

3-D imaging improves breast cancer screening

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What if breast cancers could be found earlier, lumps seen more clearly or the number of callbacks reduced? Three-dimensional breast imaging technology can do just that by increasing the accuracy of breast cancer screening exams.

A breast lump is a growth of tissue that develops within your breast. Sometimes, a [breast lump](#) is a sign of breast cancer.

"Digital breast tomosynthesis, also known as 3-D digital mammography, delivers a series of detailed breast images, allowing your provider to better evaluate your breasts layer by layer," says Dr. Megan Meyers, a Mayo Clinic Health System radiologist. "Digital breast tomosynthesis is U.S. Food and Drug Administration-approved, and more than 100 clinical studies have shown that, by using this technology, doctors are able to screen for breast cancer with much greater accuracy, regardless of your age or breast density."

Meyers says conventional mammograms provide doctors with a two-dimensional image to evaluate the breast. She explains this screening is widely accepted and available, but it can be limiting due to overlapping layers of tissue, which sometimes can produce unclear results, false alarms or, worse, cancer being missed.

Digital breast tomosynthesis offers these advantages over two-dimensional mammography:

- An increase in invasive [breast cancer detection](#)
- Up to 40 percent reduction in false positive recalls, minimizing patient anxiety and unnecessary costs

"I have found 3-D tomosynthesis to be the most beneficial in decreasing callbacks on baseline screening exams as well as in patients with dense breasts," adds Meyers. "In 2014, more than 200,000 women were diagnosed with an invasive

form of breast cancer. That's why innovative screening technology that allows for better, earlier [breast cancer](#) detection is critical."

While mammography can detect approximately 85 percent of all breast cancers, it remains important to perform your monthly self-breast examination and have your annual [breast](#) examination by your health care provider.

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