

## Breast Cancer Screening

Women with low lifetime risk of breast cancer (<https://www.radiologyinfo.org/en/info/breast-cancer>) (<15%) who have no family history of breast cancer and who have not had breast cancer themselves should be screened every year, starting at 40 years of age, with mammography (<https://www.radiologyinfo.org/en/info/mammo>) or digital breast tomosynthesis (<https://www.radiologyinfo.org/en/info/tomosynthesis>) (DBT). DBT is better at finding cancer than mammography and has fewer callbacks for false positives, which are findings that might look like but are not cancer. Screening using ultrasound (<https://www.radiologyinfo.org/en/info/breastus>) may be appropriate for women who have dense breast tissue (<https://www.radiologyinfo.org/en/info/dense-breasts>) but is associated with more false-positive findings. Screening using MRI (<https://www.radiologyinfo.org/en/info/breastmr>) is not appropriate for patients with low risk of breast cancer.

Patients with intermediate lifetime risk (15%-20%) who have a personal history of breast cancer or who have been diagnosed with benign changes in their breast tissue should be screened annually using mammography or DBT. Additional screening using MRI may be appropriate for intermediate-risk patients who have a history of breast cancer or lobular carcinoma in situ (abnormal cell growth). Ultrasound may be appropriate for patients with dense breast tissue.

Patients with high lifetime risk (>20%) who have a BRCA gene mutation themselves or in their immediate family, who have a strong family history of breast cancer, or who had radiation treatment of their chest when they were 10 to 30 years of age should be screened annually using mammography or DBT combined with MRI. Ultrasound is recommended when the patient cannot tolerate MRI.

Mammography and DBT expose patients to radiation.

See the Breast Cancer Screening (<https://www.radiologyinfo.org/en/info/screening-breast>) page for more information.

— By Casey Quinlan and Dianna M.E. Bardo, MD. This information originally appeared in the *Journal of the American College of Radiology*.

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