

Colorectal cancer is the third most common cancer diagnosed in the United States. Each year, there are an estimated 135,000 new cases diagnosed. The chance that a person will develop colorectal cancer in his or her lifetime is about 5%, or 1 in 20.

### Family history

Most cases of colorectal cancer occur by chance in individuals who do not have any family members diagnosed with cancer. However, 5% to 10% of people who develop colorectal cancer will have a significant family history of the condition.

For some people having a family history of colorectal cancer means that they have a high chance of developing the disease and, in some cases, other cancers as well. Cancer runs in these families due to an inherited mutation or trait in a cancer-predisposing gene. This is called hereditary cancer.

### How do people determine if they have hereditary cancer?

Determining the significance of a family history requires a process called "Cancer Risk Assessment." This process begins by constructing a family tree to see who in the family has been diagnosed with cancer and what types of cancers they have had. Additional factors important in analyzing the family history include the ages at which cancer diagnoses were made and whether a person has had more than one kind of cancer. The family history information is collected on close relatives (brothers, sisters, children, parents) as well as more distant relatives (grandparents, aunts, uncles, and cousins).

If the family history shows a pattern of hereditary cancer, then genetic testing may be an option. Such testing allows scientists to look directly at specific genes for cancer-causing mutations. It is often necessary to have a blood sample from a family member with cancer in order to participate in genetic testing. This test cannot rule out the possibility of a person ever developing cancer. Yet within a family with hereditary colorectal cancer, it can identify those individuals at higher risk (i.e., those who inherited the cancer mutation or trait) versus those whose cancer risk is not increased above that of the general population.

### What is the purpose of cancer genetic counseling?

The goal of cancer genetic counseling is to make families aware of their cancer risk. Sometimes people learn that their cancer risk is less than expected. Yet, it is also important to identify people who may have a higher chance of developing colorectal cancer so that these individuals can be followed carefully by their physicians. Possible medical management strategies include increased cancer screening, guidelines for nutrition and exercise, prophylactic surgeries, and chemopreventive agents. The ultimate goal is early cancer detection or prevention. An individualized plan, developed by your physician, can tailor your health care to fit your specific needs.

If you are interested in learning more about cancer genetic counseling, speak with your physician. He or she can help determine if this service would be beneficial to you.

2 Medical Park Rd.  
Suite 103  
Columbia, SC 29203  
803-545-5775 phone  
803-434-4596 fax

PHUSCMG.org