

What is breast cancer?

Cancer is a disease that causes cells in the body to divide and grow out of control. When cancer starts in the tissue of the breast, it is called breast cancer. Cancer cells in the breast may grow into surrounding tissues or spread to other parts of the body. All women are at risk of breast cancer. One in eight women will be diagnosed with breast cancer in their lifetime.¹ Breast cancer may also occur in men, but it is rare.

Risk factors²

- ✓ Female
 - ✓ Family history
 - ✓ Aging
 - ✓ Being overweight or obese
 - ✓ Being physically inactive
 - ✓ Alcohol use
 - ✓ Use of hormone replacement therapy
 - ✓ Long menstrual history (early beginning and/or late end)
 - ✓ Not having children or having your first child after the age of 30 years
 - ✓ Current or recent (less than 10 years) use of oral contraceptives
 - ✓ Inherent genetic conditions (e.g. BRCA1 and BRCA2 gene mutation)
- Modifying certain lifestyle behaviors can lower the risk of developing breast cancer. Steps that women can take to reduce the risk of breast cancer include being physically active, maintaining a healthy weight, breastfeeding and limiting use of alcohol.

Signs and symptoms²

- Abnormal lump felt during self-breast examination.
- Abnormality detected on a mammogram.
- Persistent changes to the breast, such as skin changes, swelling, skin irritation, pain and abnormal discharge.

Prevention and early detection²

- Early detection is the key to survival. Early stage breast cancer means it has not yet become invasive (in situ stage) or it is confined to the tissue of the breast (local stage).
- With regular screening, breast cancer is more likely to be detected at an early stage when it is most treatable.
- The American Medical Association and American Cancer Society recommend:
 - ✓ **Clinical Breast Exam (CBE)** approximately every 3 years for women in their 20s and 30s and every year for women aged 40 years and over.

South Carolina Quick Facts

- Breast cancer is the most commonly diagnosed cancer among women.
- It is the second most common cause of cancer death among women, next to lung cancer.
- South Carolina ranked 21st in the nation for breast cancer mortality in 2013.

Screening is extremely important for early detection and treatment.

- Black women have a slightly lower rate of getting breast cancer (1%) than white women, but are *more likely to die* from breast cancer (43%).



The Best Chance Network (BCN) provides breast and cervical cancer screening for women between the ages of 30-64 with incomes at or below 200% of federal poverty level who meet other eligibility guidelines.

- Since its inception on January 1, 1991:
 - ✓ Over 173,000 mammograms have been provided.
 - ✓ Over 215,000 clinical breast exams were performed.

- ✓ Women aged 40 years and older should have a **screening mammogram** every year and should continue to do so for as long as they are in good health.

Breast cancer facts in South Carolina

- Breast cancer is the most commonly diagnosed cancer among women in South Carolina. It is the second most common cause of cancer related death in South Carolina and the U.S.²

Incidence (rate of new cases):

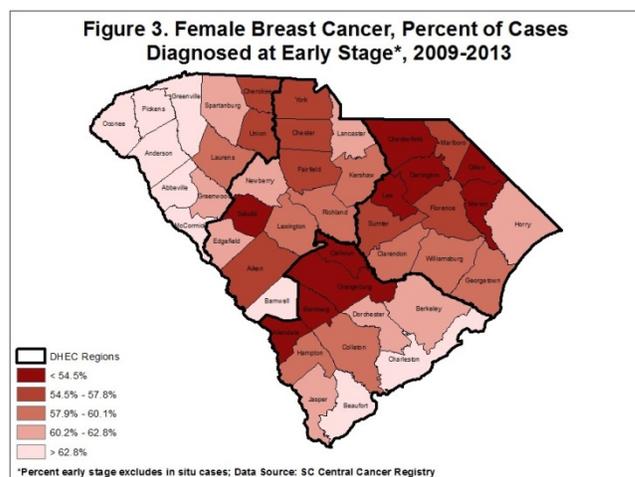
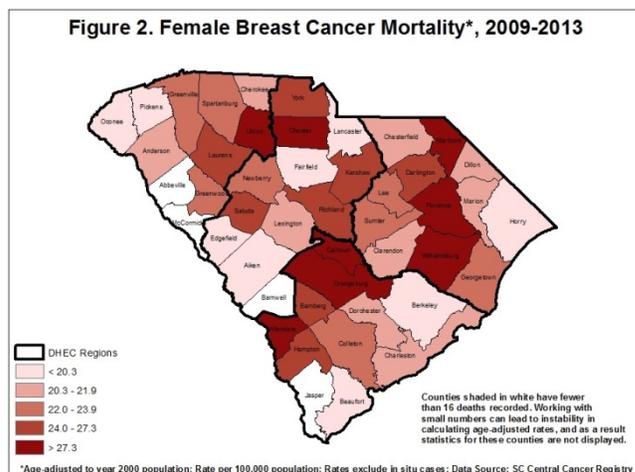
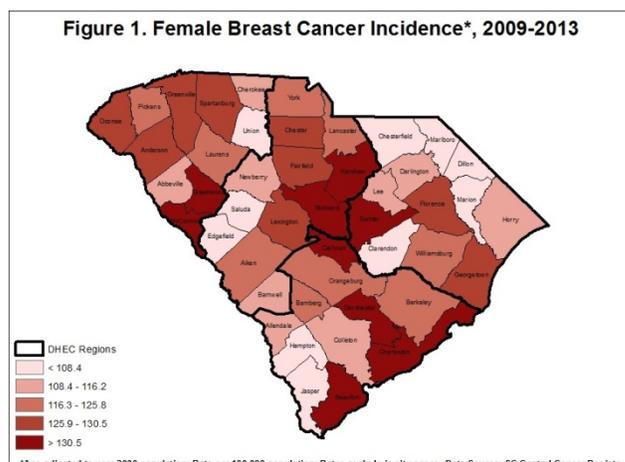
- The female breast cancer incidence rate (2009-2013) is higher in South Carolina compared to the U.S. (125.9 vs. 122.9 cases per 100,000 women, respectively).⁴
- Figure 1 displays breast cancer incidence rates in South Carolina's 46 counties.³ McCormick (161.2/100,000), Dorchester (145.9/100,000), and Calhoun (144.6/100,000) counties have the highest incidence rates for breast cancer.³
- The breast cancer incidence rate is slightly higher in white women than black women (126.1 vs. 124.4 cases per 100,000 women, respectively) (Figure 4).³

Mortality:

- The female breast cancer mortality rate (2009-2013) is higher in South Carolina compared to the U.S. overall (22.4 vs. 21.5/100,000).⁵
- Figure 2 displays breast cancer mortality rates in South Carolina's 46 counties.³ Allendale (40.3/100,000), Williamsburg (38.7/100,000), and Chester (37.2/100,000) counties have the highest mortality rates for breast cancer.³
- The breast cancer mortality rate (2009-2013) is higher in black women than white women (28.7 vs. 20.3 per 100,000 women, respectively) (Figure 5).³

Survival:

- Nationally, when diagnosed at an early stage, the five-year relative survival rate for breast cancer is about 99%.² In South Carolina (2009-2013), about 61% of breast cancers diagnosed are diagnosed at an early stage.³
- Figure 3 displays the percent of breast cancer cases diagnosed at early stage in South Carolina's 46 counties.³ McCormick (73%), Oconee (69%), and Pickens (67%) counties have the highest percentage of breast cancer being diagnosed at early stage in South Carolina.³
- White women with breast cancer are more likely to be diagnosed at an early stage than black women (64% and 52%, respectively) (Figure 6).³



Cancer screening:

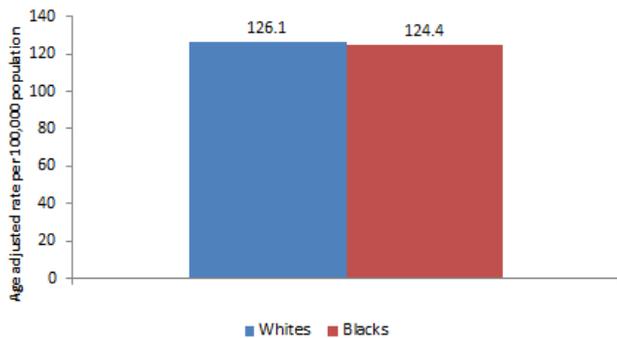
- In 2014, the Centers for Disease Control and Prevention (CDC) reported that 72% of South Carolina⁶ women aged 40 years and older had a mammogram in the past 2 years (U.S. average = 73%).⁷
- In South Carolina, black women 40 years and older reported higher use of mammogram screening in the past two years than white women (76.9% and 70.8% respectively) (Figure 7).⁶

Economic burden:

- Primary diagnoses of breast cancer for inpatient hospitalizations cost more than \$44.0 million dollars in South Carolina during 2014:
 - ✓ Inpatient hospitalizations: 807 women
 - ✓ Average length of stay: 2.6 days
 - ✓ Average charge per stay: \$54,526.⁸

Racial differences:

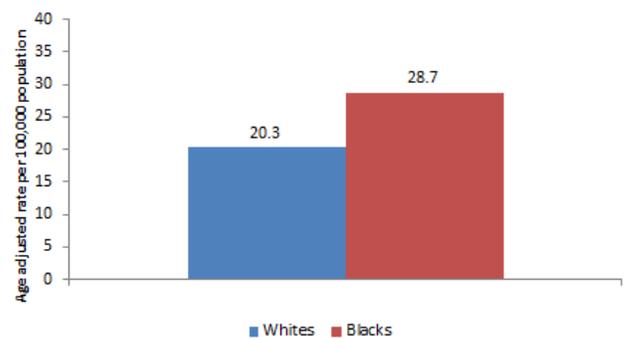
Figure 4. Female Breast Cancer Incidence Rate by Race, SC 2009-2013



Note: rate excludes *in situ* cases

Data Source: SC Central Cancer Registry

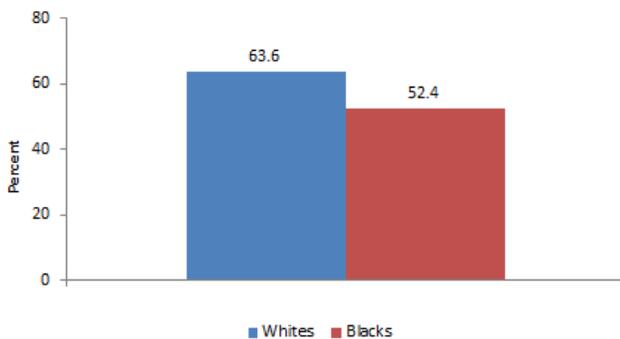
Figure 5. Female Breast Cancer Mortality Rate by Race, SC 2009-2013



Note: rate excludes *in situ* cases

Data Source: SC Central Cancer Registry

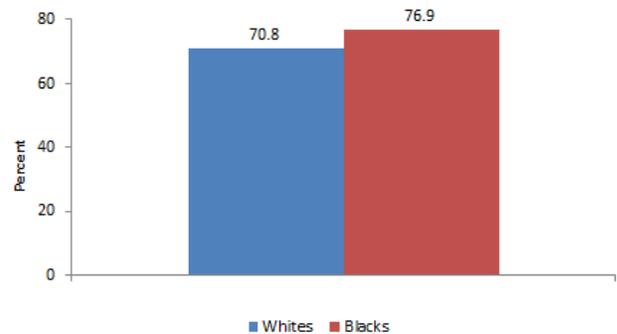
Figure 6. Female Breast Cancer Cases Diagnosed at Local Stage by Race, SC 2009-2013



Note: percent excludes *in situ* cases

Data Source: SC Central Cancer Registry

Figure 7. Prevalence of Mammogram within last 2 years of Women Ages 40+ by Race, SC 2014



Data Source: SC BRFSS, PHSIS, DHEC

¹Howlander N, Noone AM, Krapcho M, et al. SEER Cancer Statistics Review, 1975-2012, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2012/, based on November 2014 SEER data submission, posted to the SEER web site, April 2015.

²American Cancer Society, Cancer Facts & Figures 2015. Atlanta: American Cancer Society; 2015.

³South Carolina Central Cancer Registry, Office of Public Health Statistics and Information Services, Dept. of Health & Environmental Control, based on combined incidence data from 2009-2013.

⁴Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: NPCR and SEER Incidence - State RAD file - 1999-2013 - jbk 060816, National Cancer Institute, DCCPS, Surveillance Research Program, Surveillance Systems Branch, released June 2016.

⁵Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Mortality - All COD, Aggregated With State, Total U.S. (1990-2013) <Katrina/Rita Population Adjustment>, National Cancer Institute, DCCPS, Surveillance Research Program, Surveillance Systems Branch, released April 2016. Underlying mortality data provided by NCHS (www.cdc.gov/nchs).

⁶South Carolina Behavioral Risk Factor Surveillance System, Office of Public Health Statistics and Information Services, Dept. of Health & Environmental Control, 2014.

⁷Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2014.

⁸South Carolina Revenue and Fiscal Affairs Office, Hospital Discharge Patient-Level Dataset.

For more information on cancer prevention and management, please contact:

Division of Cancer Prevention and Control (DHEC): <http://www.scdhec.gov/Health/DiseasesandConditions/Cancer/>
American Cancer Society: www.cancer.org | 1.800.227.2345

Fact sheet prepared by:

Chronic Disease Epidemiology, Division of Surveillance
2100 Bull Street, Columbia, SC 29201 | 803.898.0584
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