



## Summary: Colorectal Screening for Cancer Prevention in Asymptomatic Patients

For full guideline please go to website [www.BCGuidelines.ca](http://www.BCGuidelines.ca)

### Key Recommendations

- Screening for colorectal cancer should occur after risk stratification which determines the appropriate screening test and interval.
- Fecal immunochemical test (FIT) is now the recommended fecal occult blood test (FOBT) for screening (replaces the guaiac - gFOBT).
- FIT is recommended every 1-2 years for average-risk individuals aged 50-74 years.
- Follow-up of ANY positive fecal occult blood testing (FOBT) with colonoscopy.
- Use of FOBT is not appropriate when frank blood is present.
- Colonoscopy every 10 years is an acceptable alternative to FOBT for screening.
- Patients followed by colonoscopy do not require other screening modalities (i.e., FOBT).\*

In patients who are 50 years and older, more than 25% will have at least one adenoma. The majority of colorectal cancers (CRC) arise from pre-existing adenomas, the 'adenoma-carcinoma sequence'. Two major types of polyps are found in the colon and rectum: adenomas and hyperplastic polyps. Hyperplastic polyps are considered to have **no** malignant potential.

The risk of an adenoma becoming malignant is greatest for "advanced" adenomas:

- tubular adenomas  $\geq 1$  cm,
- villous adenomas,
- adenoma with high grade dysplasia (HGD),
- sessile serrated polyps  $\geq 1$  cm,
- sessile serrated polyps with dysplasia, or
- traditional serrated adenoma.

Individuals with multiple adenomas of any size are also at increased risk. Because it generally takes 5-10 years for a small adenoma to develop into a malignancy, cancer may be prevented by adenoma removal.

### Risk Factors

The most important risk factor for CRC is age over 50.

Additional risk factors for CRC include:

- Personal history of adenoma(s)
- Family history
  - Single first degree relative<sup>†</sup> with CRC under age 60
  - Two or more first degree relatives with CRC at any age
  - Familial adenomatous polyposis (FAP) or hereditary non-polyposis colon cancer (HNPCC)
- Long standing (at least 8 years) inflammatory bowel disease involving the colon

In general, having a single affected second degree relative with CRC does not significantly increase one's risk of CRC.

\* For an average risk individual with a negative colonoscopy, further screening of any type is not required for 10 years. After a 10 year interval, the choice of subsequent screening modality can be determined

† 1st degree relatives have a blood relationship to the patient: parents, brothers, sisters and children. 2nd degree relatives have a blood relationship to the patient: aunts, uncles, nieces, nephews, grandparents & grandchildren.

## Asymptomatic Average Risk Patient Screening Recommendations

Patient Category	Screening
Average Risk Patients – Aged <50 years	No screening required.
Average Risk Patients – Aged 50 – 74 years	Fecal immunochemical test (FIT) every 1-2 years; option of colonoscopy every 10 years.
Average Risk Patients – Aged 75 – 85 years	The value of screening should be individually assessed taking into account a balance of the risks, benefits and patient co-morbidities.
Average Risk Patients – Aged over 85 years	Screening is not recommended.

## Asymptomatic Increased Risk Patient Screening Recommendations

Patient Category	Screening
Single 1st degree relative with CRC or advanced adenoma(s), < 60 years	Colonoscopy every 5 years starting at age 40, or 10 years earlier than the age of youngest affected relative at diagnosis.  Use FOBT, FS and CT colonography only when patients decline colonoscopy or have an incomplete colonoscopy.
Two or more 1st degree relatives of any age with CRC	Colonoscopy every 5 years starting at age 40, or 10 years earlier than the age of youngest affected relative at diagnosis.  Use FOBT, FS and CT colonography only when patients decline colonoscopy or have an incomplete colonoscopy.
Single 1st degree relative with advanced adenoma(s) or CRC, ≥ 60 years	Fecal immunochemical test (FIT) every 1-2 years; option of colonoscopy every 10 years.
Single 2nd degree relative of any age with cancer or adenomas	Fecal immunochemical test (FIT) every 1-2 years; option of colonoscopy every 10 years.
Inflammatory bowel disease involving the majority of the colon for over 8 years or the left colon for over 15 years	Colonoscopy every 1 to 2 years with multiple biopsies to detect occult neoplasia (dysplasia).

The recommendations above do not apply to patients with previous colorectal adenomas or cancer, anemia, or bowel related symptoms. Any symptoms need to be investigated promptly. Recommendations following removal of colorectal adenomas or cancer can be found in *BCGuidelines.ca – Summary: Follow-up of Colorectal Polyps or Cancer*

## Not Recommended for Screening

Evidence does not support the use of the following as screening tools for CRC in asymptomatic patients:

- Digital rectal exams (DRE)
- Barium enemas
- Carcinoembryonic Antigen (CEA) tests
- Combined use of FOBT with flexible sigmoidoscopy for primary screening