Basic description
Breast cancer develops from cells in the breast. The most common sign of breast cancer is a new lump or mass, but most are benign. Other signs include a generalized swelling of part of a breast (even if no lump is felt), skin irritation or dimpling, nipple pain or retraction, redness or scaliness of the nipple or breast skin, or a spontaneous discharge other than breast milk.

Opportunities

Prevention  We don’t know how to prevent breast cancer, but it’s possible for a woman of average risk to reduce her risk of developing the disease. Lifestyle factors, such as reducing alcohol use, breast-feeding, engaging in regular physical activity, and staying at a healthy weight, are all associated with lower risk. Estrogen-blocking drugs, such as tamoxifen and raloxifene, can reduce the risk of developing breast cancer in some high-risk women. Some risk factors can’t be changed, such as age, race, family history of disease, and reproductive history.

Detection  The earlier breast cancer is found, the better the chances for successful treatment. A mammogram can often show breast changes that may be cancer before physical symptoms develop. For this reason, the American Cancer Society recommends the following guidelines for finding breast cancer early:

- **Women ages 40 to 44** should have the choice to start annual breast cancer screening with mammograms if they wish to do so.

- **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 10 more years or longer.

- **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.

Treatment  Treatment is most successful when breast cancer is detected early. Depending on the situation and the patient’s choices, treatment may involve breast conservation surgery or mastectomy. In both cases, lymph nodes under the arm may also be removed. Women who have a mastectomy have several options for breast reconstruction. Other treatments are radiation therapy, chemotherapy, hormone therapy, and monoclonal antibody therapy. Often 2 or more methods are used in combination. Patients should discuss all treatment options with their doctors.

Who is at risk?

Gender  Being a woman is the greatest risk factor for breast cancer; however, men also can develop breast cancer.

Age  The risk of developing breast cancer increases with age. About 2 out of 3 invasive breast cancers are found in women age 55 or older.
Heredity

Breast cancer risks are higher among women with a family history of the disease. Having a first-degree relative with breast cancer increases a woman’s risk, while having more than one first-degree relative who has or had breast cancer before the age of 40 or in both breasts increases a woman’s risk even more. However, it’s important to remember that most women with breast cancer don’t have a first-degree relative with the disease.

Other risk factors

• Post-menopausal hormone therapy with estrogen and progesterone therapy
• Overweight or obesity, especially excessive weight gain after menopause
• More than one alcoholic drink daily
• Physical inactivity
• Long menstrual history
• Never having children or having first live birth after age 30
• Previous chest radiation to treat a different cancer
• Previous history of breast cancer or certain benign breast conditions

Breast cancer in the United States: 2016 estimates

• New cases
  - Women: 246,660
  - Men: 2,600
• Deaths
  - Women: 40,450
  - Men: 440
• 5-year relative survival rate for localized stage: 99%
• 5-year relative survival rate for all stages combined: 92% for white women and 81% for African American women

Quality-of-life issues

From the time of diagnosis, the quality of life for every cancer patient and survivor is affected in some way. They may be affected socially, psychologically, physically, and spiritually.

Concerns that patients and survivors most often express are fear of recurrence; chronic and/or acute pain; sexual problems; fatigue; guilt for delaying screening or treatment, or for doing things that may have caused the cancer; changes in physical appearance; depression; sleep difficulties; changes in what they are able to do after treatment; and the burden on finances and loved ones. Women with breast cancer often feel uncertainty about treatment options and have concerns about their fatigue, sexuality, and body image.

Bottom line

Regular mammograms can help find breast cancer at an early stage, when treatment is most successful. A mammogram can find breast changes that could be cancer years before physical symptoms develop. Some things that may help reduce a woman’s risk of getting breast cancer include being physically active, staying at a healthy weight, and limiting alcohol use.