



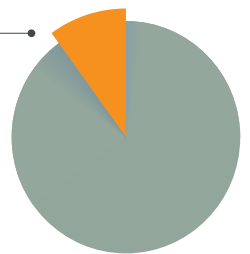
Genetic Testing and Cancer

Mutations are changes that occur in cells that affect the way they grow and divide. **Sometimes mutations can lead to the development of cancer.** Mutations are often acquired during a person's lifetime, sometimes from habits like smoking or too much sun exposure, or other times without any clear reason. People can also be born with an inherited genetic mutation that increases the risk of cancer.

Genetic testing aims to identify inherited gene mutations that are known to increase a person's risk of developing cancer.

There are **over 50 hereditary cancer syndromes** that are associated with specific gene mutations.

About 10% of all cancers are caused by an inherited genetic mutation.



Genetic testing is done using a blood or saliva sample. Most genetic testing is covered by insurance. This will be discussed during the genetic counseling appointment.

Cancer types most likely to be hereditary:



Breast



Ovarian



Colorectal



Prostate



Pancreatic



Endometrial



Consider genetic testing if your personal or family medical history shows:

- Cancer present in multiple generations
- Multiple cancers in one family member
- Cancer at an earlier age than expected (usually under 50)
- Known gene mutation in the family

With genetic testing, you and your physician can:

- Understand your risk for certain cancers
- Develop prevention strategies
- Get the correct screenings
- Create a more personalized treatment plan if you are diagnosed
- Help other family members if they are also at risk



If you feel that you and your family would benefit from understanding the results of a genetic risk evaluation and genetic testing, you can schedule an appointment with one of Arizona Oncology's Genetic Counselors or Nurse Practitioners. **You do not need to be a current Arizona Oncology patient to undergo genetic testing at one of our cancer centers.**

Sources

<https://www.cancer.gov/about-cancer/causes-prevention/genetics>