What is Breast Cancer?

*Breast cancer* is a disease in which cells in the breast grow out of control. Breast cancer can begin in different parts of the breast. A breast is made up of three main parts: lobules, ducts, and connective tissue. The lobules are the glands that produce milk. The ducts are tubes that carry milk to the nipple. The connective tissue (which consists of fibrous and fatty tissue) surrounds and holds everything together. Most breast cancers begin in the ducts or lobules. Breast cancer can spread outside the breast through blood vessels and lymph vessels. When breast cancer spreads to other parts of the body, it is said to have metastasized.

Breast cancer may also occur in men, but it is rare.¹

### Risk Factors You Cannot Change

- Getting older.
- Genetic mutations
- Having dense breasts.
- Personal history of breast cancer or certain non-cancerous breast diseases.
- Family history of breast or ovarian cancer
- Previous treatment using radiation therapy

### Risk Factors You Can Change

- Exercise regularly
- Maintain a healthy weight
- Don’t drink or limit alcohol
- Breastfeed your children, when possible
- Know your family history

### Signs and Symptoms

- New lump in the breast or underarm (armpit).
- Thickening or swelling of part of the breast.
- Irritation or dimpling of breast skin.
- Redness or flaky skin in the nipple area or the breast.
- Pulling in of the nipple or pain in the nipple area.
- Nipple discharge other than breast milk, including blood.
- Any change in the size or the shape of the breast.
- Pain in any area of the breast.

### Breast Cancer Screening for Prevention and Early detection

Breast cancer screening means checking a woman’s breasts for cancer before there are signs or symptoms of the disease. With regular screening, breast cancer is more likely to be detected at an early stage when it is most treatable.

### 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 13th in the nation for breast cancer mortality in the 2013-2017 time period.
- Screening is extremely important for early detection and treatment.
  - Black women have a slightly lower rate of getting breast cancer (2.7%) than white women but are more likely to die from breast cancer (43.5%).

The Best Chance Network (BCN) provides breast cancer screenings (ages 30-64) and cervical cancer screenings (ages 21-64) for women with incomes at or below 250% of the federal poverty level who meet other eligibility guidelines.

- Since its inception on January 1, 1991:
  - Over 136,900 women received services.
  - Over 205,900 mammograms were provided.
**Mammogram**

A mammogram is an X-ray of the breast. For many women, mammograms are the best way to find breast cancer early, when it is easier to treat and before it is big enough to feel or cause symptoms. Having regular mammograms can lower the risk of dying from breast cancer. At this time, a mammogram is the best way to find breast cancer for most women.

**Breast Magnetic Resonance Imaging (MRI)**

A breast MRI uses magnets and radio waves to take pictures of the breast. MRI is used along with mammograms to screen women who are at high risk for getting breast cancer. Because breast MRIs may appear abnormal even when there is no cancer, they are not used for women at average risk.

**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 (2013-2017) is higher in South Carolina compared to the U.S. (129.9 vs. 125.2 cases per 100,000 women, respectively).⁴
- Figure 1 displays female breast cancer incidence rates in South Carolina’s 46 counties.² Chester (148.9/100,000), Lee (148.2/100,000), and Richland (147.4/100,000) counties have the highest incidence rates for breast cancer.³
- The breast cancer incidence rate is slightly higher in white women than black women (130.8 vs. 127.2 cases per 100,000 women, respectively) (Figure 4).³

**Mortality:**

- The female breast cancer mortality rate (2013-2017) is higher in South Carolina compared to the U.S. overall (21.5 vs. 20.3/100,000).⁵
- Figure 2 displays breast cancer mortality rates in South Carolina’s 46 counties.² Chester (32.6/100,000), Williamsburg (32.5/100,000), and Lee (31.3/100,000) counties have the highest mortality rates for breast cancer.³
• The breast cancer mortality rate (2013-2017) is higher in black women than white women (27.7 vs. 19.6 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%.¹ In South Carolina (2013-2017), about 71% of breast cancers diagnosed are diagnosed at an early stage.³
• Figure 3 displays the percent of breast cancer cases diagnosed at late stage in South Carolina’s 46 counties.² Dillon (41.1%), Calhoun (40.7%), and Saluda (38.4%) counties have the highest percentage of breast cancer being diagnosed at late stage in South Carolina.³
• White women with breast cancer are more likely to be diagnosed at an early stage than black women (72.5% and 64.5%, respectively) (Figure 6).³

**Cancer screening:**
• In 2018, the Centers for Disease Control and Prevention (CDC) reported that 70.9% of South Carolina⁵ women aged 40 years and older had a mammogram in the past 2 years (U.S. average = 71.8%).⁷
• In South Carolina, black women 40-64 years reported higher use of mammogram screening in the past two years than white women (81.4% and 77.1%, respectively) (Figure 7).⁶

**Economic burden:**
• Primary diagnoses of breast cancer for inpatient hospitalizations cost more than $37.7 million dollars in South Carolina during 2019:
  ✓ Inpatient hospitalizations: 475 women
  ✓ Average length of stay: 3.2 days
  ✓ Average charge per stay: $72,031.⁸

**Racial differences:**

![Figure 4. SC female breast cancer incidence rate by race, 2013-2017](image1)

![Figure 5. SC female breast cancer mortality rate by race, 2013-2017](image2)

![Figure 6. SC female breast cancer cases diagnosed at late stage by race, 2013-2017](image3)

![Figure 7. SC prevalence of mammogram within last 2 years of women ages 40-64 by race, 2018](image4)
For more information on cancer prevention and management, please contact:
Division of Cancer Prevention and Control, SCDHEC, 2100 Bull Street, Columbia, SC 29201 | 803-898-1615
https://scdhec.gov/health/diseases-conditions/cancer

American Cancer Society: www.cancer.org | 1.800.227.2345

For more information on cancer data and statistics for South Carolina, please contact:
South Carolina Central Cancer Registry, SC DHEC. 2600 Bull Street, Columbia, SC 29201 | 803.898.8000
cancer.registry@dhec.sc.gov

Centers for Disease Control and Prevention: https://www.cdc.gov/cancer/breast/