

Breast Cancer in the US^{1,2}

In women, breast cancer is the most common cancer diagnosed (after skin cancer) and is the second-leading cause of death among women after lung cancer.

Types of Breast Cancer^{1, 3}

There are several types of breast cancer, including: ductal carcinoma in situ (DCIS), invasive ductal carcinoma (IDC), invasive lobular carcinoma (ILC), triple-negative breast cancer (TNBC), inflammatory breast cancer (IBC), angiosarcoma of the breast, and Paget disease of the breast.

Risk Factors^{1, 2, 3}

Gender Both men and women can develop this disease, but being born female is the main risk factor for breast cancer.

Being older The risk of developing breast cancer increases with age, and most breast cancers are found in women age 55 or older.

Personal or family history Breast cancer risk is higher among women with a personal or family history of the disease.

- About 5% to 10% of breast cancers are likely caused by genetic mutations in the BRCA1 and BRCA2 genes. Other gene mutations are also linked to inherited breast cancer.
- Overall, about 15% of women with breast cancer have a family member with the disease. Having a first-degree relative with breast cancer increases risk, while having more than one first-degree relative who has or had breast cancer increases the risk even more. Risk is further increased when the affected female relative was diagnosed at a young age or was diagnosed with cancer in both breasts, or if the affected relative is male.
- Previous history of breast cancer or certain benign breast conditions, such as atypical hyperplasia, can increase risk.

Other Risk Factors^{1,2,3}

• Having dense breast tissue

- Using post-menopausal hormone therapy with estrogen and progesterone therapy
- Being overweight or obese, especially after menopause
- Drinking alcohol
- Physical inactivity
- A long menstrual history starting menstruation early or having late menopause
- Not having children, not breastfeeding, or having first live birth after age 30
- Using certain birth control methods

Screening and Detection^{1, 4, 5}

Screening is a process used to test for cancer in people who have no symptoms. The American Cancer Society recommends the following guidelines for the early detection of breast cancer in average-risk women:

- Women ages 40 to 44 should have the choice to start annual breast cancer screening with mammograms.
- **Women ages 45 to 54** should get mammograms every year.
- **Women 55 and older** should switch to mammograms every 2 years, or can continue yearly screening.
- Screening should continue as long as a woman is in good health and is expected to live at least 10 more years.
- All women should be familiar with the known benefits, limitations, and potential harms linked to breast cancer screening.
- Screening MRI is recommended for women at high risk
 of breast cancer, including women with a strong family
 history of breast or ovarian cancer, those with a lifetime
 risk of breast cancer of about 20% to 25% or greater
 according to risk assessment tools that are based
 mainly on family history, those with a known breast
 cancer gene mutation, and women who were treated
 with radiation therapy to the chest when they were
 between the ages of 10 and 30.

Signs and Symptoms^{1, 3}

The most common physical sign of breast cancer is a new painless lump or mass. Sometimes breast cancer spreads to axillary lymph nodes and causes a lump or swelling, even before the original breast tumor is large enough to be felt. Less common signs and symptoms include breast pain or heaviness; persistent changes, such as swelling, thickening, redness, irritation, or dimpling of the skin; and nipple changes, such as spontaneous discharge (especially if bloody), pain, retraction, redness, or scaliness. Any persistent change in the breast should be evaluated by a physician.

Prevention^{1,4}

There is no sure way to prevent breast cancer, and some risk factors can't be changed, such as age, race, family history of disease, and genetic mutations, as well as reproductive history. But it's possible for a woman at average risk to take steps that may help reduce her risk. Lifestyle factors, such as avoiding or limiting alcohol, breastfeeding, engaging in regular physical activity, and staying at a healthy weight, are associated with lower risk. Selective estrogen receptor modulators (SERMs), such as tamoxifen and raloxifene and prophylactic mastectomy can help reduce the risk in some high-risk women.

Treatment^{1, 3, 5}

Treatment is most successful when breast cancer is detected early. Treatment is dependent on the type and stage of breast cancer, tumor characteristics, hormone receptor status, the patient's age, menopausal status, and the patient's preferences. Treatment may involve breast conservation surgery (lumpectomy) or mastectomy with or without axillary lymph node dissection and breast reconstruction.

Some non-invasive breast cancers are treated with hormone therapy after surgery. Treatment for invasive breast cancer may include surgery and/or radiation therapy with or without hormone therapy, chemotherapy, or other drug therapies. In the case of breast cancer, combination therapy is often not

Breast Cancer in the US:

2020 estimates1,2

- New cases
 - Invasive breast cancer in women: 276,480
 - Carcinoma in situ (CIS) in women: 48,530
 - Invasive breast cancer in men: 2,620
- Deaths
 - Women: 42,170
 - Men: 520
- 5-year relative survival rate for localized stages: 99%
- 5-year relative survival rate for all stages combined: 90%

given. Exceptions would be targeted therapy (such as HER2 drugs) with chemo or targeted drugs with hormone therapy. But chemo is not given with the XRT and chemo is not given with hormone therapy.

Quality of Life^{2, 3, 6, 7}

Breast cancer survivors most often express uncertainty about treatment options; concerns about hair loss; changes in physical appearance; lymphedema; sexual and fertility changes; guilt for delaying screening or treatment, or for doing things that may have caused the cancer; fear of recurrence; chronic and/or acute pain; fatigue; depression; sleep difficulties; changes in what they are able to do after treatment; and the burden on finances and loved ones.

A cancer diagnosis can profoundly impact quality of life. Clinicians should assess for any physical, social, psychological, spiritual, and financial issues. Integrating palliative care can help manage symptoms, address issues, and improve quality of life. It can be offered at any time from the point of diagnosis, during treatment, and until the end of life. Throughout a patient's cancer journey, it's very important for clinicians to share information and coordinate care to ensure surveillance is ongoing.

References

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