

Alabama

Cancer Facts & Figures

2012



Alabama Department of Public Health Letter



STATE OF ALABAMA DEPARTMENT OF
PUBLIC HEALTH

Donald E. Williamson, MD
State Health Officer

May 2013

Dear Colleagues:

I am pleased to present the annual **Alabama Cancer Facts & Figures** report produced by the Alabama Statewide Cancer Registry in collaboration with the American Cancer Society. This edition will focus on colorectal cancer, as well as highlight the work of the FITWAY Alabama Colorectal Cancer Prevention Program and its efforts to increase colorectal cancer screening rates in Alabama.

Cancer is the second leading cause of death in Alabama, exceeded only by heart disease. Breast, colorectal, lung, and prostate cancers are the most commonly diagnosed cancers, accounting for more than 56 percent of all new cases in Alabama; however, more Alabamians die from lung cancer than from breast, colorectal, and prostate cancers combined. Eliminating tobacco use, one of the single most preventable causes of disease, and eliminating exposure to secondhand smoke could greatly reduce the incidence and mortality of lung cancer. For breast, prostate, and colorectal cancers, there are established, effective screening tests which can diagnose cancers at an early stage when treatment is more effective and survival is more likely. In addition, engaging in healthy lifestyle habits, such as being physically active and consuming a healthy diet, can also contribute to cancer prevention efforts.

It is my hope that the information presented in this report will assist the partners, agencies, and organizations involved in cancer prevention efforts throughout the state as we continue to work toward reducing Alabama's cancer burden.

Sincerely,

A handwritten signature in black ink, appearing to read "D. E. Williamson", with a long horizontal flourish extending to the right.

Donald E. Williamson, M.D.
State Health Officer

American Cancer Society Letter

Dear Friends and Colleagues,

In partnership with the Alabama Department of Public Health and the Alabama Statewide Cancer Registry, I am pleased to present the 9th edition of *Alabama Cancer Facts & Figures*.

This year, the American Cancer Society will celebrate its 100th birthday. The Society has made a great deal of progress in the fight against cancer in the last 100 years and is looking forward to finishing the fight. As the “Official Sponsor of Birthdays,” we are helping people stay well, get well, find cures and fight back. We are able to accomplish this by supporting high-impact research; providing prevention and early detection education; improving the quality of life for those affected by cancer; and reaching more people, including the medically underserved, with the reliable cancer-related information they need.

We have an opportunity to prevent many more cancers from occurring and to save many more lives with what is known today. To do this, we must work collaboratively using the most effective strategies and the most current data. We are thankful to the Alabama Statewide Cancer Registry for accurate and timely cancer incidence and mortality data. We are pleased that the state devotes significant resources in this area and hope that these systems will continue to expand to assist us in our efforts to control cancer.

This publication serves as a planning tool for American Cancer Society staff and volunteers as well as our partners working on cancer control issues in Alabama. We invite you to join with us as we evaluate the impact of cancer in our state. Together, we can develop and implement local cancer plans that will benefit the people in our communities who are affected by cancer. Together we can make a huge difference in our mission to eliminate cancer.

We are excited to see the lives that are being impacted and saved. We thank you for your support and for your participation in our programs and services.

In the fight against cancer until there's a cure,

A handwritten signature in black ink that reads "Kimberly M. Williams". The signature is written in a cursive style with a large initial 'K'.

Kimberly M. Williams

American Cancer Society

State Vice President, Alabama

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Cancer: Basic Facts

What is Cancer?

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it can result in death. Cancer is caused by both external factors (tobacco, chemicals, radiation and infectious organisms) and internal factors (inherited mutations, hormones, immune conditions and mutations that occur from metabolism). These causal factors may act together or in sequence to initiate or promote carcinogenesis. Ten or more years often pass between exposure to external factors and detectable cancer. Cancer is treated with surgery, radiation, chemotherapy, hormone therapy, biological therapy and targeted therapy.²

Can Cancer Be Prevented?

All cancers caused by cigarette smoking and heavy use of alcohol could be prevented completely. The American Cancer Society estimates that in 2012 about 173,200 cancer deaths will be caused by tobacco use. Scientific evidence suggests that about one-third of the 577,190 cancer deaths expected to occur in 2012 will be related to overweight or obesity, physical inactivity and poor nutrition and thus could also be prevented. Certain cancers are related to infectious agents, such as hepatitis B virus (HBV), human papillomavirus (HPV), human immunodeficiency virus (HIV), *Helicobacter pylori* (*H. pylori*) and others and could be prevented through behavioral changes, vaccines or antibiotics. In addition, many of the more than 2 million skin cancers that are diagnosed annually could be prevented by protecting skin from intense sun exposure and avoiding indoor tanning.²

Regular screening examinations by a health care professional can result in the detection and removal of precancerous growths, as well as the diagnosis of cancers at an early stage, when they are most treatable. Cancers of the cervix, colon and rectum can be prevented by removal of precancerous tissue. Cancers that can be diagnosed early through screening include cancers of the breast, colon, rectum, cervix, prostate, oral cavity and skin. However, screening is known to reduce mortality only for cancers of the breast, colon, rectum and cervix. A heightened awareness of changes in the breast or skin may also result in detection of these tumors at earlier stages. Cancers that can be prevented or detected earlier by screening account for at least half of all new cancer cases.²

Who is at Risk?

Anyone can develop cancer. Since the risk of being diagnosed with cancer increases with age, most cases occur in adults

who are middle-aged or older. About 77% of all cancers are diagnosed in persons 55 and older.² Cancer researchers use the word “risk” in different ways, most commonly expressing risk as lifetime risk or relative risk. Lifetime risk refers to the probability that an individual will develop or die from cancer over the course of a lifetime. In the U.S., men have slightly less than a 1 in 2 lifetime risk of developing cancer; for women, the risk is a little more than 1 in 3.² Relative risk is a measure of the strength of the relationship between risk factors and a particular cancer. It compares the risk of developing cancer in persons with a certain exposure or trait to the risk in persons who do not have this characteristic. For example, male smokers are about 23 times more likely to develop lung cancer than nonsmokers, so their relative risk is 23. Women who have a first-degree relative (mother, sister or daughter) with a history of breast cancer have about twice the risk of developing breast cancer compared to women who do not have a family history.²

How Many New Cancer Cases Are Expected To Occur This Year in Alabama?

In Alabama, there will be approximately 26,440 new cancer cases in 2012; approximately 72 people will hear that they have been diagnosed with cancer each day.²

Estimated New Cancer Cases for Selected Cancer Sites, Alabama, 2012*

Site	New Cases
All Sites	26,440
Female Breast	3,450
Uterine Cervix	220
Colon and Rectum	2,540
Uterine Corpus	590
Leukemia	630
Lung and Bronchus	4,440
Melanoma	1,090
Non-Hodgkin Lymphoma	1,000
Prostate	3,860
Urinary Bladder	1,050

*Rounded to the nearest 10. Excludes basal and squamous cell skin cancers and *in situ* carcinomas except urinary bladder.

Source: American Cancer Society, *Cancer Facts & Figures 2012*. National Home Office: American Cancer Society.

How Many People Are Expected to Die of Cancer This Year in Alabama?

In Alabama, 10,290 people are expected to die of cancer this year. Lung cancer will account for 3,240 deaths which is approximately 31% of all estimated cancer deaths in Alabama.²

Estimated Cancer Deaths for Selected Cancer Sites, Alabama 2012*

Site	Deaths
All Sites	10,290
Brain/Nervous System	230
Female Breast	710
Colon and Rectum	980
Leukemia	390
Liver	320
Lung and Bronchus	3,240
Non-Hodgkin Lymphoma	320
Ovary	300
Pancreas	600
Prostate	560

*Rounded to the nearest 10.

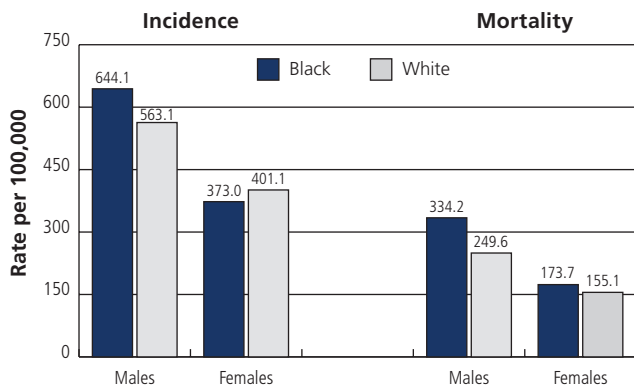
Source: American Cancer Society, *Cancer Facts & Figures 2012*. National Home Office: American Cancer Society.

All Cancers

Incidence Rates:

For both genders combined, Alabama's cancer incidence rate is 473.0 – lower than the U.S. rate of 473.4.⁴ (See Table 11.) Males in Alabama have a higher cancer incidence rate than females with a rate of 582.6 versus 395.2.⁴ Among males, black males have a higher cancer incidence rate than white males with a rate of 644.1 versus 563.1.⁴ Among females, white females have a higher cancer incidence rate than black females with a rate of 401.1 versus 373.0.⁴ (See Figure 1 and Table 11.)

Figure 1: All Sites Cancer Incidence and Mortality Rates*, by Sex and Race, Alabama



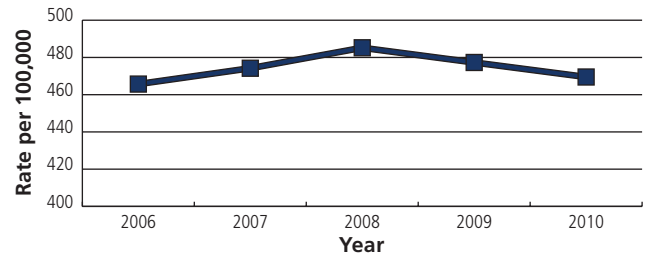
*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Cancer Incidence (2005-2009), Cancer Mortality (2001-2010).

Mortality Rates:

For both genders combined, Alabama's cancer mortality rate is 200.3 – higher than the U.S. rate of 183.3.^{3,5} Males in Alabama have a higher cancer mortality rate than females with a rate of 263.3 versus 158.7.³ Among males, black males have a higher cancer mortality rate than white males with a rate of 334.2 versus 249.6.³ Among females, black females have a higher cancer mortality rate than white females with a rate of 173.7 versus 155.1.³ (See Figure 1 and Table 12.)

Figure 2: Trends in Cancer Incidence Rates*, All Sites, Males and Females, Alabama, 2006-2010



*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population.

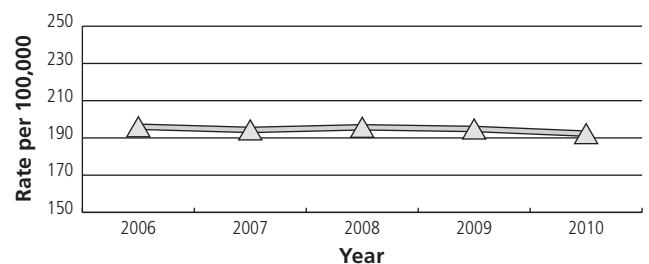
Source: Alabama Statewide Cancer Registry (ASCR), 2012.

Trends:

Between 2006 and 2010, the percentage change for all sites cancer incidence in Alabama had an overall increase of 0.8%; the annual percentage change during this time was 0.2%.³ The increase in cancer incidence was not found to be statistically significant. (See Figure 2 and Table 2.)

Between 2006 and 2010, the percentage change for all sites cancer mortality in Alabama had an overall decrease of 1.9%; the annual percentage change during this time was -0.4%.³ The decrease in cancer mortality was not found to be statistically significant. (See Figure 3 and Table 10.)

Figure 3: Trends in Cancer Mortality Rates*, All Sites, Males and Females, Alabama, 2006-2010



*Per 100,000, age-adjusted to the 2000 U.S. standard population.

Source: Alabama Statewide Cancer Registry (ASCR), 2012.

Selected Cancers

Lung Cancer

2012 Estimates:

In 2012, an estimated 4,440 new cases of lung and bronchus cancer and an estimated 3,240 deaths from lung and bronchus cancer are expected to occur in Alabama.²

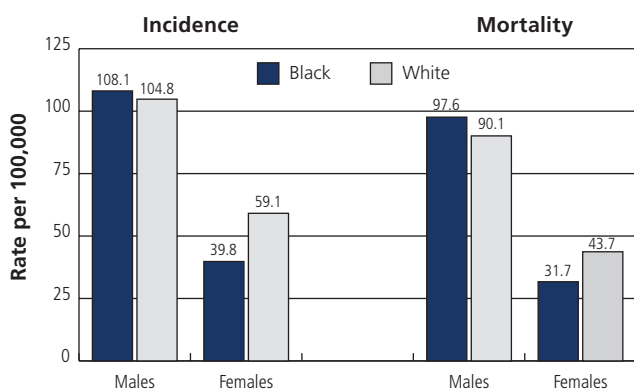
Incidence Rates:

For both genders combined, the lung cancer incidence rate in Alabama is 76.2 – higher than the U.S. rate of 67.3.⁴ (See Table 11.) Males in Alabama have a higher lung cancer incidence rate than females with a rate of 105.2 versus 54.8.⁴ Among males in Alabama, black males have a higher lung cancer incidence rate than white males with a rate of 108.1 versus 104.8.⁴ Among females in Alabama, white females have a higher lung cancer incidence rate than black females with a rate of 59.1 versus 39.8.⁴ (See Figure 4 and Table 11.)

Mortality Rates:

For both genders combined, the lung cancer mortality rate in Alabama is 61.8 – higher than the U.S. rate of 51.6.^{3,5} Males in Alabama have a higher lung cancer mortality rate than females with a rate of 91.2 versus 41.0.³ Among males in Alabama, black males have a higher lung cancer mortality rate than white males with a rate of 97.6 versus 90.1.³ Among females in Alabama, white females have a higher lung cancer mortality rate than black females with a rate of 43.7 versus 31.7.³ (See Figure 4 and Table 12.)

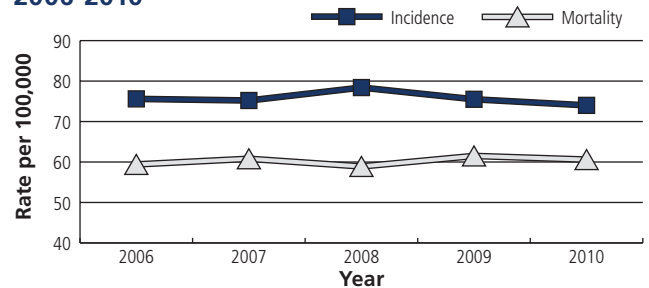
Figure 4: Lung Cancer Incidence and Mortality Rates*, by Sex and Race, Alabama



*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Cancer Incidence (2005-2009), Cancer Mortality (2001-2010).

Figure 5: Trends in Lung Cancer Incidence and Mortality Rates*, Males and Females, Alabama, 2006-2010



*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population. Source: Alabama Statewide Cancer Registry (ASCR), 2012.

Trends:

Between 2006 and 2010, the percentage change for lung cancer incidence in Alabama had an overall decrease of 2.2%; the annual percentage change during this time was -0.4%.³ For lung cancer mortality, between 2006 and 2010, the percentage change had an overall increase of 2.0%; the annual percentage change during this time was 0.5%.³ (See Figure 5 and Tables 2 and 10.)

Risk Factors:

Cigarette smoking is by far the most important risk factor for lung cancer. Risk increases with quantity and duration of cigarette consumption. Cigar and pipe smoking also increase risk. Other risk factors include occupational or environmental exposure to secondhand smoke, radon, asbestos (particularly among smokers), certain metals (chromium, cadmium, arsenic, etc.), some organic chemicals, radiation, air pollution and a history of tuberculosis.² Genetic susceptibility can also play a contributing role in the development of lung cancer, especially in those who develop lung cancer at a younger age.²

Tobacco Use:

Alabama adults and Alabama youth have higher rates of cigarette smoking than the national averages. While 24.3% of Alabama adults and 22.9% of Alabama youth smoke, the national averages are 21.2% and 18.1%, respectively.⁹ Adults with low levels of education have the highest rates of cigarette smoking in Alabama.⁹ (See Table 13 for additional information on smoking rates in Alabama and the U.S.)

Colorectal Cancer

2012 Estimates:

In 2012, an estimated 2,540 new cases of colorectal cancer and an estimated 980 colorectal cancer deaths are expected to occur in Alabama.²

Incidence Rates:

For both genders combined, the colorectal cancer incidence rate in Alabama is 49.4 – higher than the U.S. rate of 46.3.⁴ (See Table 11.) Males in Alabama have a higher colorectal cancer incidence rate than females with a rate of 59.5 versus 41.5.⁴

Among males in Alabama, black males have a higher colorectal cancer incidence rate than white males with a rate of 72.7 versus 56.5.⁴ Among females in Alabama, black females have a higher colorectal cancer incidence rate than white females with a rate of 50.1 versus 39.1.⁴ (See Figure 6 and Table 11.)

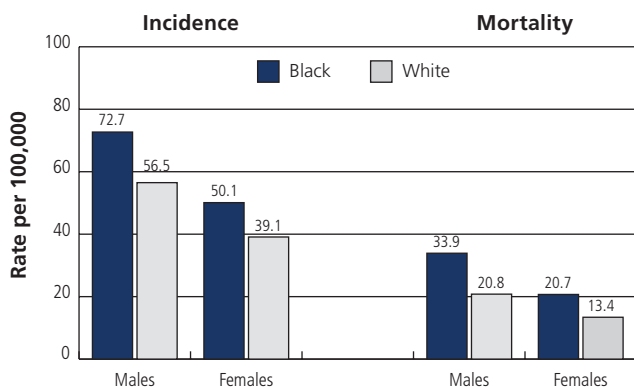
Mortality Rates:

For both genders combined, the colorectal cancer mortality rate in Alabama is 18.2 – higher than the U.S. rate of 17.8.^{3,5} Males in Alabama have a higher colorectal cancer mortality rate than females with a rate of 23.0 versus 14.9.³ Among males in Alabama, black males have a higher colorectal cancer mortality rate than white males with a rate of 33.9 versus 20.8.³ Among females in Alabama, black females have a higher colorectal cancer mortality rate than white females with a rate of 20.7 versus 13.4.³ (See Figure 6 and Table 12.)

Trends:

Between 2006 and 2010, the percentage change for colorectal cancer incidence in Alabama had an overall decrease of 11.1%; the annual percentage change during this time was -2.9%.³

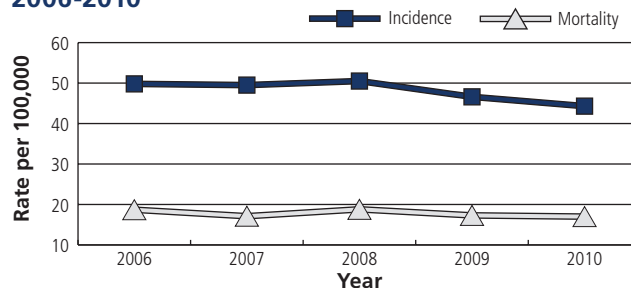
Figure 6: Colorectal Cancer Incidence and Mortality Rates*, by Sex and Race, Alabama



*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Cancer Incidence (2005-2009), Cancer Mortality (2001-2010).

Figure 7: Trends in Colorectal Cancer Incidence and Mortality Rates*, Males and Females, Alabama, 2006-2010



*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population. Source: Alabama Statewide Cancer Registry (ASCR), 2012.

For colorectal cancer mortality, between 2006 and 2010, the percentage change had an overall decrease of 9.3%; the annual percentage change during this time was -1.9%.³ (See Figure 7 and Tables 2 and 10.)

Risk Factors:

The risk of colorectal cancer increases with age; 91% of cases are diagnosed in individuals over 50 years of age.² Risk is also increased by certain inherited genetic mutations (familial adenomatous polyposis [FAP] and hereditary non-polyposis colorectal cancer [HNPCC]), a personal or family history of colorectal cancer and/or polyps, or a personal history of chronic inflammatory bowel disease.² Several modifiable factors are associated with an increased risk of colorectal cancer. These include smoking, physical inactivity, obesity, heavy alcohol consumption, a diet high in red or processed meat and inadequate intake of fruits and vegetables.¹

Early Detection:

Beginning at age 50, men and women who are at average risk for developing colorectal cancer should begin screening. Screening can result in the detection and removal of colorectal polyps before they become cancerous, as well as detect cancers at an early stage.² When colorectal cancers are detected at an early, localized stage, the 5-year survival rate is 90%; however, only 39% of colorectal cancer cases are diagnosed at this stage, mostly due to underuse of screening.² After the cancer has spread regionally to involve adjacent organs or lymph nodes, the 5-year survival rate drops to 69%. For persons with distant stage diagnosis the 5-year survival rate is 12%.² For all adults 50 years of age and older, Alabama adults have slightly lower rates of colorectal cancer screening than the national average.⁶ Adults with low education have the lowest colorectal cancer screening rates of all genders and races in Alabama.⁶ (See page 13 for the American Cancer Society's screening guidelines for the early detection of colorectal cancer and Table 14 for more information on colorectal cancer screening rates in Alabama and the U.S.)

Melanoma

2012 Estimates:

In 2012, it is estimated that 1,090 new cases of melanoma will occur in Alabama.²

Incidence Rates:

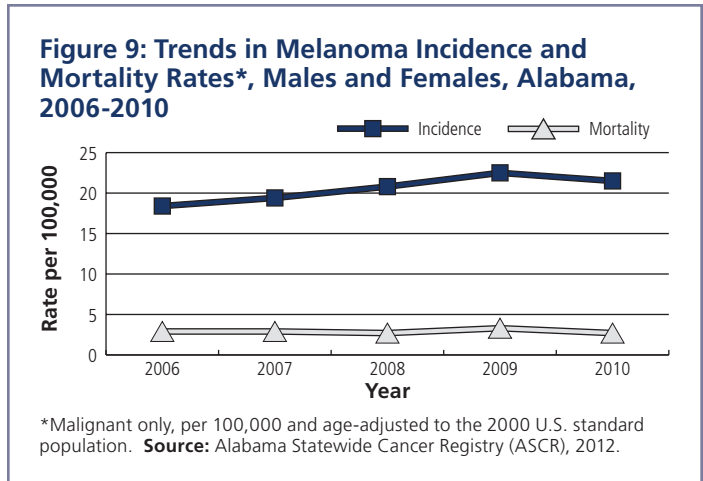
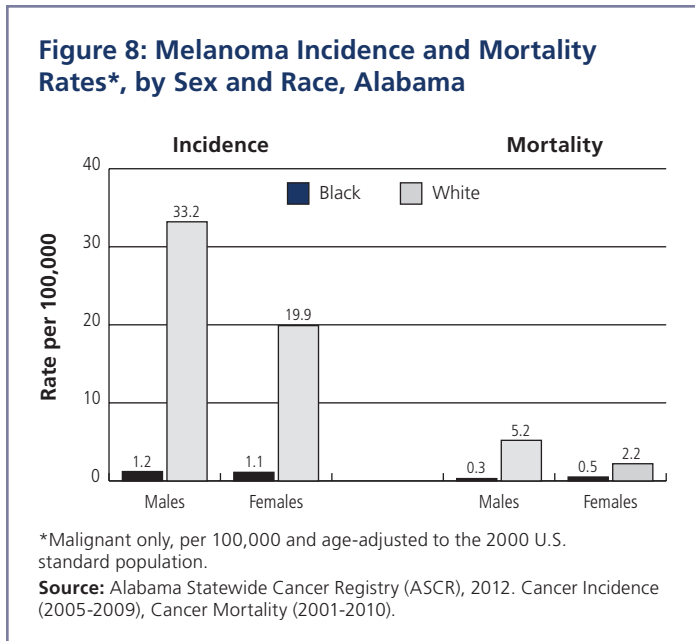
For both genders combined, the melanoma incidence rate in Alabama is 20.1 – higher than the U.S. rate of 19.4.⁴ (See Table 11.) Males in Alabama have a higher melanoma incidence rate than females with a rate of 27.0 versus 15.2.⁴ Among males in Alabama, white males have a significantly higher melanoma incidence rate than black males with a rate of 33.2 versus 1.2.⁴ Among females in Alabama, white females have a significantly higher melanoma incidence rate than black females with a rate of 19.9 versus 1.1.⁴ (See Figure 8 and Table 11.)

Mortality Rates:

For both genders combined, the melanoma mortality rate in Alabama is 2.8 – roughly the same as the U.S. rate of 2.7.^{3,5} Males in Alabama have a higher melanoma mortality rate than females with a rate of 4.3 versus 1.8.³ Among males in Alabama, white males have a higher melanoma mortality rate than black males with a rate of 5.2 versus 0.3.³ Among females in Alabama, white females have a higher melanoma mortality rate than black females with a rate of 2.2 versus 0.5.³ (See Figure 8 and Table 12.)

Trends:

Between 2006 and 2010, the percentage change for melanoma incidence in Alabama had an overall increase of 16.6%; the annual percentage change during this time was 4.7%.³ For melanoma mortality, between 2006 and 2010, the percentage change



had an overall decrease of 5.7%; the annual percentage change during this time was 0.5%.³ (See Figure 9 and Tables 2 and 10.)

Since 2004 the number of dermatology clinics reporting to the Alabama Statewide Cancer Registry (ASCR) has more than tripled. This increase in case reporting is more than likely responsible for the significant increase in the melanoma incidence trend.

Risk Factors:

Major risk factors for melanoma include a personal or family history of melanoma and the presence of atypical moles or a large number of moles (greater than 50). Other risk factors for all types of skin cancer include sun sensitivity (burning easily, difficulty tanning, natural blond or red hair color); a history of excessive sun exposure, including sunburns; use of tanning booths; diseases that suppress the immune system; and a past history of basal cell or squamous cell skin cancers.²

Early Detection:

The best way to detect skin cancer early is to recognize changes in skin growths or the appearance of new growths.² Adults should undergo regular dermatologic assessment and thoroughly examine their skin on a regular basis.² New or unusual lesions or a progressive change in a lesion's appearance (size, shape, or color, etc.) should be evaluated promptly by a physician.² A simple ABCD rule outlines the warning signals of the most common type of melanoma: A is for asymmetry (one half of the mole does not match the other half); B is for border irregularity (the edges are ragged, notched or blurred); C is for color (the pigmentation is not uniform, with variable degrees of tan, brown or black); D is for diameter greater than 6 millimeters (about the size of a pencil eraser).² If detected at its earliest stages and treated properly, melanoma is highly curable.² When detected at a localized stage, the 5-year survival rate is 98%; the 5-year survival rates for regional and distant stage diseases are 62% and 15%, respectively.²

Prostate Cancer

2012 Estimates:

In 2012, an estimated 3,860 new cases of prostate cancer and an estimated 560 prostate cancer deaths are expected to occur in Alabama.²

Incidence Rates:

The prostate cancer incidence rate in Alabama is 161.6 – higher than the U.S. rate of 151.4.⁴ (See Table 11.) Black males in Alabama have a higher prostate cancer incidence rate than white males with a rate of 243.8 versus 137.3.⁴ (See Figure 10 and Table 11.)

Mortality Rates:

The prostate cancer mortality rate in Alabama is 30.5 – higher than the U.S. rate of 25.0.^{3,5} Black males in Alabama have a higher prostate cancer mortality rate than white males with a rate of 70.2 versus 22.8.³ (See Figure 10 and Table 12.)

Trends:

Between 2006 and 2010, the percentage change for prostate cancer incidence in Alabama had an overall decrease of 8.6%; the annual percentage change during this time was -2.3% and was statistically significant.³ For prostate cancer mortality, between 2006 and 2010, the percentage change had an overall decrease of 1.5%; the annual percentage change during this time was -1.1%.³ (See Figure 11 and Tables 2 and 10.)

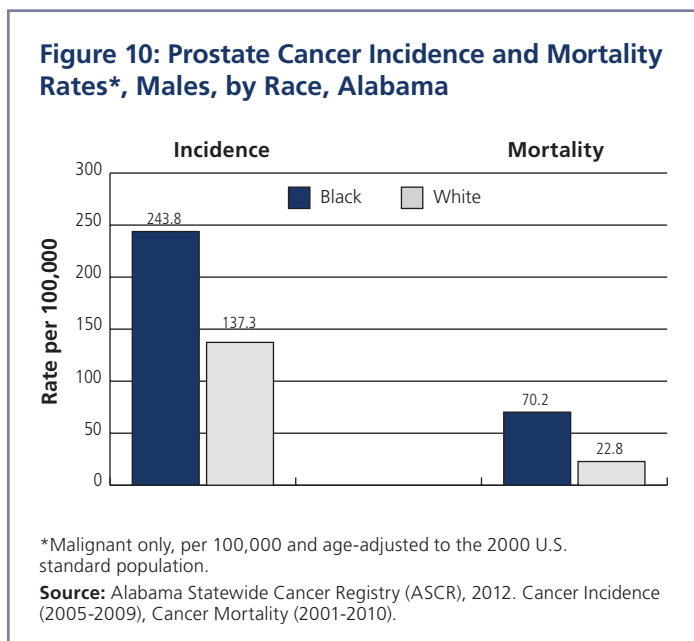
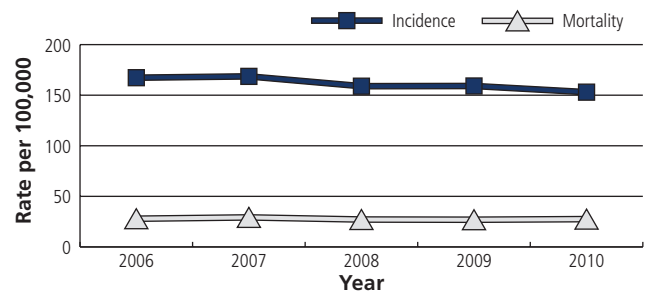


Figure 11: Trends in Prostate Cancer Incidence and Mortality Rates*, Males, Alabama, 2006-2010



*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population. **Source:** Alabama Statewide Cancer Registry (ASCR), 2012.

Risk Factors:

Age, race and family history are well-established risk factors for prostate cancer.² About 60% of all prostate cancer cases are diagnosed in men 65 years of age and older, and 97% occur in men 50 and older. African American men and Jamaican men of African descent have the highest prostate cancer incidence rates in the world.² Genetic studies suggest that strong familial disposition may account for 5-10% of prostate cancer cases. Recent studies suggest that a diet high in processed meat or dairy foods may be a risk factor, and obesity appears to increase risk of aggressive prostate cancer.²

Early Detection:

The American Cancer Society recommends that beginning at age 50, men who are at average risk of prostate cancer and have a life expectancy of at least 10 years receive information about the potential benefits and known limitations associated with testing for early prostate cancer detection and have the opportunity to make an informed decision about testing. Men at higher risk, including African American men and men with a first-degree relative (father or brother) diagnosed with prostate cancer before age 65, should have this discussion with their health care provider beginning at age 45. Men at appreciably higher risk (multiple family members diagnosed with prostate cancer before age 65) should receive this information beginning at age 40. The 5-year survival rate for prostate cancer is almost 100% when the cancer is diagnosed and treated at the local and regional stages.² Males in Alabama have higher rates of PSA screening than the U.S. averages.⁶ Males of low education have the lowest rates of PSA screening of all groups.⁶ (See page 13 for the American Cancer Society's screening guidelines concerning the early detection of prostate cancer and Table 16 for more information on prostate cancer screening rates in Alabama and the U.S.)

Breast Cancer

2012 Estimates:

In 2012, an estimated 3,450 new cases of female breast cancer and an estimated 710 female breast cancer deaths are expected to occur in Alabama.²

Incidence Rates:

The female breast cancer incidence rate in Alabama is 119.1 – lower than the U.S. rate of 122.3.⁴ (See Table 11.) Black females in Alabama have a higher breast cancer incidence rate than white females with a rate of 120.4 versus 117.6.⁴ (See Figure 12 and Table 11.)

Mortality Rates:

The female breast cancer mortality rate in Alabama is 24.4 – higher than the U.S. rate of 23.9.^{3,5} Black females in Alabama have a higher breast cancer mortality rate than white females with a rate of 31.6 versus 22.3.³ (See Figure 12 and Table 12.)

Trends:

Between 2006 and 2010, the percentage change for breast cancer incidence in Alabama had an overall decrease of 0.9%; the annual percentage change during this time was less than 0.1%.³ For breast cancer mortality, between 2006 and 2010, the percentage change had an overall increase of 8.7%; the annual percentage change during this time was 0.8%.³ (See Figure 13 and Tables 2 and 10.)

Risk Factors:

Aside from being female, age is the most important factor affecting breast cancer risk. Risk is also increased by inherited

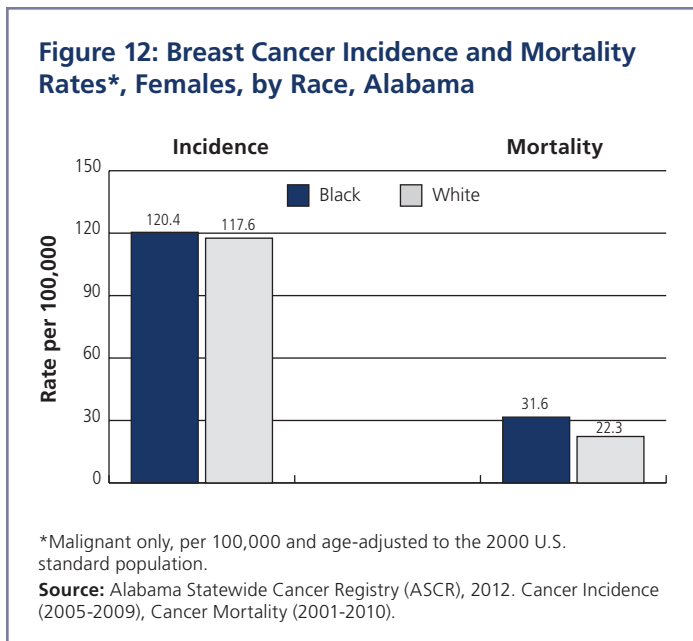
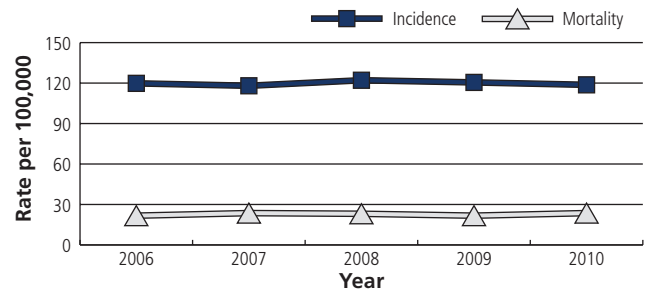


Figure 13: Trends in Breast Cancer Incidence and Mortality Rates*, Females, Alabama, 2006-2010



*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population. **Source:** Alabama Statewide Cancer Registry (ASCR), 2012.

genetic mutations in the BRCA1 and BRCA2 genes, a personal or family history of breast cancer, high breast tissue density, biopsy-confirmed hyperplasia, high bone mineral density and high-dose radiation to the chest, typically related to a medical procedure.² Reproductive factors that increase breast cancer risk include a long menstrual history (menstrual periods that start early and/or end late in life), never having children, recent use of oral contraceptives and having one's first child after age 30.² Potentially modifiable risk factors include weight gain after age 18, being overweight or obese (for post menopausal breast cancer), use of combined estrogen and progestin menopausal hormone therapy, physical inactivity and consumption of one or more alcoholic beverages per day.²

Early Detection:

Mammography can detect breast cancer at an early stage, when treatment is more effective and a cure is more likely.² Steady declines in breast cancer mortality among women since 1990 have been attributed to a combination of early detection and improvements in treatment. When breast cancers are detected and diagnosed at the localized stage, the relative 5-year survival rate is 99%, compared to a rate of only 23% for breast cancers detected at the distant stage.² Alabama females have a slightly lower rate of mammography screening than the U.S. average – 75.2% of Alabama females have had a mammogram in the past two years compared to 75.6% of U.S. females.⁶ Black females in Alabama have a higher rate of mammography screening than white females.⁶ Females with a low education have the lowest rate of mammography of all age groups and races.⁶ (See page 13 for the American Cancer Society's screening guidelines for the early detection of breast cancer and Table 15 for more information on breast cancer screening rates in Alabama and the U.S.)

Call to Action

Mammography can detect breast cancer at an early stage, when treatment may be more effective and survival is more likely.²

Cervical Cancer

2012 Estimates:

In 2012, it is estimated that 220 new cases of cervical cancer will occur in Alabama.²

Incidence Rates:

The cervical cancer incidence rate in Alabama is 8.7 – higher than the U.S. rate of 8.1.⁴ (See Table 11.) Black females in Alabama have a higher cervical cancer incidence rate than white females with a rate of 9.9 versus 8.3.⁴ (See Figure 14 and Table 11.)

Mortality Rates:

The cervical cancer mortality rate in Alabama is 3.0 – slightly higher than the U.S. rate of 2.4.^{3,5} Black females in Alabama have a higher cervical cancer mortality rate than white females with a rate of 5.3 versus 2.4.³ (See Figure 14 and Table 12.)

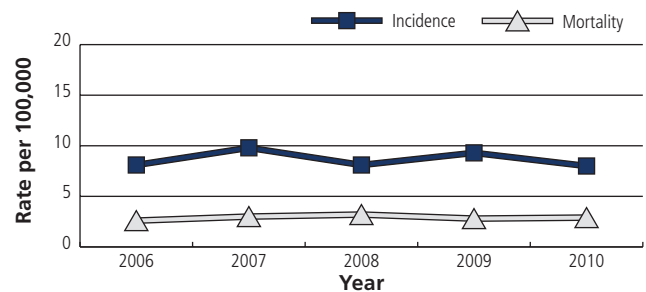
Trends:

Between 2006 and 2010, the percentage change for cervical cancer incidence in Alabama had an overall decrease of 1.9%; the annual percentage change during this time was -1.0%.³ For cervical cancer mortality, between 2006 and 2010, the percentage change had an overall increase of 12.1%; the annual percentage change during this time was 1.6%.³ (See Figure 15 and Tables 2 and 10.)

Risk Factors:

The primary cause of cervical cancer is infection with certain types of human papillomavirus (HPV).² Women who begin having sex at an early age or who have many sexual partners

Figure 15: Trends in Cervical Cancer Incidence and Mortality Rates*, Females, Alabama, 2006-2010



*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population. **Source:** Alabama Statewide Cancer Registry (ASCR), 2012.

are at increased risk for HPV and cervical cancer. However, a woman may be infected with HPV even if she has had only one sexual partner. Persistence of the infection and progression to cancer may be influenced by factors such as immunosuppression, high parity (number of childbirths) and cigarette smoking. Long-term use of oral contraceptives is also associated with increased risk of cervical cancer.²

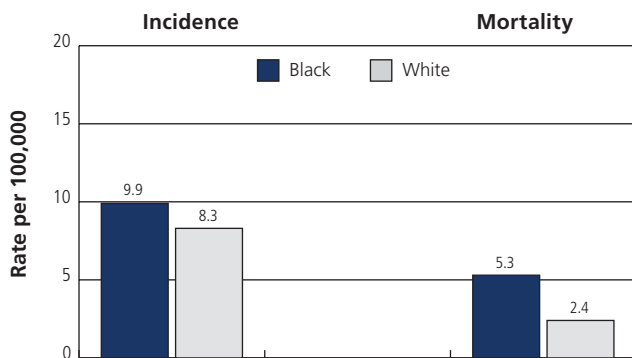
Prevention:

The FDA has approved two vaccines for the prevention of the most common HPV infections that cause cervical cancer; Gardasil was approved for use in ages 9 to 26 in 2006, and Cervarix was approved for ages 10 to 25 in October 2009. The vaccines cannot protect against established infections, nor do they protect against all HPV types. Screening can prevent cervical cancer by detecting precancerous lesions. As screening has become more common, preinvasive lesions of the cervix are detected far more frequently than invasive cancer. The Pap test is the most widely used cervical cancer screening method.

Early Detection:

The Pap test is a simple procedure in which a small sample of cells is collected from the cervix and examined.² When detected at a localized stage, the 5-year survival rate for invasive cervical cancer is 91%.² As a group, females 18 years of age and older in Alabama have a slightly higher rate of cervical cancer screening than the U.S. average.⁶ Females of low education have the lowest rate of screening for all ages and races.⁶ (See page 13 for the American Cancer Society's screening guidelines for the early detection of cervical cancer and Table 17 for more information on cervical cancer screening rates in Alabama and the U.S.)

Figure 14: Cervical Cancer Incidence and Mortality Rates*, Females, by Race, Alabama



*Malignant only, per 100,000 and age-adjusted to the 2000 U.S. standard population.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Cancer Incidence (2005-2009), Cancer Mortality (2001-2010).

The FITWAY Colorectal Cancer Prevention Program: Increasing Colorectal Screening in Alabama

Despite the availability of effective screening tests, colorectal cancer (CRC) continues to be the second leading cause of cancer deaths in Alabama. CRC is a slow growing disease that typically starts as an abnormal growth called a polyp. It affects both men and women, most often occurring in people aged 50 and older. Screening tests can prevent CRC by enabling physicians to find and remove polyps before they become cancerous. Screening tests can also detect CRC early when it is easier to treat.

Unfortunately, many Alabamians are not regularly screened for CRC and are only diagnosed with the disease after it has reached an advanced stage, when treatment is more difficult. From 2006-2010, 42.7% of CRC diagnoses in Alabama were made at a late stage (AJCC 6th edition Stage 3 or Stage 4). The percentage of late stage CRC diagnoses was statistically significantly higher among black Alabamians than whites. (See Figure 16.) If these cancers were found earlier through screening, the chances of survival could be greater. Early stage CRC often has no symptoms and it occurs in people without a family history of the disease. Therefore, everyone should be screened at age 50, earlier if they are at higher risk.

Efforts are currently underway in Alabama to improve CRC screening rates to save lives. Alabama is one of 25 states and four tribal organizations to receive a grant from the Centers for Disease Control and Prevention for CRC prevention. This grant funds the ADPH FITWAY Colorectal Cancer Prevention Program. The goal of the program is to screen 80% of Alabamians 50 and

older by 2014. To reach this goal, FITWAY promotes adherence to the United States Preventive Services Task Force (USPSTF) screening guidelines, which recommend the following tests for average risk people aged 50 to 75:

- Colonoscopy every 10 years,
- Sigmoidoscopy every 5 years combined with a high-sensitivity (HS) fecal occult blood test (FOBT) or fecal immunochemical test (FIT/iFOBT) every 3 years, or
- HS FOBT or FIT/iFOBT annually.

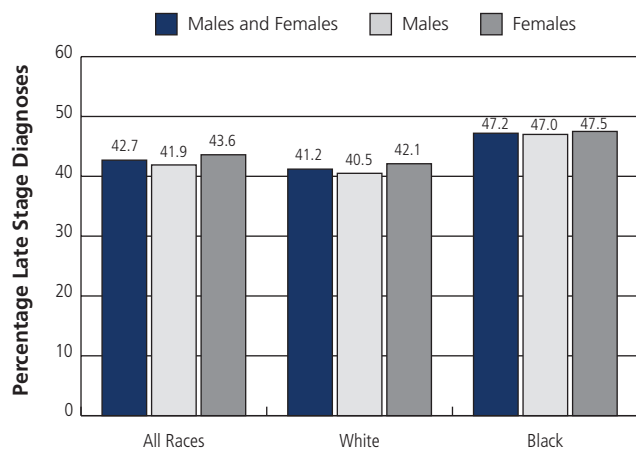
The two components of the FITWAY Program are direct screening and screening promotion. One-third of the FITWAY award is used for direct screening efforts to screen low income/uninsured average risk men and women aged 50 to 64 using a FIT/iFOBT. FITWAY provides a diagnostic colonoscopy for participants who have positive FIT/iFOBT results at no cost to the patient. Through this portion of the grant, 971 Alabamians were screened for CRC with a FIT/iFOBT between April 2010 and June 2012. Two-thirds of the award is used to establish broad-based coalitions to create policy and systems changes that will increase screening rates. Through this portion of the grant, the FITWAY Program has worked with a wide array of partners to promote CRC screening statewide. In both components of the program, FITWAY focuses on improving CRC screening rates by increasing access to FIT/iFOBT. FIT/iFOBT is a new type of take-home stool test that is highly sensitive, inexpensive and user-friendly.

FITWAY is guided by semiannual Roundtable meetings facilitated by the American Cancer Society (ACS). At these meetings, partners throughout the state gather to set goals and develop strategies for increasing screening. Attendees include physicians, nurses and pharmacists, representatives from cancer centers, universities, Blue Cross/Blue Shield of Alabama (BCBSAL), Medicaid, Medicare, the Alabama Quality Assurance Foundation (AQAF), FIT/iFOBT manufacturers and distributors, laboratory companies and interested citizens. Anyone interested in increasing CRC screening in Alabama is welcome to attend.

Why FIT/iFOBT?

FIT/iFOBT are similar to an older type of stool test called a guaiac FOBT. Both FOBT and FIT/iFOBT involve collecting a small stool sample from one or more bowel movements and returning the sample to a physician or laboratory. Positive FOBT or FIT/iFOBT should be evaluated with a colonoscopy to determine the source of the blood. Negative tests should be repeated annually.

Figure 16: Late Stage* Colorectal Cancer Diagnoses in Alabama by Race and Gender, 2006-2010



*Late stage is defined as AJCC 6th edition Stage 3 and Stage 4.

Source: Alabama Statewide Cancer Registry (ASCR), 2012.

Despite the similarities between guaiac FOBT and FIT/iFOBT, there are important differences between the two types of stool tests. For instance, some older guaiac FOBT lack the sensitivity required to adequately screen for CRC: only take-home HS guaiac tests and the FIT/iFOBT are recommended. Also, while HS take-home guaiac FOBT tests continue to be recommended, the FIT/iFOBT are superior in several ways:

- FIT/iFOBT are specific to human hemoglobin so there are fewer false positives and no diet or medicine restrictions, making FIT/iFOBT easier to complete. Guaiac tests require changes in diet and medicine for several days prior to testing.
- Many types of FIT/iFOBT only require one or two samples. The HS guaiac FOBT requires three samples taken from three different bowel movements.
- FIT/iFOBT are specific to lower gastrointestinal bleeding. Therefore, positive FIT/iFOBT results indicate bleeding in the colon or rectum. A positive guaiac test could indicate bleeding anywhere in the digestive tract, including the stomach or throat.
- FIT/iFOBT come in a variety of forms that involve less stool handling than guaiac tests. These types of tests may be more appealing to those averse to handling their stool.

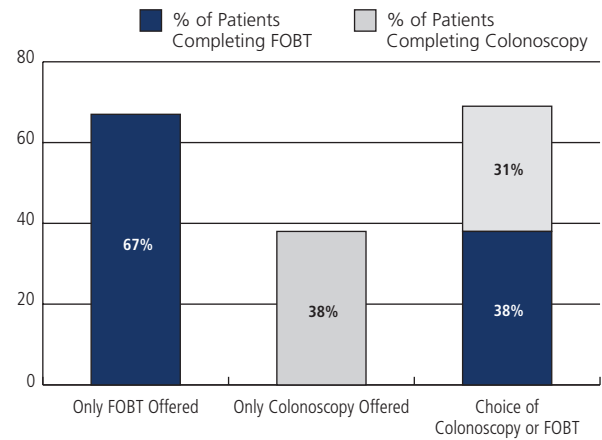
Like the HS guaiac FOBT, FIT/iFOBT screening is covered by major insurers in Alabama including BCBSAL, Medicaid and Medicare.

The Importance of Having a Choice of Screening Tests

The USPSTF and ACS recommendations include more than one type of CRC screening test because several tests have been proven effective at finding CRC early. Also, people differ greatly in their test preferences. Many prefer screening with colonoscopy because it is the most sensitive test and only needs to be undertaken every 10 years. Others prefer the convenience of stool tests that are completed privately at home once a year. Importantly, while colonoscopy is an excellent screening test for CRC, some people are unable to complete a screening colonoscopy. Common barriers to colonoscopy include cost, discomfort with bowel preparation, and transportation issues. Additionally, in some rural areas the distance to endoscopists (doctors who conduct colonoscopies) can be a significant barrier as can scheduling time off for the bowel prep and the procedure. All of these issues make it important for physicians to offer patients the types of tests they are likeliest to complete.

A recent study highlights the benefit of having multiple options for CRC screening. This study found that those offered a choice between colonoscopy and a stool test were more likely to complete screening than those offered only one type of test. The subjects of this study were broken up into three groups. One group was only offered FOBT, another group was offered

Figure 17: Screening Completion Rates by Test(s) Offered



Source: Inadomi JM, Vijan S, Janz NK, et al. Adherence to colorectal screening: a randomized clinical trial of competing strategies. *Arch Intern Med.* 2012;172(7):575-582.

colonoscopy and a third group was offered a choice between colonoscopy and FOBT. The group offered a choice of screening tests completed the most screening.¹⁰ (See Figure 17.)

Physician Outreach

Most people initiate CRC screening because of the recommendation of their physician. Therefore, FITWAY works to ensure that physicians in Alabama are aware of the current CRC screening guidelines, make CRC screening a priority and make FIT screening available to their patients. In 2009, FITWAY partnered with the University of South Alabama (USA) Polling Group to survey Primary Care, OBGYN and Internal Medicine physicians about CRC screening. This survey has been valuable in shaping the physician education efforts of the program. More than half of the responding physicians (52%) reported that they knew little or nothing about the FIT/iFOBT. Of those that used stool tests, only 14% reported using the FIT/iFOBT.¹¹

Based on the results of the USA Polling Group survey, FITWAY has focused heavily on physician education. In 2012, FITWAY mailed a letter from the State Health Officer about the importance of CRC screening to approximately 2,500 physicians statewide. FITWAY has also advertised in physician magazines, newspapers and conferences. FITWAY and partners target physicians and medical office staff with messages about the cost effectiveness of FIT/iFOBT screening. FITWAY worked with the ACS and BCBSAL to ensure that physicians receive reimbursement for completed FIT/iFOBT. Additionally, AQA has assisted the FITWAY Program in developing messages about how CRC screening can fulfill Centers for Medicare and Medicaid Services Meaningful Use objectives to earn incentives.

Partners have been critical to FITWAY's physician education efforts. The USA Mitchell Cancer Institute (MCI) provides academic detailing for FITWAY to physicians in southwest Alabama. By partnering with AQAF, ACS achieved a 40.3% increase in CRC screening rates among targeted providers. The ACS has an excellent resource available for clinical quality improvement entitled "How to Increase Colorectal Cancer Screening Rates in Practice: A Primary Care Clinicians Evidence-Based Toolkit and Guide." This toolkit was created by clinicians to provide state-of-the-science information, advice to help make screening practices more efficient and tools for use in practice. It can be found on the ACS website.

Innovative Approaches

Even with widespread adoption of FIT/iFOBT screening by physicians, some Alabamians will not be screened. Some Alabamians are unable to cover the cost of an office visit to receive a FIT/iFOBT. Others rarely schedule medical appointments for preventative care. To increase screening among these Alabamians, FITWAY has sought ways for FIT/iFOBT to be distributed in a variety of settings.

To make screening widely accessible, FITWAY and its partners have promoted FIT/iFOBT screening in worksite wellness programs. CRC screening and awareness activities fit naturally in worksites. Worksites that are just establishing wellness programs can easily provide employees education or handouts about CRC screening. Worksites with more comprehensive wellness programs can offer FIT/iFOBT to employees 50 and older at annual biometric screenings. By ensuring that their employees are screened for CRC, employers can avoid the high costs of treating late stage CRC. FITWAY worked with the Public Education Employee's Health Insurance Plan to make FIT/iFOBT available to all employees aged 50 and older at annual wellness screenings. FITWAY also assisted a private company to educate employees about the importance of CRC screening and to make FIT/iFOBT available through an on-site wellness nurse. An important FITWAY partner, the ACS, also works diligently to educate worksites about the importance of adding CRC screening to insurance benefits.

In addition to worksite wellness initiatives, FITWAY has explored ways to reduce structural barriers to CRC screening through direct mailing and pharmacy distribution of FIT/iFOBT. In one pilot project at the USA Medical Center, patients 50 and older who were not up to date on their CRC screening were identified and contacted to see if they would like to receive a FIT/iFOBT. Tests were mailed directly to those patients who were interested. In a partnership with the Alabama Pharmacy Association and Birmingham Gastroenterology Associates (BGA), FITWAY also conducted a pilot project to make FIT/iFOBT available in five Birmingham-area pharmacies. These



completed tests were returned to BGA to ensure that patients received appropriate follow-up care.

Public Outreach

To educate Alabamians about the importance of CRC screening and the availability of the FIT/iFOBT, FITWAY has run several widespread advertising campaigns. FITWAY ran television advertisements from the CDC's *Screen for Life* campaign and used a boxing glove themed "Fight Back" campaign in movie theaters, online and on gas pumps. FITWAY also advertised in programs for Auburn and Alabama football games. FITWAY staff presented information at retirement communities and attended booths at the Rumpshaker 5K, various health fairs, golf tournaments, and football and baseball games. Public and professional forums have been held by the Clearview Cancer Institute in Huntsville, the Southeast Alabama Medical Center in Dothan and MCI in Mobile. BCBSAL has begun a mail campaign to educate members who are not up to date on their cancer screenings, including CRC.

Recently, FITWAY transitioned to a sock puppet themed campaign with the message "colorectal cancer can affect anyone" to emphasize the diversity of people affected by CRC. The sock-puppet theme has been used in online advertising on AL.com, in magazines, and on billboards in Mobile, Montgomery and Birmingham. The sock puppets adorn the FITWAY website, adph.org/fitway, where there are pages devoted to educational materials for the public and physicians. Materials available on the website include academic articles, fact sheets, invitations to be screened and patient reminder postcards. For more information about the FITWAY Colorectal Cancer Prevention Program, visit adph.org/fitway or call 334-206-3336.

American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention

Individual Choices

Achieve and maintain a healthy weight throughout life.

- Be as lean as possible throughout life without being underweight.
- Avoid excessive weight gain at all ages. For those who are overweight or obese, losing even a small amount of weight has health benefits and is a good place to start.
- Get regular physical activity and limit intake of high-calorie foods and drinks as keys to help maintain a healthy weight.

Adopt a physically active lifestyle.

- Adults: Engage in at least 150 minutes of moderate intensity or 75 minutes of vigorous intensity activity each week (or a combination of these), preferably spread out over the week.
- Children and teens: Engage in at least 1 hour of moderate to vigorous intensity activity each day, with vigorous activity on at least 3 days per week.
- Limit sedentary behavior such as sitting, lying down, watching TV and other forms of screen-based entertainment.
- Doing some physical activity above usual activities, no matter what one's level of activity, can have many health benefits.

Eat a healthy diet, with an emphasis on plant foods.

- Choose foods and beverages in amounts that help achieve and maintain a healthy weight.
- Eat at least 2.5 cups of vegetables and fruits each day.
- Choose whole grains instead of refined grains products.
- Limit consumption of processed and red meats.

If you drink alcoholic beverages, limit consumption.

- Drink no more than 1 drink per day for women or 2 per day for men.

Community Action

Public, private and community organizations should work together at national, state and local levels to apply policy and environmental changes that:

- Increase access to affordable, healthy food in communities, places of work and schools and decrease access to and marketing of foods and drinks of low nutritional value, particularly to youth.
- Provide safe, enjoyable and accessible environments for physical activity in schools and workplaces and for transportation and recreation in communities.

Screening Guidelines for the Early Detection of Cancer in Average-risk Asymptomatic People

Cancer Site	Population	Test or Procedure	Frequency
Breast	Women, ages, 20+	Breast self-examination	It is acceptable for women to choose not to do BSE or to do BSE regularly (monthly) or irregularly. Beginning in their early 20s, women should be told about the benefits and limitations of BSE. Whether or not a woman ever performs BSE, the importance of prompt reporting of any new breast symptoms to a health professional should be emphasized. Women who choose to do BSE should receive instruction and have their technique reviewed on the occasion of a periodic health examination.
		Clinical breast examination	For women in their 20s and 30s, it is recommended that CBE be part of a periodic health examination, preferably at least every three years. Asymptomatic women age 40 and over should continue to receive a CBE as part of a periodic health examination, preferably annually.
		Mammography	Begin annual mammography at age 40.*
Cervix	Women, ages 21-65	Pap test & HPV DNA test	Cervical cancer screening should begin at age 21. For women ages 21-29, screening should be done every 3 years with conventional or liquid-based Pap tests. For women ages 30-65, screening should be done every 5 years with both the HPV test and the Pap test (preferred), or every 3 years with the Pap test alone (acceptable). Women age 65+ who have had ≥ 3 consecutive negative Pap tests or ≥ 2 consecutive negative HPV and Pap tests within the past 10 years, with the most recent test occurring within 5 years, and women who have had a total hysterectomy should stop cervical cancer screening. Women should not be screened annually by any method at any age.
Colorectal	Men and women, ages 50+	Fecal occult blood test (FOBT) with at least 50% test sensitivity for cancer, or fecal immunochemical test (FIT) with at least 50% test sensitivity for cancer, or	Annual, starting at age 50. Testing at home with adherence to manufacturer's recommendation for collection techniques and number of samples is recommended. FOBT with the single stool sample collected on the clinician's fingertip during a digital rectal examination is not recommended. Guaiac-based toilet bowl FOBT tests also are not recommended. In comparison with guaiac-based tests for the detection of occult blood, immunochemical tests are more patient-friendly, and are likely to be equal or better in sensitivity and specificity. There is no justification for repeating FOBT in response to an initial positive finding.
		Stool DNA test**, or	Interval uncertain, starting at age 50.
		Flexible sigmoidoscopy (FSIG), or	Every 5 years, starting at age 50. FSIG can be performed alone, or consideration can be given to combining FSIG performed every 5 years with a highly sensitive FOBT or FIT performed annually.
		Double-contrast barium enema (DCBE), or	Every 5 years, starting at age 50.
		Colonoscopy	Every 10 years, starting at age 50.
CT Colonography	Every 5 years, starting at age 50.		
Endometrial	Women, at menopause	At the time of menopause, women at average risk should be informed about risks and symptoms of endometrial cancer and strongly encouraged to report any unexpected bleeding or spotting to their physicians.	
Lung	Current or former smokers ages 55-74 in good health with at least a 30 pack-year history	Low-dose helical CT (LDCT)	Clinicians with access to high-volume, high-quality lung cancer screening and treatment centers should initiate a discussion about lung cancer screening with apparently healthy patients ages 55-74 who have at least a 30 pack-year smoking history, and who currently smoke or have quit within the past 15 years. A process of informed and shared decision making with a clinician related to the potential benefits, limitations and harms associated with screening for lung cancer with LDCT should occur before any decision is made to initiate lung cancer screening. Smoking cessation counseling remains a high priority for clinical attention in discussions with current smokers, who should be informed of their continuing risk of lung cancer. Screening should not be viewed as an alternative to smoking cessation.
Prostate	Men, ages 50+	Digital rectal examination (DRE) and prostate-specific antigen test (PSA)	Men who have at least a 10-year life expectancy should have an opportunity to make an informed decision with their health care provider about whether to be screened for prostate cancer, after receiving information about the potential benefits, risks, and uncertainties associated with prostate cancer screening. Prostate cancer screening should not occur without an informed decision-making process.
Cancer-related checkup	Men and women, ages 20+	On the occasion of a periodic health examination, the cancer-related checkup should include examination for cancers of the thyroid, testicles, ovaries, lymph nodes, oral cavity and skin, as well as health counseling about tobacco, sun exposure, diet and nutrition, risk factors, sexual practices and environmental and occupational exposures.	

*Beginning at age 40, annual clinical breast examination should be performed prior to mammography. **The stool DNA test approved for colorectal cancer screening in 2008 is no longer commercially available. New stool DNA tests are presently undergoing evaluation and may become available at some future time.

Cancer Incidence Tables

Table 1. Alabama Cancer Incidence Rates, by Site and Sex, 2001-2010 Combined

Males	Rate	Count	Females	Rate	Count
All Sites	572.4	124,218	All Sites	389.7	106,334
Oral Cavity and Pharynx	19.8	4,467	Oral Cavity and Pharynx	6.9	1,911
Digestive System	105.5	22,724	Digestive System	67.6	19,037
Esophagus	8.8	1,964	Esophagus	1.7	492
Stomach	8.7	1,852	Stomach	4.6	1,306
Small Intestine	2.4	534	Small Intestine	1.8	483
Colon and Rectum	59.9	12,844	Colon and Rectum	41.2	11,577
Colon excluding Rectum	43.4	9,202	Colon excluding Rectum	31.4	8,871
Rectum	16.5	3,642	Rectum	9.8	2,706
Anus, Anal Canal and Anorectum	1.3	278	Anus, Anal Canal and Anorectum	1.9	518
Liver and Intrahepatic Bile Duct	8.0	1,784	Liver and Intrahepatic Bile Duct	2.9	825
Gallbladder	0.8	149	Gallbladder	1.0	290
Pancreas	13.3	2,827	Pancreas	9.7	2,787
Other Digestive Organs	0.3	73	Other Digestive Organs	0.2	67
Respiratory System	117.7	25,523	Respiratory System	56.3	15,779
Larynx	9.3	2,107	Larynx	1.9	535
Lung and Bronchus	107.0	23,118	Lung and Bronchus	53.7	15,080
Bones and Joints	1.2	257	Bones and Joints	0.7	185
Soft Tissue including Heart	3.6	780	Soft Tissue including Heart	2.9	742
Skin (excluding Basal and Squamous)	25.6	5,473	Skin (excluding Basal and Squamous)	14.9	3,852
Melanoma of the Skin	23.9	5,115	Melanoma of the Skin	13.9	3,595
Other Non-Epithelial Skin	1.8	358	Other Non-Epithelial Skin	1.0	257
Breast	1.6	345	Breast	117.7	31,650
Female Genital System	*	*	Female Genital System	43.0	11,531
Cervix Uteri	*	*	Cervix Uteri	8.9	2,152
Corpus and Uterus, NOS	*	*	Corpus and Uterus, NOS	17.8	4,911
Corpus Uteri	*	*	Corpus Uteri	17.1	4,720
Uterus, NOS	*	*	Uterus, NOS	0.7	191
Ovary	*	*	Ovary	12.5	3,435
Vagina	*	*	Vagina	0.7	207
Vulva	*	*	Vulva	2.6	688
Other Female Genital Organs	*	*	Other Female Genital Organs	0.5	138
Male Genital System	162.6	35,970	Male Genital System	*	*
Prostate	157.1	34,764	Prostate	*	*
Testis	4.5	975	Testis	*	*
Penis	0.9	186	Penis	*	*
Other Male Genital Organs	0.2	45	Other Male Genital Organs	*	*
Urinary System	53.9	11,445	Urinary System	18.6	5,197
Urinary Bladder	32.6	6,718	Urinary Bladder	7.6	2,164
Kidney and Renal Pelvis	20.1	4,492	Kidney and Renal Pelvis	10.6	2,896
Ureter	0.8	157	Ureter	0.4	104
Other Urinary Organs	0.4	78	Other Urinary Organs	0.1	33
Eye and Orbit	1.1	239	Eye and Orbit	0.7	188
Brain and Other Nervous System	7.9	1,733	Brain and Other Nervous System	5.7	1,479
Endocrine System	4.7	1,055	Endocrine System	11.3	2,784
Thyroid	4.0	894	Thyroid	10.7	2,630
Other Endocrine including Thymus	0.7	161	Other Endocrine including Thymus	0.6	154
Lymphoma	23.2	5,003	Lymphoma	16.0	4,368
Hodgkin Lymphoma	2.8	625	Hodgkin Lymphoma	2.2	521
Non-Hodgkin Lymphoma	20.4	4,378	Non-Hodgkin Lymphoma	13.8	3,847
Myeloma	7.4	1,595	Myeloma	5.0	1,396
Leukemia	14.7	3,068	Leukemia	9.0	2,433
Lymphocytic Leukemia	7.2	1,534	Lymphocytic Leukemia	3.9	1,064
Acute Lymphocytic Leukemia	1.4	301	Acute Lymphocytic Leukemia	1.0	236
Chronic Lymphocytic Leukemia	5.3	1,111	Chronic Lymphocytic Leukemia	2.7	778
Myeloid and Monocytic Leukemia	6.2	1,301	Myeloid and Monocytic Leukemia	4.3	1,138
Acute Myeloid Leukemia	4.0	848	Acute Myeloid Leukemia	3.0	797
Chronic Myeloid Leukemia	1.6	338	Chronic Myeloid Leukemia	1.0	255
Other Leukemia	1.2	233	Other Leukemia	0.8	231
Miscellaneous	19.7	4,102	Miscellaneous	13.0	3,697

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates and counts are for malignant cases only with the exception of urinary bladder and groups that contain urinary bladder.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 2. Trends in Alabama Cancer Incidence, Selected Sites, 2006-2010

Females									
Cervix	P-Value	0.80			Breast	P-Value	0.96		
	Rate/Trend	SE	Lower CI	Upper CI		Rate/Trend	SE	Lower CI	Upper CI
Total PC	-1.9				Total PC	-0.9			
Total APC	-1.0		-11.3	10.5	Total APC	0.0		-1.5	1.6
2006 Rate	8.1	0.6	7.0	9.3	2006 Rate	119.8	2.1	115.6	124.0
2007 Rate	9.8	0.6	8.5	11.1	2007 Rate	118.0	2.1	113.9	122.2
2008 Rate	8.1	0.6	7.0	9.4	2008 Rate	122.1	2.1	118.0	126.4
2009 Rate	9.3	0.6	8.1	10.6	2009 Rate	120.5	2.1	116.4	124.7
2010 Rate	8.0	0.6	6.9	9.2	2010 Rate	118.7	2.1	114.7	122.9
Males					Males and Females				
Prostate	P-Value	0.02			All Sites	P-Value	0.73		
	Rate/Trend	SE	Lower CI	Upper CI		Rate/Trend	SE	Lower CI	Upper CI
Total PC	-8.6				Total PC	0.8			
Total APC	-2.3*		-4.0	-0.6	Total APC	0.2		-1.6	2.0
2006 Rate	167.3	2.8	161.9	172.8	2006 Rate	465.7	3.1	459.7	478.1
2007 Rate	168.6	2.8	163.3	174.1	2007 Rate	474.2	3.1	468.1	480.2
2008 Rate	158.9	2.6	153.8	164.2	2008 Rate	485.2	3.1	479.1	491.2
2009 Rate	159.1	2.6	154.0	164.3	2009 Rate	477.3	3.0	471.3	483.3
2010 Rate	153.0	2.5	148.0	158.1	2010 Rate	469.5	3.0	463.6	475.5
Males and Females									
Colorectal	P-Value	0.08			Lung	P-Value	0.63		
	Rate/Trend	SE	Lower CI	Upper CI		Rate/Trend	SE	Lower CI	Upper CI
Total PC	-11.1				Total PC	-2.2			
Total APC	-2.9		-6.2	0.6	Total APC	-0.4		-2.7	2.0
2006 Rate	49.8	1.0	47.9	51.8	2006 Rate	75.6	1.2	73.3	78.1
2007 Rate	49.5	1.0	47.5	51.4	2007 Rate	75.2	1.2	72.8	77.6
2008 Rate	50.5	1.0	48.6	52.5	2008 Rate	78.4	1.2	76.0	80.8
2009 Rate	46.6	1.0	44.7	48.5	2009 Rate	75.5	1.2	73.2	77.9
2010 Rate	44.3	0.9	42.5	46.1	2010 Rate	74.0	1.2	71.7	76.4
Males and Females									
Melanoma	P-Value	0.04			Oral	P-Value	0.52		
	Rate/Trend	SE	Lower CI	Upper CI		Rate/Trend	SE	Lower CI	Upper CI
Total PC	16.6				Total PC	-5.8			
Total APC	4.7*		0.3	9.2	Total APC	-1.1		-5.7	3.8
2006 Rate	18.4	0.6	17.3	19.7	2006 Rate	14.2	0.5	13.2	15.3
2007 Rate	19.4	0.6	18.2	20.6	2007 Rate	12.6	0.5	11.7	13.6
2008 Rate	20.8	0.6	19.5	22.1	2008 Rate	13.3	0.5	12.3	14.3
2009 Rate	22.5	0.7	21.2	23.9	2009 Rate	12.8	0.5	11.9	13.8
2010 Rate	21.5	0.7	20.2	22.8	2010 Rate	13.4	0.5	12.4	14.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard; Confidence intervals are 95% for rates and trends. Rates are for malignant cases only with the exception of All Sites which includes bladder cancer *in situ*. Percent changes were calculated using 1 year for each end point; APCs were calculated using weighted least squares method. *The APC is significantly different from zero (p<0.05).

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2006-2010.

Table 3. Alabama Cancer Incidence Rates and Counts, by County, Males and Females, All Races, 2001-2010 Combined

	All Sites		Lung		Colorectal		Oral		Melanoma	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Alabama	464.5	230,552	76.2	38,198	49.3	24,421	12.7	6,378	17.9	8,710
Autauga	457.9	2,115	75.8	348	57.4	259	11.8	59	22.7	109
Baldwin	448.3	9,209	69.5	1,478	42.0	865	10.8	221	23.0	448
Barbour	430.9	1,380	75.9	243	46.2	146	14.7	47	8.6	27
Bibb	488.7	1,093	89.5	201	58.7	131	13.4	30	14.2	32
Blount	349.7	2,165	64.9	411	38.2	235	10.5	65	17.9	109
Bullock	461.9	510	70.4	75	75.3	85	14.0	15	7.0	8
Butler	445.2	1,093	75.0	187	53.1	134	11.8	30	16.5	39
Calhoun	493.3	6,352	94.8	1,247	56.8	731	16.0	205	18.8	236
Chambers	453.5	1,959	77.9	344	46.8	204	14.0	64	12.4	53
Cherokee	420.4	1,360	77.2	257	39.5	128	11.9	42	10.8	34
Chilton	423.6	1,899	84.1	385	39.3	175	12.2	56	19.6	87
Choctaw	384.3	708	63.4	122	39.4	73	8.7	17	8.3	16
Clarke	466.0	1,413	69.6	216	59.5	181	10.3	31	22.1	63
Clay	472.1	851	91.7	169	45.4	85	10.8	19	18.8	30
Cleburne	419.5	700	67.9	117	53.2	88	15.9	27	12.0	19
Coffee	446.3	2,321	74.2	394	38.1	197	12.7	65	15.4	79
Colbert	408.0	2,764	74.7	516	49.4	340	13.2	90	18.9	122
Conecuh	471.3	783	76.6	131	61.5	104	17.7	29	15.6	26
Coosa	451.1	636	80.2	116	46.7	65	8.2	12	15.0	20
Covington	436.3	2,123	76.9	378	46.8	234	12.8	61	17.6	81
Crenshaw	416.6	704	58.0	102	49.0	85	13.5	23	18.4	31
Cullman	431.9	4,028	79.8	768	45.4	425	14.7	137	26.0	231
Dale	481.2	2,413	91.5	463	44.8	225	17.3	87	18.0	89
Dallas	493.7	2,383	78.8	388	62.2	300	15.3	73	12.5	56
DeKalb	406.4	3,040	65.4	498	41.5	309	10.9	81	17.2	125
Elmore	493.5	3,634	90.4	655	54.4	393	16.2	121	21.6	164
Escambia	482.8	2,070	83.7	364	53.0	228	15.4	68	14.2	59
Etowah	463.2	5,812	83.6	1,078	48.6	616	14.8	186	17.6	208
Fayette	392.3	882	73.9	170	40.8	91	10.7	23	13.2	28
Franklin	445.8	1,607	90.1	335	49.3	180	12.2	44	16.0	56
Geneva	473.8	1,574	87.2	296	49.1	164	17.3	58	25.3	78
Greene	490.2	526	70.3	78	62.7	69	8.4	9	^	^
Hale	484.3	909	65.0	123	51.5	97	13.8	26	11.2	21
Henry	515.1	1,084	75.5	160	52.0	110	15.6	32	19.7	40
Houston	470.4	5,075	72.8	804	49.4	535	15.0	163	19.4	201
Jackson	459.3	2,906	80.7	531	55.3	348	13.2	86	20.5	124
Jefferson	508.5	36,164	74.2	5,294	52.4	3,768	12.7	902	17.2	1,212
Lamar	509.0	964	82.7	164	54.8	106	15.3	29	22.3	39
Lauderdale	466.6	5,023	77.4	860	52.0	561	12.2	131	23.1	241
Lawrence	427.4	1,610	75.9	291	49.6	186	10.8	44	15.1	55
Lee	409.9	3,988	58.8	553	39.8	386	11.7	115	14.0	148
Limestone	441.2	3,244	76.4	560	49.4	361	10.1	75	15.8	115
Lowndes	405.9	556	60.5	84	60.8	82	5.9	8	5.8	8
Macon	405.0	1,013	54.7	137	51.3	129	15.7	38	3.5	9
Madison	452.9	13,979	67.3	2,070	46.2	1,399	11.8	375	17.2	530
Marengo	422.5	1,058	61.1	157	49.8	126	12.2	30	9.7	23
Marion	423.1	1,620	79.0	312	50.3	197	13.0	53	17.3	63
Marshall	487.3	4,700	96.9	956	47.7	457	15.4	148	22.7	210
Mobile	491.4	20,158	82.5	3,387	53.8	2,193	12.8	528	15.0	608
Monroe	412.4	1,079	62.2	167	53.7	141	9.2	23	17.1	41
Montgomery	440.6	9,630	67.4	1,468	50.5	1,103	11.8	261	15.1	329
Morgan	524.2	6,576	85.6	1,090	50.2	620	14.2	181	23.5	288
Perry	452.5	555	69.7	87	50.3	62	5.5	7	9.3	12
Pickens	470.0	1,141	75.6	193	48.8	119	11.6	28	15.9	36
Pike	458.1	1,381	69.4	215	46.5	139	16.9	51	23.8	69
Randolph	418.4	1,161	57.3	164	44.7	127	11.1	30	16.1	43
Russell	487.4	2,622	76.3	420	57.0	303	15.0	81	14.4	77
St. Clair	425.6	3,358	83.1	663	40.2	311	12.3	99	18.4	141
Shelby	405.6	6,125	68.2	955	38.2	557	10.4	162	19.1	306
Sumter	423.9	619	66.3	98	44.7	68	11.0	15	10.3	14
Talladega	449.1	4,039	76.0	698	49.5	443	10.9	98	15.2	132
Tallapoosa	413.7	2,173	63.0	344	41.2	218	11.9	61	14.7	74
Tuscaloosa	469.3	7,627	74.6	1,205	50.4	814	10.5	170	17.1	279
Walker	520.6	4,419	102.2	898	50.7	433	15.1	128	16.4	131
Washington	462.8	902	73.0	144	44.8	89	9.7	19	15.2	28
Wilcox	514.3	693	66.8	93	72.6	100	13.4	18	11.6	13
Winston	477.7	1,423	98.8	299	51.1	149	16.3	50	26.8	76

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are for malignant cases only except for All Sites which contains *in situ* bladder cases. ^Statistic not displayed due to fewer than 6 cases.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 4. Alabama Cancer Incidence Rates and Counts, by County, Males, All Races, 2001-2010 Combined

	All Sites		Lung		Colorectal		Prostate		Oral		Melanoma	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Alabama	572.4	124,218	107.0	23,118	59.9	12,844	157.1	34,764	19.8	4,467	23.9	5,115
Autauga	535.2	1,083	107.0	208	69.8	137	121.4	245	16.2	39	28.7	65
Baldwin	528.9	5,116	85.5	843	49.1	472	151.5	1,517	15.8	152	28.5	265
Barbour	561.0	776	124.1	165	49.0	68	183.6	256	20.9	31	17.0	22
Bibb	599.5	610	117.1	119	72.9	76	151.8	153	14.5	17	16.2	18
Blount	426.7	1,209	92.1	262	47.4	136	94.5	275	13.0	40	25.3	70
Bullock	535.6	263	108.5	52	80.6	39	172.9	85	14.6	7	14.2	7
Butler	553.1	585	124.7	132	61.8	64	147.8	162	18.7	20	20.6	21
Calhoun	621.9	3,450	136.8	753	70.7	388	147.8	844	25.9	148	24.1	132
Chambers	563.7	1,037	114.9	209	54.9	102	144.9	272	21.6	42	19.4	37
Cherokee	532.1	781	111.3	164	49.5	73	142.9	223	18.5	29	16.1	23
Chilton	518.2	1,055	122.4	253	43.9	87	121.4	251	22.6	48	21.4	43
Choctaw	512.8	420	97.5	82	51.5	40	165.5	143	13.6	12	11.8	10
Clarke	586.3	789	110.7	148	76.6	102	158.5	223	15.5	21	23.9	32
Clay	586.3	474	134.0	111	71.6	58	135.1	111	20.2	16	29.8	22
Cleburne	505.2	382	86.1	67	64.7	49	112.4	86	25.6	20	15.5	11
Coffee	556.3	1,285	99.3	228	43.6	99	172.8	413	20.9	48	21.2	51
Colbert	489.3	1,455	104.1	315	59.4	177	80.5	251	22.4	70	25.4	74
Conecuh	576.1	428	121.2	90	69.8	52	150.8	115	30.8	22	15.6	13
Coosa	554.7	361	118.9	80	61.3	39	147.0	98	14.3	10	21.7	13
Covington	543.4	1,160	103.2	222	54.3	113	144.0	320	20.3	45	27.5	57
Crenshaw	531.6	387	80.7	62	80.7	57	139.0	103	17.4	13	23.5	17
Cullman	513.2	2,163	115.4	495	53.9	223	104.2	451	21.9	93	30.7	128
Dale	623.9	1,379	130.9	288	63.9	143	171.1	382	28.1	66	28.0	59
Dallas	613.3	1,237	111.8	227	75.8	148	209.7	427	23.7	50	16.5	31
DeKalb	501.1	1,646	92.0	302	46.2	153	140.7	460	16.5	57	21.9	72
Elmore	595.1	1,985	126.8	418	71.3	227	126.8	434	24.0	84	28.8	103
Escambia	631.8	1,183	128.4	239	66.1	123	159.8	302	24.7	49	16.1	31
Etowah	582.7	3,152	116.0	642	60.6	323	158.9	881	25.4	138	22.0	116
Fayette	471.4	467	97.3	100	60.1	57	113.4	116	17.4	17	19.3	19
Franklin	527.7	839	120.2	194	62.6	100	100.5	164	20.1	32	23.0	34
Geneva	608.8	892	125.2	186	67.3	97	167.7	256	26.9	40	27.3	36
Greene	640.6	306	114.0	55	93.8	46	251.1	121	15.5	7	^	^
Hale	617.8	512	90.2	75	54.6	44	234.3	197	19.1	17	16.5	14
Henry	674.2	621	116.1	104	64.9	59	226.7	214	29.2	26	30.4	27
Houston	589.9	2,749	104.9	495	62.8	283	176.5	850	24.1	114	25.7	115
Jackson	536.0	1,545	114.3	339	62.7	180	106.2	313	21.5	64	27.9	76
Jefferson	633.2	18,853	105.9	3,099	63.0	1,873	188.7	5,690	19.3	597	24.0	710
Lamar	616.3	521	117.5	99	65.6	56	158.6	140	22.8	18	28.7	21
Lauderdale	577.7	2,731	109.2	523	64.5	305	143.2	694	20.9	99	31.3	144
Lawrence	534.5	909	105.9	188	63.9	107	124.5	217	17.8	33	19.1	33
Lee	492.1	2,077	74.0	304	43.8	191	162.1	670	18.6	80	18.9	85
Limestone	558.4	1,826	106.9	346	59.4	192	151.9	503	14.9	50	21.6	70
Lowndes	500.3	307	90.8	55	72.7	44	152.6	96	^	^	10.1	6
Macon	489.2	532	75.4	83	60.8	65	171.5	188	26.8	30	^	^
Madison	526.1	7,281	87.5	1,184	57.4	769	142.0	2,024	17.0	255	22.1	303
Marengo	540.8	589	94.1	104	63.9	69	147.8	167	20.4	23	10.0	10
Marion	521.2	893	120.8	206	57.3	96	110.6	195	21.2	39	24.1	40
Marshall	589.8	2,504	131.1	559	58.9	245	131.1	570	25.5	112	29.4	118
Mobile	616.4	10,900	115.2	2,011	65.2	1,133	178.1	3,219	19.6	367	21.4	376
Monroe	519.8	604	102.1	119	64.8	76	125.2	152	17.1	20	22.1	24
Montgomery	539.2	4,874	98.7	875	58.6	521	155.4	1,415	18.6	179	21.5	194
Morgan	654.3	3,658	115.7	644	60.1	328	191.0	1,096	22.6	131	29.0	165
Perry	593.0	312	105.6	56	68.6	36	216.9	116	12.2	6	14.9	8
Pickens	596.6	636	115.5	125	56.9	61	179.5	196	18.4	20	14.8	15
Pike	577.4	763	98.9	133	56.3	73	167.2	227	31.1	43	31.3	39
Randolph	504.8	625	73.3	90	67.4	83	130.3	166	13.4	17	16.8	22
Russell	614.3	1,398	111.1	256	71.5	158	168.5	385	28.1	65	19.4	45
St. Clair	525.6	1,876	112.0	394	45.7	161	116.3	431	18.3	70	26.1	88
Shelby	487.5	3,312	88.5	556	44.3	303	142.4	980	15.6	118	24.1	171
Sumter	582.6	349	134.4	79	47.4	29	197.6	120	11.4	7	19.6	11
Talladega	551.8	2,188	106.8	429	61.2	244	146.4	588	14.7	61	20.8	80
Tallapoosa	515.9	1,190	95.0	221	54.2	122	153.6	368	18.1	40	20.5	46
Tuscaloosa	563.7	4,040	106.1	745	60.5	428	156.7	1,138	16.1	116	22.3	160
Walker	645.2	2,380	144.9	540	63.1	233	140.2	537	22.6	84	19.8	71
Washington	617.3	549	114.0	100	49.8	46	202.3	186	19.8	17	18.4	16
Wilcox	672.3	380	116.7	65	100.1	55	216.8	127	20.9	12	^	^
Winston	583.6	784	138.1	187	67.1	87	105.8	147	23.8	35	36.5	46

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are for malignant cases only except for All Sites which contains *in situ* bladder cases. ^Statistic not displayed due to fewer than 6 cases.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 5. Alabama Cancer Incidence Rates, by County, Females, All Races, 2001-2010 Combined

	All Sites		Lung		Colorectal		Breast		Cervix		Oral		Melanoma	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Alabama	389.7	106,334	53.7	15,080	41.2	11,577	117.7	31,650	8.9	2,152	6.9	1,911	13.9	3,595
Autauga	407.9	1,032	54.8	140	48.8	122	122.5	317	9.5	24	7.7	20	17.9	44
Baldwin	381.4	4,093	56.0	635	35.8	393	118.7	1,265	7.0	59	6.4	69	18.4	183
Barbour	351.7	604	43.6	78	43.4	78	123.4	205	6.9	11	9.7	16	^	^
Bibb	412.5	483	69.0	82	46.4	55	114.1	133	14.8	16	11.2	13	11.8	14
Blount	291.0	956	43.5	149	29.7	99	84.1	277	7.6	21	7.6	25	12.3	39
Bullock	420.4	247	38.6	23	70.9	46	141.2	77	^	^	13.9	8	^	^
Butler	369.6	508	39.1	55	47.3	70	111.0	148	16.0	18	6.4	10	13.3	18
Calhoun	407.2	2,902	66.6	494	46.0	343	111.5	779	10.2	63	8.2	57	15.5	104
Chambers	382.0	922	53.1	135	40.0	102	105.9	245	15.1	28	7.5	22	6.6	16
Cherokee	338.9	579	51.3	93	31.7	55	101.0	169	5.5	8	6.5	13	6.7	11
Chilton	353.5	844	53.3	132	35.6	88	104.3	246	9.2	19	3.3	8	18.9	44
Choctaw	291.3	288	37.3	40	30.8	33	96.2	90	7.1	7	^	^	5.6	6
Clarke	374.2	624	37.7	68	46.0	79	125.8	205	7.1	11	5.7	10	21.5	31
Clay	388.5	377	60.0	58	25.0	27	136.0	128	18.6	14	^	^	8.0	8
Cleburne	362.4	318	55.2	50	41.6	39	83.3	74	11.9	9	7.4	7	9.5	8
Coffee	368.0	1,036	57.1	166	34.0	98	112.5	311	6.8	16	6.0	17	10.8	28
Colbert	353.3	1,309	52.9	201	41.5	163	108.9	395	5.0	16	5.8	20	14.5	48
Conecuh	397.1	355	44.4	41	53.9	52	138.0	118	^	^	7.8	7	15.0	13
Coosa	372.2	275	45.2	36	34.6	26	104.9	79	13.6	8	^	^	9.7	7
Covington	361.1	963	58.7	156	42.1	121	93.3	250	9.4	19	6.5	16	10.7	24
Crenshaw	340.4	317	40.0	40	27.3	28	98.4	85	20.9	15	9.7	10	14.0	14
Cullman	376.1	1,865	51.8	273	38.8	202	103.5	507	9.3	39	8.6	44	23.3	103
Dale	376.8	1,034	62.2	175	29.5	82	103.8	281	7.9	20	7.5	21	11.4	30
Dallas	413.6	1,146	55.8	161	53.3	152	126.9	342	10.9	27	8.2	23	10.4	25
DeKalb	342.7	1,394	46.3	196	37.4	156	98.9	398	9.8	34	6.1	24	14.5	53
Elmore	421.4	1,649	61.2	237	42.4	166	133.9	533	15.6	59	9.1	37	15.8	61
Escambia	384.7	887	52.6	125	42.7	105	115.7	261	7.6	14	7.8	19	14.3	28
Etowah	383.9	2,660	59.5	436	40.4	293	109.9	746	10.3	54	6.8	48	15.1	92
Fayette	339.0	415	54.6	70	27.6	34	120.2	144	5.3	7	5.4	6	7.7	9
Franklin	391.7	768	69.4	141	39.4	80	115.4	222	8.3	12	5.6	12	11.6	22
Geneva	381.1	682	59.4	110	35.7	67	117.7	208	9.5	12	9.3	18	26.0	42
Greene	371.1	220	37.1	23	36.9	23	126.6	71	^	^	^	^	^	^
Hale	393.4	397	45.1	48	50.0	53	122.7	117	6.4	7	9.1	9	7.4	7
Henry	399.0	463	47.3	56	41.1	51	125.8	140	8.6	8	5.1	6	13.2	13
Houston	390.9	2,326	49.7	309	40.3	252	112.8	652	10.9	56	8.3	49	15.3	86
Jackson	403.5	1,361	53.6	192	48.7	168	117.9	393	8.3	25	6.3	22	15.1	48
Jefferson	426.8	17,311	53.0	2,195	44.6	1,895	134.1	5,294	8.8	323	7.5	305	12.8	502
Lamar	434.3	443	58.8	65	48.7	50	117.7	116	19.3	15	9.2	11	18.7	18
Lauderdale	390.6	2,292	55.1	337	41.8	256	108.8	616	6.6	35	5.4	32	18.0	97
Lawrence	347.5	701	50.0	103	38.7	79	98.5	200	6.2	12	5.3	11	11.9	22
Lee	355.9	1,911	47.4	249	36.8	195	111.6	600	7.4	39	6.4	35	11.0	63
Limestone	360.3	1,418	53.8	214	42.5	169	99.4	397	8.5	32	6.4	25	12.2	45
Lowndes	331.6	249	37.9	29	50.3	38	93.4	69	^	^	^	^	^	^
Macon	343.8	481	38.2	54	45.1	64	101.3	138	14.6	17	6.2	8	4.7	7
Madison	400.5	6,698	52.5	886	37.8	630	129.7	2,186	6.5	103	7.2	120	13.8	227
Marengo	336.4	469	36.1	53	38.5	57	103.9	139	6.7	9	5.0	7	9.4	13
Marion	355.8	727	47.9	106	46.6	101	109.2	216	10.4	15	5.9	14	12.4	23
Marshall	420.5	2,196	72.7	397	39.1	212	101.9	528	10.6	46	7.0	36	18.9	92
Mobile	404.0	9,258	59.0	1,376	45.5	1,060	125.6	2,850	7.5	159	7.0	161	10.6	232
Monroe	333.6	475	31.6	48	45.1	65	112.2	158	4.7	6	^	^	14.0	17
Montgomery	380.1	4,756	47.1	593	44.9	582	125.1	1,536	10.3	119	6.5	82	10.8	135
Morgan	428.3	2,918	63.7	446	42.0	292	121.4	821	10.9	67	7.2	50	19.0	123
Perry	350.5	243	44.1	31	34.9	26	114.1	75	17.3	11	^	^	^	^
Pickens	380.3	505	46.7	68	42.3	58	127.2	158	7.7	8	6.0	8	16.3	21
Pike	374.8	618	47.7	82	38.6	66	103.3	163	11.3	17	4.8	8	19.3	30
Randolph	359.0	536	45.6	74	27.8	44	104.4	151	10.6	13	8.5	13	16.1	21
Russell	407.3	1,224	51.9	164	47.4	145	115.3	342	14.1	39	5.0	16	11.4	32
St. Clair	351.6	1,482	61.8	269	35.0	150	92.1	387	7.0	27	6.8	29	13.4	53
Shelby	342.4	2,813	52.5	399	32.9	254	107.5	921	4.7	43	5.6	44	15.3	135
Sumter	321.1	270	22.3	19	42.2	39	91.4	75	^	^	11.4	8	^	^
Talladega	379.2	1,851	52.4	269	40.0	199	111.9	539	10.0	41	7.5	37	11.6	52
Tallapoosa	345.2	983	40.6	123	32.1	96	98.6	279	12.2	29	7.1	21	11.2	28
Tuscaloosa	401.2	3,587	50.9	460	42.7	386	126.3	1,122	7.7	65	6.1	54	13.5	119
Walker	439.0	2,039	72.9	358	41.6	200	114.1	520	13.4	49	9.2	44	14.9	60
Washington	339.9	353	41.5	44	40.8	43	127.1	131	9.6	9	^	^	12.4	12
Wilcox	413.3	313	34.0	28	56.7	45	120.5	86	11.7	8	8.0	6	18.1	11
Winston	404.4	639	67.5	112	39.2	62	112.7	178	9.9	13	9.4	15	21.3	30

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are for malignant cases only except for All Sites which contains *in situ* bladder cases. ^Statistic not displayed due to fewer than 6 cases.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 6. Alabama Cancer Incidence Rates, by County, Males by Races, 2001-2010 Combined

	All Sites				Lung				Colorectal			
	White		Black		White		Black		White		Black	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Alabama	555.1	96,642	630.9	25,590	106.6	18,647	109.9	4,348	57.7	9,937	69.8	2,778
Autauga	507.3	872	700.6	196	110.9	182	97.0	26	64.9	111	95.3	24
Baldwin	518.9	4,663	567.5	351	84.9	781	87.8	55	47.7	425	75.8	46
Barbour	566.4	504	545.4	260	134.3	114	107.7	50	50.1	45	43.5	22
Bibb	585.6	496	635.1	104	108.8	93	157.9	26	78.1	68	47.5	8
Blount	421.7	1,173	564.2	18	92.6	259	^	^	47.2	133	^	^
Bullock	433.7	83	593.2	175	121.4	22	101.7	30	68.4	13	93.1	26
Butler	522.0	382	616.3	197	117.3	87	141.9	45	65.8	47	54.1	17
Calhoun	617.5	2,948	667.3	479	140.3	671	117.5	80	71.7	341	63.9	42
Chambers	566.0	745	543.0	281	120.6	160	97.4	48	58.6	76	42.0	24
Cherokee	530.9	744	446.1	25	111.4	157	115.8	6	50.5	71	^	^
Chilton	505.4	936	648.0	111	123.6	233	114.9	19	42.4	76	59.1	10
Choctaw	546.2	285	454.0	133	100.8	54	90.5	28	46.6	23	63.2	17
Clarke	546.2	492	625.1	281	107.9	97	117.3	51	64.2	57	96.8	44
Clay	592.6	421	527.1	49	141.9	104	77.7	7	78.4	56	^	^
Cleburne	498.1	359	804.9	22	84.8	63	^	^	65.1	47	^	^
Coffee	537.8	1,073	642.5	184	96.0	192	121.8	34	39.5	77	69.5	20
Colbert	479.5	1,237	539.0	208	99.8	264	132.7	49	53.5	138	95.9	38
Conecuh	556.5	280	600.8	142	111.2	57	137.3	33	77.7	39	53.2	13
Coosa	530.3	254	586.6	101	114.5	58	123.8	22	54.0	26	75.5	13
Covington	540.4	1,044	545.2	100	106.0	207	83.7	15	53.5	101	61.8	11
Crenshaw	537.5	302	486.8	77	81.3	49	81.5	13	75.8	40	98.2	16
Cullman	509.6	2,115	593.0	24	114.7	484	182.7	8	53.7	218	^	^
Dale	604.0	1,148	773.5	214	131.8	251	129.2	35	63.9	123	66.2	19
Dallas	574.2	592	652.2	636	111.1	118	111.5	109	61.7	62	91.5	86
DeKalb	495.8	1,589	423.0	20	92.3	296	^	^	45.7	147	^	^
Elmore	583.6	1,680	632.2	271	121.9	349	160.3	67	73.1	202	57.7	24
Escambia	641.2	891	632.8	262	127.6	177	135.6	57	63.5	87	72.6	30
Etowah	560.5	2,737	762.6	368	113.5	569	143.5	69	59.1	287	74.5	32
Fayette	459.5	413	563.4	47	98.0	91	102.0	9	57.7	50	88.3	7
Franklin	521.7	797	728.8	38	119.6	187	165.7	7	62.7	96	^	^
Geneva	601.0	812	675.1	73	123.6	169	146.7	16	68.9	91	53.8	6
Greene	609.8	86	654.3	214	146.3	22	101.6	33	84.7	12	101.9	34
Hale	562.2	245	674.4	263	84.3	37	96.4	38	56.7	24	50.7	20
Henry	638.4	447	733.8	160	120.6	84	97.5	19	65.5	45	62.6	14
Houston	576.6	2,187	631.8	528	102.9	399	113.7	93	62.8	230	60.4	50
Jackson	533.7	1,467	535.1	47	115.5	326	118.0	11	63.6	174	69.8	6
Jefferson	612.6	12,446	673.6	6,120	102.7	2,089	114.9	997	59.6	1,214	71.3	641
Lamar	595.9	460	667.0	50	114.6	88	133.2	10	70.3	55	^	^
Lauderdale	564.3	2,486	789.3	233	106.4	477	158.2	44	61.3	271	109.1	34
Lawrence	537.1	790	639.6	111	111.8	171	84.1	16	64.2	93	79.8	14
Lee	452.3	1,512	657.0	524	67.9	220	101.0	79	39.8	135	58.2	52
Limestone	555.5	1,619	541.3	175	111.9	324	67.1	22	57.6	167	78.5	24
Lowndes	478.9	125	518.4	180	114.4	31	71.1	24	34.7	10	101.2	34
Macon	513.8	128	476.8	396	86.7	22	71.7	60	60.0	15	61.7	50
Madison	514.9	5,865	564.2	1,194	88.0	996	90.7	176	56.3	622	67.9	134
Marengo	459.5	297	624.8	275	92.4	61	93.9	43	52.1	33	81.1	36
Marion	512.8	845	764.5	39	120.9	199	135.4	6	54.0	87	156.7	9
Marshall	579.6	2,418	841.6	34	131.0	550	163.0	6	58.7	239	^	^
Mobile	597.6	7,644	682.5	3,116	113.4	1,437	121.2	551	64.0	813	71.5	313
Monroe	511.5	398	533.3	200	103.9	82	99.1	37	68.5	54	55.8	21
Montgomery	510.9	2,899	594.4	1,897	93.1	531	109.0	339	53.6	301	68.1	215
Morgan	654.5	3,343	661.4	271	116.8	599	121.3	43	60.8	304	54.8	20
Perry	494.2	121	650.8	185	112.6	29	93.2	27	48.5	12	79.0	23
Pickens	548.2	399	679.8	226	111.4	85	120.0	40	52.5	39	67.1	22
Pike	559.1	537	621.5	212	96.2	97	108.9	36	53.3	50	60.0	20
Randolph	492.1	511	523.8	103	78.8	82	40.7	8	70.7	74	47.0	8
Russell	622.4	917	551.1	441	126.6	192	81.5	64	70.2	101	67.5	52
St. Clair	515.6	1,710	675.9	149	110.7	363	127.8	29	45.9	152	53.2	9
Shelby	479.8	3,005	585.6	262	87.7	512	111.3	42	44.0	279	40.8	19
Sumter	618.0	139	545.7	206	162.2	36	116.7	43	23.8	6	60.7	23
Talladega	544.0	1,669	551.0	479	112.0	353	90.0	76	61.8	187	56.2	55
Tallapoosa	497.4	947	582.1	232	91.5	177	114.1	44	49.1	93	79.5	29
Tuscaloosa	533.5	2,957	667.4	1,032	103.0	566	119.7	176	57.7	311	71.8	116
Walker	645.4	2,253	673.5	113	144.3	513	151.9	25	61.6	214	105.0	18
Washington	625.7	402	694.2	141	128.5	82	90.3	18	49.4	33	62.3	13
Wilcox	515.1	132	763.6	238	85.5	21	142.3	44	85.9	20	113.3	33
Winston	580.1	772	^	^	136.3	183	^	^	67.7	87	^	^

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are for malignant cases only except for All Sites which contains *in situ* bladder cases. ^Statistic not displayed due to fewer than 6 cases.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 6 (Continued). Alabama Cancer Incidence Rates, by County, Males by Races, 2001-2010 Combined

	Prostate				Oral				Melanoma			
	White		Black		White		Black		White		Black	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Alabama	134.2	24,057	239.6	9,585	20.3	3,626	17.3	793	29.3	5,016	1.1	42
Autauga	97.8	169	255.4	69	15.6	32	19.8	7	33.6	65	^	^
Baldwin	141.0	1,321	220.8	132	16.3	144	9.4	7	30.8	264	^	^
Barbour	149.0	135	238.7	114	28.1	27	^	^	26.6	21	^	^
Bibb	126.2	107	253.0	38	15.7	15	^	^	20.9	18	^	^
Blount	90.8	259	248.1	8	12.5	38	^	^	25.5	69	^	^
Bullock	99.3	19	213.7	62	^	^	^	^	28.9	6	^	^
Butler	130.1	99	172.5	57	14.4	11	27.2	9	30.5	21	^	^
Calhoun	130.5	645	265.4	191	25.5	123	28.7	22	27.6	130	^	^
Chambers	117.8	161	215.4	109	21.1	30	18.0	10	27.4	36	^	^
Cherokee	133.9	201	223.2	13	19.4	29	^	^	16.8	23	^	^
Chilton	110.0	211	242.7	39	23.0	44	^	^	22.1	40	^	^
Choctaw	169.0	95	153.1	47	15.2	8	^	^	18.6	10	^	^
Clarke	132.0	129	190.7	86	14.6	14	12.7	6	35.1	30	^	^
Clay	115.5	84	260.2	24	19.8	14	^	^	34.6	22	^	^
Cleburne	106.1	78	299.6	8	25.6	19	^	^	16.2	11	^	^
Coffee	157.4	327	248.7	71	20.4	40	15.9	6	23.7	49	^	^
Colbert	73.6	198	121.8	49	23.1	62	19.7	8	28.4	72	^	^
Conecuh	118.6	62	205.8	49	37.6	17	^	^	22.6	13	^	^
Coosa	114.7	56	221.2	38	19.8	10	^	^	29.4	13	^	^
Covington	131.4	265	215.9	41	21.0	42	^	^	30.4	57	^	^
Crenshaw	124.2	71	164.1	27	19.5	11	^	^	30.0	17	^	^
Cullman	101.4	433	185.5	7	21.8	91	^	^	30.9	127	^	^
Dale	146.7	289	331.4	81	28.3	56	29.3	10	33.0	59	^	^
Dallas	153.7	167	269.4	254	29.3	31	17.7	19	30.7	29	^	^
DeKalb	134.4	430	159.8	7	17.0	57	^	^	22.5	72	^	^
Elmore	113.0	335	203.6	89	24.2	72	15.3	8	32.9	101	^	^
Escambia	142.5	205	216.1	85	27.0	40	21.1	9	21.7	30	^	^
Etowah	142.4	718	283.4	132	24.0	117	37.1	20	23.9	113	^	^
Fayette	96.9	92	240.2	19	14.0	12	^	^	21.4	19	^	^
Franklin	95.3	149	243.9	14	19.6	30	^	^	24.0	34	^	^
Geneva	159.7	225	247.7	27	24.7	34	^	^	29.8	36	^	^
Greene	160.9	24	277.6	91	^	^	^	^	^	^	^	^
Hale	154.8	71	322.6	123	21.9	10	14.7	7	29.8	13	^	^
Henry	163.1	118	380.6	83	28.2	19	30.0	7	39.0	27	^	^
Houston	150.9	599	273.7	227	26.6	101	11.8	12	31.4	113	^	^
Jackson	98.1	279	148.7	12	21.9	62	^	^	29.0	75	^	^
Jefferson	158.6	3,286	248.2	2,249	20.8	427	16.5	167	34.2	692	1.2	9
Lamar	140.8	115	268.5	19	22.8	16	^	^	30.1	20	^	^
Lauderdale	132.0	601	301.2	87	20.5	89	27.7	10	33.2	142	^	^
Lawrence	113.6	170	215.8	41	18.7	29	^	^	21.9	32	^	^
Lee	129.9	427	293.7	223	17.5	57	23.2	22	23.9	85	^	^
Limestone	139.5	415	208.0	66	15.0	45	^	^	24.3	70	^	^
Lowndes	131.4	36	169.5	60	^	^	^	^	23.4	6	^	^
Macon	150.1	36	173.5	146	41.8	11	22.5	19	^	^	^	^
Madison	122.6	1,456	208.3	438	17.8	217	13.1	34	26.4	298	^	^
Marengo	88.4	61	208.0	91	14.0	9	30.3	14	16.7	10	^	^
Marion	105.9	180	255.3	10	20.6	36	^	^	24.4	39	^	^
Marshall	124.9	535	159.0	8	25.3	109	^	^	29.8	117	^	^
Mobile	150.9	2,000	258.0	1,161	20.4	272	18.2	92	29.1	370	^	^
Monroe	91.6	76	187.5	72	15.9	12	20.1	8	33.2	24	^	^
Montgomery	122.1	715	216.8	668	19.2	111	16.5	64	33.5	187	^	^
Morgan	184.2	970	230.2	93	22.5	119	20.6	11	31.7	163	^	^
Perry	149.2	38	269.9	75	^	^	^	^	26.6	7	^	^
Pickens	131.8	100	259.0	86	17.7	13	17.1	6	21.9	15	^	^
Pike	131.3	133	262.6	86	32.5	32	27.5	11	42.4	38	^	^
Randolph	103.0	111	256.9	50	15.6	16	^	^	18.4	20	^	^
Russell	125.5	184	225.0	182	30.0	44	24.4	20	24.7	37	^	^
St. Clair	106.0	366	242.6	54	18.9	67	^	^	28.1	88	^	^
Shelby	133.5	848	239.9	108	16.0	111	13.4	7	25.8	169	^	^
Sumter	169.9	40	203.6	76	^	^	^	^	52.6	11	^	^
Talladega	118.2	373	218.7	186	15.3	48	11.0	13	26.5	79	^	^
Tallapoosa	135.9	272	209.6	88	17.0	30	25.7	10	24.2	45	^	^
Tuscaloosa	127.1	722	249.7	381	16.1	89	16.1	27	28.3	157	^	^
Walker	134.5	488	233.0	41	23.2	81	^	^	20.9	71	^	^
Washington	178.4	120	296.5	62	23.6	14	^	^	19.3	12	^	^
Wilcox	148.0	41	244.6	78	^	^	19.3	7	^	^	^	^
Winston	103.1	142	^	^	23.4	34	^	^	36.8	46	^	^

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are for malignant cases only except for All Sites which contains *in situ* bladder cases. ^Statistic not displayed due to fewer than 6 cases.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 7. Alabama Cancer Incidence Rates, by County, Females by Races, 2001-2010 Combined

	All Sites				Lung				Colorectal				Breast			
	White		Black		White		Black		White		Black		White		Black	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Alabama	395.7	82,936	367.6	22,090	57.8	12,653	39.3	2,328	39.1	8,557	49.0	2,920	117.1	24,179	116.6	7,064
Autauga	410.1	854	381.6	157	59.7	126	30.9	13	43.5	89	73.1	29	124.0	265	110.6	46
Baldwin	385.4	3,788	324.0	259	58.0	607	28.7	23	34.5	350	49.6	39	119.2	1,164	105.2	85
Barbour	375.4	382	314.2	218	52.0	57	29.0	21	44.3	49	41.6	28	127.8	126	114.6	78
Bibb	429.0	419	334.5	64	75.7	76	33.2	6	47.2	46	47.4	9	112.8	111	111.6	22
Blount	292.1	939	318.5	14	43.7	147	^	^	30.1	98	^	^	84.2	271	^	^
Bullock	346.0	71	450.7	175	31.7	7	42.5	16	59.6	13	78.3	33	113.6	21	148.6	56
Butler	374.4	331	370.5	173	46.2	41	29.1	14	39.9	39	62.0	30	112.1	99	105.7	48
Calhoun	408.3	2,415	404.0	456	68.9	429	53.6	60	45.0	280	52.3	60	106.1	616	135.2	153
Chambers	413.2	668	310.4	241	65.7	113	25.9	20	39.3	69	38.5	31	120.0	187	73.8	56
Cherokee	335.1	541	370.1	32	51.9	89	^	^	33.0	54	^	^	98.6	155	144.3	13
Chilton	351.3	756	378.5	85	51.5	115	74.0	17	37.9	85	^	^	102.0	217	129.3	29
Choctaw	300.6	177	279.3	110	41.7	27	31.3	13	34.8	22	24.8	10	96.7	55	90.7	35
Clarke	381.1	400	366.9	221	43.4	53	26.0	15	43.5	48	51.2	31	126.7	129	122.8	74
Clay	394.3	332	369.0	44	64.2	53	^	^	24.0	23	^	^	136.4	113	128.6	15
Cleburne	358.4	301	439.1	15	55.8	48	^	^	43.4	39	^	^	84.0	71	^	^
Coffee	372.2	867	347.5	150	59.9	145	42.8	18	32.7	79	35.9	16	115.8	263	102.7	44
Colbert	358.2	1,126	326.0	178	56.7	183	31.1	17	39.3	133	51.9	30	107.7	332	114.0	62
Conecuh	429.7	236	335.5	116	64.4	37	^	^	51.2	32	56.5	20	132.6	71	131.1	45
Coosa	405.4	212	292.0	62	51.0	29	32.0	7	39.3	21	^	^	120.1	63	72.4	16
Covington	365.9	863	331.1	93	60.0	140	50.4	15	41.5	104	53.4	16	96.0	229	73.8	20
Crenshaw	377.2	264	225.4	51	43.9	33	22.4	6	32.3	25	^	^	113.5	73	56.2	12
Cullman	376.0	1,833	199.1	9	52.4	272	^	^	39.0	200	^	^	102.9	496	^	^
Dale	388.6	858	355.0	157	66.6	153	46.3	20	29.4	66	37.4	16	102.8	226	112.9	52
Dallas	466.1	554	376.8	585	71.3	96	41.1	64	50.0	67	54.5	84	138.7	158	118.5	184
DeKalb	342.9	1,358	331.0	23	46.1	191	^	^	37.5	152	^	^	98.5	386	^	^
Elmore	429.1	1,405	363.7	225	63.7	209	46.6	27	41.4	137	47.8	28	138.4	460	103.3	68
Escambia	394.6	657	369.4	210	58.1	102	38.0	21	40.4	73	48.9	29	105.8	176	135.4	75
Etowah	384.8	2,327	371.3	310	62.3	402	39.3	33	38.4	246	54.5	45	105.7	628	133.5	111
Fayette	338.5	367	318.6	44	55.7	64	44.7	6	27.7	30	^	^	115.3	122	154.5	21
Franklin	393.0	736	356.6	29	71.5	139	^	^	39.1	76	^	^	114.0	210	114.6	9
Geneva	387.3	621	353.9	60	62.4	103	40.4	7	35.5	60	33.9	6	118.2	186	131.6	22
Greene	475.3	68	342.0	152	48.9	8	33.2	15	^	^	40.0	18	169.3	23	113.0	48
Hale	420.9	205	363.6	190	52.6	27	38.3	21	62.5	33	37.3	20	110.1	53	124.5	63
Henry	430.1	354	317.0	105	57.6	49	21.3	7	33.1	30	62.0	21	145.9	115	72.2	23
Houston	394.9	1,848	388.9	468	50.6	252	47.6	57	35.7	180	59.2	71	116.4	527	101.0	123
Jackson	406.5	1,295	400.7	50	55.3	188	^	^	48.2	158	46.2	6	118.7	373	108.2	13
Jefferson	441.5	11,518	403.1	5,632	58.8	1,615	41.4	569	41.9	1,178	50.6	703	136.5	3,432	129.1	1,823
Lamar	441.8	405	374.4	37	61.1	61	^	^	51.7	47	^	^	115.7	103	132.8	13
Lauderdale	388.1	2,080	406.7	197	56.0	314	40.7	20	39.9	224	63.5	31	107.3	555	119.7	57
Lawrence	361.1	610	369.1	89	54.3	95	30.8	7	36.7	63	60.5	16	99.2	168	128.9	32
Lee	356.6	1,423	346.0	445	52.4	207	31.2	38	35.5	139	37.6	49	111.1	442	110.5	144
Limestone	364.3	1,267	311.1	133	56.7	201	33.4	13	43.3	153	38.3	16	99.9	352	81.3	37
Lowndes	364.7	91	311.9	157	54.0	14	27.6	14	58.4	15	46.0	23	96.8	24	89.8	45
Macon	541.3	126	298.8	348	55.6	14	33.7	39	64.9	15	40.3	48	167.6	39	89.1	99
Madison	407.1	5,416	374.0	1,078	53.3	732	50.6	141	36.3	491	45.4	130	128.3	1,718	120.4	367
Marengo	365.3	273	303.9	196	40.5	33	31.1	20	30.2	25	47.3	32	118.2	88	83.4	51
Marion	352.8	699	469.9	25	48.6	104	^	^	46.1	96	^	^	108.0	208	150.3	7
Marshall	418.8	2,137	459.6	31	72.8	389	104.3	7	39.4	209	^	^	101.1	511	118.6	8
Mobile	413.1	6,446	388.5	2,680	64.9	1,052	45.6	311	41.2	665	57.1	390	127.1	1,953	122.5	854
Monroe	350.9	320	308.8	151	44.4	45	^	^	42.9	40	50.7	25	113.5	101	112.9	56
Montgomery	396.8	2,901	353.9	1,773	50.3	394	39.8	190	43.3	353	47.3	229	129.8	911	117.3	599
Morgan	428.8	2,637	438.3	261	64.8	413	58.0	33	40.8	258	56.1	32	119.6	730	138.0	87
Perry	315.9	91	361.1	150	28.0	9	53.5	22	18.3	7	44.9	19	108.1	27	114.0	47
Pickens	386.7	319	369.7	184	39.6	38	58.8	29	39.2	32	50.1	26	140.7	108	105.0	50
Pike	398.6	433	330.7	178	55.6	64	33.0	17	37.2	42	45.0	24	106.0	111	92.8	51
Randolph	362.3	443	344.7	90	50.3	68	^	^	28.8	36	30.8	8	103.2	123	107.6	28
Russell	478.5	866	291.4	333	65.3	129	29.2	34	47.4	91	45.0	51	133.9	239	88.2	101
St. Clair	356.4	1,393	284.8	81	64.1	259	34.1	10	36.0	143	23.6	7	90.8	356	104.9	29
Shelby	342.8	2,558	314.7	206	54.7	379	24.9	16	31.9	226	44.8	25	106.1	827	116.0	77
Sumter	317.7	79	326.6	190	23.2	6	22.8	13	34.7	11	47.0	28	83.5	22	90.8	53
Talladega	393.3	1,428	337.8	410	58.4	227	34.4	42	40.6	154	37.2	45	115.5	409	102.2	125
Tallapoosa	335.3	756	378.1	219	43.7	106	29.8	17	30.9	73	33.1	20	98.8	221	98.6	57
Tuscaloosa	405.8	2,654	386.5	897	54.1	364	42.6	95	38.6	256	54.1	125	125.2	814	126.9	299
Walker	443.7	1,935	360.2	92	73.8	342	63.1	16	41.9	189	39.6	10	114.7	490	114.8	29
Washington	367.0	265	318.4	82	53.5	40	^	^	38.6	28	49.6	13	131.5	95	144.1	36
Wilcox	482.6	127	393.0	184	42.5	14	28.8	14	65.1	19	55.6	26	120.5	31	118.1	55
Winston	403.4	631	^	^	66.8	110	^	^	38.7	61	^	^	111.9	175	^	^

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are for malignant cases only except for All Sites which contains *in situ* bladder cases. ^Statistic not displayed due to fewer than 6 cases.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 7 (Continued). Alabama Cancer Incidence Rates, by County, Females by Races, 2001-2010 Combined

	Cervix				Oral				Melanoma			
	White		Black		White		Black		White		Black	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Alabama	8.1	1,408	11.5	690	7.2	1,534	5.6	341	18.2	3,484	0.9	51
Autauga	9.4	19	^	^	7.0	15	^	^	22.1	44	^	^
Baldwin	6.5	49	10.3	8	6.5	63	^	^	20.2	181	^	^
Barbour	8.9	7	^	^	8.3	8	11.0	8	^	^	^	^
Bibb	14.9	13	^	^	13.4	13	^	^	14.5	14	^	^
Blount	7.8	21	^	^	7.4	24	^	^	12.6	39	^	^
Bullock	^	^	^	^	^	^	^	^	^	^	^	^
Butler	13.5	7	24.4	11	6.1	7	^	^	21.1	17	^	^
Calhoun	9.5	45	14.8	17	8.5	49	6.2	7	18.8	102	^	^
Chambers	15.3	17	15.7	11	9.2	19	^	^	8.1	13	^	^
Cherokee	5.9	8	^	^	6.4	12	^	^	6.6	10	^	^
Chilton	9.0	16	^	^	3.7	8	^	^	19.3	40	^	^
Choctaw	^	^	^	^	^	^	^	^	9.3	6	^	^
Clarke	^	^	13.2	8	4.9	6	^	^	36.7	30	^	^
Clay	16.4	10	^	^	^	^	^	^	9.4	8	^	^
Cleburne	12.4	9	^	^	6.7	6	^	^	10.0	8	^	^
Coffee	7.0	13	^	^	6.2	15	^	^	13.6	28	^	^
Colbert	4.8	12	^	^	5.3	16	^	^	17.1	47	^	^
Conecuh	^	^	^	^	12.3	6	^	^	22.7	11	^	^
Coosa	^	^	28.3	6	^	^	^	^	14.3	7	^	^
Covington	8.0	14	^	^	6.0	13	^	^	12.3	24	^	^
Crenshaw	16.9	9	32.5	6	11.2	9	^	^	18.6	14	^	^
Cullman	9.2	38	^	^	8.4	42	^	^	23.5	102	^	^
Dale	8.3	16	^	^	7.1	16	^	^	14.6	30	^	^
Dallas	10.5	8	12.6	19	10.4	14	5.9	9	28.6	22	^	^
DeKalb	9.7	32	^	^	6.3	24	^	^	14.9	53	^	^
Elmore	13.9	41	26.3	17	10.0	34	^	^	18.2	57	^	^
Escambia	6.7	8	11.4	6	9.6	17	^	^	20.3	27	^	^
Etowah	11.0	48	^	^	7.0	43	^	^	17.1	89	^	^
Fayette	5.2	6	^	^	^	^	^	^	8.9	9	^	^
Franklin	7.5	10	^	^	5.5	11	^	^	12.2	22	^	^
Geneva	10.9	12	^	^	10.4	18	^	^	29.2	42	^	^
Greene	^	^	^	^	^	^	^	^	^	^	^	^
Hale	^	^	^	^	^	^	^	^	18.3	6	^	^
Henry	^	^	^	^	7.3	6	^	^	19.4	13	^	^
Houston	9.4	35	17.6	21	9.1	43	5.0	6	19.9	85	^	^
Jackson	8.6	24	^	^	5.8	19	^	^	16.1	48	^	^
Jefferson	7.5	160	10.9	154	7.7	204	6.6	95	20.6	484	0.8	12
Lamar	18.3	12	^	^	9.0	10	^	^	21.0	18	^	^
Lauderdale	6.7	32	^	^	5.4	29	^	^	20.1	97	^	^
Lawrence	7.7	12	^	^	5.1	9	^	^	14.7	22	^	^
Lee	6.4	24	9.7	13	7.0	28	4.4	6	13.9	58	^	^
Limestone	8.1	26	14.9	6	6.2	21	^	^	14.0	45	^	^
Lowndes	^	^	^	^	^	^	^	^	^	^	^	^
Macon	^	^	12.7	13	^	^	6.7	7	25.5	6	^	^
Madison	5.7	67	10.0	29	7.9	105	4.6	13	17.8	222	^	^
Marengo	^	^	10.4	7	^	^	^	^	17.5	12	^	^
Marion	10.8	15	^	^	6.1	14	^	^	12.4	22	^	^
Marshall	10.4	44	^	^	7.0	35	^	^	18.9	89	^	^
Mobile	6.8	89	9.5	65	7.7	123	4.8	33	15.4	222	^	^
Monroe	^	^	^	^	^	^	^	^	22.5	16	^	^
Montgomery	8.8	48	12.4	68	7.8	58	4.5	24	19.2	129	^	^
Morgan	10.5	56	17.4	10	7.3	46	^	^	21.2	121	^	^
Perry	^	^	16.6	7	^	^	^	^	^	^	^	^
Pickens	^	^	13.3	6	^	^	^	^	27.1	20	^	^
Pike	12.5	11	^	^	^	^	^	^	29.1	28	^	^
Randolph	12.7	12	^	^	6.7	9	^	^	18.1	19	^	^
Russell	18.1	28	10.1	11	5.6	11	^	^	16.2	27	^	^
St. Clair	7.1	25	^	^	7.1	28	^	^	14.4	52	^	^
Shelby	3.6	30	13.2	11	5.3	37	9.4	7	16.6	132	^	^
Sumter	^	^	^	^	^	^	^	^	^	^	^	^
Talladega	7.1	20	15.9	19	8.1	30	6.1	7	15.9	51	^	^
Tallapoosa	7.9	14	27.2	15	6.6	15	10.0	6	15.3	28	^	^
Tuscaloosa	6.2	37	11.4	28	5.9	40	5.2	12	18.8	115	^	^
Walker	13.5	45	^	^	9.0	41	^	^	15.8	59	^	^
Washington	^	^	23.7	6	^	^	^	^	16.6	11	^	^
Wilcox	^	^	13.1	6	^	^	^	^	76.6	9	^	^
Winston	10.0	13	^	^	9.5	15	^	^	21.1	29	^	^

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are for malignant cases only except for All Sites which contains *in situ* bladder cases. ^Statistic not displayed due to fewer than 6 cases.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 8. Alabama Cancer Incidence Rates, by County, Males and Females by Races, 2001-2010 Combined

	All Sites				Lung				Colorectal				Oral				Melanoma			
	White		Black		White		Black		White		Black		White		Black		White		Black	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Alabama	461.4	179,578	469.1	47,680	78.6	31,300	66.9	6,676	47.3	18,494	57.0	5,698	13.2	5,160	10.6	1,134	22.7	8,500	0.9	93
Autauga	448.2	1,726	503.4	353	80.1	308	57.6	39	53.2	200	78.9	53	11.3	47	15.7	12	27.3	109	^	^
Baldwin	446.3	8,451	426.2	610	70.4	1,388	54.3	78	40.8	775	61.0	85	11.1	207	6.2	10	25.1	445	^	^
Barbour	447.0	886	396.5	478	85.0	171	58.8	71	47.5	94	42.8	50	17.5	35	9.2	12	13.8	26	^	^
Bibb	493.2	915	455.4	168	89.1	169	88.9	32	61.7	114	46.3	17	15.1	28	^	^	18.0	32	^	^
Blount	347.9	2,112	421.1	32	65.3	406	^	^	38.3	231	^	^	10.2	62	^	^	18.1	108	^	^
Bullock	383.9	154	500.7	350	74.4	29	67.9	46	64.1	26	83.7	59	^	^	14.3	10	16.5	7	^	^
Butler	433.6	713	469.0	370	76.1	128	74.3	59	50.6	86	59.2	47	9.9	18	14.1	12	25.4	38	^	^
Calhoun	494.1	5,363	495.6	935	98.3	1,100	75.9	140	57.1	621	55.4	102	16.2	172	15.0	29	22.2	232	^	^
Chambers	472.7	1,413	397.7	522	88.3	273	52.1	68	48.2	145	40.7	55	14.9	49	9.9	13	17.2	49	^	^
Cherokee	418.2	1,285	377.7	57	77.7	246	59.9	9	40.8	125	^	^	12.2	41	^	^	11.1	33	^	^
Chilton	416.4	1,692	494.8	196	83.9	348	90.2	36	39.9	161	32.2	13	12.6	52	^	^	20.1	80	^	^
Choctaw	406.1	462	350.5	243	67.0	81	57.7	41	40.4	45	39.5	27	9.5	11	8.3	6	13.4	16	^	^
Clarke	452.4	892	476.2	502	72.1	150	64.5	66	52.4	105	70.9	75	9.5	20	9.2	10	34.9	60	^	^
Clay	477.8	753	437.5	93	97.2	157	60.9	12	48.2	79	31.7	6	10.2	16	^	^	22.0	30	^	^
Cleburne	413.8	660	581.7	37	67.5	111	^	^	54.4	86	^	^	15.5	25	^	^	12.5	19	^	^
Coffee	442.5	1,940	455.1	334	74.6	337	72.8	52	35.7	156	49.1	36	12.7	55	9.6	8	18.1	77	^	^
Colbert	406.8	2,363	409.3	386	75.3	447	70.4	66	45.7	271	69.8	68	13.4	78	12.5	12	21.6	119	^	^
Conecuh	480.5	516	438.4	258	83.9	94	61.0	37	63.4	71	56.5	33	23.6	23	9.4	6	23.1	24	^	^
Coosa	457.1	466	420.5	163	81.4	87	73.9	29	45.2	47	46.9	18	11.4	12	^	^	21.0	20	^	^
Covington	438.2	1,907	411.6	193	79.0	347	62.6	30	45.9	205	58.6	27	13.0	55	^	^	19.7	81	^	^
Crenshaw	437.5	566	330.3	128	60.5	82	46.5	19	49.6	65	46.9	19	15.5	20	^	^	24.0	31	^	^
Cullman	430.3	3,948	369.0	33	79.7	756	83.0	8	45.4	418	^	^	14.5	133	^	^	26.3	229	^	^
Dale	482.2	2,006	505.1	371	95.5	404	75.0	55	45.2	189	47.7	35	17.4	72	17.4	14	22.2	89	^	^
Dallas	510.6	1,146	478.0	1,221	88.9	214	67.7	173	55.1	129	67.7	170	19.9	45	10.9	28	28.5	51	^	^
DeKalb	404.2	2,947	366.3	43	65.4	487	62.8	8	41.2	299	51.9	6	11.2	81	^	^	17.7	125	^	^
Elmore	495.0	3,085	454.1	496	89.9	558	91.5	94	55.1	339	49.4	52	16.7	106	7.9	9	25.0	158	^	^
Escambia	493.4	1,548	470.4	472	85.9	279	78.6	78	50.6	160	58.9	59	17.6	57	10.9	11	19.9	57	^	^
Etowah	455.7	5,064	504.4	678	84.5	971	76.7	102	47.1	533	58.5	77	14.3	160	18.2	25	19.5	202	^	^
Fayette	389.2	780	393.2	91	75.3	155	66.2	15	40.5	80	45.4	11	8.9	17	26.1	6	14.8	28	^	^
Franklin	443.6	1,533	501.8	67	91.4	326	66.8	9	49.2	172	61.3	8	11.9	41	^	^	16.8	56	^	^
Geneva	474.5	1,433	475.1	133	88.2	272	79.3	23	49.8	151	42.3	12	16.9	52	^	^	28.2	78	^	^
Greene	537.0	154	475.6	366	92.9	30	61.9	48	52.3	17	67.8	52	^	^	^	^	^	^	^	^
Hale	477.0	450	486.2	453	66.9	64	63.4	59	60.0	57	42.4	40	16.1	15	11.4	11	22.3	19	^	^
Henry	521.5	801	473.5	265	85.0	133	46.6	26	48.4	75	63.0	35	16.5	25	12.3	7	27.1	40	^	^
Houston	466.7	4,035	485.4	996	72.7	651	73.8	150	46.7	410	60.2	121	16.5	144	8.1	18	24.4	198	^	^
Jackson	460.0	2,762	445.8	97	82.2	514	65.1	15	55.5	332	54.8	12	13.1	81	^	^	21.5	123	^	^
Jefferson	509.1	23,964	505.6	11,752	76.7	3,704	69.1	1,566	49.6	2,392	58.8	1,344	13.6	631	10.7	262	25.9	1176	0.9	21
Lamar	503.4	865	497.2	87	82.8	149	79.2	14	58.3	102	^	^	15.2	26	^	^	24.3	38	^	^
Lauderdale	460.5	4,566	535.8	430	77.1	791	79.9	64	49.6	495	82.3	65	12.1	118	14.2	12	25.1	239	^	^
Lawrence	437.0	1,400	471.9	200	81.2	266	53.2	23	48.9	156	66.9	30	11.1	38	12.1	6	17.9	54	^	^
Lee	394.1	2,935	457.9	969	59.0	427	57.9	117	37.3	274	45.5	101	11.5	85	12.2	28	18.0	143	^	^
Limestone	443.1	2,886	397.6	308	80.2	525	48.5	35	49.2	320	53.8	40	10.0	66	10.8	8	18.0	115	^	^
Lowndes	421.3	216	392.6	337	83.3	45	43.9	38	46.6	25	68.1	57	^	^	^	^	16.0	8	^	^
Macon	526.2	254	371.5	744	71.8	36	49.9	99	62.6	30	48.4	98	23.9	12	13.8	26	17.0	8	^	^
Madison	451.3	11,281	453.8	2,272	68.1	1,728	66.4	317	45.0	1,113	54.3	264	12.6	322	8.4	47	21.3	520	^	^
Marengo	405.2	570	430.9	471	63.6	94	57.2	63	40.5	58	61.5	68	9.4	12	16.3	18	17.2	22	^	^
Marion	417.8	1,544	558.0	64	79.2	303	73.0	8	48.6	183	120.1	14	12.8	50	^	^	17.4	61	^	^
Marshall	482.0	4,555	580.9	65	97.0	939	121.8	13	47.7	448	^	^	15.3	144	^	^	22.8	206	^	^
Mobile	490.0	14,090	501.4	5,796	85.4	2,489	75.5	862	51.3	1,478	62.2	703	13.7	395	10.4	125	21.1	592	^	^
Monroe	418.5	718	401.9	351	70.2	127	46.0	40	53.7	94	54.1	46	8.8	14	10.0	9	26.5	40	^	^
Montgomery	439.4	5,800	441.4	3,670	67.2	925	66.2	529	47.8	654	54.8	444	12.9	169	9.6	88	25.3	316	^	^
Morgan	524.7	5,980	523.1	532	86.8	1,012	80.9	76	50.0	562	54.3	52	14.2	165	12.3	15	25.8	284	^	^
Perry	397.2	212	474.7	335	66.2	38	68.8	49	32.4	19	60.0	42	^	^	^	^	17.7	10	^	^
Pickens	453.5	718	494.9	410	70.2	123	84.2	69	45.6	71	56.5	48	11.3	18	9.7	8	24.8	35	^	^
Pike	466.8	970	434.5	390	73.2	161	61.3	53	45.5	92	50.2	44	17.9	37	15.1	14	34.2	66	^	^
Randolph	413.4	954	421.7	193	62.4	150	28.2	13	46.5	110	38.2	16	11.4	25	^	^	17.7	39	^	^
Russell	528.6	1,783	396.2	774	91.1	321	50.3	98	56.8	192	53.0	103	16.6	55	11.2	23	19.3	64	^	^
St. Clair	424.3	3,103	439.4	230	83.8	622	74.5	39	41.0	295	33.0	16	12.7	95	^	^	19.9	140	^	^
Shelby	402.9	5,563	424.7	468	69.3	891	57.0	58	37.6	505	44.4	44	10.5	148	10.9	14	20.6	301	^	^
Sumter	441.9	218	408.9	396	82.1	42	58.4	56	30.6	17	52.0	51	^	^	10.8	10	32.8	14	^	^
Talladega	454.7	3,097	419.1	889	82.1	580	56.6	118	50.2	341	46.0	100	11.5	78	8.9	20	20.3	130	^	^
Tallapoosa	400.7	1,703	456.2	451	63.3	283	63.2	61	38.6	166	49.2	49	11.2	45	16.6	16	18.4	73	^	^
Tuscaloosa	459.9	5,611	495.4	1,929	75.5	930	72.8	271	47.0	567	61.6	241	10.5	129	9.7	39	22.7	272	^	^
Walker	523.0	4,188	476.8	205	102.5	855	96.6	41	50.1	403	65.9	28	15.3	122	^	^	17.4	130	^	^
Washington	483.7	667	480.1	223	86.6	122	44.5	21	43.3	61	55.7	26	11.7	16	^	^	17.8	23	^	^
Wilcox	485.5	259	533.7	422	57.5	35	73.1	58	73.3	39	75.6	59	12.7	7	12.6	11	39.2	10	^	^
Winston	475.5	1,403	^	^	97.7	293	^	^	51.1	148	^	^	16.2	49	^	^	26.8	75	^	^

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates are for malignant cases only except for All Sites which contains *in situ* bladder cases. ^Statistic not displayed due to fewer than 6 cases.

Source: Alabama Statewide Cancer Registry (ASCR),

Cancer Mortality Tables

Table 9. Alabama Cancer Mortality Rates and Counts, by Site, Race and Sex, 2001-2010 Combined

	Male and Female						Male					
	All Races		White		Black		All Races		White		Black	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count
All Malignant Cancers	200.3	99,037	193.4	76,014	231.8	22,649	263.3	53,900	249.6	41,435	334.2	12,293
Oral Cavity and Pharynx	2.9	1,454	2.7	1,075	3.6	374	4.7	1,011	4.3	733	6.5	275
Digestive System	44.2	21,874	40.4	15,889	60.2	5,878	58.6	12,200	53.5	8,974	82.5	3,176
Esophagus	4.0	2,027	3.8	1,488	5.2	536	7.4	1,631	6.9	1,220	9.7	408
Stomach	3.8	1,869	2.9	1,142	7.4	712	5.3	1,082	4.0	653	11.4	425
Small Intestine	0.3	130	0.2	92	0.4	38	0.3	66	0.3	47	0.5	19
Colon and Rectum	18.2	8,985	16.5	6,465	25.7	2,492	23.0	4,681	20.8	3,409	33.9	1,257
Colon excluding Rectum	15.2	7,463	13.6	5,337	21.8	2,102	19.0	3,830	17.1	2,782	28.5	1,035
Rectum and Rectosigmoid Junction	3.1	1,522	2.9	1,128	3.9	390	4.0	851	3.7	627	5.3	222
Anus, Anal Canal and Anorectum	0.2	99	0.2	70	0.3	29	0.2	45	0.2	30	0.4	15
Liver and Intrahepatic Bile Duct	5.5	2,735	5.2	2,045	6.4	653	8.1	1,754	7.6	1,311	9.9	421
Liver	4.7	2,330	4.3	1,715	5.7	581	7.2	1,560	6.6	1,146	9.2	393
Intrahepatic Bile Duct	0.8	405	0.8	330	0.7	72	1.0	194	1.0	165	0.8	28
Gallbladder	0.5	262	0.5	188	0.8	72	0.5	96	0.5	80	0.5	16
Other Biliary	0.4	184	0.4	153	0.3	31	0.4	81	0.5	69	0.3	12
Pancreas	10.9	5,392	10.4	4,099	13.2	1,273	12.9	2,678	12.4	2,088	15.5	584
Other Digestive Organs	0.2	118	0.2	82	0.4	34	0.3	63	0.3	45	0.5	18
Respiratory System	63.6	31,725	64.8	25,740	59.6	5,875	94.3	19,901	92.8	15,881	102.8	3,958
Larynx	1.4	711	1.2	488	2.2	222	2.6	573	2.2	385	4.5	187
Lung and Bronchus	61.8	30,855	63.3	25,132	57.1	5,616	91.2	19,228	90.1	15,420	97.6	3,748
Bones and Joints	0.6	284	0.6	215	0.6	67	0.7	142	0.7	112	0.7	29
Soft Tissue including Heart	1.2	610	1.2	443	1.5	163	1.4	291	1.4	226	1.5	65
Skin excluding Basal and Squamous	3.7	1,800	4.4	1,691	1.0	105	5.8	1,196	6.8	1,134	1.3	58
Melanoma of the Skin	2.8	1,394	3.5	1,346	0.5	45	4.3	897	5.2	880	0.3	14
Other Non-Epithelial Skin	0.8	406	0.9	345	0.6	60	1.5	299	1.6	254	1.0	44
Breast	13.9	6,840	12.5	4,875	19.1	1,935	0.2	51	0.2	35	0.4	16
Female Genital System	*	*	*	*	*	*	*	*	*	*	*	*
Cervix Uteri	*	*	*	*	*	*	*	*	*	*	*	*
Corpus and Uterus, NOS	*	*	*	*	*	*	*	*	*	*	*	*
Corpus Uteri	*	*	*	*	*	*	*	*	*	*	*	*
Uterus, NOS	*	*	*	*	*	*	*	*	*	*	*	*
Ovary	*	*	*	*	*	*	*	*	*	*	*	*
Vagina	*	*	*	*	*	*	*	*	*	*	*	*
Vulva	*	*	*	*	*	*	*	*	*	*	*	*
Other Female Genital Organs	*	*	*	*	*	*	*	*	*	*	*	*
Male Genital System	*	*	*	*	*	*	31.0	5,513	23.2	3,385	70.6	2,117
Prostate	*	*	*	*	*	*	30.5	5,412	22.8	3,304	70.2	2,097
Testis	*	*	*	*	*	*	0.3	57	0.3	52	^	^
Penis	*	*	*	*	*	*	0.2	37	0.1	23	0.3	14
Other Male Genital Organs	*	*	*	*	*	*	<0.1	7	<0.1	6	^	^
Urinary System	7.7	3,810	7.9	3,116	7.1	681	12.5	2,484	12.9	2,092	10.8	385
Urinary Bladder	3.6	1,790	3.8	1,506	3.0	279	6.6	1,250	7.0	1,089	4.9	157
Kidney and Renal Pelvis	3.9	1,937	3.9	1,541	3.9	389	5.6	1,184	5.6	962	5.7	220
Ureter	0.1	45	0.1	40	^	^	0.1	26	0.1	21	^	^
Other Urinary Organs	0.1	38	0.1	29	0.1	9	0.1	24	0.1	20	^	^
Eye and Orbit	0.1	28	0.1	26	^	^	0.1	14	0.1	13	^	^
Brain and Other Nervous System	4.6	2,260	5.2	2,007	2.3	245	5.6	1,229	6.3	1,090	3.0	137
Endocrine System	0.7	336	0.7	261	0.7	73	0.8	164	0.8	130	0.8	32
Thyroid	0.4	203	0.4	159	0.5	44	0.5	97	0.5	77	0.6	20
Other Endocrine including Thymus	0.3	133	0.3	102	0.3	29	0.3	67	0.3	53	0.2	12
Lymphoma	7.2	3,521	7.8	3,011	4.9	492	9.0	1,832	9.6	1,566	6.1	252
Hodgkin Lymphoma	0.4	205	0.4	162	0.4	42	0.5	114	0.5	89	0.5	24
Non-Hodgkin Lymphoma	6.8	3,316	7.3	2,849	4.5	450	8.5	1,718	9.1	1,477	5.6	228
Myeloma	4.2	2,044	3.5	1,359	7.1	680	5.2	1,047	4.4	718	9.0	329
Leukemia	7.4	3,614	7.6	2,935	6.7	667	10.3	2,021	10.5	1,664	9.3	353
Lymphocytic Leukemia	2.1	1,022	2.1	824	2.0	195	3.0	585	3.1	471	3.0	112
Acute Lymphocytic Leukemia	0.4	186	0.4	148	0.3	35	0.5	114	0.6	92	0.4	20
Chronic Lymphocytic Leukemia	1.6	762	1.6	613	1.6	149	2.3	426	2.2	342	2.4	84
Myeloid and Monocytic Leukemia	3.0	1,445	3.1	1,179	2.6	261	3.9	802	4.0	668	3.3	133
Acute Myeloid Leukemia	2.4	1,165	2.5	946	2.1	214	3.1	637	3.2	530	2.7	106
Chronic Myeloid Leukemia	0.4	170	0.4	140	0.3	30	0.5	101	0.5	82	0.4	19
Other Leukemia	2.4	1,147	2.4	932	2.2	211	3.3	634	3.4	525	3.0	108
Miscellaneous Malignant Cancer	17.5	8,642	16.7	6,572	20.9	2,048	23.3	4,804	22.2	3,682	28.9	1,110

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. ^Statistic not displayed due to fewer than 6 deaths.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 9 (Continued). Alabama Cancer Mortality Rates and Counts, by Site, Race and Sex, 2001-2010 Combined

	Female					
	All Races		White		Black	
	Rate	Count	Rate	Count	Rate	Count
All Malignant Cancers	158.7	45,137	155.1	34,579	173.7	10,356
Oral Cavity and Pharynx	1.5	443	1.5	342	1.7	99
Digestive System	33.4	9,674	30.3	6,915	45.4	2,702
Esophagus	1.4	396	1.2	268	2.1	128
Stomach	2.7	787	2.1	489	4.8	287
Small Intestine	0.2	64	0.2	45	0.3	19
Colon and Rectum	14.9	4,304	13.4	3,056	20.7	1,235
Colon excluding Rectum	12.5	3,633	11.2	2,555	17.9	1,067
Rectum and Rectosigmoid Junction	2.3	671	2.3	501	2.8	168
Anus, Anal Canal and Anorectum	0.2	54	0.2	40	0.2	14
Liver and Intrahepatic Bile Duct	3.4	981	3.3	734	3.9	232
Liver	2.7	770	2.5	569	3.1	188
Intrahepatic Bile Duct	0.7	211	0.7	165	0.7	44
Gallbladder	0.6	166	0.5	108	0.9	56
Other Biliary	0.3	103	0.4	84	0.3	19
Pancreas	9.3	2,714	8.8	2,011	11.7	689
Other Digestive Organs	0.2	55	0.2	37	0.3	16
Respiratory System	41.7	11,824	44.3	9,859	32.5	1,917
Larynx	0.5	138	0.5	103	0.6	35
Lung and Bronchus	41.0	11,627	43.7	9,712	31.7	1,868
Bones and Joints	0.5	142	0.5	103	0.6	38
Soft Tissue including Heart	1.2	319	1.0	217	1.6	98
Skin excluding Basal and Squamous	2.1	604	2.6	557	0.8	47
Melanoma of the Skin	1.8	497	2.2	466	0.5	31
Other Non-Epithelial Skin	0.3	107	0.4	91	0.3	16
Breast	24.4	6,789	22.3	4,840	31.6	1,919
Female Genital System	16.6	4,682	15.6	3,414	21.0	1,247
Cervix Uteri	3.0	789	2.4	468	5.3	317
Corpus and Uterus, NOS	3.5	992	2.7	599	6.6	391
Corpus Uteri	1.8	510	1.4	324	3.1	184
Uterus, NOS	1.7	482	1.2	275	3.5	207
Ovary	9.3	2,655	9.6	2,145	8.4	497
Vagina	0.3	93	0.3	77	0.2	15
Vulva	0.4	109	0.4	94	0.2	14
Other Female Genital Organs	0.2	44	0.1	31	0.2	13
Male Genital System	*	*	*	*	*	*
Prostate	*	*	*	*	*	*
Testis	*	*	*	*	*	*
Penis	*	*	*	*	*	*
Other Male Genital Organs	*	*	*	*	*	*
Urinary System	4.5	1,326	4.4	1,024	5.0	296
Urinary Bladder	1.8	540	1.8	417	2.1	122
Kidney and Renal Pelvis	2.6	753	2.6	579	2.8	169
Ureter	0.1	19	0.1	19	0.0	0
Other Urinary Organs	<0.1	14	<0.1	9	^	^
Eye and Orbit	<0.1	14	0.1	13	^	^
Brain and Other Nervous System	3.7	1,031	4.3	917	1.8	108
Endocrine System	0.6	172	0.6	131	0.7	41
Thyroid	0.4	106	0.3	82	0.4	24
Other Endocrine including Thymus	0.3	66	0.3	49	0.3	17
Lymphoma	5.9	1,689	6.4	1,445	4.0	240
Hodgkin Lymphoma	0.3	91	0.4	73	0.3	18
Non-Hodgkin Lymphoma	5.5	1,598	6.0	1,372	3.8	222
Myeloma	3.4	997	2.8	641	6.0	351
Leukemia	5.6	1,593	5.6	1,271	5.2	314
Lymphocytic Leukemia	1.5	437	1.5	353	1.4	83
Acute Lymphocytic Leukemia	0.3	72	0.3	56	0.2	15
Chronic Lymphocytic Leukemia	1.1	336	1.1	271	1.1	65
Myeloid and Monocytic Leukemia	2.3	643	2.4	511	2.1	128
Acute Myeloid Leukemia	1.9	528	2.0	416	1.8	108
Chronic Myeloid Leukemia	0.2	69	0.3	58	0.2	11
Other Leukemia	1.8	513	1.8	407	1.7	103
Miscellaneous Malignant Cancer	13.3	3,838	12.8	2,890	15.7	938

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. ^Statistic not displayed due to fewer than 6 deaths.

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Table 10. Trends in Alabama Cancer Mortality, Selected Sites, 2006-2010

Females									
Breast P-Value 0.61					Cervix P-Value 0.62				
	Rate/Trend	SE	Lower CI	Upper CI		Rate/Trend	SE	Lower CI	Upper CI
Total PC	8.7				Total PC	12.1			
Total APC	0.8	-3.8	5.7		Total APC	1.6	-7.3	11.4	
2006 Rate	21.7	0.9	20.0	23.6	2006 Rate	2.6	0.3	2.0	3.3
2007 Rate	23.6	0.9	21.8	25.5	2007 Rate	3.0	0.3	2.4	3.7
2008 Rate	23.1	0.9	21.4	25.0	2008 Rate	3.2	0.4	2.6	4.0
2009 Rate	21.7	0.9	20.1	23.5	2009 Rate	2.8	0.3	2.2	3.6
2010 Rate	23.6	0.9	21.9	25.5	2010 Rate	2.9	0.3	2.3	3.6
Males					Males and Females				
Prostate P-Value 0.35					All Sites P-Value 0.14				
	Rate/Trend	SE	Lower CI	Upper CI		Rate/Trend	SE	Lower CI	Upper CI
Total PC	-1.5				Total PC	-1.9			
Total APC	-1.1		-4.4	2.2	Total APC	-0.4		-0.9	0.2
2006 Rate	27.9	1.3	25.5	30.5	2006 Rate	196.0	2.0	192.1	200.0
2007 Rate	29.2	1.3	26.8	31.9	2007 Rate	194.3	2.0	190.5	198.2
2008 Rate	27.1	1.2	24.7	29.5	2008 Rate	195.7	2.0	191.9	199.6
2009 Rate	26.9	1.2	24.6	29.3	2009 Rate	194.8	1.9	191.0	198.6
2010 Rate	27.5	1.2	25.2	29.9	2010 Rate	192.3	1.9	188.6	196.1
Males and Females									
Colorectal P-Value 0.32					Lung P-Value 0.43				
	Rate/Trend	SE	Lower CI	Upper CI		Rate/Trend	SE	Lower CI	Upper CI
Total PC	-9.3				Total PC	2.0			
Total APC	-1.9		-6.7	3.2	Total APC	0.5		-1.3	2.3
2006 Rate	18.7	0.6	17.5	20.0	2006 Rate	59.4	1.1	57.3	61.6
2007 Rate	17.1	0.6	15.9	18.2	2007 Rate	60.8	1.1	58.6	62.9
2008 Rate	18.8	0.6	17.7	20.1	2008 Rate	58.9	1.1	56.9	61.1
2009 Rate	17.3	0.6	16.1	18.4	2009 Rate	61.5	1.1	59.4	63.7
2010 Rate	17.0	0.6	15.9	18.1	2010 Rate	60.6	1.1	58.5	62.8
Melanoma P-Value 0.89					Oral P-Value 0.85				
	Rate/Trend	SE	Lower CI	Upper CI		Rate/Trend	SE	Lower CI	Upper CI
Total PC	-5.7				Total PC	6.0			
Total APC	0.5		-9.7	11.8	Total APC	-0.6	0.800	-9.0	8.6
2006 Rate	2.9	0.2	2.4	3.4	2006 Rate	2.9	0.2	2.4	3.4
2007 Rate	2.9	0.2	2.5	3.4	2007 Rate	3.1	0.2	2.6	3.6
2008 Rate	2.7	0.2	2.3	3.2	2008 Rate	2.8	0.2	2.4	3.3
2009 Rate	3.3	0.3	2.9	3.9	2009 Rate	2.5	0.2	2.1	3.0
2010 Rate	2.7	0.2	2.3	3.2	2010 Rate	3.0	0.2	2.6	3.6

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard; Confidence intervals are 95% for rates and trends. Percent changes were calculated using 1 year for each end point; APCs were calculated using weighted least squares method. *The APC is significantly different from zero (p<0.05).

Source: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2006-2010.

National Comparison Tables

Table 11. Alabama and United States Cancer Incidence Rates, by Site, Race and Sex, 2005-2009*

Males and Females						
	Alabama			United States		
	All Races	White	Black	All Races	White	Black
All Sites	473.0	468.8	478.7	473.4	472.8	484.7
Lung and Bronchus	76.2	78.8	66.6	67.3	68.0	70.3
Colon and Rectum	49.4	46.9	59.0	46.3	45.3	54.8
Melanoma of the Skin	20.1	25.5	1.2	19.4	21.7	1.0
Males						
	Alabama			United States		
	All Races	White	Black	All Races	White	Black
All Sites	582.6	563.1	644.1	550.7	546.5	619.7
Lung and Bronchus	105.2	104.8	108.1	82.7	82.3	99.3
Colon and Rectum	59.5	56.5	72.7	53.9	52.8	65.1
Melanoma of the Skin	27.0	33.2	1.2	24.6	27.2	1.1
Prostate	161.6	137.3	243.8	151.4	141.0	228.7
Females						
	Alabama			United States		
	All Races	White	Black	All Races	White	Black
All Sites	395.2	401.1	373.0	419.3	424.0	396.8
Lung and Bronchus	54.8	59.1	39.8	55.9	57.5	51.3
Colon and Rectum	41.5	39.1	50.1	40.3	39.2	48.0
Melanoma of the Skin	15.2	19.9	1.1	15.8	17.9	1.0
Breast	119.1	117.6	120.4	122.3	123.3	118.0
Cervix	8.7	8.3	9.9	8.1	7.8	10.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. *All rates are for malignant cases only except the rates for All Sites which includes bladder cancer *in situ*.

Source Alabama Data: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2005-2009.

Source United States Data: NAACCR CINA+ Online, 2012. Data Years: 2005-2009.

Table 12. Alabama and United States Cancer Mortality Rates, by Site, Race and Sex, 2001-2010

Males and Females						
	Alabama			United States		
	All Races	White	Black	All Races	White	Black
All Sites	200.3	193.4	231.8	183.3	182.3	220.8
Lung and Bronchus	61.8	63.3	57.1	51.6	52.1	56.6
Colon and Rectum	18.2	16.5	25.7	17.8	17.3	24.6
Melanoma of the Skin	2.8	3.5	0.5	2.7	3.1	0.4
Males						
	Alabama			United States		
	All Races	White	Black	All Races	White	Black
All Sites	263.3	249.6	334.2	224.6	221.9	292.6
Lung and Bronchus	91.2	90.1	97.6	67.4	66.9	84.6
Colon and Rectum	23.0	20.8	33.9	21.4	20.8	30.5
Melanoma of the Skin	4.3	5.2	0.3	4.0	4.5	0.5
Prostate	30.5	22.8	70.2	25.0	23.0	55.3
Females						
	Alabama			United States		
	All Races	White	Black	All Races	White	Black
All Sites	158.7	155.1	173.7	155.2	155.1	178.4
Lung and Bronchus	41.0	43.7	31.7	40.0	41.2	38.3
Colon and Rectum	14.9	13.4	20.7	15.1	14.6	20.9
Melanoma of the Skin	1.8	2.2	0.5	1.7	2.0	0.4
Breast	24.4	22.3	31.6	23.9	23.3	32.1
Cervix	3.0	2.4	5.3	2.4	2.2	4.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard.

Source Alabama Data: Alabama Statewide Cancer Registry (ASCR), 2012. Data Years: 2001-2010.

Source United States Data: CDC WONDER, 2012. Data Years: 2001-2010.

Health Risk and Cancer Screening Behaviors Tables

Table 13. Percentage of Tobacco Use, Adults (2011) and High School Students (2011), Alabama and the U.S.

Current Cigarette Smoking	Alabama	United States
Total Adults	24.3	21.2
Male Adults	28.0	23.6
Female Adults	21.0	18.8
Less Than High School Education Adults	41.2	35.6
White	25.0	20.8
Black	20.8	26.4
Hispanic	27.4	19.8
Total High School Students	22.9	18.1
Male High School Students	26.4	19.9
Female High School Students	19.0	16.1
White High School Students	26.5	20.3
Black High School Students	16.2	10.5

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention

Table 14. Percentage of Colorectal Cancer Screening, Adults 50 and Older, Alabama and the U.S., 2010

Sigmoidoscopy/Colonoscopy	Alabama	United States
Total Adults	63.9	65.3
Male Adults	63.0	64.7
Female Adults	64.6	65.8
White	65.5	67.2
Black	58.8	63.7
Hispanic	n/a	54.0
Less Than High School Education	52.8	52.9
Fecal Occult Blood Test in the Past 2 Years	Alabama	United States
Total Adults	16.7	17.3
Male Adults	28.5	17.8
Female Adults	15.1	16.1
White	15.7	17.4
Black	19.9	19.9
Hispanic	n/a	12.7
Less Than High School Education	13.0	14.7

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

Table 15. Percentage of Breast Cancer Screening, Women 40 and Older, Alabama and the U.S., 2010

Mammogram in the Past 2 Years	Alabama	United States
40 Years and Older	75.2	75.6
White	74.1	75.4
Black	79.3	78.9
Hispanic	n/a	77.4
Less Than High School Education	65.6	63.7

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention. *American Cancer Society. Behavioral Risk Factor Surveillance System Public Use Data File 2010, Centers for Disease Control and Prevention.

Table 16. Percentage of Prostate Cancer Screening, Men 50 and Older, Alabama and the U.S., 2010

PSA in the Past Year	Alabama	United States
50 Years and Older	62.5	55.9
50-64 Years Old	59.8	50.0
65 Years and Older	67.5	66.9
White 50+	64.6	58.1
Black 45+	51.6	50.5
Less Than High School Education	49.0	41.7

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention. *American Cancer Society. Behavioral Risk Factor Surveillance System Public Use Data File 2010, Centers for Disease Control and Prevention.

Table 17. Percentage of Cervical Cancer Screening, Women 18 and Older, Alabama and the U.S., 2010

Pap Test within the Past 3 Years	Alabama	United States
Total 18 Years and Older	83.2	81.1
65 Years and Older	68.6	62.9
White	81.4	81.9
Black	88.3	86.1
Hispanic	n/a	84.3
Less Than High School Education	66.6	72.0

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

Table 18. Percentage of Fruit and Vegetable Intake, Adults 18 and Older, Alabama and the U.S., 2009

5 or More Fruits and Vegetables per Day	Alabama	United States
Total	20.3	23.4
Male	18.2	19.2
Female	22.3	27.7
White	20.5	24.1
Black	19.5	21.3
Low Education	11.3	18.3

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

Table 19. Percentage of Physical Activity, Adults 18 and Older, Alabama and the U.S., 2011

Participated in \geq 150 Minutes Aerobic Physical Activity per Week	Alabama	United States
Total	42.4	51.7
Male	45.4	53.0
Female	39.6	49.9
White	43.1	54.1
Black	40.6	46.4
Hispanic	37.9	44.6
Low Education	31.5	40.1

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

Table 20. Percentage of Overweight*, Adults 18 and Older, Alabama and the U.S., 2011

Overweight	Alabama	United States
Total	66.7	63.6
Male	71.3	69.9
Female	62.3	56.5
White	66.2	62.0
Black	70.2	71.5
Low Education	66.8	65.0

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention. *BMI 25 and over.

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TECHNICAL NOTES

International Classification of Diseases (ICD) codes used for this report were based on the North American Association of Central Cancer Registries (NAACCR) list for incidence and mortality. The International Classification of Diseases for Oncology, Third Edition (2000) was used for incidence data. The International Classification of Diseases, Tenth Revision, Clinical Modification (2003) was used for mortality data. The 95% confidence intervals were calculated for incidence and mortality data and used to determine the level of significance when comparing two rates. If the confidence intervals overlapped, it was determined that no difference existed between the two rates.

MATERIALS AND METHODS

Population Estimates

The population estimates for the denominators of incidence and mortality rates are race-specific (all races, white, black) and sex-specific county population estimates. The county population estimates were incorporated into NCI's SEER*Stat software to calculate cancer incidence and mortality rates. The SEER*Stat population estimates are a slight modification of the annual time series of July 1 county population estimates (by age, sex and race) produced by the Population Estimates Program of the U. S. Bureau of the Census with support from NCI through an interagency agreement.

Data Sources

Data from cancer registries, health information departments, histopathologic laboratories and physician offices were reported to the ASCR as of June 30, 2012. For cancer cases diagnosed during 2000-2009, the ASCR considered as reportable all incident cases with a behavior code of 2 (*in situ*, non-invasive) or 3 (invasive, primary site only) in the International Classification of Diseases for Oncology (ICDO) (3rd edition), with the exception of *in situ* cancer of the cervix. Basal and squamous cell carcinomas of the skin are also excluded, with the exception of those on the skin of the genital organs. The primary source of cancer incidence data is medical records. Staff at health care facilities abstract cancer incidence data from patients' medical records, enter the data into the facility's own cancer registry if it has one and then send the data to the ASCR. All reporting sources collect data using uniform data items and codes as documented by the North American Association of Central Cancer Registries. This uniformity means that data items collected by all reporting sources are comparable. For this report, information on primary cancer sites was coded according to the appropriate ICDO edition and was grouped according to revised SEER recodes dated January 27, 2003, which define standard groupings of primary cancer sites. The January 2003 SEER recodes were used to ensure consistent site-type definitions over time and consistency with other published cancer incidence and mortality data. Invalid site codes were excluded from the analysis.

Age-Adjusted Incidence Rates

Because the occurrence of many cancers increases with age and because the age distribution of a population (i.e., the number of people in particular age categories) can change over time and can be different in different geographic areas, researchers age adjust incidence rates so that they can make a valid comparison between one year's rates and those of another year or between one geographic area's rates and those of another area. Age adjusting the rates ensures that differences in incidence from one year to another or from one geographic area to another are not due to differences in age distribution. The standard population used to age adjust the rates for this report is the 2000 U.S. standard population, in accordance with a 1998 Department of Health and Human Services recommendation. The 2000 U.S. standard population is based on the proportion of the 2000 population in specific age groups. The proportions of the 2000 population in these age groups serve as weights for calculating age-adjusted incidence rates. Because national publications tend to exclude *in situ* cases, with the exception of bladder cancer, when calculating incidence rates, the ASCR has included a new table (Table 11) that calculates incidence rates in the same fashion. This table was added to facilitate an accurate comparison between Alabama and United States incidence rates. Moreover, the ASCR incidence rates and their associated counts presented in Table 1 through Table 8 are based on the ten most recent years of data available and exclude *in situ* cases for all sites except urinary bladder. The ASCR chose to make this change to exclude *in situ* cases to bring this publication into line with the national publication standard of excluding *in situ* cases even if doing so prohibits direct comparisons to be made to previous editions of the *Alabama Cancer Facts and Figures*.

Age-Adjusted Mortality Rates

Mortality data for Alabama was obtained from the Alabama Department of Public Health Center for Health Statistics, and age-adjusted rates were calculated using the 2000 U.S. standard population. Prior to the release of the *Alabama Cancer Facts & Figures 2007*, cancer deaths of Alabama residents that occurred outside of Alabama were omitted from the rates. Beginning with *Alabama Cancer Facts & Figures 2007*, these deaths were included in the rate calculations.

Annual Percentage Change (APC)

The Annual Percentage Change (APC) is a summary statistic that represents the average rate of change in a rate over a defined time period and is used to measure trends over time. The APC is calculated by fitting a least squares regression line to the natural logarithm of the rates using the calendar year as a regressor variable.

Interpreting the Data

Published age-adjusted cancer incidence and mortality rates for years before 1999 were calculated using standard populations other than the 2000 U.S. standard population. Beginning with the publication of data for the 1999 diagnosis year, or year of death, cancer incidence and mortality rates were age adjusted to the 2000 U.S. standard population. This change was motivated by a need to standardize age-adjustment procedures across publications and to update the calculation of age-adjusted rates to more closely reflect the current age distribution of the U.S. population and the current burden of cancer. Because of the aging of the U.S. population, the 2000 U.S. standard population gives more weight to older age categories than did previous standard populations. Caution should be used when comparing the data published here with cancer incidence and mortality rates adjusted to standard populations other than the 2000 U.S. standard population. Geographic variation in incidence and mortality rates may be the result of regional differences in the exposure of the population to known or unknown risk factors. Differences may arise because of differences in sociodemographic characteristics of the populations (e.g., age, race or ethnicity, geographic region, urban or rural residence), screening use, health-related behaviors (e.g., behaviors related to tobacco use, diet, physical activity), exposure to cancer-causing agents, or factors related to registry operations (e.g., completeness, timeliness, specificity in coding cancer sites). Work continues to ensure the reporting of high-quality data. Please note that differences in registry database completeness and data quality influence the estimated cancer incidence rates. Because 2010 cases were 95 percent complete at the time of this publication, some rates, especially all sites combined, may vary slightly from the "true" or final rates for the Alabama population. The rates presented here have not been adjusted for completeness differences across the database. The ASCR may update the previous years' data as cancer registries submit data for the new diagnosis year and additional cases from the previous diagnosis years. Users of cancer incidence data should be mindful of this issue for all data used in their comparisons. Race information reported to the ASCR is not self-reported by the patient. Information on race is abstracted from medical records, coded according to standard procedures and then grouped into standard race groupings. In this Alabama's Cancer Facts and Figures report, cancer incidence and mortality data are presented for all races combined and for white and black populations in Alabama.

American Cancer Society Quality of Life Programs

Improving the quality of life for cancer patients is one of the most important priorities for the American Cancer Society. The American Cancer Society supports programs that enable cancer patients, survivors and their families to seek and recognize ongoing sources of support within their community network.

- **Cancer Information** is available 24 hours a day, seven days a week, by calling 1-800-227-2345 or visiting www.cancer.org. Cancer information specialists are available by calling 1-800-227-2345 to provide comprehensive information about the disease and its treatment, as well as connect the caller with local community resources.
- **Cancer Survivors Network** is a virtual community created by and for cancer survivors to connect with one another, share experiences and provide support. It is available online through www.cancer.org.
- **Children's Camps** are supported by the American Cancer Society for children who have, or have had, cancer. These camps are designed to handle the special needs of children undergoing treatment, as well as offer a fun environment where children can enjoy typical summer camp activities. American Cancer Society sponsored camps are available in Tennessee, Arkansas, Mississippi and Kentucky.
- **The College Scholarship Program** is available to students who have had a cancer diagnosis before age 19, maintain a 2.5 GPA, are under the age of 25 and have been accepted to an accredited college, university or vocational school. Students must be a legal resident of the Mid-South Division. The American Cancer Society's Mid-South Division awards competitive scholarships each year to young cancer survivors pursuing higher education.
- **The Community Resource Database** contains detailed information about community programs and services available in communities that offer assistance available to those affected by cancer. Trained cancer specialists provide callers to 1-800-227-2345 with information and referrals to resources, including lodging, transportation, medications and other patient support services/programs.
- **Hope Lodge** is a temporary no-cost lodging facility for cancer patients and a caregiver while receiving cancer treatment at nearby hospitals. The Mid-South Division operates five lodges: Birmingham, AL; Memphis, TN; Nashville, TN; New Orleans, LA; and Lexington, KY.
- **I Can Cope** is a patient education program designed to help cancer patients and their loved ones deal with their cancer experience. These stand-alone educational modules provide information about cancer, diagnosis and treatment, pain control, money management and nutrition for the cancer patient. Some modules can also be found online at www.cancer.org/onlineclasses.
- **Look Good...Feel Better** is a program in which trained volunteer cosmetologists help female cancer patients deal with the side effects of treatment by teaching them beauty techniques to enhance their appearance and self-image. The Personal Care Products Foundation and National Cosmetology Association partner with the American Cancer Society to offer this program.
- **Man to Man** is a peer-support service that offers education, discussion and support to men with prostate cancer. Topics include information about the disease, treatment, side effects and coping.
- **Reach to Recovery** is a peer-support service for patients with a diagnosis of breast cancer. Specially trained Reach to Recovery volunteer visitors allow patients to find "someone like me" and gain support.
- **Transportation** programs provide community appropriate solutions to help cancer patients (in need) get to treatment.
 - The American Cancer Society's Transportation Grants Program provides grants to qualifying radiation therapy facilities to help patients with financial needs get to treatment.
 - The American Cancer Society's Road to Recovery Program provides transportation for cancer patients to and from treatment appointments. Rides are provided by volunteer drivers who donate their time and the use of their personal vehicles.
- **Publications** are available from the American Cancer Society for individuals with a concern about cancer. Brochures, books, posters and videos on cancer prevention, early detection and treatment are also available by calling 1-800-227-2345.

Geographic Divisions of the American Cancer Society, Inc.

California Division

1710 Webster Street
Oakland, CA 94612
(510) 893-7900 (O)
(510) 835-8656 (F)

East Central Division (PA, OH)

Route 422 and Sipe Avenue
Hershey, PA 17033-0897
(717) 533-6144 (O)
(717) 534-1075 (F)

Eastern Division (NJ, NY)

6725 Lyons Street
East Syracuse, NY 13057
(315) 437-7025 (O)
(315) 437-0540 (F)

Florida Division (including Puerto Rico operations)

3709 West Jetton Avenue
Tampa, FL 33629-5146
(813) 253-0541 (O)
(813) 254-5857 (F)

Puerto Rico

Calle Alverio #577
Esquina Sargento Medina
Hato Rey, PR 00918
(787) 764-2295 (O)
(787) 764-0553 (F)

Great Lakes Division (IN, MI)

1755 Abbey Road
East Lansing, MI 48823-1907
(517) 332-2222 (O)
(517) 664-1498 (F)

Great West Division (AK, AZ, CO, ID, MT, ND, NM, NV, OR, UT, WA, WY)

2120 First Avenue North
Seattle, WA 98109-1140
(206) 283-1152 (O)
(206) 285-3469 (F)

High Plains Division (including Hawaii operations, KS, MO, NE, OK, TX)

2433 Ridgepoint Drive
Austin, TX 78754
(512) 919-1800 (O)
(512) 919-1844 (F)

Hawaii Pacific Division

2370 Nuuanu Avenue
Honolulu, HI
(808) 595-7500 (O)
(808) 595-7502 (F)

Illinois Division

225 N. Michigan Avenue
Suite 1200
Chicago, IL 60601
(312) 641-6150 (O)
(312) 641-3533 (F)

Mid-South Division (AL, AR, KY, LA, MS, TN)

1100 Ireland Way
Suite 300
Birmingham, AL 35205-7014
(205) 930-8860 (O)
(205) 930-8877 (F)

Midwest Division (IA, MN, SD, WI)

8364 Hickman Road
Suite D
Des Moines, IA 50325
(515) 253-0147 (O)
(515) 253-0806 (F)

New England Division (CT, ME, MA, NH, RI, VT)

30 Speen Street
Framingham, MA 01701-9376
(508) 270-4600 (O)
(508) 270-4699 (F)

South Atlantic Division (DE, GA, MD, NC, SC, VA, Washington, D.C., WV)

250 Williams Street
Atlanta, GA 30303
(404) 816-7800 (O)
(404) 816-9443 (F)

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by helping you stay well, helping you get well,
by finding cures, and by fighting back.

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