

Screening for Colorectal Cancer:

Summary of 2021 U.S. Preventive Services Task Force (USPSTF) Guidelines¹



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When to start screening? Start screening average-risk individuals at age 45 years. What is new: Age to start screening lowered from 50 years to 45 years.

Comments: While the incidence of colorectal cancer (CRC) has been declining in the US for older adults by about 2% per year, it has been rising for both men and women < 50 years by 2% / year^{2,3}. This increase is mostly driven by rectal and left-sided colon cancers and is noted even among 20 to 45-year-olds. Risk factors such as sedentary lifestyle, obesity and diabetes have been rising for all ages, but may disproportionately affect young adults as those > 50 years are "protected" by screening.⁴

Features of CRC in young adults: (1) Advanced stage at diagnosis, may be related to delay in seeking attention for symptoms and delay in referral to specialist for diagnosis⁵; (2) Up to one-third are associated with hereditary CRC syndromes like Lynch syndrome.⁶

Considerations:

- 1. Educate patients about CRC symptoms
- 2. Promptly investigate symptoms of rectal bleeding and anemia (especially in men). History and physical exam are inaccurate in differentiating benign from malignant causes of rectal bleeding.^{7,8} Sigmoidoscopy, and if non-diagnostic, colonoscopy; or direct colonoscopy should be considered⁹
- 3. Obtain detailed family history to identify those with hereditary CRC syndromes

How to screen?

The USPSTF recommends the following screening strategies as acceptable:

- High-sensitivity gFOBT or FIT every year
- sDNA-FIT every 1 to 3 years (Note: sDNA-FIT has higher sensitivity but lower specificity than FIT.
 Specificity decreases with increasing patient age. "sDNA every 3 years" was inferior to other strategies regarding balance between number of colonoscopies and life-years gained)
- CT colonography every 5 years
- Flexible sigmoidoscopy every 5 years
- Flexible sigmoidoscopy every 10 years + annual FIT
- Colonoscopy screening every 10 years (Note: associated with highest mean life-years gained and CRC cases averted but also colonoscopy-associated harms, when compared with other strategies)

Comments: Most screening in the US is opportunistic (results from office-based interaction between patient and physician) and colonoscopy-based.¹⁰ This model has been highly effective as the US has the highest CRC screening compliance rates and highest decreases in CRC incidence in the world.¹¹ USPSTF estimates that average-risk individuals will need only 4.2 tests/lifetime for colonoscopy-based screening compared with up to 21 tests/lifetime for stool-based strategies, supporting colonoscopy's preferred role in opportunistic screening model.

When to stop screening?

<u>76 – 85 years</u>: Screen selectively. The net benefit of screening all persons in this age group is small, especially for those who have been adequately screened before. Consider life-expectancy, comorbidities, patient's overall risk and patient preferences in decision-making.

<u>86 years and older</u>: Unlikely to benefit from screening. Competing causes of mortality likely preclude any survival benefit that would outweigh the harms of screening.

For Additional Information:

Access detailed guidelines and downloadable PDF at:

https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening

Visit the ASGE Value of Colonoscopy Campaign at <u>ValueofColonoscopy.org</u> for resources to educate patients on screening options and reinforcement that regardless of the test selected, every positive test leads to a colonoscopy, the gold standard of colorectal cancer screening.

References

- 1. Davidson KW, Barry MJ, Mangione CM, et al. Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. Jama 2021;325:1965-77.
- 2. Henley SJ, Ward EM, Scott S, et al. Annual report to the nation on the status of cancer, part I: National cancer statistics. Cancer 2020;126:2225-49.
- 3. Siegel RL, Miller KD, Goding Sauer A, et al. Colorectal cancer statistics, 2020. CA Cancer J Clin 2020;70:145-64.
- 4. Ahnen DJ, Wade SW, Jones WF, et al. The increasing incidence of young-onset colorectal cancer: a call to action. Mayo Clin Proc 2014;89:216-24.
- 5. Scott RB, Rangel LE, Osler TM, Hyman NH. Rectal cancer in patients under the age of 50 years: the delayed diagnosis. American journal of surgery 2016;211:1014-8.
- 6. Giráldez MD, Balaguer F, Bujanda L, et al. MSH6 and MUTYH deficiency is a frequent event in early-onset colorectal cancer. Clinical cancer research: an official journal of the American Association for Cancer Research 2010;16:5402-13.
- 7. Goulston KJ, Cook I, Dent OF. How important is rectal bleeding in the diagnosis of bowel cancer and polyps? Lancet (London, England) 1986;2:261-5.
- 8. Helfand M, Marton KI, Zimmer-Gembeck MJ, Sox HC, Jr. History of visible rectal bleeding in a primary care population. Initial assessment and 10-year follow-up. Jama 1997;277:44-8.
- 9. Lewis JD, Brown A, Localio AR, Schwartz JS. Initial evaluation of rectal bleeding in young persons: a cost-effectiveness analysis. Annals of internal medicine 2002;136:99-110.
- Rex DK, Boland CR, Dominitz JA, et al. Colorectal Cancer Screening: Recommendations for Physicians and Patients From the U.S. Multi-Society Task Force on Colorectal Cancer. Gastroenterology 2017;153:307-23.
- 11. Edwards BK, Noone AM, Mariotto AB, et al. Annual Report to the Nation on the status of cancer, 1975-2010, featuring prevalence of comorbidity and impact on survival among persons with lung, colorectal, breast, or prostate cancer. Cancer 2014;120:1290-314.