

What You Need to Know About Genetic Testing for Cancer Risk



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This booklet is about:

- Genetic testing for cancer risks that run in a family
- What to expect during a visit with a genetic counselor
- How genetic testing may help you, your family, and your doctors
- How to make a genetic counseling appointment

Genetic Testing for Cancer Risk

Most cancers happen by chance, and the cause is usually unknown. These are known as "sporadic" cancers. In some families, cancer happens more often than what we expect by chance. This may happen because of shared lifestyle, or due to a



combination of shared environmental and genetic risk factors. It could also happen because of a single genetic risk factor that is passed down through a family. Cancer that is caused by a known genetic risk factor is called "hereditary cancer."

Genes tell our bodies how to work. Many of our genes protect the body and help prevent cancers from happening. When there is a change in one of these genes, it may not work the way it should to prevent cancer. These gene changes are called mutations. Having a gene mutation does not mean that a person has cancer or will get cancer for certain. It means that a person has a higher chance for developing certain types of cancer.

Genetic testing looks for gene changes that can cause hereditary cancers in families. Learning more about your risk for cancer can sometimes make a person worry. However, if you are found to have an increased risk for cancer, you may benefit from extra cancer screenings or there may be options to lower your risk for cancer. For these reasons, genetic testing can be important to consider.

What are some reasons to meet with our cancer genetics team?

If you have cancer: In some cases, genetic testing may help you and your doctor decide the best treatment plan for you. Testing may help you understand your chance of getting another cancer in the future. It may also help your family members better understand their risk for cancer.

If a family member has cancer: You may want to learn if you have a higher chance for cancer. Finding out about an increased risk for cancer may help you take steps to prevent cancer or find cancers earlier.

Our cancer genetics team will talk with you about genetic testing for you and your family. It's up to you to decide if testing is right for you. We work with people who:

- have cancer now.
- had cancer in the past.
- do not have cancer but may have one or more family members with cancer.

Does health insurance cover the cost of genetic counseling and testing



Most health insurance plans cover the cost of genetic counseling visits and genetic testing, but not all plans are the same. During a genetics appointment, the genetic counselor will discuss the cost of testing with you.

How do I make a genetic counseling appointment?

Ask your doctor for a referral, or call the Center for Human Genetics at **216-844-3936**, option **2**.



What happens at a cancer genetics visit?

At your first visit, you meet with a genetic counselor and/or a genetics doctor. They talk to you about:



- your personal and family history of cancer
- · if cancers in your family appear to follow a pattern of being passed down
- ways to manage your risk for cancer, such as cancer screenings or preventive options
- if and how genetic testing might help you and your family

Genetic testing may not be helpful for every family. Even if testing is offered, you may choose not to have it done. The choice is yours. If you decide to have genetic testing, it is usually done by taking a sample of your blood or saliva. Sometimes tumor tissue from a past surgery can also be tested.



Results from the testing are often ready in about 3 to 4 weeks. A follow-up visit is scheduled to review your test results.

What happens at a cancer genetics follow-up

Your genetics team talks with you about:

- your genetic test results
- the risk of cancer for you and your family members
- options for cancer screening to find cancer earlier or ways to lower cancer risk
- whether other family members should consider genetic testing

Who can benefit from meeting with a genetic counselor?

Genetic counselors can help people who are diagnosed with cancer at a young age or who have a family history of multiple cancers.

You may benefit from a cancer genetics appointment if you or any family members have a history of:

- cancer diagnosed at an early age, such as breast cancer diagnosed before age 50.
- more than one blood relative with the same type of cancer, especially in multiple generations. For example, colon cancer in a father and daughter.
- more than one cancer diagnosis in the same person, such as someone who is diagnosed with colon cancer and uterine cancer.
- 10 or more colon polyps.
- Ashkenazi (Eastern European) Jewish ancestry and breast or ovarian cancer.
- a rare type of cancer, such as male breast cancer or medullary thyroid cancer.
- cancer on both sides of a pair of organs, such as both kidneys or both breasts.
- a gene mutation that can increase the risk for cancer. For example, a known mutation in the BRCA1 or BRCA2 genes.

How can I learn more?

For an appointment or to ask questions call:

The Center for Human Genetics at 216-844-3936



More info can be found at:

UH Seidman Cancer Center Information Service Line 1-800-641-2422

National Society of Genetic Counselors: visit nsgc.org

National Cancer Institute: cancer.gov Search "genetics of cancer"



UHSeidman.org