

Breast Cancer Awareness



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October: Breast Cancer Awareness Month

- October is internationally celebrated as *Breast Cancer Awareness Month* allowing the issue to be highlighted as a top health priority



Approximately

**30% of all new
cancer diagnoses**

in women will be breast cancer.

Statistics

- In 2024, an estimated 310,720 new cases of invasive breast cancer will be diagnosed in women in the US
- There are currently over 4 million breast cancer survivors in the US
- An estimated 42,250 US women will die from breast cancer in 2024
- On average, every 2 minutes a woman is diagnosed with breast cancer in the US
- Among cancers affecting women, 25% of cases are breast cancer
- Breast cancer is the main cause of death among female cancer patients worldwide



1 in 8

women

in the United States will develop breast cancer in her lifetime.





66% of breast cancer cases

are diagnosed at a localized stage, for which

the 5-year survival rate is 99%.



Statistics

- If diagnosed and treated early, one third of these deaths can potentially be prevented, meaning that 400,000 women could be saved each year
- Women who get their yearly scheduled mammograms have a survival rate of 83-87%, while those who don't get screened have a survival rate of 59-78%
- Regular mammograms can reduce breast cancer mortality up to 72%
- Survival rates increase significantly when breast cancer is detected at an early stage (Stages 0-II)
- Approximately 15% of women diagnosed have a family history of breast cancer

Breast Cancer Pathophysiology

- A malignant (cancerous) tumor that starts from cells of the breast
- Cells in the body normally divide at a steady and even pace, and the body is continuously forming new cells to take the place of old and injured cells
- Sometimes, when cells divide and multiply rapidly, they form a lump also called a tumor
- Nearly 80% of findings on a mammogram are not cancer and instead are usually benign tumors, a cyst or some other non-cancerous condition
- A tumor is cancerous if and when it starts invading nearby tissues and organs and damages them



Stages of Breast Cancer

- A stage is generally expressed as a number on a scale of 0-4
- Stage 0 describing non-invasive cancers that remain within their original location and stage 4 describing invasive cancers that have spread outside the breast to other parts of the body

Possible Symptoms of Breast Cancer

- A new area of thickening or a lump in the breast
- A lump in the arm pit area
- Nipple distortion
- Bloody nipple discharge
- Skin retraction or dimpling
- Fixation of skin to an underlying lump
- Skin redness
- Skin thickening, especially around the nipple area
- Feeling of warmth over an area of skin which is already thickened and red
- Skin ulcer or blister that does not heal
- Pain in the breast that travels to the arm pit and along the arm and neck

Any of these changes should promote immediate attention to your provider!



Risk Factors: Controllable vs Uncontrollable

- A risk factor is something that increases a person's chance of developing a disease
- We do not know what causes breast cancer, but we do know that certain things can make an individual more likely to acquire it
- Your age, genetic factors, personal health history and diet all play a role
 - Some you can control and others you cannot

Uncontrollable Risk Factors

- Genetics (BRCA 1 and BRCA 2)
 - Increased risk of breast cancer with those who have a mutation in BRCA 1 or BRCA 2 genes
- Dense breasts
 - If your breasts have more connective tissue than fatty it can be hard to see tumors on a mammogram, recommendation for ultrasound as well
- Menstrual history
 - Increased risk with those whose period started prior to age 12 and with those whose periods don't stop until after age 55
- Family history
 - If a first-degree female relative (mother, sister, or daughter) had breast cancer, you're two times more likely to get the disease, recommendation for mammogram 10 years prior to the age of onset of relative
- Age
 - Increased prevalence in women over 50 years old

Controllable Risk Factors

Breast cancer can be preventable up to 40% by lifestyle changes!

- Physical activity
 - Recommendation to exercise 30 minutes a day for 5 days per week
- Weight and diet
 - Increased risk found with those that have an elevated BMI over menopause as well as those that eat a diet heavy in processed foods
- Reproductive history
 - Decreased risk with those that have had a live birth and have breastfed
- Alcohol and smoking
 - Increased risk found with those that regularly drink more than one drink per day
- Adequate sleep
 - Minimum 8 hours of sleep is essential
- Relieve the effect of stress and depression

Genetic Testing: BRCA 1 and BRCA 2

- Everyone has BRCA 1 and BRCA 2 genes
 - But some are born with an error or mutation in one of these genes
- Those with a gene mutation are at a heightened risk for certain cancers including breast, ovarian, prostate and pancreatic
- These gene mutations can be passed on to children by either men or women
- Lifetime breast cancer risk with a BRCA mutation is up to 75%

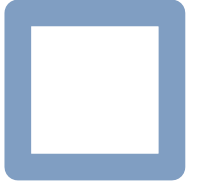
GENES2ME

BRCA
Enhance your
chances of finding
Cancer early



Who Should Consider Genetic Testing

- Consider genetic risk evaluation if you or a family member has had:
 - Breast cancer at age 65 or younger
 - Ovarian or fallopian tube cancer at any age
 - More than one breast cancer diagnosis (including male)
 - Pancreatic cancer
 - Metastatic prostate cancer
 - Anyone of Ashkenazi Jewish ancestry
 - A known mutation in a cancer risk gene
 - Breast, ovarian, pancreatic or high grade prostate cancer diagnosed in multiple individualized on the same side of the family



“The best protection is early detection.”

Guidelines for those at normal risk

Preventive Measure	25-39 years	40 years and above
Self-breast exam	Monthly	Monthly
Clinical breast exam	Yearly	Yearly
Mammogram	Not recommend	Yearly

Self-breast Exam

- Early detection tool that uses both physical and visual examinations of the breasts to check for signs and symptoms of breast cancer
- The purpose is to become familiar with the way your breasts normally look and feel which will help you identify any changes or abnormalities in your breasts, such as a new lump or skin changes
- Any changes in your breasts discovered during a breast self-exam should be reported to your healthcare provider right away

Self-breast Exam

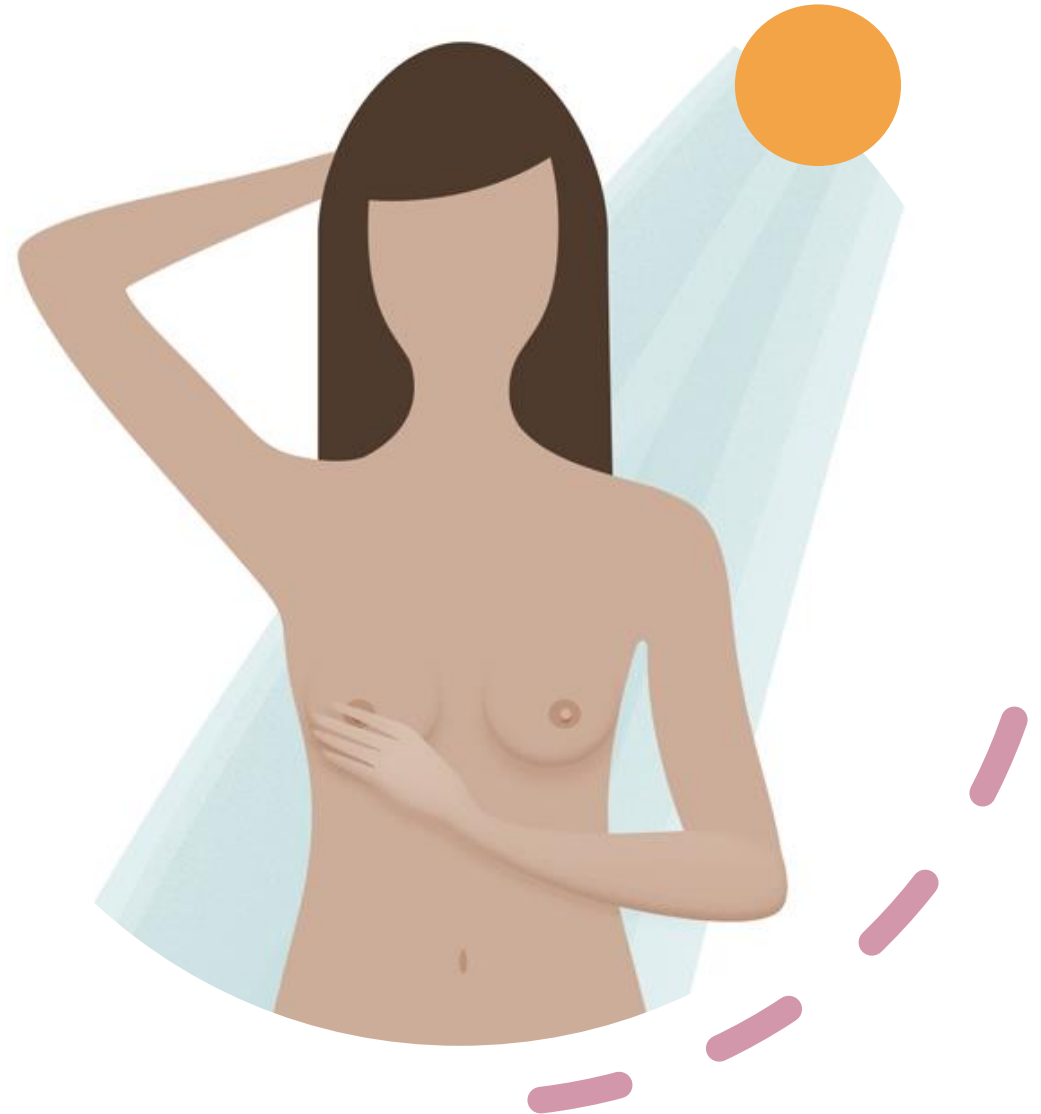
- For women still menstruating, a breast self-exam should be performed a few days after her period ends
- For those who are post-menopausal, a breast self-exam should be performed on the same day of each month, such as the 1st or 15th day of the month



How Should a Self-breast Exam be Performed

1) In the shower

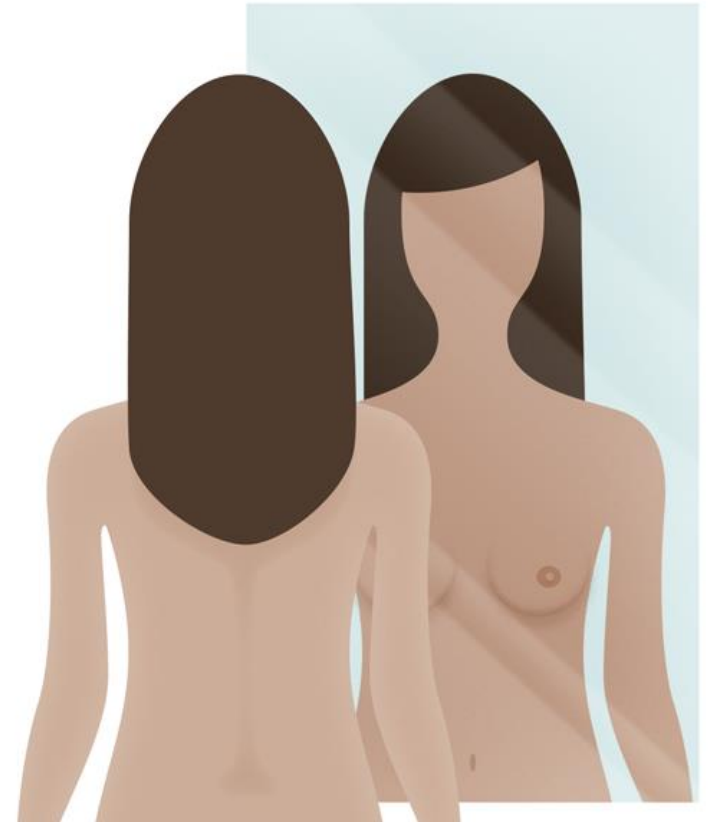
- With the pads/flats of your 3 middle fingers, check the entire breast and armpit area, pressing down with light, medium, and firm pressure. Check both breasts each month, feeling for any new lumps, thickenings, hardened knots, or any other breast changes.



How Should a Self-breast Exam be Performed

2) In front of a mirror

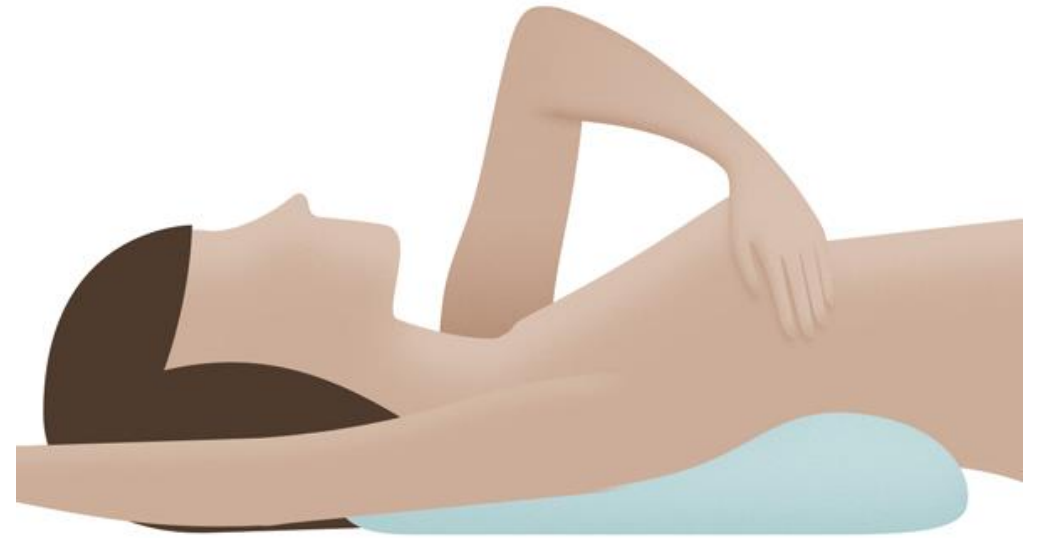
- With your arms at your sides, visually inspect your breasts, looking for any changes in the contour or shape of the breasts, any dimpling, swelling, or other skin irregularities on or around the breasts, or any changes in the nipples.
- Note that the left and right breasts will not exactly match – few women’s breasts are perfectly symmetrical.



How Should a Self-breast Exam be Performed

3) Lying Down

- Place a pillow under your right shoulder and put your right arm behind your head. Using your left hand, move the pads of your 3 middle fingers around your right breast, covering the entire breast area and armpit. Use light, medium, and firm pressure to feel for any new lumps, thickenings, hardened knots, or any other breast changes. Also squeeze the nipple to check for discharge. Repeat these steps for your left breast.



Thank you to
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References

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