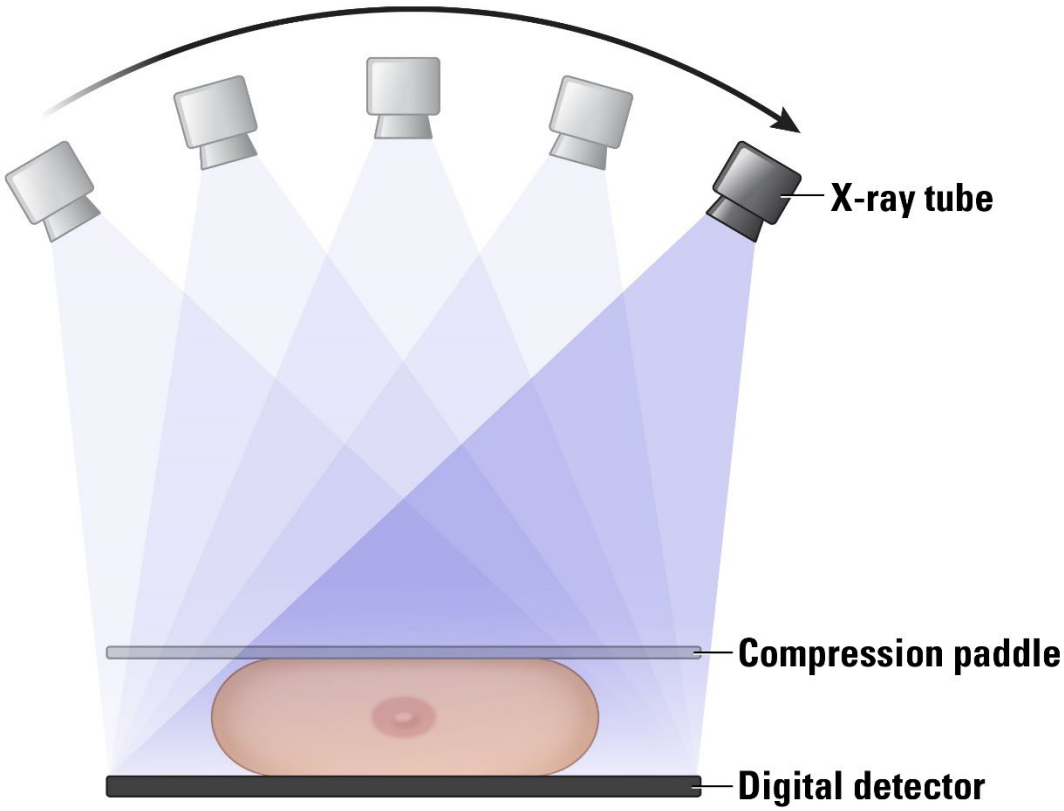
MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN

Digital Breast Tomosynthesis (3-D Mammography)

What is digital breast tomosynthesis?

Digital Breast Tomosynthesis (DBT) mammography (also referred to as "3D" mammography) is a type of mammogram which has gained widespread use in the last several years. It is an imaging test that uses x-rays to take multiple pictures of the breast. The breast is compressed the same as a standard mammogram. The x-ray tube moves over the breast in an arc, acquiring images of the breast from different angles. The x-ray images are displayed as a stack of mammogram images for the radiologist to read.

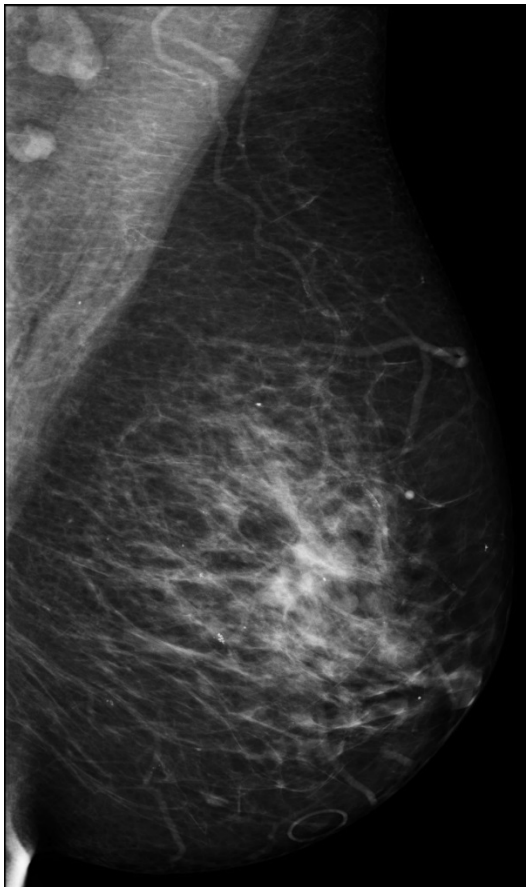


What are the possible benefits to digital breast tomosynthesis?

Digital breast tomosynthesis may increase the detection of breast cancer for some people. Normal breast tissue may hide breast cancer, but because DBT takes mammogram images at various angles, it may help to find breast cancer. Additionally, overlapping normal breast tissue can look abnormal on a mammogram. DBT mammography may decrease the amount of tissue overlap and help prevent the possibility of patients needing to return for additional imaging.

2D Mammogram

A standard 2D mammogram obtains a single image of the breast. A breast mass may be obscured by overlapping breast tissue.



3D Mammogram

Breast tomosynthesis takes images of the breast tissue from multiple angles. In this case, it allowed for the breast cancer mass in the center of the breast to be seen.

Is there more radiation associated with digital breast tomosynthesis?

Both standard mammography and DBT mammography expose people to very low levels of radiation, well within the Food and Drug Administration (FDA) limits. For example, a screening mammogram with DBT may expose someone to approximately 2-3 months' worth of the annual background radiation they receive just by living in Michigan.

Radiation exposure associated with screening mammography can also vary depending on patients' breast size and breast tissue composition. With the DBT screening protocol at Michigan Medicine, you will be exposed to approximately 1.5 times the typical radiation dose of the standard 2D mammogram.

What can I expect when having a digital breast tomosynthesis examination?

Prepare as you would for a mammogram appointment. Other than the movement of the x-ray tube, DBT mammography will be similar to your prior mammograms.

- Wear comfortable clothes that can be easily removed.
- Avoid wearing deodorant to your appointment.
- The technologist will position you, compress your breast, and take the images. There is no additional compression required.

Will my insurance company cover digital breast tomosynthesis?

Medicare and some private insurers cover digital breast tomosynthesis. You are encouraged to check with your insurer if you opt for a digital breast tomosynthesis examination.

Where can I have a mammogram with digital breast tomosynthesis?

Call **734-936-4500** to schedule an examination at one of the locations below, or to ask any other questions before your test.

- Brighton Center for Specialty Care
- Briarwood Radiology
- Canton Health Center
- East Ann Arbor Health and Geriatrics Center
- Rogel Cancer Center
- West Ann Arbor Health Center
- Ypsilanti Health Center (mobile unit)

Where can I learn more?

American Cancer Society: www.cancer.org/content/dam/CRC/PDF/Public/8579.00.pdf	
Susan G. Komen: www.komen.org/BreastCancer/Mammography.html	

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