• The lifetime risk of developing Colorectal Cancer (CRC) is about 1 in 14 (7.1%) in men and 1 in 16 (6.3%) in women.
• CRC risk increases over age 50 - only 6.3% of cases in Canada occur under age 50.
• Ten to 15% of colorectal cancers occur in people with a family history of CRC.
• ColonCancerCheck aims to reduce mortality from CRC through an organized population-based screening program and to improve the capacity for primary care to participate in comprehensive CRC screening. The screening method will be determined by assessing risk.

Risk Assessment
Assess risk in individuals who have never had colorectal cancer.

Assess for Colorectal Cancer Signs and Symptoms
Patients should be referred for diagnostic work-up if they have one or more of the following:
• Rectal mass
• Abdominal mass
• Unexplained weight loss
• Unexplained change in bowel habits
• Rectal bleeding
• Unexplained anemia
• Persistent urge to evacuate the rectum
• Unexplained stool incontinence

FOBT is NOT appropriate for symptomatic patients.

Assess for Increased Risk of Colorectal Cancer

No CRC signs or symptoms
One or more first degree relatives with CRC (parent, sibling or child) 1,2
Refer for Colonoscopy 3
Begin at age 50 or 10 years younger than earliest age of diagnosis of relative, whichever comes first
If negative, repeat colonoscopy every 5 - 10 years
See reverse ‘Surveillance after Colonoscopy’ for abnormal results

Average Risk - Asymptomatic Age 50 Years and Older 4

No CRC signs or symptoms
No affected first degree family member 5
Fecal Occult Blood Test (FOBT) 6,7,8
Positive: 9,10 refer for colonoscopy
Incomplete: 11 CCC will recall
Negative: repeat two years

1 Lifetime risk of CRC:
One first degree relative with CRC = 9%
One first degree relative < 45 years with CRC = 15%
Two first degree relatives with CRC = 16%

2 For other patients at increased risk for CRC including familial and hereditary syndromes refer to www.mtsinai.on.ca/FamMedGen

3 For a list of participating hospitals in your area to refer patients for colonoscopy who have a positive FOBT or one or more first degree relatives with CRC please visit: www.ColonCancerCheck.ca

4 The upper age limit to initiate or continue CRC screening is at the discretion of the clinician and should be based on the individual patient’s health status, anticipated life expectancy and risk of CRC.

5 Lifetime risk of CRC for average risk asymptomatic individuals = 4%

6 There are no restrictions on oral intake of any prescribed medications, including aspirin, NSAIDs or iron supplements or specific foods except for Vitamin C, citrus fruits or juices, which should be discontinued 3 days prior to and during stool collection.

7 Hema Screen kits are provided by ColonCancerCheck.
FOBT screening involves 3 stool cards with 2 windows each. A total of 6 stool samples are submitted. A single stool specimen obtained during rectal examination is NOT an adequate screen.

8 Other CRC screening tests are not funded by the ColonCancerCheck program but will still be available and funded by the MOH/LTC.

9 If one or more of the 6 samples are positive, the patient should be referred for colonoscopy.

10 Research shows that 2% will have a positive FOBT, of whom ~10% will be found to have cancer at a follow-up colonoscopy.

11 ColonCancerCheck will send a letter to participants when a retest is needed due to incomplete results.
**Repeat Screening After Negative FOBT**

ColonCancerCheck will send a letter to participants with negative results.

Every two years participants will be sent a letter from ColonCancerCheck to repeat the FOBT.

**Surveillance After Colonoscopy**

- Over 90% of CRC are adenocarcinomas. Most CRCs (>95%) arise from adenomatous polyps (AP).
- ~2/3 of polyps are adenomas. The remaining third are hyperplastic (none to minimal malignancy risk).
- Prevalence of AP increases with age. Prevalence is ~ 25% by age 50 and 50% by age 80.
- ~1-5% of APs will progress to invasive cancer especially if they are larger (>1cm), have villous features or high grade dysplasia. Progression from normal mucosa to invasive cancer takes ~10-15 years.

**Colonoscopy Result**

<table>
<thead>
<tr>
<th>Normal Colonoscopy or Hyperplastic Polyps</th>
<th>Surveillance Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asymptomatic Average Risk</td>
<td>Colonoscopy or average risk screening in 10 years</td>
</tr>
<tr>
<td>Increased Risk of CRC</td>
<td>Colonoscopy in 5-10 years (depending on prior colonoscopy findings, family history, etc.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 or 2 small (≤1 cm) tubular adenomas with low-grade dysplasia</th>
<th>Colonoscopy in 5-10 years (depending on prior colonoscopy findings, family history, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 3-10 adenomas, or</td>
<td>• Colonoscopy in 3 years (if adenomas were completely removed, not removed piecemeal)</td>
</tr>
<tr>
<td>• Any adenoma ≥ 1 cm, or</td>
<td>• If follow-up colonoscopy normal or 1-2 small tubular adenomas with low-grade dysplasia, then next colonoscopy in 5 years</td>
</tr>
<tr>
<td>• Adenoma with villous features, or</td>
<td></td>
</tr>
<tr>
<td>• Adenoma with high-grade dysplasia</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&gt; 10 adenomas</th>
<th>Endoscopist discretion for more intense follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessile adenomas removed piecemeal</td>
<td>Endoscopy in 2-6 months to verify complete removal</td>
</tr>
<tr>
<td><strong>Surveillance Recommendation</strong></td>
<td>Then individualized surveillance</td>
</tr>
</tbody>
</table>

1Note that other CRC screening modalities including FOBT are not recommended in the interim

The US Multi-Society Task Force on Colorectal Cancer and the American Cancer Society

**Why is ColonCancerCheck Funding Population-Based Biennial CRC Screening Using FOBT for Average Risk Adults?**

- Biennial FOBT (followed by colonoscopy for those with a positive FOBT) is the only CRC screening modality with the highest level of evidence (Level 1) from randomized controlled trials (RCTs) in average risk adults demonstrating a reduction in CRC mortality.
- Based on this evidence, FOBT has been recommended by the Canadian Task Force on Preventive Health Care, the Canadian Association of Gastroenterology and the Ontario Guidelines Advisory Committee.
- FOBT is safe – there are no risks of perforation or death.
- FOBT can be easily completed at home – no bowel preparation, no dietary or medication restrictions except Vitamin C and no time off work is required.
- FOBT is not perfect. There may be false negatives in which case cancer or polyps with advanced neoplasia can be missed, or false positives which lead to colonoscopy with its associated risks.
- All recommended screening strategies for CRC, including biennial screening with FOBT, are cost-effective compared to no screening.
- Using FOBT in average risk individuals and colonoscopies in increased risk individuals is economically feasible, and allows for greater use of colonoscopies for patients with symptoms and for those at increased risk.
- Other jurisdictions in Canada and around the world are implementing population-based FOBT Colorectal Cancer Screening Programs.

Your local ColonCancerCheck centre and fax number:

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