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Colorectal Screening Recommendations

This guideline covers screening of individuals with no signs or symptoms of colorectal cancer. For others, a thorough evaluation is warranted.

Background

- Colorectal cancer (CRC) is the second leading cause of death from cancer in men and women combined
- Risk is higher among men, in African Americans and some Native Americans, and risk increases with age
- Screening tests that can detect adenomatous polyps can lead to prevention of colorectal cancer
- **The best choice of a screening test is the one that the health care provider and patient accept and then complete**

Average Risk → Begin at 50 yrs. →

Options[a]
1) Colonoscopy every 10 yrs.
2) Fecal Occult Blood Test (FOBT) every 1 yr. [high sensitivity guaiac-based[b] or fecal immunochemical test (FIT)]
3) Sigmoidoscopy every 5 yrs., preferably with FOBT every 1-3 yrs.
4) CT colonography every 5 yrs.[c] (consider for those who cannot tolerate colonoscopy)

→ Consider discontinuing screening based on co-morbid conditions that limit life expectancy, especially after age 75. The U.S. Preventive Services Task Force recommends against screening after age 85.

Higher Risk due to Family History

- CRC or documented advanced adenomatous polyps[d] in a 1st degree relative before 60 yrs. or ≥2 1st degree relatives at any age. → Begin at 40 yrs. or consider starting 10 yrs. before youngest case in a 1st degree relative, whichever is earliest. → Colonoscopy every 5 yrs.
- CRC or documented advanced adenomatous polyps[d] in a 1st degree relative ≥60 yrs. or ≥2 2nd degree relatives with CRC. → Begin at 40 yrs. → Choose from average risk screening options (above).

Other High Risk Conditions → Consider referral to specialty care for those with ulcerative colitis, Crohn's disease, familial adenomatous polyposis (FAP), Lynch Syndrome (A.K.A. Hereditary Non-Polyposis Colorectal Cancer (HNPCC)), and other rare syndromes.

History of Polyps → Hyperplastic polyps: usually screened as for average risk.
Adenomatous polyps: surveillance depends on number, size, and histology.
See guidelines at: http://www.healthteamworks.org/guidelines/colorectal-cancer-screening.html.

History of Colorectal Cancer → Typically colonoscopy at 1 yr. and 3 yrs.; follow-up thereafter depends on colonoscopy findings.
See guidelines at: http://www.healthteamworks.org/guidelines/colorectal-cancer-screening.html.

[a] Individual settings and circumstances influence the choice of a method. Information about all screening options is summarized on page 2 of this guideline, including methods under development.
[b] A highly sensitive product such as Hemoccult SENSA or equivalent.
[c] Recommended by the Multi-Society Task Force but not the U.S. Preventive Services Task Force (USPSTF). Check with health plan for coverage.
[d] Advanced adenomatous polyps are defined as 1 cm or larger, and/or with villous histologic features, and/or with high-grade dysplasia.

This guideline is designed to assist the clinician in the management of colorectal screening and is not intended to replace a clinician's judgment or establish a protocol for all patients. This publication was supported by cooperative agreement #U58 DP000848-01 Revised, from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC.
For references and additional copies of the guideline go to www.healthteamworks.org or call (303) 446-7200. *Approved 1/7/2009.*

Comparison of Screening Methods

This guideline covers screening of individuals with no signs or symptoms of colorectal cancer. For others, a thorough evaluation is warranted.

Preferred Methods	Frequency	Prep Required	Single test Sensitivity for Advanced Neoplasia	USPSTF Evidence Grade[a]	Comments
Colonoscopy	q 10 yrs.	Complete bowel prep	Over 90% sensitive for both cancer and adenomas >1 cm	A	• Mild sedation is usually used. • Risks of perforation and bleeding, mostly associated with polypectomy. • *Colonoscopy recommended as follow-up for positive findings from any other screening test.*
Fecal Occult Blood Testing (FOBT) by high sensitivity guaiac-based tests[b]	q 1 yr.	Diet and medication restrictions	44% to 80% sensitive for cancer but under 70% sensitive for adenomas >1 cm	A	• A highly sensitive product such as Hemoccult SENSA or equivalent is recommended. • 2-3 stool samples from 3 consecutive bowel movements are collected at home. • Adherence to annual screening is required for optimal test performance for all FOBT tests. • A single sample collected digitally during clinical exam is not adequate for any of the FOBT tests.
Fecal Occult Blood Testing (FOBT) by Fecal Immunochemical Test (FIT)[b]	q 1 yr.	None	61% to 91% sensitive for cancer and 20% to 67% sensitive for adenomas >1 cm	A	• Fewer demands on patients than the guaiac-based FOBT tests. • No dietary or drug restrictions are needed. • Stool sampling procedure may be easier. • Higher false positive rate than guaiac-based FOBT tests.
Flexible sigmoidoscopy[b]	q 5 yrs.	Complete or partial bowel prep	58% to 70% sensitive for cancer and 50% to 75% sensitive for an adenoma ≥1 cm anywhere in the colorectum	A	• Combining with FOBT every 1-3 yrs. offers greater protection than sigmoidoscopy alone. • Sigmoidoscopy directly visualizes only the distal portion of the colorectum, but increased sensitivity comes from the colonoscopy follow-up of all positive findings. • Sedation is not usually used, so some discomfort. • Becoming less available.
Methods with Insufficient Evidence (USPSTF "I" Grade)					
CT colonography[b]	q 5 yrs.	Complete bowel prep	About 90% sensitive for both cancer and adenomas >1 cm	I	• Consider for those who cannot tolerate colonoscopy. • Check with health plan for coverage. • Perforation risk is very low; there is radiation risk; insufflation causes some discomfort. • 10-15% of tests result in colonoscopy follow-up. • May reveal extra-colonic findings that require further work up in about 10% of patients.
Stool DNA[b]	Unknown	None	Unknown	I	• Current tests have inconsistent sensitivity.
Methods Not Recommended					
Double Contrast Barium Enema (DCBE)[b]	q 5 yrs.	Complete bowel prep	About 50-75% sensitive for both cancer and adenomas >1 cm	Ungraded	• Perforation risk is very low, and there is some radiation risk. • Evidence base is weak, so not included in the recommended methods by USPSTF. • High quality exams are not widely available.
Camera Capsule[b]	Unknown	Complete bowel prep	Unknown	Ungraded	• An ingestible encapsulated miniature camera captures images of the lining of the colon. • This technology is still under development, and is not available in the U.S.
Serologic tests[b]	Unknown	None	Unknown	Ungraded	• Several types of circulating biomarkers are being studied, including proteins and DNA. • These tests are under development, so it is premature to recommend them at this time.

[a] Summary of USPSTF evidence grades at: www.coloradoguidelines.org/guidelines/colorectalcancer.asp

[b] **Colonoscopy recommended for any positive test.**

IMPORTANT: Further evaluation is recommended in patients with any signs or symptoms of colorectal cancer, including unexplained iron deficiency anemia not of upper GI origin such as a peptic ulcer; significant change in bowel pattern; and/or rectal bleeding of undetermined cause, regardless of the presence of hemorrhoids.

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