

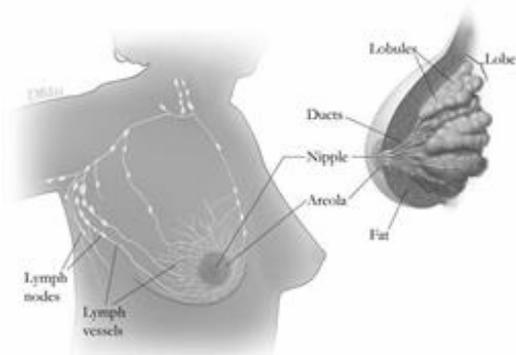


## Breast Cancer

Breast cancer is a disease in which malignant (cancer) cells form in the tissues of the breast, usually the ducts (tubes that carry milk to the nipple) and lobules (glands that make milk). It occurs in both men and women, although male breast cancer is rare.

The breast is made up of lobes and ducts. Each breast has 15 to 20 sections called lobes, which have many smaller sections called lobules. Lobules end in dozens of tiny bulbs that can produce milk. The lobes, lobules, and bulbs are linked by thin tubes called ducts.

Each breast also has blood vessels and lymph vessels. The lymph vessels carry an almost colorless fluid called lymph. Lymph vessels lead to organs called lymph nodes. Lymph nodes are small bean-shaped structures that are found throughout the body. They filter lymph and store white blood cells that help fight infection and disease. Clusters of lymph nodes are found near the breast in the axilla (under the arm), above the collarbone, and in the chest.



Estimated new cases and deaths from breast cancer in the United States in 2008:

New cases: 182,460 female; 1990 male

Deaths: 40,480 female and 450 male

## **Some warning signs of breast cancer**

- 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.

Keep in mind that some of these warning signs can happen with other conditions that are not cancer.

Research has found several risk factors that may increase your chances of getting breast cancer.

Risk factors that increase risk of breast cancer include:

- Being younger when you first had your menstrual period.
- Starting menopause at a later age.
- Being older at the birth of your first child
- Never giving birth
- Not breastfeeding.
- Personal history of breast cancer or some non-cancerous breast diseases.
- Family history of breast cancer (mother, sister, daughter).
- Treatment with radiation therapy to the breast/chest.
- Being overweight (increases risk for breast cancer after menopause).
- Long-term use of hormone replacement therapy (estrogen and progesterone combined).
- Having changes in the breast cancer-related genes BRCA1 or BRCA2.
- Using birth control pills, also called oral contraceptives.
- Drinking alcohol (more than one drink a day).
- Not getting regular exercise.

Having a risk factor does not mean you will get the disease. Most women have some risk factors and most women do not get breast cancer. If you have breast cancer risk factors, talk with your doctor about ways you can lower your risk and about screening for breast cancer.

## **Reducing Risk**

There are ways you can help lower your risk of breast cancer:

- Control your weight and exercise.
- Know your family history of breast cancer

- Find out the risks and benefits of hormone replacement therapy
- Limit the amount of alcohol you drink.
- Get screened for breast cancer regularly.

## Diagnosis

Doctors often use additional tests to find or diagnose breast cancer.

- **Breast ultrasound.** A machine uses sound waves to make detailed pictures, called sonograms, of areas inside the breast.
- **Diagnostic mammogram.** If you have a problem in your breast, such as lumps, or if an area of the breast looks abnormal on a screening mammogram, doctors may have you get a diagnostic mammogram. This is a more detailed X-ray of the breast.
- **Magnetic resonance imaging (MRI).** A kind of body scan that uses a magnet linked to a computer. The MRI scan will make detailed pictures of areas inside the breast.
- **Biopsy.** This is a test that removes tissue or fluid from the breast to be looked at under a microscope and do more testing. There are different kinds of biopsies (for example, fine-needle aspiration, core biopsy, or open biopsy).

## Kinds of Treatment

Breast cancer is treated in several ways. It depends on the kind of breast cancer and how far it has spread. Treatments include surgery, chemotherapy, hormonal therapy, biologic therapy, and radiation. People with breast cancer often get more than one kind of treatment.

If you think you can't do anything about your chances of getting breast cancer you're wrong. You got the power everyday to make a difference in your future health. You have the power to decrease your chances of getting cancer.

## References

Cancer Risks and Prevention (2008). Retrieved from <http://cancer.org>

Cancer Risks and Prevention (2008). Retrieved from <http://www.cdc.gov>