

What does the doctor look for on a mammogram?

A radiologist will look at your mammogram. Radiologists are doctors who diagnose diseases and injuries using imaging tests such as x-rays and CT scans. When possible, the doctor reading your mammogram will compare it to your old mammograms. This helps find small changes that could be signs of cancer.

Here are some of the changes the doctor will look for:

Calcifications

Calcifications are tiny mineral deposits within the breast tissue. They look like small white spots on a mammogram. They may or may not be caused by cancer. There are 2 types of calcifications.

- **Macrocalcifications** are coarse, bigger calcium deposits that are most likely due to changes caused by aging of the breast arteries, old injuries, or inflammation. These deposits are related to non-cancerous conditions and don't need to be checked with a biopsy. Macrocalcifications are found in about half of women over age 50 and in 1 of 10 women under age 50.
 - **Microcalcifications** are tiny specks of calcium in the breast. Microcalcifications seen on a mammogram are of more concern than macrocalcifications, but they don't always mean that cancer is present. The shape and layout of microcalcifications help the radiologist judge how likely it is that the change is due to cancer. In most cases, microcalcifications don't need to be checked with a biopsy. But if they have a suspicious look and pattern, a [biopsy](#) will be recommended. (During a biopsy, the doctor removes a small piece of the suspicious area to be checked under a microscope. A biopsy is the only way to tell if cancer is really present.)
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A mass

A mass is the same as a lump or a tumor. With or without calcifications, it's another important change seen on a mammogram. Masses are areas that look abnormal and they [can be many things](#), including cysts (non-cancerous, fluid-filled sacs) and non-cancerous solid tumors (such as fibroadenomas), but they may also be a sign of cancer.

Cysts can be simple fluid-filled sacs (known as *simple* cysts) or can be partially solid (known as *complex cystic and solid masses*). Simple cysts are not cancer and don't need to be checked with a biopsy. If a mass is not a simple cyst, it's of more concern and a biopsy might be needed to be sure it isn't cancer.

- A cyst and a tumor can feel the same. They can also look the same on a mammogram. The doctor must be sure it's a cyst to know it's not cancer. To be sure that a mass is really a cyst, a breast ultrasound is often done. Another option is to remove (aspirate) the fluid from the cyst with a thin, hollow needle.

- If a mass is not a simple cyst (that is, if it's at least partly solid), more imaging tests may be needed to decide if it might be cancer. Some masses can be watched with regular mammograms or ultrasound to see if they change, but others may need to be checked with a biopsy. The size, shape, and margins (edges) of the mass may help the radiologist decide how likely it is to be cancer.

Having your old mammograms available for the radiologist is very important. They can help show that a mass or calcification has not changed for many years. This would mean that it's likely not cancer and a biopsy isn't needed.

Breast density

Your mammogram report will also contain an assessment of [breast density](#). Breast density is based on how fibrous and glandular tissues are distributed in your breast, vs. how much of your breast is made up of fatty tissue.

Dense breasts are not abnormal, but they are linked to a higher risk of breast cancer. We know that dense breast tissue can make it harder to find cancers on a mammogram. Still, experts don't agree what other tests, if any, should be done along with mammograms in women with dense breasts who aren't in a high breast cancer risk group (based on gene mutations, breast cancer in the family, or other factors).