

Screening for Polyps and Cancer

These tests look at the structure of the colon to find any abnormal areas either with a scope inserted into the rectum or with special medical imaging (x-ray) tests. Polyps found before they become cancerous can be removed, so these tests may prevent colorectal cancer. Because of this, these tests are preferred.



Colonoscopy

In this test, the doctor looks at the entire length of the colon and rectum with a colonoscope. It has a video camera on the end that is connected to a display monitor so the doctor can examine the inside of the colon. Special instruments can be passed through the colonoscope to remove (biopsy) suspicious looking areas such as polyps, if needed.

Before the test: You will need a bowel prep to clean out your lower colon and rectum. Most preps require strong laxatives, enemas, and/or special diets (such as drinking only clear liquids). Your doctor will give you specific instructions. Be sure your doctor is aware of your medications, as you may need to change how you take them before the test. You may need to arrange for someone to drive you home from the test because the sedative used can affect your ability to drive.

During the test: The test takes about 30 minutes—longer if a polyp is found and removed. Before the colonoscopy, you will be given a sedative to make you feel comfortable and sleepy. You may not be aware of what is going on and may not remember the procedure afterward.

You will be placed on your side with your knees flexed, and draped. Your blood pressure, heart rate, and breathing rate will be monitored. Your doctor should do a digital rectal exam before inserting the lubricated colonoscope. It is passed to the very beginning of the colon. The colonoscope will deliver air into the colon so that it is easier for the doctor to see the colon's lining and use the instruments. To ease any discomfort it may help to breathe deeply and slowly through your mouth. The doctor will look at the inner walls of the colon as he or she slowly withdraws the colonoscope.

If a small polyp is found, the doctor may remove it, usually done by passing a wire loop through the colonoscope to cut the polyp from the colon's wall with an electrical current. The polyp can then be sent to a lab to check whether it has any areas that have changed into cancer. If your doctor sees a larger polyp or tumor, a biopsy may be done. A small bit of tissue is removed through the colonoscope and later examined to determine if it is a cancer, a benign (non-cancerous) growth, or a result of inflammation.

Possible side effects: Many people consider the bowel prep the most unpleasant part of the test, as it usually requires you to be in the bathroom quite a bit. The test may be uncomfortable, but the sedative usually prevents this. Some people may have gas pains or cramping after the test. Others may have low blood pressure or changes in heart rhythms due to the sedation, although these are rarely serious. If a polyp is removed or a biopsy is done during the colonoscopy, you may notice some blood in your stool for a day or two after the test.

Flexible Sigmoidoscopy

During this test, the doctor looks at part of the colon and rectum with a sigmoidoscope — a flexible, lighted tube about the thickness of a finger with a small video camera on the end. Images from the scope are viewed on a display monitor. Using the sigmoidoscope, your doctor can view the inside of the rectum and part of the colon to detect (and possibly remove) any abnormality. Because the sigmoidoscope is short, the doctor is able to see the entire rectum but **only** less than half of the colon.

Before the test: You will need to have a bowel preparation to clean out your lower colon and rectum so your doctor can view their linings. Most colon cancer screenings require strong laxatives, enemas, and/or special diets (such as drinking only clear liquids) prior to the procedure. Your doctor will give you specific instructions to follow that are appropriate for this type of screening. Be sure your doctor is aware of any medicines you are taking, as you may need to change how you take them before the test.

During the test: The test usually takes 10- 20 minutes. Most people do not need to be sedated, but this may be an option you can discuss with your doctor. Sedation may make the test less uncomfortable, but it requires more recovery time and requires someone to take you home after the test.

You will likely be placed on a table on your left side with your knees positioned near your chest. Your doctor should do a digital rectal exam before inserting the lubricated sigmoidoscope. Air will be placed into the sigmoid colon through the sigmoidoscope so the doctor can see the colon better.

If a small polyp is found your doctor may remove it with a small instrument passed through the scope. The polyp will be sent to a lab to be examined by a pathologist. If a pre-cancerous polyp or cancer is found during the test, you will require a colonoscopy at a later date to look for polyps or cancer in the rest of the colon.

Possible side effects: Many people consider the bowel preparation to be the most unpleasant part of the test, as it usually requires you to be in the bathroom quite a bit. Because of the air put into the colon, you might feel pressure and slight cramping in your lower abdomen. Be sure to let your doctor know if you feel pain during the procedure. To ease discomfort and any urge to have a bowel movement, it helps to breathe deeply and slowly through your mouth. You will feel better after the test once the air leaves your colon. You may see a small amount of blood in your first bowel movement after the test. Bleeding and puncture of the colon are possible complications, but they are very uncommon.

CT Colonography (Virtual Colonoscopy)

This test is an advanced type of computed tomography (CT). It is a scan of the colon and rectum that produces cross-sectional images of your body. A CT scanner takes many pictures as it rotates around you while you lie on a table. A computer then combines these pictures into images of slices of the part of your body being studied. For CT colonography, computer programs create both two dimensional x- ray pictures and a three-dimensional "fly-through" view of the inside of the colon and rectum, which allows the doctor to look for polyps or cancer.

This test may be appropriate for people who can't have or don't want to have more invasive tests. The test still requires a type of bowel preparation and uses a tube placed

in the rectum to fill the colon with air. It can be done fairly quickly and does not require sedation. A possible drawback is that if polyps or other suspicious areas are seen on this test, a colonoscopy will still likely be needed to remove them or to explore them fully.

Before the test: It is important that the colon and rectum are emptied before this test to provide the best images. You will likely be instructed to follow a clear liquid diet for a day or two before the test, and to take strong laxatives and/or enemas the night before or morning of the exam.

During the test: This takes about 10 minutes. You may be asked to drink a contrast solution before the test to help "tag" any remaining stool in the colon or rectum, which helps the doctor when looking at the test images. You will lay on a thin table that is part of the CT scanner, and will have a small, flexible tube inserted into your rectum. Air is pumped through the tube into the colon to expand it to provide better images. The table then slides into the CT scanner and you will be asked to hold your breath while the scan takes place. You will likely have two scans: one while you are lying on your back and one while you are on your stomach. Each scan typically takes only about 10 to 15 seconds.

Possible side effects: Many people consider the bowel preparation to be the most unpleasant part of the test, as it usually requires you to be in the bathroom quite a bit. With the CT colonography itself, there are usually very few side effects. You may feel bloated or have cramps because of the air in the colon, but this should go away once the air passes from the body. There is a very small risk that inflating the colon with air could injure or puncture the colon.