



FACTS ABOUT BREAST CANCER

- More than three-and-a-quarter million women in our country are living in the aftermath of a breast cancer diagnosis. This includes survivors and women still in treatment.
- Breast cancer is second only to non-melanoma skin cancer as the most commonly diagnosed cancer among women in the United States. Female breast cancer represents 15% of all new cancer cases in our country.
- The biggest risk factors for breast cancer are being a woman and growing older. The median age of diagnosis is 62.
- A woman in the United States has a 1 in 8 chance of developing breast cancer during her lifetime. It is estimated that a woman age 30 has about a 1 in 227 risk of developing breast cancer in the next 10 years; for a woman age 40, it is about 1 in 68; for a woman age 50, it is about 1 in 42; for a woman age 60, it is about 1 in 28; and for a woman age 70, it is 1 in 26.
- Stage IV breast cancer is a disease that has, at initial diagnosis, spread to distant sites within the body. The incidence of this has not changed since 1975. In 2022, an estimated 43,250 women in our country will die as a result of breast cancer.
- It is estimated that 287,850 new cases of invasive breast cancer (cancer that has spread from the site where it started into surrounding, healthy breast tissue) will be diagnosed among women in the U.S. in 2022. In addition to invasive cancers, it is projected that 51,400 cases of non-invasive (in situ) breast cancer will be diagnosed.
- Men do get breast cancer. While less than 1% of new breast cancer diagnoses occur among men, it is possible for men
- to develop the disease. It's estimated that about 2,710 new cases of breast cancer will be diagnosed in men in 2022. For males, the lifetime risk of getting breast cancer is about 1 in 833.
- The overwhelming majority (approximately 85%) of those diagnosed with breast cancer have no relatives with the disease. A family history is only one risk factor. Other risk factors include getting older, benign breast problems, early exposure to ionizing radiation, having children later in life or not at all, longer exposure to estrogen and progesterone, lack of exercise, and drinking alcohol.
- An estimated 168,000 Americans are currently living with metastatic breast cancer, which occurs when cancer in the breast spreads to other parts of the body, most often the lungs, liver, bones, and brain. One quarter of this number represents those whose metastatic disease was found at diagnosis, while threequarters have experienced metastatic recurrence of early stage disease. Approximately 20% to 30% of people first diagnosed with early stage disease will later develop advanced or metastatic breast cancer.

- White women are more likely to receive a diagnosis of breast cancer, but African American women have a higher mortality rate. The mortality rate for breast cancer for African American women is 29.2 per 100,000 women compared to 20.6 per 100,000 white women. Comparatively speaking, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native women have lower mortality rates compared to white women.
- All breast cancers are not the same, just as breast tumors do not all grow at the same rate or spread in the same way. The biology of the tumor and its microenvironment (the normal cells and molecules around it) can matter more than its size in determining the aggressiveness of the cancer.
- There are several types of breast cancer based on the biology of the tumors. These subtypes respond to different treatments and have different prognoses. Breast tumors are currently classified using three primary immunohistochemical (IHC) tumor markers: Estrogen Receptor (ER), Progesterone Receptor (PR), and Human Epidermal Growth Factor Receptor 2 (HER-2/Neu). The term “Triple Negative” indicates none of these markers are prevalent.
- Exposure to environmental estrogens is a potential risk factor for breast and gynecologic cancers. Environmental estrogens are a variety of synthetic chemicals and natural plant compounds that, when absorbed into the body, behave like estrogen or block the natural hormone. These include pesticides such as the now-banned DDT and polychlorinated biphenyls (PCBs); Bisphenol-A (BPA); phytoestrogen (naturally occurring estrogen like plant compounds); and a host of other chemicals.
- Some breast cancer risk factors such as being a woman, age, genetics, and having dense breasts can't be changed. Others, however, are in your control. Make responsible health choices: eat a healthy diet, practice stress management techniques that work for you, stay active, and minimize your exposures to environmental chemicals. Be an informed consumer by learning about the ingredients in products you use. If needed, consider safer alternatives for yourself and your family.
- If you are diagnosed with breast cancer, it's not your fault. 85-90% of breast cancers are caused by random genetic changes, and are not the result of a genetic mutation inherited from one of your parents. Maintaining a healthy lifestyle is good for many reasons, and can help minimize your risk for breast cancer, but that risk can never be reduced to zero.
- At least 900 synthetic compounds in industrial and commercial products have been identified as endocrine disrupting compounds (EDCs) – chemicals that mimic or interfere with natural hormones. EDCs that mimic estrogen cause concern because of their potential links to women's health. These compounds are found in everyday products such as some pesticides, detergents, and plastics.
- Epigenetics studies the processes regulating how and when certain genes are turned on and turned off. Cancer affects these processes. Nutrigenomics investigates the ways in which certain foods, nutritional supplements, and other lifestyle variables such as cigarette smoking and alcohol consumption may interact with specific genes to increase or decrease risks of conditions such as type II diabetes, obesity, heart disease, stroke, and certain cancers.

- Breast cancer is ultimately a disease of malfunctioning genes. Many factors can generate growth-promoting signals to cells already primed to become cancerous, or may already be cancerous, because of changes in their genes. Most people are born with normal genes, but across time, a long and complex succession of genetic changes can lead to cancer. These genetic changes are called somatic mutations, and are not inherited.
- To end breast cancer, we need more focus on understanding how to prevent the disease from developing and how to stop the disease from spreading to other parts of the body. We need a greater understanding of how to find the aggressive cancers that are not detected with mammography, how to keep breast cancer from recurring, and how to prevent it from metastasizing to other parts of the body and becoming lethal.
- Most self-detected lumps that turn out to be breast cancer are found during normal routines such as showering or getting dressed, not during monthly breast self-exams. About 80% of breast cancers not discovered by mammography are discovered by women themselves. Knowing the landscape of your body and noticing slight changes is always wise. Becoming familiar with one's breasts can help detect breast cancers that mammograms may miss.
- According to the American Cancer Society, women ages 40 to 44 who are at average risk of breast cancer should have the choice to start annual breast cancer screening with mammograms if they wish to do so.
- Mammography is not prevention. Mammography is a screening test to detect cancer already present in the breast. Getting regular mammograms does not prevent you from getting breast cancer, nor will it always detect the disease. If you have a personal history of breast cancer, never rely on technology as your sole method of surveillance. Knowing what is normal for you is important.
- The current infrastructure and focus on breast cancer has not led to significant progress in ending the disease or in preventing deaths from the disease. This is true for research and health care and also advocacy: more of the same will not produce different results.
- Five year breast cancer survival rates do not give an accurate picture of progress against breast cancer. Breast cancer can take many years, sometimes decades, to develop and spread throughout the body. Counting the number of people alive five years after diagnosis does not accurately portray the true impact of the disease. Following trends in mortality rates over time is the only way to get an accurate picture of the true impact of breast cancer and the progress – or lack thereof – made against the disease.
- No one needs go through breast cancer alone. If you or a loved one receives a diagnosis of breast cancer, the Breast Cancer Network of WNY is here to help. BCN offers education and support programs for those with breast cancer and provides funding for metastatic breast cancer research. BCN offers education and support programs for those in WNY impacted by breast cancer.