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## Basic Information about Breast Cancer

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Information sourced from [http://www.cdc.gov/cancer/breast/basic\\_info/index.htm](http://www.cdc.gov/cancer/breast/basic_info/index.htm)

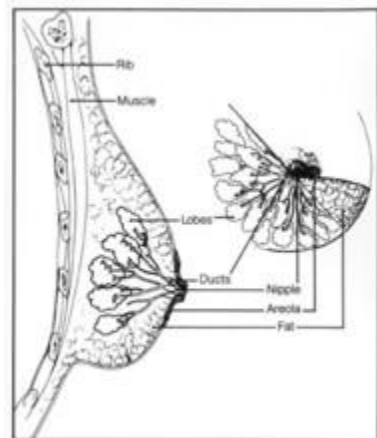
A breast is made up of three main parts: glands, ducts, and connective tissue. The glands produce milk. The ducts are passages that carry milk to the nipple. The connective tissue (which consists of fibrous and fatty tissue) connects and holds everything together.

### What Is a Normal Breast?

No breast is typical. What is normal for you may not be normal for another woman. Most women say their breasts feel lumpy or uneven. The way your breasts look and feel can be affected by getting your period, having children, losing or gaining weight, and taking certain medications. Breasts also tend to change as you age.

### Lumps in the Breast

Many conditions can cause lumps in the breast, including cancer. But most breast lumps are caused by other medical conditions. The two most common causes of breast lumps are fibrocystic breast condition and cysts. Fibrocystic condition causes noncancerous changes in the breast that can make them lumpy, tender, and sore. Cysts are small fluid-filled sacs that can develop in the breast.



### Tumors and Breast Cancer

Sometimes breast cells become abnormal. These abnormal cells grow, divide, and create new cells that the body does not need and that do not function normally. The extra cells form a mass called a tumor. Some tumors are "benign" or not cancer. These tumors usually stay in one spot in the breast and do not cause big health problems. Other tumors are "malignant" and are cancer. Breast cancer often starts out too small to be felt. As it grows, it can spread throughout the breast or to other parts of the body. This causes serious health problems and can cause death.

### Can Men Get Breast Cancer?

Men can get breast cancer. In men, breast cancer can happen at any age, but is most common in men who are between 60 and 70 years old. Male breast cancer is not very common. For every 100 cases of breast cancer, less than 1 is in men.

For men, signs of breast cancer and treatment are almost the same as for women.

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## Risk Factors

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

Risk factors that increase risk of breast cancer include—

- Getting older.
- 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.

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## Prevention

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You can help lower your risk of breast cancer in the following ways—

- **Get screened for breast cancer regularly.** By getting the necessary exams, you can increase your chances of finding out early on, if you have breast cancer.
- **Control your weight and exercise.** Make healthy choices in the foods you eat and the kinds of drinks you have each day. Stay active.

- **Know your family history of breast cancer.** If you have a mother, sister, or daughter with breast cancer, ask your doctor what is your risk of getting breast cancer and how you can lower your risk.
  - **Find out the risks and benefits of hormone replacement therapy.** Some women use hormone replacement therapy (HRT) to treat the symptoms of menopause. Ask your doctor about the risks and benefits of HRT and find out if hormone replacement therapy is right for you.
  - **Limit the amount of alcohol you drink.**
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## Symptoms

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Different people have different warning signs for breast cancer. Some people do not have any signs or symptoms at all. A person may find out they have breast cancer after a routine mammogram.

Some warning signs of breast cancer are—

- 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.

**If you have any signs that worry you, be sure to see your doctor right away.**

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## Screening

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### Kinds of Screening Tests

Breast cancer screening means checking a woman's breasts for cancer before there are signs or symptoms of the disease. Three main tests are used to screen the breasts for cancer. Talk to your doctor about which tests are right for you, and when you should have them.

- **Mammogram.** A mammogram is an X-ray of the breast. Mammograms are the best method to detect 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. If you are age 50 to 74 years, be sure to have a screening mammogram every two years. If you are age 40–49 years, talk to your doctor about when and how often you should have a screening mammogram.
- **Clinical breast exam.** A clinical breast exam is an examination by a doctor or nurse, who uses his or her hands to feel for lumps or other changes.<sup>4</sup>
- **Breast self-exam.** A breast self-exam is when you check your own breasts for lumps, changes in size or shape of the breast, or any other changes in the breasts or underarm (armpit).

**Which tests to choose:** Having a clinical breast exam or a breast self-exam have not been found to decrease risk of dying from breast cancer. Keep in mind that, at this time, the best way to find breast cancer is with a mammogram. If you choose to have clinical breast exams and to perform breast self-exams, be sure you also get regular mammograms.

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## Understanding Mammograms

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### What is a mammogram?

A mammogram is an X-ray picture of the breast. Doctors use a mammogram to look for early signs of breast cancer.

### Why should I get a mammogram?

Regular mammograms are the best tests doctors have to find breast cancer early, sometimes up to three years before it can be felt. When their breast cancer is found early, many women go on to live long and healthy lives.

### When should I get a mammogram?

Women should have mammograms every two years from age 50 to 74 years. Talk to your health professional if you have any symptoms or changes in your breast, or if breast cancer runs in your family. He or she may recommend that you have mammograms before age 50 or more often than usual.

### How is a mammogram done?

You will stand in front of a special X-ray machine. A technologist will place your breast on a clear plastic plate. Another plate will firmly press your breast from above. The plates will flatten the breast, holding it still while the X-ray is being taken. You will feel some pressure. The other

breast will be X-rayed in the same way. The steps are then repeated to make a side view of each breast. You will then wait while the technologist checks the four X-rays to make sure the pictures do not need to be re-done. Keep in mind that the technologist cannot tell you the results of your mammogram.

## What does having a mammogram feel like?

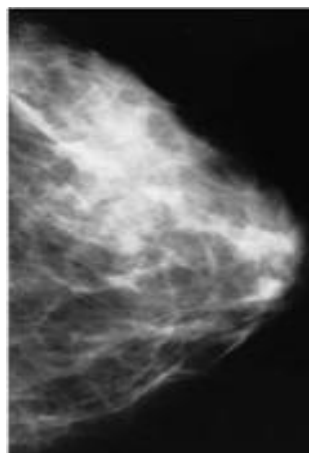
Having a mammogram is uncomfortable for most women. Some women find it painful. A mammogram takes only a few moments, though, and the discomfort is over soon. What you feel depends on the skill of the technologist, the size of your breasts, and how much they need to be pressed. Your breasts may be more sensitive if you are about to get or have your period.

Before you get a mammogram, you may want to ask the following questions—

- What will happen? How long will I be there?
- Do you have my previous mammograms?
- When will my doctor get the results?
- When and how will I learn about the results?
- When will I need to have my next mammogram?

## What does a mammogram look like?

An example of a normal mammogram is shown here. Each woman's mammogram may look a little different because all breasts are a little different. A doctor with special training, called a radiologist, will read the mammogram. He or she will look at the X-ray for early signs of breast cancer or other problems.



Tips for getting a mammogram—

- Try not to have your mammogram the week before you get your period or during your period. Your breasts may be tender or swollen then.

- On the day of your mammogram, don't wear deodorant, perfume, or powder. These products can show up as white spots on the X-ray.
- Some women prefer to wear a top with a skirt or pants, instead of a dress. You will need to undress from your waist up for the mammogram.

## What happens if my mammogram is normal?

Continue to get regular mammograms. Mammograms work best when they can be compared with previous ones. This allows your doctor to compare them to look for changes in your breasts.

## What happens if my mammogram is abnormal?

If it is abnormal, do not panic. An abnormal mammogram does not always mean that there is cancer. But you will need to have additional mammograms, tests, or exams before the doctor can tell for sure. You may also be referred to a breast specialist or a surgeon. It does not necessarily mean you have cancer or need surgery. These doctors are experts in diagnosing breast problems.

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## Self Examination

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### 1. Make a regular date for your BSE



**If you are pre-menopausal:** Set a regular time to examine your breasts a few days after your period ends, when hormone levels are relatively stable and breasts are less tender.

**If you are already menopausal** (have not had a period for a year or more): Pick a particular day of the month to do the exam, and then repeat your BSE on that day each month.

### 2. Visual Exam - Hands on Hips



In the privacy of your bathroom, strip to the waist and stand before a mirror. You will need to see both breasts at the same time. Stand with your hands on your hips and check the appearance of your breasts. Look at size, shape, and contour. Note changes, if any, in the skin color or texture. Look at the nipples and areolas, to see how healthy they look.

### 3. Visual Exam - Arms Over Your Head



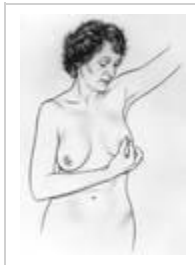
Still standing in front of the mirror, raise your arms over your head and see if your breasts move in the same way, and note any differences. Look at size, shape, and drape, checking for symmetry. Pay attention to your nipples and areolas, to see if you have any dimples, bumps, or retraction (indentation). Look up toward your armpits and note if there is any swelling where your lymph nodes are (lower armpit area).

### 4. Manual Exam - Stand and Stroke



Raise your left arm overhead, and use your right-hand fingers to apply gentle pressure to the left breast. Stroke from the top to the bottom of the breast, moving across from the inside of the breast all the way into your armpit area. You can also use a circular motion, being sure to cover the entire breast area. Take note of any changes in texture, color, or size. Switch sides and repeat. This is best done in the shower, as wet skin will have the least resistance to the friction of your fingers.

### 5. Manual Exam - Check Your Nipples



Still facing the mirror, lower both arms. With the index and middle fingers of your right hand, gently squeeze the left nipple and pull forward. Does the nipple spring back into place? Does it pull back into the breast? Note whether or not any fluid leaks out. Reverse your hands and check the right nipple in the same way.

### 6. Manual Exam - Recline and Stroke



This is best done in your bedroom, where you can lie down. Place a pillow on the bed so that you can lie with both your head and shoulders on the pillow. Lie down and put your left hand behind your head. Use your right hand to stroke the breast and underarm, as you did in step 4. Take note of any changes in texture, color, or size. Switch sides and repeat.

### 7. Tips For Doing Your BSE

1. Mark your calendar to remind yourself to do your BSE regularly. This is a good way to prevent worry if find a normal cyclic change.
2. Stay relaxed and breathe normally as you do your BSE. Becoming tense will produce some knots that you may mistake for something worrisome.
3. Report any changes or unusual pain to your doctor or nurse practitioner. Keep a log of changes, if that helps you remember.

4. Remember to have an annual clinical exam and a mammogram.
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## Diagnosis

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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).

## Staging

If breast cancer is diagnosed, tests are done to find out if cancer cells have spread within the breast or to other parts of the body. This process is called staging. Whether the cancer is only in the breast, is found in lymph nodes under your arm, or has spread outside the breast determines your stage of breast cancer. The type and stage of breast cancer tells doctors what kind of treatment will be needed.

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## Treatment

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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.

- **Surgery.** An operation where doctors cut out and remove cancer tissue. Even if the doctor removes all the cancer that can be seen at the time of the surgery, some patients may be given radiation therapy, chemotherapy, or hormone therapy after surgery to kill any cancer cells that are left. Treatment given after the surgery, to lower the risk that the cancer will come back, is called adjuvant therapy.
- **Chemotherapy.** Using special medicines, or drugs to shrink or kill the cancer. The drugs can be pills you take or medicines given through an intravenous (IV) tube, or,



sometimes, both. The way the chemotherapy is given depends on the type and stage of the cancer being treated.

- **Hormonal therapy.** Some cancers need certain hormones to grow. Hormonal treatment is used to block cancer cells from getting the hormones they need to grow, by removing the hormones or blocking their action. Hormones are substances produced by glands in the body and circulated in the bloodstream. Some hormones can cause certain cancers to grow. If tests show that the cancer cells have places where hormones can attach (receptors), drugs, surgery, or radiation therapy is used to reduce the production of hormones or block them from working.
- **Biological therapy.** This treatment works with your body's immune system to help it fight cancer or to control side effects from other cancer treatments. Side effects are how your body reacts to drugs or other treatments. Biological therapy is different from chemotherapy, which attacks cancer cells directly.
- **Radiation.** The use of high-energy rays (similar to X-rays) to kill the cancer cells. The rays are aimed at the part of the body where the cancer is located.

It is common for doctors from different specialties to work together in treating breast cancer. Surgeons are doctors that perform operations. Medical oncologists are doctors that treat cancers with medicines. Radiation oncologists are doctors that treat cancers with radiation.

## Complementary and Alternative Medicine

Complementary medicine is a group of medicines and practices that may be used in addition to the standard treatments for cancer. Alternative medicine means practices or medicines that are used instead of the usual, or standard, ways of treating cancer. Examples of complementary and alternative medicine are meditation, yoga, and dietary supplements like vitamins and herbs.

Complementary and alternative medicine does not treat breast cancer, but may help lessen the side effects of the cancer treatments or of the cancer symptoms. It is important to note that many forms of complementary and alternative medicines have not been scientifically tested and may not be safe. Talk to your doctor before you start any kind of complementary or alternative medicine.

## Which Treatment Is Right for Me?

Choosing which kind of treatment is right for you may be hard. If you have breast cancer, be sure to talk to your doctor about the treatment options available for your type and stage of cancer. Doctors can explain the risks and benefits of each treatment and their side effects.

Sometimes people get an opinion from more than one breast cancer doctor. This is called a "second opinion." Getting a second opinion may help you choose the treatment option that is right for you.

### Follow-up tests may be needed.

Some of the tests that were done to diagnose the cancer or to find out the stage of the cancer may be repeated. Some tests will be repeated in order to see how well the treatment is working. Decisions about whether to continue, change, or stop treatment may be based on the results of these tests. This is sometimes called re-staging.

Some of the tests will continue to be done from time to time after treatment has ended. The results of these tests can show if your condition has changed or if the cancer has recurred (come back). These tests are sometimes called follow-up tests or check-ups.

Information taken from [http://www.cdc.gov/cancer/breast/basic\\_info/index.htm](http://www.cdc.gov/cancer/breast/basic_info/index.htm)

For more information visit: <http://www.cancer.gov>