COLORECTAL CANCER SCREENING

What is colorectal cancer?
Colorectal (large bowel) cancer is a disease in which malignant (cancer) cells form in the inner lining of the colon or rectum. Together, the colon and rectum make up the large bowel or large intestine. The large intestine is the last segment of the digestive system (the esophagus, stomach, and small intestine are the first three sections). The large bowel's main job is to reabsorb water from the contents of the intestine so that solid waste can be expelled into the toilet. The first several feet of the large intestine is the colon and the last 6 inches is the rectum.

Most colon and rectal cancers originate from benign wart-like growths on the inner lining of the colon or rectum called polyps. Not all polyps have the potential to transform into cancer. Those that do have the potential are called adenomas. It takes more than 10 years in most cases for an adenoma to develop into cancer. This is why some colon cancer prevention tests are effective even if done at 10-year intervals. This 10-year interval is too long, in some cases, such as in persons with ulcerative colitis or Crohn’s colitis, and in persons with a strong family history of colorectal cancer or adenomas.

How common is colorectal cancer?
Colorectal cancer is the second most common cancer killer overall and third most common cause of cancer-related death in the United States in both males and females. Lung and prostate cancers are more common in men and lung and breast in women.

What is screening for colorectal cancer?
Screening means looking for cancer or polyps when patients have no symptoms. Finding colorectal cancer before symptoms develop dramatically improves the chance of survival. Identifying and removing polyps before they become cancerous actually prevents the development of colorectal cancer.

Who is at risk for colorectal cancer?
The US Preventive Services Task Force recommends that screening for colorectal cancer start at age 50 and continue until age 75. This can be done either with a sensitive test that looks for signs of cancer in a person’s stool (a stool-based test), or with an exam that looks at the colon and rectum (a visual exam). These options are listed below. People who are in good health and with a life expectancy of more than 10 years should continue regular colorectal cancer screening through the age of 75. For people ages 76 through 85, the decision to be screened should be based on a person’s preferences, life expectancy, overall health, and prior screening history. People over 85 should no longer get colorectal cancer screening. For screening, people are considered to be at average risk if they do not have: a personal history of colorectal cancer or certain types of polyps, a family history of colorectal cancer, a personal history of inflammatory bowel disease (ulcerative colitis or Crohn’s disease), a confirmed or suspected hereditary colorectal cancer syndrome, such as familial adenomatous polyposis (FAP) or Lynch syndrome (hereditary non-polyposis colon cancer or HNPCC), a personal history of getting radiation to the abdomen (belly) or pelvic area to treat a prior cancer, and African American ethnicity.

Men tend to get colorectal cancer at an earlier age than women, but women live longer so they ‘catch up’ with men and thus the total number of cases in men and women is equal. If a person has a history of two or more first-degree relatives (parent, sibling, or child) with colorectal cancer, or any first-degree relatives diagnosed under age 60, the overall colorectal cancer risk is three to six times higher than that of the
general population. For those with one first-degree relative diagnosed with colorectal cancer at age 60 or older, there is an approximate two times greater risk of colon cancer than that observed in the general population. Special screening programs are used for those with a family history of colorectal cancer. A well-documented family history of adenomas is also an important risk factor. Persons who have had colorectal cancer or adenomas removed are at increased risk of developing additional adenomas or cancers. Women diagnosed with uterine or ovarian cancer before age 50 are at increased risk of colorectal cancer. These groups should be checked by colonoscopy at regular intervals, usually every 3 to 5 years. Woman with a personal history of breast cancer have only a very slight increase in risk of colorectal cancer.

**Why should you get checked for colorectal cancer even if you have no symptoms?**
Adenomas can grow for years and transform into cancer without producing any symptoms. By the time symptoms develop; it is often too late to cure the cancer, because it may have spread. Screening identifies cancers earlier and actually results in cancer prevention when it leads to removal of adenomas (pre-cancerous polyps).

**What else can I do to prevent the development of colorectal cancer?**
The strategy for reducing colorectal cancer deaths is simple. For normal risk individuals, screening tests begin at age 50. Screening programs incorporating fecal occult blood testing, sigmoidoscopy, DNA testing or colonoscopy will all be effective in reducing mortality. Modeling evidence suggests that population screening programs between the ages of 50 and 75 years using any of the following 4 regimens will be approximately equally effective in life-years gained, assuming 100% adherence to the same regimen for that period: 1) annual high-sensitivity fecal occult blood testing, 2) sigmoidoscopy every 5 years combined with high-sensitivity fecal occult blood testing every 3 years, and 3) screening colonoscopy at intervals of 10 years or 4) Colوغguard DNA testing every 3 years. Surveillance needs to be available earlier and at more frequent intervals for individuals at high risk for colon cancers such as those with a personal history of colorectal cancer or adenomatous polyps, family history of colorectal cancer, non-hereditary polyposis, colorectal cancer, a predisposing condition such as inflammatory bowel disease or African American background. For both average and high risk individuals, all potential pre-cancerous polyps must be removed.

Recent observations suggest regular use of aspirin may reduce the chances of colorectal cancer death. Patients should consult their physician as to whether regular use is appropriate. Folate, calcium, and post-menopausal hormones each have a modest protective benefit against colon cancer. A high fiber (vegetables) and low fat diet, regular exercise, maintenance of normal body weight and cessation of smoking are also beneficial. None of the measures is as effective as, or should replace, colorectal cancer screening.

[https://www.cancer.gov/types colorectal/patient/colorectal-prevention-pdq#section/14](https://www.cancer.gov/types colorectal/patient/colorectal-prevention-pdq#section/14)