



Breast cancer is a complicated disease, and there is no single explanation for it. In the vast majority of breast cancer, the cause is likely some genetics, some environmental factors (such as exposures to toxins and/or chemicals), and a lot of it is just bad luck. In most cases we are not able to pinpoint a specific cause, likely because in most cases there is not ONE specific cause to be found, but rather a combination of many different things coming together.

Some of the factors that are known to increase the risk for breast cancer are:

- **Gender:** Breast cancer is almost 100 times more common in women than in men.
- **Age:** The risk for breast cancer (and most other cancers) increases as we get older.
- **Race:** Breast cancer is diagnosed more often in Caucasian women than in women of other races. However, African American women have a poorer survival rate compared to white women once diagnosed with cancer. This inequality may be due, in part, to differences in the availability of care and not necessarily genetic risk factors.
- **Family history:** A family history of breast cancer increases a woman's risk of developing breast cancer. How many people are affected in her family, how old they were when they were diagnosed, and how closely they are related to her will all influence how much the risk for cancer is increased.
- **Reproductive/hormonal history:** Having no children, having your first child later in life, early menstruation (before age 12), and late menopause (after age 55) all increase the lifetime risk for breast cancer. This is primarily due to one's exposure to estrogen over their lifetime.
- **Previous history of breast cancer:** Women diagnosed with breast cancer in one breast have an increased risk of being diagnosed with breast cancer in the other breast in the future.
- **Certain benign (noncancerous) breast findings:** Women with these findings, such as lobular carcinoma in situ (LCIS), can increase the lifetime risk for breast cancer.
- **Dense breast tissue:** This may increase the risk for breast cancer, and also makes detection more difficult.
- **Lack of physical activity:** Not getting enough exercise has been linked to an increased risk for breast cancer.
- **Alcohol consumption:** The more alcohol that someone drinks, the higher their risk for breast cancer goes up. Most current studies recommend women limit their intake to no more than one serving of alcohol a day, but even this amount can increase breast cancer risks, as alcohol can affect estrogen levels in the body.
- **Obesity or being overweight:** Individuals with a higher than average proportion of body fat have an increased risk for breast cancer, as well as decreased survival rates



after diagnosis.

- **Hormone replacement therapy (HRT):** HRT involves taking female sex hormones after menopause when a woman's ovaries stop normal hormone production. This can involve either just taking estrogen, or taking a combination of estrogen and progesterone, and have been found to cause an increased risk for breast cancer.
- **Hereditary predisposition:** Approximately 5-10% of breast cancers are part of a hereditary cancer syndrome. Mutations in the [BRCA1](#) and [BRCA2](#) genes are the most common and well known cause for inherited breast cancer risk, but mutations in other genes have also been identified to increase the risk for breast cancer. The below links include more information about hereditary breast cancer genes:
 - [Hereditary Breast and Ovarian Cancer syndrome \(BRCA1/2\)](#)
 - [ATM-related Breast Cancer](#)
 - [Hereditary Diffuse Gastric Cancer \(CDH1\)](#)
 - [CHEK2-related Breast Cancer](#)
 - [NBN-related Breast Cancer](#)
 - [Neurofibromatosis, type 1 \(NF1\)](#)
 - [PALB2-related Breast Cancer](#)
 - [Cowden syndrome \(PTEN\)](#)
 - [Peutz-Jeghers syndrome \(STK11\)](#)
 - [Li-Fraumeni syndrome \(TP53\)](#)

Click [here](#) to learn more about scheduling a genetic counseling appointment for questions about hereditary cancer predisposition.

Related Articles

- [Sporadic vs. Inherited Cancers](#)

Research over the past few decades has shown that genes play a key role in the development and behavior of cancers. In short, genes are the instructions that tell our cells how to grow and function to keep us healthy. Therefore, changes within those instructions can cause cells to lose...
- [Genetic Testing for Hereditary Cancer](#)

Genetic testing for hereditary cancer first starts with a genetic consultation to collect and analyze the personal and/or family history of cancer. If a pattern suggestive of hereditary cancer is identified, then genetic testing may be considered for further clarification or confirmation of the specific cancer risks. Depending on...
- [Why Consider Genetic Testing for Cancer Risk?](#)



There are several reasons why someone may consider genetic testing for hereditary cancer predisposition, which are outlined below. High-Risk Screening and Risk Management One of the primary benefits of knowing about hereditary cancer risk is the ability to take control of that risk in partnership with your healthcare team. Genetic...

- [Common Concerns about Genetic Testing](#)

Genetic testing for cancer risk is a very personal decision, and is not right for everyone. Some people are concerned about the benefits versus potential risks, while others are more concerned with insurance or privacy issues. Click below to learn more about these common concerns pertaining to genetic testing: Will...

- [DNA Banking](#)

If genetic testing is performed but does not identify a harmful genetic variant, or if testing is declined for any reason, DNA banking is another resource available to ensure the ability for future genetic testing of one's DNA. This is primarily for the benefit of family members, and can allow...