

# Mammography

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# What is mammography?

Mammography is a simple X-ray process. It passes low doses of X-rays through the breasts. No dyes have to be injected or swallowed, and no instruments will be put in your body. It can be done in a doctor's office, a clinic, a mobile screening van, or a hospital.

Mammography is a good way to find cancerous growths in the breast before they are large enough to be felt. When cancer is found in this early stage, it is easier to treat. Caught early enough, breast cancer often can be cured. Mammography also is useful for checking growths that have been felt during a physical exam by a health care provider or during a breast self-exam.

## Who should have mammography?

Women aged 40-49 years should have mammography done every 1-2 years. Women aged 50 years and older should have it done every year. If you have certain risk factors, your health care provider may suggest you have the test at a younger age.

You also may need mammography if you have any of these signs:

- Unexplained lump or thickening in the breast or in the armpit
- Puckers, dimples, redness, or other changes in the skin of the breast
- Discharge or bleeding that comes from the nipple
- A recent change in the nipple, such as a retracted nipple (a nipple that has pulled inward)

## How should I prepare for mammography?

The day you have the test done, you should not wear powders, lotions, or deodorants. These products may contain substances that can show up on the X-ray. To get ready for the test, you will need to undress from the waist up and put on a gown.

#### What happens during mammography?

You will be asked to stand or sit in front of the X-ray machine. Two smooth, flat plastic or glass plates will be placed around one of your breasts. You will briefly feel pressure on your breast. The plates will flatten your breast as much as possible so that the most tissue can be viewed with the least radiation. After the first X-ray, the plates may be removed so that the breast can be X-rayed from one or more other positions. The test then is done on the other breast.

The pressure of the plates may make the breasts ache. This discomfort will go away shortly. If you menstruate, you may want to have the test done in the week right after your menstrual period. The breasts often are less tender at this time.

### What are the risks associated with mammography?

Mammography exposes a woman to a very low dose of radiation. The dose is much lower than the natural level of radiation received from the environment during a 1-year period. In the past, there was some concern about the amount of radiation a woman would be exposed to during the test. Improved equipment and techniques now result in very low doses. Thus, risk is very low, even with repeated tests. If needed, mammography can be done during pregnancy.

### What if my mammography test result is positive?

Most lumps found in the breast are **benign**—not cancer. To confirm the results of mammography, other imaging tests, such as **ultrasonography** and **magnetic resonance imaging**, also may be useful. Magnetic resonance imaging of the breast is a method used to view tissue inside the breast by using a strong magnetic field and radio waves. With ultrasonography, sound waves are used to create pictures of the inside of body organs or tissues. This method can show whether the lumps are solid or filled with fluid, such as with a cyst.

### What other tests can provide more information about breast lumps?

Other tests that can tell your health care provider more about the type of lump include:

- Needle aspiration, in which a needle is inserted into the lump to find out whether it is fluid filled or solid. A sample of fluid or tissue may be drawn out for study under a microscope.
- Biopsy, a surgical procedure in which a small incision (cut) is made to remove the entire growth or a sample for study under a microscope.

In some cases, special breast X-rays also may be used along with these tests. These X-rays give a better view of the area that is being studied.

#### **Glossary**

Benign: Noncancerous growth usually confined to one part of the body.

**Magnetic Resonance Imaging:** A method of viewing internal organs and structures by using a strong magnetic field and radio waves.

*Ultrasonography:* A test in which sound waves are used to examine internal structures. During pregnancy, it can be used to examine the fetus.

#### If you have further questions, contact your obstetrician-gynecologist.

**FAQ076:** Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to institution or type of practice, may be appropriate.

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