

April 2016

What Is Cancer?

Cancer is not one disease, but a group of diseases. For example, lung cancer is a completely different disease than colorectal cancer. All cancers have one thing in common, they can grow and spread uncontrollably if not diagnosed at an early stage and properly treated.

Cancer is caused by many things, like smoking, poor diet, and/or family history. The greatest risk factor for any cancer is increasing age. The risk of getting cancer increases with age. The risk of developing cancer differs for men and women. In the United States, one out of two men and one out of three women will have cancer in his or her lifetime.

What Is Cancer Incidence?

Cancer *incidence* is a measure of how many *new cancer cases* occurred in a certain period of time. A cancer *incidence rate* tells how many cancers were diagnosed per 100,000 people in the population. (For example, a cancer incidence rate of 400 means that for every 100,000 people, 400 were diagnosed with cancer).

Incidence rates can be *age-adjusted*, meaning that the age structure of the population is taken into account when rates are calculated. Adjusting for age allows us to compare rates by removing differences in the age structure among different populations. Incidence rates shown below are age-adjusted to the 2000 US standard population.

What Is Cancer Mortality?

Cancer *mortality* is a measure of how many *cancer deaths* occurred in a certain period of time. A cancer *mortality rate* tells how many people died from cancer per 100,000 people in the population. (For example, a cancer mortality rate of 150 means that for every 100,000 people in the population, 150 died from cancer).

Cancer mortality rates can also be *age-adjusted*, taking into account the age structure of the population. Mortality rates shown below are age-adjusted to the 2000 US standard population.

Impact of Cancer: US, SC, and SC County

The American Cancer Society (ACS) estimates that **1,685,210** new cases of cancer will be diagnosed in the United States in **2016**. This translates to **4,617** new diagnoses each day. Furthermore, an estimated **595,690** people in the United States are expected to die from cancer in **2016**.

In South Carolina, ACS estimates **27,980** new cases of cancer will be diagnosed in **2016** or over **77** new cancer cases diagnosed each day, while an estimated **10,330** South Carolinians will die from cancer in **2016**. The four most common cancers in SC are cancers of the lung, breast (female), prostate, and colon/rectum. The four leading cancer causes of death in SC are lung, colon/rectum, breast (female), and pancreas.

Tables 1 through 4 below show the number of new cancer cases and deaths for Barnwell County, including age-adjusted rates for cancers in the county and for the state of SC. The last column in each table shows how the county ranks in comparison to the other 45 SC counties. A rank of 1 means that a county has the highest rate of any county, while a rank of 46 means that a county has the lowest rate of any SC county. *At this time, the most recent cancer statistics for South Carolina and the United States are for new cases diagnosed in 2013. Deaths occurring in 2013 are also used.*

Table 1 shows 5-year cancer **incidence** data for Barnwell County and SC for all cancers by sex and race, including Barnwell County's rank in SC compared to all other SC counties.

Table 1. Cancer Incidence by Sex and Race, 2009-2013, Barnwell County and South Carolina*

| | SC | Barnwell County | | SC rank |
|--------|-------------|-----------------|------------|---------|
| | 5-year rate | 5-year rate | new cases* | |
| all | 460 | 398 | 102 | 43 |
| male | 531 | 477 | 54 | 41 |
| female | 410 | 342 | 48 | 45 |
| white | 458 | 403 | 63 | 42 |
| black | 464 | 383 | 38 | 45 |

*Counts are annual averages based on 5 years of data. 5-year rates are per 100,000 age-adjusted to the 2000 US standard population. Statistics do not include *in situ* cancers, except for bladder. Source: SC Central Cancer Registry. ~ Statistic could not be calculated (small counts).

Table 2 shows 5-year cancer **mortality** data for Barnwell County and SC for all cancers by sex and race, including Barnwell County's rank in SC compared to all other SC counties.

Table 2. Cancer Mortality by Sex and Race, 2009-2013, Barnwell County and South Carolina*

| | SC | Barnwell County | | SC rank |
|--------|-------------|-----------------|-------------|---------|
| | 5-year rate | 5-year rate | lives lost* | |
| all | 179 | 206 | 53 | 9 |
| male | 227 | 283 | 31 | 5 |
| female | 146 | 152 | 22 | 18 |
| white | 171 | 197 | 32 | 13 |
| black | 207 | 229 | 21 | 5 |

*Counts are annual averages based on 5 years of data. 5-year rates are per 100,000 age-adjusted to the 2000 US standard population. Sources: SC Central Cancer Registry and SC Vital Records. ~ Statistic could not be calculated (small counts).

Table 3 shows 5-year cancer **incidence** data for Barnwell County and SC for selected cancers, including Barnwell County's rank in SC compared to all other SC counties.

Table 3. Cancer Incidence for Selected Cancers, 2009-2013, Barnwell County and South Carolina*

| cancer | SC | Barnwell County | | SC rank |
|-----------------|-------------|-----------------|------------|---------|
| | 5-year rate | 5-year rate | new cases* | |
| breast (female) | 126 | 111 | 16 | 35 |
| prostate (male) | 129 | 110 | 14 | 38 |
| lung/bronchus | 69 | 60 | 15 | 38 |
| colon/rectum | 39 | 24 | 6 | 46 |
| pancreas | 13 | 17 | 4 | 5 |

*Counts are annual averages based on 5 years of data. 5-year rates are per 100,000 age-adjusted to the 2000 US standard population. Statistics do not include *in situ* cancers, except for bladder. Source: SC Central Cancer Registry. ~ Statistic could not be calculated (small counts).

Table 4 shows 5-year cancer **mortality** data for Barnwell County and SC for selected cancers, including Barnwell County's rank in SC compared to all other SC counties.

Table 4. Cancer Mortality for Selected Cancers, 2009-2013, Barnwell County and South Carolina*

| cancer | SC | Barnwell County | | SC rank |
|-----------------|-------------|-----------------|-------------|---------|
| | 5-year rate | 5-year rate | lives lost* | |
| breast (female) | 22 | ~ | 2 | 43 |
| prostate (male) | 24 | 56 | 5 | 1 |
| lung/bronchus | 52 | 55 | 15 | 21 |
| colon/rectum | 16 | 14 | 4 | 39 |
| pancreas | 11 | 13 | 3 | 16 |

*Counts are annual averages based on 5 years of data. 5-year rates are per 100,000 age-adjusted to the 2000 US standard population. Sources: SC Central Cancer Registry and SC Vital Records. ~ Statistic could not be calculated (small counts).

Table 5 shows the percentage of cancers diagnosed in early and late stages of disease in **Barnwell County** and SC. Cancers diagnosed in late stages lessen the potential for successful treatment and raise the risk of premature loss of life.

Table 5. All Cancers by Stage of Diagnosis, 2009-2013, Barnwell County and South Carolina*

| | SC | Barnwell County |
|---------------|------------------------|------------------------|
| | Percent of all cancers | Percent of all cancers |
| Early Stage | 45.8 | 39.1 |
| Late Stage | 44.2 | 41.7 |
| Unknown Stage | 10.0 | 19.2 |

*Percents (proportions) shown are (rounded) based on 5 years of data. Statistics do not include *in situ* cancers, except for bladder. Source: SC Central Cancer Registry.

Breast Cancer in Barnwell County

Among women, breast cancer was the number **1** most commonly diagnosed cancer and the number **2** leading cause of cancer death from **2009-2013**. For this 5-year period, there was an annual average of **16** new female breast cancer cases diagnosed and **2** deaths from this disease.

Prostate Cancer in Barnwell County

Among men, prostate cancer was the number **1** most commonly diagnosed cancer and the number **2** leading cause of cancer death from **2009-2013**. For this 5-year period, there was an annual average of **14** new prostate cancer cases diagnosed and **5** deaths from this disease.

Lung Cancer in Barnwell County

Lung Cancer was the number **2** most commonly diagnosed cancer and the number **1** leading cause of cancer death from **2009-2013**. For this 5-year period, there was an annual average of **15** new lung cancer cases diagnosed and **15** deaths from this disease.

Colorectal Cancer in Barnwell County

Colorectal cancer was the number **4** most commonly diagnosed cancer and the number **3** leading cause of cancer death from **2009-2013**. For this 5-year period, there was an annual average of **6** new colorectal cancer cases diagnosed and **4** deaths from this disease.

Pancreatic Cancer in Barnwell County

Pancreatic cancer was the number **5** most commonly diagnosed cancer and the number **4** leading cause of cancer death from **2009-2013**. For this 5-year period, there was an annual

average of **4** new pancreatic cancer cases diagnosed and **3** deaths from this disease.

Screening

Men and women should speak with their doctor about the pros and cons of screening and to determine their level of risk.

The SC Best Chance Network (BCN) is a federally funded program that provides breast and cervical cancer screening, follow-up and diagnosis for low-income, uninsured women age 30 – 64, screening thousands of women each year. For more information see:

<http://www.scdhec.gov/Health/DiseasesandConditions/Cancer/FreeCancerScreenings/>

Notes: Data are subject to change as data sets are updated. Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population. Statistics do not include *in situ* cancers, except for bladder. The following suppression rules may have been applied to the data in the text and tables above: counts of 1-4 are recorded as less than 5; counts of 5-9 are rounded to 10. Rates based on counts fewer than 16 are suppressed (~).

Resources

SC Central Cancer Registry (DHEC)

<http://www.scdhec.gov/Health/DiseasesandConditions/Cancer/CancerStatisticsReports/>

American Cancer Society

<http://www.cancer.org/research/cancerfactsstatistics/>

CDC National Program of Cancer Registries

United States Cancer Statistics

<http://apps.nccd.cdc.gov/uscs/>

Division of Cancer Prevention and Control (DHEC)

<http://www.scdhec.gov/Health/DiseasesandConditions/Cancer/>

Division of Tobacco Prevention and Control (DHEC)

<http://www.scdhec.gov/Health/TobaccoCessation/>

SC Cancer Alliance

<http://www.sccanceralliance.org/>

