

## 📖 Topic Page: [Mammography](#)

Definition: **mammography** from *The Hutchinson Unabridged Encyclopedia with Atlas and Weather Guide*

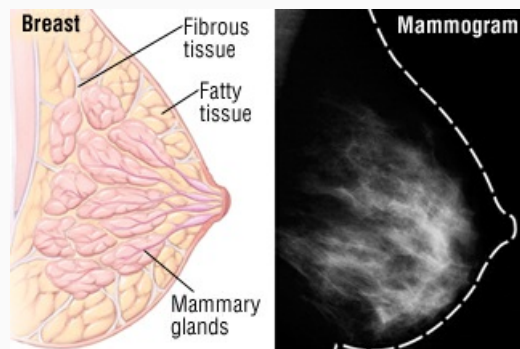
X-ray procedure used to screen for breast cancer. It can detect abnormal growths at an early stage, before they can be seen or felt. It is most effective for screening women over 35, as breast tissue is too dense in younger women.

Summary Article: **Mammography**

from *Harvard Medical School Health Topics A-Z*

### What Is It?

Mammography is a series of X-rays that shows images of the soft tissues of the breast. It is a valuable screening procedure that can detect breast cancer early, as long as two years before a lump can be felt.



For women ages 50 to 74 with an average risk of breast cancer, the United States Preventive Services Task Force (USPSTF) recommends mammography once every 2 years. Other medical societies and organizations recommend yearly mammograms.

For women between ages 40 and 50, the benefits of mammography for women at average breast cancer risk continue to be debated. The USPSTF does not recommend routine screening for women in this age group. However, the Cancer Society, the American College of Radiology, and the American College of Obstetrics and Gynecology recommend that women start routine screening with mammography at the age of 40. While the American Cancer Society recommends 45 as the age to begin screening.

If a woman has a mother, sister or daughter who has had breast cancer, her doctor may recommend beginning mammograms earlier than age 40.

Mammography is a quick and generally painless test that usually takes less than 30 minutes, depending on the number of individual X-ray views required. The X-rays themselves take only a few seconds, but extra time is needed to position your breast and body correctly for each separate X-ray view.

Mammography misses breast cancer about 5% to 10% of the time. But the rate can be as high as 30% for women with dense breast tissue (usually women who have not reached menopause).

It is not uncommon to find something on a mammogram that requires additional testing. Most testing facilities will immediately take different, larger images of the area in question or do an ultrasound for a

different view of the abnormal area. Most abnormalities found during a mammography are not cancer.

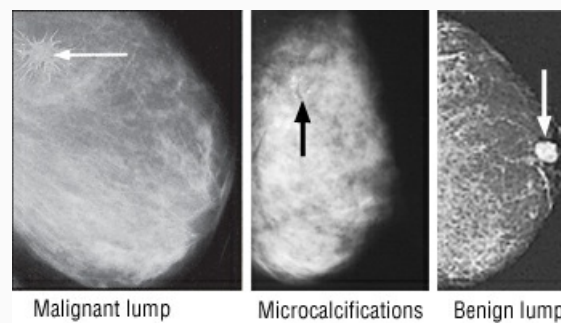
Sometimes, a doctor may order a fine-needle biopsy of the suspicious spot to determine if it is malignant (cancerous). In this type of biopsy, cells from the suspicious area of the breast are removed using a needle, and then spread on a slide. The slide is sent to the laboratory to be examined under a microscope.

The value of mammography is early detection. Early detection saves lives and, in many cases, also saves the woman's breast by identifying the cancer at a very early stage when it is most easily treated and is not life threatening.

## What It's Used For

Mammography is used as a screening test for breast cancer. No screening strategy finds every breast cancer. You have a better chance of detecting breast cancer early if you also examine your own breasts every month and see a doctor once a year for a professional breast examination.

Mammography also is used to help clarify whether a suspicious breast lump is a cyst or a tumor and whether a tumor is more likely to be benign (not cancerous) or malignant (cancerous). However, a mammogram is not always definite. A lump that you or your doctor can feel may be cancer even if a mammogram indicates that it is not. Your doctor should check these lumps periodically or may do a biopsy, in which a small piece of tissue is removed to be examined in a laboratory.



## Preparation

On the day of your mammogram, avoid using deodorants, powders, lotions, perfumes or creams on your breasts or under your arms. Certain chemicals in these products may cause abnormal images on your mammogram that could be mistaken for signs of breast disease.

Some women complain of breast discomfort while having a mammogram because the breast needs to be compressed for a few seconds. If you have tender breasts, it is best to schedule your mammogram a few days after your menstrual period has ended. This is when your breasts will be the least tender.

If you have very tender breasts, you may want to ask your doctor about taking Tylenol or Advil one hour before you are scheduled for your mammogram. Also, avoid drinking anything containing caffeine for two days before having your mammogram done. This also helps to reduce breast tenderness.

Since you will need to undress above the waist before your X-rays are taken, wear a two-piece outfit with no neck jewelry.

If you have had mammograms before and you are using a new test facility, ask about bringing copies of your previous mammograms with you on the day of your test. The radiologist will want to compare your previous mammograms with your latest films to spot any changes.

If you feel anxious or nervous, or if you have questions concerning the mammogram test procedure, discuss these issues with your doctor beforehand. When you arrive at the test facility, the X-ray technician who performs your mammogram also can answer many of your questions.

## How It's Done

Mammograms almost always are done in an outpatient X-ray facility or in the X-ray department of a hospital.

If you have breast implants, tell the X-ray personnel about them when you arrive for mammography, since having breast implants affects the way your mammogram will be performed and analyzed. During mammography, a breast with implants must be compressed with special care to prevent the implants from rupturing. The breast also must be positioned differently for the X-ray.

When you arrive at the X-ray facility, you will be asked to remove your clothing from the waist up, including neck jewelry, and you will be given a hospital gown to wear during the test. Each of your breasts will be X-rayed separately, and you will be asked to hold your breath for a few seconds while each X-ray is taken.

For some X-ray views, your breast will be compressed briefly between two plastic plates. Compressing the breast spreads out the breast tissue and provides a clearer image of the thicker areas of your breast. Depending on the size of your breasts and how sensitive they are, you may feel some mild discomfort during this part of your mammogram, but it should not be painful.

When all the X-rays are complete, you can get dressed again. In some centers, you may be asked to wait until your mammogram films are developed in case a view is not clear and needs to be repeated.



## Follow-Up

After your mammogram, you can return to your normal activities. In a few days, either call the facility for your test results or check with your doctor. Even if you are given a preliminary reading on the day of your mammogram, always check back for the final results a few days later. Some facilities will have you address an envelope to yourself on the day of the test, and will mail your test results to you.

## Risks

The dose of radiation used in a mammogram is very low, about the same amount as in a dentist's X-ray. This test poses very little risk, and there is no evidence that the small amount of radiation used can cause cancer.

## When To Call a Professional

Call your doctor's office if you are reluctant to have a mammogram. The professional staff may help to decrease any anxiety you have about the test and offer strategies to help diminish the discomfort of having your breasts compressed.

## Additional Info

### National Cancer Institute (NCI)

Toll-Free: 800-422-6237

[www.cancer.gov](http://www.cancer.gov)

### American Cancer Society (ACS)

Toll-Free: 800-227-2345

[www.cancer.org/](http://www.cancer.org/)

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