

# Breast MRI for Screening

Breast MRI is not recommended as a routine screening tool for all women. However, it is recommended for screening women who are at high risk for breast cancer, usually due to a strong family history and/or a mutation in genes such as *BRCA1* or *BRCA2*. If you are considered high-risk, you would have breast MRI in addition to your annual mammograms (X-rays of the breast).

Breast MRI is not a perfect tool. Although it is generally considered more sensitive for picking up breast cancer than mammography, it also can miss some cancers that would be detected by mammography. That is why breast MRI is recommended only in combination with other tests, such as mammogram or ultrasound.

## Who should have breast MRI for screening?

Yearly mammograms plus breast MRI screening are typically recommended for women who are at higher-than-average risk of developing breast cancer — in other words, at greater than the average 13% risk most women have over the course of an entire lifetime.

The American Cancer Society (ACS) recommends that all high-risk women — those with a greater than 20% lifetime risk of breast cancer — have a breast MRI and a mammogram every year. For most women, these combined screenings should start at age 30 and continue as long as the woman is in good health. According to ACS guidelines, high-risk women include those who:

- have a known *BRCA1* or *BRCA2* gene mutation
- have a first-degree relative (mother, father, brother, sister, or child) with a *BRCA1* or *BRCA2* gene mutation and have not had genetic testing themselves
- find out they have a lifetime risk of breast cancer of 20-25% or greater, according to risk assessment tools that are based mainly on family history
- had radiation therapy to the chest for another type of cancer, such as Hodgkin's disease, when they were between the ages of 10 and 30 years
- have a genetic disease such as Li-Fraumeni syndrome, Cowden syndrome, or Bannayan-Riley-Ruvalcaba syndrome, or have one of these syndromes in first-degree relatives

The American Cancer Society also recommends that women at moderately increased risk of breast cancer — those with a 15-20% lifetime risk — talk with their doctors about the possibility of adding breast MRI screening to their yearly mammogram. According to ACS guidelines, this includes women who:

- find out they have a lifetime risk of breast cancer of 15-20%, according to risk assessment tools based mainly on family history
- have a personal history of breast cancer, ductal carcinoma in situ (DCIS), lobular carcinoma in situ (LCIS), or abnormal breast cell changes such as atypical ductal hyperplasia or atypical lobular hyperplasia
- have extremely dense breasts or unevenly dense breasts when viewed by mammograms

If you think you're a candidate for breast MRI screening, talk to your doctor. You and your doctor may need to work with your health insurance plan to get the test covered. You may have to prove to your plan that you are indeed considered high-risk for breast cancer. You also will need to find a facility with dedicated breast MRI screening equipment.

### **Why breast MRI is not recommended for screening all women**

Breast MRI is not recommended as a screening tool for women who are at average risk of developing breast cancer. Yes, breast MRI has been found to be more sensitive in detecting cancers than mammograms, which does seem like an advantage. However, a major disadvantage is that breast MRI screening results in more false positives — in other words, the test finds something that initially looks suspicious but turns out not to be cancer. If breast MRI were adopted as a screening tool for everyone, many women would end up having unnecessary biopsies and other tests, not to mention the anxiety and distress. That is why current recommendations reserve breast MRI screening for high-risk women only.

MRI is also more expensive than mammography, and dedicated breast MRI screening equipment is not widely available.