

Quick Facts of Colorectal Cancer

- 3rd most common cancer in Canada
- 20,800 diagnosed in 2007.
- 8,700 will die of it.

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Windsor Transmission Plant

COLORECTAL CANCER

Colorectal cancer (CRC) is the third most common cancer in Canada.

Regular screening can diagnose the disease at an early stage when it is more treatable, therefore reducing mortality.

Background:

Although the number of people affected with CRC is declining, it is still the second most common form of cancer in men and

the third most common form of cancer, after breast and lung cancer in women.

In 2007, an estimated **20,800** Canadians will be diagnosed with CRC and **8,700** will die of it.

On average, 400 Canadians will be diagnosed with CRC and 167 will die of CRC every week.

CRC is a malignant

tumour that develops over a period of time (at least 10 years) on the bowel wall, before invading the wall and moving onto other organs.

Approximately, two-thirds of these cancers are found in the large intestine and one-third in the rectum. CRC usually develops from benign tumours or polyps found in the bowel.

What to do if it's in your family!

Bowel cancer affects one in ten families.

But that doesn't mean you're going to get it, if it is in your family.

Rough rule of thumb: the closer the relatives are to you (brother, sister, mother, father, child) and the younger they were when diagnosed, the more you need to do something about it.

- One close relative under 45 affected (brother, sister, parent or child) talk

to your GP about screening possibilities.

- Two or more older close relatives from the same side of the family. The younger your relatives, the more need for you to discuss screening with your GP.

- Usual yardstick for screening - around 10 years before the age at which your youngest close relative developed the disease.

- If you have a less strong family history, say

one grandparent who died in their 60s or 70s, you have very little lifetime increased risk and screening is no more appropriate for you than patients with no family history at all.



Risk Factors for Colorectal Cancer

Age: the older you are, the more likely you are to develop CRC. Most of those diagnosed are 70 years or older.

Heredity: you are more likely to get CRC if someone in your family, especially your immediate family, has been diagnosed with it.

Diet: a diet high in red meat and low in fruits and vegetables may increase your risk.

Weight: obesity and a lack of physical activity increase the risk.

Alcohol consumption: alcohol, especially beer, may increase your risk. Lower rates of CRC have been found in those who drink no alcohol.

Smoking: smoking also increases your risk.

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Symptoms to watch for

Symptoms of CRC depend on the lesion's location, type, extent and complication, and may include:

- **Fatigue and weakness**
- **A change in bowel habit (alternating constipation and increased stool frequency)**
- **Stool streaked or**

mixed with blood

- **Discomfort or pain in the lower abdomen**

Symptomatic CRC is usually investigated by examining the stool for evidence of blood by using the Fecal Occult Blood Test (FOBT), by ultrasound, and/or digital rectal exam. If positive, further tests such as a colonoscopy are done.

Even if you are not experiencing any symptoms, CRC may be detected using the FOBT.

The Canadian Task Force on Preventative Health Care recommends that if you are over 50 years of age, you should have an FOBT every one or two years.

Studies show that regular FOBT testing may lower the mortality rate of CRC by 15 to 33 percent.

Other conditions that can cause the same symptoms

Fissures - split or tear in the lining of last tiny bit of the anal canal, sometimes caused by constipation - may cause bleeding which drips into the toilet bowl. Nearly always associated with severe pain when going to the toilet.

Irritable bowel syndrome (IBS) - this diagnosis should only safely be made after referral to hospital for examination. Very common - over one third of us will have irritable bowel symptoms each year and need not be referred. Symptoms similar to bowel cancer but don't persist, they come and go, with long stretches where the gut goes back to normal. Many IBS patients have recurring symptoms which need investigation at some time to make sure it is not more serious

Polyps - warty like growths on the bowel lining. Most don't have symptoms, don't cause cancer and are not usually discovered unless you are having other tests. Larger polyps can cause bleeding and around 3 per cent are thought more likely to turn cancerous. Removing these can usually be done by an internal flexible probe (endoscope) without the need for an operation. By screening people over 55 for important polyps, it is thought most bowel cancers could be prevented in the future.

Crohn's disease - painful inflammation of the gut. No one knows the cause - may be life long. More common in smokers. Long time sufferers may have a slightly increased risk

of bowel cancer
Ulcerative Colitis - where the bowel becomes red and inflamed. May be life long. Tends to come and go with symptoms like bleeding and mucus, very little pain (occasionally after a bowel movement). Long time sufferers, over 10 years, at increased risk.

Diverticular disease - becomes increasingly common as we get older. Half of us over 60 have some. Most people have no symptoms, occasionally causes changes in bowel habits, abdominal pain and more rarely, severe inflammation, which occasionally needs major surgery to correct. It doesn't predispose you to cancer.

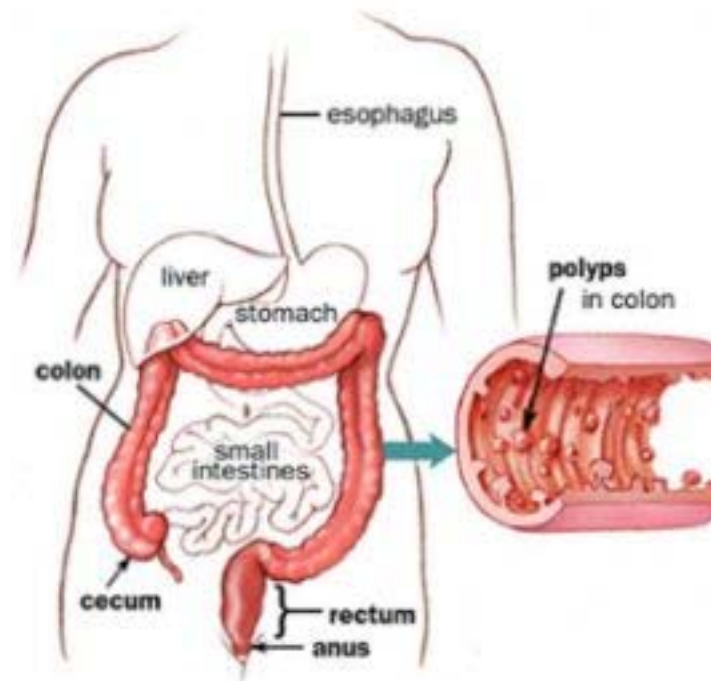
What's a Flexible sigmoidoscopy??

. A flexible sigmoidoscopy is a test that lets the doctor look at the lining of the rectum and lower part of the colon.

A sigmoidoscopy can be done in a doctor's office or clinic. The doctor inserts the endoscope through the rectum and into the lower part of the colon. This can be uncomfortable but not painful – drugs for relaxation and pain relief are usually not needed.

If polyps are found, they can be removed through the endoscope. Biopsies of any other abnormal

areas can also be taken through the endoscope. The polyps and tissue samples are sent to the laboratory to be examined under a microscope for the presence of cancer cells.



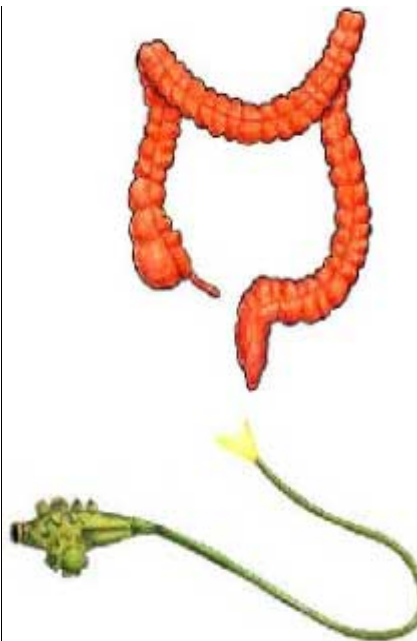
Colonoscopy

A colonoscopy is a test that lets the doctor look at the lining of the entire colon beyond the rectum and lower part of the colon. A colonoscopy is preferred over a flexible sigmoidoscopy because the entire colon can be checked for polyps or abnormal areas.

A colonoscopy is done in a hospital on an outpatient basis. The doctor inserts the endoscope through the rectum and into the colon. The colon is inflated with air to stretch out the lining of the colon

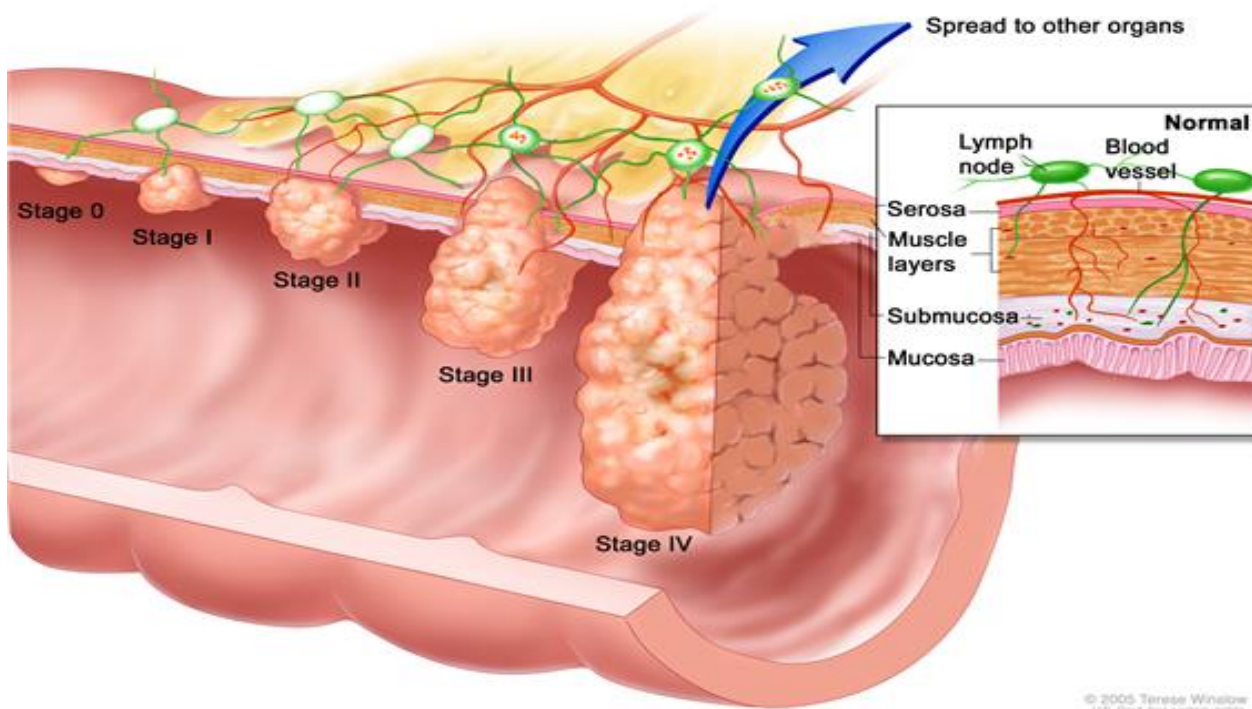
so the doctor can inspect the entire surface. This can be uncomfortable so drugs are given to help the person relax during the procedure.

If polyps are found, they can be removed through the endoscope. Biopsies of any other abnormal areas can also be taken through the endoscope. The polyps and tissue samples are sent to the laboratory to be examined under a microscope for the presence of cancer cells.



“If you go to GPs with any bowel symptom, they should ask whether your bowel habits have changed.

If your GP doesn't ask, volunteer the information.



Biopsy – Diagnosis

A biopsy removes tissue or cells from the body so they can be tested in a laboratory. The pathology report from the laboratory will confirm whether or not cancer cells are present in the sample. The pathology report may also identify the type of cancer.

A biopsy is the only definite way to diagnose colorectal cancer. Polyps or biopsies of abnormal areas are taken during a sigmoidoscopy or colonoscopy. A biopsy sample will allow the doctor to find out the type of colorectal cancer, the grade, and may also show the level to which the cancer has gone through the wall of the colon or rectum.

What is next?

The average patient gets **eight minutes** with their GP **so get straight to the point.** GPs are used to talking about intimate subjects and will not be embarrassed to talk about your symptoms.

Staging Tests

Once colorectal cancer has been diagnosed, more tests may be done to find out how far the cancer has progressed (stage).

Some of the same tests used to diagnose colorectal cancer are also used to stage it.

Blood work:

- **complete blood count** – to check for anemia caused by bleeding in the colon or rectum
- **blood chemistry tests** – to check if the liver and kidneys are functioning properly or affected by the cancer
- **carcinoembryonic antigen (CEA) level** – very high CEA levels may mean the cancer

is advanced, however, not everyone with colorectal cancer will have increased CEA levels

Chest x-ray

An x-ray uses small doses of radiation to make an image of the body's organs on film.

Chest x-rays are done to:

- see if the cancer has spread to the lungs
- rule out other lung diseases (such as emphysema) that need to be considered if surgery is planned

Computerized tomography (CT, CAT) scan

A computerized tomography scan uses special x-ray equipment to make 3-dimensional and cross-sectional images of organs, tissues, bones and blood vessels inside the body. A computer turns the images into detailed pictures. It is used to:

- check if the cancer has spread to other organs in the abdomen, although small implants cannot be detected by CT
- check if the cancer has spread to the lymph nodes in the abdomen, although the lymph nodes have to be bigger than 1 cm (0.5") before they can be detected by CT

- check how far the tumour has grown into the wall of the colon or rectum, especially rectal tumours.

Ultrasound

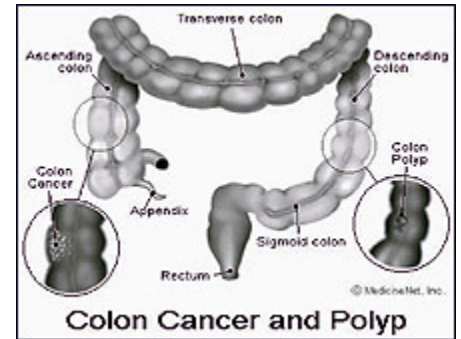
Ultrasound uses high-frequency sound waves to make images of structures in the body.

- Endorectal ultrasound

(EUS, ERUS) uses a special device (transducer) that is inserted into the rectum. It is used to:

- ◇ ◇ see how far a tumour has grown into the rectal wall
- ◇ ◇ see if the tumour has spread to nearby organs or lymph nodes, although it might not detect small lymph nodes less than 1 cm (0.5")

- Abdominal ultrasound may be done to see if the cancer has spread to other organs in the abdomen such as the liver.
- Pelvic ultrasound may be done if it is suspected that the cancer has spread to the urinary tract.

**FOOD SAFETY AND FRESH PRODUCE**

It's important to use good food safety practices when washing and preparing fresh vegetables and fruit. Here are a few key tips:

- Thoroughly wash fresh vegetables and fruit under cold running water, unless otherwise specified. Do not use soap or detergents.
- Scrub fresh vegetables and fruit that have firm surfaces, such as oranges, potatoes, and carrots. If improperly

washed, they can become contaminated during cutting.

- Cut away any damaged or bruised areas because harmful bacteria can thrive in these areas. Clean your knife after cutting these areas.
- Place peeled or cut vegetables and fruit on a separate clean plate. Avoid putting them back on the cutting board.

For more information on food safety tips for fresh produce, visit the website

identified in the reference below.

Reference:
Canadian Food Inspection Agency (2004). Food safety facts for fresh fruits and vegetables. Retrieved April 25, 2005 from www.inspection.gc.ca/english/plaveg/fresh/ffvlife.shtml

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Constipation facts:
It means different things to different folks: not going frequently, passing hard stools, bloating.

Passing hard stools is less likely to be serious - it's persistently looser stools which need watching.

Helpful Canadian Websites

[Colorectal Cancer Association of Canada](http://www.ccac-accc.ca)

www.ccac-accc.ca

Canadian Cancer Society

www.cancer.ca

Colorectal Support Network.

www.colorectal-cancer.ca

Ontario Ministry of Health
Website on Colon Cancer

www.coloncancercheck.ca/

www.motoringtowellness.com

TAKE THEM FRESH, FROZEN, OR CANNED!

Fresh, frozen, or canned vegetables and fruit – which is more nutritious? The answer is all of them! The nutrient content of vegetables and fruit (e.g. vitamins, minerals, and antioxidants) begins to drop after they are harvested. Typically, vegetables and fruit are frozen or canned immediately after harvest when the nutritional content is at its peak. Fresh produce that has been sitting on the shelf long past its harvest may actually be lower in nutrients than food that is frozen. When compared, studies have shown that fresh, frozen, or canned foods have very few differences

in total nutrient content (Cancer Care Ontario, 2004). However, to reduce the sodium and caloric content, buy low-sodium or sodium-free canned vegetables, fruit canned in juice rather than syrup, and frozen vegetables without added high-fat or sugar sauces.

Reference:
Cancer Care Ontario (2002).
Leader's guide – Take five: 5-10
a day...your way! (p.17).



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