

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*.

Disclaimer

This information is copied from the RadiologyInfo Web site (<http://www.radiologyinfo.org>) which is dedicated to providing the highest quality information. To ensure that, each section is reviewed by a physician with expertise in the area presented. All information contained in the Web site is further reviewed by an ACR (American College of Radiology) - RSNA (Radiological Society of North America) committee, comprising physicians with expertise in several radiologic areas.

However, it is not possible to assure that this Web site contains complete, up-to-date information on any particular subject. Therefore, ACR and RSNA make no representations or warranties about the suitability of this information for use for any particular purpose. All information is provided "as is" without express or implied warranty.

Please visit the RadiologyInfo Web site at <http://www.radiologyinfo.org> to view or download the latest information.

Note: Images may be shown for illustrative purposes. Do not attempt to draw conclusions or make diagnoses by comparing these images to other medical images, particularly your own. Only qualified physicians should interpret images; the radiologist is the physician expert trained in medical imaging.

Copyright

This material is copyrighted by either the Radiological Society of North America (RSNA), 820 Jorie Boulevard, Oak Brook, IL 60523-2251 or the American College of Radiology (ACR), 1891 Preston White Drive, Reston, VA 20191-4397. Commercial reproduction or multiple distribution by any traditional or electronically based reproduction/publication method is prohibited.

