

△ GENERAL INFORMATION

Mammography is the best single test you can have to pick up potentially serious abnormalities in the breast that you *cannot* feel. Mammography also is extremely valuable in giving the doctor and you a very good idea of the nature of a lump that you *can* feel. So, regular mammography plus *regular* breast self-examination in addition to *regular* routine physical examination of your breasts by your physician—*all together*—is the best way to find, in its early stages, something that may be serious. Remember, *early* detection and treatment of a tumor has the best chance of being successful.

The American Cancer Society recommends that a baseline mammogram be done by age 40 years, and mammograms should be repeated every 1 or 2 years between the ages of 40 and 49 (depending on your particular risk factors). There should be an annual mammogram after age 50. However, there are exceptions to this:

- Your breast may be “lumpy,” and while nothing in it appears ominous, it may be difficult for both you and your doctor to be certain without a mammogram.
- There may be a strong family history of breast cancer, making it wise for you to start having routine mammograms at an earlier age.

Discuss this issue with your doctor. The important point is to get mammograms and a physical examination on a *regular* basis.

WHAT IS A MAMMOGRAM?

A mammogram is a picture of the breast tissue that is done with a very low and safe dose of radiation. Some radiation does go through the breast, but if mammograms are properly ordered and performed, the information you get about your breasts is *far more* valuable than the virtually negligible risk of the very small dose of radiation passing through your breasts.

PREPARATION

Minimal preparation is necessary, but several suggestions are worth mentioning:

- Shower or bathe as usual on the day of your scheduled mammography, but do not use underarm deodorants, especially any dusting powders. Some of these have little particles in them that might cause very tiny shadows on the mammogram and possibly cause confusion.
- If you experience a lot of breast pain or tenderness before your menstrual periods, it may be wise to avoid scheduling your mammography at such a time. The breasts have to be compressed during the procedure, which would only aggravate your discomfort.
- If you are pregnant, or think you are pregnant, be certain to make this known to the technologist. Special arrangements may need to be made.
- You will be asked to disrobe from the waist up for the examination. Wearing a blouse or a two-piece outfit instead of a dress may make this easier for you.

THE MAMMOGRAM

- You will be standing or sitting for the mammogram, depending on the type of x-ray machine being used. Limited views can be taken of a patient in a wheelchair.
- Your breasts will be positioned and then compressed with a plastic shield or a plate sponge. This may cause some temporary discomfort.
- X-ray pictures of your breast will be taken as follows:
 - From top to bottom.
 - From an angle aimed toward your armpit (Fig. 1). These two views are routine and are necessary to take a picture of as much of the inside of your breast tissue as possible. Just one view simply is not enough. Even with three views, it sometimes is difficult to see 100% of the breast tissue. In some instances, a straight sideways view is also taken.
- On occasion, certain shadows may be seen on these routine mammograms that are not entirely clear. If so, additional pictures from a different angle may need to be taken. Sometimes a magnified view may need to be taken of a small area. This technique enlarges and sharpens any small abnormalities so that they can be seen more clearly.

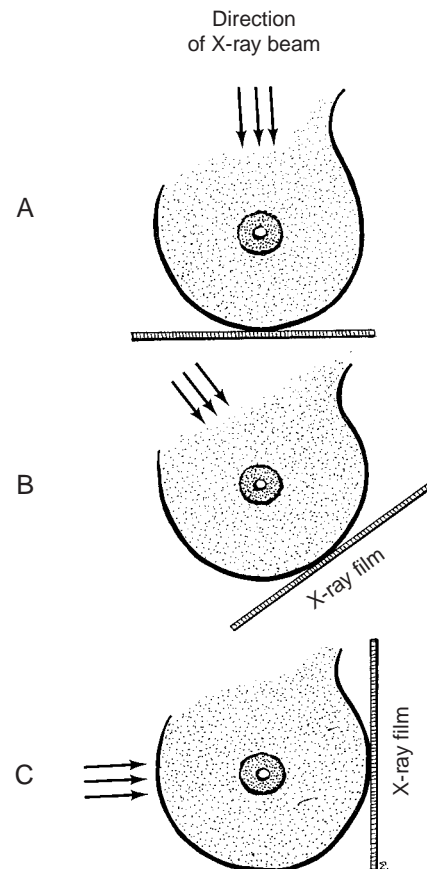


Figure 1. Typical views of the breast. A, Top to bottom (cephalocaudal); B, diagonal (oblique); C, side-to-side (lateral).

The Need to Compress Your Breast

For technical reasons, if the x-rays pass through the *same thickness* of tissue throughout the breast the pictures made are much clearer and sharper. To achieve uniform thickness in the average breast, it is necessary to flatten the breasts as much as possible (Fig. 2). This can be uncomfortable, but remember that the result is a much clearer picture for the radiologist to look at, which is of benefit to you. Also, the thinner the breast is compressed, the less radiation dose is absorbed by the breast tissue.

Occasionally, this compression may produce some redness of the skin as well as discomfort. Neither of these is harmful, and both are temporary.

Your mammograms will be done by a highly trained technologist who does this all day long. Everyone's concern is to get the very best quality mammogram with the least number of films and the least discomfort for you. At the completion of the mammography, you'll be asked to wait a short while so that the technologist can make sure that the films are of good quality. After this, you are free to leave.

In some places, your mammograms will be carefully examined right away by a radiologist who is an expert in the field of mammography. You will then be told the results right away. In other places, the mammograms will be read later and the results will be reported to your personal physician.

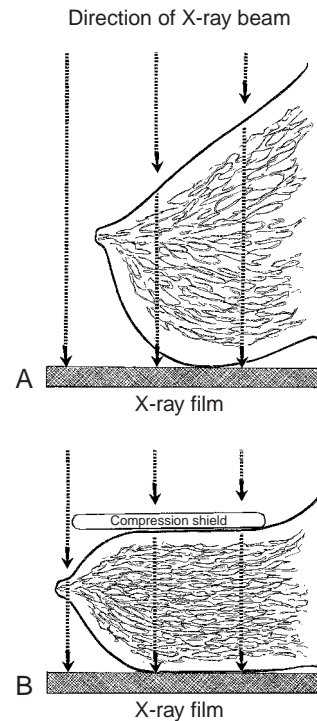


Figure 2. A, The breast as it normally lies on the x-ray films. B, The breast must be compressed so that it is uniform in thickness as much as possible. This produces more accurate detail on the x-ray films.