	19.2	Prostate ¹	160	51.5
Lung/Bronchus	105	15.8	Melanoma(Skin)	145	22.8

¹ Sex specific populations are used to calculate rates for sex-specific cancers.

In situ cancers except those of the urinary bladder and female breast are excluded. Report includes benign brain/CNS.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 10 (continued) : Five Most Frequently Diagnosed Cancers By Age Group, 2005

Ages 50-54			Ages 55-59		
Type	Cases	Rate*	Type	Cases	Rate
Female Breast ¹	805	273.7	Female Breast ¹	979	371.4
Prostate ¹	452	164.2	Prostate ¹	796	324.6
Lung/Bronchus	432	75.9	Lung/Bronchus	723	142.1
Colon/Rectum	362	63.6	Colon/Rectum	443	87.1
Melanoma(Skin)	168	29.5	Kidney	220	43.2
Ages 60-64			Ages 65-69		
Type	Cases	Rate*	Type	Cases	Rate*
Prostate ¹	998	543.5	Prostate ¹	1,100	780.1
Lung/Bronchus	944	243.9	Lung/Bronchus	1,023	333.1
Female Breast ¹	879	432.0	Female Breast ¹	751	452.2
Colon/Rectum	514	132.8	Colon/Rectum	535	174.2
Bladder	183	47.3	Bladder	237	77.2
Ages 70-74			Ages 75-79		
Type	Cases	Rate*	Type	Cases	Rate*
Lung/Bronchus	1,077	417.3	Lung/Bronchus	1,015	483.6
Prostate ¹	1,019	896.5	Prostate ¹	664	768.2
Female Breast ¹	688	476.3	Colon/Rectum	586	279.2
Colon/Rectum	547	211.9	Female Breast ¹	568	460.1
Bladder	251	97.2	Bladder	281	133.9
Ages 80-84			Ages 85+		
Type	Cases	Rate*	Type	Cases	Rate*
Lung/Bronchus	669	441.3	Lung/Bronchus	390	306.1
Female Breast ¹	443	459.4	Colon/Rectum	386	302.9
Colon/Rectum	427	281.6	Female Breast ¹	313	345.6
Prostate ¹	324	587.1	Prostate ¹	228	618.8
Bladder	230	151.7	Bladder	163	127.9

¹ Sex specific populations are used to calculate rates for sex-specific cancers.

In situ cancers except those of the urinary bladder and female breast are excluded. Report includes benign brain/CNS.

Rates are based on the bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>)

Table 11: 2001-2005 Cancer Incidence Rates by Race and Ethnicity, Per 100,000 Population

Age-Adjusted to the US 2000 Census

* Counts less than five are suppressed.

Rates based on counts less than 16 are unstable. Use with caution.

Sites	Whites		African Americans		American Indians		Hispanics		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
ORAL CAVITY	3,679	10.8	1,001	12.7	30	6.8	54	6.7	4,774	11.2
ESOPHAGUS	1,554	4.6	453	6.1	13	3.0	14	2.5	2,038	4.8
STOMACH	1,678	5.0	736	10.4	21	5.2	59	8.0	2,495	6.0
COLON/RECTUM	15,853	46.9	4,053	56.3	125	33.2	173	29.5	20,246	48.6
LIVER	1,401	4.1	406	5.3	15	3.8	41	6.6	1,902	4.5
GALLBLADDER	265	0.8	104	1.5	*	*	*	*	374	0.9
PANCREAS	3,499	10.4	1,013	14.5	15	4.3	45	8.5	4,570	11.0
LARYNX	1,467	4.3	495	6.6	8	1.9	16	2.4	1,986	4.7
LUNG/BRONCHUS	25,545	74.9	4,957	69.0	229	57.9	179	35.8	30,914	73.8
BONE	304	1.0	67	0.7	*	*	21	0.7	384	0.9
SOFT TISSUE	913	2.8	247	3.0	13	2.8	36	2.1	1,191	2.8
MELANOMA (SKIN)	6,843	20.5	56	0.8	9	2.1	31	3.6	6,998	16.6
FEMALE BREAST	27,342	150.5	6,188	140.0	212	87.3	415	106.8	34,156	148.2
CERVIX UTERI	1,205	7.2	453	10.1	19	7.7	101	19.0	1,746	7.9
CORPUS UTERI	3854	20.9	872	20.6	37	17.0	68	20.7	4839	20.7
OVARY	2394	13.0	400	9.1	12	5.1	50	14.1	2,850	12.2
PROSTATE	21,053	138.2	7080	248.2	265	154.1	208	85.5	28,759	156.1
TESTES	905	5.6	61	1.4	9	3.4	71	3.4	1,003	4.7
BLADDER	7,198	21.3	756	11.0	33	10.5	45	10.8	8,044	19.4
KIDNEY	4,874	14.3	1,195	15.8	55	14.1	88	12.9	6,183	14.6
ENDOCRINE	2,803	8.5	583	7.0	18	3.8	119	7.9	3,516	8.3
MULTIPLE MYELOMA	1,611	4.8	754	10.6	15	3.7	25	4.0	2,404	5.8
LEUKEMIA	3,726	11.3	611	8.0	26	6.6	134	8.3	4,464	10.8
BRAIN/OTHER CNS (includes benign brain/CNS)	3,541	10.7	566	7.1	33	7.2	99	8.0	4,209	10.0
HODGKINS DISEASE	847	2.6	218	2.4	10	1.9	34	1.3	1,098	2.6
NON-HODGKINS LYMPHOMA	6,240	18.6	956	12.3	34	7.9	122	15.2	7,342	17.6
OTHER CANCERS	9,375	28.0	2,027	27.9	104	27.1	153	21.2	11,657	28.1
ALL CANCERS	159,969	472.5	36,308	492.7	1,365	337.8	2,403	314.7	200,142	475.9

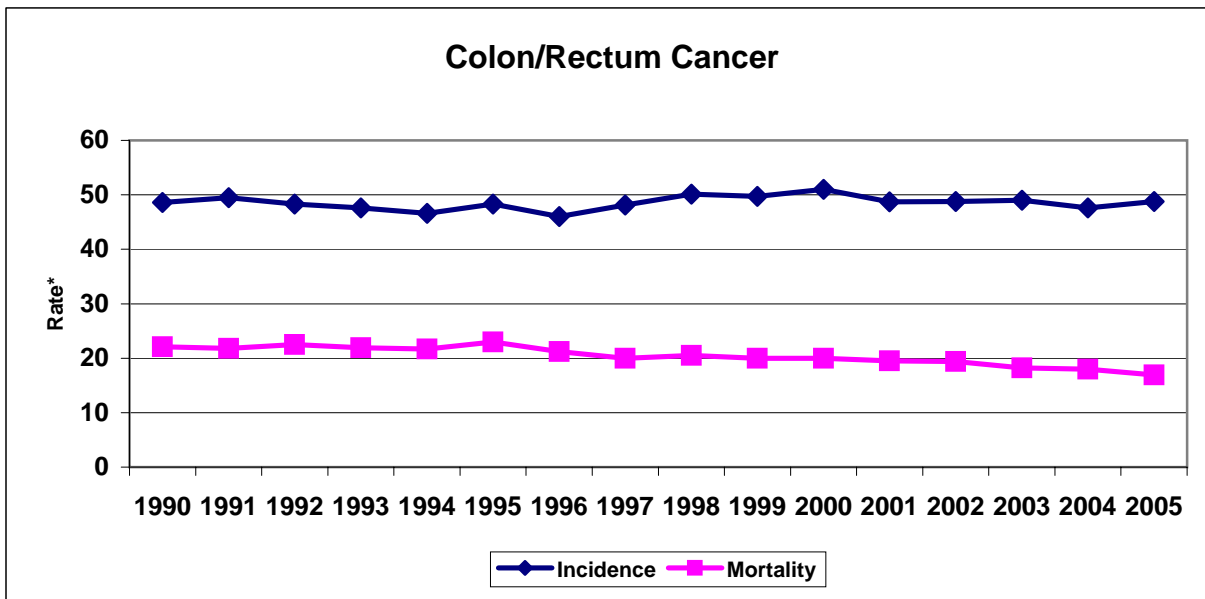
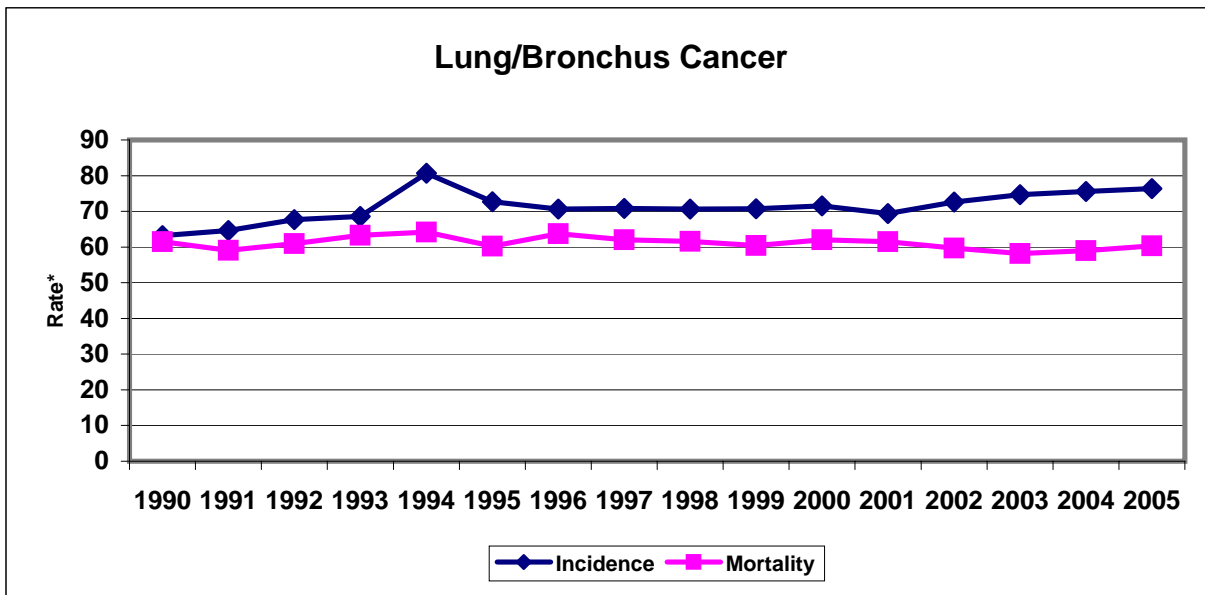
Hispanic ethnicity is independent of race, so the counts will not sum to the total.

Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at <http://www.naaccr.org/filesystem/pdf/NHIA%20v2%2009-21-05.pdf>

American Indian rate is known to be underreported. Previous analyses by the North Carolina Central Cancer Registry indicates approximately 17% of patients of American Indian race are reported as a different race. Incidence is assumed to be under-estimated as a result of misclassification.

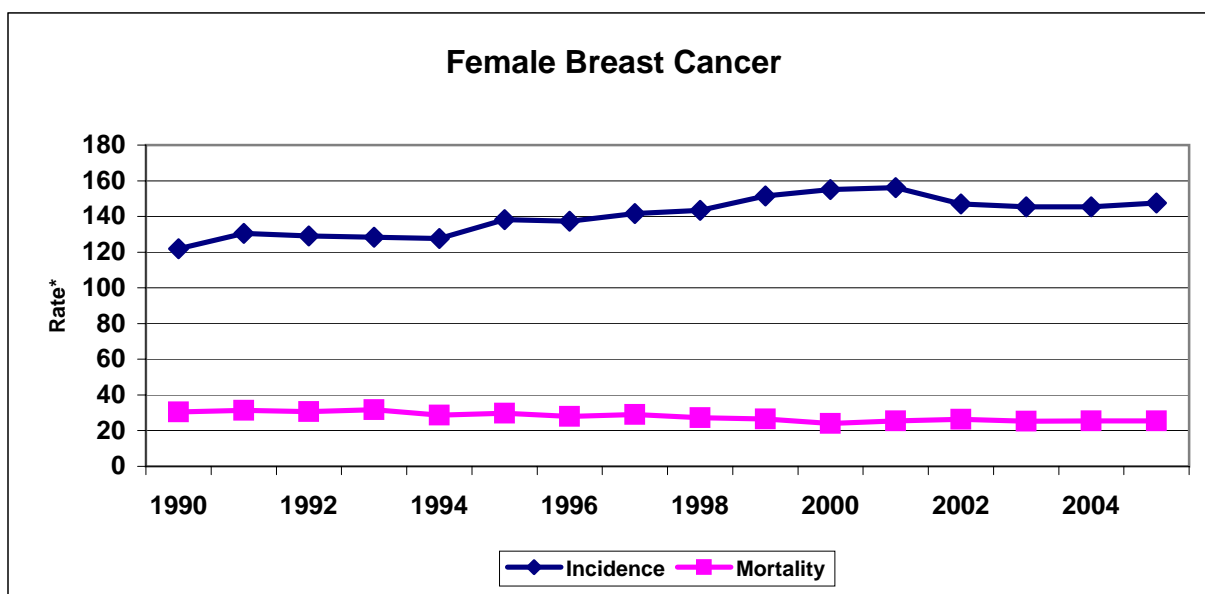
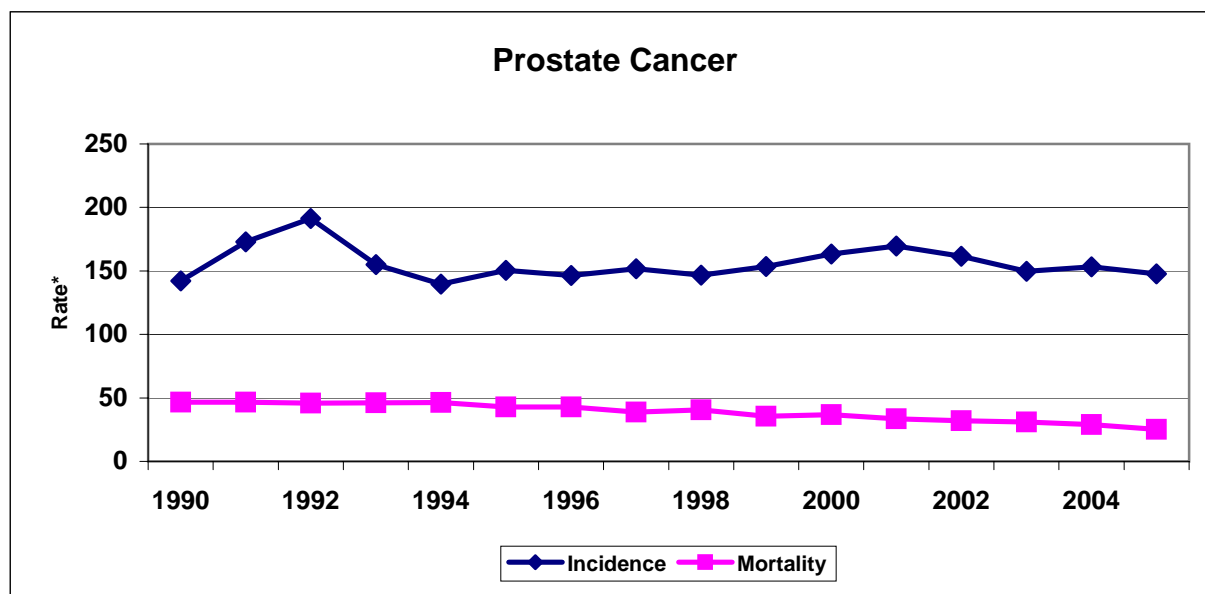
Incidence rates for 2001-2005 used the Bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>).

**Chart 1: Trends For The Four Major Cancers
1990-2005**



* Rates per 100,000 Population
Age-Adjusted to the 2000 U.S. Census

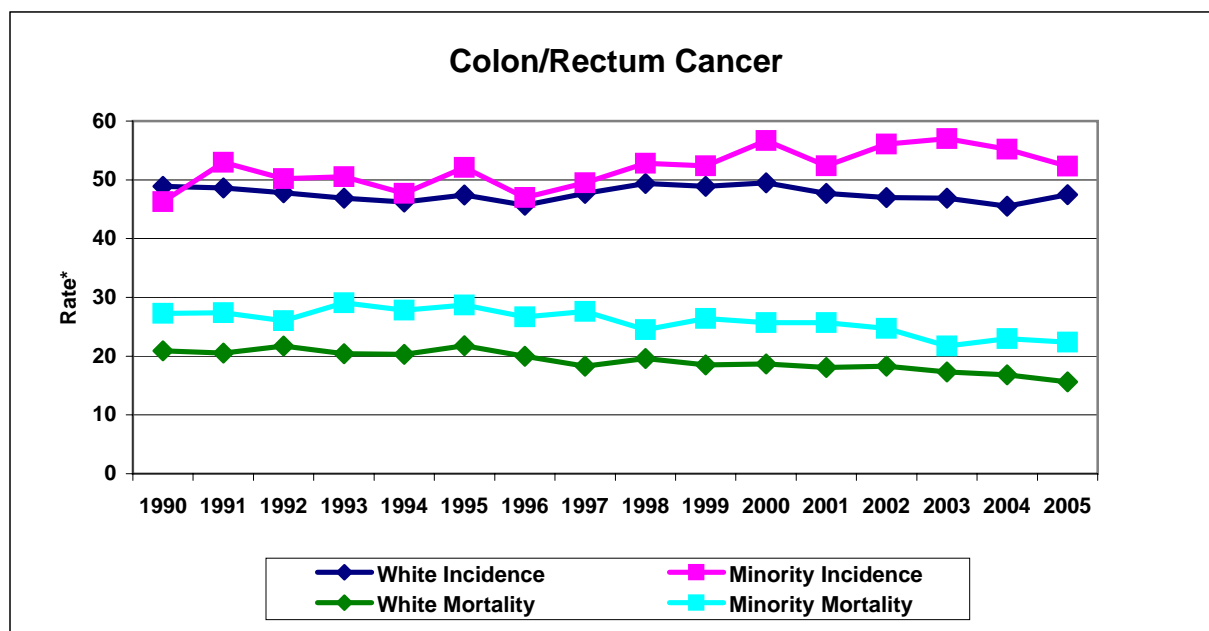
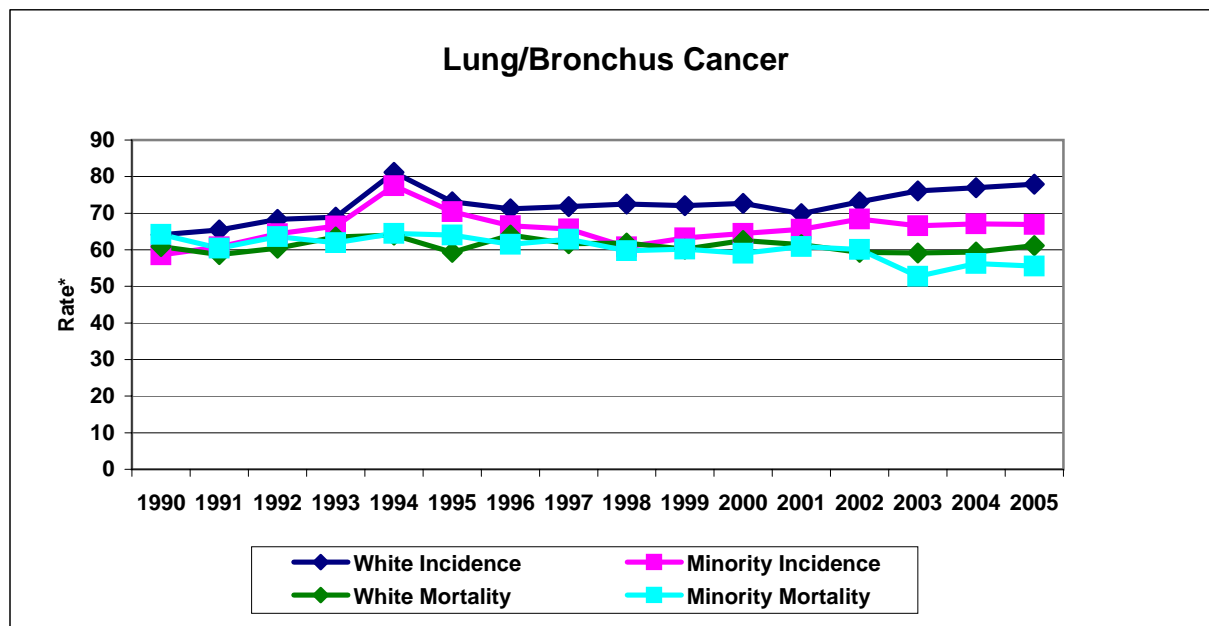
**Chart 1 (continued) : Trends For The Four Major Cancers
1990-2005**



Includes in situ breast cancers.

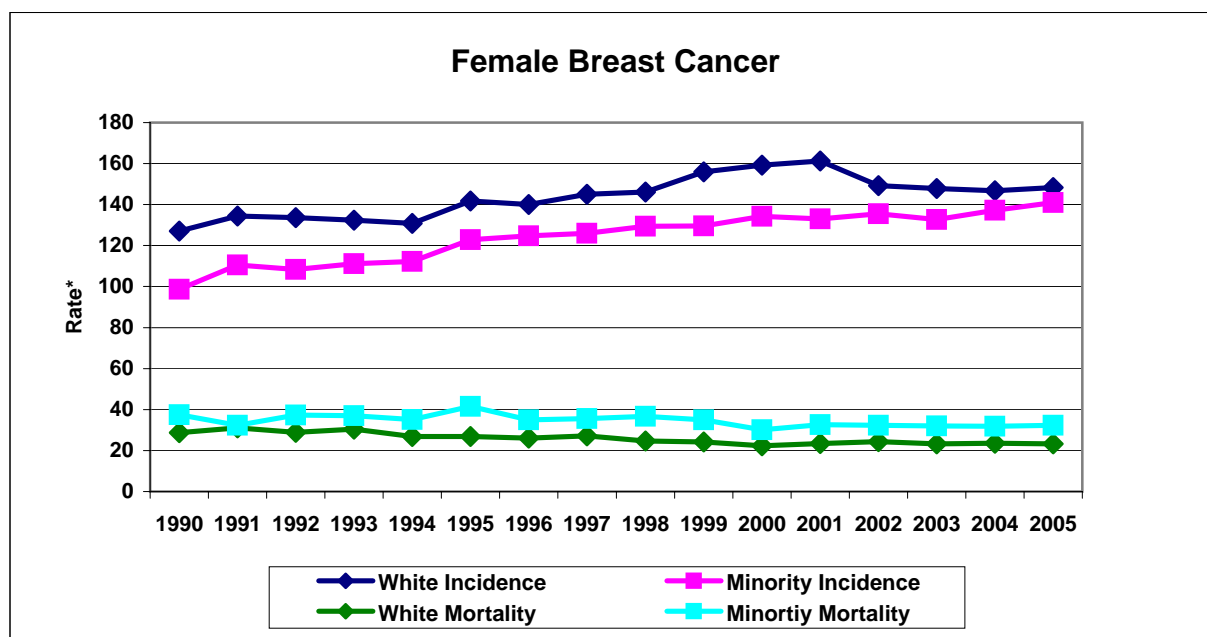
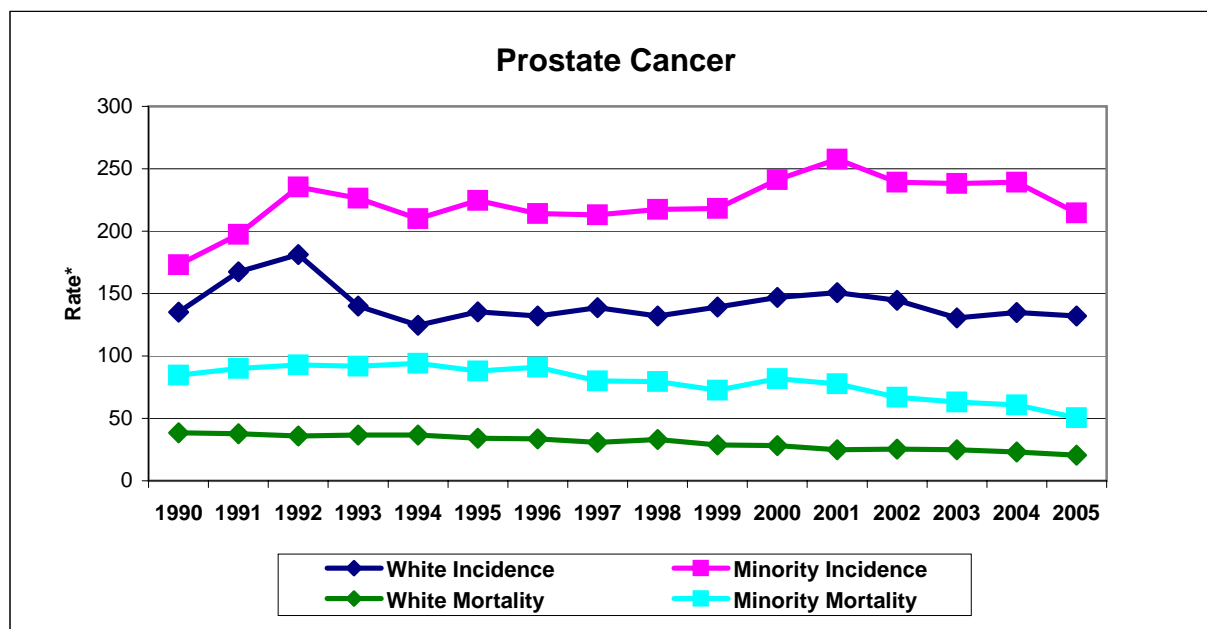
* Rates per 100,000 Population
Age-Adjusted to the 2000 U.S. Census

**Chart 2: White and Minority Trends For The Four Major Cancers
1990-2005**



* Rates per 100,000 Population
Age-Adjusted to the 2000 U.S. Census

**Chart 2 (continued) : White and Minority Trends For The Four Major Cancers
1990-2005**



* Rates per 100,000 Population
Age-Adjusted to the 2000 U.S. Census

Appendix A

Primary Site Definitions

International Classification of Disease for Oncology (ICD-O-3) Codes for Newly Diagnosed Neoplasms¹

Primary Site	ICD-O-3
All Sites	C000-C809
Oral Cavity and Pharynx:	C000-C148
❖ Lips	C000-C009
❖ Tongue	C019-C029
❖ Salivary Glands	C079-C089
❖ Floor of Mouth	C040-C049
❖ Nasopharynx	C110-C119
❖ Oropharynx	C100-C109
❖ Hypopharynx	C129-C139
❖ Other Mouth and Pharynx	C030-C039, C050-C069, C090-C099, C140, C142-C148
Digestive System:	C150-C269, C480-C488
❖ Esophagus	C150-C159
❖ Stomach	C160-C169
❖ Small Intestine	C170-C179
❖ Colon and Rectum	C180-C209, C260
❖ Anus, Anal Cavity and Anorectum	C210-C212, C218
❖ Liver and Intrahepatic Bile Duct	C220-C221
❖ Gallbladder	C239
❖ Pancreas	C250-C259
❖ Other Digestive Organs	C240-C249, C268-C269, C480-C488
Respiratory System:	C300-C399
❖ Larynx	C320-C329
❖ Lung and Bronchus	C340-C349
❖ Other Respiratory Organs	C300-C319, C339, C381-C399
Bones and Joints	C400-C419
Soft Tissues	C380, C470-C479, C490-C499
Skin	C440-C449
❖ Melanoma of Skin	C440-C449 (M8720-M8790)
❖ Other Skin	C440-C449 (Other histology)
Breast	C500-C509
❖ Invasive	C500-C509 (Behavior=3)
❖ In Situ	C500-C509 (Behavior=2)
Female Genital Organs:	C530-C589
❖ Cervix Uteri	C530-C539
❖ Uterus (Corpus, NOS)	C540-C559
❖ Ovary	C569
❖ Other Female Genital Organs	C510-C529, C570-C589

Appendix A (Continued)

Primary Site Definitions

International Classification of Disease for Oncology (ICD-O-3) Codes for Newly Diagnosed Neoplasms¹

Male Genital Organs:	C600-C639
❖ Prostate	C619
❖ Testis	C620-C629
❖ Penis	C600-C609
❖ Other Male Genital Organs	C630-C639
Urinary System:	C649-C689
❖ Bladder	C670-C679
❖ Kidney and Renal Pelvis	C649, C659
❖ Ureter	C669
❖ Other Urinary System	C680-C689
Eye & Orbit:	C690-C699
Brain & Central Nervous System (CNS):	C700-C729
Endocrine System:	C379, C739-C759
❖ Thyroid	C739
❖ Other Endocrine and Thymus	C379, C740-C759
Lymphomas:	M9590-M9717
❖ Hodgkin's Disease	M9650-M9667
❖ Non-Hodgkin's	M9590-M9596, M9670-M9671, M9673,M9675,M9678-M9680,M9684,M9687,M9689-M9691,M9695,M9698- M9702,M9705,M9708-M9709,M9714-M9719,M9727-M9729,M9823,M9827
Multiple Myeloma:	M9731-M9732,M9734
Leukemia:	M9800-M9948
❖ Acute Lymphocytic	M9826, M9835-M9837
❖ Chronic Lymphocytic	M9823
❖ Acute Myeloid	M9840, M9861, M9866, M9867, M9871-M9874, M9895-M9897,M9910,M9920
❖ Chronic Myeloid	M9863,M9875,M9876, M9945,M9946
❖ Other Leukemia	M9733, M9742,M9800-M9801,M9805, M9827,M9831, M9870, M9931, M9948, M9963-M9964
Ill-Defined & Unspecified	M9740-M9741,M9750-M9758,M9760- M9769,M9950-M9960-M9962,M9970,M9975,M9980,M9982-M9978,M9989

¹ Based on the SEER Incidence Site ICD-O-3 Recode, 1/27/2003
<http://seer.cancer.gov/siterecode/>

Note: Except for lymphoma, multiple myeloma, and leukemia, all categorized sites exclude M9590-M9989 unless otherwise stated.

Appendix B

Formulae

Mathematical definitions:

Age Group (i):

0-4	45-49
5-9	50-54
10-14	55-59
15-19	60-64
20-24	65-69
25-29	70-74
30-34	74-79
35-39	80-84
40-44	85+

Age-specific rate:

$$r_i = (c_i/r_i)*100,000$$

where r_i is the age-specific rate for age group (i), c_i is the count of cases for that age group (i) and r_i is the count of persons at risk (i.e., the population) for that age group (i); rates in all tables are presented per 100,000 population.

Observed:

- ◆ Male Observed = Number of new cases of cancer among males
- ◆ Female Observed = Number of new cases of cancer among females

Age-adjusted rate:

$$A.A.R. = \sum_{i=0-4}^{85+} (w_i r_i)$$

where w_i is the proportion of the age group in the 2000 U.S. Standard and r_i is the age-specific rate for age group.

**Appendix C: Population By County And Race/Gender
North Carolina, 2005**

County	White Males	White Females	Minority Males	Minority Females
NORTH CAROLINA	3,208,831	3,265,515	1,040,559	1,157,554
<i>Alamance</i>	54,036	56,859	13,618	15,714
<i>Alexander</i>	16,652	16,397	1,596	1,170
<i>Alleghany</i>	5,262	5,376	136	90
<i>Anson</i>	6,459	6,261	6,701	6,268
<i>Ashe</i>	12,297	12,635	196	165
<i>Avery</i>	8,635	8,059	898	108
<i>Beaufort</i>	15,870	16,904	5,963	7,141
<i>Bertie</i>	3,429	3,631	5,594	6,677
<i>Bladen</i>	9,849	10,096	6,016	6,924
<i>Brunswick</i>	37,754	38,891	5,894	6,569
<i>Buncombe</i>	95,445	102,945	9,517	10,473
<i>Burke</i>	39,335	40,180	5,586	4,371
<i>Cabarrus</i>	62,068	63,305	11,556	12,656
<i>Caldwell</i>	36,498	37,703	2,544	2,589
<i>Camden</i>	3,697	3,815	689	769
<i>Carteret</i>	28,102	29,323	2,650	2,774
<i>Caswell</i>	7,672	7,487	4,233	4,098
<i>Catawba</i>	65,891	67,108	8,904	9,442
<i>Chatham</i>	24,005	24,248	4,630	5,206
<i>Cherokee</i>	11,900	12,798	521	504
<i>Chowan</i>	4,404	4,707	2,398	2,975
<i>Clay</i>	4,657	4,942	69	87
<i>Cleveland</i>	36,962	39,439	10,022	11,576
<i>Columbus</i>	17,274	18,229	8,790	10,106
<i>Craven</i>	34,018	34,366	12,051	13,394
<i>Cumberland</i>	84,566	85,216	60,077	69,168
<i>Currituck</i>	10,499	10,647	931	1,039
<i>Dare</i>	16,249	16,137	690	644
<i>Davidson</i>	67,806	69,730	7,986	9,011
<i>Davie</i>	17,759	18,202	1,518	1,536
<i>Duplin</i>	19,131	18,150	6,681	7,876
<i>Durham</i>	69,439	68,025	48,694	56,196
<i>Edgecombe</i>	11,006	11,536	14,150	17,309
<i>Forsyth</i>	114,349	120,002	42,055	49,320
<i>Franklin</i>	19,471	19,275	7,542	8,332
<i>Gaston</i>	79,895	84,022	15,071	17,249
<i>Gates</i>	3,467	3,468	2,048	2,197
<i>Graham</i>	3,548	3,758	345	353
<i>Granville</i>	17,990	16,194	10,646	8,594
<i>Greene</i>	6,148	5,717	4,215	3,994
<i>Guilford</i>	140,663	147,516	72,582	82,778
<i>Halifax</i>	11,144	12,162	15,285	17,036
<i>Harnett</i>	38,646	39,371	12,275	13,473
<i>Haywood</i>	26,268	28,372	692	752
<i>Henderson</i>	45,020	47,939	2,063	2,153
<i>Hertford</i>	4,063	4,317	7,295	7,861
<i>Hoke</i>	10,593	10,289	9,585	10,208
<i>Hyde</i>	1,762	1,638	1,171	871
<i>Iredell</i>	59,159	60,310	9,839	11,154
<i>Jackson</i>	14,749	15,639	2,455	2,381
<i>Johnston</i>	60,879	60,142	12,177	13,126
<i>Jones</i>	3,293	3,382	1,675	1,950

2005 North Carolina bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>).

**Appendix C (continued) : Population By County And Race/Gender
North Carolina, 2005**

County	White Males	White Females	Minority Males	Minority Females
NORTH CAROLINA	3,208,831	3,265,515	1,040,559	1,157,554
<i>Lee</i>	21,787	21,754	5,695	6,511
<i>Lenoir</i>	16,423	17,197	11,057	13,201
<i>Lincoln</i>	32,208	32,435	2,459	2,646
<i>McDowell</i>	20,157	20,604	1,411	1,023
<i>Macon</i>	14,790	16,246	494	403
<i>Madison</i>	9,720	10,118	231	142
<i>Martin</i>	6,367	6,953	4,973	6,176
<i>Mecklenburg</i>	262,984	258,552	129,125	145,708
<i>Mitchell</i>	7,643	7,918	103	98
<i>Montgomery</i>	10,636	10,536	3,164	3,020
<i>Moore</i>	32,858	34,961	6,241	7,282
<i>Nash</i>	27,497	29,178	16,179	18,339
<i>New Hanover</i>	71,527	74,674	15,057	17,785
<i>Northampton</i>	4,224	4,397	5,985	6,795
<i>Onslow</i>	64,628	51,873	17,396	16,611
<i>Orange</i>	45,450	48,981	11,095	13,010
<i>Pamlico</i>	4,834	4,840	1,630	1,475
<i>Pasquotank</i>	11,009	11,414	7,598	8,239
<i>Pender</i>	18,215	18,060	4,997	5,185
<i>Perquimans</i>	4,328	4,576	1,420	1,722
<i>Person</i>	12,941	13,361	5,074	5,825
<i>Pitt</i>	44,223	46,236	23,600	28,226
<i>Polk</i>	8,438	9,379	601	644
<i>Randolph</i>	63,369	64,809	4,837	5,161
<i>Richmond</i>	15,316	15,474	7,759	8,157
<i>Robeson</i>	23,568	22,949	38,923	42,312
<i>Rockingham</i>	35,800	37,791	8,864	10,049
<i>Rowan</i>	55,177	56,450	11,227	11,928
<i>Rutherford</i>	26,865	28,965	3,783	4,041
<i>Sampson</i>	21,467	21,285	9,681	10,423
<i>Scotland</i>	9,123	9,745	8,822	9,386
<i>Stanly</i>	25,180	25,687	4,160	4,004
<i>Stokes</i>	21,168	22,151	1,200	1,271
<i>Surry</i>	33,615	35,214	1,748	1,845
<i>Swain</i>	4,426	4,789	2,010	2,024
<i>Transylvania</i>	13,386	14,486	843	917
<i>Tyrrell</i>	1,268	1,153	1,031	694
<i>Union</i>	70,758	70,351	10,850	11,524
<i>Vance</i>	10,376	10,938	10,263	11,969
<i>Wake</i>	280,398	274,886	92,961	102,620
<i>Warren</i>	3,940	3,897	5,914	6,009
<i>Washington</i>	3,209	3,360	3,096	3,618
<i>Watauga</i>	20,421	20,637	684	692
<i>Wayne</i>	37,092	36,981	18,833	20,921
<i>Wilkes</i>	31,422	32,091	1,818	1,797
<i>Wilson</i>	22,277	22,904	14,228	16,766
<i>Yadkin</i>	17,739	18,359	774	817
<i>Yancey</i>	8,851	9,060	150	136

2005 North Carolina bridged-race population estimates obtained from the National Center for Health Statistics (Vintage 2006, available online at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>).

Appendix D: U.S. Standard Million Population 2000

Ages 0-4	69135
Ages 5-9	72532
Ages 10-14	73032
Ages 15-19	72168
Ages 20-24	66478
Ages 25-29	64530
Ages 30-34	71044
Ages 35-39	80762
Ages 40-44	81851
Ages 45-49	72118
Ages 50-54	62716
Ages 55-59	48454
Ages 60-64	38793
Ages 65-69	34264
Ages 70-74	31773
Ages 75-79	27000
Ages 80-84	17842
Ages 85+	15508

Source: U.S. Bureau of the Census, Census of Population: 2000.