

# Breast Cancer Screening

1 in 8 American women will develop invasive breast cancer during their lifetime

**D**uring 2018, it has been estimated that there will be 266,120 new cases of invasive breast cancer, as well as 63,960 new cases of in situ (non-invasive) breast cancer.

Breast cancer is not limited to women – there is expected to be 2,550 new cases of invasive breast cancer in men in 2018.

## What is Breast Cancer Screening?

According to the Centers for Disease Control and Prevention, breast cancer screening is “...checking a woman’s breasts for cancer before there are signs or symptoms of the disease.”

It is important to note that breast cancer screening *does not prevent cancer from occurring*. However, it can help detect breast cancer in its early stages; this can make it easier to treat.

What does breast cancer screening entail? Let’s take a closer look.

## Screening Recommendations

The United States Preventive Services Task Force (USPSTF) is a group of medical professionals (specifically, doctors and disease experts) who review research and determine the best way to prevent diseases. They outline specific recommendations for health care practitioners to guide practice so that disease can be prevented or detected early.

The USPSTF has outlined the following recommendations regarding breast cancer screening:

- Women who are ages 50 to 74 with an average risk of breast cancer should have a mammogram every two years.
- Women who are ages 40 to 49 should discuss with their health care practitioner when they should start receiving mammograms and how often.
- Pros and cons should be discussed with providers if mammograms are begun before the age of 50.

Breast self-exam (BSE) is a controversial topic that may be recommended by some physicians. In the past, BSE was recommended monthly as a means to screen for breast cancer. However, several studies have indicated that BSE does not improve breast cancer survival and led to false positive results. However, many highly regarded cancer centers, such as Memorial Sloan Kettering

Cancer Center, still recommend BSE. The bottom line – if you feel any lump that is abnormal, you should discuss it with your physician.

## Tools for Cancer Screening

There are a variety of tools that health care providers can use to screen for cancer.

**Mammography** is undoubtedly the gold standard for breast cancer screening. A mammogram uses low-dose x-rays to evaluate the breast for the presence of abnormal cells. It involves standing in front of an x-ray machine while the breast is placed between two plates; the plates flatten the breasts so that a clear picture can be obtained of the tissue.

**Breast ultrasounds** use sound waves to obtain pictures of the breast tissue. A probe is placed on the breast; this probe sends high-frequency sound waves into the breast. These sound waves bounce off the tissue, returning to the machine as an echo wave. The echo waves are converted to the pictures that we can visualize. A breast ultrasound is typically used if an abnormality is found on a mammogram or on a clinical breast exam.

**Breast tomosynthesis** (3-D mammography) is especially useful for women with dense breasts. This type of mammography allows for visualization of the breast from many different angles, allowing for three-dimensional picture.

## Contrast-enhanced digital mammography

(**CEDM**) utilizes mammography with contrast. Tumors typically absorb contrast readily, allowing for a doctor to visualize a tumor readily.

**Breast MRI** is often recommended in conjunction with MRI for women who are at high risk of breast cancer. MRI uses radio waves and a magnet linked to a computer in order to create a picture of the breast.

**Clinical breast exam** should be done at routine intervals by a trained healthcare professional. This involves examination and palpation of the breasts, armpits and the collarbone to check for signs of breast cancer.

## The Bottom Line...

Don’t hesitate to make that appointment for a mammogram. It can be frightening, but early diagnosis can improve the treatment options that are available. ■

## Resources

BreastCancer.org (2018, October 16). U.S. breast cancer statistics. Retrieved from [https://www.breastcancer.org/symptoms/understand\\_bc/statistics?gclid=CjwKCAjwx7DeBRBJEiwA9MeX\\_CUrdgJXpPJOtQAvG4m6EUIUffcsWxf2FoVK-ACUTj2dbBu9wiMFxoCJ\\_IQAvD\\_BwE](https://www.breastcancer.org/symptoms/understand_bc/statistics?gclid=CjwKCAjwx7DeBRBJEiwA9MeX_CUrdgJXpPJOtQAvG4m6EUIUffcsWxf2FoVK-ACUTj2dbBu9wiMFxoCJ_IQAvD_BwE)

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