

Germline Mutations & Hereditary Cancer

What does “**germline**” mean? In simple terms, germline means the DNA that you inherit at conception. **Germline mutations** are broken parts of certain genes that you may inherit at conception. Some **germline mutations** might put you at risk for developing cancer.

Here’s an example using a **BRCA2 gene mutation**. Keep in mind that there are many other genetic mutations that may increase the risk of cancer, like **BRCA1, CHEK2, PALB2, MLH1, MSH2, MSH6, CDKN2A, ATM, PALB2, etc.**

Information reviewed by a Certified Genetic Counselor

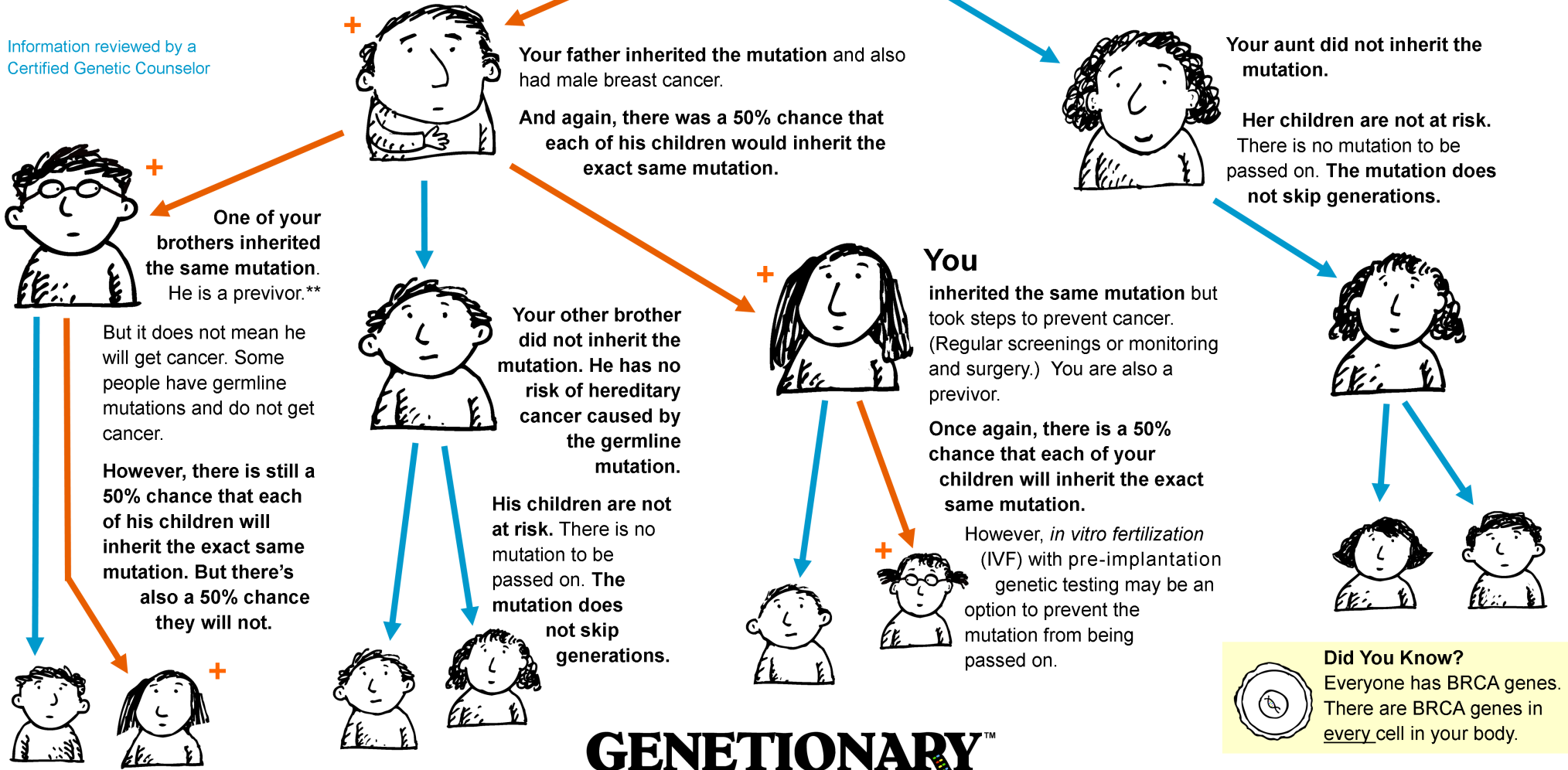
* Please note: Breast cancer is not the only cancer that can indicate the possibility of a germline mutation. Other cancers, including pancreatic, ovarian, prostate, melanoma, colorectal, or rare or early-onset cancers, can be an indication.

Knowing and sharing health history as well as genetic testing results is very important for families with a history of cancer!

Let’s say your paternal grandfather had male breast cancer* caused by one of the thousands of pathogenic BRCA2 mutations.



Every one of his children had a 50% chance of inheriting the exact same mutation.



** Has a germline mutation, but not cancer.

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Did You Know? Everyone has BRCA genes. There are BRCA genes in every cell in your body.