

Colonoscopy

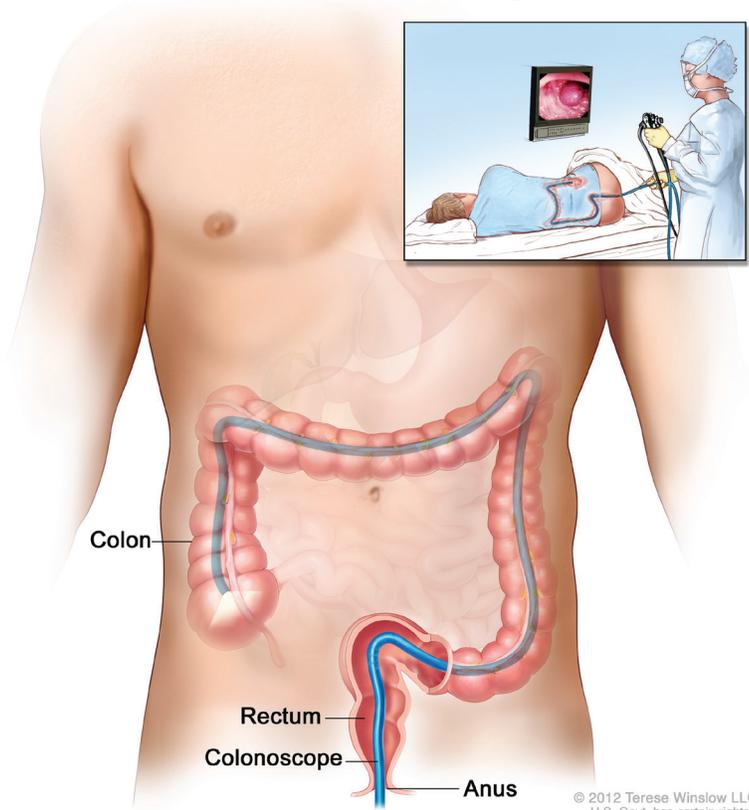


AMERICAN COLLEGE OF SURGEONS

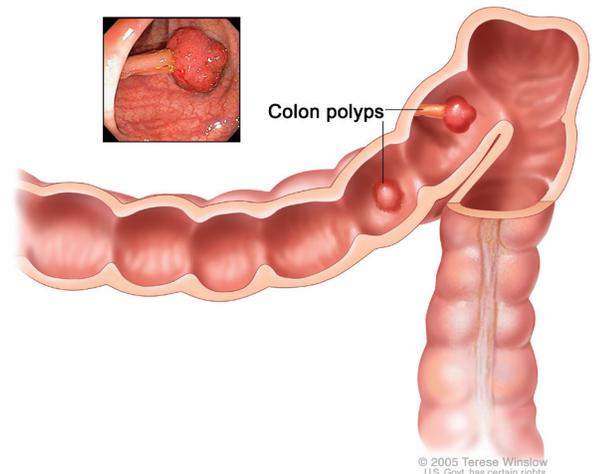
Inspiring Quality:
Highest Standards, Better Outcomes

100+ years

Colonoscopy



© 2012 Terese Winslow LLC
U.S. Govt. has certain rights



© 2005 Terese Winslow
U.S. Govt. has certain rights

- The risk of developing CRC is increased if you have ulcerative colitis or Crohn's disease or have a parent or sibling who had CRC before age 60.⁴
- Blacks have a higher risk and death rate than whites in the U.S.

Diagnostic Colonoscopy

A diagnostic colonoscopy is done to evaluate conditions such as anemia, a change in bowel habits, or abdominal pain.

Colonoscopy

Colonoscopy is a complete examination of the large intestine (colon). A flexible lighted tube fitted with a tiny camera is inserted through the anus.¹ The inside of the rectum and colon can be viewed for polyps, cancer, or diseases such as ulcerative colitis or Crohn's disease. Tissue and polyps can be removed during the procedure.

Reasons for a Colonoscopy

Screening Colonoscopy

A screening colonoscopy is done to check for cancer and inflammatory diseases like ulcerative colitis. Most colorectal cancers (CRC) start as non-cancerous polyps (tiny, fast growing cells that may become cancer). Removing polyps or finding cancer at an early stage can increase your chances for a full recovery.² During the colonoscopy, polyps can be removed with tiny instruments such as snares or forceps.

- In the U.S., CRC is the second leading cause of cancer death for both men and women. The lifetime risk of CRC is 4.5% or 1 of 20 adults in Western countries.³

Therapeutic Colonoscopy

A therapeutic colonoscopy can treat a known problem inside the colon such as bleeding or narrowing.

- For bleeding, your doctor may seal off the bleeding location by injecting medication, heat treatment, or clipping the bleeding site.
- Strictures (narrowing or partial blockage of colon) can be widened by inserting a balloon through the endoscope and inflating it inside the colon. A small stent (tube) may be left in the narrowed area to keep it open.

Surveillance colonoscopy

A surveillance colonoscopy is a follow-up for patients with a history of colon polyps, cancer, or inflammatory bowel disease.

SURGICAL PATIENT EDUCATION PROGRAM

Prepare for the Best Recovery

This first page is an overview. For more detailed information, review the entire document.

Procedure Options and Risks for Colorectal Screenings

American Cancer Society Guidelines: At 50 years old for average risk; at 40 for increased risk

TEST	KEEPING YOU INFORMED	ACCURACY
Fecal occult blood testing (FOBT): Recommended every year	Stool is collected at home and sent to a lab. Avoid eating red meat, taking Vitamin C, eating foods containing Vitamin C (citrus and broccoli), or taking nonsteroidal anti-inflammatory drugs before the test. ⁵	62 to 79% of the time when done yearly. This means that if 10 people had colon cancer, this test would show positive blood in 6 to 8 of them. The others would have cancer, but it would not be detected. ⁵
Fecal immunochemical test (FIT): Recommended every year	Stool is collected at home and sent to a lab. You can eat your regular diet before the test. If blood is found, the test may be repeated and you may need a colonoscopy.	May detect up to 3% of advanced cancers and 23% of precancerous lesions. ⁶
Flexible sigmoidoscopy: Recommended every 5 years	The doctor inserts a scope and checks for polyps or cancer in the lower third of the colon. The procedure may be done in the office while you are fully awake. The rectum and lower colon must be clean of stool. ^{5*}	May detect 70% to 80% of polyps or tumors in the lower half of the colon and rectum. The entire colon is not examined and you may be referred for colonoscopy.
Multitargeted stool DNA test plus FIT test: Recommended every 3 years ⁷	Combines a FIT test (above) with a test for DNA markers left in the stool. ⁷	May detect up to 92% of cancerous lesions; 42% of precancerous lesions. ⁶
Virtual colonoscopy (CT colonography): Recommended every 5 years	A CT scan with air inserted into the rectum through a tube before the scan. The procedure requires complete bowel preparation.*	May detect up to 94% of tumors 10 mm or larger ⁷ ; 65% of polyps 6 to 9 mm. ⁸ Polyps less than 6 mm may not be seen and a colonoscopy may still be necessary to remove them. ⁹
Colonoscopy: Recommended every 10 years	The procedure is done in an outpatient or hospital facility and requires complete bowel preparation.* Sedation is usually given and you will need someone to drive you home. ¹⁰	May detect 90% of polyps or tumors; may miss small or flat lesions less than 9 mm. ¹¹ Polyp biopsy or removal can be done.

*See complete bowel prep instructions on the insert of this brochure

Colonoscopy Benefits and Risks

Benefits—A colonoscopy is the most accurate way to find and remove small polyps. Removing polyps at an early stage can decrease your risk of death from colon and rectal cancer.¹

THE RISK	WHAT HAPPENS	KEEPING YOU INFORMED
Perforation of the intestine	A hole made by pressure from the scope that passes through the entire wall of the colon is a rare complication reported in less than 1 of 1,000 cases. ¹²	A large perforation noticed immediately requires surgery. A small perforation noticed the first few days after the procedure may be treated with rest, fluids, antibiotics, and close observation.
Bleeding	Bleeding is reported in less than 1 of 1,000 cases. ¹² The risk is increased when many or a large polyp is removed.	A small amount of bleeding may occur after colonoscopy. Call your doctor if you notice more than four tablespoons of blood (one shot glass) with bowel movements within the first two weeks of your colonoscopy.
Cardiorespiratory	Minor changes in oxygen levels and heart rate occur in less than 1 of 1,000 cases. ¹³	The majority of these events are related to sedation and increase with advanced age and other diseases. ¹⁴
All complications	33% of patients report at least one minor symptom after colonoscopy, but serious complications are uncommon. ¹²	Checking for any problems with medication and sedation and monitoring before, during, and after the procedure will reduce risks.

The Procedure and Recovery

Common Colonoscopy Prep Solutions

Your health care provider will advise you which prep to use—see [facs.org/education/patient-education/patient-resources/operations/colonoscopy-prep](https://www.facs.org/education/patient-education/patient-resources/operations/colonoscopy-prep) for details.

GoLyte[®], Colyte[®], NuLyte[®], TriLyte[®]
Contain Polyethylene glycol (PEG)

HalfLyte[®]

2 liters of the PEG solution taken with another laxative

Sports Drink and MiraLAX[®]

Dulcolax laxative tablets containing 5 mg of bisacodyl each, 1 – 8.3 oz. bottle Miralax (238 grams), and a 64 oz. clear liquid sports drink

MoviPrep[®]

Polyethylene Glycol 3350: Sodium sulfate, sodium chloride, sodium ascorbate, and ascorbic acid

Suprep[®]

Sodium/potassium/magnesium sulfate solution

Visicol[®] or OsmoPrep[®]

Sodium phosphate monobasic monohydrate and sodium phosphate dibasic anhydrous tablets

Prepopik[®]

Oral sodium picosulfate, magnesium oxide, and citric acid

Safety Check

If you are having the procedure done in a hospital or ambulatory center, an identification bracelet with your name will be placed on your wrist. This should be checked by all health care team members before providing any procedure or giving you medication.

Sedation

You will be placed on your side usually with your knees drawn toward your chest. You will be given medication usually through an IV line to help you relax and remain comfortable. You may or may not fall completely asleep during the procedure, but most patients will not remember their colonoscopy. Talk to your doctor about the type of sedation

and side effects. Common drugs are benzodiazepines (midazolam/Versed); opioids (Fentanyl[®]), and other agents (Propofol[®]).

The Procedure

Your doctor will guide a scope that is inserted into the anus and passed up to the colon. Small amounts of air are inserted to open the colon and allow viewing of the surrounding area. The tube has a light and camera at the end and sends a picture to a TV screen.

Your heart rate, breathing, and oxygen level will be monitored during the exam. The procedure will take about 15 to 60 minutes. If your doctor sees abnormal tissue or polyps, they will be removed or biopsied.

Your Recovery

You will be monitored until you are fully awake. Most patients can go home within 30 to 90 minutes.

If you receive sedation or relaxation medication, you may feel tired following the procedure. You may feel groggy and you should not make any big decisions, drive, or return to work for the rest of the day.

Diet

You may be eager to eat a large meal after fasting, but it is a good idea to start with light meals and ease into solid food for the first day.¹⁵

Pain

Severe pain is rare after the procedure. You may have minor cramping and gas; after you pass gas, the cramping should be gone.

Bowel Movements

You should return to your normal bowel pattern within 2 to 3 days after your procedure.

If you had a biopsy or polyps removed, your doctor will let you know:

- When and how you will be informed about your results.
- If you need to avoid aspirin or ibuprofen for 10 days after the procedure.

When to Contact Your Surgeon

Call your doctor if you have:

- Severe abdominal pain or if your abdomen feels hard; this could be a symptom of colon perforation
- Bleeding for more than 2 bowel movements or bright red bleeding that fills a shot glass
- Fever greater than 100.4°F or 38°C
- Swelling, redness, or drainage at the IV site
- Weakness, shortness of breath, or fainting
- Nausea or vomiting blood

OTHER INSTRUCTIONS:

FOLLOW-UP APPOINTMENTS

WHO:

DATE:

PHONE:

More Information

For more information, please go to the American College of Surgeons Patient Education Website at facs.org/patienteducation.

GLOSSARY

Crohn's disease: An inflammatory bowel disease that can cause inflammation and narrowing along the gastrointestinal tract.

Ulcerative colitis: A disease that causes inflammation (redness and swelling) of the colon and rectum.

DISCLAIMER

The American College of Surgeons (ACS) is a scientific and educational association of surgeons that was founded in 1913 to improve the quality of care for the surgical patient by setting high standards for surgical education and practice. The ACS endeavors to provide procedure education for prospective patients and those who educate them. It is not intended to take the place of a discussion with a qualified surgeon who is familiar with your situation. The ACS makes every effort to provide information that is accurate and timely, but makes no guarantee in this regard.

Original review November 2009 by:

H. Randolph Bailey, MD, FACS
David Schoetz, MD, FACS
Kathleen Piotrowski-Walters, RN, MSN
Kathleen Heneghan, RN, PhD

Reviewed August 2014 by:

Michael McGee, MD, FACS
Nancy Strand, MPH, RN

Revised July 2017 by:

Robert Cima, MD, FACS
Nancy Strand, MPH, RN

REFERENCES

The information provided in this brochure is chosen from recent articles based on relevant clinical research or trends. The research listed below does not represent all of the information that is available about your procedure. Ask your doctor if he or she recommends that you read any additional research.

1. Lieberman D. Progress and challenges in Colorectal Cancer Screening. *Gastroenterology*. 2010;138(6):2115-2126. doi: 10.1053/j.gastro.2010.02.006.
2. Edwards BK, Ward E, Kohler BA, et al. Annual report to the nation on the status of cancer, 1975-2006, featuring colorectal cancer trends and impact of interventions (risk factors, screening and treatment) to reduce future rates. *Cancer*. 2010;116(3):544-573. doi: 10.1002/cncr.24760.
3. SEER Cancer Statistics Review 1975-2013. National Cancer Institute. Available at: https://seer.cancer.gov/archive/csr/1975_2013/results_merged/topic_lifetime_risk_diagnosis.pdf. Accessed September 22, 2017.
4. SEER Stat Fact Sheet; colon and rectum. National Cancer Institute. Available at: <http://seer.cancer.gov/statfacts/html/colorect.html>. Accessed July 7, 2014.
5. Harvard Health Publishing. A New Look at Colon Cancer Screening. *Harvard Men's Health Watch*. October 2016. Available at: www.health.harvard.edu/staying-healthy/a-new-look-at-colon-cancer-screening. Accessed September 25, 2017.
6. Imperiale TF, Ransohoff DF, Itzkowitz SH, et al. Multitarget stool DNA testing for colorectal-cancer screening. *N Engl J Med*. 2014;(4)370:1287-1297. DOI: 10.1056/NEJMoa1311194.
7. US Preventive Services Task Force. Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2016;315(23):2564-2575. doi:10.1001/jama.2016.5989.
8. Colorectal Cancer. American Cancer Society. Available at: www.cancer.org/acs/groups/cid/documents/webcontent/003096-pdf.pdf. Accessed July 7, 2014.
9. ACR Practice Guidelines for the Performance of Computerized Tomography (CT) Colonography in Adults, 2009. Available at: www.acr.org/~media/A81531ACA92F45058A83B5281E8FE826.pdf. Accessed July 7, 2014.
10. Johnson CD, Chen M-H, Toledano AY, et al. Accuracy of CT colonography for detection of large adenomas and cancers. *N Engl J Med*. 2008;359(12):1207-1217. doi: 10.1056/NEJMoa0800996.
11. Pickhardt PJ, Hassan C, Halligan S, et al. Colorectal Cancer: CT colonography and colonoscopy for detection-systematic review and meta-analysis. *Radiology*. 2011;259(2):393-405.
12. Ko CW, Dornitz JA. Complication of colonoscopy, magnitude and management. *Gastrointest Endosc Clin N Am*. 2010;20(4):659-671. doi: 10.1016/j.giec.2010.07.005.
13. Sharma VK, Nguyen CC, Crowell MD, et al. A national study of cardiopulmonary unplanned events after GI endoscopy. *Gastrointest Endosc*. 2007;66(1):27-34.
14. Warren JL, Klabunde CN, Mariotto AB, et al. Adverse events after out-patient colonoscopy in the Medicare population. *Ann Intern Med*. 2009;150(12):849-857, W152.
15. Viiala CH, Zimmerman M, Cullet DJ, et al. Complication rates of colonoscopy in an Australian teaching hospital environment. *Intern Med J*. 2003;33(8):355-359.