

National Cancer Institute

Common Breast Changes



Things to Know



NIH Publication No. 05-5729
Printed August 2005



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health

Breast changes occur in almost all women. In fact, most of these changes are not cancer (these changes are called benign).

Common breast changes include:

- Lumpiness
- Single lumps
- Nipple discharge

Changes can also happen monthly, due to your period.

Finding Breast Changes

There are two main ways to find breast changes:

- **Clinical breast exam**—a breast exam done by your health care provider
- **Mammogram**—an x-ray of your breasts

Some women check their own breasts for changes. If you find a change, it's important to see your health care provider. Make sure to watch the change you found until your appointment. But a breast self-exam and a clinical breast exam are not substitutes for mammograms.



Normal



Benign Cyst
(Not Cancer)



Cancer

Mammograms

It is important to see your doctor and get a mammogram every 1 to 2 years after age 40 to check for breast changes.

Mammograms are used for both screening and diagnosis.

A screening mammogram is used to find breast changes in women who have no signs of breast cancer. Most women get two x-rays of each breast.

If your screening mammogram shows a breast change since your last one, or if you or your health care provider notice a change, you may need to have a diagnostic mammogram. That means more x-rays are taken to get clearer, more detailed pictures of the breast.

A digital mammogram is another way to take a picture of your breasts. The procedure for having a digital mammogram is the same as for a screening mammogram, except that it records the x-ray images in computer code instead of on x-ray film.

What Mammograms Can Show

The radiologist will look at your x-rays for breast changes that do not look normal. The doctor will look for differences in each breast. He or she will compare your past mammograms with your most recent one to check for changes. The doctor will also look for lumps and calcifications (see next page).

Lump (or “mass”)

The size, shape, and edges of a lump sometimes can give doctors information about whether or not it may be cancer. On a mammogram, a growth that is benign often looks smooth and round with a clear, defined edge. Breast cancer often has a jagged outline and an irregular shape.

Calcifications

A calcification is a deposit of the mineral calcium in the breast tissue. Calcifications appear as small white spots on a mammogram. There are two types:

- **Macrocalcifications** are large calcium deposits often caused by aging. These are usually not a sign of cancer.
- **Microcalcifications** are tiny specks of calcium that may be found in an area of rapidly dividing cells.

Calcium in the diet does *not* create calcium deposits (calcifications) in the breast.

If calcifications are grouped together in a certain way, it may be a sign of cancer.

Depending on how many calcium specks you have, how big they are, and what they look like, your doctor may suggest that you have:

- A different type of mammogram that allows the radiologist to have a closer look at the area
- Another screening mammogram, usually within 6 months
- Other tests such as ultrasound or biopsy

Are Mammogram Results Always Right?

No. Although they are not perfect, mammograms are the best method to find breast changes. If your mammogram shows a breast change, sometimes other tests are needed to better understand it. Even if the doctor sees something on the mammogram, it does not mean it is cancer.

For More Information, You Can Contact . . .

National Cancer Institute (NCI)

Cancer Information Service

Toll free: 1-800-4-CANCER (1-800-422-6237)

TTY: 1-800-332-8615

Information on cancer prevention and screenings, as well as answers to questions about cancer.

NCI Online

Web site: www.cancer.gov

Chat online www.cancer.gov and click on “Need Help?”

Free booklets that are available online and in print include:

- *Understanding Breast Changes*
- *Mammograms: Not Just Once, But For a Lifetime*

Centers for Medicare and Medicaid Services (CMS)

Toll free: 1-800-MEDICARE (1-800-633-4227)

TTY/TDD: 1-877-486-2048

Web site: www.cms.gov or www.medicare.gov

Information about Medicare benefits to pay for screening mammograms.

Centers for Disease Control and Prevention (CDC)

Toll free: 1-888-842-6355

Web site: www.cdc.gov/cancer

Information on free breast and cervical cancer screening and diagnostic services to women with low incomes.

National Women’s Health Information Center (NWHIC)

Toll free: 1-800-994-WOMAN (1-800-994-9662)

TTY: 1-888-220-5446

Web site: www.4woman.gov

A gateway to women’s health information, sponsored by the U.S. Department of Health and Human Services Office on Women’s Health.

U.S. Food and Drug Administration (FDA)

Web site: www.fda.gov/cdrh/mammography

A list of FDA-approved mammography facilities.

Possible Mammogram Results and Follow-Up Care

Conditions	Features
Cysts	<ul style="list-style-type: none"> • Fluid-filled lumps • Usually not cancer • Occur most often in women ages 35–50 • Often in both breasts • Some too small to be felt
Fibroadenoma	<ul style="list-style-type: none"> • Hard, round, benign growth • Feels like rubber; moves around easily • Usually painless • Often found by the woman herself • Appears on mammogram as smooth, round lumps with clearly defined edges • Can get bigger when a woman is pregnant or nursing
Macrocalcifications	<ul style="list-style-type: none"> • Appear on a mammogram as large calcium deposits • Often caused by aging • Usually not cancer • If they are grouped together in a certain way, they may be a sign of cancer
Lump (or “mass”)	<ul style="list-style-type: none"> • May be round and smooth • May be caused by normal hormone changes • Irregular borders may be a sign of cancer
Microcalcifications	<ul style="list-style-type: none"> • Appear on a mammogram as tiny specks of calcium that might be in an area of rapidly dividing cells • If they are grouped together in a certain way, they may be a sign of cancer

What Your Doctor May Recommend
<ul style="list-style-type: none"> • Doctors often watch cysts over time or use fine-needle aspiration to remove the fluid from the cyst • Ultrasound may be used to see whether a lump is solid or filled with fluid
<ul style="list-style-type: none"> • Sometimes diagnosed with fine-needle aspiration • If the fibroadenoma does not appear normal, the doctor may suggest taking it out to make sure it is benign
<ul style="list-style-type: none"> • Another mammogram to have a closer look at the area • A biopsy may be used for diagnosis
<ul style="list-style-type: none"> • A mammogram and/or ultrasound may be used to see whether a lump is solid or filled with fluid • A biopsy may be used for diagnosis
<ul style="list-style-type: none"> • Another mammogram to have a closer look at the area • A biopsy may be used for diagnosis