



COMPREHENSIVE
CANCER CENTERS
OF NEVADA

GENETIC TESTING INFORMATION

Why is genetic cancer risk assessment important?

Inherited cancer syndromes account for approximately five to 10 percent of all cancers. This equates to nearly 50,000 newly diagnosed cancers that can be attributed to an inherited gene. You inherit your genes from your mother and father. It is important to identify individuals and families that have cancer susceptibility genes so that they can be aware of their risks and treated before a cancer occurs.

Not everyone with a cancer gene will develop cancer, but their risk is greatly increased. Many people with these genes develop cancer at younger ages than the rest of the population. Genetic testing for those who are at high risk is now highly recommended and is becoming more of an expectation in oncology.

It is important to know if you or your family members have a hereditary predisposition to cancer, as there are now options to reduce the risk of getting cancer. Management care plans can include specific cancer screening exams, medications and/or preventative surgery. Treatment options are tailored to an individual's risks and lifestyle.

If possible, the best person in the family to test is the person who already has cancer.

What happens during a genetic risk assessment?

The first part of a genetic risk assessment is obtaining a complete family history. Your family history is the foundation for a risk assessment and the basis for identifying those people who are at an increased risk for developing certain cancers. Both your mother's and father's history will be obtained as well as histories for your aunts, uncles, grandparents, siblings and your children. We want to know who has had cancer, what type of cancer they were diagnosed with and how old they were when they were diagnosed. These histories will determine whether further discussion or genetic testing for a hereditary cancer syndrome is indicated.

If it is determined that testing is recommended, education on cancer genetics and hereditary syndromes will be provided. Counseling is another necessary step in the process and is critical to helping you make informed decisions about testing.



You will be provided with information on the specific test being performed, what the results mean, the psychological implications of test results, confidentiality issues, options for risk estimation without genetic testing, the risk of passing a gene mutation to a child, fees involved in testing, options and limitations of medical surveillance and strategies for prevention after testing and the importance of sharing your genetic test results with at-risk relatives.

How is the actual test performed?

The genetic testing performed in our office requires saliva (buccal) sampling. It is a simple procedure and takes only minutes. An oral rinse process obtains the DNA from the lining of your mouth, which is then processed in the laboratory for analysis.

How much does it cost?

Most insurance carriers cover genetic testing for hereditary cancer. A majority of patients have no out-of-pocket costs if their deductibles have been met. You can contact your insurance plan directly to determine the current status of your own deductible. If there is a fee involved with your test, the laboratory running the test can arrange for low monthly payments.

What are my risks if I undergo genetic testing?

Some people are concerned that they may be discriminated against if they test positive for an inherited cancer gene mutation. In 2008, the federal government enacted a law called the Genetic Information Nondiscrimination Act (GINA), which protects Americans against discrimination based on their genetic information pertaining to health insurance and employment. This may not apply to life or disability insurance policies and you are encouraged to investigate their discrimination policies prior to testing.

How do I get my results?

We will schedule a follow-up appointment two to three weeks after you have been tested. Before we disclose your results, we will ask if you want to know the results. In some cases, people may decide that they do not want to know yet. If you are ready to receive the results, we will then disclose them to you and fully explain the implications of a positive, negative or inconclusive result. We will offer guidance on how to share the results with family members and how your test results may affect them. There are many medical management options available to those who test positive and you will be referred to the appropriate provider for follow up.

Human genetics is a rapidly growing field and new information is being discovered frequently. Genetic testing does not detect all causes of hereditary cancer. A negative result is most helpful when there is a known mutation in the family.

For more information about Comprehensive Cancer Centers of Nevada and our cancer genetic counseling program, please visit our website at www.cccnevada.com/cancer-genetic-counseling.

