

THE BREAST HEALTH

Guide



TIPS, FACTS, AND
COMPREHENSIVE INFORMATION
YOU SHOULD KNOW



NATIONAL
BREAST
CANCER
FOUNDATION, INC.®

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Breast Health Basics

Healthy Habits

Leading a healthy lifestyle is recommended to protect your overall health and may help reduce your risk for certain cancers.

Here are a few tips to follow:



- Eat five or more servings of fruits and vegetables each day.
- Get regular physical activity.
- Maintain a healthy weight.
- Limit alcohol intake to no more than one drink per day.
- Do not smoke. Or, quit smoking.

Want to learn more about healthy living? Subscribe to our weekly healthy living tips that will be delivered to your email inbox.

Assessing Your Personal Risk

A risk factor is a characteristic that increases the likelihood of developing cancer.

Below are just a few breast cancer risk factors:

- I am a woman aged 40 or above:
Yes No
- I have been previously diagnosed with breast cancer or ovarian cancer:
Yes No
- My mother, sister, and/or daughter has had breast cancer:
Yes No
- My mother, sister, and/or daughter has tested positive for a gene mutation that is associated with higher risk of breast cancer (i.e. BRCA1 or BRCA2):
Yes No
- I have tested positive for a gene mutation that is associated with higher risk of breast cancer (i.e. BRCA1 or BRCA2):
Yes No

If you answered “yes” to any of these questions, or if you’d like to view a more comprehensive list of risk factors, please explore the Breast Cancer Risk Assessment Tool from National Cancer Institute. Click here to go to that assessment: [Cancer.gov/bcrisktool](https://www.cancer.gov/bcrisktool)

Talk to your doctor about any concerns you have. If you answered “yes” to any of the above questions, you may specifically want to talk to your doctor about genetic counseling or if genetic testing is right for you.

Signs & Symptoms

BREAST CANCER SYMPTOM CHECKLIST

Many of the symptoms of breast cancer are invisible and not noticeable without a professional screening like a mammogram or ultrasound. There are other symptoms, however, that can be felt or observed when you are being proactive about your breast health. This guide will help you know what to look for and help you take note of the important information to share with your healthcare provider to guide him or her in their professional evaluation of your breast health and required screenings.

Complete this checklist if you have noticed any changes in your breast. This will help you discuss the changes with your healthcare provider.

I have noticed these breast changes:

- A lump or thickening in or near the breast or in the underarm area
Left Breast Right Breast Date first noticed:
- A change in the size or shape of the breast
Left Breast Right Breast Date first noticed:
- Dimpling or puckering in the skin of the breast
Left Breast Right Breast Date first noticed:
- A nipple turned inward into the breast
Left Breast Right Breast Date first noticed:
- Discharge (fluid) from the nipple
Left Breast Right Breast Date first noticed:
- Scaly, red, or swollen skin on the breast, nipple, or areola (the dark area of skin at the center of the breast)
Left Breast Right Breast Date first noticed:
- Other changes:

If you have noticed any changes in your breasts, use this worksheet to describe what has happened. This will help you discuss these changes with your healthcare provider:

These are the breast changes or problems I have noticed:

This is what the breast change looks or feels like: (Is the lump hard or soft? Does your breast feel tender or swollen? How big is the lump? What color is the nipple discharge?)

This is where the breast change is: (What part of the breast feels different? Do both breasts feel different or only one?)

This is when I first noticed the breast change:

Since then, this is the change I've noticed: (Has it stayed the same or gotten worse?)

Document your personal medical history.

I've had the following breast problems in the past:

These are the breast exams and tests that I have had:

My last mammogram was on this date:

My last menstrual period began on this date:

Right now, I:

Have breast implants

Am pregnant

Am breastfeeding

I've had the following type(s) of cancer before:

Early Detection

Early detection means finding the cancer before it spreads. Breast cancer cannot be prevented, but early detection provides the greatest possibility of successful treatment. By following these three steps, you will help increase your chance of detecting breast cancer early.

1. BREAST SELF-AWARENESS



Breast self-awareness can help you become familiar with how your breasts normally look and feel. Knowing this will help you identify any changes in your breasts that should be reported to your health care professional promptly. If you find a lump, schedule an appointment with your doctor, but don't panic – most lumps are not cancer.

Changes to look for include:

- A lump or thickening in or near the breast or in the underarm area
- A change in the size or shape of the breast
- Dimpling or puckering in the skin of the breast
- A nipple turned inward into the breast
- Discharge (fluid) from the nipple
- Scaly, red, or swollen skin on the breast, nipple, or areola (the dark area of skin at the center of the breast)

You should see your healthcare provider about any of these symptoms. Often these symptoms are not due to cancer, but if you notice any changes in your body, tell your healthcare provider immediately so that the problems can be diagnosed and treated.

2. WELL-WOMAN EXAM



It is recommended that women visit their family physician or gynecologist each year for a Well-Woman Exam. In addition to a routine pelvic exam and pap smear, the doctor may perform a brief breast exam to check for abnormalities. The Well-Woman Exam is a great opportunity for you to discuss with your healthcare provider any questions or concerns you have regarding your breast health. For example, your doctor may help you determine the most appropriate personalized frequency for your early detection steps.

3. MAMMOGRAM



In its early stages, breast cancer doesn't usually cause symptoms. NBCF recommends that women ages 40 and older get a mammogram every year. A mammogram is an X-ray of the breast. It is a safe way to detect cancerous tumors and other abnormal breast conditions, and women who have screening mammograms have a lower chance of dying from breast cancer than women who do not have screening mammograms. Mammograms can detect cancer or other problems before a lump becomes large enough to be detected by touch. They provide an effective way to find breast cancer in its early stages when treatment is usually the most successful. Mammograms are considered safe, quick, and relatively painless.

SCREENING SCHEDULE

Below you will find some general guidelines for breast cancer early detection methods. You should always consult with your doctor to create a screening schedule that is most appropriate for you.

EXAM	AGE	FREQUENCY
Breast Self-Awareness	18+	Regularly/Monthly
Well-Woman Exam	21+	Yearly
Mammogram	40+	Yearly

Breast Cancer Basics

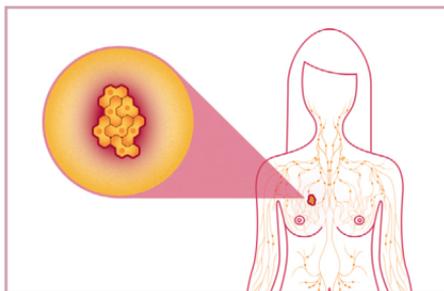
What Is Cancer?

UNDERSTANDING BREAST CANCER

Cancer is a broad term for a class of diseases characterized by abnormal cells that grow and invade healthy cells in the body. Breast cancer starts in the cells of the breast as a group of cancer cells that can then invade surrounding tissues or spread (metastasize) to other areas of the body.

WHAT CAUSES CANCER TO DEVELOP?

Cancer begins in the cells which are the basic building blocks that make up tissue. Tissue is found in the breast and other parts of the body. Sometimes, the process of cell growth goes wrong and new cells form when the body doesn't need them and old or damaged cells do not die as they should. When this occurs, a build up of cells often forms a mass of tissue called a lump, growth, or tumor.



Breast cancer occurs when malignant (cancerous) tumors develop in the breast. These cells can spread by breaking away from the original tumor and entering blood vessels or lymph vessels, which branch into tissues throughout the body. When cancer cells travel to other parts of the body and begin damaging other tissues and organs, the process is called metastasis.

FACTS ABOUT BREAST CANCER IN THE UNITED STATES

- 1 in 8 women will be diagnosed with breast cancer in her lifetime. ^[1]
- Breast cancer is the most common cancer in American women, except for skin cancers. It is estimated that in this year, approximately 30% of all new women cancer diagnoses will be breast cancer. ^[2]
- For women in the U.S., breast cancer deaths are higher than those for any another cancer, besides lung cancer. ^[2]
- In 2021, an estimated 281,550 new cases of invasive breast cancer will be diagnosed in women in the U.S. as well as 49,290 new cases of non-invasive (in situ) breast cancer. ^[1]
- This year, an estimated 43,600 women will die from breast cancer in the U.S. ^[1]
- In 2021, an estimated 2,650 men will be diagnosed with breast cancer this year in the U.S. and 530 men will die from breast cancer. ^[3]
- There are over 3.8 million breast cancer survivors in the United States. ^[1]

Sources:

[1] American Cancer Society

[2] breastcancer.org

[3] cancer.net

What Are Tumors?

A tumor is a mass of abnormal tissue. There are two types of breast cancer tumors: those that are non-cancerous, or 'benign', and those that are cancerous, which are 'malignant'.

TYPES OF TUMORS:

Benign Tumors

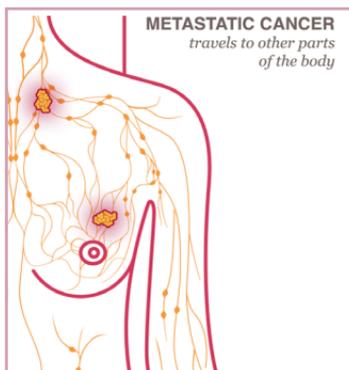
When a tumor is diagnosed as benign, doctors will usually leave it alone rather than remove it. Even though these tumors are not generally aggressive toward surrounding tissue, occasionally they may continue to grow, pressing on organs and causing pain or other problems. In these situations, the tumor is removed, allowing pain or complications to subside.

Malignant Tumors

Malignant tumors are cancerous and aggressive because they invade and damage surrounding tissue. When a tumor is suspected to be malignant, the doctor will perform a biopsy to determine the severity or aggressiveness of the tumor.

Metastatic Cancer

Metastatic cancer is when cancer cells of a malignant tumor spread to other parts of the body, usually through the lymph system, and form a secondary tumor.

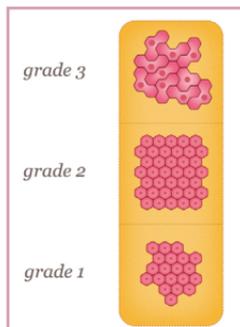


TUMOR GRADES

Tumor grading is a system used to classify a malignant breast cancer tumor based upon the severity of the mutation and the likelihood that it will spread. The breast cancer cells are examined under a microscope to determine, among other factors, how closely the breast cancer cells resemble the healthy cells (called the histologic grade) and the shape and size of the tumor cells' nuclei (called the nuclear grade) as well as how rapidly those cells divide and multiply.

When dealing with breast cancer, tumors are often graded based on a scale of one to three indicating how aggressive the cancerous cells are:

Low grade (1)	Well-differentiated
Intermediate grade (2)	Moderately differentiated
High grade (3)	Poorly differentiated



Low grade tumors look more like normal tissue under the microscope. High-grade tumors look abnormal and less like normal tissue and tend to be more aggressive.

Breast cancer tumor grades are not to be confused with cancer stages. Tumor grades help to determine the best treatment plan, and in general, a lower grade tumor means a better chance for a full recovery. However, there are individuals who make full recoveries at every stage and with even the highest grades of aggressive tumors.

Breast Cancer Staging

Once a person is determined to have a malignant tumor or the diagnosis of breast cancer, the healthcare team will determine staging to communicate how far the disease has progressed. Knowing the stage helps determine the best way to contain and eliminate the breast cancer.

TNM SYSTEM OF STAGING

The most widely used method of staging breast cancer is the TNM system.

TNM stands for:

- T = Tumor size
- N = Lymph node status (the number and location of lymph nodes with cancer)
- M = Metastases (whether or not the cancer has spread to other areas of the body)

In the past, tumor stage was classified with these 3 measures only. Starting in 2018, the TNM system added these measures:

- Tumor grade
- Estrogen-receptor status
- Progesterone-receptor levels in the tumor tissue
- HER2/neu status
- Menopausal status
- General health of the patient

For more information about the TNM classifications for each stage of breast cancer, [click here](#).

Types of Breast Cancer

The most common types of breast cancer are Ductal Carcinoma In Situ (DCIS), Invasive Ductal Carcinoma (IDC), Lobular Carcinoma In Situ (LCIS), and Invasive Lobular Carcinoma (ILC).

Most breast cancers are carcinomas. These cancers start in the cells that line organs and tissues. In fact, breast cancers are often a type of carcinoma called adenocarcinoma, which starts in cells that make glands (glandular tissue). Breast adenocarcinomas start in the ducts (the milk ducts) or the lobules (milk-producing glands).

There are other types of breast cancers, too, such as sarcomas, which start in the cells of the muscle, fat, or connective tissue.

Sometimes a single breast tumor can be a combination of different types.

Doctors will try to find out whether the cancer has spread beyond the place it started.

- In situ breast cancers have not spread.
- Invasive or infiltrating cancer has spread into the surrounding breast tissue.

Common types of breast cancer include:

DUCTAL CARCINOMA IN SITU

Ductal Carcinoma in Situ (DCIS) is a non-invasive breast cancer where abnormal cells have been contained in the lining of the breast milk duct.

LOBULAR CARCINOMA IN SITU

Lobular Carcinoma In Situ (LCIS) is a breast change, not a cancer. In LCIS, cells that look like cancer cells are growing in the lobules of the milk-producing glands of the breast, but they don't grow through the wall of the lobules.

INVASIVE DUCTAL CARCINOMA

Invasive Ductal Carcinoma means that abnormal cells that originated in the lining of the breast milk duct have invaded surrounding tissue. This is the most common type of breast cancer.

- IDC is the most common type of breast cancer, making up nearly 70- 80% of all breast cancer diagnoses.
- IDC is also the type of breast cancer that can most commonly affects men.

INVASIVE LOBULAR CARCINOMA

Invasive Lobular Carcinoma starts in the milk-producing glands (lobules). Like Invasive Ductal Carcinoma, it can spread to other parts of the body.

SUB-TYPES OF INVASIVE CARCINOMA

- Adenoid cystic (or adenocystic) carcinoma
- Low-grade adenosquamos (type of metaplastic carcinoma)
- Medullary carcinoma
 - » The tumor usually shows up on a mammogram, but does not always feel like a lump. At times, it feels like a spongy change of breast tissue.
- Mucinous (or colloid) carcinoma
- Papillary carcinoma
- Tubular carcinoma
 - » Typically this type of breast cancer is found in women aged 50 and above and usually responds well to hormone therapy.
- Metaplastic carcinoma
- Micropapillary carcinoma
- Mixed carcinoma (has features of both invasive ductal and lobular)

LESS COMMON TYPES OF BREAST CANCER INCLUDE:

Triple Negative Breast Cancer

A diagnosis of Triple Negative Breast Cancer (TNBC) means that the three most common types of receptors known to fuel most breast cancer growth—estrogen, progesterone, and the HER-2/neu gene—are not present in the cancer tumor. This means that the breast cancer cells have tested negative for hormone epidermal growth factor receptor 2 (HER-2), estrogen receptors (ER), and progesterone receptors (PR).

Since the tumor cells lack the necessary receptors, common treatments like hormone therapy and drugs that target estrogen, progesterone, and HER-2 are ineffective. Using chemotherapy to treat Triple Negative Breast Cancer is still an effective option.

Inflammatory Breast Cancer (IBC)

Inflammatory breast cancer is a less common form of breast cancer that may not develop a tumor and often affects the skin.

It often produces no distinct tumor or lump that can be felt and isolated within the breast. But when the lymph vessels become blocked by the breast cancer cells, symptoms begin to appear.

Early IBC symptoms may include persistent itching and the appearance of a rash or small irritation similar to an insect bite. The breast typically becomes red, swollen, and warm. The skin may appear pitted like an orange peel, and nipple changes such as inversion, flattening, or dimpling may occur.

Paget Disease of the Nipple

This type of breast cancer starts in the breast ducts and spreads to the skin of the nipple and then to the areola, the dark circle around the nipple. It is rare, accounting for only 1% of all cases of breast cancer.

Paget disease is frequently misdiagnosed at first because the first noticeable symptoms can easily be confused with more common skin conditions affecting the nipple.

Phyllodes Tumor

Phyllodes tumors are rare breast tumors. They develop in the connective tissue (stroma) of the breast, in contrast to carcinomas, which develop in the ducts or lobules.

Angiosarcoma

This form of cancer rarely occurs in the breasts. Angiosarcoma starts in cells that line blood vessels or lymph vessels.

Breast Cancer During Pregnancy

Women who are diagnosed with breast cancer during pregnancy may face tremendous additional strain due to concern for the safety of the unborn child.

Source: American Cancer Society