

## Frequently Asked Questions

### What is breast cancer?

Cancer is a condition caused by cells in the body that divide and reproduce abnormally and which can spread, or metastasize, throughout the body. Breast cancer occurs when breast cells divide rapidly to form a lump or mass known as a tumor. Breast tumors may be benign (noncancerous) or malignant, (cancerous). Malignant tumors are those that penetrate healthy body tissues.

There are two general categories of breast cancer: noninvasive, where the cancer cells are confined to the ducts (milk passages); and invasive, where the cancer cells have broken through the duct into the surrounding fatty and connective tissues. Within these categories, there are a number of unique cancer types, affecting different components of the breast.

[\(See Breast Cancer Information\)](#)

### What causes breast cancer and how likely am I to develop breast cancer?

Although a great deal of research is underway to understand what causes breast cells to become cancerous, the cause of breast cancer remains unknown today.

It is estimated that approximately 192,370 women developed breast cancer in 2009 and that nearly 40,170 women died of the disease. Breast cancer is the second leading cause of cancer death in women, following lung cancer. The chance of developing breast cancer increases with age:

| <b>Age of Woman</b> | <b>Chance of Developing Breast Cancer</b> |
|---------------------|---|
| By Age 40           | 1 out of 208                              |
| By Age 60           | 1 out of 26                               |
| By Age 70           | 1 out of 29                               |
| By Age 80           | 1 out of 16                               |
| Ever                | 1 out of 8                                |

There are some risk factors, such as a family or personal history of breast cancer, race, history of chest area radiation, long menstrual history (early onset of menstruation and late onset of menopause), the use of oral contraceptives or hormone replacement therapy, and alcohol use, that have been shown to increase a woman's chances of developing breast cancer.

[\(See Breast Cancer Information - Risk Factors\)](#)

## What is the survival rate for breast cancer?

Successful treatment and survival rates for breast cancer patients are dramatically affected by early detection of breast cancers. When breast cancer is detected before it has spread to lymph nodes, the five-year survival rate is 98%. If the cancer has spread to the underarm lymph nodes, the five-year survival rate is 84%. If the cancer has spread to other body organs, such as the lung or brain, the five-year survival rate drops to 20%.

(See Breast Cancer Information - Survival Rates)

## How is breast cancer treated?

Breast cancers are treated by a variety of methods including; surgery, chemotherapy or radiation therapy, either alone or in conjunction with surgery, and drug therapies, which can be used with or without surgery. The physician and the patient should determine an appropriate treatment program according to the specific type of breast cancer being treated and the stage of the cancer.

Most breast cancers are treated surgically, using one of the following procedures:

| Type of Surgery             | Description  |
|-----------------------------|--|
| Lumpectomy                  | Removal of only the cancerous lump and a portion of normal tissue surrounding the lump. A lumpectomy is often followed by radiation therapy.                   |
| Mastectomy                  | Removal of the entire breast. There are several types of mastectomies that may be performed, depending on the stage of the cancer.                             |
| Simple or Total Mastectomy  | Involves removal of the entire breast, but not the lymph nodes from under the arm, or muscle tissue from beneath the breast.                                   |
| Modified Radical Mastectomy | Involves the removal of the entire breast and some of the underarm lymph nodes. This is the most common surgery for a woman who is having a mastectomy.        |
| Radical mastectomy          | Involves removal of the entire breast, underarm lymph nodes, and the pectoral (chest wall) muscles under the breast. This procedure is rarely performed today. |

Along with surgery, some women will receive additional treatment to prevent further growth, spread, or recurrence of cancer. Additional treatments include:

- Chemotherapy—the use of cytotoxic (cell-killing) chemicals to destroy cancer cells
- Radiation therapy—the use of high-energy radiation to kill cancer cells.
- Brachytherapy—internal radiation where radioactive seeds or pellets are placed directly into the breast tissue next to the cancer.
- Drug therapy—the use of a variety of drugs approved by the Food and Drug Administration (FDA) to be used, with or without surgery, to treat breast cancer.

(See Types of Treatment)

## **How is breast cancer detected?**

Methods for detection of breast cancer include breast self-examinations, clinical examinations by a healthcare professional, and mammography. In most cases, mammography can identify an abnormal breast mass as much as two years before it can be detected by touch. Although breast cancer is the second leading cause of cancer death in women, after lung cancer, the rate of deaths from breast cancer has declined in recent years. It is believed that early detection and treatment of breast cancers is the key to successful treatment and survival.

The American Cancer Society recommends the following guidelines for detecting breast cancer:

- All women aged 20 or older should perform breast self-examination every month.
- Between the ages of 20 and 39, women should have a clinical breast exam by a healthcare professional every 3 years.
- Women aged 40 and older should have a screening mammogram and a clinical breast exam by a healthcare professional every year.

## **What is a mammogram?**

A mammogram is an x-ray examination of the breasts, used to detect and diagnose breast diseases.

Screening mammography is used as a preventive measure for women who have no symptoms of breast disease. A screening mammogram usually involves two views of each breast. Although physicians routinely order mammograms for their patients as part of a preventive health maintenance program, women can request and receive a screening mammogram from any mammography facility without a referral from a physician.

Diagnostic mammography involves additional views of the breast, and is used when an abnormality is found during screening, or in women who have breast complaints, such as a breast mass, nipple discharge, breast pain, or skin irritation. (See Screening Procedures)

## **Is mammogram dangerous?**

Today's mammography units use very low doses of radiation to produce high-quality x-rays, making this a very safe procedure.

In addition, in 1992 Congress passed the Mammography Quality Standards Act (MQSA). This act established a set of rigorous guidelines for mammography safety. To receive certification by the FDA, a mammography facility must conform to these guidelines that assure that mammography systems are safe and use low doses of radiation. Before you have a mammogram, ask to see the facility's FDA certificate.

## **How is mammography performed?**

Mammograms are performed using equipment specially designed to take x-rays of the breast. When a mammogram is performed, the woman must undress above the waist and wear a wrap provided by the mammography facility. A technologist will position the breast on the mammography unit and use a paddle to compress the breast. The breast is compressed to spread the tissue apart and allow the maximum amount of tissue to be imaged and reduce radiation dose. The compression lasts just a few seconds. Once the breast is positioned appropriately, the technologist will step behind a screen and take the x-ray images. The x-ray films will be developed and examined before you leave the facility, to assure that the quality and positioning are acceptable.

A radiologist will read the films and results of the mammogram will be forwarded to the patient by the mammography facility.

### **How can I find a mammography center in my area?**

You can call the American Cancer Society at 1-800-ACS-2345. The American Cancer Society maintains a geographic list of mammography facilities.

The FDA also maintains a geographic listing of certified mammography facilities. Click [<<here>>](#) to locate a certified mammography facility in your area.

### **How much does a mammogram cost?**

The average cost of a mammogram is approximately \$100. Most health insurance plans, as well as Medicare and Medicaid, cover mammogram costs or a percentage of them. In addition, low cost mammograms are available in most communities. Your local health department can give you information about obtaining a low cost mammogram, or you can contact the American Cancer Society at 1-800-ACS-2345 for information about facilities in your area.

### **If I have breast implants do I still need to have a mammogram?**

The guidelines for screening mammography for women with implants are the same as for women without them. Breast implants create a unique imaging situation, because some breast tissue will be covered by the implant and cannot be seen on x-rays. To compensate for this, the number of films taken for each examination for a woman with implants is greater to allow for as much breast tissue as possible to be imaged.

### **Should I be concerned if my doctor tells me I need to have a breast biopsy?**

Your doctor may recommend a breast biopsy if an abnormality is seen on a mammogram or if there are any breast complaints, such as a breast mass, nipple discharge, breast pain, or skin irritation. This is not necessarily a reason for alarm; 70% to 80% of all breast biopsies show no signs of cancer. However, it is important to have the biopsy performed so that a definitive diagnosis can be made and the appropriate treatment program or screening schedule can be determined.

### **How is a breast biopsy performed?**

A breast biopsy involves removal of a sample of cells or tissue from the suspicious area for examination under a microscope by a pathologist. For many years, the only way to obtain the sample was by an open surgical biopsy, where an incision was made in the breast and the entire mass, along with a portion of tissue surrounding the mass, was removed.

With advances in technology, breast biopsies today can be performed without surgery by using needle biopsy. In this type of procedure, a hollow needle is inserted in the suspicious area of the breast and small pieces of tissue are removed through the needle. If the breast mass is too small to be felt, placement of the needle can be directed by computer-guided imaging. This type of biopsy is called stereotactic needle biopsy.

Using today's modern equipment, needle biopsies can be performed with the patient in an upright position or in a prone position. If your doctor recommends a breast biopsy, you should discuss the most appropriate type of procedure for you.

### **Is a breast biopsy dangerous?**

Although there are some risks associated with breast biopsy, most physicians feel that the value of a definitive diagnosis far outweighs the risks. The potential side effects of a needle biopsy, though rare, include bruising, infection, and hematoma (a pooling of blood in the biopsy area). The potential side effects of an open surgical biopsy are greater than those of a needle biopsy because the procedure is more invasive and is done under general anesthesia.

### **How will I know the results of my breast biopsy?**

The tissue samples taken during a breast biopsy are forwarded to a pathologist for examination under a microscope. A pathologist is a physician who analyzes cells and tissues to determine whether they are cancerous, pre-cancerous, or benign. A pathology report will be forwarded to your physician, who will explain the results to you.

NOTE: Facts and figures from the American Cancer Society