

# Flexible Sigmoidoscopy

*National Digestive Diseases Information Clearinghouse*

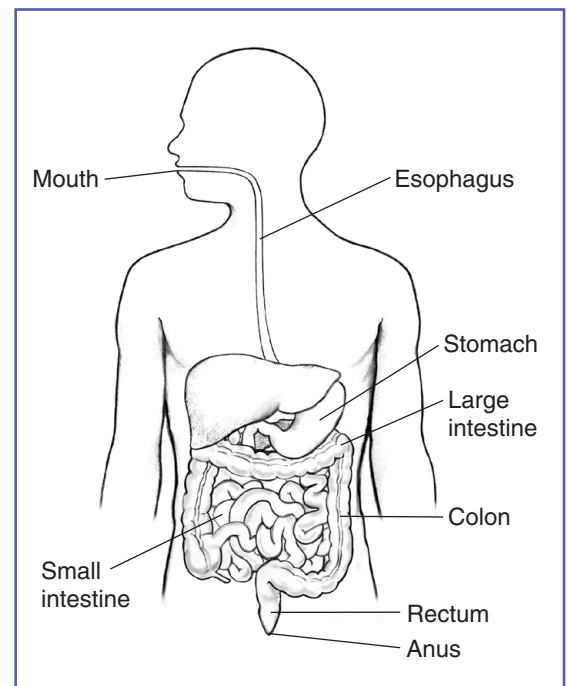


## What is flexible sigmoidoscopy?

Flexible sigmoidoscopy is a test that uses a flexible, narrow tube with a light and tiny camera on one end, called a sigmoidoscope or scope, to look inside the rectum and the lower, or sigmoid, colon. Flexible sigmoidoscopy can show irritated or swollen tissue, ulcers, and polyps—extra pieces of tissue that grow on the inner lining of the intestine. A health care provider performs the procedure during an office visit or at a hospital or an outpatient center.

## What are the rectum and sigmoid colon?

The rectum and sigmoid colon are parts of the gastrointestinal (GI) tract, a series of hollow organs joined in a long, twisting tube from the mouth to the anus—the 1-inch opening through which stool leaves the body. Organs that make up the GI tract are the mouth, esophagus, stomach, small intestine, large intestine, and anus. The last part of the GI tract—called the lower GI tract—consists of the large intestine and anus.



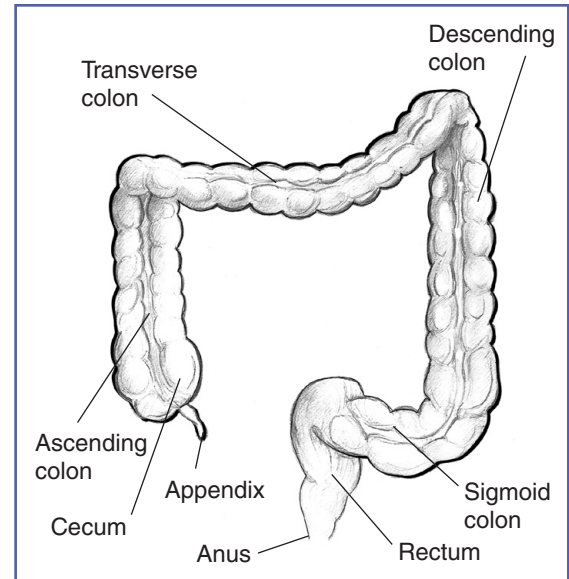
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The large intestine is about 5 feet long and includes the appendix, cecum, colon, rectum, and anus. The large intestine changes waste from liquid to a solid matter called stool. Stool passes from the colon to the rectum. The rectum stores stool prior to a bowel movement.

The colon has four main parts:

- ascending colon
- transverse colon
- descending colon
- sigmoid colon

The sigmoid colon is the last section of the colon. The rectum is 6 to 8 inches long in adults and is located between the sigmoid colon and the anus. During a bowel movement, stool moves from the rectum to the anus and out of the body.



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## Get Screened for Colon Cancer

The American College of Gastroenterology recommends screening for colon cancer

- at age 50 for people who are not more likely to develop the disease
- at age 45 for African Americans because they are more likely to develop the disease<sup>1</sup>

A health care provider may recommend earlier screening if a person has a family history of colon cancer, a personal history of inflammatory bowel disease—long-lasting disorders that cause irritation and

sores in the GI tract—or other risk factors for colon cancer.

Colonoscopy is the preferred screening method for colon cancer because it shows the entire colon. However, preparing for and performing a flexible sigmoidoscopy usually requires less time.

Medicare and private insurance companies sometimes change whether and how often they pay for cancer screening tests. People should check with their insurance company to find out how often their coverage will allow a screening flexible sigmoidoscopy.

Read more about colon cancer at [www.cancer.gov](http://www.cancer.gov).

<sup>1</sup>Rex DK, Johnson DA, Anderson JC, Schoenfeld PS, Burke CA, Inadomi JM. American College of Gastroenterology guidelines for colorectal cancer screening 2008. *American Journal of Gastroenterology*. 2009;104:739–750.

## Why is a flexible sigmoidoscopy performed?

A health care provider performs a flexible sigmoidoscopy to help diagnose

- changes in bowel habits
- abdominal pain
- bleeding from the anus
- weight loss

A health care provider may also perform a flexible sigmoidoscopy as a screening test for colon cancer. Screening is testing for a disease when a person has no symptoms. Screening may find diseases at an early stage, when there may be a better chance of curing the disease.

## How does a person prepare for a flexible sigmoidoscopy?

A person prepares for a flexible sigmoidoscopy by

- **talking with a health care provider.** A person should talk with his or her health care provider about medical conditions he or she has and all prescribed and over-the-counter medications, vitamins, and supplements he or she takes, including
  - arthritis medications
  - aspirin or medications that contain aspirin
  - blood thinners

- diabetes medications
- nonsteroidal anti-inflammatory drugs such as ibuprofen or naproxen
- vitamins that contain iron or iron supplements

- **cleansing the bowel.** The health care provider will give written bowel prep instructions to follow at home. A health care provider orders a bowel prep so that little to no stool is present inside the person's intestine. A complete bowel prep lets the person pass stool that is clear. Stool inside the colon can prevent the health care provider from clearly seeing the lining of the intestine. Instructions may include following a clear liquid diet for 1 to 3 days before the procedure and avoiding drinks that contain red or purple dye. The instructions will provide specific direction about when to start and stop the clear liquid diet. During this diet, people may drink or eat the following:

- fat-free bouillon or broth
- gelatin in flavors such as lemon, lime, or orange
- plain coffee or tea, without cream or milk
- sports drinks in flavors such as lemon, lime, or orange
- strained fruit juice, such as apple or white grape—orange juice is not recommended
- water

The person needs to take laxatives and enemas the night before and several hours before a flexible sigmoidoscopy. A laxative is medication that loosens stool and increases bowel movements. An enema involves flushing water or laxative into the rectum using a special wash bottle. Laxatives and enemas can cause diarrhea, so the person should stay close to a bathroom during the bowel prep.

Laxatives are usually swallowed in pill form or as a powder dissolved in water. Some people will need to drink a large amount, usually a gallon, of liquid laxative over the course of the bowel prep at scheduled times. People may find this part of the prep difficult; however, it is important to complete the prep. The health care provider will not be able to see the sigmoid colon clearly if the prep is incomplete.

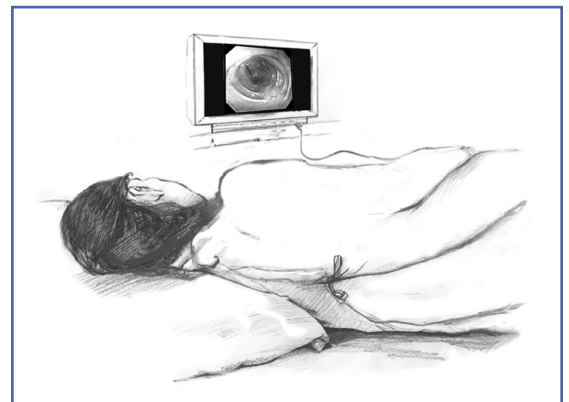
People should call the health care provider if they are having side effects that make them feel they can't finish the prep.

## How is a flexible sigmoidoscopy performed?

A health care provider performs a flexible sigmoidoscopy during an office visit or at a hospital or an outpatient center. A person usually does not need anesthesia, and the procedure takes about 20 minutes.

For the test, the person will lie on a table while the health care provider inserts a sigmoidoscope into the anus and slowly

guides it through the rectum and into the sigmoid colon. The scope inflates the large intestine with air to give the health care provider a better view. The camera sends a video image of the intestinal lining to a computer screen, allowing the health care provider to examine the tissues lining the sigmoid colon and rectum. The health care provider may ask the person to move several times so he or she can adjust the scope for better viewing. Once the scope has reached the transverse colon, the health care provider withdraws it slowly while examining the lining of the colon again.



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The health care provider can remove polyps during flexible sigmoidoscopy and send them to a lab for testing. Polyps are common in adults and are usually harmless. However, most colon cancer begins as a polyp, so removing polyps early is an effective way to prevent cancer.

The health care provider may also perform a biopsy, a procedure that involves taking a small piece of intestinal lining for examination with a microscope. The person will not feel the biopsy. A pathologist—a doctor who specializes in diagnosing diseases—will examine the tissue.

The health care provider may pass tiny tools through the scope to remove polyps and take a sample for biopsy. If bleeding occurs, the health care provider can usually stop it with an electrical probe or special medications passed through the scope. If the health care provider finds polyps or other abnormal tissues, he or she may suggest examining the rest of the colon with a colonoscopy.

### What can a person expect after a flexible sigmoidoscopy?

After a flexible sigmoidoscopy, a person can expect

- abdominal cramps or bloating during the first hour after the test.
- to resume regular activities immediately after the test.
- to return to a normal diet.
- a member of the health care team to review the discharge instructions with the person and provide a written copy. The person should follow all instructions given.

Some results from a flexible sigmoidoscopy are available immediately after the procedure, and the health care provider will share results with the person. Biopsy results take a few days to come back.

### What are the risks of flexible sigmoidoscopy?

The risks of flexible sigmoidoscopy include

- bleeding.
- perforation—a hole or tear in the lining of the colon.
- severe abdominal pain.
- diverticulitis—a condition that occurs when small pouches in the colon, called diverticula, become irritated, swollen, and infected. Read more in *Diverticular Disease* at [www.digestive.niddk.nih.gov](http://www.digestive.niddk.nih.gov).
- cardiovascular events, such as a heart attack, low blood pressure, or the heart skipping beats or beating too fast or too slow.
- death, although this risk is rare.

Bleeding and perforation are the most common complications from flexible sigmoidoscopy. Most cases of bleeding occur in people who have polyps removed. The health care provider can treat bleeding that occurs during the flexible sigmoidoscopy right away. However, a person may have delayed bleeding up to 2 weeks after the test. The health care provider diagnoses delayed bleeding with a colonoscopy or repeat flexible sigmoidoscopy and treats it with an electrical probe or special medication. A person may need surgery to treat perforation.

## Seek Immediate Care

People who have any of the following symptoms after a flexible sigmoidoscopy should seek immediate care:

- severe abdominal pain
- fever
- continued bloody bowel movements or continued bleeding from the anus
- dizziness
- weakness

## Points to Remember

- Flexible sigmoidoscopy is a test that uses a flexible, narrow tube with a light and tiny camera on one end, called a sigmoidoscope or scope, to look inside the rectum and the lower, or sigmoid, colon.
- Flexible sigmoidoscopy can show irritated or swollen tissue, ulcers, and polyps—extra pieces of tissue that grow on the inner lining of the intestine.
- A health care provider performs a flexible sigmoidoscopy to help diagnose
  - changes in bowel habits
  - abdominal pain
  - bleeding from the anus
  - weight loss
- The health care provider will give written bowel prep instructions to follow at home. A health care provider orders a bowel prep so that little to no stool is present inside the person’s intestine.
- People should call the health care provider if they are having side effects that make them feel they can’t finish the prep.
- A health care provider performs a flexible sigmoidoscopy during an office visit or at a hospital or an outpatient center. A person usually does not need anesthesia, and the procedure takes about 20 minutes.
- After a flexible sigmoidoscopy, a person can expect
  - abdominal cramps or bloating during the first hour after the test.
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  - a member of the health care team to review the discharge instructions with the person and provide a written copy. The person should follow all instructions given.
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  - severe abdominal pain
  - fever
  - continued bloody bowel movements or continued bleeding from the anus
  - dizziness
  - weakness



## Hope through Research

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) conducts and supports basic and clinical research into many digestive disorders.

Clinical trials are research studies involving people. Clinical trials look at safe and effective new ways to prevent, detect, or treat disease. Researchers also use clinical trials to look at other aspects of care, such as improving the quality of life for people with chronic illnesses. To learn more about clinical trials, why they matter, and how to participate, visit the NIH Clinic Research Trials and You website at [www.nih.gov/health/clinicaltrials](http://www.nih.gov/health/clinicaltrials). For information about current studies, visit [www.ClinicalTrials.gov](http://www.ClinicalTrials.gov).

## For More Information

Read more about other diagnostic tests in these publications at [www.digestive.niddk.nih.gov](http://www.digestive.niddk.nih.gov):

- *Colonoscopy*
- *ERCP (Endoscopic Retrograde Cholangiopancreatography)*
- *Liver Biopsy*
- *Lower GI Series*
- *Upper GI Endoscopy*
- *Upper GI Series*
- *Virtual Colonoscopy*

### **American College of Gastroenterology**

6400 Goldsboro Road, Suite 200  
Bethesda, MD 20817  
Phone: 301-263-9000  
Fax: 301-263-9025  
Email: [info@acg.gi.org](mailto:info@acg.gi.org)  
Internet: [www.gi.org](http://www.gi.org)

### **American Gastroenterological Association**

4930 Del Ray Avenue  
Bethesda, MD 20814  
Phone: 301-654-2055  
Fax: 301-654-5920  
Email: [member@gastro.org](mailto:member@gastro.org)  
Internet: [www.gastro.org](http://www.gastro.org)

### **American Society for Gastrointestinal Endoscopy**

3300 Woodcreek Drive  
Downers Grove, IL 60515  
Phone: 1-866-353-ASGE (1-866-353-2743)  
or 630-573-0600  
Fax: 630-963-8332  
Email: [info@asge.org](mailto:info@asge.org)  
Internet: [www.asge.org](http://www.asge.org)

### **International Foundation for Functional Gastrointestinal Disorders**

700 West Virginia Street, Suite 201  
Milwaukee, WI 53204  
Phone: 1-888-964-2001 or 414-964-1799  
Fax: 414-964-7176  
Email: [iffgd@iffgd.org](mailto:iffgd@iffgd.org)  
Internet: [www.iffgd.org](http://www.iffgd.org)

### **National Cancer Institute**

BG 9609 MSC 9760  
9609 Medical Center Drive  
Bethesda, MD 20892-9760  
Phone: 1-800-4-CANCER  
(1-800-422-6237)  
Internet: [www.cancer.gov](http://www.cancer.gov)

### **Society of American Gastrointestinal and Endoscopic Surgeons**

11300 West Olympic Boulevard, Suite 600  
Los Angeles, CA 90064  
Phone: 310-437-0544  
Email: [webmaster@sages.org](mailto:webmaster@sages.org)  
Internet: [www.sages.org](http://www.sages.org)

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You may also find additional information about this topic by visiting MedlinePlus at [www.medlineplus.gov](http://www.medlineplus.gov).

This publication may contain information about medications and, when taken as prescribed, the conditions they treat. When prepared, this publication included the most current information available. For updates or for questions about any medications, contact the U.S. Food and Drug Administration toll-free at 1-888-INFO-FDA (1-888-463-6332) or visit [www.fda.gov](http://www.fda.gov). Consult your health care provider for more information.

## National Digestive Diseases Information Clearinghouse

2 Information Way  
Bethesda, MD 20892-3570  
Phone: 1-800-891-5389  
TTY: 1-866-569-1162  
Fax: 703-738-4929  
Email: [nddic@info.niddk.nih.gov](mailto:nddic@info.niddk.nih.gov)  
Internet: [www.digestive.niddk.nih.gov](http://www.digestive.niddk.nih.gov)

The National Digestive Diseases Information Clearinghouse (NDDIC) is a service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The NIDDK is part of the National Institutes of Health of the U.S. Department of Health and Human Services. Established in 1980, the Clearinghouse provides information about digestive diseases to people with digestive disorders and to their families, health care professionals, and the public. The NDDIC answers inquiries, develops and distributes publications, and works closely with professional and patient organizations and Government agencies to coordinate resources about digestive diseases.

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