

## Prevention and Screening for Colorectal Cancer

Cancer of the colon and rectum is the second leading cause of cancer-related death in the United States in both men and women. Approximately 131,000 Americans will be diagnosed every year with colorectal cancer, and approximately 55,000 people will die from their disease. Detection and removal of pre-cancerous lesions is the key to the prevention of colorectal cancer.

Cancer is a disease that is caused by the uncontrolled growth of abnormal cells. Nearly all colon and rectal cancers begin as polyps; which are small, benign (non-cancerous) growths on the lining of the colon or rectum. Approximately 20% of all people will develop polyps. These polyps rarely cause symptoms and most people are unaware that they have polyps. While not every polyp will turn into a cancer, it is impossible to tell which polyps will become malignant. If polyps are present, and are found early, before they become malignant, they can be removed thus preventing their development into cancer.

Screening is designed to detect polyps and to eliminate them before cancer develops. Prevention of cancer is the number one goal, but if cancer should already be present, early detection, before it has had a chance to spread, is also an important factor in leading to a cure. Below is a summary of the American Cancer Society recommendations for average, moderate and high risk groups:

The patient at **average risk** does not have the risk factors listed in the moderate or high risk groups, listed on the other side of this page. The risk of developing cancer in the average risk group is about 1 in 20 if no screening is done. If you are in this group, beginning by the age of 50 you should have the following:

Every year a check of the stool for hidden blood (Hemoccult test), *and* every five years a 'flexible sigmoidoscopy' (an examination of the rectum and lower colon with a flexible lighted instrument). This simple test is usually done in the office with minimal if any discomfort. It takes about fifteen minutes to complete and medications are not needed.

Alternatively, 'colonoscopy' (an examination of the *entire* colon and rectum, using a flexible lighted instrument) can be done every ten years. This test is performed under sedation and requires clearing the bowels with laxative medications. This test has the advantage of viewing the complete lining of the colon, and thus is more accurate in detecting polyps in areas not seen by the flexible sigmoidoscope.

People are at **moderate risk** for colorectal cancer if they have either: a) a personal history of polyps or colorectal cancer, b) a family history (sister, brother, parents, or children) of colorectal cancers or polyps, or c) a personal history of breast, ovarian, or endometrial cancer. The risk of developing cancer in this group is about 1 in 6 if no screening is done. People with a personal history of inflammatory bowel disease, such as ulcerative colitis, are also at moderate risk for colorectal cancer. In this case, the risk is related to the amount of colon that is involved and to the duration of the colitis. If you are in this group you should have the following:

A *colonoscopy* beginning at age 40 and every 3 to 5 years thereafter. If you had a flexible sigmoidoscopy for screening and a polyp was found, the colonoscopy should be done to look for and remove any new polyps that may have developed in the colon. If you had a colorectal cancer that was removed by surgery, the first colonoscopy should be done within one year of the operation for the cancer.

If you have inflammatory bowel disease involving the colon, specific recommendations for screening vary widely, and should be discussed with your physician.

People at **high risk** for colorectal cancer include those who have either: a) a family history of 'familial adenomatous polyposis' (a genetic disorder causing cancer to develop at an early age in 100% of those affected, if no treatment is given), b) a family history of 'hereditary non-polyposis colon cancer' (a genetic disorder causing colorectal cancer at an early age in 50% of those affected). If you are in the *high risk group* for colorectal cancer, you should have the following:

Annual flexible sigmoidoscopy beginning at puberty if you have a family history of 'familial adenomatous polyposis'. In addition, genetic testing or colonoscopy may be useful in some patients.

*Colonoscopy* beginning at the age of 21 years if you have a family history of 'hereditary non-polyposis colon cancer.' This exam should be repeated every 2 years until the age of 40 then every 1 year thereafter. Genetic testing is available, but is not sufficiently accurate to be useful as a screening test at this time.

These recommendations are based on published guidelines for colorectal cancer screening. Your doctor may offer you other options for screening and surveillance based on your state of health and risk factors.