

**1A\_Attachment 1: Guidelines for Screening and Surveillance for Early Detection of Colorectal Polyps and Cancer+  
Colorectal Cancer (CRC) Medical Advisory Committee, Maryland Department of Health and Mental Hygiene  
March 2009**

**Identify the person’s *most advanced* Risk Category (first column), and read across for the Recommendation**

<b>Risk Category</b>	<b>Recommendation</b>	<b>Age to Begin</b>	<b>Interval<sup>&amp;</sup></b>	<b>Reference<sup>+</sup></b>
<b>Inadequate Colonoscopy</b>				
“Inadequate colonoscopy,” that is, colonoscopy didn’t reach cecum or patient had inadequate bowel preparation; any risk category	Repeat colonoscopy or perform other screening, as recommended by provider		As soon as indicated by colonoscopist; assure adequate preparation before repeat test or other procedure <sup>&amp;</sup>	
<b>Average Risk<sup>++</sup></b>				
All people who are asymptomatic and <b>not</b> in the categories below <sup>++</sup>	Colonoscopy*	Age 50 years	Colonoscopy <sup>&amp;</sup> <b>every 10 years</b>	Winawer-- US Multi-Society Task Force, Gastro 2003 Maryland CRC Medical Advisory Committee, 2006
People with small and limited number of rectal hyperplastic polyps <sup>^ ++</sup>	Colonoscopy	At time of initial polyp diagnosis	Colonoscopy <sup>&amp;</sup> <b>every 10 years</b>	Winawer-US Multi-Society Task Force and ACS, 2006
<b>Increased Risk of Adenocarcinoma of the Colon or Rectum—Moderate Risk: Family History</b>				
Colorectal cancer (CRC) or adenomatous polyp(s) (or polyp of unknown histology) in first degree relative <sup>@</sup> (FDR) at <b>&lt;60</b> years old or in <b>two or more</b> FDRs of any ages	Colonoscopy	Age 40 years or 10 years before the youngest case in the family, whichever is earlier	Colonoscopy <sup>&amp;</sup> <b>every 5-10 years</b>	ACS, 2003
CRC or adenomatous polyp(s) (or polyp of unknown histology) in <b>one</b> FDR who was diagnosed at age <b>≥60</b> years	Colonoscopy	Age 40 years	As for Average Risk persons if no CRC or adenomas found	ACG, 2000

Risk Category	Recommendation	Age to Begin	Interval <sup>&amp;</sup>	Reference <sup>+</sup>
<b>Increased Risk: Personal history of endometrial or ovarian cancer</b>				
Personal history of cancer of the ovary or endometrium diagnosed at <50 years old <sup>@@</sup>	Colonoscopy	At time of diagnosis of ovarian or endometrial cancer	If no CRC or adenomas on screening, <b>repeat every 3-5 years</b> (or sooner if findings)	Maryland CRC Medical Advisory Committee 2007
<b>Increased Risk: Personal history of radiation therapy to colon or rectum</b>				
Personal history of radiation therapy to colon or rectum (e.g., radiation to prostate, cervix, uterus, rectum, etc.)	Colonoscopy &&	Age appropriate for CRC risk category, or begin 3-5 years after radiation, whichever is earlier.	If no CRC or adenomas on screening, <b>repeat in 3-5 years</b> (or sooner if findings)	Maryland CRC Medical Advisory Committee 2007
<b>Increased Risk—High Risk</b>				
Family history of familial adenomatous polyposis (FAP)	Early surveillance with colonoscopy, counseling to consider genetic testing, and referral to a specialty center	Puberty	If polyposis is confirmed by genetic testing <i>and</i> colonoscopy or by colonoscopy alone, colectomy is indicated. These clients are best referred to a center with experience in the management of FAP	ACS, 2003
Family history of hereditary non-polyposis colon cancer (HNPCC)	Colonoscopy and counseling to consider genetic testing	Age 21	If genetic test positive or if client has not had genetic testing, colonoscopy every <b>1-2 years until age 40, then every year</b> . These clients are best referred to a center with experience in the management of HNPCC.	<b>ACS, 2003</b>

Risk Category	Recommendation	Age to Begin	Interval <sup>&amp;</sup>	Reference <sup>+</sup>
Personal history of inflammatory bowel disease (IBD): ulcerative colitis-pancolitis/left-sided colitis; and Crohn's colitis	Colonoscopy with biopsies for dysplasia	8 years after the start of pancolitis; 12-15 years after the start of left-sided colitis	<p>Clients are best referred to a center with experience in the surveillance and management of IBD, number of biopsies needed, frequency of repeat colonoscopy, etc.</p> <p>Colonoscopy every 1-2 years (every year if pancolitis)</p> <p>If client is found to have <i>only</i> proctitis or proctosigmoiditis with biopsies negative for colitis proximal to 35 cm, then colonoscopy every 5 years.</p>	<p>IBD Study Group, 2005<sup>7</sup></p> <p>Maryland CRC Medical Advisory Committee, 2008</p>
<b>Increased Risk: Personal history of polyps—"Surveillance Colonoscopies"</b>				
People with <b>sessile or flat adenomas that are removed piecemeal</b> ; people with pathological evidence of <b>incomplete removal of an adenoma</b> or where endoscopist is uncertain that the polypectomy was complete	Colonoscopy	At time of initial polyp diagnosis	Consider follow-up at <b>short intervals (2-6 months)</b> to verify complete removal. Once complete removal has been established, subsequent surveillance should be individualized based on the endoscopist's judgment.	<p>Winawer-US Multi-Society Task Force and ACS, 2006,</p> <p>Maryland CRC Medical Advisory Committee, 2008</p>
People with <b>&gt;10 adenomas</b> of any size	Colonoscopy	At time of initial polyp diagnosis	Colonoscopy at <b>less than 3 years</b> ; interval based on clinical judgment	Winawer-US Multi-Society Task Force and ACS, 2006
People with <ul style="list-style-type: none"> <li>• <b>one or more large adenoma(s) (&gt;=1 cm);</b></li> <li>• <b>3-10 adenomas of any size or histology; OR</b></li> <li>• <b>1 or more adenomas of any size with:</b> <ul style="list-style-type: none"> <li>○ <b>villous or tubulovillous histology;</b></li> <li>○ <b>serrated adenoma histology; or</b></li> <li>○ <b>high grade dysplasia<sup>^^</sup></b></li> </ul> </li> </ul>	Colonoscopy	At time of initial polyp diagnosis	Colonoscopy <sup>&amp;</sup> <b>in 3 years</b> after initial polyp removal; if this colonoscopy is negative for adenomas or CRC, or shows only 1-2 small tubular adenomas without high grade dysplasia then repeat colonoscopy <b>in 5 years</b> ; if no adenomas then, the patient can thereafter be screened as per average risk guidelines	Winawer-US Multi-Society Task Force and ACS, 2006

Risk Category	Recommendation	Age to Begin	Interval <sup>&amp;</sup>	Reference <sup>+</sup>
People with <b>1-2 small (&lt;1 cm), tubular adenomas with NO villous histology and NO high grade dysplasia</b>	Colonoscopy	At time of initial polyp diagnosis	Colonoscopy <sup>&amp;</sup> <b>5-10 years</b> after initial polyp removal (timing within the 5-10 year interval should be based on other clinical factors such as prior colonoscopy findings, family history, and preferences of the patient and judgment of the physician)	Winawer-US Multi-Society Task Force and ACS, 2006
People with multiple or large <b>hyperplastic polyps</b> suggestive of hyperplastic polyposis syndrome <sup>^</sup>	Colonoscopy	At time of initial polyp diagnosis	Colonoscopy every <b>6-12 months</b> . These clients are best referred to a center with experience in the management of this syndrome	Maryland CRC Medical Advisory Committee, 2006
People with one or more polyps of unknown size or histology (e.g., ablated polyps, polyps was lost; or histology still unknown after attempts to obtain the information from prior endoscopist or patient's primary care provider)	Colonoscopy	At time of initial polyp diagnosis	Colonoscopy <b>within 5 years</b> of initial polyp(s) removal (number of years based on information on number, size, etc. and judgment of the physician); if normal or only hyperplastic polyps found on that colonoscopy, then screening as per average risk recommendations, above	Maryland CRC Medical Advisory Committee, 2006

Risk Category	Recommendation	Age to Begin	Interval <sup>&amp;</sup>	Reference <sup>+</sup>
<b>Increased Risk: Personal history of colorectal cancer—“Surveillance Colonoscopy”</b>				
Personal history of <b>CRC--curative-intent resection of invasive colorectal adenocarcinoma</b>	Colonoscopy	At time of diagnosis	<ol style="list-style-type: none"> <li>a. Clear colorectum of synchronous neoplasia in the perioperative period (if non-obstructed, clear with colonoscopy; if obstructed, DCBE or CT colonography pre-operatively and colonoscopy 3-6 months post op)</li> <li>b. After clearing for synchronous disease and treatment of CRC, perform colonoscopy in <b>1 year</b>.</li> <li>c. If normal, perform colonoscopy in <b>3 years</b></li> <li>d. If still normal, colonoscopy in <b>5 years<sup>&amp;</sup></b></li> <li>e. If <b>rectal</b> cancer, consider endoscopic ultrasound or flexible sigmoidoscopy at 3-6 month intervals for the first two years after resection.</li> </ol> <p>Shorter intervals may be indicated based on findings or on patient’s age, family history, or tumor testing indicating possible HNPCC.</p>	Rex--US Multi-Society Task Force and ACS, 2006

Risk Category	Recommendation	Age to Begin	Interval <sup>&amp;</sup>	Reference <sup>+</sup>
<b>Increased Risk: Personal history of <i>other</i> cancers—“Surveillance Procedures”</b>				
Personal history of anal cancer (for example, squamous cell carcinoma)	Colonoscopy	At time of diagnosis	<p><b>Surveillance for CRC</b></p> <ul style="list-style-type: none"> <li>a. Clear colorectum of synchronous neoplasia in the perioperative period (if non-obstructed, clear with colonoscopy; if obstructed, DCBE or CT colonography pre-operatively and colonoscopy 3-6 months post op)</li> <li>b. Full colonoscopy should be repeated every 5 years or earlier based on findings other than anal cancer (that is, family history or personal history of adenocarcinoma, adenomas, etc.)</li> </ul> <p><b>Surveillance for further anal cancer</b></p> <ul style="list-style-type: none"> <li>a. Perform DRE between 8-12 weeks after completion of primary treatment with chemotherapy.</li> <li>b. If complete remission, perform DRE, anoscopy and inguinal node palpation every 3-6 months for 5 years. If T3-T4 or inguinal node positive, consider chest x-ray, pelvic CT annually for 3 years.</li> <li>c. If persistent disease or progressive disease after treatment, perform inguinal node palpation and CT scan every 3-6 months for 5 years.</li> </ul>	<p>NCCN v,1,2008  <a href="http://www.nccn.org/professionals/physician_gls/PDF/anal.pdf">http://www.nccn.org/professionals/physician_gls/PDF/anal.pdf</a>  and per Medical Case Manager surgeon/oncologist/radiation oncologist</p> <p>Maryland CRC Medical Advisory Committee, 2008</p>
Personal history of carcinoid, cloacogenic carcinoma, squamous cell cancer of rectum, etc.			Surveillance for CRC and for the other cancer(s) per Medical Case Manager recommendation+++	Maryland CRC Medical Advisory Committee, 2008

## + **References for Recommendations:**

1. Smith RA, Cokkinides V, Eyre, HJ. American Cancer Society guidelines for early detection of cancer, 2003. *CA Cancer J Clin* 2003; 53:27-43.
2. Rex DK, Johnson DA, Lieberman DA, Burt, RW, and Sonnenberg A. Colorectal cancer prevention 2000: screening recommendations of the American College of Gastroenterology. *Am J Gastroenterology* 2000; 95: 868-877.
3. Rex DK, Bond JH, Winawer S, et al. Quality in the Technical Performance of Colonoscopy and the Continuous Quality Improvement Process for Colonoscopy: Recommendations for the US Multi-Society Task Force on Colorectal Cancer. *Am J Gastroenterology* 2002; 97:1296-1308.
4. Winawer SJ, Fletcher R, Rex D, et al. Colorectal cancer screening and surveillance: Clinical guidelines and rationale—Update based on new evidence. *Gastro* 2003; 124:544-560.
5. Winawer SJ, Zauber AG, Fletcher RH, et al. Guidelines for colonoscopy surveillance after polypectomy: A consensus update by the US Multi-Society Task Force on Colorectal Cancer and the American Cancer Society. *CA Cancer J Clin* 2006; 56:143-159 The US Multi-Society Task Force guidelines have been endorsed by the Colorectal Cancer Advisory Committee of the American Cancer Society and by the governing boards of the American College of Gastroenterology, the American Gastroenterological Association, and the American Society for Gastrointestinal Endoscopy.
6. Rex DK, Kahi CJ, Levin B, et al. Guidelines for colonoscopy surveillance after cancer resection: A consensus update by the American Cancer Society and US Multi-Society Task Force on Colorectal Cancer. *CA Cancer J Clin* 2006; 56:160-167. The US Multi-Society Task Force guidelines have been endorsed by the Colorectal Cancer Advisory Committee of the American Cancer Society and by the governing boards of the American College of Gastroenterology, the American Gastroenterological Association, and the American Society for Gastrointestinal Endoscopy.
7. Itzkowitz SH, Present DH; Crohn's and Colitis Foundation of America Colon Cancer in IBD Study Group, 2005. Consensus conference: Colorectal cancer screening and surveillance in inflammatory bowel disease. *Inflamm Bowel Dis*. 2005 Mar; 11(3):314-21.

& Interval is based on the findings of an **adequate** colonoscopy and asymptomatic client. If the endoscopist either fails to reach the cecum **or** determines that the preparation of the colon was inadequate for visualization, the colonoscopy should be considered **inadequate** and the colonoscopy repeated as soon as feasible. Symptomatic patients should be screened for CRC based on clinician judgment. If there are findings, shorter screening intervals are allowed under CRF funding (e.g., per Medical Advisory Committee: people with family history of CRC in multiple FDR or <60 years of age may be screened every **5 years**; people with 2 small tubular adenomas may return **within 3** years; people with 1 small tubular adenoma may return at 5 years; people with large, multiple, or villous adenomas may return **within 3** for surveillance; and people with past CRC could continue colonoscopy at another 3 year interval).

++ Average risk includes those people found to have limited number of small **hyperplastic** (or serrated hyperplastic polyps) but not found to have adenomatous polyps or CRC.

\* Reserve double contrast barium enema (DCBE) and CT colonography for screening in situations where client and provider discuss and determine that the DCBE or CT colonography is indicated for the individual client; client, provider, and payer should discuss the additional procedures needed to follow up on findings and agree to the timing and type of future screenings recommended/covered. If chosen for screening and no findings, DCBE should be repeated in 5 years. Digital rectal exam should be performed at the time of colonoscopy or sigmoidoscopy.

^ Definition of hyperplastic polyposis suggested is: (1) at least five histologically diagnosed hyperplastic polyps proximal to the sigmoid colon of which 2 are greater than 1 cm in diameter, or; (2) any number of hyperplastic polyps occurring proximal to the sigmoid colon in an individual who has a first-degree relative with hyperplastic polyposis, or; (3) greater than 20 hyperplastic polyps of any size distributed throughout the colon.

+++ Recommendations for rescreening intervals for adenocarcinoma of the colon and rectum and counseling of risk for cancer that is *other than adenocarcinoma* should be made by the Medical Case Manager (examples include squamous cell carcinoma of rectum/anus, carcinoid, cloacogenic carcinoma)

^^ “High grade dysplasia” includes severe dysplasia, carcinoma in situ, and intramucosal carcinoma.

@ First degree relative is a mother, father, sister, brother, or child of the person.

&& In some cases when only the rectum and sigmoid need examination, a sigmoidoscopy is sufficient for screening.

@@ Women with ovarian or endometrial cancer diagnosed at age 50 or older should be considered average risk for screening unless they have other risk factors