

THE RISE OF EARLY ONSET BREAST CANCER **FOR PHYSICIANS**

Breast cancer is the most common type of cancer among women, excluding skin cancer, and the second leading cause of cancer death after lung cancer in the U.S. and Texas.¹ Approximately 1 in 8 women (13.1%) in the U.S. will be diagnosed with breast cancer in their lifetime, and 1 in 43 women (2.3%) will die from it.² Since 2012, incidence rates have risen by about 1% each year, with a greater increase among women younger than 50 (1.4% annually) compared to those 50 and older (0.7%).² Although breast cancer accounts for only about 5% of cancer cases in women under 40, it continues to be the leading cause of cancer related deaths in this age group.³ Studies show that younger women are 39% more likely to die from breast cancer compared to older women.⁴

In Texas, breast cancer is the most common cancer among women, and those diagnosed between ages 20 and 49 are more likely to be diagnosed at advanced stages.⁵ Researchers continue to investigate why cases are rising in younger women, but possible factors include changes in childbearing and breastfeeding patterns, increased alcohol use, excess body weight, genetics, and environmental exposure.⁶

Common Signs and Symptoms ^{7,8}

- A new lump in the breast or armpit
- A change in breast shape or size
- Swelling of all or part of a breast
- Breast or nipple pain
- Nipple changes or discharge
- Skin changes (redness, inflammation, or dimpling)
- Swollen lymph nodes under the arm or near the collar bone

Early symptoms may not be easy to discern. The most common sign is a new lump in the breast or armpit. While a painless, firm, irregular mass is common with cancer, lumps can also be soft, tender, or painful. Although breast cancer is more often associated with older women, it is important not to dismiss symptoms in younger patients, including

those who are pregnant or breastfeeding. Diagnostic delays in women under 40 are well documented, often tied to low clinical suspicion, and associated with later-stage disease and poorer outcomes⁹

Higher Risk Patients ^{10,2}

Multiple factors increase a person's risk for breast cancer. These include: 1) family history of breast cancer in a first-degree relative; 2) family history of ovarian, fallopian tube, or primary peritoneal cancer; 3) hereditary cancer testing showing pathogenic variant in a gene (i.e., BRCA1/ BRCA2, TP53, PTEN, ATM, PALB2, STK11); 4) reproductive history of longer lifetime exposure to estrogen (early menstruation, late menopause, nulliparity, long interval between menarche, and age at first live birth); 5) personal history of breast cancer or high-risk lesions (i.e., ADH or LCIS); 6) chest radiation before age 30; 7) heterogeneously dense or extremely dense breasts on mammogram; 8) obesity (BMI \geq 30); 9) physical inactivity; 10) alcohol use.

Non-Hispanic white women are slightly more likely to develop breast cancer than Black, Hispanic, and Asian women. The incidence of breast cancer before age 40 is higher in non-Hispanic Black women compared to non-Hispanic white women. Non-Hispanic Black women face higher mortality from breast cancer, with higher prevalence of triple-negative breast cancer, a more aggressive cancer with greater risk of metastasis and recurrence.

Breast cancer risk assessment tools help physicians estimate a woman's 5-year risk or lifetime risk of developing breast cancer. A woman with a calculated 5-year risk of 1.7% or higher or a lifetime risk of 20% or higher is considered "high risk." Breast cancer risk estimates can be used to personalize a woman's breast cancer screening and prevention recommendations. Encourage patients to discuss and document their risk to support appropriate screening and prevention strategies.

See reverse for more

Preventing Breast Cancer^{2,11}

Physicians play a central role in providing prevention counseling and ensuring timely referral when elevated risk is identified. Although there are many risk factors beyond a patient's control, studies showed that roughly 30% of breast cancer cases are linked to modifiable factors such as excess weight, physical inactivity, and alcohol use. The American Cancer Society recommends that women at higher-than-average risk consider genetic counseling and testing, clinical breast exams every 6–12 months, risk-reducing medications, and preventive surgery as strategies to lower risk and support earlier detection.

Available Screening¹¹

The American College of Radiology (ACR) recommends that women at average risk begin annual breast cancer screening at age 40. Women at higher risk may need to start screening earlier and/or undergo more intensive testing. See the table below for information about recommended screening guidelines for high-risk women. For most high-risk women, breast MRI is recommended as a supplemental test in addition to mammography. ACR also advises that all women should have a breast cancer risk assessment by age 25 to identify those who may benefit from intensified screening.

BREAST CANCER SCREENING GUIDELINE FOR HIGH-RISK WOMEN

Population at Risk	ACR Screening Recommendations
Genetic mutation carriers/ untested first-degree relative	<ul style="list-style-type: none"> Annual MRI starting age 25-30 Annual 2D mammogram with or without 3D starting at age 30 <ul style="list-style-type: none"> Age 40 if also receiving annual MRI
Calculated lifetime risk of 20% or more	<ul style="list-style-type: none"> Annual 2D mammogram with or without 3D starting at age 30 Annual MRI starting at age 30
History of chest/abdominal radiation treatment at a young age	<ul style="list-style-type: none"> Annual 2D mammogram with or without 3D starting at age 25 Annual MRI starting at age 25 or 8 years after last treatment Consider abdominal radiation therapy that overlaps breast in risk
Personal history of breast cancer before age 40	<ul style="list-style-type: none"> Annual 2D mammogram with or without 3D starting at age 30 Annual MRI if patient has dense breast or history of diagnoses before 50 Consider MRI
Dense breast tissue	<ul style="list-style-type: none"> Annual 2D mammogram with or without 3D starting at age 30 Annual MRI starting at age 40 or earlier if other risks are present <ul style="list-style-type: none"> Consider contrast-enhanced mammography or ultrasound as an alternative to MRI (age 40 or earlier if other risk factors are present)
All women	<ul style="list-style-type: none"> Risk assessment by age 25

1. <https://www.cancer.org/cancer/types/breast-cancer/about/how-common-is-breast-cancer.html>
 2. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/breast-cancer-facts-and-figures/2024/breast-cancer-facts-and-figures-2024.pdf>
 3. <https://www.sciencedirect.com/science/article/pii/S2059702924015072?via%3Dihub>
 4. <https://pubmed.ncbi.nlm.nih.gov/19317994/>
 5. <https://www.dshs.texas.gov/sites/default/files/tcr/Statistics/2024-Female-Breast-Cancer-Data-Brief.pdf>
 6. <https://www.bcrf.org/about-breast-cancer/breast-cancer-young-women/>
 7. <https://www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/breast-cancer-signs-and-symptoms.html>

8. <https://www.bcrf.org/about-breast-cancer/signs-of-breast-cancer/>
 9. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10826418/pdf/main.pdf>
 10. <https://www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/american-cancer-society-recommendations-for-the-early-detection-of-breast-cancer.html>
 11. [https://www.jacr.org/article/S1546-1440\(21\)00383-5/fulltext?_ga=2.29208892.1432425254.1682971698-2035821856.1636737310&_gl=1*_nyc9hs*_gcl_au*_NjgyNTk0MDM4LjE3NTczNTcyNDY*_ga*_MjA5NDU5OTI2MCM4xNzU3MzU3MjQ2*_ga_K9XZBF7MXP*_czE3NTczNjQxMzkbzlkzEkdDE3NTczNjU3NzMkajM1JGwwwJGgw](https://www.jacr.org/article/S1546-1440(21)00383-5/fulltext?_ga=2.29208892.1432425254.1682971698-2035821856.1636737310&_gl=1*_nyc9hs*_gcl_au*_NjgyNTk0MDM4LjE3NTczNTcyNDY*_ga*_MjA5NDU5OTI2MCM4xNzU3MzU3MjQ2*_ga_K9XZBF7MXP*_czE3NTczNjQxMzkbzlkzEkdDE3NTczNjU3NzMkajM1JGwwwJGgw)

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