Mission Statement for Georgia Department of Human Resources

Our mission is to promote and protect the health of people in Georgia wherever they live, work, and play. We unite with individuals, families, and communities to improve their health and enhance their quality of life.

If you would like more information on cancer, visit our web site at **www.ph.dhr.state.ga.us**.

DHR
GEORGIA
DEPARTMENT OF
HUMAN RESOURCES

Mission Statement for American Cancer Society

The American Cancer Society is the nationwide community-based voluntary health organization dedicated to eliminating cancer as a major health problem by preventing cancer, saving lives and diminishing suffering from cancer, through research, education, advocacy, and service.

If you would like more information on cancer, call **1-800-ACS-2345** 24 hours a day, seven days a week. Or visit our web site at **www.cancer.org**.

AMERICAN CANCER SOCIETY®
Hope. Progress. Answers.™

GEORGIA
Cancer Data
REPORT
2000

DHR
GEORGIA
DEPARTMENT OF
HUMAN RESOURCES

AMERICAN
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STATE OF GEORGIA

OFFICE OF THE GOVERNOR

ATLANTA 30334-0900

Roy E. Barnes
GOVERNOR

September 1, 2000

Dear Friends:

The **Georgia Cancer Data Report 2000** describes the immense impact of cancer in our state. During this year an estimated 32,900 Georgians will develop cancer and 13,700 will die from the disease. This means that a citizen of our state will be diagnosed with cancer every 16 minutes and that a Georgian will die of cancer about every 38 minutes.

Here are some highlights from this report:

- Cancer is the second leading cause of death in this state, accounting for one in four deaths each year.
- Twenty-seven percent more African-American Georgians will die of cancer than whites.
- Cancers of the lung, breast, prostate, and colorectum account for 54 percent of our state's cancer deaths.
- Unless current trends are reversed, one in two Georgia men and one in three Georgia women will develop cancer in their lifetime.

This important document will serve as a guide to help us develop a plan to reverse these trends. Promising new screening tests and research show clearly that we can intervene and prevent cancer from becoming deadly. In order to take advantage of these new opportunities, we must capitalize on our existing resources and new research opportunities. Working together, we can dramatically reduce the number of Georgians who are currently projected to die of cancer.

I commend the Georgia Department of Human Resources' Division of Public Health and the American Cancer Society, Southeast Division for their partnership in developing and releasing this document. Through their joint efforts we have a much better perspective of the burden of cancer in our state, identification of risk factors for the more prevalent types of cancers, and guidelines for early detection and screening. This information will help us better plan our efforts in cancer prevention, screening, education, research, and treatment to meet the current and future needs of Georgians.

Sincerely,

Roy E. Barnes

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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

Cancer is a major health problem in Georgia

- More than 32,900 Georgians will develop cancer in 2000, and 13,700 will die from this disease.
- Cancer was the second leading cause of death in Georgia in 1994-1998, accounting for 22% of all deaths.
- One in 2 males, and 1 in 3 females in the US will develop cancer in their lifetime.
- Cancer mortality rates in Georgia declined 6% between 1993-1998.
- Lung cancer is the leading cause of cancer death among Georgians and accounts for 30% of all cancer deaths.
- Lung cancer mortality rates among Georgia females have doubled since 1980.
- Blacks in Georgia are 27% more likely to die of cancer than whites.

Much of the burden of death and disability from cancer is preventable

- Tobacco use accounts for at least 30% of all cancer deaths.
- Tobacco use is responsible for about 87% of all lung cancers in Georgia.
- Between 1992-1998, smoking rates in Georgia increased 5% per year among females and 4% per year among males.
- In 1999, 55% of middle school students reported ever having used tobacco; 19% reported current use of tobacco.
- About one-third of cancer deaths are related to diet, nutrition, and physical activity.
- In 1998, only 21% of Georgia adults consumed 5 or more fruits and vegetables per day.
- Less than one-third of Georgia adults are physically active on a regular basis.

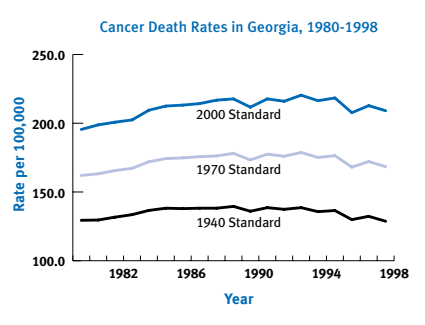
Some cancers can be detected early when treatment is most effective

- For 1996-1998, 55% of Georgia females aged 50 and older had a mammogram and clinical breast examination within the previous year.
- For 1996-1998, 90% of Georgia females aged 18 and older had a Pap test in the past 3 years.
- In 1997, 52% of Georgia males and 45% of Georgia females had ever had a sigmoidoscopy.

Age-adjusted Rates and Standard Populations

Age-adjusted rates allow for direct comparison of cancer incidence and mortality among populations with different age structures. Recently, the National Center for Health Statistics recommended that all rates calculated for deaths occurring during 1999 and thereafter be age-adjusted to the 2000 US standard population. Changing from previously used standards, such as the 1970 US standard, to the 2000 US standard will affect the magnitude of age-adjusted rates. Rates adjusted to the 2000 US standard will be ***higher*** in magnitude *(see figure below)*.

In order to begin the transition to the new standard population, this report displays rates calculated to both the 1970 US standard *(Tables 2, 3 and 4, pages 14-17, 19-21 and 24)* and the 2000 US standard *(Statistical Appendix Tables 2A, 3A and 4A, pages 37-45)*. The reader ***must use caution*** when comparing the rates presented in this report with rates from other data sources. It is important to note the standard population used for age-adjustment in order to make accurate comparison of rates from a variety of sources. Rates calculated using different standard populations are ***not directly comparable.***



INTRODUCTION

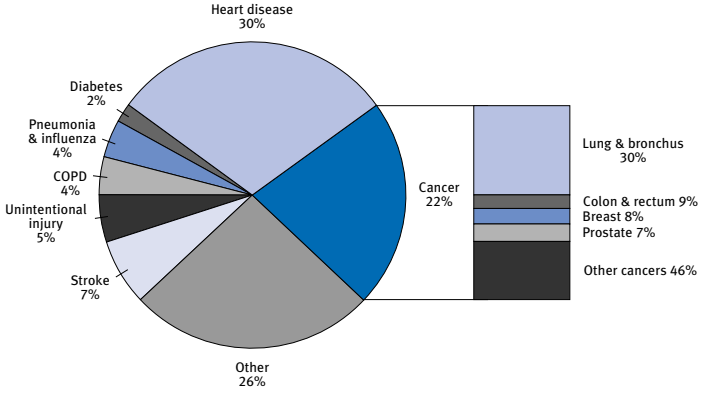
The Challenge

Cancer is the second leading cause of death in Georgia, accounting for 22% of all deaths between 1994-1998 *(Figure 1)*. In 2000, an estimated 13,700 Georgians will die of cancer and 32,920 Georgians are expected to be diagnosed with this disease. The most common forms of cancer, lung, colorectal, breast and prostate, will account for 55% of all cancer diagnoses and 54% of all cancer deaths.

Hope and Progress

Currently, there is no universal cure for all types of cancer. However, there is hope in reducing the number of lives lost to this disease. New and better treatments for cancer continue to be developed and survival rates for cancer are improving. Many cancers can be detected early, increasing the chances of successful treatment and survival. More significantly, the risk of death from cancer can be reduced by adopting a healthy lifestyle. About 30% of all cancer deaths could be prevented by not smoking and another one-third could be prevented by adopting healthy diet and exercise practices.

Figure 1.
Leading Causes of Death in Georgia, 1994-1998



Answers

This report was written to assist health professionals, volunteers and staff of cancer control organizations, community groups and others who are working to reduce the burden of cancer throughout Georgia. Data provided at the state and local level can be used to measure outcomes and effectiveness of cancer control programs, develop plans for future programs, develop funding proposals, and coordinate effective collaborations.

This report describes the burden of cancer in Georgia and includes: 1) the 2000 estimated number of new cancer cases and deaths for Georgia and each county; 2) the number of cases and incidence rates for Georgia and each county; 3) the number of cancer deaths and mortality rates for Georgia and each county; 4) the prevalence of cancer screening in Georgia; and 5) the prevalence of cancer risk factors in Georgia.

GEORGIA DEMOGRAPHICS

During the 1990's, Georgia experienced substantial population growth. Between 1990-1998, the population of Georgia increased 18% compared to only 9% for the United States.[1] Approximately half of Georgia's 7.6 million residents live in Metropolitan Atlanta.[1, 2]

In 1997, 70% of Georgians were white, 28% black, and 2% of other races; 3% of the population was of Hispanic origin.[3] Between 2000-2015, the Hispanic population of Georgia is expected to increase by 48%. During these same years, the black population is expected to increase by 29% and will comprise approximately one-third of the total population of Georgia.[4]

Like the United States, Georgia's population is aging. Between 2000-2015, the number of Georgians over the age of 65 will increase by 51% to 1.2 million.[4] Since the risk of developing cancer increases with age, this aging of the population will increase the burden of cancer in Georgia.

BASIC CANCER INFORMATION

What Is Cancer?

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the growth is not controlled, it can result in death. Cancer is caused by both internal and external factors. Many cancers can be prevented by lifestyle changes and many can be cured if detected and treated promptly.

How Many New Cases are Expected to Occur This Year?

In 2000, about 32,920 Georgians will be diagnosed with cancer — about 90 per day *(Table 1, page 7)*. In the United States, 1.2 million cases of cancer are expected to occur in 2000. These estimates do not include non-melanoma skin cancer and carcinoma in situ for sites other than urinary bladder. Based on national estimates, more than 39,000 cases of non-melanoma skin cancer are expected to be diagnosed in Georgia this year.

How Many People are Expected to Die of Cancer This Year?

In 2000, about 13,700 Georgians are expected to die from cancer *(Table 1, page 7)*. Cancer is the second leading cause of death in Georgia, with approximately 1 out of every 4 deaths from cancer. In the United States, 552,200 cancer deaths are expected to occur in 2000.

Can Cancer Be Prevented?

Many cancers can be prevented. Nearly two-thirds of cancer deaths can be linked to modifiable risk factors such as tobacco use, diet, obesity, and lack of exercise. In addition, many skin cancers could be prevented by protection from the sun's rays. Regular screening examinations by a health care provider can result in early detection of many cancers, when treatment is more likely to be successful.

Who Is at Risk of Developing Cancer?

Everyone. Since the occurrence of cancer increases as individuals age, most cases affect adults who are middle-aged or older. Nearly 72% of all cancers in Georgia are diagnosed at ages 55 and older. In the United States, males have a 1 in 2 lifetime risk of developing cancer, and for females the lifetime risk is 1 in 3. Lifetime risk refers to the probability that an individual, over the course of a lifetime, will develop cancer.

How is Cancer Treated?

Cancer is commonly treated by surgery, radiation, chemotherapy, hormones, and immunotherapy (agents to stimulate the body's defenses) or a combination of two or more of these methods.

What Are the Costs of Cancer?

The financial costs of cancer are great both to the individual and to society as a whole. Using estimates from the National Institutes of Health, the overall annual costs for cancer in Georgia is approximately $2.9 billion; $1.0 billion for direct medical costs (total of all health expenditures), $300 million for indirect morbidity costs (cost of lost productivity due to illness), and $1.6 billion for indirect mortality costs (cost of lost productivity due to premature death). Treatment of breast, lung, and prostate cancers account for over half of the direct medical costs.

Causes of Cancer in the United States

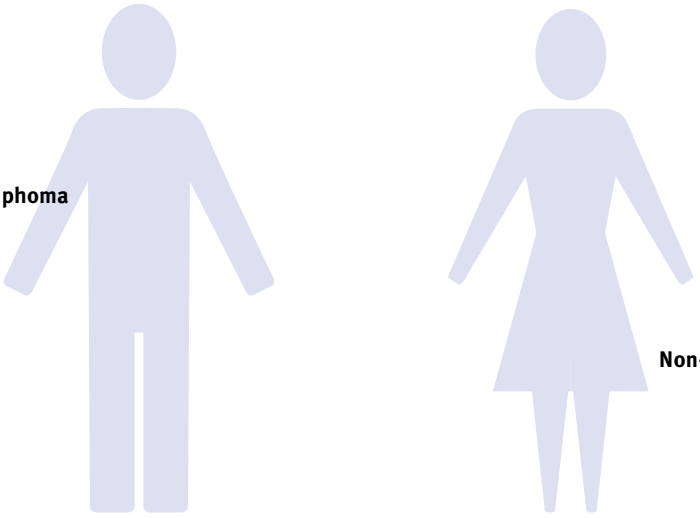
Estimated percentage of total cancer deaths attributable to established causes of cancer

Risk Factor	*Percentage*
Tobacco	30%
Adult diet/obesity	30%
Sedentary lifestyle	5%
Occupational factors	5%
Family history of cancer	5%
Viruses/other biologic agents	5%
Perinatal factors/growth	5%
Reproductive factors	3%
Alcohol	3%
Socioeconomic status	3%
Environmental pollution	2%
Ionizing/ultraviolet radiation	2%
Prescription drugs/medical procedures	1%
Salt/other food additives/contaminants	1%

Source: Cancer Causes & Control, Harvard Report on Cancer Prevention, 1996

CANCER IN GEORGIA IN 2000

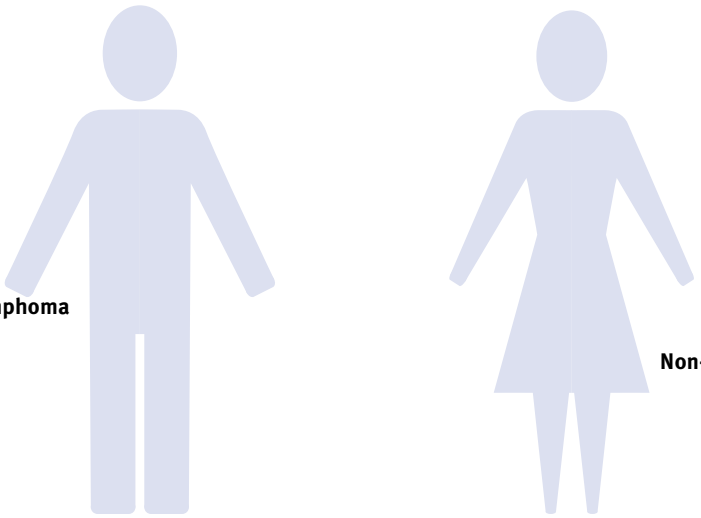
Figure 2. Cancer Cases in Georgia, 2000 Estimates



Male		Female	
Prostate	5,030	Breast	4,650
Lung & bronchus	3,480	Lung & bronchus	1,810
Colon & rectum	1,640	Colon & rectum	1,640
Non-Hodgkin's lymphoma	930	Uterine corpus	840
Melanoma	810	Ovary	780
Urinary bladder	720	Melanoma	670
Oral cavity	520	Non-Hodgkin's lymphoma	580
Kidney	450	Uterine cervix	550
Leukemia	440	Leukemia	350
Pancreas	290	Pancreas	270
ALL SITES*	17,760	ALL SITES*	15,160

* Excludes non-melanoma skin cancer and carcinoma in situ except urinary bladder.

Figure 3. Cancer Deaths in Georgia, 2000 Estimates



Male		Female	
Lung & bronchus	2,770	Lung & bronchus	1,360
Prostate	910	Breast	1,100
Colon & rectum	610	Colon & rectum	650
Pancreas	310	Pancreas	330
Leukemia	280	Ovary	330
Non-Hodgkin's lymphoma	240	Leukemia	220
Esophagus	210	Non-Hodgkin's lymphoma	220
Stomach	190	Brain	140
Brain	170	Uterine cervix	130
Liver	150	Stomach	130
ALL SITES*	7,490	ALL SITES*	6,210

* Excludes non-melanoma skin cancer and carcinoma in situ except urinary bladder.

Table 1. Estimated New Cancer Cases and Cancer Deaths by County, Georgia, 2000

County	ESTIMATED NEW CASES					ESTIMATED DEATHS				
	All sites	Female breast	Colon & rectum	Lung & bronchus	Prostate	All sites	Female breast	Colon & rectum	Lung & bronchus	Prostate
Georgia	**32,920**	**4,650**	**3,280**	**5,290**	**5,030**	**13,700**	**1,100**	**1,260**	**4,130**	**910**
Appling	90	10	10	20	20	40	†	10	10	†
Atkinson	30	†	†	10	10	10	†	†	†	†
Bacon	60	10	10	10	10	30	†	†	10	†
Baker	20	10	†	†	†	10	†	†	†	†
Baldwin	190	30	20	30	30	80	10	10	20	10
Banks	50	10	†	10	10	20	†	†	10	†
Barrow	150	20	10	30	10	70	†	10	20	†
Bartow	320	40	40	60	50	140	10	10	50	10
Ben Hill	80	10	10	10	10	40	†	†	10	†
Berrien	80	10	10	20	10	30	†	†	10	†
Bibb	730	90	90	120	130	320	30	30	100	20
Bleckley	60	†	10	10	10	30	†	†	10	†
Brantley	70	†	†	20	†	30	†	†	10	†
Brooks	80	10	10	10	20	40	†	†	10	†
Bryan	70	10	10	10	10	30	†	†	10	†
Bulloch	190	30	20	30	40	80	10	10	20	10
Burke	100	20	10	10	10	40	†	10	10	†
Butts	90	10	10	10	10	40	†	†	10	†
Calhoun	30	†	†	†	†	20	†	†	10	†
Camden	100	10	10	20	20	40	†	†	10	10
Candler	50	†	10	10	†	20	†	†	10	†
Carroll	360	50	40	60	40	140	10	20	50	10
Catoosa	250	30	30	50	20	110	10	10	40	10
Charlton	50	10	10	10	10	20	†	†	10	†
Chatham	1,160	150	130	190	160	510	40	50	150	30
Chattahoochee	30	†	†	†	†	10	†	†	†	†
Chattooga	140	20	10	30	10	60	10	†	20	†
Cherokee	420	60	50	60	40	160	10	20	50	10
Clarke	290	50	30	50	70	130	10	10	40	10
Clay	20	†	†	†	†	10	†	†	†	†
Clayton	860	110	70	150	110	310	20	30	110	20
Clinch	30	†	10	†	10	10	†	†	†	†
Cobb	2,060	320	190	310	260	800	80	70	230	40
Coffee	150	20	10	20	†	60	10	10	20	†
Colquitt	190	20	20	30	50	90	10	10	30	10
Columbia	310	50	20	50	50	130	10	10	40	10
Cook	80	10	10	10	10	30	†	†	10	†
Coweta	270	40	20	50	50	120	10	10	40	10
Crawford	40	†	†	10	10	20	†	†	10	†
Crisp	140	20	10	30	20	60	10	†	20	10
Dade	60	10	†	10	10	30	†	†	10	†
Dawson	60	10	10	10	10	30	†	†	10	†
Decatur	130	20	20	20	20	70	†	10	20	†
DeKalb	2,580	480	260	350	460	1,040	100	100	280	70
Dodge	110	10	10	20	10	40	†	†	10	†
Dooly	60	10	10	10	10	30	†	†	†	†
Dougherty	440	60	50	80	80	200	20	20	60	10
Douglas	360	50	30	60	50	140	10	10	50	10
Early	70	10	10	10	10	30	†	†	10	†
Echols	10	†	†	†	†	10	†	†	†	†
Effingham	130	20	10	20	10	40	†	†	20	†
Elbert	120	20	10	20	30	50	10	10	20	†

† Estimate is fewer than 5 cases or deaths. Cases or deaths between 5 and 9 were rounded to 10.
Note: County estimates may not add to Georgia total due to rounding.

Table 1. Estimated New Cancer Cases and Cancer Deaths by County, Georgia, 2000 *(continued)*

County	ESTIMATED NEW CASES					ESTIMATED DEATHS				
	All sites	Female breast	Colon & rectum	Lung & bronchus	Prostate	All sites	Female breast	Colon & rectum	Lung & bronchus	Prostate
Emanuel	120	10	20	20	20	50	†	10	10	10
Evans	50	10	†	10	10	20	†	†	10	†
Fannin	120	10	10	30	20	50	†	10	20	†
Fayette	350	50	50	50	30	150	20	10	40	10
Floyd	490	60	50	90	60	230	20	20	70	10
Forsyth	180	30	20	30	30	80	10	10	30	†
Franklin	100	10	10	20	10	50	†	†	10	†
Fulton	3,260	530	330	430	600	1,290	130	130	330	100
Gilmer	100	10	10	20	10	40	†	†	20	†
Glascock	10	†	†	†	†	10	†	†	†	†
Glynn	380	50	30	70	90	170	10	10	60	10
Gordon	200	20	20	40	20	90	10	10	30	10
Grady	120	20	10	20	30	50	†	†	20	†
Greene	70	10	10	10	20	30	†	†	10	†
Gwinnett	1,460	250	140	190	220	540	50	50	160	30
Habersham	150	20	20	30	10	60	10	10	20	†
Hall	480	70	50	80	80	210	20	20	60	10
Hancock	60	10	10	10	20	20	†	†	†	†
Haralson	130	20	10	30	20	50	†	10	20	†
Harris	110	10	10	20	30	50	†	10	10	†
Hart	110	20	10	20	20	50	10	†	20	10
Heard	40	10	†	10	10	20	†	†	10	†
Henry	310	50	30	50	30	120	10	10	40	10
Houston	430	70	40	80	70	180	20	20	60	10
Irwin	60	10	10	10	10	30	†	†	10	†
Jackson	160	20	20	30	20	70	10	10	20	10
Jasper	60	10	10	10	10	20	†	†	10	†
Jeff Davis	80	10	10	20	10	40	†	†	10	†
Jefferson	110	20	10	20	20	50	10	10	10	†
Jenkins	50	10	10	10	10	20	†	†	10	†
Johnson	50	†	10	10	†	20	†	†	10	†
Jones	100	20	10	20	20	40	†	†	20	†
Lamar	80	10	10	10	10	30	†	†	10	†
Lanier	30	†	†	10	10	10	†	†	†	†
Laurens	230	20	20	40	60	100	10	10	30	10
Lee	90	10	10	20	10	30	†	†	10	†
Liberty	160	30	10	20	40	60	10	†	20	10
Lincoln	50	10	10	10	10	20	†	†	10	†
Long	30	†	10	†	10	10	†	†	†	†
Lowndes	360	40	30	60	60	150	10	10	50	10
Lumpkin	80	10	10	20	10	30	†	†	10	†
McDuffie	110	20	10	20	10	40	†	†	10	†
McIntosh	80	10	10	10	20	30	†	†	10	†
Macon	70	10	10	10	20	30	†	†	10	†
Madison	120	20	10	20	10	50	†	†	20	†
Marion	20	†	†	10	10	10	†	†	10	†
Meriwether	120	10	10	20	20	50	†	†	10	10
Miller	30	10	†	†	10	20	†	†	†	†
Mitchell	110	10	10	20	20	50	†	†	20	†
Monroe	100	10	10	20	10	40	†	†	20	†
Montgomery	40	†	†	10	10	20	†	†	10	†
Morgan	70	10	10	10	10	30	†	†	10	†
Murray	130	10	10	30	10	50	†	†	20	†

† Estimate is fewer than 5 cases or deaths. Cases or deaths between 5 and 9 were rounded to 10.
Note: County estimates may not add to Georgia total due to rounding.

Table 1. Estimated New Cancer Cases and Cancer Deaths by County, Georgia, 2000 *(continued)*

County	ESTIMATED NEW CASES					ESTIMATED DEATHS				
	All sites	Female breast	Colon & rectum	Lung & bronchus	Prostate	All sites	Female breast	Colon & rectum	Lung & bronchus	Prostate
Muscogee	840	120	90	140	120	370	30	40	110	30
Newton	250	30	20	40	30	100	10	10	30	10
Oconee	80	10	10	10	10	30	†	†	10	†
Oglethorpe	50	10	†	10	10	20	†	†	10	†
Paulding	220	30	20	40	20	80	10	10	30	10
Peach	100	20	10	20	10	40	†	†	10	†
Pickens	90	10	10	20	20	40	†	†	20	†
Pierce	90	10	10	20	10	40	†	†	10	†
Pike	60	†	†	10	10	30	†	†	10	†
Polk	210	30	20	40	30	90	10	10	30	10
Pulaski	50	10	10	10	10	20	†	†	10	†
Putnam	100	†	10	20	30	40	†	†	10	†
Quitman	20	†	†	†	†	10	†	†	†	†
Rabun	90	10	10	10	10	40	†	†	10	†
Randolph	50	10	10	10	10	20	†	†	10	†
Richmond	1,010	130	100	160	120	420	30	40	120	20
Rockdale	280	50	30	50	30	110	10	10	30	†
Schley	30	†	†	†	10	10	†	†	10	†
Screven	80	10	10	10	20	30	†	†	10	†
Seminole	50	10	10	10	10	20	†	†	10	†
Spalding	260	40	20	40	30	120	10	10	40	10
Stephens	140	20	10	20	20	60	10	10	20	†
Stewart	40	10	†	10	20	10	†	†	10	†
Sumter	170	30	10	30	20	70	10	†	20	†
Talbot	40	10	†	10	10	20	†	†	†	†
Taliaferro	10	†	†	†	†	10	†	†	†	†
Tattnall	100	10	10	20	10	40	†	†	10	†
Taylor	40	†	†	10	10	20	†	†	10	†
Telfair	80	10	10	20	10	30	†	†	10	†
Terrell	70	10	†	10	10	30	†	†	10	†
Thomas	220	20	20	40	30	90	10	10	30	10
Tift	170	30	10	30	30	80	10	10	20	†
Toombs	150	10	10	30	10	60	†	10	20	†
Towns	60	10	10	10	10	30	†	†	10	†
Treutlen	40	†	†	10	†	10	†	†	†	†
Troup	320	40	30	60	60	140	10	10	40	10
Turner	40	†	†	10	10	20	†	†	†	†
Twiggs	50	10	10	10	10	20	†	†	10	†
Union	100	10	10	20	10	40	†	†	10	†
Upson	140	30	10	20	30	60	10	10	20	10
Walker	350	40	30	70	40	150	10	10	50	10
Walton	200	20	20	40	30	90	10	10	30	10
Ware	200	20	30	40	30	90	10	10	30	10
Warren	40	10	10	10	†	10	†	†	†	†
Washington	120	10	10	20	30	40	†	†	10	10
Wayne	120	20	10	20	10	50	†	†	20	†
Webster	20	†	†	†	†	10	†	†	†	†
Wheeler	30	†	†	10	10	10	†	†	10	†
White	70	10	10	10	10	30	†	†	10	†
Whitfield	370	50	30	70	60	170	10	10	60	10
Wilcox	40	†	10	10	†	20	†	†	†	†
Wilkes	80	10	10	10	20	30	†	†	10	†
Wilkinson	40	10	10	10	10	20	†	†	10	†
Worth	90	10	20	10	10	40	†	10	10	†

† Estimate is fewer than 5 cases or deaths. Cases or deaths between 5 and 9 were rounded to 10.
Note: County estimates may not add to Georgia total due to rounding.

CANCER MORTALITY

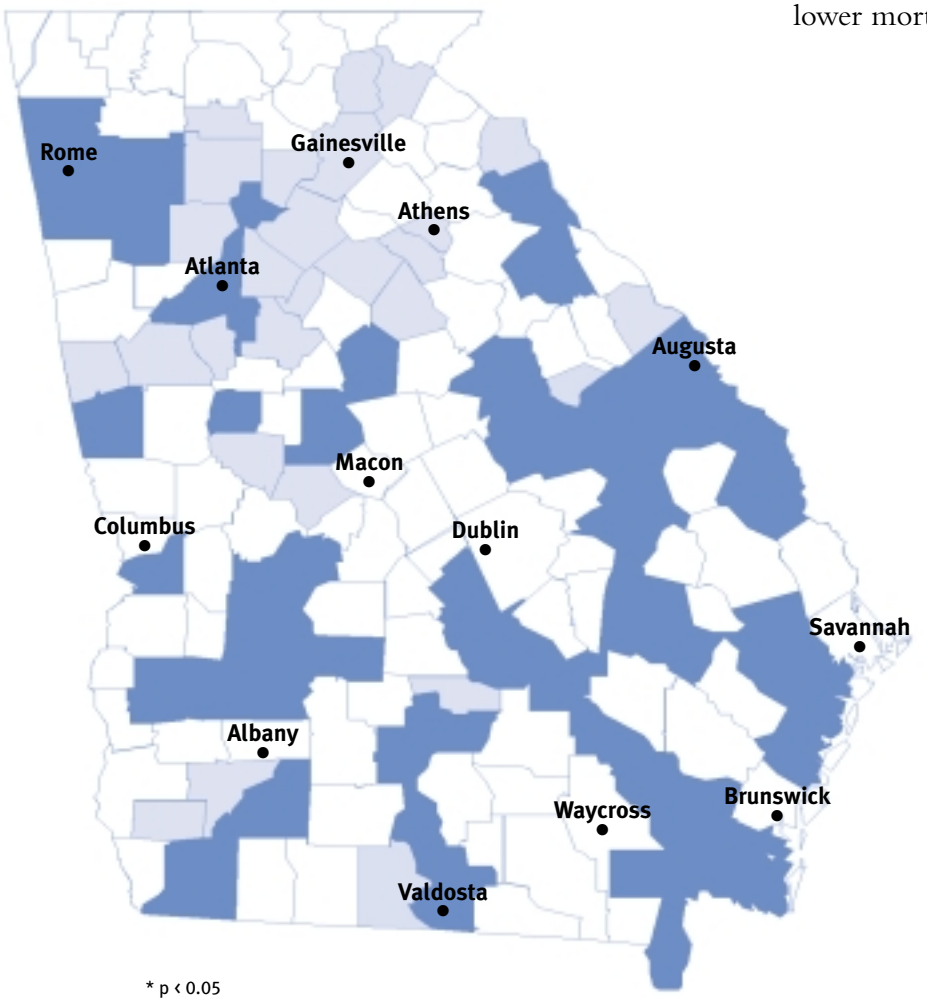
Cancer Mortality in Georgia

Between 1994-1998, there was an average of 12,714 cancer deaths in Georgia per year; 6,818 among males and 5,896 among females *(Table 2, page 14)*. Four cancer sites — lung, colorectal, breast and prostate accounted for 54% of cancer deaths in Georgia. The burden of these cancers can be significantly reduced by broadening the use of mammography, colorectal screening, and other early detection examinations and by preventing or stopping tobacco use, improving diet, and increasing physical activity.

Males in Georgia are about 70% more likely to die of cancer than females. Lung cancer is the leading cause of cancer death among Georgia males and females and accounts for 30% of all cancer deaths each year. Among males, prostate and colorectal cancer are the second and third leading causes of cancer death; while breast and colorectal cancer rank second and third among females.

There are a large number of counties in rural south and east Georgia where mortality rates are significantly higher than the state average. All counties in the Metropolitan Atlanta area, with the exception of Fulton County, have significantly lower mortality rates than the state average.

Figure 4. Counties with Significantly* High or Low Cancer Mortality Rates, 1994-1998



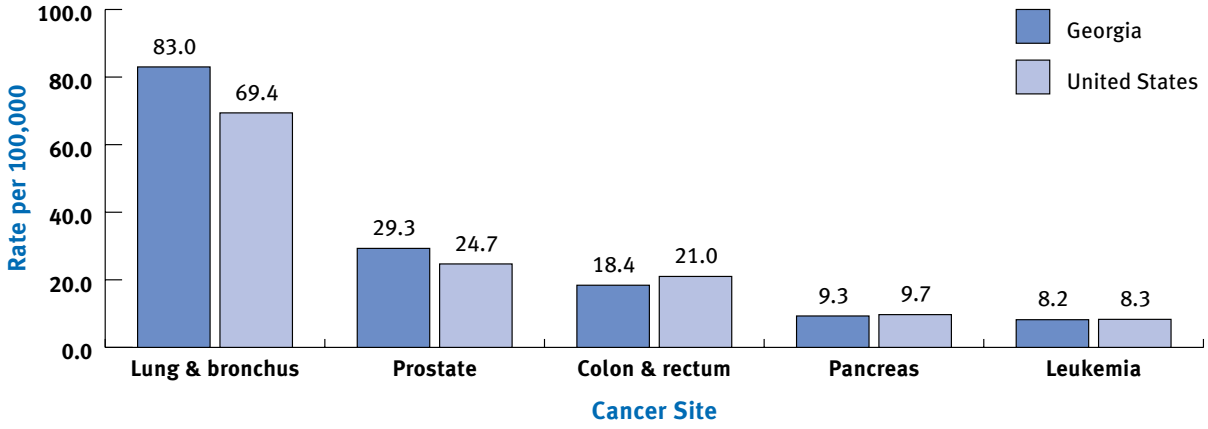
* $p < 0.05$

Counties with rates significantly higher than state rate
No significant difference
Counties with rates significantly lower than state rate

Cancer Mortality in Georgia and the United States

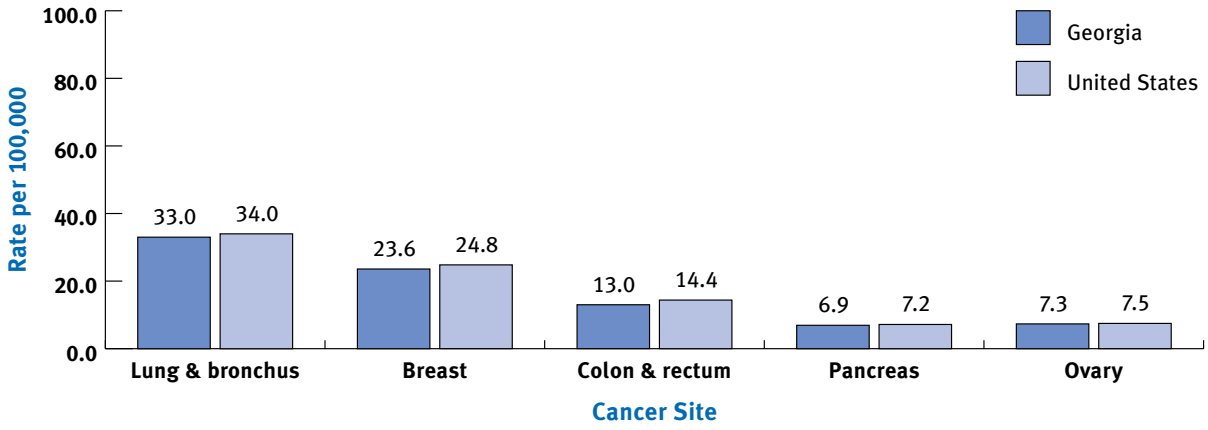
- Lung and prostate cancer mortality rates are higher among Georgia males compared to US males by 20% and 19%, respectively *(Figure 5)*.
- Pancreatic cancer and leukemia mortality rates are slightly lower or the same among Georgia males compared to US males.
- Colorectal cancer mortality rates are 12% lower among Georgia males compared to US males and 10% lower among Georgia females compared to US females *(Figures 5 and 6)*.
- Lung, breast, pancreatic and ovarian cancer mortality rates are slightly lower or the same among Georgia females compared to US females *(Figure 6)*.

Figure 5. Cancer Mortality Rates* in Georgia (1994-1998) and the United States (1993-1997), Males



* Average annual rate per 100,000, age-adjusted to the 1970 US standard population.

Figure 6. Cancer Mortality Rates* in Georgia (1994-1998) and the United States (1993-1997), Females



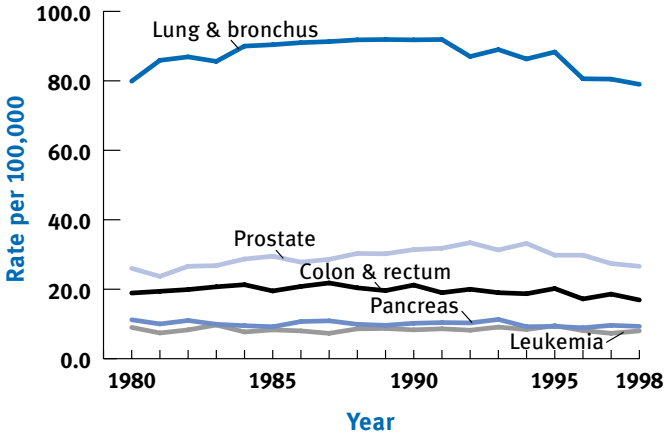
* Average annual rate per 100,000, age-adjusted to the 1970 US standard population.

Trends in Cancer Mortality in Georgia

Between 1991-1998, overall cancer mortality rates among Georgia males declined 9%.

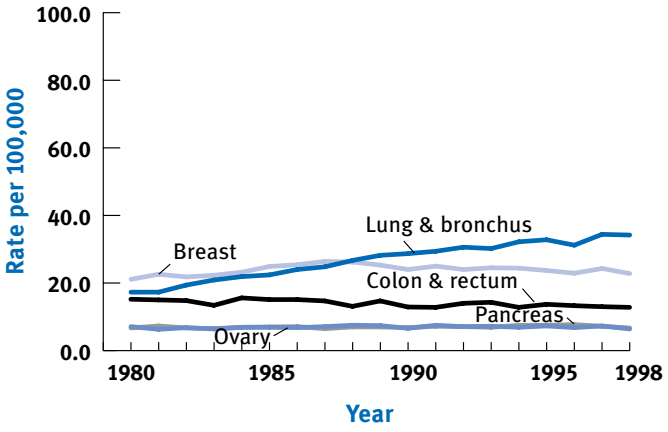
- Lung cancer is the leading cause of cancer deaths among Georgia males; mortality rates are 2 times higher than rates of any other cancer. Since 1991, mortality rates from lung cancer have declined 14% *(Figure 7)*.
- Prostate cancer is the second leading cause of cancer death among Georgia males. During 1980-1992, prostate cancer mortality rates in Georgia increased 29% followed by a 20% decline between 1992-1998.
- Colorectal cancer is the third leading cause of cancer death among Georgia males. During 1980-1990, colorectal cancer mortality rates increased 12% followed by a 20% decline between 1990-1998.
- Cancer of the pancreas and leukemia are the fourth and fifth leading causes of cancer death among Georgia males; mortality rates for these cancers have been relatively steady since 1980.

Figure 7. Trends in Cancer Mortality Rates* in Georgia, Males, 1980-1998



* Rate per 100,000, age-adjusted to the 1970 US standard population.

Figure 8. Trends in Cancer Mortality Rates* in Georgia, Females, 1980-1998



* Rate per 100,000, age-adjusted to the 1970 US standard population.

Unlike males, overall cancer mortality rates among females have been steadily increasing over the past 2 decades; however, the increase appears to be slowing in recent years.

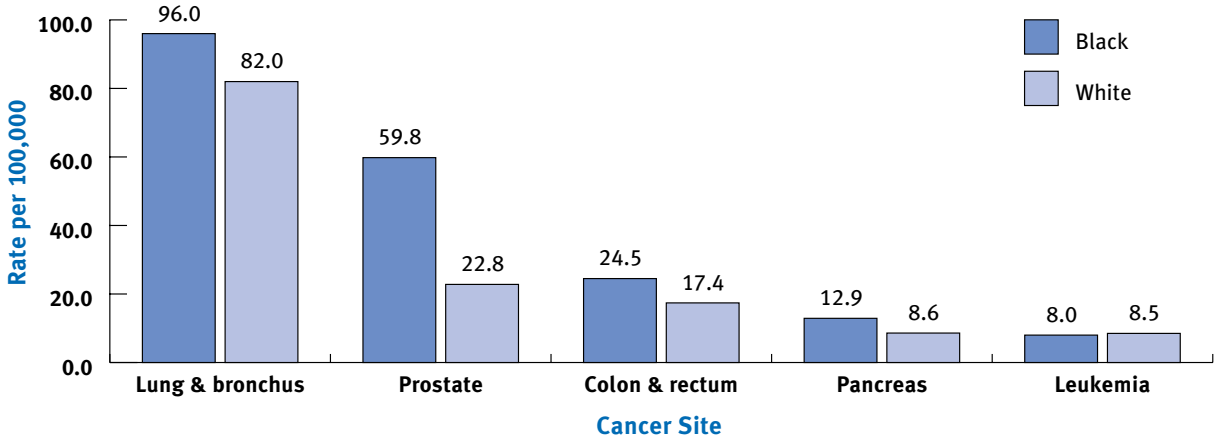
- Lung cancer is the leading cause of cancer death among Georgia females; the mortality rate has doubled since 1980 *(Figure 8)*. Since 1988, more females have died each year of lung cancer than breast cancer, which, for over 40 years, had been the major cause of cancer death among females.
- Breast cancer is the second leading cause of cancer death among Georgia females. During 1980-1987, breast cancer mortality rates in Georgia increased 25% followed by a 14% decline between 1987-1998.
- Colorectal cancer is the third leading cause of cancer death among Georgia females; since 1980, colorectal cancer mortality rates have declined 16%.
- Cancers of the pancreas and ovary are the fourth and fifth leading causes of cancer death among Georgia females; mortality rates for these cancers have been relatively steady since 1980.

Racial Differences in Cancer Mortality in Georgia

Blacks in Georgia are 27% more likely to die of cancer than whites. During 1994–1998, overall cancer mortality rates were 205.1 per 100,000 among blacks and 161.1 per 100,000 among whites.

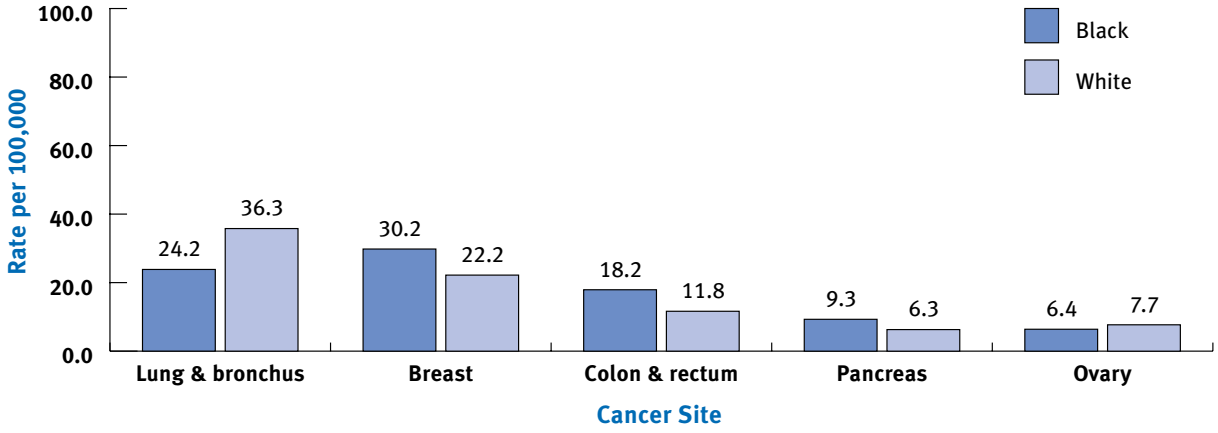
- Lung, prostate, colorectal, and pancreatic cancer mortality rates are higher (17%, 162%, 41%, and 50% respectively) among black males in Georgia compared to white males *(Figure 9)*.
- Black males are more than twice as likely to die of prostate cancer than white males.
- Breast, colorectal, and pancreatic cancer mortality rates are higher (36%, 54%, and 48% respectively) among black females in Georgia compared to white females *(Figure 10)*.
- Lung and ovarian cancer mortality rates are lower (33% and 17% respectively) among black females in Georgia compared to white females.

Figure 9. Cancer Mortality Rates* in Georgia by Race, Males, 1994-1998



* Average annual rate per 100,000, age-adjusted to the 1970 US standard population.
Note: These rates are for non-Hispanic white and black males.

Figure 10. Cancer Mortality Rates* in Georgia by Race, Females, 1994-1998



* Average annual rate per 100,000, age-adjusted to the 1970 US standard population.
Note: These rates are for non-Hispanic white and black females.

Table 2. Average Annual Number of Cancer Deaths and Mortality Rates by County, Georgia, 1994-1998

	ALL SITES				BREAST		COLON & RECTUM				LUNG & BRONCHUS				PROSTATE	
	Male		Female		Female		Male		Female		Male		Female		Male	
County	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
Georgia	**6,818**	**227.3**	**5,896**	**135.5**	**1,014**	**23.6**	**553**	**18.4**	**599**	**13.0**	**2,478**	**83.0**	**1,353**	**33.0**	**830**	**29.3**
Appling	22	277.7	15	125.9	2	20.1	<2	†	3	21.5	9	118.9	3	23.4	4	51.5
Atkinson	6	196.7	7	175.3	<2	†	<2	†	<2	†	3	96.2	<2	†	<2	†
Bacon	13	259.1	12	168.1	<2	†	<2	†	<2	†	5	100.8	<2	†	<2	†
Baker	3	156.6	4	136.3	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Baldwin	43	224.4	33	132.4	6	26.7	5	23.0	3	10.4	17	86.5	9	36.9	6	30.0
Banks	12	224.7	8	114.4	<2	†	<2	†	<2	†	5	84.5	2	33.4	<2	†
Barrow	34	229.8	26	122.9	4	16.7	2	15.2	<2	†	14	96.8	8	41.5	<2	†
Bartow	72	257.4	50	129.7	9	22.2	6	21.8	6	15.0	27	95.8	13	35.5	8	34.0
Ben Hill	19	223.3	16	116.8	2	20.1	2	27.7	<2	†	8	98.4	3	25.7	2	23.3
Berrien	17	220.0	15	137.6	2	21.5	<2	†	2	17.1	8	108.1	4	31.4	2	31.0
Bibb	178	248.2	150	130.6	24	21.9	16	23.0	17	13.6	67	93.1	38	34.1	23	31.4
Bleckley	15	274.1	11	122.1	<2	†	<2	†	<2	†	7	123.0	2	25.4	<2	†
Brantley	13	219.6	13	177.4	<2	†	<2	†	<2	†	6	110.3	4	61.3	<2	†
Brooks	20	229.9	15	114.0	<2	†	2	23.6	2	14.8	7	84.9	3	23.1	3	35.8
Bryan	18	240.6	14	148.3	<2	†	<2	†	<2	†	7	86.9	4	48.9	2	33.3
Bulloch	42	218.8	38	140.1	8	30.4	4	18.3	4	12.1	13	69.0	6	23.8	6	34.5
Burke	22	253.6	20	152.8	4	35.9	<2	†	2	15.3	6	67.2	4	29.0	4	41.2
Butts	17	211.7	16	156.2	2	26.0	<2	†	<2	†	6	72.8	4	40.1	<2	†
Calhoun	7	269.8	6	115.0	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Camden	21	226.7	19	149.6	3	20.6	<2	†	<2	†	6	68.0	6	49.2	4	44.8
Candler	12	256.3	9	134.0	<2	†	<2	†	<2	†	3	75.7	2	33.9	<2	†
Carroll	75	228.0	65	139.8	11	22.6	8	24.1	7	15.6	30	90.2	14	33.9	7	23.5
Catoosa	52	219.1	41	127.8	6	19.7	5	22.3	3	9.0	22	91.4	13	42.0	3	15.6
Charlton	10	251.8	11	204.4	<2	†	<2	†	<2	†	3	79.2	2	37.2	<2	†
Chatham	248	224.8	229	142.0	36	23.7	21	19.3	26	15.5	88	80.3	55	35.3	32	28.9
Chattahoochee	4	388.2	3	176.0	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Chattooga	31	240.8	30	156.1	4	25.8	2	15.2	3	11.6	14	107.9	8	42.8	3	19.8
Cherokee	83	215.3	64	121.3	11	19.2	8	19.6	7	12.7	26	71.2	14	29.2	7	22.0
Clarke	63	207.4	55	117.5	11	24.5	5	17.7	4	7.4	23	76.7	13	30.4	10	32.4
Clay	5	225.9	5	157.6	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Clayton	136	222.5	126	148.2	18	20.4	11	18.6	10	10.7	53	86.2	37	46.1	12	24.3
Clinch	8	259.1	5	124.2	<2	†	<2	†	<2	†	2	78.9	<2	†	<2	†
Cobb	349	211.4	338	140.7	58	23.2	29	17.9	33	13.8	122	73.5	80	35.4	37	26.9
Coffee	31	222.0	25	127.4	4	22.4	3	22.4	<2	†	12	86.7	5	29.2	<2	†
Colquitt	45	222.1	40	136.9	5	17.5	3	14.4	6	17.5	17	85.0	7	26.8	9	41.4
Columbia	56	198.2	54	141.2	9	21.1	3	11.0	4	10.6	21	68.4	14	38.0	6	25.1
Cook	21	291.7	14	128.8	3	27.2	<2	†	<2	†	8	107.1	3	30.2	2	28.9
Coweta	66	231.8	52	125.6	10	21.9	6	21.7	3	7.1	23	79.1	13	33.2	10	40.4
Crawford	9	195.1	6	114.3	<2	†	<2	†	<2	†	3	68.0	<2	†	<2	†

* Average annual rate per 100,000, age-adjusted to the 1970 US standard population.

† Rate not calculated for fewer than 2 average deaths.

Table 2. Average Annual Number of Cancer Deaths and Mortality Rates by County, Georgia, 1994-1998 *(continued)*

	ALL SITES				BREAST		COLON & RECTUM				LUNG & BRONCHUS				PROSTATE	
	Male		Female		Female		Male		Female		Male		Female		Male	
County	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
Crisp	32	326.5	22	130.9	4	25.5	<2	†	<2	†	15	149.9	5	30.6	4	44.0
Dade	15	194.4	12	128.4	<2	†	<2	†	<2	†	6	79.6	3	38.0	3	36.8
Dawson	13	257.3	9	129.3	2	34.3	<2	†	<2	†	5	89.7	2	34.5	<2	†
Decatur	32	248.8	28	150.4	5	29.2	3	23.8	2	9.5	12	96.7	6	35.5	4	30.6
DeKalb	433	208.0	421	134.6	89	27.8	36	17.4	46	14.0	134	65.5	89	30.4	58	31.4
Dodge	26	273.1	21	153.1	3	25.5	2	23.4	2	16.8	10	107.3	4	27.9	3	27.9
Dooly	12	243.2	12	145.3	3	36.3	<2	†	<2	†	4	80.0	<2	†	<2	†
Dougherty	101	251.8	81	132.6	14	23.4	10	24.3	8	11.1	39	95.5	19	34.0	15	38.9
Douglas	68	228.6	55	138.5	10	24.1	4	13.3	4	9.6	24	83.6	14	38.1	6	22.7
Early	17	263.5	15	139.1	4	33.0	<2	†	2	14.0	6	87.4	3	25.0	3	41.4
Echols	3	243.1	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Effingham	28	222.2	22	132.4	3	21.0	<2	†	2	14.5	13	98.4	4	27.7	2	23.1
Elbert	29	266.1	23	142.4	4	26.5	2	21.1	3	15.1	10	95.9	5	32.0	2	22.7
Emanuel	33	302.0	20	120.2	3	21.1	3	31.2	2	10.7	10	94.1	5	28.7	3	29.1
Evans	12	249.4	9	129.2	<2	†	<2	†	<2	†	5	101.2	<2	†	2	41.2
Fannin	29	208.2	22	132.2	3	20.6	2	18.0	3	16.0	12	88.3	7	45.2	3	19.6
Fayette	55	188.5	54	132.0	8	19.2	6	19.9	6	14.0	18	60.3	13	31.9	7	28.5
Floyd	111	244.8	96	141.8	15	23.5	9	19.0	9	11.8	43	94.4	23	36.8	10	22.0
Forsyth	41	156.1	38	103.7	6	16.6	<2	†	5	15.0	16	58.2	8	22.7	5	22.3
Franklin	23	203.4	20	132.7	4	22.8	<2	†	2	13.8	8	71.3	3	20.9	3	27.3
Fulton	627	235.0	636	149.4	125	29.4	55	20.3	72	15.7	190	72.3	134	33.5	89	35.1
Gilmer	24	230.3	20	145.9	2	16.4	2	20.1	2	12.4	9	86.7	7	51.9	3	25.1
Glascock	4	207.8	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Glynn	78	205.9	73	142.4	11	23.7	5	13.2	7	12.6	27	70.8	21	41.1	9	25.3
Gordon	44	246.0	32	128.5	5	20.3	3	17.6	3	11.5	16	90.8	9	37.2	5	30.6
Grady	32	269.5	19	117.9	4	24.4	2	15.8	<2	†	13	115.7	3	22.0	5	38.8
Greene	16	242.6	12	133.4	3	34.7	<2	†	2	20.4	6	89.5	2	22.8	2	35.4
Gwinnett	233	186.3	227	129.9	44	23.2	22	17.8	23	13.5	72	59.3	52	31.4	23	22.4
Habersham	34	191.8	29	122.3	6	26.5	3	17.0	4	13.5	14	80.4	6	25.3	3	16.6
Hall	103	205.8	84	122.1	15	22.1	10	20.1	8	10.5	39	76.7	21	33.0	12	24.6
Hancock	13	292.6	11	154.0	2	33.2	<2	†	<2	†	3	77.5	<2	†	3	65.6
Haralson	29	238.1	24	133.3	3	19.5	<2	†	3	14.2	13	105.1	5	35.6	3	25.1
Harris	28	239.7	18	122.8	4	24.8	2	21.3	<2	†	8	64.3	4	27.4	5	41.2
Hart	27	209.8	20	107.9	4	25.7	2	17.6	2	11.2	10	78.9	3	17.2	4	31.7
Heard	8	178.7	6	111.2	<2	†	<2	†	<2	†	3	75.3	<2	†	<2	†
Henry	68	202.6	62	136.2	11	23.0	5	13.5	7	15.4	23	70.5	15	33.6	6	21.6
Houston	87	230.5	76	139.8	15	26.0	6	17.6	6	10.8	33	82.7	22	41.0	10	35.9
Irwin	14	297.9	10	136.7	<2	†	<2	†	<2	†	8	159.4	<2	†	2	36.0
Jackson	36	216.5	29	129.8	5	23.1	4	21.2	<2	†	16	93.6	7	34.6	3	21.3
Jasper	12	252.5	11	179.6	2	38.3	<2	†	<2	†	5	96.4	<2	†	<2	†

* Average annual rate per 100,000, age-adjusted to the 1970 US standard population.

† Rate not calculated for fewer than 2 average deaths.

Table 2. Average Annual Number of Cancer Deaths and Mortality Rates by County, Georgia, 1994-1998 *(continued)*

	ALL SITES				BREAST		COLON & RECTUM				LUNG & BRONCHUS				PROSTATE	
	Male		Female		Female		Male		Female		Male		Female		Male	
County	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
Jeff Davis	20	340.5	10	119.6	<2	†	<2	†	<2	†	9	156.3	2	32.2	2	44.8
Jefferson	24	283.1	22	153.6	5	45.0	<2	†	4	22.1	10	119.6	3	21.5	4	47.9
Jenkins	13	269.2	7	122.5	<2	†	<2	†	<2	†	5	115.9	2	35.5	2	43.4
Johnson	11	249.9	11	147.6	<2	†	<2	†	<2	†	4	97.8	<2	†	<2	†
Jones	21	231.8	18	134.9	3	22.7	<2	†	2	15.7	9	92.2	4	31.4	3	34.2
Lamar	19	261.4	15	149.6	2	22.7	<2	†	<2	†	8	106.7	3	36.6	3	43.1
Lanier	8	286.4	4	104.8	<2	†	<2	†	<2	†	3	110.5	<2	†	<2	†
Laurens	58	266.0	37	121.4	6	18.2	3	15.5	3	10.3	21	91.3	7	23.3	10	44.3
Lee	14	249.8	14	148.3	2	17.8	<2	†	<2	†	6	95.8	3	35.7	<2	†
Liberty	31	285.9	23	147.9	5	27.4	2	18.4	<2	†	9	86.1	7	48.5	5	56.5
Lincoln	12	276.6	8	137.6	<2	†	<2	†	<2	†	5	115.2	<2	†	2	44.5
Long	6	212.2	5	135.1	<2	†	<2	†	<2	†	2	68.0	<2	†	<2	†
Lowndes	78	241.6	66	141.1	8	17.5	4	13.3	7	14.7	31	96.0	18	40.6	11	35.6
Lumpkin	18	222.0	14	136.6	2	25.5	<2	†	<2	†	7	90.1	4	42.3	2	25.7
McDuffie	23	237.5	21	151.6	4	27.6	<2	†	2	12.4	11	110.4	5	37.2	<2	†
McIntosh	15	287.9	10	155.9	2	35.4	<2	†	<2	†	5	88.4	<2	†	3	49.3
Macon	16	280.0	13	148.1	<2	†	<2	†	<2	†	6	99.2	<2	†	3	52.3
Madison	25	232.6	22	147.9	4	27.3	<2	†	2	16.2	9	86.3	4	27.3	3	27.0
Marion	8	272.4	3	72.5	<2	†	<2	†	<2	†	4	128.7	<2	†	<2	†
Meriwether	27	236.8	24	141.2	3	17.6	<2	†	3	13.8	9	81.1	5	30.6	5	40.9
Miller	7	192.0	6	103.2	<2	†	<2	†	<2	†	2	53.4	<2	†	<2	†
Mitchell	26	275.0	21	144.3	2	17.2	<2	†	3	20.0	12	129.5	5	33.1	3	30.6
Monroe	25	292.7	18	141.8	3	20.5	<2	†	3	18.6	11	133.7	4	32.3	2	28.9
Montgomery	10	265.2	7	142.5	<2	†	<2	†	<2	†	4	95.8	<2	†	<2	†
Morgan	15	206.3	12	115.4	<2	†	2	31.4	<2	†	5	70.8	3	25.1	<2	†
Murray	25	211.4	22	137.0	3	20.4	2	19.0	2	11.9	12	101.7	6	40.1	2	21.0
Muscogee	190	242.7	166	136.7	28	23.7	16	21.4	16	12.5	70	87.8	39	33.5	27	35.7
Newton	49	224.8	45	141.6	6	21.1	4	16.7	4	12.6	20	95.0	8	27.3	6	28.3
Oconee	18	208.7	14	106.5	3	22.6	<2	†	<2	†	5	65.4	4	31.3	<2	†
Oglethorpe	12	237.7	9	124.4	<2	†	<2	†	<2	†	4	80.0	3	45.5	<2	†
Paulding	47	231.8	37	139.1	6	23.3	5	25.1	2	8.0	19	91.5	11	45.9	5	29.1
Peach	22	230.9	18	125.3	4	26.2	<2	†	<2	†	9	94.5	3	22.3	3	29.0
Pickens	21	223.6	13	98.0	3	26.6	<2	†	<2	†	9	92.1	3	21.2	<2	†
Pierce	21	279.9	12	130.5	2	26.5	<2	†	<2	†	9	121.9	<2	†	3	34.4
Pike	18	290.3	10	120.3	<2	†	<2	†	<2	†	7	112.2	3	39.9	2	36.8
Polk	51	276.2	41	148.2	7	26.5	4	23.2	4	12.2	21	112.1	11	41.6	5	26.7
Pulaski	11	230.2	10	132.0	2	38.7	<2	†	<2	†	3	56.6	2	27.2	2	45.3
Putnam	21	225.9	16	137.8	<2	†	<2	†	<2	†	8	86.8	4	36.2	3	34.7
Quitman	4	264.1	3	138.9	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Rabun	22	220.3	17	137.1	3	25.1	2	21.2	2	14.9	7	76.4	2	18.1	3	23.6

* Average annual rate per 100,000, age-adjusted to the 1970 US standard population.

† Rate not calculated for fewer than 2 average deaths.

Table 2. Average Annual Number of Cancer Deaths and Mortality Rates by County, Georgia, 1994-1998 *(continued)*

	ALL SITES				BREAST		COLON & RECTUM				LUNG & BRONCHUS				PROSTATE	
	Male		Female		Female		Male		Female		Male		Female		Male	
County	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
Randolph	13	296.7	10	132.5	<2	†	<2	†	<2	†	4	90.5	<2	†	2	53.9
Richmond	210	267.1	175	149.4	28	23.7	15	19.8	18	14.8	73	93.8	43	37.4	19	26.1
Rockdale	49	191.8	52	147.2	10	27.1	4	17.6	5	13.3	19	72.7	13	38.1	4	19.1
Schley	5	311.2	5	195.7	<2	†	<2	†	<2	†	2	118.9	<2	†	<2	†
Screven	24	311.9	16	153.1	4	38.9	2	27.6	2	21.6	8	104.8	3	28.9	4	48.7
Seminole	11	225.6	9	121.5	<2	†	<2	†	<2	†	4	75.1	<2	†	<2	†
Spalding	58	231.8	52	133.4	9	24.8	4	16.5	4	9.5	20	79.7	12	36.1	7	27.5
Stephens	34	232.7	28	128.5	5	24.7	3	17.6	2	10.2	13	89.5	5	27.7	5	29.8
Stewart	8	248.1	7	143.9	<2	†	<2	†	<2	†	4	137.5	<2	†	3	73.8
Sumter	33	246.4	33	151.1	5	29.2	2	15.1	3	12.5	11	83.9	7	33.9	4	30.3
Talbot	9	254.6	7	142.5	<2	†	<2	†	<2	†	3	100.8	<2	†	<2	†
Taliaferro	3	281.1	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Tattnall	28	283.9	16	123.0	3	27.1	<2	†	<2	†	10	104.3	3	27.2	3	26.2
Taylor	8	195.5	8	128.6	<2	†	<2	†	<2	†	3	80.2	2	35.5	<2	†
Telfair	19	311.9	15	151.9	3	32.2	3	45.3	<2	†	8	132.0	3	38.3	<2	†
Terrell	17	320.5	11	139.4	<2	†	<2	†	<2	†	8	151.5	<2	†	2	41.8
Thomas	54	259.1	39	120.4	4	13.8	5	25.9	3	9.2	21	100.0	8	24.5	6	26.9
Tift	38	245.9	33	140.4	5	24.7	2	13.6	<2	†	15	99.5	8	34.4	5	30.1
Toombs	31	273.2	28	154.2	3	17.9	<2	†	<2	†	14	119.0	6	35.3	4	35.6
Towns	13	164.3	11	117.8	2	26.0	<2	†	<2	†	4	56.5	<2	†	<2	†
Treutlen	7	220.1	7	151.6	<2	†	<2	†	<2	†	3	87.4	<2	†	<2	†
Troup	71	254.9	61	138.8	7	19.2	5	19.3	8	14.5	29	106.3	14	35.2	9	32.5
Turner	12	256.0	8	118.1	<2	†	<2	†	<2	†	4	83.1	2	28.1	<2	†
Twiggs	13	263.4	7	120.0	<2	†	<2	†	<2	†	6	118.5	2	33.0	<2	†
Union	27	225.3	18	117.0	<2	†	2	17.4	2	13.2	11	92.2	5	36.4	2	17.2
Upson	28	192.2	31	138.6	7	33.7	2	13.2	3	14.8	9	63.3	6	27.9	5	35.2
Walker	81	241.2	62	134.0	9	21.8	6	18.8	6	12.0	36	106.4	16	35.3	6	18.9
Walton	49	225.3	36	120.4	4	12.2	4	17.4	4	13.8	18	83.3	9	34.0	5	25.9
Ware	50	250.8	36	121.7	4	13.7	4	21.1	5	13.7	22	110.0	8	27.6	6	28.2
Warren	8	239.1	7	130.6	<2	†	<2	†	<2	†	3	107.4	<2	†	<2	†
Washington	25	280.9	23	155.4	3	18.2	3	28.6	2	11.1	7	75.1	6	45.1	4	42.2
Wayne	28	228.4	22	140.9	4	23.4	<2	†	<2	†	13	104.3	6	36.7	3	23.4
Webster	4	275.7	3	169.5	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Wheeler	7	255.1	4	121.1	<2	†	<2	†	<2	†	3	119.8	<2	†	<2	†
White	17	163.1	14	106.6	3	25.3	<2	†	<2	†	7	64.9	3	23.9	<2	†
Whitfield	76	219.7	67	136.2	12	25.3	6	18.1	6	10.7	33	96.1	16	36.5	9	26.9
Wilcox	10	227.1	7	114.2	<2	†	<2	†	<2	†	4	91.2	<2	†	<2	†
Wilkes	18	301.7	14	154.4	3	35.0	<2	†	<2	†	7	114.5	<2	†	2	42.3
Wilkinson	10	197.2	9	132.8	2	32.1	<2	†	<2	†	4	81.5	<2	†	<2	†
Worth	22	220.5	17	122.6	3	19.8	3	27.9	2	15.8	8	76.8	4	26.8	2	23.1

* Average annual rate per 100,000, age-adjusted to the 1970 US standard population.

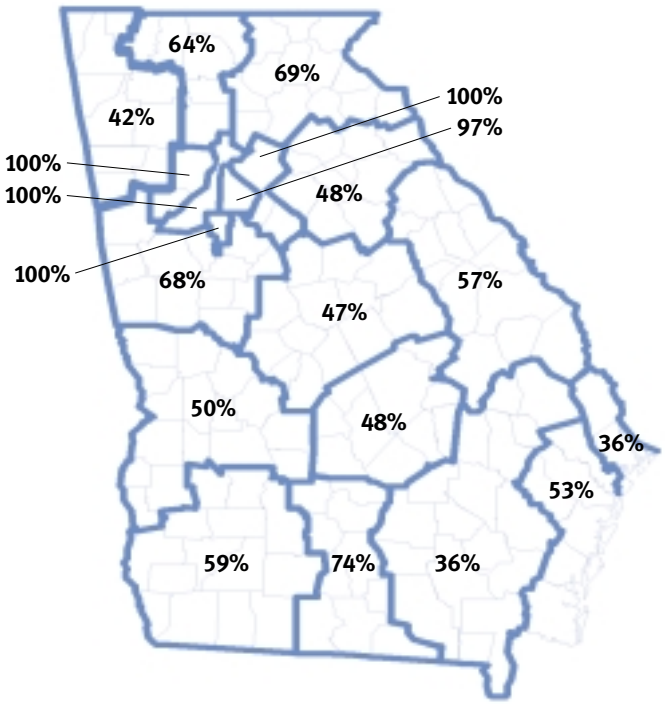
† Rate not calculated for fewer than 2 average deaths.

CANCER INCIDENCE

The Georgia Comprehensive Cancer Registry

The Georgia Comprehensive Cancer Registry was established to be a tool for Georgia health professionals at the state and local level to better understand the state's cancer burden. The Cancer Registry collects statewide data on new cases of cancer and these data are used to estimate cancer incidence rates within Georgia, monitor cancer trends, evaluate possible clusters of cancer, respond to inquiries about cancer from the public, and conduct research. Data from the Cancer Registry also assist state and local agencies in focusing cancer control programs on early detection and the prevention of risk behaviors. The State's goal is to produce cancer incidence and mortality reports yearly for use by the public and health professionals.

Figure 11. Completeness of Case Reporting by Health District, Georgia, 1997



In order to accurately understand the burden of cancer in Georgia it is important to have at least 90% of the newly diagnosed cancer cases reported to the Cancer Registry annually. For 1995, the first year cancer incidence data were required to be reported by all health care providers, reporting is 93% complete; for 1996 it is 75% complete; for 1997 it is 72% complete; and for 1998 it is only 51% complete. The primary reason for incomplete data is that there are still hospitals, laboratories, and outpatient treatment and diagnostic facilities that are not reporting their cancer data to the Cancer Registry. Projections show that if all hospitals, laboratories, and outpatient treatment and diagnostic facilities reported their newly diagnosed cancer cases completely and accurately, Cancer Registry data would be more than 90% complete each year. The State's goal for 2000 is to have all health care providers reporting data to the Cancer Registry.

The reader must use caution when analyzing the incidence data on Table 3 as these data are only 93% complete and may be an underestimate of the true cancer burden in Georgia and Georgia counties.

Cancer Incidence in Georgia

In 1995, there were more than 23,000 cancer cases diagnosed in Georgia *(Table 3)*. Four cancer sites account for over half of Georgia's cancer burden — lung, colorectal, breast and prostate cancer. In 1995, these four cancer sites accounted for 57% of new cancer cases in Georgia.

Males in Georgia are nearly 50% more likely to develop cancer than females. Prostate cancer is the most common cancer diagnosed among Georgia males, followed by lung and colorectal cancer. Among females, breast cancer is the most commonly diagnosed cancer, followed by lung and colorectal cancer.

Table 3. Reported Number of Cancer Cases and Incidence Rates by County, Georgia, 1995

	ALL SITES		BREAST		COLON & RECTUM		LUNG & BRONCHUS		PROSTATE	
	Total		Female		Total		Total		Male	
County	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Georgia	**23,669**	**331.1**	**3,558**	**87.8**	**2,464**	**34.1**	**3,884**	**56.4**	**3,490**	**121.6**
Appling ≈	49	276.3	14	144.5	<5	†	<5	†	<5	†
Atkinson ≈	18	247.1	5	†	<5	†	<5	†	<5	†
Bacon ≈	31	263.8	8	†	<5	†	<5	†	<5	†
Baker	17	372.2	<5	†	<5	†	<5	†	5	†
Baldwin ≈	53	121.1	5	†	<5	†	13	30.2	7	†
Banks	32	265.1	<5	†	<5	†	<5	†	8	†
Barrow	119	348.5	23	116.3	8	†	20	61.4	19	144.1
Bartow ≈	140	216.7	23	65.6	17	26.3	28	44.0	11	40.2
Ben Hill ≈	49	254.7	7	†	<5	†	11	59.7	10	112.7
Berrien ≈	36	202.9	5	†	<5	†	10	58.8	5	†
Bibb ≈	384	220.8	40	41.3	38	21.6	90	51.4	73	104.1
Bleckley ≈	26	211.1	<5	†	<5	†	5	†	<5	†
Brantley	41	309.9	<5	†	<5	†	7	†	<5	†
Brooks ≈	39	194.8	<5	†	<5	†	11	52.6	6	†
Bryan	68	369.5	8	†	6	†	14	82.6	6	†
Bulloch	151	344.0	30	113.4	12	25.2	23	51.5	19	102.4
Burke ≈	58	265.2	13	88.1	9	†	7	†	<5	†
Butts	64	373.5	9	†	6	†	13	79.7	12	159.1
Calhoun	25	434.3	5	†	<5	†	<5	†	5	†
Camden ≈	64	286.5	9	†	8	†	14	68.0	6	†
Candler ≈	22	196.8	<5	†	<5	†	<5	†	<5	†
Carroll ≈	99	127.3	14	31.5	<5	†	20	26.9	15	50.6
Catoosa ≈	13	23.4	<5	†	<5	†	<5	†	<5	†
Charlton ≈	15	170.8	<5	†	<5	†	<5	†	<5	†
Chatham	977	377.9	137	97.1	151	56.5	172	66.7	101	93.1
Chattahoochee	15	584.1	<5	†	<5	†	<5	†	<5	†
Chattooga	100	319.8	18	103.1	11	33.3	17	55.9	12	87.0
Cherokee	245	268.6	35	63.0	22	24.6	42	52.8	37	107.6
Clarke	307	411.6	49	106.4	27	33.3	32	46.8	60	208.3
Clay ≈	<5	†	<5	†	<5	†	<5	†	<5	†
Clayton	666	429.5	113	117.2	61	41.1	115	79.6	93	157.5
Clinch	21	300.1	5	†	<5	†	6	†	<5	†
Cobb	1,812	431.3	305	119.2	171	44.1	271	70.9	282	175.4
Coffee	120	354.8	17	86.9	13	39.4	16	47.5	19	140.1
Colquitt ≈	99	216.6	12	54.6	<5	†	22	47.7	20	102.6
Columbia	274	411.0	28	68.0	29	45.5	60	97.3	37	144.1
Cook ≈	50	309.9	8	†	6	†	9	†	7	†
Coweta	245	355.1	39	92.9	32	47.0	41	62.3	30	108.3
Crawford ≈	13	125.4	<5	†	<5	†	<5	†	<5	†
Crisp	90	371.4	10	65.8	<5	†	16	69.3	18	192.2
Dade ≈	<5	†	<5	†	<5	†	<5	†	<5	†
Dawson	42	366.4	8	†	<5	†	8	†	6	†
Decatur ≈	60	204.9	11	68.0	6	†	12	39.6	<5	†
DeKalb	2,180	407.6	365	116.6	221	42.0	286	56.5	386	187.6
Dodge ≈	45	205.6	6	†	6	†	15	72.0	<5	†
Dooly ≈	35	289.1	6	†	8	†	<5	†	<5	†
Dougherty	393	400.2	66	119.1	49	48.3	68	68.9	65	162.9
Douglas	192	268.3	24	63.5	23	31.2	28	43.8	21	68.5
Early ≈	11	79.5	<5	†	<5	†	<5	†	<5	†
Echols ≈	<5	†	<5	†	<5	†	<5	†	<5	†
Effingham	105	364.6	21	132.1	6	†	25	89.9	13	109.9
Elbert ≈	71	301.2	8	†	7	†	13	53.0	12	108.7

* Rate per 100,000, age-adjusted to the 1970 US standard population.
† Rate not calculated for fewer than 10 cases.
≈ Cancer cases for this county may be underreported to the Cancer Registry. Please use caution when comparing these data with mortality data for the same county.

Table 3. Reported Number of Cancer Cases and Incidence Rates by County, Georgia, 1995 *(continued)*

	ALL SITES		BREAST		COLON & RECTUM		LUNG & BRONCHUS		PROSTATE	
	Total		Female		Total		Total		Male	
County	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Emanuel ≈	72	292.0	6	†	10	39.2	19	73.2	8	†
Evans	32	295.0	6	†	<5	†	9	†	<5	†
Fannin ≈	58	212.9	11	77.2	<5	†	12	40.0	13	106.2
Fayette	245	353.2	57	143.6	35	53.8	29	44.2	42	137.9
Floyd	339	311.6	54	87.1	40	32.8	70	66.1	28	62.9
Forsyth	140	234.7	21	61.3	17	29.5	25	42.2	20	77.5
Franklin	67	276.9	9	†	14	59.6	9	†	10	88.4
Fulton	2,957	433.8	433	109.8	294	42.2	376	58.6	478	192.6
Gilmer ≈	55	254.7	<5	†	6	†	11	48.3	10	95.9
Glascock	10	231.1	<5	†	<5	†	<5	†	<5	†
Glynn	315	366.2	43	87.2	26	28.6	53	61.3	53	146.9
Gordon ≈	114	279.2	19	81.7	8	†	30	74.0	7	†
Grady ≈	76	283.3	19	126.9	6	†	11	42.3	6	†
Greene	62	421.5	8	†	11	63.7	8	†	8	†
Gwinnett	1,254	404.3	208	109.7	131	47.2	174	62.9	187	169.3
Habersham	121	329.6	13	64.7	11	30.7	21	53.8	17	100.3
Hall	405	356.1	56	90.4	42	35.2	67	59.8	70	146.7
Hancock	49	451.6	7	†	8	†	10	94.0	7	†
Haralson ≈	45	169.1	<5	†	<5	†	13	48.4	<5	†
Harris ≈	65	261.6	8	†	6	†	14	57.6	7	†
Hart ≈	40	151.3	7	†	<5	†	11	42.9	<5	†
Heard ≈	21	209.2	<5	†	<5	†	<5	†	<5	†
Henry	285	368.6	41	93.3	26	34.7	44	61.0	43	140.6
Houston ≈	159	165.1	15	28.8	14	13.9	22	23.5	33	85.2
Irwin ≈	17	173.4	<5	†	<5	†	<5	†	<5	†
Jackson	130	352.0	20	103.5	17	46.6	15	40.5	16	103.7
Jasper	48	444.4	7	†	7	†	6	†	<5	†
Jeff Davis	45	330.5	5	†	8	†	10	73.1	11	199.5
Jefferson	80	362.0	5	†	14	60.6	17	84.4	10	116.5
Jenkins	36	327.5	<5	†	<5	†	8	†	6	†
Johnson ≈	25	249.5	6	†	<5	†	8	†	<5	†
Jones ≈	26	115.5	<5	†	<5	†	6	†	<5	†
Lamar	60	355.4	7	†	<5	†	15	95.7	11	144.0
Lanier ≈	17	278.1	<5	†	<5	†	<5	†	<5	†
Laurens ≈	107	208.7	8	†	11	20.7	26	53.0	16	71.1
Lee	51	349.8	7	†	<5	†	9	†	13	237.3
Liberty	103	364.6	14	73.2	13	49.3	17	74.7	12	123.8
Lincoln	39	390.1	5	†	<5	†	13	133.5	<5	†
Long ≈	12	175.4	<5	†	<5	†	<5	†	<5	†
Lowndes	300	391.9	46	106.5	30	35.5	48	64.9	59	192.4
Lumpkin	50	291.1	11	116.6	5	†	9	†	7	†
McDuffie	76	334.4	12	79.1	12	55.5	13	55.8	10	104.3
McIntosh	45	393.6	<5	†	5	†	7	†	6	†
Macon ≈	33	219.3	<5	†	<5	†	<5	†	7	†
Madison	76	310.7	9	†	9	†	12	52.5	<5	†
Marion ≈	12	168.0	<5	†	<5	†	<5	†	<5	†
Meriwether	88	320.6	11	75.5	14	44.2	16	60.0	13	120.5
Miller ≈	16	189.8	<5	†	<5	†	<5	†	<5	†
Mitchell	84	371.8	12	94.0	8	†	18	79.1	8	†
Monroe ≈	33	164.9	<5	†	<5	†	9	†	8	†
Montgomery ≈	16	224.8	<5	†	<5	†	<5	†	<5	†
Morgan	74	435.1	12	120.6	9	†	9	†	13	188.1
Murray	80	290.4	11	72.5	7	†	14	54.1	6	†

* Rate per 100,000, age-adjusted to the 1970 US standard population.
† Rate not calculated for fewer than 10 cases.
≈ Cancer cases for this county may be underreported to the Cancer Registry. Please use caution when comparing these data with mortality data for the same county.

Table 3. Reported Number of Cancer Cases and Incidence Rates by County, Georgia, 1995 *(continued)*

	ALL SITES		BREAST		COLON & RECTUM		LUNG & BRONCHUS		PROSTATE	
	Total		Female		Total		Total		Male	
County	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Muscogee	636	328.8	97	90.2	78	38.9	111	57.8	93	118.3
Newton	144	286.3	25	92.2	14	27.4	31	61.0	7	†
Oconee	80	422.1	16	137.6	6	†	8	†	11	145.0
Oglethorpe ≈	30	257.4	<5	†	<5	†	<5	†	5	†
Paulding ≈	97	212.7	13	45.7	9	†	22	55.7	11	64.0
Peach ≈	52	234.8	6	†	7	†	9	†	7	†
Pickens ≈	50	259.3	<5	†	<5	†	10	51.9	13	144.2
Pierce	52	313.0	9	†	5	†	8	†	5	†
Pike ≈	36	283.9	6	†	8	†	6	†	6	†
Polk	152	345.9	32	129.8	8	†	31	70.5	17	94.6
Pulaski ≈	17	164.3	<5	†	<5	†	5	†	<5	†
Putnam	83	406.9	11	105.3	8	†	16	77.7	11	114.6
Quitman ≈	<5	†	<5	†	<5	†	<5	†	<5	†
Rabun ≈	47	249.0	6	†	<5	†	11	55.5	5	†
Randolph	40	353.4	<5	†	10	81.6	7	†	8	†
Richmond	768	400.7	109	98.9	74	38.3	138	73.3	117	151.9
Rockdale	182	298.9	33	91.6	17	29.2	31	54.1	15	58.6
Schley	21	497.7	<5	†	7	†	<5	†	<5	†
Screven	62	349.0	9	†	7	†	15	83.5	10	121.3
Seminole ≈	8	†	<5	†	<5	†	<5	†	<5	†
Spalding	232	369.7	38	109.5	28	44.1	38	61.7	33	136.2
Stephens	109	325.5	20	104.1	9	†	15	44.1	20	140.5
Stewart	23	312.5	<5	†	<5	†	6	†	<5	†
Sumter	134	408.3	16	76.4	19	59.1	22	70.0	23	185.7
Talbot	44	518.1	8	†	7	†	6	†	<5	†
Taliaferro	6	†	<5	†	<5	†	<5	†	<5	†
Tattnall ≈	47	214.9	9	†	7	†	9	†	<5	†
Taylor	31	321.5	<5	†	<5	†	7	†	8	†
Telfair ≈	29	209.1	<5	†	7	†	5	†	<5	†
Terrell	53	419.1	6	†	<5	†	13	101.7	9	†
Thomas	177	352.7	25	85.3	20	38.9	39	77.4	14	69.0
Tift ≈	105	278.9	17	81.1	11	29.5	16	43.3	22	139.2
Toombs ≈	54	208.2	<5	†	<5	†	12	44.5	7	†
Towns	44	345.2	<5	†	<5	†	10	68.1	9	†
Treutlen ≈	12	177.8	<5	†	<5	†	<5	†	<5	†
Troup	223	330.2	33	84.7	27	38.3	38	61.6	36	133.0
Turner ≈	25	245.0	<5	†	<5	†	6	†	<5	†
Twiggs ≈	18	165.1	<5	†	<5	†	<5	†	6	†
Union ≈	48	209.8	5	†	<5	†	9	†	<5	†
Upson	96	272.1	15	77.2	15	44.0	10	27.9	17	118.9
Walker ≈	13	17.5	<5	†	<5	†	<5	†	<5	†
Walton ≈	92	189.5	13	51.2	5	†	12	26.0	15	71.1
Ware	148	315.8	24	96.6	22	43.1	14	30.1	23	117.5
Warren	33	419.7	5	†	<5	†	8	†	8	†
Washington	88	376.0	13	99.3	13	50.5	17	73.5	12	137.9
Wayne ≈	65	249.6	6	†	6	†	17	65.1	5	†
Webster ≈	5	†	<5	†	<5	†	<5	†	<5	†
Wheeler ≈	11	188.4	<5	†	<5	†	<5	†	<5	†
White	61	288.7	7	†	<5	†	10	46.3	13	133.4
Whitfield	335	411.5	58	127.6	31	38.4	75	95.4	35	107.5
Wilcox	25	285.5	<5	†	<5	†	<5	†	6	†
Wilkes ≈	36	252.2	<5	†	<5	†	10	68.5	5	†
Wilkinson ≈	17	145.5	<5	†	<5	†	<5	†	<5	†
Worth	64	292.6	6	†	9	†	15	68.4	9	†

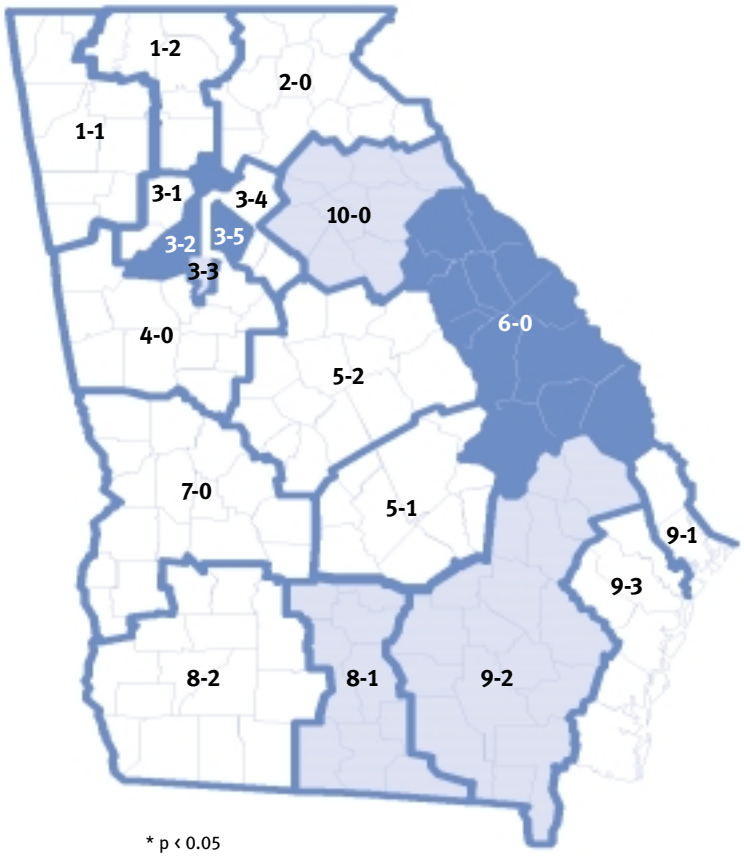
* Rate per 100,000, age-adjusted to the 1970 US standard population.
† Rate not calculated for fewer than 10 cases.
≈ Cancer cases for this county may be underreported to the Cancer Registry. Please use caution when comparing these data with mortality data for the same county.

BREAST CANCER

New Cases

An estimated 4,650 new cases of breast cancer are expected to be diagnosed among Georgia females in 2000. Breast cancer is the most commonly diagnosed cancer among Georgia females and in 2000 will account for over 30% of all female cancer cases. One in 8 American females will develop breast cancer in her lifetime. Breast cancer can also occur in males, but is rare.

Figure 12. Health Districts with Significantly* High or Low Breast Cancer Mortality Rates, 1994-1998



Deaths

An estimated 1,100 Georgia females are expected to die of breast cancer in 2000. Breast cancer is the second leading cause of cancer death in Georgia females and in 2000 will account for 18% of all cancer deaths in females. Breast cancer mortality rates increased 25% between 1980-1987 followed by a 14% decline between 1987-1998. This decrease is probably the result of earlier detection through mammography and improved treatment.

The Fulton (3-2), DeKalb (3-5), and Augusta (6-0) health districts have significantly higher mortality rates than the state average; while the Athens (10-0), Waycross (9-2), and Valdosta (8-1) health districts have significantly lower rates *(Figure 12)*.

Risk Factors

- Risk increases with age
- A personal or family history of breast cancer
- Biopsy-confirmed atypical hyperplasia
- A long menstrual history (menstrual periods that start early and end late in life)
- Recent use of oral contraceptives or post-menopausal estrogens
- Never having children or having the first child after age 30
- Consuming 2 or more drinks of alcohol daily

Prevention

There is no known way to prevent breast cancer. For now, the best strategy for women at average risk is to manage modifiable risk factors (above), such as alcohol and estrogen use. The use of anti-estrogen drugs, such as Tamoxifen, have been shown to reduce the risk of recurrence in localized breast cancer. Following the guidelines for early detection of breast cancer will not prevent breast cancer, but can find cancers when the likelihood of successful treatment is greatest.

Early Detection

Early detection of breast cancer saves lives. Mammograms and clinical breast examinations are both important screening tools. A mammogram, or low-dose x-ray of the breast, is valuable because it can identify breast abnormalities before they can be felt by a women or her health care provider. Numerous studies have shown that early detection increases survival and treatment options.

Breast Cancer Screening in Georgia

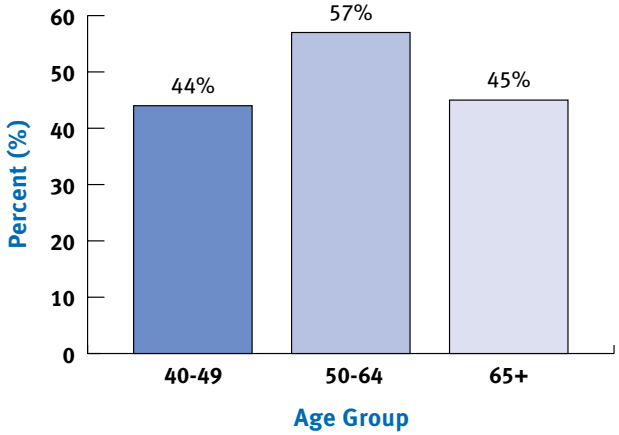
According to the 1998 Behavioral Risk Factor Surveillance System, only 44% of females aged 40-49 and 45% of females aged 65 and older reported having had a mammogram and clinical breast examination within the past year. Females aged 50-64 were more likely to have had an annual mammogram and clinical breast examination (57%) *(Figure 13)*. Although the sample size in some health districts is small, there is apparent geographical variation in mammography and clinical breast examination among women aged 50 and older in Georgia. For the 3 year period 1996-1998, the prevalence ranged from 37% in the Clayton health district (3-3) to 70% in the Gwinnett health district (3-4); the state average was 55% *(Figure 14)*.

American Cancer Society Guidelines for Early Detection of Breast Cancer

Females 40 and older:
Annual mammogram, annual clinical breast examination by a health care professional, monthly breast self-examination. The clinical breast examination should be conducted close to the scheduled mammogram.

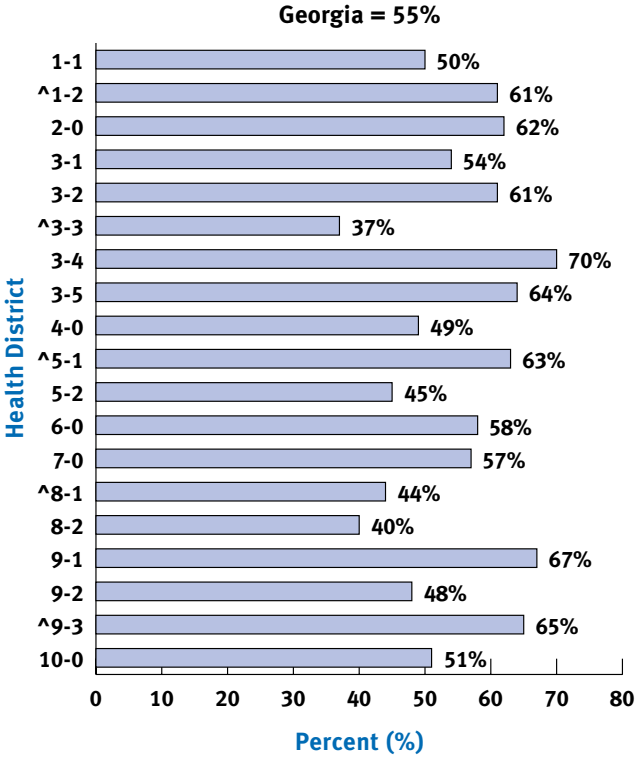
Females aged 20–39:
Clinical breast examination by a health care professional every three years, monthly breast self-examination.

Figure 13.
Mammogram and Clinical Breast Examination*, Females Aged 40 and Older, Georgia, 1998



* Reported having had a mammogram and clinical breast examination within the past year.

Figure 14. Mammogram and Clinical Breast Examination* by Health District, Females Aged 50 and Older, Georgia, 1996-1998



* Reported having had a mammogram and clinical breast examination within the past year.
^ Fewer than 50 respondents, data may be unstable.
Note: 95% confidence interval for Georgia was ±3% and intervals for the health districts ranged from ±9% to ±20%.

UTERINE CERVIX CANCER

New Cases

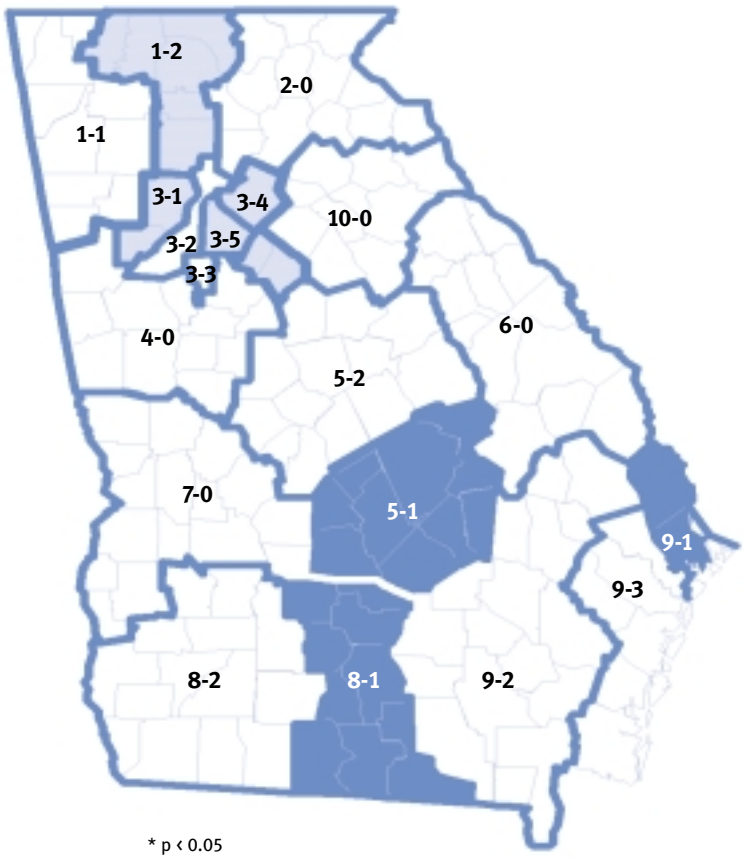
An estimated 550 new cases of invasive cervical cancer are expected to be diagnosed among Georgia females in 2000.

Deaths

An estimated 130 Georgia females are expected to die of cervical cancer in 2000. In Georgia, mortality rates from cervical cancer have declined nearly 35% during the past 20 years.

The Dublin (5-1), Valdosta (8-1), and Savannah (9-1) health districts have significantly higher mortality rates than the state average; while the Dalton (1-2), Cobb (3-1), Gwinnett (3-4) and DeKalb (3-5) health districts have significantly lower rates *(Figure 15 and Table 4)*.

Figure 15. Health Districts with Significantly* High or Low Cervical Cancer Mortality Rates, 1994-1998



* p < 0.05

Health districts with rates significantly higher than state rate
No significant difference
Health districts with rates significantly lower than state rate

Risk Factors

- Risk is closely linked to sexual behavior and to sexually transmitted infections with certain types of human papillomavirus
- First intercourse at an early age
- Multiple sexual partners, or partners who have had multiple sexual partners
- Cigarette smoking

Prevention

The vast majority of invasive cervical cancers can be prevented. Preventing the development of precancers by decreasing the risk of exposure to sexually transmitted human papillomavirus, and early detection and treatment of precancers

Table 4. Invasive Cervical Cancer Incidence and Average Annual Mortality by Health District, Georgia

	Incidence (1995)		Mortality (1994-1998)	
Health District	Cases	Rate*	Deaths	Rate*
Georgia	**389**	**8.9**	**124**	**2.9**
1-1 ≈	19	6.6	10	3.3
1-2	12	7.9	3	1.7
2-0 ≈	14	6.5	5	2.2
3-1	34	9.4	7	2.4
3-2	44	10.7	11	2.7
3-3	15	14.7	3	3.1
3-4	33	11.1	7	2.1
3-5	31	8.0	6	1.7
4-0	34	10.6	11	3.4
5-1 ≈	<5	†	4	4.7
5-2 ≈	12	4.6	7	2.6
6-0 ≈	20	8.4	8	3.2
7-0 ≈	20	9.4	8	3.6
8-1 ≈	10	7.7	7	5.5
8-2	25	12.1	8	3.7
9-1 ≈	14	8.2	7	4.3
9-2	18	9.4	5	2.7
9-3	14	12.9	4	3.6
10-0	17	10.0	4	2.3

* Incidence rate or average annual mortality rate per 100,000, age-adjusted to the 1970 US standard population.
† Rate not calculated for fewer than 10 cases.
≈ Cancer cases for these health districts may be underreported to the Cancer Registry. Please use caution when comparing these data with mortality data from the same health district.

are the best strategies for preventing invasive disease. Cervical cancer and precancers of the cervix can be prevented by managing modifiable risk factors, such as delaying onset of first sexual intercourse, and limiting the number of lifetime sexual partners.

Early Detection

Deaths from cervical cancer were reduced dramatically with the advent of the Pap smear test developed in the 1940's. With regular Pap tests and appropriate follow-up care, death from cervical cancer is almost totally preventable.

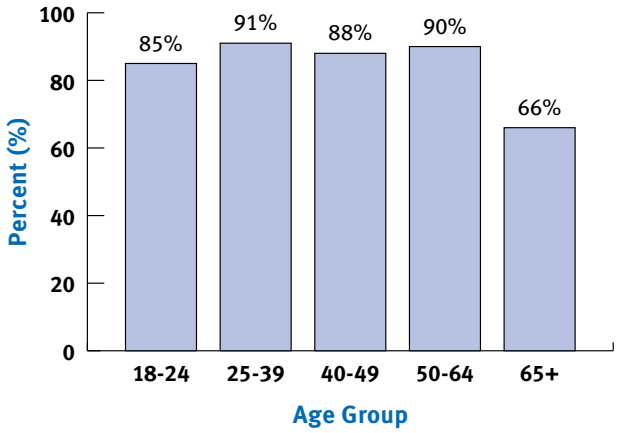
Cervical Cancer Screening in Georgia

According to the 1998 Behavioral Risk Factor Surveillance System, the rate of Pap test screening (within the past 3 years) was similar for all age groups except for females aged 65 and older, who had the lowest rate (66%) *(Figure 16)*. Although the sample size in some health districts is small, there is apparent geographical variation in Pap test prevalence among women aged 18 and older in Georgia. For the 3 year period 1996-1998, the prevalence ranged from 76% in the Brunswick health district (9-3) to 96% in the Fulton health district (3-2); the state average was 90% *(Figure 17)*.

American Cancer Society Guidelines for Early Detection of Cervical Cancer

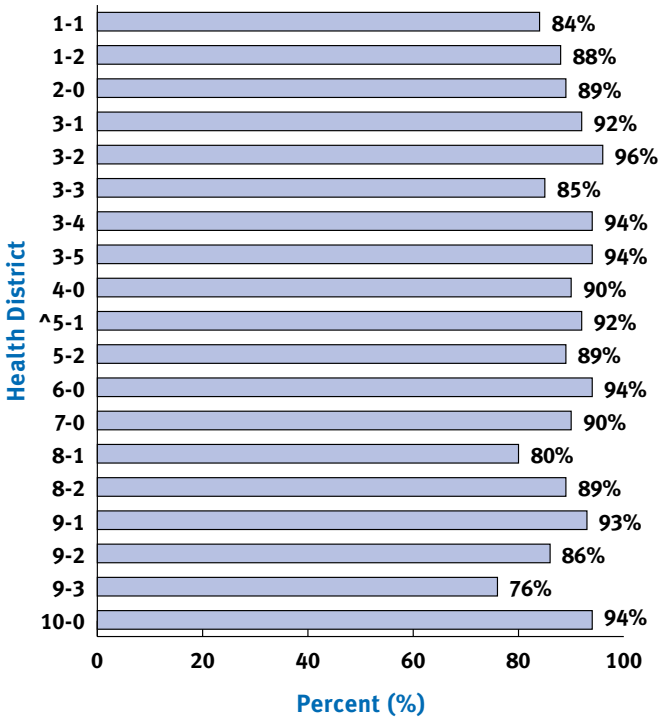
- Annual Pap test and pelvic examination in females who are or have been sexually active, or have reached age 18. After three or more consecutive annual exams with normal findings, the Pap test may be performed less frequently at the discretion of the physician.

Figure 16.
Pap Test, Females Aged 18 and Older*, Georgia, 1998



* Reported having had a Pap test within the past 3 years, women with intact uterine cervix.

Figure 17. Pap Test by Health District, Females Aged 18 and Older, Georgia, 1996-1998
Georgia = 90%



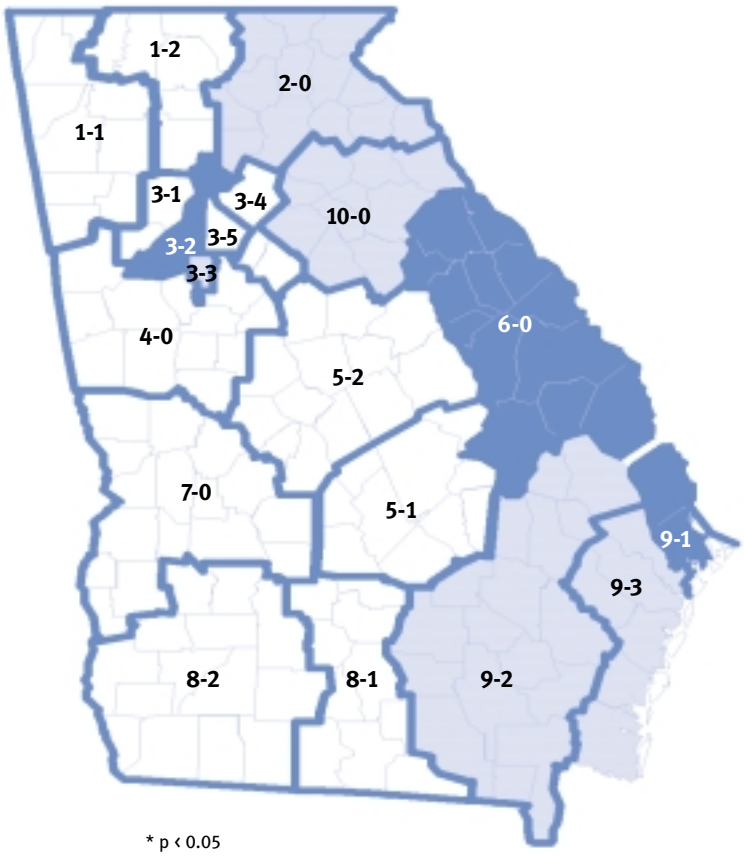
* Reported having had a Pap test within the past 3 years, women with intact uterine cervix.
^ Fewer than 50 respondents, data may be unstable.
Note: 95% confidence interval for Georgia was ±1% and intervals for the health districts ranged from ±2% to ±23%.

COLON & RECTUM CANCER

New Cases

An estimated 3,280 new cases of colorectal cancer are expected to be diagnosed in Georgia in 2000; 1,640 males and 1,640 females. Colorectal cancer is the third most common cancer diagnosed among Georgia males and females.

Figure 18. Health Districts with Significantly* High or Low Colon and Rectum Cancer Mortality Rates, 1994-1998



Deaths

An estimated 1,260 Georgians are expected to die of colorectal cancer in 2000; 610 males and 650 females. Colorectal cancer is third leading cause of cancer death among Georgia males and females. Mortality rates for colorectal cancer declined 20% among males between 1990-1998 and declined 16% among females between 1980-1998.

The Augusta (6-0), Savannah (9-1) and Fulton (3-2) health districts have significantly higher mortality rates than the state average; while the Gainesville (2-0), Athens (10-0), Waycross (9-2) and Brunswick (9-3) health districts have significantly lower rates *(Figure 18)*.

Risk Factors

- Personal or family history of colorectal cancer or polyps, and inflammatory bowel disease
- Physical inactivity
- A high fat and/or low fiber diet
- Inadequate intake of fruits and vegetables

Prevention

The early detection and removal of precancerous polyps can greatly reduce the risk of developing or dying of invasive colorectal cancer. Other strategies for prevention include managing modifiable risk factors (above), such as diet and physical activity.

Early Detection

Early detection of colorectal cancer can save lives. Two effective tools available for screening for colorectal cancer are fecal occult blood tests, which detect blood in a person's stool sample, and sigmoidoscopy, an examination of the rectum and lower colon using a lighted flexible tube.

American Cancer Society Guidelines for Early Detection of Colorectal Cancer

Beginning at age 50, males and females should follow <u>one</u> of the examination schedules below:

- Fecal occult blood test every year and flexible sigmoidoscopy every five years.★
- A colonoscopy every 10 years.★
- A double-contrast barium enema every 5 to 10 years.★

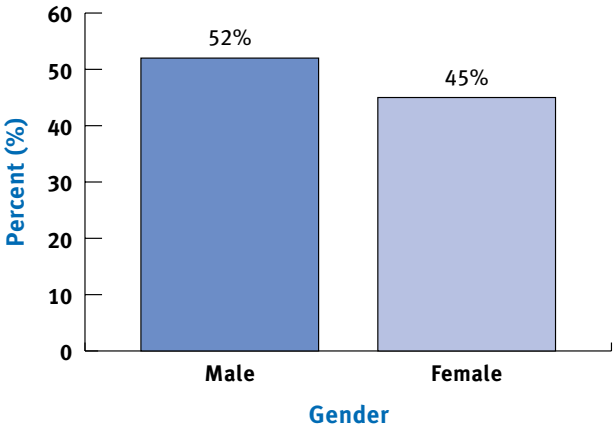
People who are at moderate or high risk for colorectal cancer should talk with their doctor about an appropriate testing schedule.

★ A digital rectal examination should be done at the same time as sigmoidoscopy, colonoscopy, or double-contrast barium enema.

Colorectal Cancer Screening in Georgia

According to the 1997 Behavioral Risk Factor Surveillance System, 52% of males and 45% of females aged 50 and older reported ever having had a sigmoidoscopic or proctoscopic examination *(Figure 19)*.

Figure 19.
Sigmoidoscopic/Proctoscopic Examination*, Persons Aged 50 and Older, Georgia, 1997



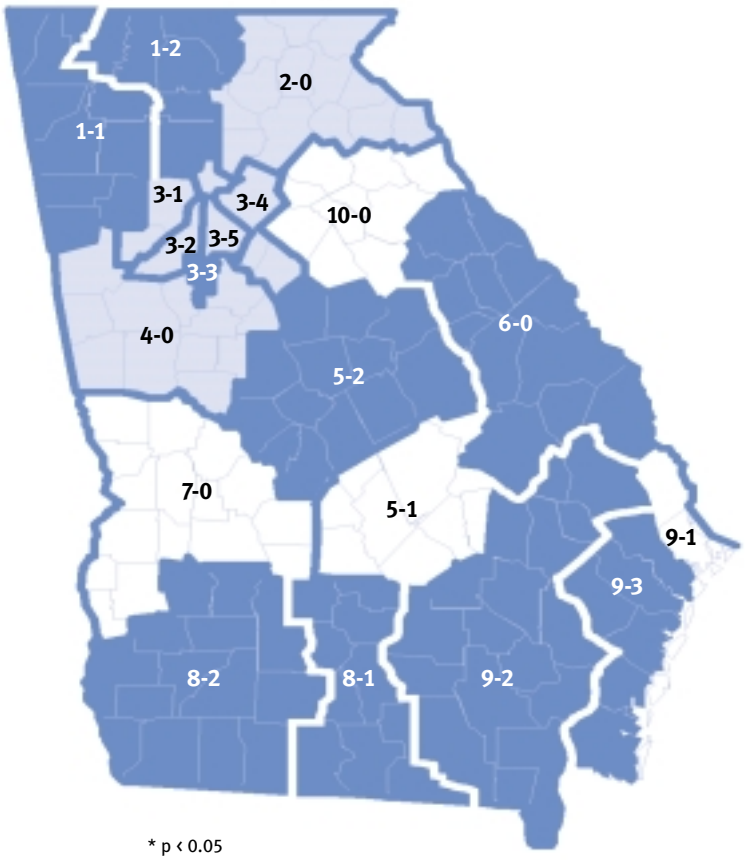
* Reported ever having had a sigmoidoscopic/proctoscopic examination.

LUNG & BRONCHUS CANCER

New Cases

An estimated 5,290 new cases of lung cancer are expected to be diagnosed in Georgia in 2000; 3,480 males and 1,810 females. Lung cancer is the most common cancer diagnosed in Georgia and in 2000 will account for 16% of all cancer diagnoses.

Figure 20. Health Districts with Significantly* High or Low Lung and Bronchus Cancer Mortality Rates, 1994-1998



Deaths

An estimated 4,130 Georgians are expected to die of lung cancer in 2000; 2,770 males and 1,360 females. In 2000, lung cancer deaths will account for 30% of all cancer deaths in Georgia. In recent years, mortality rates from lung cancer have declined among males; however, among females, rates have doubled since 1980. Decreasing mortality rates among males are most likely a result of decreased smoking rates over the previous 30 years.

The northwest and southern health districts have significantly higher mortality rates than the state average; while most of the Metropolitan Atlanta, Gainesville (2-0), and LaGrange (4-0) health districts have significantly lower rates *(Figure 20)*.

Risk Factors

- Tobacco use (accounts for almost 87% of all lung cancer cases)
- Exposure to environmental (second-hand) tobacco smoke
- Exposure to certain industrial substances, such as arsenic; some organic chemicals; radon and asbestos, particularly for persons who smoke
- Radiation exposure from occupational, medical, and environmental sources
- Air pollution

Prevention

The best strategy for preventing lung cancer is not to smoke and to avoid exposure to environmental or second hand smoke. In those who stop smoking, damaged lung tissue often returns to normal. People who work with potentially cancer causing chemicals should take appropriate protective measures to avoid harmful exposure.

Early Detection

There is no known effective way to routinely screen for lung cancer. Because symptoms often do not appear until the disease is advanced, early detection is difficult.

PROSTATE CANCER

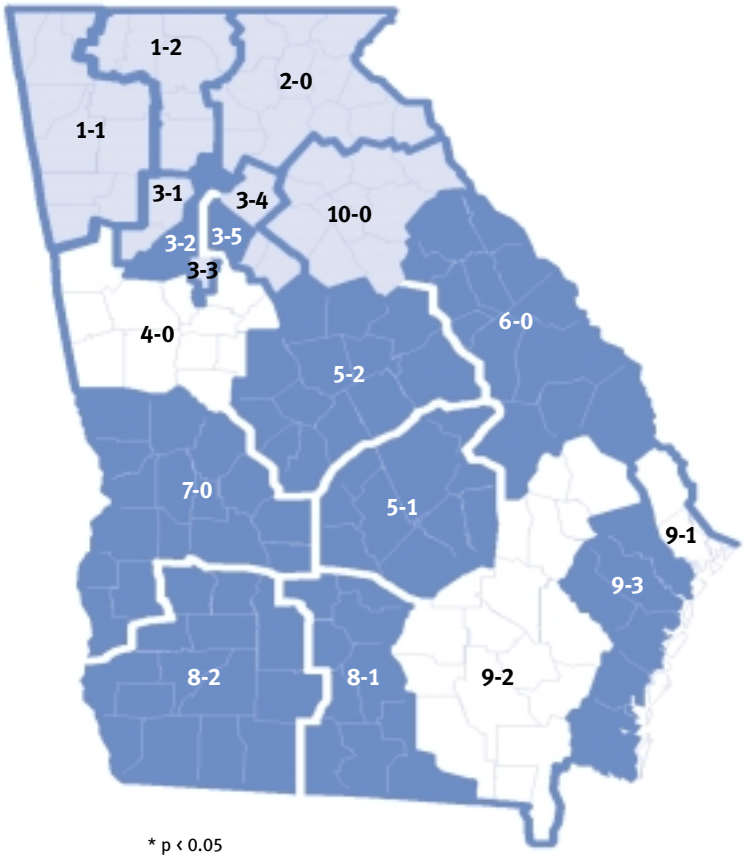
New Cases

An estimated 5,030 new cases of prostate cancer are expected to be diagnosed among Georgia males in 2000. Prostate cancer is the most commonly diagnosed cancer among Georgia males and in 2000 will account for 28% of all male cancer cases.

Deaths

An estimated 910 Georgia males are expected to die of prostate cancer in 2000. Prostate cancer is the second leading cause of cancer death among males. During 1980-1992, prostate cancer mortality rates in Georgia increased 29% followed by a 20% decline in rates from 1992-1998. Mortality rates among black males are more than twice as high as rates among white males.

Figure 21. Health Districts with Significantly* High or Low Prostate Cancer Mortality Rates, 1994-1998



* p < 0.05

Health districts with rates significantly higher than state rate
No significant difference
Health districts with rates significantly lower than state rate

The Fulton (3-2) and DeKalb (3-5) health districts as well as many of the southern and central Georgia health districts have significantly higher mortality rates than the state average, while the northern health districts have significantly lower rates *(Figure 21)*.

Risk Factors

- Risk increases with age; 91% of cases are diagnosed in males over age 55
- Black race
- Family history; genetic predisposition (may be responsible for 5%-10% of prostate cancers)
- A high fat diet

Prevention

There is no known way to prevent prostate cancer. Many known risk factors such as age, race, and family history cannot be controlled; however managing diet may help to reduce prostate cancer risk.

Early Detection

A blood test for prostate specific antigen (PSA) and digital rectal examination of the prostate gland are two tools commonly used to detect prostate cancer early. Neither the PSA nor the digital rectal examination have been proven to reduce mortality from prostate cancer. Currently, there are no commonly accepted recommendations regarding routine screening for prostate cancer. Men should discuss prostate cancer screening options with their health care professional.

American Cancer Society Guidelines for Early Detection of Prostate Cancer

- Males aged 50 and older who have at least a 10-year life expectancy should talk with their health care professional about having a digital rectal examination of the prostate gland and a prostate-specific antigen (PSA) blood test every year. Males who are at high risk for prostate cancer (blacks or males who have a history of prostate cancer in close family members) should consider beginning these tests at an earlier age.

CANCER RISK BEHAVIORS IN GEORGIA

Tobacco Use

Smoking is the most preventable cause of death in our society. Tobacco use accounts for at least 30% of all cancer deaths, about 87% of all lung cancer cases and is also associated with cancers of the mouth, pharynx, larynx, esophagus, pancreas, uterine cervix, kidney, and bladder. In 1996, tobacco use was responsible for 17% or one in six deaths in Georgia; and Georgians who die as a result of their smoking habit lose an average of 14.6 years of life.

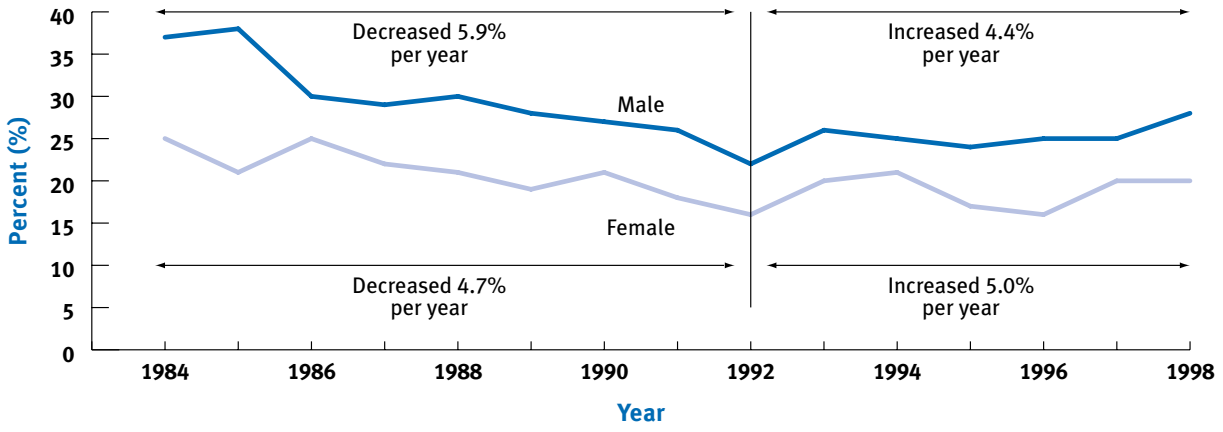
The use of spit tobacco and cigars is on the rise. In 1986, the US Surgeon General concluded that the use of spit tobacco is not a safe substitute for smoking cigarettes. Spit tobacco causes cancer, a number of non-cancerous oral conditions and can lead to nicotine addiction and dependence.[5] Cigars contain most of the same carcinogens and cancer-producing chemicals found in cigarettes and regular cigar smoking causes cancer of the lung, oral cavity, larynx, esophagus, and probably cancer of the pancreas.[6]

Tobacco Use Among Georgia Adults

- According to the 1998 Behavioral Risk Factor Surveillance System, an estimated 24% of Georgia adults smoke. Males (28%) are more likely to smoke than females (20%) and whites (25%) are more likely to smoke than blacks (19%).
- The prevalence of smoking among both males and females in Georgia declined between 1984-1992. However, since 1992, the prevalence has increased 4.4% per year among males and 5.0% among females *(Figure 22)*.
- Although the sample size in some health districts is small, there is apparent geographical variation in adult cigarette use. For the 3 year period 1996-1998, the prevalence ranged from 17% in the Fulton health district (3-2) to 30% in the Valdosta health district (8-1); the state average was 23% *(Figure 23)*.

There are many benefits to smoking cessation. People who quit smoking, regardless of age, live longer than people who continue to smoke.

Figure 22. Current Cigarette Use*, Persons Aged 18 and Older, Georgia, 1984-1998



* Reported having smoked at least 100 cigarettes in their lifetime, and now are current smokers.

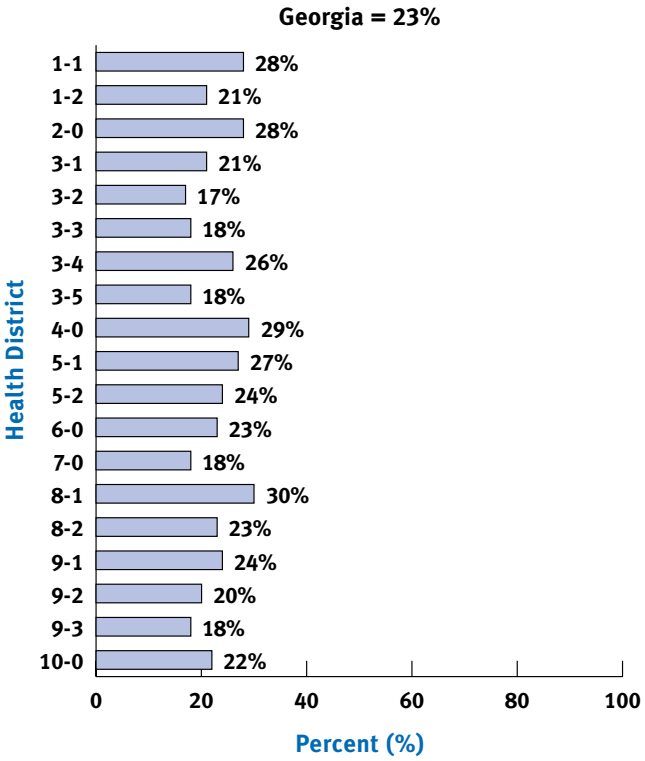
Quitting smoking decreases the risk of developing many cancers and other major diseases, including coronary heart disease and other cardiovascular diseases.[7]

- According to the 1998 Behavioral Risk Factor Surveillance System, 46% of Georgia males and 49% of Georgia females who were current smokers reported that they had tried to quit smoking for at least one day during the past year.

Tobacco Use Among Georgia Youth

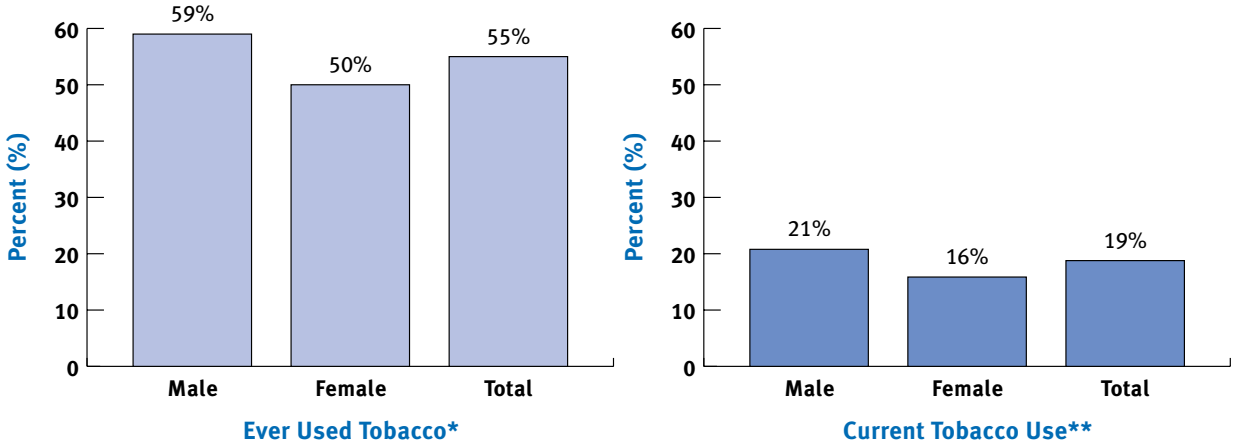
- According to the 1999 Georgia Youth Tobacco Survey, the prevalence of middle school students who have ever used tobacco was 59% among males and 50% among females *(Figure 24)*.
- During 1999, 21% of male and 16% of female middle school students reported current tobacco use *(Figure 24)*. The prevalence of students in grades six, seven and eight who have ever used tobacco was 43%, 57% and 65%, respectively. Students in grade eight were significantly more likely to have ever used tobacco compared to students in grade six.
- The prevalence of Hispanic middle school students who have ever used tobacco was 68%, while 54% of white students and 53% of black students reported having ever used tobacco.

Figure 23. Current Cigarette Use* by Health Districts, Adults aged 18 and Older, Georgia, 1996-1998



* Reported having smoked at least 100 cigarettes in their lifetime and now are current smokers.
Note: 95% confidence interval for Georgia was ±1% and intervals for the health districts ranged from ±3% to ±13%.

Figure 24. Ever and Current Tobacco Use by Gender, Middle School Students, Georgia, 1999



* Reported ever having used cigarettes, smokeless tobacco, or cigars.

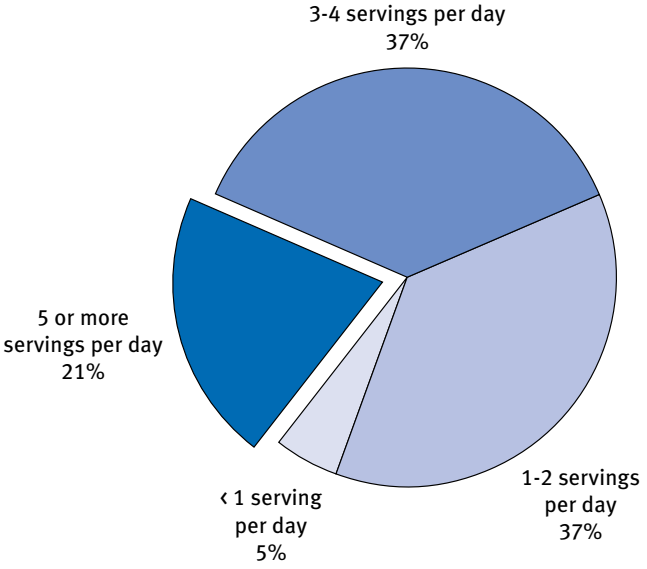
** Reported cigarette, smokeless tobacco, or cigar use on 1 or more of the preceding 30 days.

Diet and Nutrition

Existing scientific evidence suggests that about one-third of the cancer deaths that occur in the US each year are due to dietary factors.[8] The introduction of healthful diet and exercise practices at any time from childhood to old age can promote health and probably reduces cancer risk. Many dietary factors can affect cancer risk: type of food, food preparation methods, portion sizes, food variety, and overall caloric balance. Cancer risk can be reduced by an overall dietary pattern that includes a high proportion of plant foods (fruits, vegetables, grains and beans), limited amounts of meat, dairy, and other high-fat foods and a balance of caloric intake and physical activity.

The recommendations of the American Cancer Society Advisory Committee on Diet, Nutrition, and Cancer Prevention *(see text boxes on pages 32 and 33)* are consistent in principle with the 1992 US Department of Agriculture (USDA) Food Guide Pyramid, the 1995 Dietary Guidelines for Americans, and dietary recommendations of other agencies. Although no diet can guarantee full protection against any disease, these recommendations offer the best nutrition information currently available to help Americans reduce their risk of cancer.

Figure 25. Fruit and Vegetable Intake, Persons Aged 18 and Older, Georgia, 1998



Nutrition in Georgia

- According to the 1998 Behavioral Risk Factor Surveillance System, only 21% of Georgia adults were eating the recommended 5 or more servings of fruits and vegetables per day; 37% reported eating 3-4 servings or 1-2 servings per day; and 5% reported eating less than 1 serving per day. *(Figure 25)*.

Choose most of the foods you eat from plant sources.

Eat five or more servings of fruits and vegetables each day; eat other foods from plant sources, such as breads, cereals, grain products, rice, pasta, or beans several times each day. Consumption of fruits and vegetables can reduce the risk of developing some cancers. The evidence is particularly strong for reducing the risk of colon cancer.

Limit the intake of high-fat foods, particularly from animal sources.

Choose foods low in fat; limit consumption of meats, especially high-fat meats. High-fat diets have been associated with an increased risk of cancers of the colon and rectum, prostate, and uterine corpus (endometrium).

Limit consumption of alcoholic beverages, if you drink at all.

Alcohol consumption increases the risk of cancers of the mouth, esophagus, pharynx, larynx, and liver. Studies have also noted an association between alcohol consumption and an increased risk of breast cancer. The mechanism is unknown but may be due to alcohol-induced changes in hormones in the blood, or to a carcinogenic effect of alcohol or its metabolites on breast tissue.

Physical Activity

Physical activity can help protect against some cancers, either by balancing caloric intake with energy expenditure or by some other unknown mechanisms.[8] An imbalance of caloric intake and output can lead to being overweight or obese, and increases the risk of developing several cancers. Maintaining a healthy body weight can also reduce the risk of chronic diseases such as coronary heart disease and diabetes. Moderate physical activity may increase caloric needs and encourage consumption of healthful foods while maintaining a recommended body weight.

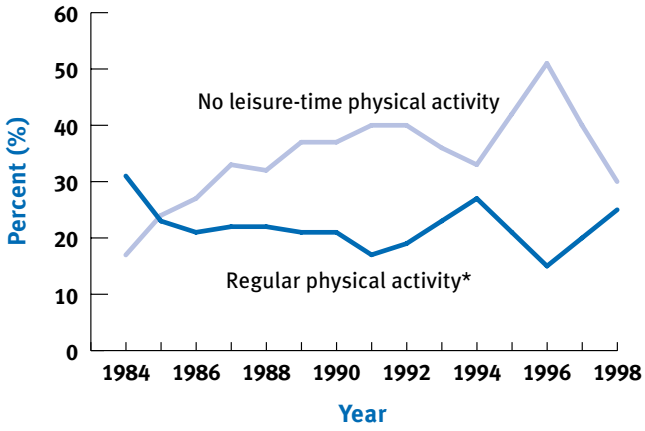
The physical activity recommendations of the American Cancer Society Advisory Committee on Diet, Nutrition, and Cancer Prevention *(see text box below)* are consistent in principle with the recommendations of the Centers for Disease Control and Prevention, the American College of Sports Medicine, a National Institutes of Health Consensus Conference, and the US Surgeon General.

Be physically active: achieve and maintain a healthy weight.
Be at least moderately active for 30 minutes or more on most days of the week; stay within your healthy weight range.

Physical Activity in Georgia

- According to the 1998 Behavioral Risk Factor Surveillance System, only 25% of Georgia adults were participating in regular physical activity; while 30% reported no leisure time physical activity at all *(Figure 26)*. Between 1984–1998, there was a gradual increase among those reporting no leisure time physical activity and a gradual decrease among those reporting regular physical activity.

Figure 26. Physical Activity, Persons Aged 18 and Older, Georgia, 1984-1998



* Five+ times per week and 150+ minutes per week and at least 10 minutes per session OR 3+ times per week of vigorous intensity activity for at least 20 minutes per session.

CONCLUSION

This report summarizes the most recent information available on cancer incidence, mortality, and risk in Georgia. Cancer is a significant health problem in Georgia; accounting for 1 in 4 deaths each year. Black Georgians suffer an increased burden of cancer; they are 27% more likely to die of cancer than whites. Although overall mortality rates have declined slightly in recent years, there is still much progress to be made.

The practical implications of the findings in this report are clear. Nearly two-thirds of cancer deaths could be prevented by adopting a healthy lifestyle including not smoking, eating a healthy diet and engaging in regular physical activity. Additionally, the risk of cancer death can be reduced by following recommended guidelines for early detection of cancer.

There is hope that Georgia can reduce its burden from cancer; prevention, early detection, and prompt treatment can make a difference. Greater effort needs to be made by all Georgians to reduce the prevalence of risk factors for cancer and to participate in cancer early detection examinations. Sustained behavior change is difficult to make, even for highly motivated individuals. Therefore, it is essential to engage a variety of state and local governments, non-profit organizations and private groups in a process to encourage policy and environmental changes that make it easier for people to change their behavior.

Much of the death and disability from cancer in Georgia is preventable. If we focus our attention on realistic ways to reduce risk and encourage early detection, we can increase the decline in cancer death rates and reduce the number of Georgians who receive a diagnosis of cancer. Georgians can work together to reduce the number of individuals who suffer and die from cancer.

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TECHNICAL APPENDIX

Definitions:

Age-adjusted rate: A rate calculated in a manner that allows for the comparison of rates derived from populations with different age structures.

Cancer incidence rate: The number of new cancer cases occurring in a population during a specified period of time. Often expressed per 100,000 population.

Cancer mortality rate: The number of cancer deaths occurring in a population during a specified period of time. Often expressed per 100,000 population.

Confidence interval: A range of probable values for a prevalence estimate. A 95% confidence interval is one that will contain the true prevalence in 95 out of 100 samples surveyed.

Prevalence: The number of people with a disease or risk factor out of the total number of persons in a population. Often expressed as a percent.

Risk factor: A behavior, characteristic or finding on clinical examination that is consistently associated with increased probability of a disease or complications from the disease.

Data Sources:

The number of deaths and death rates by county and for the state of Georgia were obtained from the Georgia Department of Human Resources, Division of Public Health, Vital Records Branch. Deaths and death rates for the United States were obtained from the National Center for Health Statistics, Centers for Disease Control and Prevention (CDC). For Figure 1, the ICD-9 codes for the disease categories were 1) cancer: 140-208; 2) heart disease: 390-398, 402, 404-429; 3) chronic obstructive pulmonary disease: 490-496; 4) diabetes: 250; 5) pneumonia and influenza: 480-487; 6) stroke: 430-438; 7) unintentional injuries: E800-E949; and 8) other: all disease codes not already categorized.

For Tables 2 and 4, Figures 1, 4-10, 12, 15, 18 and 20-21, the ICD-9 codes used to define cancer sites were: 1) all cancers: 140.0-208.9; 2) breast: 174.0-174.9; 3) colon & rectum: 153.0-153.9, 154.0-154.1, 159.0; 4) leukemia: 202.4, 203.1, 204.0-207.2, 207.8, 208.0-208.9; 5) lung & bronchus: 162.2-162.9; 6) pancreas: 157.0-157.9; 7) prostate: 185; 8) uterine cervix: 180.0-180.9.

The number of cases and incidence rates by county and for the state of Georgia were obtained from the Georgia Department of Human Resources, Division of Public Health, Georgia Comprehensive Cancer Registry. For Tables 3 and 4, the ICD-O2 codes used for disease categories were: 1) breast: C500:C509; 2) colon & rectum: C180:C189, C260, C199, C209; 3) lung & bronchus: C340:C349; 4) prostate: C619; 5) uterine cervix: C530:C539.

Population projections for 2000 were obtained from the Office of Planning and Budgeting for the state of Georgia. Population estimates for 1994-1998 and the 2000 US standard population were obtained from the US Bureau of the Census.

Risk factor and screening behavior data were obtained from the Behavioral Risk Factor Surveillance System, a state-based surveillance system administered by the Georgia Department of Human Resources, Division of Public Health, in collaboration with the CDC. The objective of the Behavioral Risk Factor Surveillance System is to collect uniform, state-specific data on preventative health practices and risk behaviors that are linked to chronic diseases, injuries and preventable infectious diseases in the adult population. Limitations of Behavioral Risk Factor Surveillance System data include bias that may result from self-reporting of behaviors and sampling error as a result of surveying a sample rather than taking a complete population enumeration. As well, these data do not include Georgians without a telephone in the household.

Data on youth tobacco use were obtained from the Georgia Youth Tobacco Survey (GYTS). The GYTS is a random sample of students in public schools grades 6, 7 or 8 and grades 9-12. The purpose of this survey is to collect information on cigarette, smokeless tobacco, and cigar use; knowledge and attitudes; media and advertising; minors access; school curriculum; environmental tobacco smoke; and cessation. The survey was jointly developed by the Division of Public Health's Tobacco Prevention Program and the CDC. The results of the survey of high school students are not included in this report because the overall participation rate of high schools is too low for statewide generalization.

Methods:

Mortality rates were calculated per 100,000 population and age-adjusted by the direct method to the 1970 and 2000 US standards. Except where calculated to show trends, the mortality rates are five-year average annual rates for the period 1994 through 1998. Incidence rates were calculated per 100,000 population and age-adjusted by the direct method to the 1970 and 2000 US standards. Rates were calculated for only 1995 as this is the only year in which Cancer Registry data are greater than 90% complete.

The estimated number of cases for 2000 was calculated by multiplying age-specific state incidence to mortality rate ratios by the county mortality rate. The results were then multiplied by county age-specific population estimates for 2000 and summed to obtain a county estimate. County values were summed to obtain a state total. This was done for each cancer site individually. For Cobb, Clayton, DeKalb, Fulton and Gwinnett counties, the Metro Atlanta SEER incidence to mortality rate ratio was used in place of the state ratio.

The estimated numbers of deaths for 2000 were calculated by multiplying age-specific county population estimates for 2000 by gender- and age-specific county mortality rates for 1994-1998 and summing the resultant values. County values were summed to obtain a state total. This was done for each cancer site individually.

For Figures 2 and 3, the top ten sites chosen for cases and deaths were selected by ranking cancer incidence and mortality rates. Consequently, estimates for those sites were calculated.

For Figure 11, the percent of data completeness by health district was calculated by dividing the observed cases for 1997 by the expected cases for 1997 and multiplying by 100.

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STATISTICAL APPENDIX

INCIDENCE AND MORTALITY RATE TABLES AGE-ADJUSTED TO THE 2000 US STANDARD POPULATION

Table 2A:
Average Annual Number of Cancer Deaths and Mortality Rates by County, Georgia 1994-1998 (Age-adjusted to 2000 US Standard)

Table 3A:
Reported Number of Cancer Cases and Incidence Rates by County, Georgia, 1995 (Age-adjusted to 2000 US Standard)

Table 4A:
Invasive Cervical Cancer Incidence and Average Annual Mortality by Health District, Georgia (Age-adjusted to 2000 US Standard)

Table 2A. Average Annual Number of Cancer Deaths and Mortality Rates by County, Georgia, 1994-1998 (Age-adjusted to 2000 US Standard)

	ALL SITES				BREAST		COLON & RECTUM				LUNG & BRONCHUS				PROSTATE	
	Male		Female		Female		Male		Female		Male		Female		Male	
County	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
Georgia	**6,818**	**288.2**	**5,896**	**167.8**	**1,014**	**28.8**	**553**	**23.7**	**599**	**17.0**	**2,478**	**100.6**	**1,353**	**38.8**	**830**	**43.4**
Appling	22	353.6	15	166.4	2	26.2	<2	†	3	29.7	9	140.1	3	27.8	4	77.0
Atkinson	6	231.2	7	206.9	<2	†	<2	†	<2	†	3	111.5	<2	†	<2	†
Bacon	13	323.0	12	203.3	<2	†	<2	†	<2	†	5	122.5	<2	†	<2	†
Baker	3	215.7	4	174.7	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Baldwin	43	288.0	33	161.5	6	31.2	5	30.0	3	13.6	17	107.1	9	42.6	6	43.1
Banks	12	308.1	8	137.2	<2	†	<2	†	<2	†	5	111.8	2	36.4	<2	†
Barrow	34	277.1	26	144.8	4	19.9	2	19.6	<2	†	14	117.2	8	47.5	<2	†
Bartow	72	326.5	50	157.9	9	27.2	6	26.8	6	18.8	27	112.7	13	40.6	8	52.7
Ben Hill	19	295.6	16	149.7	2	24.1	2	34.8	<2	†	8	130.1	3	28.3	2	33.5
Berrien	17	278.3	15	173.3	2	25.2	<2	†	2	22.7	8	128.6	4	40.2	2	46.3
Bibb	178	312.4	150	161.5	24	26.5	16	30.4	17	17.8	67	112.2	38	40.8	23	45.3
Bleckley	15	336.3	11	154.9	<2	†	<2	†	<2	†	7	143.8	2	29.2	<2	†
Brantley	13	272.7	13	218.7	<2	†	<2	†	<2	†	6	133.8	4	70.8	<2	†
Brooks	20	298.4	15	145.5	<2	†	2	30.0	2	19.4	7	108.9	3	28.2	3	56.0
Bryan	18	318.7	14	178.6	<2	†	<2	†	<2	†	7	108.5	4	53.5	2	59.7
Bulloch	42	272.0	38	172.3	8	36.8	4	23.4	4	17.4	13	82.5	6	28.0	6	49.7
Burke	22	312.6	20	182.9	4	39.3	<2	†	2	19.9	6	87.6	4	36.2	4	58.8
Butts	17	255.0	16	185.8	2	29.9	<2	†	<2	†	6	86.9	4	44.9	<2	†
Calhoun	7	336.8	6	142.9	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Camden	21	294.7	19	189.1	3	27.7	<2	†	<2	†	6	81.1	6	56.6	4	66.7
Candler	12	307.3	9	167.3	<2	†	<2	†	<2	†	3	81.1	2	40.2	<2	†
Carroll	75	282.1	65	169.9	11	28.2	8	30.2	7	18.8	30	108.2	14	37.5	7	34.0
Catoosa	52	271.4	41	157.0	6	23.7	5	28.2	3	12.9	22	109.4	13	47.8	3	22.3
Charlton	10	310.1	11	238.4	<2	†	<2	†	<2	†	3	88.2	2	44.7	<2	†
Chatham	248	287.6	229	177.2	36	28.7	21	25.1	26	19.6	88	97.9	55	42.0	32	43.4
Chattahoochee	4	509.2	3	215.0	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Chattooga	31	302.6	30	199.0	4	31.4	2	20.0	3	17.2	14	126.8	8	50.6	3	31.0
Cherokee	83	273.0	64	150.6	11	23.9	8	24.3	7	17.2	26	88.7	14	33.1	7	32.4
Clarke	63	265.6	55	143.1	11	29.2	5	22.7	4	10.4	23	92.4	13	35.0	10	48.9
Clay	5	312.4	5	189.1	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Clayton	136	277.4	126	181.2	18	23.8	11	22.2	10	14.6	53	103.6	37	53.2	12	37.0
Clinch	8	330.9	5	140.0	<2	†	<2	†	<2	†	2	102.0	<2	†	<2	†
Cobb	349	275.4	338	175.9	58	28.2	29	24.0	33	17.6	122	91.0	80	42.2	37	41.1
Coffee	31	281.3	25	157.9	4	26.9	3	29.8	<2	†	12	97.2	5	33.2	<2	†
Colquitt	45	291.0	40	170.5	5	21.5	3	19.6	6	24.1	17	107.2	7	31.4	9	62.1
Columbia	56	254.8	54	179.5	9	26.5	3	14.0	4	12.8	21	80.0	14	47.9	6	37.5
Cook	21	376.8	14	158.2	3	32.2	<2	†	<2	†	8	134.3	3	32.1	2	49.1
Coweta	66	307.8	52	153.3	10	27.3	6	28.8	3	8.6	23	101.5	13	38.2	10	62.6
Crawford	9	222.0	6	133.7	<2	†	<2	†	<2	†	3	75.8	<2	†	<2	†

* Average annual rate per 100,000, age-adjusted to the 2000 US standard population.

† Rate not calculated for fewer than 2 average deaths.

Table 2A. Average Annual Number of Cancer Deaths and Mortality Rates by County, Georgia, 1994-1998 (Age-adjusted to 2000 US Standard) *(continued)*

	ALL SITES				BREAST		COLON & RECTUM				LUNG & BRONCHUS				PROSTATE	
	Male		Female		Female		Male		Female		Male		Female		Male	
County	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
Crisp	32	414.2	22	164.3	4	33.4	<2	†	<2	†	15	190.8	5	38.1	4	65.8
Dade	15	249.4	12	158.6	<2	†	<2	†	<2	†	6	96.2	3	45.8	3	59.1
Dawson	13	341.6	9	160.1	2	43.4	<2	†	<2	†	5	116.5	2	36.9	<2	†
Decatur	32	307.2	28	193.3	5	34.9	3	27.1	2	14.0	12	107.9	6	43.7	4	49.9
DeKalb	433	268.2	421	166.8	89	33.7	36	22.5	46	18.2	134	81.5	89	36.1	58	46.1
Dodge	26	338.1	21	183.4	3	29.0	2	28.7	2	19.3	10	131.6	4	31.6	3	46.6
Dooly	12	316.4	12	185.4	3	48.0	<2	†	<2	†	4	103.8	<2	†	<2	†
Dougherty	101	324.2	81	162.2	14	27.9	10	31.4	8	15.3	39	117.6	19	38.8	15	60.3
Douglas	68	279.1	55	170.3	10	28.9	4	14.8	4	12.6	24	101.1	14	43.1	6	31.5
Early	17	333.6	15	180.9	4	42.8	<2	†	2	20.5	6	101.7	3	32.0	3	64.0
Echols	3	279.5	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Effingham	28	276.5	22	165.5	3	25.0	<2	†	2	19.1	13	116.7	4	33.1	2	36.9
Elbert	29	330.4	23	177.9	4	34.0	2	28.6	3	19.5	10	115.5	5	37.5	2	29.8
Emanuel	33	372.3	20	156.7	3	24.7	3	41.7	2	16.1	10	109.3	5	38.6	3	41.7
Evans	12	315.6	9	157.5	<2	†	<2	†	<2	†	5	115.4	<2	†	2	52.9
Fannin	29	265.9	22	163.4	3	25.1	2	20.0	3	20.1	12	106.5	7	52.8	3	31.4
Fayette	55	245.2	54	169.1	8	24.2	6	25.8	6	19.3	18	75.8	13	40.1	7	44.2
Floyd	111	308.9	96	173.0	15	28.5	9	25.5	9	15.8	43	113.2	23	41.5	10	30.4
Forsyth	41	209.3	38	131.8	6	21.0	<2	†	5	19.5	16	73.6	8	28.7	5	33.8
Franklin	23	261.5	20	161.1	4	28.4	<2	†	2	18.3	8	85.7	3	25.2	3	40.9
Fulton	627	297.3	636	185.8	125	36.1	55	26.1	72	20.7	190	87.8	134	40.3	89	50.2
Gilmer	24	294.1	20	178.5	2	19.8	2	25.6	2	17.1	9	105.9	7	59.8	3	45.0
Glascock	4	278.1	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Glynn	78	258.2	73	179.0	11	28.5	5	17.0	7	16.8	27	86.3	21	49.6	9	33.9
Gordon	44	307.1	32	159.6	5	24.9	3	22.2	3	16.1	16	111.7	9	43.0	5	47.2
Grady	32	340.6	19	147.6	4	30.4	2	21.8	<2	†	13	141.4	3	26.6	5	54.0
Greene	16	303.0	12	154.5	3	38.1	<2	†	2	26.1	6	103.4	2	27.0	2	45.5
Gwinnett	233	240.6	227	162.3	44	28.0	22	23.6	23	18.1	72	72.5	52	38.3	23	34.2
Habersham	34	243.8	29	154.6	6	31.5	3	22.4	4	18.9	14	97.6	6	30.6	3	25.4
Hall	103	256.8	84	150.9	15	26.4	10	25.8	8	14.5	39	91.4	21	37.1	12	36.0
Hancock	13	372.3	11	189.1	2	39.7	<2	†	<2	†	3	86.1	<2	†	3	92.6
Haralson	29	292.1	24	163.0	3	24.6	<2	†	3	18.5	13	120.5	5	38.6	3	40.5
Harris	28	309.4	18	151.2	4	31.2	2	30.5	<2	†	8	82.4	4	30.9	5	58.3
Hart	27	278.2	20	136.0	4	30.5	2	22.9	2	14.9	10	99.9	3	22.2	4	48.5
Heard	8	213.8	6	126.3	<2	†	<2	†	<2	†	3	84.4	<2	†	<2	†
Henry	68	252.0	62	166.8	11	27.6	5	17.1	7	19.2	23	85.6	15	39.0	6	32.3
Houston	87	299.4	76	175.3	15	33.1	6	24.2	6	14.6	33	101.4	22	50.1	10	55.8
Irwin	14	361.3	10	169.7	<2	†	<2	†	<2	†	8	197.0	<2	†	2	51.9
Jackson	36	277.3	29	160.3	5	27.6	4	24.9	<2	†	16	116.0	7	41.0	3	33.4
Jasper	12	316.6	11	213.0	2	43.8	<2	†	<2	†	5	112.2	<2	†	<2	†

* Average annual rate per 100,000, age-adjusted to the 2000 US standard population.

† Rate not calculated for fewer than 2 average deaths.

Table 2A. Average Annual Number of Cancer Deaths and Mortality Rates by County, Georgia, 1994-1998 (Age-adjusted to 2000 US Standard) *(continued)*

	ALL SITES				BREAST		COLON & RECTUM				LUNG & BRONCHUS				PROSTATE	
	Male		Female		Female		Male		Female		Male		Female		Male	
County	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
Jeff Davis	20	419.1	10	146.8	<2	†	<2	†	<2	†	9	188.9	2	36.2	2	67.8
Jefferson	24	358.8	22	191.8	5	53.0	<2	†	4	30.1	10	147.1	3	25.7	4	66.6
Jenkins	13	348.3	7	149.5	<2	†	<2	†	<2	†	5	142.2	2	41.4	2	64.4
Johnson	11	317.3	11	186.3	<2	†	<2	†	<2	†	4	111.8	<2	†	<2	†
Jones	21	294.9	18	173.8	3	27.6	<2	†	2	22.3	9	112.4	4	39.3	3	46.4
Lamar	19	341.3	15	179.5	2	27.0	<2	†	<2	†	8	136.1	3	40.6	3	65.5
Lanier	8	380.5	4	127.9	<2	†	<2	†	<2	†	3	146.0	<2	†	<2	†
Laurens	58	334.6	37	151.7	6	23.0	3	17.9	3	13.9	21	110.2	7	28.4	10	63.7
Lee	14	311.8	14	199.3	2	25.2	<2	†	<2	†	6	107.9	3	40.4	<2	†
Liberty	31	376.5	23	185.3	5	35.5	2	26.9	<2	†	9	109.5	7	57.2	5	86.6
Lincoln	12	348.6	8	172.2	<2	†	<2	†	<2	†	5	150.3	<2	†	2	62.8
Long	6	236.2	5	161.2	<2	†	<2	†	<2	†	2	73.3	<2	†	<2	†
Lowndes	78	300.7	66	176.2	8	22.3	4	16.0	7	18.4	31	116.7	18	49.4	11	50.4
Lumpkin	18	278.8	14	165.3	2	29.5	<2	†	<2	†	7	112.5	4	46.2	2	37.6
McDuffie	23	306.7	21	183.8	4	33.9	<2	†	2	16.8	11	133.5	5	41.2	<2	†
McIntosh	15	354.8	10	184.7	2	39.1	<2	†	<2	†	5	99.1	<2	†	3	66.4
Macon	16	344.8	13	177.8	<2	†	<2	†	<2	†	6	121.9	<2	†	3	75.5
Madison	25	294.5	22	178.9	4	31.5	<2	†	2	19.3	9	105.5	4	32.4	3	39.2
Marion	8	353.9	3	88.8	<2	†	<2	†	<2	†	4	152.1	<2	†	<2	†
Meriwether	27	293.9	24	170.8	3	20.6	<2	†	3	18.1	9	97.5	5	35.9	5	60.9
Miller	7	231.6	6	134.0	<2	†	<2	†	<2	†	2	66.4	<2	†	<2	†
Mitchell	26	338.1	21	176.8	2	20.3	<2	†	3	23.6	12	151.5	5	39.5	3	43.4
Monroe	25	348.4	18	175.4	3	25.5	<2	†	3	25.8	11	150.4	4	37.3	2	39.1
Montgomery	10	346.1	7	183.9	<2	†	<2	†	<2	†	4	132.4	<2	†	<2	†
Morgan	15	271.5	12	145.6	<2	†	2	34.8	<2	†	5	96.0	3	32.9	<2	†
Murray	25	251.7	22	168.5	3	23.9	2	24.2	2	16.5	12	112.9	6	45.4	2	30.7
Muscogee	190	309.2	166	166.9	28	28.6	16	27.6	16	16.1	70	105.7	39	38.7	27	53.0
Newton	49	284.1	45	173.7	6	24.3	4	20.2	4	16.1	20	117.0	8	31.1	6	42.2
Oconee	18	266.7	14	134.2	3	27.7	<2	†	<2	†	5	79.1	4	36.9	<2	†
Oglethorpe	12	294.1	9	153.0	<2	†	<2	†	<2	†	4	88.5	3	53.3	<2	†
Paulding	47	287.1	37	175.0	6	27.4	5	29.3	2	11.9	19	102.6	11	54.4	5	47.2
Peach	22	283.7	18	159.2	4	33.2	<2	†	<2	†	9	114.3	3	27.4	3	43.7
Pickens	21	265.4	13	124.5	3	33.1	<2	†	<2	†	9	111.2	3	26.1	<2	†
Pierce	21	341.4	12	156.1	2	28.3	<2	†	<2	†	9	139.8	<2	†	3	52.2
Pike	18	375.8	10	149.5	<2	†	<2	†	<2	†	7	133.5	3	45.7	2	55.4
Polk	51	344.8	41	182.8	7	31.9	4	30.1	4	18.2	21	132.3	11	47.4	5	35.5
Pulaski	11	291.2	10	170.0	2	46.4	<2	†	<2	†	3	73.0	2	33.8	2	66.2
Putnam	21	285.5	16	168.9	<2	†	<2	†	<2	†	8	112.2	4	42.7	3	48.1
Quitman	4	352.1	3	202.1	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Rabun	22	270.7	17	170.7	3	29.1	2	25.8	2	20.6	7	85.8	2	22.6	3	35.0

* Average annual rate per 100,000, age-adjusted to the 2000 US standard population.

† Rate not calculated for fewer than 2 average deaths.

Table 2A. Average Annual Number of Cancer Deaths and Mortality Rates by County, Georgia, 1994-1998 (Age-adjusted to 2000 US Standard) *(continued)*

	ALL SITES				BREAST		COLON & RECTUM				LUNG & BRONCHUS				PROSTATE	
	Male		Female		Female		Male		Female		Male		Female		Male	
County	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*	Deaths	Rate*
Randolph	13	378.7	10	169.6	<2	†	<2	†	<2	†	4	123.3	<2	†	2	65.4
Richmond	210	334.2	175	184.8	28	29.2	15	26.1	18	18.8	73	113.6	43	45.0	19	37.1
Rockdale	49	254.3	52	181.9	10	34.0	4	26.3	5	19.0	19	89.0	13	44.0	4	29.8
Schley	5	378.9	5	234.8	<2	†	<2	†	<2	†	2	144.9	<2	†	<2	†
Screven	24	397.5	16	176.7	4	44.9	2	35.8	2	23.8	8	130.7	3	32.0	4	68.3
Seminole	11	287.5	9	149.0	<2	†	<2	†	<2	†	4	90.4	<2	†	<2	†
Spalding	58	293.5	52	163.7	9	30.2	4	20.5	4	13.0	20	99.3	12	40.3	7	42.1
Stephens	34	303.0	28	161.1	5	30.9	3	21.4	2	13.1	13	110.3	5	31.4	5	48.1
Stewart	8	308.6	7	184.4	<2	†	<2	†	<2	†	4	156.6	<2	†	3	100.0
Sumter	33	307.9	33	178.7	5	34.0	2	20.0	3	15.6	11	97.7	7	38.0	4	46.2
Talbot	9	326.0	7	164.5	<2	†	<2	†	<2	†	3	122.0	<2	†	<2	†
Taliaferro	3	381.8	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Tattnall	28	351.6	16	154.7	3	32.5	<2	†	<2	†	10	119.1	3	30.2	3	38.8
Taylor	8	251.0	8	163.0	<2	†	<2	†	<2	†	3	101.4	2	43.2	<2	†
Telfair	19	389.1	15	191.6	3	41.9	3	63.8	<2	†	8	155.1	3	45.6	<2	†
Terrell	17	400.9	11	160.7	<2	†	<2	†	<2	†	8	172.1	<2	†	2	68.3
Thomas	54	334.8	39	153.1	4	17.8	5	31.0	3	12.9	21	121.6	8	30.1	6	42.6
Tift	38	306.7	33	171.8	5	29.8	2	18.9	<2	†	15	116.2	8	41.2	5	42.5
Toombs	31	348.0	28	192.9	3	23.3	<2	†	<2	†	14	144.5	6	41.5	4	56.8
Towns	13	202.3	11	155.9	2	35.1	<2	†	<2	†	4	64.8	<2	†	<2	†
Treutlen	7	284.1	7	184.3	<2	†	<2	†	<2	†	3	103.5	<2	†	<2	†
Troup	71	321.8	61	170.7	7	23.1	5	25.1	8	20.2	29	125.2	14	40.7	9	46.1
Turner	12	303.2	8	150.5	<2	†	<2	†	<2	†	4	99.3	2	33.7	<2	†
Twiggs	13	329.0	7	148.3	<2	†	<2	†	<2	†	6	151.6	2	38.0	<2	†
Union	27	265.2	18	153.6	<2	†	2	21.0	2	18.3	11	103.1	5	45.1	2	24.5
Upson	28	240.8	31	173.4	7	40.8	2	16.4	3	18.6	9	75.8	6	34.4	5	49.4
Walker	81	300.9	62	167.1	9	26.2	6	23.5	6	15.3	36	128.6	16	42.0	6	27.0
Walton	49	285.7	36	145.8	4	16.2	4	22.6	4	17.2	18	103.4	9	38.2	5	38.3
Ware	50	311.7	36	150.8	4	18.5	4	26.6	5	18.6	22	132.1	8	32.2	6	39.3
Warren	8	305.2	7	164.6	<2	†	<2	†	<2	†	3	130.6	<2	†	<2	†
Washington	25	344.5	23	190.4	3	22.9	3	36.5	2	15.8	7	86.0	6	51.4	4	64.4
Wayne	28	277.2	22	169.9	4	28.3	<2	†	<2	†	13	122.5	6	43.0	3	34.6
Webster	4	337.6	3	225.0	<2	†	<2	†	<2	†	<2	†	<2	†	<2	†
Wheeler	7	313.3	4	135.5	<2	†	<2	†	<2	†	3	138.1	<2	†	<2	†
White	17	200.3	14	127.4	3	29.7	<2	†	<2	†	7	72.1	3	25.9	<2	†
Whitfield	76	277.8	67	168.7	12	30.3	6	24.9	6	15.9	33	114.3	16	41.1	9	40.2
Wilcox	10	285.3	7	140.4	<2	†	<2	†	<2	†	4	117.2	<2	†	<2	†
Wilkes	18	382.5	14	188.3	3	43.3	<2	†	<2	†	7	141.3	<2	†	2	63.2
Wilkinson	10	252.3	9	160.8	2	39.2	<2	†	<2	†	4	104.0	<2	†	<2	†
Worth	22	285.3	17	158.7	3	25.8	3	33.0	2	19.6	8	100.5	4	34.3	2	36.6

* Average annual rate per 100,000, age-adjusted to the 2000 US standard population.

† Rate not calculated for fewer than 2 average deaths.

Table 3A. Reported Number of Cancer Cases and Incidence Rates by County, Georgia, 1995 (Age-adjusted to 2000 US Standard)

	ALL SITES		BREAST		COLON & RECTUM		LUNG & BRONCHUS		PROSTATE	
	Total		Female		Total		Total		Male	
County	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Georgia	**23,669**	**388.1**	**3,558**	**103.4**	**2,464**	**41.8**	**3,884**	**64.9**	**3,490**	**141.9**
Appling ≈	49	306.3	14	170.1	<5	†	<5	†	<5	†
Atkinson ≈	18	286.5	5	†	<5	†	<5	†	<5	†
Bacon ≈	31	327.3	8	†	<5	†	<5	†	<5	†
Baker	17	443.9	<5	†	<5	†	<5	†	5	†
Baldwin ≈	53	139.2	5	†	<5	†	13	35.0	7	†
Banks	32	291.3	<5	†	<5	†	<5	†	8	†
Barrow	119	396.8	23	136.2	8	†	20	69.2	19	163.9
Bartow ≈	140	251.2	23	75.0	17	30.8	28	52.1	11	43.2
Ben Hill ≈	49	287.8	7	†	<5	†	11	64.8	10	136.8
Berrien ≈	36	243.0	5	†	<5	†	10	67.7	5	†
Bibb ≈	384	253.9	40	48.3	38	25.6	90	59.1	73	121.9
Bleckley ≈	26	233.0	<5	†	<5	†	5	†	<5	†
Brantley	41	372.3	<5	†	<5	†	7	†	<5	†
Brooks ≈	39	229.4	<5	†	<5	†	11	64.1	6	†
Bryan	68	458.1	8	†	6	†	14	99.8	6	†
Bulloch	151	398.6	30	141.5	12	32.8	23	61.8	19	114.2
Burke ≈	58	314.5	13	117.2	9	†	7	†	<5	†
Butts	64	425.8	9	†	6	†	13	86.3	12	182.8
Calhoun	25	472.9	5	†	<5	†	<5	†	5	†
Camden ≈	64	356.0	9	†	8	†	14	72.6	6	†
Candler ≈	22	233.7	<5	†	<5	†	<5	†	<5	†
Carroll ≈	99	144.3	14	38.3	<5	†	20	30.5	15	56.0
Catoosa ≈	13	26.9	<5	†	<5	†	<5	†	<5	†
Charlton ≈	15	186.2	<5	†	<5	†	<5	†	<5	†
Chatham	977	444.6	137	112.0	151	70.5	172	76.1	101	105.3
Chattahoochee	15	661.2	<5	†	<5	†	<5	†	<5	†
Chattooga	100	387.3	18	121.1	11	40.4	17	67.0	12	119.2
Cherokee	245	302.2	35	74.6	22	27.2	42	57.8	37	112.4
Clarke	307	480.3	49	130.0	27	40.3	32	51.3	60	239.1
Clay ≈	<5	†	<5	†	<5	†	<5	†	<5	†
Clayton	666	501.3	113	136.9	61	52.3	115	89.8	93	183.5
Clinch	21	343.5	5	†	<5	†	6	†	<5	†
Cobb	1,812	509.9	305	140.4	171	56.0	271	82.8	282	211.4
Coffee	120	429.1	17	109.5	13	49.8	16	54.7	19	157.5
Colquitt ≈	99	260.8	12	61.4	<5	†	22	57.1	20	128.7
Columbia	274	479.8	28	75.1	29	60.3	60	113.8	37	171.4
Cook ≈	50	353.0	8	†	6	†	9	†	7	†
Coweta	245	430.1	39	113.4	32	59.3	41	75.7	30	125.9
Crawford ≈	13	151.7	<5	†	<5	†	<5	†	<5	†
Crisp	90	425.3	10	82.1	<5	†	16	77.0	18	234.9
Dade ≈	<5	†	<5	†	<5	†	<5	†	<5	†
Dawson	42	430.2	8	†	<5	†	8	†	6	†
Decatur ≈	60	237.6	11	78.3	6	†	12	47.2	<5	†
DeKalb	2,180	483.1	365	137.7	221	52.2	286	66.4	386	216.4
Dodge ≈	45	236.1	6	†	6	†	15	78.2	<5	†
Dooly ≈	35	334.5	6	†	8	†	<5	†	<5	†
Dougherty	393	464.8	66	138.3	49	57.6	68	82.0	65	192.2
Douglas	192	304.8	24	71.5	23	37.7	28	50.0	21	73.5
Early ≈	11	84.2	<5	†	<5	†	<5	†	<5	†
Echols ≈	<5	†	<5	†	<5	†	<5	†	<5	†
Effingham	105	437.2	21	152.5	6	†	25	109.0	13	135.3
Elbert ≈	71	345.6	8	†	7	†	13	62.0	12	120.6

* Rate per 100,000, age-adjusted to the 2000 US standard population.
† Rate not calculated for fewer than 10 cases.
≈ Cancer cases for this county may be underreported to the Cancer Registry. Please use caution when comparing these data with mortality data for the same county.

Table 3A. Reported Number of Cancer Cases and Incidence Rates by County, Georgia, 1995 (Age-adjusted to 2000 US Standard) *(continued)*

	ALL SITES		BREAST		COLON & RECTUM		LUNG & BRONCHUS		PROSTATE	
	Total		Female		Total		Total		Male	
County	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Emanuel ≈	72	327.4	6	†	10	47.6	19	80.8	8	†
Evans	32	344.1	6	†	<5	†	9	†	<5	†
Fannin ≈	58	250.1	11	97.3	<5	†	12	51.4	13	112.2
Fayette	245	402.7	57	164.1	35	67.7	29	51.7	42	149.3
Floyd	339	372.4	54	104.8	40	43.1	70	75.7	28	73.8
Forsyth	140	264.2	21	71.5	17	31.9	25	48.5	20	80.6
Franklin	67	315.6	9	†	14	69.5	9	†	10	92.9
Fulton	2,957	515.7	433	129.5	294	52.8	376	68.4	478	224.2
Gilmer ≈	55	296.4	<5	†	6	†	11	59.2	10	109.9
Glascock	10	317.8	<5	†	<5	†	<5	†	<5	†
Glynn	315	441.6	43	108.7	26	37.6	53	71.4	53	186.6
Gordon ≈	114	320.6	19	94.8	8	†	30	83.9	7	†
Grady ≈	76	342.3	19	154.7	6	†	11	48.3	6	†
Greene	62	477.8	8	†	11	82.1	8	†	8	†
Gwinnett	1,254	477.7	208	129.8	131	59.0	174	73.2	187	202.5
Habersham	121	376.4	13	72.9	11	35.3	21	62.9	17	110.0
Hall	405	405.5	56	102.6	42	43.5	67	67.5	70	163.0
Hancock	49	541.1	7	†	8	†	10	112.8	7	†
Haralson ≈	45	188.0	<5	†	<5	†	13	52.4	<5	†
Harris ≈	65	310.8	8	†	6	†	14	69.8	7	†
Hart ≈	40	172.0	7	†	<5	†	11	44.5	<5	†
Heard ≈	21	239.5	<5	†	<5	†	<5	†	<5	†
Henry	285	438.0	41	109.4	26	42.2	44	70.5	43	174.6
Houston ≈	159	184.2	15	30.5	14	16.5	22	27.1	33	101.4
Irwin ≈	17	180.9	<5	†	<5	†	<5	†	<5	†
Jackson	130	409.5	20	118.1	17	54.4	15	46.2	16	115.7
Jasper	48	529.0	7	†	7	†	6	†	<5	†
Jeff Davis	45	389.3	5	†	8	†	10	87.0	11	256.6
Jefferson	80	442.4	5	†	14	73.2	17	100.3	10	150.4
Jenkins	36	430.4	<5	†	<5	†	8	†	6	†
Johnson ≈	25	271.6	6	†	<5	†	8	†	<5	†
Jones ≈	26	133.5	<5	†	<5	†	6	†	<5	†
Lamar	60	418.7	7	†	<5	†	15	104.6	11	177.3
Lanier ≈	17	309.5	<5	†	<5	†	<5	†	<5	†
Laurens ≈	107	247.3	8	†	11	25.5	26	58.9	16	83.5
Lee	51	413.2	7	†	<5	†	9	†	13	290.7
Liberty	103	424.7	14	95.5	13	54.9	17	85.6	12	155.8
Lincoln	39	441.4	5	†	<5	†	13	142.8	<5	†
Long ≈	12	189.0	<5	†	<5	†	<5	†	<5	†
Lowndes	300	465.5	46	125.0	30	48.8	48	75.7	59	229.4
Lumpkin	50	341.8	11	146.9	5	†	9	†	7	†
McDuffie	76	382.5	12	107.5	12	62.2	13	60.5	10	109.4
McIntosh	45	479.0	<5	†	5	†	7	†	6	†
Macon ≈	33	255.5	<5	†	<5	†	<5	†	7	†
Madison	76	350.8	9	†	9	†	12	56.0	<5	†
Marion ≈	12	221.9	<5	†	<5	†	<5	†	<5	†
Meriwether	88	388.2	11	86.6	14	60.5	16	69.5	13	156.6
Miller ≈	16	240.3	<5	†	<5	†	<5	†	<5	†
Mitchell	84	431.8	12	116.3	8	†	18	90.8	8	†
Monroe ≈	33	191.5	<5	†	<5	†	9	†	8	†
Montgomery ≈	16	232.9	<5	†	<5	†	<5	†	<5	†
Morgan	74	535.7	12	157.3	9	†	9	†	13	226.9
Murray	80	335.6	11	79.6	7	†	14	57.6	6	†

* Rate per 100,000, age-adjusted to the 2000 US standard population.
† Rate not calculated for fewer than 10 cases.
≈ Cancer cases for this county may be underreported to the Cancer Registry. Please use caution when comparing these data with mortality data for the same county.

Table 3A. Reported Number of Cancer Cases and Incidence Rates by County, Georgia, 1995 (Age-adjusted to 2000 US Standard) *(continued)*

	ALL SITES		BREAST		COLON & RECTUM		LUNG & BRONCHUS		PROSTATE	
	Total		Female		Total		Total		Male	
County	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Muscogee	636	381.8	97	106.9	78	47.8	111	65.5	93	137.5
Newton	144	329.3	25	101.1	14	32.9	31	72.4	7	†
Oconee	80	467.1	16	161.0	6	†	8	†	11	166.8
Oglethorpe ≈	30	288.4	<5	†	<5	†	<5	†	5	†
Paulding ≈	97	252.9	13	55.5	9	†	22	60.6	11	73.0
Peach ≈	52	252.1	6	†	7	†	9	†	7	†
Pickens ≈	50	282.2	<5	†	<5	†	10	60.2	13	151.1
Pierce	52	370.0	9	†	5	†	8	†	5	†
Pike ≈	36	316.9	6	†	8	†	6	†	6	†
Polk	152	417.9	32	159.0	8	†	31	82.3	17	105.7
Pulaski ≈	17	192.2	<5	†	<5	†	5	†	<5	†
Putnam	83	501.6	11	125.3	8	†	16	101.3	11	119.9
Quitman ≈	<5	†	<5	†	<5	†	<5	†	<5	†
Rabun ≈	47	277.2	6	†	<5	†	11	56.8	5	†
Randolph	40	431.6	<5	†	10	106.2	7	†	8	†
Richmond	768	468.9	109	115.7	74	46.7	138	84.9	117	172.7
Rockdale	182	357.4	33	110.8	17	36.5	31	65.4	15	64.8
Schley	21	585.0	<5	†	7	†	<5	†	<5	†
Screven	62	411.8	9	†	7	†	15	96.1	10	170.0
Seminole ≈	8	†	<5	†	<5	†	<5	†	<5	†
Spalding	232	445.9	38	124.9	28	53.8	38	72.5	33	160.9
Stephens	109	382.2	20	129.4	9	†	15	51.2	20	160.9
Stewart	23	370.6	<5	†	<5	†	6	†	<5	†
Sumter	134	472.5	16	95.5	19	67.3	22	76.8	23	212.8
Talbot	44	609.4	8	†	7	†	6	†	<5	†
Taliaferro	6	†	<5	†	<5	†	<5	†	<5	†
Tattnall ≈	47	250.2	9	†	7	†	9	†	<5	†
Taylor	31	371.7	<5	†	<5	†	7	†	8	†
Telfair ≈	29	228.9	<5	†	7	†	5	†	<5	†
Terrell	53	468.0	6	†	<5	†	13	112.1	9	†
Thomas	177	421.4	25	103.8	20	46.7	39	92.7	14	84.4
Tift ≈	105	317.0	17	91.9	11	34.0	16	47.5	22	167.9
Toombs ≈	54	227.2	<5	†	<5	†	12	50.7	7	†
Towns	44	385.7	<5	†	<5	†	10	73.8	9	†
Treutlen ≈	12	202.9	<5	†	<5	†	<5	†	<5	†
Troup	223	388.3	33	100.2	27	46.9	38	65.9	36	152.6
Turner ≈	25	274.5	<5	†	<5	†	6	†	<5	†
Twiggs ≈	18	197.1	<5	†	<5	†	<5	†	6	†
Union ≈	48	240.9	5	†	<5	†	9	†	<5	†
Upson	96	320.5	15	91.0	15	49.7	10	32.6	17	149.2
Walker ≈	13	20.3	<5	†	<5	†	<5	†	<5	†
Walton ≈	92	217.4	13	56.4	5	†	12	29.5	15	89.5
Ware	148	373.2	24	112.0	22	55.2	14	32.5	23	143.4
Warren	33	489.7	5	†	<5	†	8	†	8	†
Washington	88	453.2	13	121.4	13	64.4	17	88.2	12	183.2
Wayne ≈	65	279.6	6	†	6	†	17	71.8	5	†
Webster ≈	5	†	<5	†	<5	†	<5	†	<5	†
Wheeler ≈	11	216.8	<5	†	<5	†	<5	†	<5	†
White	61	328.5	7	†	<5	†	10	51.4	13	159.1
Whitfield	335	486.0	58	149.1	31	46.0	75	108.2	35	131.1
Wilcox	25	315.9	<5	†	<5	†	<5	†	6	†
Wilkes ≈	36	294.0	<5	†	<5	†	10	77.0	5	†
Wilkinson ≈	17	171.2	<5	†	<5	†	<5	†	<5	†
Worth	64	328.5	6	†	9	†	15	80.8	9	†

* Rate per 100,000, age-adjusted to the 2000 US standard population.
† Rate not calculated for fewer than 10 cases.
≈ Cancer cases for this county may be underreported to the Cancer Registry. Please use caution when comparing these data with mortality data for the same county.

Table 4. Invasive Cervical Cancer Incidence and Average Annual Mortality by Health District, Georgia (Age-adjusted to 2000 US Standard)

	Incidence (1995)		Mortality (1994-1998)	
Health District	Cases	Rate*	Deaths	Rate*
Georgia	**389**	**10.6**	**124**	**3.4**
1-1 ≈	19	8.4	10	4.0
1-2	12	9.2	3	2.2
2-0 ≈	14	7.5	5	2.7
3-1	34	11.0	7	2.9
3-2	44	12.2	11	3.1
3-3	15	16.7	3	3.4
3-4	33	13.1	7	2.6
3-5	31	9.9	6	2.0
4-0	34	12.5	11	4.0
5-1 ≈	<5	†	4	5.5
5-2 ≈	12	5.3	7	3.2
6-0 ≈	20	9.6	8	3.8
7-0 ≈	20	11.4	8	4.4
8-1 ≈	10	9.0	7	6.4
8-2	25	14.5	8	4.4
9-1 ≈	14	10.2	7	5.1
9-2	18	12.1	5	3.2
9-3	14	16.2	4	4.3
10-0	17	11.6	4	2.7

* Incidence rate or average annual mortality rate per 100,000, age-adjusted to the 2000 US standard population.

† Rate not calculated for fewer than 10 cases.

≈ Cancer cases for these health districts may be underreported to the Cancer Registry. Please use caution when comparing these data with mortality data from the same health district.

For further information about this report or the two organizations contact:

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http://www.cancer.org.