



NATIONAL CANCER INSTITUTE

# Understanding Breast Changes and Conditions

## A Health Guide



# About this guide

This guide **Understanding Breast Changes and Conditions** can help you talk with your doctor or nurse as you learn about next steps after an abnormal mammogram result or breast change.

View PDF, ePub, and Kindle formats: [www.cancer.gov/ubc-guide](http://www.cancer.gov/ubc-guide)

## Learn more online

**National Cancer Institute (NCI):** NCI has comprehensive research-based information on breast cancer prevention, screening, diagnosis, treatment, genetics, and supportive care.

- Visit NCI's home page for breast cancer: [www.cancer.gov/breast](http://www.cancer.gov/breast)
- View NCI's web page that also covers breast changes and conditions: [www.cancer.gov/breast-changes](http://www.cancer.gov/breast-changes)
- Throughout this guide, click on links that define medical terms in the NCI dictionary: [www.cancer.gov/dictionary](http://www.cancer.gov/dictionary)

Call or chat online with an information specialist at our NCI Cancer Information Service at [www.cancer.gov/contact](http://www.cancer.gov/contact), in English and Spanish. There, you can also request a clinical trial search related to breast cancer, ductal carcinoma in situ (DCIS), or a breast condition.

**Phone:** 1-800-4-CANCER (1-800-422-6237)

**Website:** [www.cancer.gov](http://www.cancer.gov) or [www.cancer.gov/espanol](http://www.cancer.gov/espanol)

**Email:** [NCInfo@nih.gov](mailto:NCInfo@nih.gov)

**Centers for Disease Control and Prevention (CDC):** CDC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP) helps low-income, uninsured, and underinsured women gain access to timely breast and cervical cancer screening, diagnostic, and treatment services. NBCCEDP also provides patient navigation services to help women overcome barriers and get timely access to quality care.

Visit [www.cdc.gov/cancer/nbccedp](http://www.cdc.gov/cancer/nbccedp) to find out if you qualify for free or low-cost breast and cervical cancer screenings.

## Note to health care providers

This handout at [www.cancer.gov/ubc-flyer](http://www.cancer.gov/ubc-flyer) can help your patients access an online version of this booklet.

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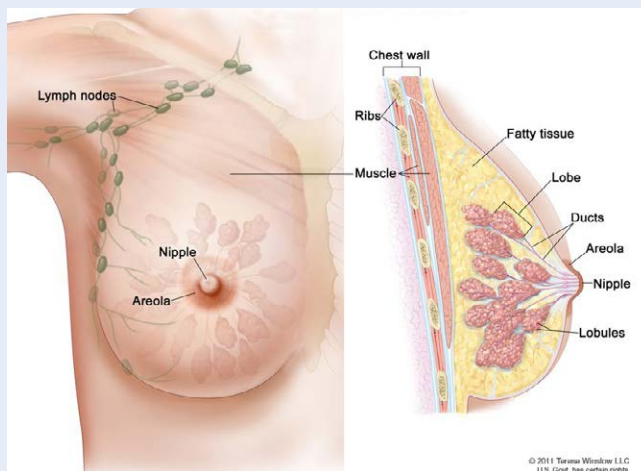
## **The information in this booklet can help you**

- talk with your doctor or nurse if you notice a breast change
- understand the importance of follow-up care if you had an abnormal mammogram result
- get the tests and treatment that your doctor or nurse recommends

We've also included questions within this guide to help you talk with your doctor or nurse.

# Female Breast Anatomy

To better understand breast changes, it helps to know about the breasts and lymphatic system.



## Anatomy of the female breast

The nipple and areola are on the outside of the breast. The lobes, lobules, and ducts are inside the breast. The breast also has lymph nodes that go from the breast to the armpit and are part of the lymphatic system. The chest wall has skin, fat, muscles, bones, and other tissues that form a protective structure around vital organs.

## About the female breast

The female breast has different types of breast tissue.

- **Glandular tissue** includes breast **lobes**, **lobules** (sacs) that make milk, and **ducts** that carry milk to the nipple; most breast cancers form in the ducts.
- **Fibrous connective tissue** supports, protects, and holds bones, muscles, and other tissues and organs in place.
- **Fatty breast tissue** is found around the glandular and fibrous connective tissue.

**Dense breasts** have more glandular tissue and fibrous connective tissue and less fatty breast tissue. Learn more about dense breast tissue on [page 8](#).

## About the lymphatic system

The **lymphatic system** is a part of your body's defense system. It has lymph vessels and lymph nodes.

- Lymph vessels are thin tubes that carry a fluid called lymph and white blood cells. Lymph vessels lead to small, bean-shaped organs called lymph nodes.
- Lymph nodes are found near your breast, under your arm, above your collarbone, in your chest, and in other parts of your body. Lymph nodes filter substances in lymph to help fight infection and disease. They also store disease-fighting white blood cells called lymphocytes.

# Abnormal Breast Changes

Check with your doctor or nurse if you notice unusual changes in your breast(s).

- **Lump or firm feeling (also called a mass)**, including a lump in or near your breast, a lump under your arm, thick or firm tissue in or near your breast or under your arm, or a change in the size or shape of your breast. Breast lumps come in different shapes and sizes. Most lumps are not breast cancer.
- **Nipple changes or discharge**, including fluid from the nipple that is not breast milk. Because nipple changes or discharge can sometimes be signs of breast cancer, they should be checked. However, [nipple discharge](#) can be caused by birth control pills, medicine, and infections.
- **Skin changes**, including itching, redness or darkening, scaling, swelling, dimples, or puckers on your breast or nipple that don't go away.

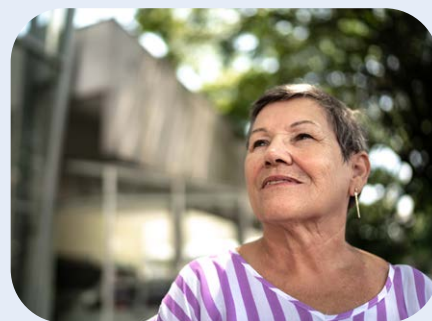
While some breast changes can be felt or seen, others can only be found during an [imaging procedure](#) such as a [mammogram](#), [MRI](#), or [ultrasound](#).

## Finding breast changes

Being familiar with how your breasts normally feel, such as when you shower or put on a bra, can make it easier to notice any changes. However, doing routine [breast self-exams](#) has not been shown to decrease the chance of dying from breast cancer.

Follow up with your doctor or nurse if you notice a breast change—even if you are not due for a mammogram. Some breast cancers, called [interval breast cancer](#), are diagnosed between routine mammogram screenings.

*“One day I felt a small lump in my breast. I was worried, so I called to schedule a mammogram. I’m glad that I did.”*



# Breast Changes during Your Lifetime

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Most women notice changes in the breasts at different times during their life.

- **Before or during menstruation (also called a woman's period),** your breasts may feel painful, swollen, or tender. You may feel one or more lumps during this time because of extra fluid in your breasts.
- **During pregnancy** your breasts may feel lumpy. This is usually because the glands that produce milk are increasing in number and getting larger.
- **As you approach menopause,** your hormone levels change. This can make your breasts feel tender, even when you are not having your period. Your breasts may also feel lumpier during [menopause](#) than they did before.
- **If you are taking hormones** (such as [hormone replacement therapy](#), [birth control pills](#), or injections), your breasts may become more [dense](#). This can make a mammogram more difficult to interpret. Be sure to mention that you are taking hormones when scheduling your mammogram appointment.
- **After menopause,** your hormone levels drop. You may stop having lumps, pain, or nipple discharge.

## Talking about breast changes with a doctor or nurse

Prepare before your visit by writing down information about the change(s) you notice.

These are the breast changes I have noticed:

- My breast change looks or feels like this:  
(Is the lump hard or soft? Does your breast feel tender or swollen? How big is the lump? What color is the nipple discharge?)
- This is where the breast change is:  
(What part of the breast feels different? Do both breasts feel different or only one breast?)
- This is when I first noticed the breast change:
- Since then, this is the change I've noticed:  
(Has it stayed the same or changed?)

Share your [personal medical history](#) including, for example,

- I've had these breast problems in the past:
- My last screening exam (mammogram, MRI, or ultrasound) was on this date:
- My last menstrual period started on this date:
- I currently: have breast implants, am pregnant, am breastfeeding

Share what you know about your [family medical history](#) including, for example,

- These family members had these breast conditions:
- These family members have tested positive for [mutations](#) related to breast cancer risk:
- These family members had breast cancer (at these ages):

# Screening for Breast Cancer

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**Screening means checking for a disease such as breast cancer, or for changes that may develop into disease, before there are signs or symptoms.**

A screening mammogram can find signs of breast cancer and tumors that are too small to feel.

Breast cancer screening recommendations are developed by organizations such as the [United States Preventive Services Task Force \(USPSTF\)](#). The USPSTF is a group of health experts who review published research, look at the scientific quality of the evidence, and make recommendations on health topics such as breast cancer screening.

## USPSTF screening recommendations for most women

- **Ages 40–49:** The decision of when to start mammography is a personal one. Screening mammograms in this age group may reduce the risk for breast cancer death, although less than in older age groups. Also, the number of [false-positive test results](#) and unnecessary biopsies is larger in this age group, especially among women in their early 40s, than in older age groups.
- **Ages 50–74:** Most of the benefit of mammography comes from screening every 2 years during ages 50 to 74.
- **Age 75 or older:** The decision of whether to continue screening at age 75 and beyond is a personal one to make after talking with your doctor or nurse.

Talk with your doctor or nurse about when to get screened and what screening test to have, based on your [personal medical history](#), [family medical history](#), and personal preference. Making this decision together is called [shared decision making](#).

### Questions to ask about breast cancer screening

- Am I at average or high risk for breast cancer?
- How often should I be screened?
- What breast cancer screening test is recommended for me?

## Where to get screened

If you don't have a doctor, you can find a clinic near you that offers breast cancer screening by contacting your state or local health department or the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) at [www.cdc.gov/cancer/nbccedp](http://www.cdc.gov/cancer/nbccedp).

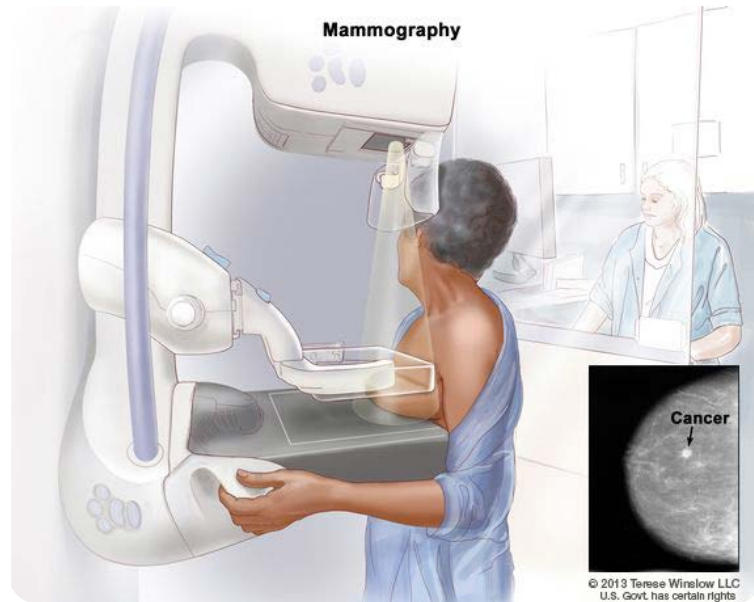
## Screening mammogram

A screening mammogram is an x-ray of the breast that is used to find breast cancer. During the procedure, your breast is pressed between two plastic plates. You will stand still for a few seconds when the x-ray is being taken. Some discomfort is normal, but if it's painful, tell the mammography technician. The x-rays are sent to a [radiologist](#), who studies them and sends a [radiology report](#) to your doctor or nurse.

Depending on where you get your mammogram, you may get a [2-D mammogram](#) or a [3-D mammogram](#).

- 2-D mammography takes pictures from two different angles, the side and above.
- 3-D mammography takes pictures from many different angles. 3-D mammography is also called [digital breast tomosynthesis](#).

Although 3-D mammography may allow breast tissue to be seen more clearly, it may involve a higher dose of radiation. And it is not known whether it is better than standard 2-D mammography at finding life-threatening breast cancers early.



Learn more about guidelines for screening mammograms at [www.cancer.gov/mammograms](http://www.cancer.gov/mammograms).

**Breast cancer screening clinical trial:** A cancer screening clinical trial, called TMIST (Tomosynthesis Mammographic Imaging Screening Trial) is working to determine whether 3-D is better than 2-D at reducing the development of advanced breast cancer. The results will help researchers develop individualized screening recommendations based on a woman's risk for breast cancer

Learn more about this breast cancer screening trial at [www.cancer.gov/tmist](http://www.cancer.gov/tmist).

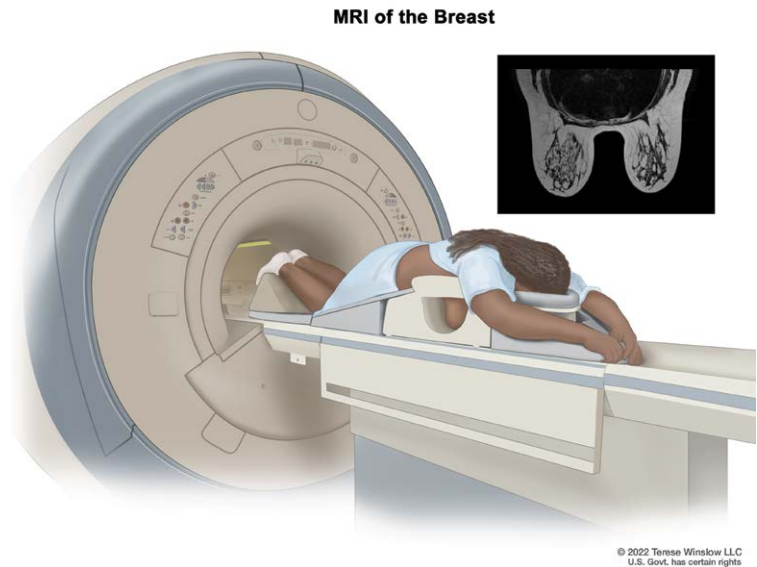
## Vaccination and breast cancer screening

You may be advised to wait 4 to 6 weeks after getting some vaccines, such as the [COVID-19](#) vaccine, before getting your routine screening mammogram. This is because certain vaccines may cause temporary swelling of the [lymph nodes](#) in your armpit. This swelling may be mistaken as a sign of breast cancer.



## Breast MRI

A breast MRI (also called magnetic resonance imaging) uses a powerful magnet, radio waves, and a computer to take detailed pictures of areas inside the breast. MRI is used in addition to mammograms in some women who have a high risk of breast cancer. MRI is not used alone because it doesn't find certain breast changes, such as [microcalcifications](#). And although MRI has high [sensitivity](#) (it can detect cancers that mammograms may miss), it does not have high [specificity](#), which means it may give [false-positive test results](#).



Your doctor can help you understand how factors in your personal medical history and family medical history may increase or decrease your risk for breast cancer.

Learn about risk factors for breast cancer at [www.cancer.gov/breast-prevention-pdq](http://www.cancer.gov/breast-prevention-pdq).



*“My doctor talked with me about where and how often to get a mammogram, based on the guidelines. It helped to have her explain this information.”*

# Mammogram Findings

You should receive the results of your mammogram within 30 days. Be sure the mammography facility has your current contact information. It's helpful to get your mammogram at the same facility each time, so your current mammogram can be compared with past mammograms.

- **If your results were normal:** Your breast tissue shows no signs of a [mass](#) or [calcification](#).
- **If your results were abnormal:** An abnormal breast change was found. Although many breast changes found on a mammogram are [benign](#) (not cancer), it's important to get the follow-up tests advised by your doctor or nurse.
- **If you don't get your results:** Call your doctor or nurse.

## Did you notice a breast change after a recent mammogram?

If you notice a breast change before you are due for your next mammogram, call your doctor or nurse. Sometimes breast cancer is diagnosed before you are due for your next mammogram. Breast cancer that develops between mammograms is known as an [interval breast cancer](#).

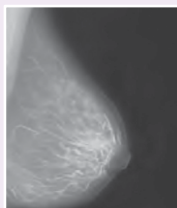
These breast cancers tend to be larger, grow and spread more quickly, and have a worse [prognosis](#) than breast cancers that are found during a screening mammogram.

*"I was nervous when I had an abnormal mammogram finding. I was relieved to learn that most abnormal results are not breast cancer."*



## What can a mammogram show?

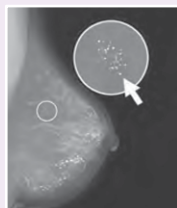
Mammograms can show a [mass](#) (lump), [calcifications](#), [dense breast tissue](#), and other changes in breast tissue. The radiologist will study the mammogram for changes that do not look normal and for differences between your breasts. When possible, your most recent mammogram will be compared with past mammograms to check for changes.



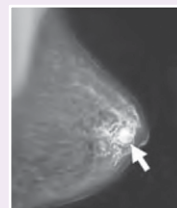
Normal  
mammogram



Benign cyst  
(not cancer)



Breast  
calcifications



Breast  
cancer

**Mass (also called a lump):** The size, shape, and edges of a lump give the radiologist important information. A lump that is not cancer often looks smooth and round and has clear, defined edges. Lumps that look like this are often cysts and are not cancer. However, if the lump on the mammogram has a jagged outline, an irregular shape, or other unusual features, it is of more concern and more tests may be needed.

**Calcifications** are deposits of calcium in the breast. They are too small to be felt but can be seen on a mammogram. There are two types:

- [Macrocalcifications](#) look like small white dots on a mammogram. They are often caused by aging, an old injury, or inflammation and are usually benign (not cancer).
- [Microcalcifications](#) look like white specks on a mammogram. If found in an area of rapidly dividing cells or grouped together in a certain way, they may be a sign of [DCIS](#) or [breast cancer](#). Calcium in your diet does not cause breast calcifications.

**Breast density** is a description of the relative amounts of dense and fatty tissue on a mammogram. Dense breasts, which have relatively less fat and relatively more [glandular tissue](#) and [connective tissue](#) than [fatty breast tissue](#), can make a mammogram more difficult to interpret. That's because both dense breast tissue and some abnormal breast changes, such as [calcifications](#) and [tumors](#), appear as white areas in the mammogram. As a result, mammography is less [sensitive](#) in women with dense breasts—that is, it is more likely to miss cancer. Women with dense breasts also have an increased risk of developing, but not dying from, breast cancer.

Learn how having dense breast tissue may affect mammography and get answers to questions about dense breasts at [www.cancer.gov/DenseBreasts](http://www.cancer.gov/DenseBreasts).

## Understanding your mammogram report

It's important to understand your mammogram results. Don't hesitate to call your doctor if you have questions about what your mammogram letter means. Be sure you understand the findings and the recommended next steps you need to take.

Mammogram reports use the [Breast Imaging Reporting and Data System \(BI-RADS\)](#) to report findings, shown in the table below.

### Questions to ask about your mammogram results

- What is my BI-RADS category?
- What do I need to do?
- Do I need follow-up testing?
- When should I get my next mammogram?

Breast Imaging Reporting and Data System (BI-RADS)		
Category	Finding (assessment)	Recommended next steps
0	Need additional imaging evaluation	Additional imaging needed before a category can be assigned
1	Negative	Continue regular screening mammograms
2	Benign (not cancer)	Continue regular screening mammograms
3	Probably benign	Receive a 6-month follow-up mammogram
4	Suspicious abnormality	May require biopsy
5	Highly suggestive of malignancy (cancer)	Requires biopsy
6	Known biopsy-proven malignancy (cancer)	Biopsy confirms presence of cancer before treatment begins

# Follow-Up Tests to Diagnose Breast Conditions and Breast Cancer

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The procedures and tests listed below may be recommended by your doctor or nurse to diagnose a breast change that was found on a mammogram or that you or your doctor or nurse felt. Keep in mind that fewer than 1 in 10 women who are called back for more testing after a screening mammogram are found to have breast cancer.

## Breast imaging procedures

Breast [imaging procedures](#) take detailed pictures of areas inside the breast. The results of the breast imaging tests listed below, and the expertise of the radiologist interpreting your tests, are important for an accurate diagnosis.

**Diagnostic mammogram:** A type of mammography in which more x-ray pictures of the breast are taken from different angles to allow an area of the breast to be examined more closely.

**Ductography (also called a galactography):** A procedure that takes pictures of the [breast ducts](#) so that doctors can learn more about certain kinds of abnormal nipple discharge or a breast [mass](#). Pictures are taken using a [contrast material](#) that is given through an injection to help breast ducts show up clearly.

**Magnetic resonance imaging (MRI) of the breast:** A procedure in which radio waves and a powerful magnet linked to a computer are used to create detailed pictures of areas inside the breast. An MRI can help your doctor learn more about a breast mass or enlarged [lymph nodes](#) that were found during a [clinical breast exam](#) but were not seen on a mammogram or ultrasound.

**Ultrasound of the breast:** A procedure that that uses high-energy sound waves to look at tissues and organs inside the body. The sound waves make echoes that form images (called a sonogram) of the tissues and organs on a computer screen. These images can show if a breast lump is solid or is filled with fluid.

### Questions to ask before an imaging test

- Why is this test needed? What will it tell us?
- What type of imaging test will I have?
- What happens during the procedure?
- How long will the procedure take?
- How long will the appointment take?

### Questions to ask after an imaging test

- What are the results of my test?
- What do these findings mean?
- What next steps should I take?

## Breast biopsies and surgical procedures

A biopsy is a procedure to remove cells or tissue to be checked under a microscope, by a [pathologist](#), for signs of disease. When an imaging procedure shows an abnormal breast change, a biopsy may be needed to make a [definitive diagnosis](#). Some types of biopsies may also be used as treatment.

Your doctor will talk with you about the type of biopsy, why it's needed, and what to expect during and after the procedure.

**Needle biopsy:** A procedure that removes cells, small tissue samples, or fluid so that it can be examined under a microscope.

- A fine-needle aspiration biopsy uses a thin needle to drain fluid or to remove cells.
- A core needle biopsy (also called a core biopsy) uses a wide needle to remove small tissue sample(s) that are about the size of a grain of rice.
- A vacuum-assisted core biopsy (also called a vacuum-assisted biopsy) is used to remove a small sample of breast tissue with a probe that is connected to a vacuum device. The tiny cut made in the breast is much smaller than with surgical biopsy.

**Surgical biopsy:** A procedure that removes breast tissue so that it can be examined under a microscope.

- An incisional biopsy procedure removes a sample of breast tissue.
- An excisional biopsy procedure removes the entire lump or suspicious area.
- A wide local excision is used to cut out a tumor or other abnormal lesion and some normal tissue around it.

Sometimes an imaging procedure is used to help a surgeon find and remove an abnormal area during a biopsy. A [stereotactic biopsy](#) uses mammography; there are also [ultrasound-guided biopsies](#) and [MRI-guided biopsies](#).

### Questions to ask before a biopsy

- Why is a biopsy needed?
- What type of biopsy will I have?
- What happens during the biopsy?
- How long will the procedure take?
- How should I care for the area where I had the biopsy?
- When will I know the results?

### Questions to ask after the results of a biopsy

- What are my biopsy results?
- What do these findings mean?
- What next steps should I take?
- Should I see a breast surgeon or other specialist?

## Commonly asked questions about breast procedures

Here are answers to commonly asked questions about tests and procedures:

### Where are breast biopsy and other surgical procedures done?

Breast biopsies and surgical procedures are usually done in a doctor's office, clinic, or hospital on an outpatient basis. This means you will go home the same day as the procedure.

### What are different types of anesthesia?

Anesthesia is the loss of feeling or awareness caused by drugs or other substances. It will be used so you won't feel pain during a breast procedure. [Local anesthesia](#) causes the loss of feeling in a small area, so you'll be awake but won't feel pain during the procedure. [Regional anesthesia](#) is used to cause a temporary loss of feeling in a region or part of the body. [General anesthesia](#) causes you to be asleep during the procedure.

### What happens during a wire localization procedure?

Wire localization (also called needle localization and needle/wire localization) is a procedure used to mark a small area of abnormal tissue to be removed. An imaging device is used to guide a thin wire with a hook at the end through a hollow needle to place the wire in or around the abnormal area. Once the wire is in the right place, the needle is removed, and the wire is left in place so the doctor will know where the abnormal tissue is. The wire is removed when a biopsy is done.

### What is a breast biopsy clip?

A breast biopsy clip (also called a breast biopsy marker) is a tiny metal object that is placed into the breast during a biopsy to mark the area where the biopsy was done. The clip or marker is left inside the breast to identify the area on future imaging exams or to help locate the site in the event that breast cancer is diagnosed, and surgery is required. The clip does not cause pain or harm and can stay in the breast. However, if the abnormal area is removed, the clip or marker will often be removed as part of the surgery.



*“I needed to have a second mammogram, followed by an MRI and then a biopsy. My doctor explained why I needed each procedure and the results of each one.”*

# Benign Breast Conditions

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Your doctor will use the findings from follow-up tests listed in the previous section to diagnose most breast conditions. You and your doctor will receive a [radiology report](#) after an imaging test such as a mammogram, MRI, or ultrasound or a [pathology report](#) after a biopsy. Most of the [benign](#) (not cancer) breast conditions listed below are not related to and do not increase your risk of breast cancer.

**Adenosis:** A breast condition in which there are enlarged [breast lobules](#) that may cause small round lumps or lumpiness. Or you may not feel anything at all. It does not increase your risk of breast cancer. If the enlarged lobules have scar-like fibrous tissue, the condition is called [sclerosing adenosis](#), which is explained on [page 15](#).

**Breast duct ectasia (also called mammary duct ectasia):** A breast condition in which one or more [breast ducts](#) widens and thickens. This can cause the duct to become blocked with fluid. It may sometimes cause whitish, greenish, or blackish nipple discharge, tender or darker nipples, or [inverted nipples](#). If the blocked duct becomes infected, you may feel a lump under the nipple. Breast duct ectasia is a benign breast condition that is most common in women who are approaching or have gone through [menopause](#). It does not increase your risk of breast cancer.

**Cysts in the breast:** Closed, saclike pockets of tissue that can form in the breast. Most breast cysts are filled with fluid and called simple cysts. They may be painful just before your menstrual period begins. You may be able to feel a cyst, although some are too small to be felt. Most cysts are benign and do not increase your risk of breast cancer. Cysts are most common in [premenopausal](#) women and in women taking [menopausal hormone therapy](#).

**Fat necrosis of the breast:** A condition that causes round, firm, usually painless lumps. Fat necrosis may appear after an injury to the breast, surgery, or radiation therapy. Skin around the lump may look red, bruised, or dimpled. Fat necrosis is a benign condition that does not increase your risk of breast cancer.

## Questions to ask about a breast condition

- What is the name (and spelling) of the breast condition that I have?
- Does this condition increase my risk of breast cancer?
- Can you help me understand this risk and if it's something to be concerned about?
- What are the next steps?
- Does this condition go away on its own? Does it need monitoring or treatment?



**Fibroadenoma:** Benign breast tumors that often feel like hard, round lumps in the breast and move easily. Fibroadenomas don't usually hurt and may sometimes be too small to be felt. Fibroadenomas are the most common benign breast tumors in women under 30 years old, although they can be found at any age. These tumors may get larger when [estrogen](#) levels increase (during pregnancy or with [hormone replacement therapy](#)) and smaller during [menopause](#). Most fibroadenomas are [simple fibroadenomas](#) and don't increase your risk of breast cancer. However, [complex fibroadenomas](#) are larger and may slightly increase your risk of breast cancer.

**Fibrocystic breast changes (also called fibrocystic breasts):** A common breast condition in which you may have breast swelling or discomfort, sensitive nipples, nipple discharge and itching. You may also have a mass (also called lumps) or cysts. Symptoms often start before or during your [menstrual period](#). As many as half of all women notice fibrocystic breast changes. It's most common among women under the age of 45 and among women taking [hormone replacement therapy](#). Fibrocystic breast changes do not increase your risk of breast cancer.

**Granular cell tumor (also called Abrikossoff tumor):** A rare type of [soft tissue](#) tumor that may cause a firm lump. Granular cell tumors usually begin in [Schwann cells](#) (cells that hold nerve cells in place) and can occur anywhere in the body, including the breasts. Very rarely, granular cell tumors may be malignant (cancer) and spread to nearby tissue.

**Hematoma of the breast:** A pool of clotted or partially clotted blood under the skin of the breast that may cause a lump, fever, and breast inflammation. Hematomas are usually caused by a broken [blood vessel](#) after an injury or surgery to the breast. They can also occur without injury in people taking aspirin or [blood thinners](#). Hematomas do not increase your risk of breast cancer.

**Intraductal breast papilloma (also called intraductal papilloma):** A breast condition that causes wartlike growths in the [breast duct](#).

- Single intraductal papillomas are usually close to the nipple and may cause a lump, pain, and clear or bloody discharge. They do not increase your risk of breast cancer.
- Multiple intraductal papillomas may not be felt or cause nipple discharge. They are smaller and often found farther away from the nipple than single intraductal breast papillomas. Multiple intraductal papillomas may increase your risk of breast cancer.

**Lipoma of the breast:** A benign tumor made of fat cells. It's usually a painless, single, soft lump. Lipoma does not increase your risk of breast cancer.

**Mastitis:** A painful breast condition that is most common in women who are breastfeeding. It's caused when a [breast duct](#) (also called a [milk duct](#)) becomes blocked or infected. Your breast may look red or darker and feel lumpy, warm, and tender. You may also have nipple discharge and a fever or flu-like symptoms. Mastitis is usually diagnosed by your doctor, based on your signs and symptoms.

**Phyllodes tumor (also called cystosarcoma phyllodes of the breast or CSP):** A rare type of breast tumor that is usually painless. It starts in the [connective tissue](#) of the breast and may grow quickly. These tumors grow in a leaf-like pattern and are named after the Greek word “phyllodes,” which means leaf-like. Although most phyllodes tumors are benign (not cancer), they may sometimes be malignant (cancer). Your risk of developing a phyllodes tumor is higher if you have [Li-Fraumeni syndrome](#), a rare, inherited disorder.

**Radial scars (also called complex sclerosing lesions):** A type of benign tissue that looks like a scar when viewed under a microscope. Often, multiple lesions are seen in both breasts. Radial scars cannot usually be felt and rarely cause symptoms. Radial scars may slightly increase your risk of breast cancer.

**Sclerosing adenosis of the breast:** A condition that doesn’t usually cause symptoms, although you may notice a small lump or breast pain. Scar-like fibrous tissue is found in the [breast lobules](#). Sclerosing adenosis may slightly increase your risk of breast cancer. Learn more about [complex sclerosing lesions](#), commonly called [radial scars](#), above.

*“I talked with my doctor to learn what treatment she recommended for the benign breast condition that I had.”*



# Precancerous Breast Conditions

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A precancerous condition is one that is not cancer but may become cancer. If you are diagnosed with one of these conditions, you have a higher risk of breast cancer. The risk of developing breast cancer is lower for ADH and ALH than for PLCIS and LCIS.

**Atypical ductal hyperplasia (ADH):** A breast condition in which there are more cells than usual in the [breast ducts](#) and the cells look [atypical](#) (abnormal) under a microscope. ADH may increase your risk of breast cancer.

**Atypical lobular hyperplasia (ALH):** A breast condition in which there are more cells than usual in the [breast lobules](#) and these cells look [atypical](#) (abnormal) under a microscope. ALH may increase your risk of breast cancer.

**Lobular carcinoma in situ (LCIS):** A breast condition in which abnormal cells are found in the [breast lobules](#). There are more abnormal cells in the breast lobules with LCIS than with ALH. LCIS increases your risk of developing cancer in either breast.

**Pleomorphic lobular carcinoma in situ (PLCIS):** A breast condition in which abnormal cells are found in the breast lobules. These cells are often larger and more abnormal than in LCIS. PLCIS is more likely to become [invasive breast cancer](#) than LCIS. PLCIS occurs most often in [postmenopausal](#) women.



*“My doctor made the time to help me understand my increased risk of breast cancer and the pathology report after my biopsy.”*

# Ductal Carcinoma in Situ (DCIS)

Ductal carcinoma in situ (DCIS) is a [noninvasive](#) breast condition in which abnormal cells are found inside the [breast duct](#) but have not spread outside it. DCIS is also called [intraductal breast carcinoma](#) or [stage 0 breast carcinoma in situ](#).

Although the cells are abnormal, they are not considered cancer because they do not have the ability to break through the duct wall or spread in the body, which is the definition of [cancer](#). DCIS may sometimes become [invasive breast cancer](#) and spread to other tissues.

Doctors diagnose some cases of DCIS as being at lower risk of becoming invasive than others. However, since doctors don't currently know for sure which cases of DCIS will become invasive cancer and which ones won't, DCIS is almost always treated. Because research is ongoing and you have choices about treatment, it may be helpful to get a [second opinion](#) and discuss your treatment options with more than one doctor.

Learn about treatment options in the DCIS section of [www.cancer.gov/BreastTreatment](http://www.cancer.gov/BreastTreatment).

**DCIS and clinical trials:** You and your doctor can find DCIS prevention and treatment clinical trials near you by entering "DCIS" as a keyword in [www.cancer.gov/trials](http://www.cancer.gov/trials). [One nationwide clinical trial, called COMET](#), is comparing [active monitoring](#) with [surgery](#) in women with low-risk DCIS.

Learn more about this clinical trial: *Comparing an Operation to Monitoring, with or without Endocrine Therapy (COMET)* at [www.cometstudy.org](http://www.cometstudy.org).

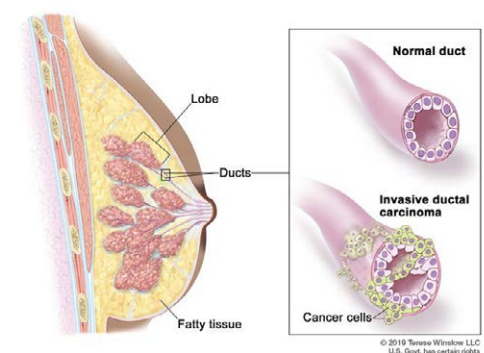
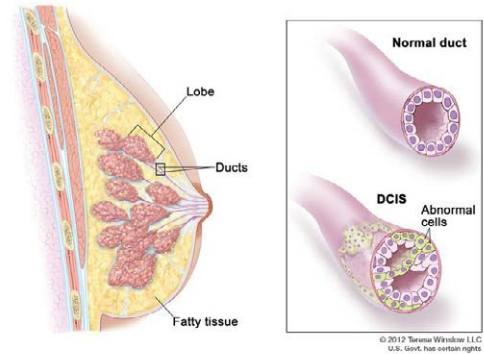
## Breast Cancer

Breast cancer (also called invasive breast cancer) is a disease in which cancer cells form in the tissues of the breast. Breast cancer is not just one disease. There are different breast cancer subtypes.

In breast cancer, cells grow and divide without control and invade nearby breast tissue. Cancer cells may also form a mass called a tumor and metastasize (spread) to the lymph nodes or other parts of the body.

Invasive ductal carcinoma is the most common type of breast cancer.

Learn more about breast cancer, including treatment options, at [www.cancer.gov/types/breast](http://www.cancer.gov/types/breast).



# Talking with Your Doctor to Learn More

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It can be stressful to receive an abnormal mammogram result or notice a breast change and need follow-up testing. Here are tips to help you talk with your doctor or nurse, consider a second opinion, and get answers to any breast health questions you may still have.

## Meeting with your doctor or nurse

When you meet with your doctor or nurse, it's important to get information that helps you to understand your diagnosis and to make medical decisions. You may want to ask a friend or family member to go with you to take notes and ask questions.

It's important to ask your doctor or nurse to

- explain and write down medical terms, such as the name of a procedure, treatment, or breast condition
- go over treatment options, if needed, for the breast condition that you have
- give you information to read or websites to visit, if you are interested in learning more
- refer you to a breast specialist for follow-up medical care and treatment if needed; you can also call your insurance company for the names of specialists who participate with your plan

## Considering a second opinion

You may want to get a [second opinion](#) on the recommended treatment. Even highly experienced doctors sometimes have different opinions. If you choose to get a second opinion, you will need to get information on the diagnosis and treatment from the first doctor to give to the second doctor.

A second opinion is especially helpful when

- the first opinion on the treatment comes from a doctor who doesn't specialize in or frequently treat the breast condition that you were diagnosed with
- there are complicated medical decisions that need to be made
- there are different treatment options to choose from

## Considering a clinical trial

[Clinical trials](#) are being carried out to learn more about how to prevent, detect, and treat breast conditions and breast cancer. You can call 1-800-4-CANCER to get help finding clinical trials that are most relevant to you or a loved one.

*You and your doctor can also find clinical trials by searching [www.cancer.gov/trials](http://www.cancer.gov/trials).*

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