

Why we use ultrasound examination

Mammograms – benefits and limitations.

A mammogram is the best imaging test to check your breasts for cancer. A mammogram can reveal many early breast cancers well before they can be felt. However a mammogram cannot show all cancers, and does not even show all non-cancerous (benign) lesions.

Why don't mammograms show everything?

Many abnormalities can be partially or totally hidden by overlying normal breast tissue. We call this 'mammographic breast density'. The amount and thickness of normal breast tissue varies between women. Your breast density is not necessarily the same as your mother's or sister's. Your own type of breast tissue makes your breasts more or less dense on a mammogram, and may affect our ability to see an abnormality.

Does ultrasound help?

Ultrasound examination uses soundwaves (rather than X-rays) and can show abnormalities which are not evident on a mammogram. It can also give valuable additional information about findings already seen on a mammogram, or felt on a breast examination.

We recommend an ultrasound as well as a mammogram for all women with mammographically dense breast tissue. For these women, ultrasound has been shown to find more breast cancers than mammography alone.

For the same reason, we also recommend ultrasound for women at increased risk of developing breast cancer. Increased breast cancer risk occurs for many reasons, including a strong family history of breast cancer, a personal history of previous breast cancer and dense breast tissue.

If you are younger than 35 and have a breast problem, we use ultrasound as the first imaging test. It is also used as the first test if you are pregnant or breast-feeding.

Ultrasound is an excellent way to check breast tissue; it adds information to the clinical examination and the mammogram. However, it takes time and skill to do breast ultrasound properly, as only small areas of each breast are seen at a time.

More Information?

If you would like to know more about mammograms, ultrasound, breast density or breast cancer risks, please ask the clinician looking after you today, or refer to the websites overleaf.

For further information on:

Breast Ultrasound:

- The Royal Australian and New Zealand College of Radiologists:
www.insideradiology.com.au
- then use the search bar at the top right of the screen to search for “breast ultrasound”
- Radiological Society of North America
www.radiologyinfo.org
- then use the search bar at the top right of the screen to search for “breast”
- Berg WA, Zhang Z, Lehrer D, et al. Detection of Breast Cancer With Addition of Annual Screening Ultrasound or a Single Screening MRI to Mammography in Women With Elevated Breast Cancer Risk. JAMA. 2012;307(13):1394-1404.

Mammography :

- The Royal Australian and New Zealand College of Radiologists:
www.insideradiology.com.au
- then use the search bar at the top right of the screen to search for “mammogram”

Mammographic Density as a Risk Factor For Breast Cancer

- Boyd NF, Guo H, Martin LJ, et al. Mammographic Density and the Risk and Detection of Breast Cancer. N Engl J Med 2007; 356:227-36