

# North State Radiology

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## 3D MAMMOGRAPHY FREQUENTLY ASKED QUESTIONS

### What is a 3D mammography breast exam?

3D mammography is a revolutionary new screening and diagnostic tool designed for early breast cancer detection that can be done in conjunction with a traditional 2D digital mammogram.

During the 3D part of the exam, the X-ray arm sweeps in a slight arc over your breast, taking multiple breast images. Then, a computer produces a 3D image of your breast tissue in one millimeter slices, providing greater visibility for the radiologist to see breast detail in a way never before possible. They can scroll through images of your entire breast like pages of a book.

The additional 3D images make it possible for a radiologist to gain a better understanding of your breast tissue during screening(1) and the confidence to reduce the need for follow-up imaging.(2)

### Why is there a need for tomosynthesis breast exams? What are the benefits?

With conventional digital mammography, the radiologist is viewing all the complexities of your breast tissue in a one flat image. Sometimes breast tissue can overlap, giving the illusion of normal breast tissue looking like an abnormal area. By looking at the breast tissue in one millimeter slices, the radiologist can provide a more confident assessment.(1)

In this way, 3D mammography finds cancers missed with conventional 2D mammography.(3) It also means there is less chance your doctor will call you back later for a "second look," because now they can see breast tissue more clearly.

### What should I expect during the 3D mammography exam?

3D mammography complements standard 2D mammography and is performed at the same time with the same system. There is no additional compression required, and it only takes a few more seconds longer for each view.

### Is there more radiation dose?

Very low X-ray energy is used during the exam, just about the same amount as a traditional mammogram done on film.

### Who can have a 3D mammography exam?

It is approved for all women who would be undergoing a standard mammogram, in both the screening and diagnostic settings.

(1) Bernardi D, Ciatto S, Pellegrini M, et. al. Prospective study of breast tomosynthesis as a triage to assessment in screening. *Breast Cancer Res Treat.* 2012 Jan 22 [Epub ahead of print]. (2) The Hologic Selenia Dimensions clinical studies presented to the FDA as part of Hologic's PMA submission that compared Hologic's Selenia Dimensions combo-mode to Hologic 2D FFDM. (3) Skaane P, Gullien R, Eben EB, et. al. Reading time of FFDM and tomosynthesis in a population-based screening Program. *Radiological Society of North America annual meeting.* Chicago, IL, 2011