

American Cancer Society recommendations for early breast cancer detection in women without breast symptoms

The importance of finding breast cancer early

The goal of screening tests for breast cancer is to find it before it causes symptoms (like a lump that can be felt). *Screening* refers to tests and exams used to find a disease in people who don't have any symptoms. *Early detection* means finding and diagnosing a disease earlier than might have happened if you'd waited for symptoms to start.

Breast cancers found during screening exams are more likely to be smaller and still confined to the breast. The size of a breast cancer and how far it has spread are some of the most important factors in predicting the *prognosis* (outlook) of a woman with this disease.

Most doctors feel that early detection tests for breast cancer help save thousands of lives each year, and that many more lives could be saved if even more women and their health care providers took advantage of these tests. Following the [American Cancer Society's guidelines for the early detection of breast cancer](#) improves the chances that breast cancer can be found early and treated successfully.

For women at average risk

These guidelines are for women at average risk for breast cancer. Women with a personal history of breast cancer, a family history of breast cancer, a genetic mutation known to increase risk of breast cancer (such as BRCA), and women who had radiation therapy to the chest before the age of 30 are at higher risk for breast cancer, not average-risk. (See below for guidelines for women at higher than average risk.)

Women ages 40 to 44 should have the choice to start annual breast cancer screening with mammograms if they wish to do so. The risks of screening as well as the potential benefits should be considered.

Women age 45 to 54 should get mammograms every year.

Women age 55 and older should switch to mammograms every 2 years, or have the choice to continue yearly screening.

Screening should continue as long as a woman is in good health and is expected to live 10 more years or longer.

All women should be familiar with the known benefits, limitations, and potential harms associated with breast cancer screening. They should also be familiar with how their breasts normally look and feel and report any changes to a health care provider right away.

Mammograms

Regular mammograms can often help find breast cancer at an early stage, when treatment is most likely to be successful. A mammogram can find breast changes that could be cancer years before physical symptoms develop. Results from many decades of research clearly show that women who have regular mammograms are more likely to have breast cancer found early, less likely to need aggressive treatment (like surgery to remove the entire breast [mastectomy] and chemotherapy), and more likely to be cured.

Mammograms are not perfect. They miss some cancers. And sometimes more tests will be needed to find out if something found on a mammogram is or is not cancer. There's also a small possibility of being diagnosed with a cancer that never would have caused any problems had it not been found during screening. It's important that women getting mammograms know what to expect and understand the benefits and limitations of screening.

Clinical breast exam and breast self-exam

Research does not show a clear benefit of physical breast exams done by either a health professional or by yourself for breast cancer screening. Due to this lack of evidence, regular clinical breast exam and breast self-exam are not recommended. Still, all women should be familiar with how their breasts normally look and feel and report any changes to a health care provider right away.

For women at higher than average risk

Women who are at high risk for breast cancer based on certain factors should get an MRI and a mammogram every year. This includes

women who:

Have a lifetime risk of breast cancer of about 20% to 25% or greater, according to risk assessment tools that are based mainly on family history (such as the Claus model – see below)

Have a known *BRCA1* or *BRCA2* gene mutation

Have a first-degree relative (parent, brother, sister, or child) with a *BRCA1* or *BRCA2* gene mutation, and have not had genetic testing themselves

Had radiation therapy to the chest when they were between the ages of 10 and 30 years

Have Li-Fraumeni syndrome, Cowden syndrome, or Bannayan-Riley-Ruvalcaba syndrome, or have first-degree relatives with one of these syndromes

The American Cancer Society recommends against MRI screening for women whose lifetime risk of breast cancer is less than 15%.

There's not enough evidence to make a recommendation for or against yearly MRI screening for women who have a moderately increased risk of breast cancer (a lifetime risk of 15% to 20% according to risk assessment tools that are based mainly on family history) or who may be at increased risk of breast cancer based on certain factors, such as:

Having a personal history of breast cancer, ductal carcinoma in situ (DCIS), lobular carcinoma in situ (LCIS), atypical ductal hyperplasia (ADH), or atypical lobular hyperplasia (ALH)

Having dense breasts (“extremely” or “heterogeneously” dense) as seen on a mammogram

If MRI is used, it should be in addition to, not instead of, a screening mammogram. This is because although an MRI is a more sensitive test (it's more likely to detect cancer than a mammogram), it may still miss some cancers that a mammogram would detect.

For most women at high risk, screening with MRI and mammograms should begin at age 30 years and continue for as long as a woman is in

good health. But because the evidence is limited about the best age at which to start screening, this decision should be based on shared decision-making between patients and their health care providers, taking into account personal circumstances and preferences.

Tools used to assess breast cancer risk

Several risk assessment tools, with names such as the Gail model, the Claus model, and the Tyrer-Cuzick model, are available to help health professionals estimate a woman's breast cancer risk. These tools give approximate, rather than precise, estimates of breast cancer risk based on different combinations of risk factors and different data sets.

Because the different tools use different factors to estimate risk, they may give different risk estimates for the same woman. For example, the Gail model bases its risk estimates on certain personal risk factors, like current age, age at first menstrual period and history of prior breast biopsies, along with any history of breast cancer in first-degree relatives. In contrast, the Claus model estimates risk based only on family history of breast cancer in both first and second-degree relatives. These 2 models could easily give different estimates for the same person.

Risk assessment tools (like the Gail model, for example) that are not based mainly on family history are not appropriate to use with the ACS guidelines to decide if a woman should have MRI screening. The use of any of the risk assessment tools and its results should be discussed by a woman with her health care provider.

More on MRI as a screening test

It's recommended that women who get a screening MRI do so at a facility that can do an MRI-guided breast biopsy at the same time if needed. Otherwise, the woman will have to have a second MRI done at another facility when she has the biopsy.

There's no evidence right now that MRI is an effective screening tool for women at average risk. While MRI is more sensitive than mammograms, it also has a higher false-positive rate. (This means it's more likely to find something that turns out not to be cancer.) This would lead to unneeded biopsies and other tests in many of the women screened, which can lead to a lot of worry and anxiety.

The American Cancer Society believes the use of mammograms and MRI

(in women at high risk), according to the recommendations outlined above, offers women the best chance to reduce their risk of dying from breast cancer. This approach is clearly better than any one exam or test alone.

See [Mammograms and Other Breast Imaging Tests](#) for more details on mammograms, breast MRI, breast ultrasound, and other tests that might be used to diagnose breast cancer or find it early.

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Resource: *Susan G. Komen SC Mountains to Midlands*, <http://www.komenscmm.org> and *American Cancer Society*, <http://www.cancer.org>