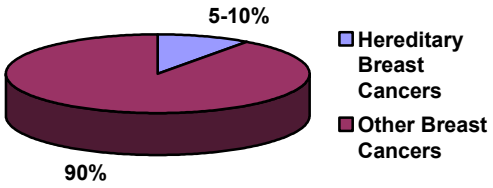
Hereditary Breast Cancer

What is Hereditary Breast Cancer?

Hereditary breast cancer is cancer that may be caused by an altered gene that is passed on in a family.

The majority of breast cancers occur in individuals with no family history of breast cancer (i.e., their cancer is considered sporadic). Only 5% to 10% of breast cancer cases are thought to be hereditary. Today, researchers know that hereditary breast cancer is associated with mutations (permanent alterations or changes) in two genes, BRCA1 and BRCA2. Together, mutations in these genes account for about 50% of inherited breast cancer. Scientists continue to look for other genes associated with increased breast cancer risk.



In families with hereditary breast cancer, each child of a parent who carries a breast cancer gene mutation has a 50% chance of inheriting the mutated gene. A person who inherits an altered gene has a much higher risk for developing breast cancer than people in the general population. The average woman has about a 12% chance of developing breast cancer during her lifetime. Women who carry a BRCA1 or BRCA2 mutation have a 50-85% lifetime risk of developing breast cancer and a 10% to 60% lifetime risk of developing ovarian cancer. Men who carry a BRCA1 or BRCA2 mutation also have an elevated risk of breast cancer, though not as high as women.

Look for These Clues

Family history is an important risk factor for hereditary breast cancer.

When reviewing your family history, it is important to consider both your father's and your mother's side of the family since an altered gene can be inherited from either parent. Gather information on all types of cancer because other cancers can be associated with hereditary breast cancer. Certain "red flags" may suggest a higher risk for hereditary breast cancer. These include:

- Breast cancer diagnosis before age 50
- Breast cancer in multiple relatives on either the mother's or father's side of the family
- Breast and ovarian cancer in the same person
- Bilateral breast cancer (cancer in both breasts)
- Ovarian cancer at any age
- Male breast cancer
- Ashkenazi Jewish ancestry (Eastern European/Russian descent) with a family history of breast or ovarian cancer
- A relative with a positive genetic test for BRCA1 or BRCA2.

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What Can I Do?

Talk with your health care provider about options for prevention, screening, genetic counseling and genetic testing.

If you have a family history of breast cancer, your physician may recommend more frequent screening examinations, including clinical and self-breast exams and mammograms, beginning at an earlier age than recommended for the general population (usually 5 to 10 years before the earliest age of breast or ovarian cancer diagnosis in a family). Certain medical and/or surgical options may reduce breast cancer risk. Talk with your health care provider to determine if these are right for you.

Genetic counseling and genetic testing for mutations in BRCA1 and BRCA2 are currently available. Genetic counselors interpret information about genetic diseases or disorders, analyze inheritance patterns and risks of occurrence, identify high-risk family members, and review available options for prevention, screening, genetic testing, and treatment. For more information about hereditary breast cancer or for a referral, please call the **Mid-Atlantic Cancer Genetics Network** toll free at 1-877-880-6188 or visit our Web site at http://www.MACGN.org