



# Your Guide to Mammograms

A mammogram is an X-ray image of the breast and surrounding tissue. A screening mammogram is used to check for breast cancer in women who have no signs or symptoms of the disease. A diagnostic mammogram is used to check for breast cancer after a lump or other symptom of the disease has been found.

## The Benefits of Mammograms

The main benefit of a mammogram is that it has the potential to detect breast cancer early. Early detection means earlier treatment, possibly before it has spread, resulting in a reduction in breast cancer deaths. It also means that many more women being treated for breast cancer are able to keep their breasts. When caught early, the chance of localized cancers is high, meaning the cancer can be removed without resorting to breast removal (mastectomy).

## The Risks of Mammograms

Some women may worry about the risk of radiation exposure from a mammogram, but modern-day mammography involves very little radiation. Another possible mammography risk is the potential for a false negative, which is when breast cancer can hide behind normal breast tissue. Additionally, mammography can identify an abnormality that may look like cancer, but, in reality, is completely benign. This is called a false positive. A false positive results in more tests and follow-up visits, not to mention additional stress and worry.



## Mammogram Techniques and Types

Over the years, technology has evolved. Currently, there are three different types of mammograms:

- **Conventional mammography.** In this technique, an X-ray is used to produce an image of the breast. The image is stored directly on film and examined by a radiologist.
- **Digital mammography.** Just like with most things, mammograms have gone digital. With digital, the image is still produced by X-ray, but then stored on a computer. This allows a radiologist to adjust, store and retrieve the images, leading to easier conversations and consultations between breast surgeons and radiologists.
- **3D mammography.** Also known as breast tomosynthesis, 3D mammography uses X-rays to take pictures of thin slices of the breast from different angles and then uses computer software to reconstruct the image.



## Mammograms by Age

In screening for breast cancer, mammograms can be a useful tool to find breast cancer when it is early and potentially most curable. Professional societies differ in their recommendations, but Mercy recommends mammograms annually, beginning at age 40 until age 74. Women 75 and older should continue screening if they are in good health and are expected to live 10 or more years.

Screening may start earlier or include other test methods, such as 3D mammography, ultrasound, or breast MRI for patients with dense breasts or a family history of breast cancer. Each woman should discuss screening with her physician to decide what is best for her.

## Mammogram Results

Most screenings show two views of each breast, taken at different angles. Pictures are taken of both breasts to compare any abnormalities. While they're looking for cancer, doctors may come across other masses in the breast such as calcifications, fibroadenomas and cysts.

Your mammography report will also determine your breast density. Things that can affect your breast density include your family history (genetics), being pregnant, and using estrogen hormone therapy. Your age can also make a difference. Breast tissue in younger women tends to be denser than in older women who have been through menopause. The more dense a breast is, the harder it is to see cancer on a mammogram image. That's because dense tissue looks white on screen, just like cancer does.

Breast cancer tends to grow in dense breast tissue more often than in fatty breast tissue. So having dense breasts may slightly increase your risk for breast cancer.

On its own, breast density is not a major risk factor for cancer. Your overall risk is based on facts like how old you are, whether you've ever had breast cancer before, and whether any of your close relatives, such as your mother or sister, have had breast cancer. If you have dense breasts, discuss your options for screening with your doctor to determine which method is best for you.

Be sure to know when and where you'll receive your results before your mammogram. The main advantage of having them read immediately is that if there is anything suspicious, you can get additional imaging done right away — a close-up mammogram or an ultrasound.

## Follow-Up Tests

There are several types of follow-up tests. Tests after an abnormal screening depend on the recommendation of the radiologist and may include:

- **A diagnostic mammogram** - A mammogram that involves two or more X-ray views of the breast. It is used to check symptoms of breast cancer, such as a lump, or an abnormal finding noted on a screening mammogram or clinical breast exam.

- **Breast MRI** – An imaging technique that uses a magnet linked to a computer to make detailed pictures of the breast.
- **Breast ultrasound** – A diagnostic test that uses sound waves to create images of the breast and surrounding tissues. Tissues of different densities reflect sound waves differently.
- **Biopsy** – A biopsy removes cells or tissue from the suspicious area of the breast. The cells or tissue are studied under a microscope to see if cancer is present. There are two main types of biopsies used, needle biopsies and surgical biopsies.

## Mammograms after Breast Surgery

If you've had surgery for breast cancer, you will follow these general guidelines for future mammograms. Your care team will discuss your individualized follow-up treatment with you.

- **Mammogram after lumpectomy.** If you had a cancerous lump removed, plus received radiation therapy, you can expect to have a mammogram six months after your treatment ends. This six-month mammogram will be the new “standard” against which future mammograms of the remaining breast tissue are compared. Six months after that, you can expect to have your annual mammogram of both breasts.
- **Mammogram after mastectomy.** Since a mastectomy involves the removal of the entire breast, no follow-up mammogram is necessary as all the tissue has been removed. You will continue to have annual exams of the remaining breast.
- **Mammogram after reconstruction.** Generally speaking, if you've had reconstruction using silicone implants or tissue from another part of your body, you won't need a mammogram on the affected breast because no original breast tissue remains. However, a breast MRI might be used as a more effective alternative to screening.

## Where to Get a Mammogram

Mercy mammogram specialists are experienced in mammography for both screening and diagnostic purposes. To schedule a screening mammogram online, visit **[mercy.net/mammography](https://www.mercy.net/mammography)** and choose the location nearest you. You'll have the option to schedule a standard digital mammogram or a digital mammogram with 3D images, depending on which is best for you.

