

What You Should Know About Breast Self-Examination

Breast cancer is the second most common type of cancer and the second leading cause of cancer death in American women. It is expected that in 2002, 251,300 new cases of breast cancer will be diagnosed and 39,600 patients will die. A new case will be diagnosed every 2 minutes, and a woman will die from breast cancer every 13 minutes. As grim as this sounds, the odds of survival have improved greatly since 1990 due to high-tech advances in detection and treatment, and also to the growing number of women who are performing breast self-examination (BSE) faithfully every month.

How does breast cancer develop?

Cancer can develop in various parts of the breast. Each breast has 15 to 20 sections (lobes) surrounding the nipple, like spokes on a wheel. These lobes contain smaller lobules that each end in tiny, milk-producing bulbs. The milk is carried to the nipple by small tubes called ducts. The spaces between the lobes and ducts are filled by fat. Around the nipple is a darker area of skin called the areola, which contains glands to lubricate the nipple during breastfeeding. The breast also contains vessels that carry lymph fluid,

which circulates throughout the body. These lymph vessels lead to small, bean-shaped glands called lymph nodes; sets of lymph nodes are located in the armpits, above the collarbone, and in the chest. Breast development depends on the female hormones estrogen, which elongates the ducts and causes them to form branches, and progesterone, which stimulates the lobules to prepare for nursing. Breast cancer is due to uncontrolled growth of abnormal cells in a particular area of the breast, including the ducts, the lobules, and the nonglandular “filler” tissue.

Who is at risk for breast cancer?

The overall risk of any American woman developing breast cancer during her lifetime is 1 in 8 or 11%, with 3% to 4% dying of the disease. Factors that can increase your risk of breast cancer include:

- Personal or family history of breast cancer
- Presence of the “breast cancer genes” *BRCA1* or *BRCA2* (more common in Jewish women of central and eastern European ancestry)
- Early menstruation and/or late menopause

- Never having children or having your first baby after age 30
- Excess weight, especially after menopause.
- Alcohol use equal to three or more drinks per day
- Cigarette smoking.

However, about 70% of women who develop breast cancer don’t have any of these risk factors, and only 5% to 10% of breast cancers occur in women with a genetic predisposition. That’s why it’s so important for all women to perform BSE on a regular basis.

What are the symptoms of breast cancer?

When you perform BSE every month, you will be looking for symptoms of breast cancer such as:

- A painless lump in the breast or armpit
- Unexplained pain in the breast with no lump
- Unusual thickening of the breast skin
- Swelling, redness, or distortion of the breast skin
- Changes in the skin of the nipples or breasts, especially puckering or dimpling
- A sore or ulcer on the breast skin that does not heal
- Sticky or bloody nipple discharge
- Scaling, crusting, or erosion of the nipple
- Inversion or retraction of the nipple
- An increase in the size of one breast
- One breast suddenly lower/higher than the other.

The key is to remember that you’re looking for changes. Many women naturally have breasts that are different sizes or at different heights, or a

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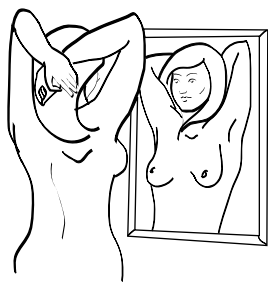
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tendency toward developing certain types of harmless lumps. During BSE, you're looking for new breast features, changes that persist after your menstrual cycle, or any change that worries you.

How do I perform BSE?

It takes only about 15 minutes to perform a thorough BSE. Proper technique is essential to ensure that you examine the entire breast. It's a good idea to ask a doctor or nurse to instruct you, and to have illustrations to guide you.

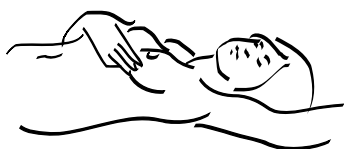
1. In front of the mirror. Standing undressed in front of a mirror, look at your breasts with your arms at your sides; check each breast for anything unusual, such as puckering, dimpling, or scaliness. Remember to look beneath each breast, using your



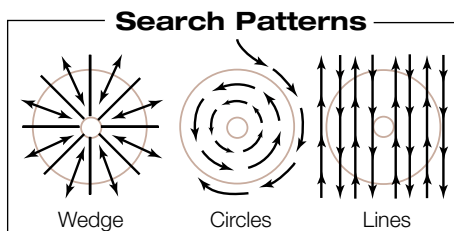
hands to lift the breasts if necessary. Clasp your hands behind your head and press them forward. You should feel your chest muscles tightening,

allowing you to see the contours of your breasts. Turn from side to side so you can see the outer surfaces. Next, inspect your breasts while pressing your hands firmly on your hips and bending forward slightly, pulling your shoulders and elbows forward as well. Standing erect again, raise one arm, and use the pads of the three middle fingers of the opposite hand to feel the breast. You can use lotion or powder to help your fingers glide easily over the skin, or you can do the raised-arm part of the exam in the shower with soapy skin.

2. Lying down. Lie down with a pillow under your left shoulder, and put your left hand behind your head. Feel your left



breast with the pads of the three middle fingers on your right hand. Start at the outer edge and work inward toward the nipple. Then squeeze your nipple gently to look for discharge. Do the same thing to your right breast with a pillow under your right shoulder. Be sure to include the area



up to your collarbone and out to your armpit.

Using a "search pattern" can help you perform BSE more thoroughly. To use the "line" technique, start under the arm and move your fingers downward slowly until they are below the breast. Then move your fingers slightly toward the middle, and slowly move back up. Continue going up and down until you cover the whole breast. To use the "wedge" pattern, start at the outer edge of the breast, and move you fingers toward the nipple and back to the edge. Check the entire breast by covering one small wedge at a time. You can also use a "circle" pattern by beginning at the outer edge of your breast and moving your fingers slowly around the whole breast in a circle. Keep feeling the breast in smaller circles, gradually working toward the nipple. Whichever pattern you prefer, remember to apply it up to the collarbone and out to the armpit.

When should I perform BSE?

You should perform BSE every month beginning at age 20; this will make it easier for you to distinguish changes throughout life. Because breast tissue changes in response to fluctuations in estrogen and progesterone, you should

schedule BSE 3 to 5 days after your menstrual period. If you don't have periods or if they're unpredictable, check your breasts on the same day of every month, perhaps on the first, fifteenth, or another day that's easy to remember.

What if I find a lump or other abnormality when I perform BSE?

If you find a new lump or other change, make an appointment with your doctor immediately. More than 80% of breast lumps found during BSE are not cancerous, but speedy diagnosis is essential. The doctor will probably take a detailed medical history and perform a thorough manual breast exam. If there is nipple discharge, a sample will be inspected for cancer cells, and a biopsy may be obtained for tissue sampling. Breast mammography and/or ultrasonography may be ordered. Most breast lumps are due to noncancerous (benign) conditions that either need no therapy or can be treated easily. These disorders rarely increase your risk of breast cancer.

Is BSE really an effective way to detect cancer?

Yes. In fact, women who perform regular BSE find 90% of all breast lumps. Good technique is crucial: research shows that women who perform BSE correctly (inspecting the breasts visually and palpating with the pads of their middle three fingers) are less likely to die of breast cancer or have metastasis (cancer spread) to other parts of the body. Furthermore, women who report performing BSE thoroughly are about 35% less likely to develop advanced breast cancer.

There is nothing you can do that will absolutely prevent breast cancer. However, monthly BSE and annual mammography and check-ups by your doctor can both lower your risk and promote early detection. Combining these measures with a healthy diet and regular exercise will also reduce your risk, and increase your peace of mind.