

## Patient education: Colon and rectal cancer screening (The Basics)

Written by the doctors and editors at UpToDate

### What is colon and rectal cancer screening?

Colon and rectal cancer screening is a way in which doctors check the colon and rectum for signs of cancer or growths (called polyps) that might become cancer. It is done in people who have no symptoms and no reason to think they have cancer. The goal is to find and remove polyps before they become cancer, or to find cancer early, before it grows, spreads, or causes problems.

The colon and rectum are the last part of the digestive tract ([figure 1](#)). When doctors talk about colon and rectal cancer screening, they use the term "colorectal." That is just a shorter way of saying "colon and rectal." It's also possible to say just colon cancer screening.

Studies show that having colon cancer screening lowers the chance of dying from colon cancer. There are several different types of screening test that can do this.

### What are the different screening tests for colon cancer?

They include:

- Colonoscopy** – Colonoscopy allows the doctor to see directly inside the entire colon. Before you can have a colonoscopy, you must clean out your colon. You do this at home by drinking a special liquid that causes watery diarrhea for several hours. On the day of the test, you get medicine to help you relax. Then a doctor puts a thin tube into your anus and advances it into your colon ([figure 2](#)). The tube has a tiny camera attached to it, so the doctor can see inside your colon. The tube also has tiny tools on the end, so the doctor can remove pieces of tissue or polyps if they are there. After polyps or pieces of tissue are removed, they are sent to a lab to be checked for cancer.
  - Advantages of this test – Colonoscopy finds most small polyps and almost all large polyps and cancers. If found, polyps can be removed right away. This test gives the most accurate results. If any other screening tests are done first and come back positive (abnormal), a colonoscopy will need to be done for follow-up. If you have a colonoscopy as your first test, you will probably not need a second follow-up test soon after.
  - Drawbacks to this test – Colonoscopy has some risks. It can cause bleeding or tear the inside of the colon, but this only happens in 1 out of 1,000 people. Also, cleaning out the bowel beforehand can be unpleasant. Plus, people usually cannot work or drive for the rest of the day after the test, because of the relaxation medicine they must take during the test.

In certain situations, a doctor might do something called a "capsule" colonoscopy. For this test, you swallow a special capsule that contains tiny wireless video cameras. This might be done if your doctor was not able to see all of your colon during a regular colonoscopy.

- CT colonography** (also known as virtual colonoscopy or CTC) – CTC looks for cancer and polyps using a special X-ray called a "CT scan." For most CTC tests, the preparation is the same as it is for colonoscopy.
  - Advantages of this test – CTC can find polyps and cancers in the whole colon without the need for medicines to relax.
  - Drawbacks to this test – If doctors find polyps or cancer with CTC, they usually follow up with a colonoscopy. CTC sometimes finds areas that look abnormal but that turn out to be healthy. This means that CTC can lead to tests and procedures you did not need. Plus, CTC exposes you to radiation. In most cases, the preparation needed to clean the bowel is the same as the one needed for a colonoscopy. The test is expensive, and some insurance companies might not cover this test for screening.

**Stool test for blood** – "Stool" is another word for bowel movements. Stool tests most commonly check for blood in samples of stool. Cancers and polyps can bleed, and if they bleed around the time you do the stool test, then blood will show up on the test. The test can find even small amounts of blood that you can't see in your stool. Other less serious conditions can also cause small amounts of blood in the stool, and that will show up in this test. You will have to collect small samples from your bowel movements, which you will put in a special container you get from your doctor or nurse. Then you follow the instructions to mail the container out for the testing.

- Advantages of this test – This test does not involve cleaning out the colon or having any procedures.
- Drawbacks to this test – Stool tests are less likely to find polyps than other screening tests. These tests also often come up abnormal even in people who do not have cancer. If a stool test shows something abnormal, doctors usually follow up with a colonoscopy.

**Sigmoidoscopy** – A sigmoidoscopy is similar in some ways to a colonoscopy. The difference is that this test looks only at the last part of the colon, and a colonoscopy looks at the whole colon. Before you have a sigmoidoscopy, you must clean out the lower part of your colon using an enema. This bowel cleaning is not as thorough or unpleasant as the one for colonoscopy. For this test, you do not need to take medicines to help you relax, so you can drive and work afterward if you want.

- Advantages of this test – Sigmoidoscopy can find polyps and cancers in the rectum and the last part of the colon. If polyps are found, they can be removed right away.
- Drawbacks to this test – In about 2 out of 10,000 people, sigmoidoscopy tears the inside of the colon. The test also can't find polyps or cancers that are in the part of the colon the test does not view ([figure 3](#)). If doctors find polyps or cancer during a sigmoidoscopy, they usually follow up with a colonoscopy.

**Stool DNA test** – The stool DNA test checks for genetic markers of cancer, as well as for signs of blood. For this test, you get a special kit in order to collect a whole bowel movement. Then you follow the instructions about how and where to ship it.

- Advantages of this test – This test does not involve cleaning out the colon or having any procedures. When cancer is not present, it is less likely to be falsely abnormal than a stool test for blood. That means it leads to fewer unnecessary colonoscopies.
- Drawbacks to this test – It might be unpleasant to collect and ship a whole bowel movement. If a DNA test shows something abnormal, doctors usually follow up with a colonoscopy.

There is no blood test that most experts think is accurate enough to use for screening.

### How do I choose which test to have?

Work with your doctor or nurse to decide which test is best for you. Some doctors might choose to combine screening tests, for example, sigmoidoscopy plus stool testing for blood. Being screened—no matter how—is more important than which test you choose.

### Who should be screened for colon cancer?

Doctors recommend that most people begin having colon cancer screening at age 50. People who have an increased risk of getting colon cancer sometimes begin screening at a younger age. That might include people with a strong family history of colon cancer, and people with diseases of the colon called "Crohn's disease" and "ulcerative colitis."

Most people can stop being screened around the age of 75, or at the latest 85.

### How often should I be screened?

That depends on your risk of colon cancer and which test you have. People who have a high risk of colon cancer often need to be tested more often and should have a colonoscopy.

Most people are not at high risk, so they can choose one of these schedules:

- Colonoscopy every 10 years
- CT colonography (CTC) every 5 years
- Stool testing for blood once a year
- Sigmoidoscopy every 5 to 10 years
- Stool DNA testing every 3 years (but doctors are not yet sure of the best time frame for repeating the test)

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- [Patient education: Screening for colorectal cancer \(Beyond the Basics\)](#)
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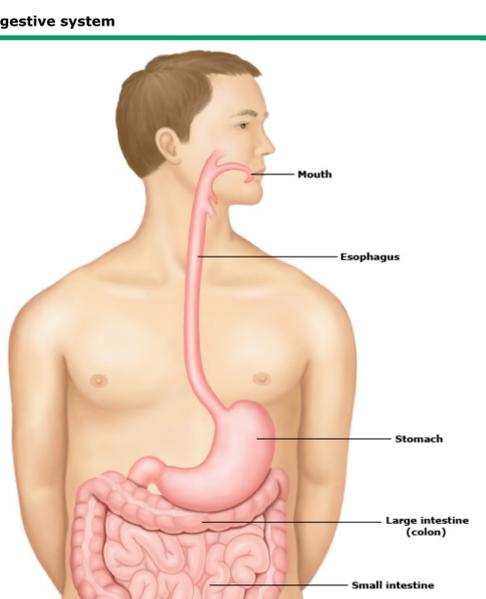
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Topic 16186 Version 14.0

## GRAPHICS

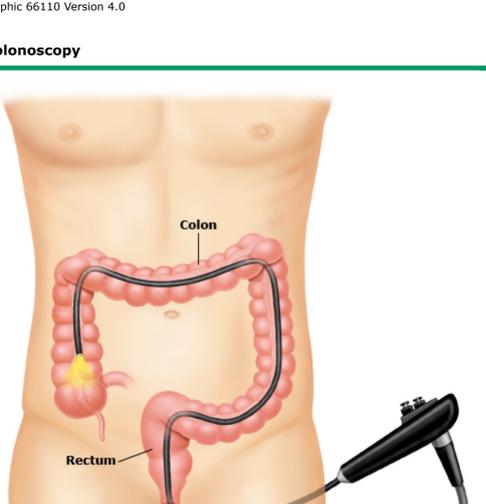
### Digestive system



This drawing shows the organs in the body that process food. Together these organs are called "the digestive system," or "digestive tract." As food travels through this system, the body absorbs nutrients and water.

Graphic 66110 Version 4.0

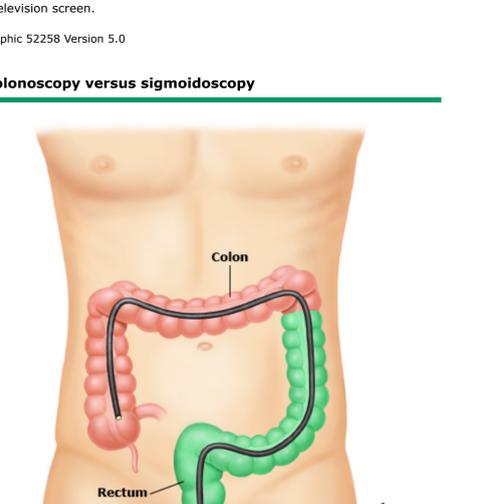
### Colonoscopy



During a colonoscopy, you lie on your side and the doctor or nurse puts a thin tube with a camera into your anus (from behind). Then the doctor or nurse advances the tube into the rectum and colon. The camera sends pictures from inside your colon to a television screen.

Graphic 52258 Version 5.0

### Colonoscopy versus sigmoidoscopy



During a colonoscopy or a sigmoidoscopy, you lie on your side, and the doctor or nurse puts a thin tube with a camera into your anus (from behind). Then the doctor or nurse advances the tube into the rectum and colon. The camera sends pictures from inside your colon to a television screen.

A colonoscopy allows the doctor to see the whole colon (shown in pink and green). A sigmoidoscopy allows the doctor to see only the last part of the colon (shown in green).

Graphic 58734 Version 5.0