Colorectal Cancer

Information for people with cancer

Provincial Health Services Authority

This information should not be used to diagnose yourself or in place of a doctor's care.

Colorectal cancer starts in the colon or the rectum.

The colon and the rectum make up the large intestine. The large intestine is the lower part of the gastrointestinal tract (digestive tract). The large intestine absorbs water and gets rid of waste for the body.

The colon is the longest part of the large intestine. It is a tube that is about 1.5 - 1.8 m (5 to 6 feet) long. It is often called the bowel.

The colon starts where the small intestine ends. There are four parts to the colon:

- **Ascending colon** goes up towards the liver
- **Transverse colon** crosses the abdomen
- **Descending colon** goes down the body
- **Sigmoid colon** is an s-shaped curve between the descending colon and the rectum.

The rectum is about 12 cm long (4.7 inches). It is between the sigmoid colon and the anal canal. The rectum holds stool (poop) until you have a bowel movement (go poop).

Image of colon and rectum: visualsonline.cancer.gov/details.cfm?imageid=9686

Diagnosis and Staging

What are the signs and symptoms of colorectal cancer?

Many of the common symptoms of colorectal cancers can also be caused by other conditions.

These are some symptoms of colorectal cancer:

- A change in your bowel habits.
    - Bowel obstruction (a blockage in your bowel)
    - Change in the size of your stool

  - Constipation (you cannot go poop as often or as easily as you usually do)
  - Diarrhea (loose or watery poop)
- Blood in your stool, either apparent (visible) or occult (hidden)
- Pain in your lower abdomen or pelvis
- If the tumour has spread, it may cause enlargement of your liver, abdominal bloating, pain in your lower back, or bladder symptoms such as increased urinary frequency (you go pee more often than is normal for you) or blood in your urine.
- 1 out of 20 people with this cancer may develop sudden obstruction (blockage) of the bowel or a perforation (tear) in their bowel.
- Anemia (low iron in your blood)
- Feeling very tired
- Nausea or vomiting
- Weight loss and weakness

If you have any signs or symptoms that you are worried about, please talk to your family doctor or nurse practitioner.

How is colorectal cancer diagnosed?

Tests that may help diagnose colorectal cancer include:

- **General physical exam** including a digital rectal examination (a doctor or nurse practitioner puts their finger in your bum to examine you).
- **Lab and blood tests**
- **Testing of stool sample** for occult (hidden) blood.
- **Barium enema X-ray:** A special liquid is put into your colon by enema (a tube is used to inject the liquid into your rectum and colon) and then x-rays are taken.

- **Sigmoidoscopy**: a thin, lighted tube with a camera is put into your anus and then gently pushed into your rectum and lower colon. Doctors can examine the lowest 50 cm (20 inches) of the colon in this way. They can also use this scope to grab tiny bits of tissue to look at under the microscope.
- **Colonoscopy**: This is similar to a sigmoidoscopy but doctors can look at both your upper and lower colon.
- **Biopsy of colon or rectal tissue:** A doctor removes a small sample of your colon or rectum to examine under a microscope. This is the most accurate test of all, but because it involves cutting your body, the other tests are usually done first.
- **CT (computed tomography) scan of abdomen and pelvis:** to see the tumour and if the cancer has spread**.**
- **Ultrasound of abdomen:** to see the tumour.

For more information on tests used to diagnose cancer, see our Screening and Diagnosis pathfinder: bccancer.libguides.com/pathfinder-screening

What are the types of colorectal cancer?

- Most cases of bowel and rectal cancers are adenocarcinomas.
- Sometimes bowel and rectal cancers are lymphomas, melanomas, sarcomas or squamous cell carcinomas.
- Cancer of the small intestine (not the colon or rectum) is different. For information on small intestine (small bowel) cancer: www.bccancer.bc.ca/health-info/types-of-cancer/digestive-system/small-bowel
- Anal cancer is also different. For more information on anal cancer: www.bccancer.bc.ca/health-info/types-of-cancer/digestive-system/anus

What are the stages of colorectal cancer?

Staging describes the cancer. Staging is based on how much cancer is in the body, where it was first diagnosed, if the cancer has spread and where it has spread to.

The stage of the cancer can help your health care team plan your treatment. It can also tell them how your cancer might respond to treatment and the chance that your cancer may come back (recur).

Colorectal cancer staging:

- **Stage 1:** Tumour (cancer growth) is only in the colon wall, not growing into the muscle in the wall. The cure rate for this stage is over 90% (more than 90 out of 100 people).
- **Stage 2:** Tumour has spread into the tissue surrounding your colon or has grown through the wall of your colon or rectum. The cure rate is about 70% (70 out of 100 people).
- **Stage 3:** Cancer is in the lymph nodes near your colon or rectum. The cure rate is about 50% (50 out of 100 people) depending on how many lymph nodes have cancer.
- **Stage 4:** Cancer has spread to other parts of your body (distant metastasis) or the cancer has spread into other organs. This type of cancer is often not curable. There are treatments that to help with symptoms, improve the quality of life and significantly extend life.

For more information on staging, see our About Cancer page:

bccancer.bc.ca/health-info/types-of-cancer/about-cancer

What are the grades of colorectal cancer?

The grade of the cancer describes how different the cancer cells look from normal cells and how fast the cancer cells are growing. A pathologist will give the cancer a grade after looking at the cells under a microscope.

Colorectal cancer can be grade 1, 2, 3 or 4. The lower the number, the lower the grade.

Low grade: cells are abnormal but look a lot like normal cells. Low grade cancers usually grow slowly and are less likely to spread.

High grade: cells are abnormal and do not look like normal cells. High grade cancers usually grow more quickly and are more likely to spread.

The grade of the cancer helps your health care team plan your treatment.

Treatment

What is the treatment for colorectal cancer?

Cancer treatment may be different for each person. It depends on your particular cancer. Your treatment may be different than what is listed here.

Colon cancer

Treatment depends on where the tumour is in the colon, how big it is and if it has grown or spread outside of where it started.

Surgery

- The best option for a cure. The goal is to cut out the cancer. A surgeon also cuts out tissue around the cancer and lymph nodes near the cancer. This is done to try and remove all of the cancer.
- If a cure is not possible, tumours should still be removed to prevent blockage of your colon or bleeding.

- In most cases, your colon can be rejoined during surgery. This is called anastomosis. Anastomosis is sometimes not possible for people who have obstructing tumours in the left (descending) side of the colon. These patients get a colostomy. A colostomy is an opening in your abdomen that allows stool to empty into a plastic pouch attached over the opening (stoma). Usually a colostomy is temporary and your colon may be rejoined later.
- If a tumour comes back as a single spot of tumour in your lung or liver, it may be removed by a surgeon.

Radiation therapy (high energy x-rays that kill or shrink cancer cells)

- Not usually helpful for treating colon cancer.
- Sometimes used to help with symptoms when cure is not possible.
- For more information about radiation therapy go to: bccancer.bc.ca/our-services/treatments/radiation-therapy

Systemic therapy (chemotherapy)

- If you have surgery and have a higher chance of recurrence (cancer coming back), you may get systemic therapy.
- The type of systemic therapy you get depends on your cancer.
- For more information about systemic therapy go to: bccancer.bc.ca/our-services/treatments/systemic-therapy-(chemotherapy)

Rectal cancer

Treatment depends on where the tumour is in your rectum, how big it is and if it has grown or spread outside of where it started.

Surgery

- The type of surgery usually depends on where the cancer is in your rectum.
- If you have rectal cancer surgery, you will likely get a temporary or permanent colostomy.
- If you have a very low rectal tumour (near the outside of the body), your entire rectum may need to be removed. If this happens, you will have a permanent colostomy (you will have the colostomy for the rest of your life).
- For operable rectal cancers (cancers that can be removed with surgery), systemic therapy and radiation therapy may help improve the chance for cure.
- Inoperable rectal cancers (cancers that cannot be removed with surgery) may be treated with radiation therapy or systemic therapy and radiation therapy together.

Radiation therapy

You may have radiation therapy:

- Before or after surgery.
- If your rectal tumour cannot be removed with surgery.
- If you have a recurrence (your rectal cancer comes back).
- For more information about radiation therapy go to: bccancer.bc.ca/our-services/treatments/radiation-therapy

Systemic therapy

- If you have a higher risk of your cancer coming back, you may have systemic therapy before or after surgery.
- You may have systemic therapy alone or with radiation therapy.
- For more information about systemic therapy go to: bccancer.bc.ca/our-services/treatments/systemic-therapy-(chemotherapy)

What is the follow-up after treatment?

- Follow-up testing and appointment are based on the type and stage of your cancer.
- Rectal cancer can recur (come back) more often than colon cancer. Close follow-up is necessary and improves the possibility of cure.
- Guidelines for follow-up after treatment for colon cancer are on our website: www.bccancer.bc.ca/health-professionals/clinical-resources/cancer-management-manual/gastrointestinal/colon#Follow-up-and-Surveillance-of-Rectal-Cancer-Patients-Treated-with-Curative-Intent
- Guidelines for follow-up after treatment for rectal cancer are on our website: www.bccancer.bc.ca/health-professionals/clinical-resources/cancer-management-manual/gastrointestinal/rectum#Follow-up-and-Surveillance-of-Rectal-Cancer-Patients-Treated-with-Curative-Intent
- These are guidelines written for your doctor, nurse practitioner or specialist. You can look at them to see what appointments and tests you might need after treatment.
- After treatment, you may return to the care of your family doctor or specialist for regular follow-up. If you do not have a family doctor, please talk to your BC Cancer health care team.
- You should be seeing your family doctor, specialist or nurse practitioner regularly, especially for the first five years after treatment. You may need imaging tests and blood tests each year.
- The BC Cancer Life after Cancer page has information on issues that cancer survivors may face: bccancer.bc.ca/lifeaftercancer
    - BC Cancer has a follow-up brochure for people with colorectal cancer: www.bccancer.bc.ca/survivorship-site/Documents/Follow-up-after-colorectal-cancer-treatment.pdf
    - The brochure is also available in other languages. Go the bottom of this page: www.bccancer.bc.ca/health-info/coping-with-cancer/life-after-cancer#Follow-up--After--Treatment

More Information

What causes colorectal cancer and who gets it?

These are the risk factors for this cancer. Not all of these risk factors below may cause this cancer, but they may help the cancer start growing.

- Eating a diet low in fibre, fruit and vegetables and high in meats and fats.
- A family history of colorectal cancer. The number of relatives who have had colorectal cancer and their age when they were diagnosed are important in estimating risk. For more information, check out the Hereditary Cancer Program website: www.bccancer.bc.ca/our-services/services/hereditary-cancer
- Polyps (small clumps of cells that are not cancer) or adenomas (tumours that are not cancer) in the colon
    - These may become malignant (cancer). Polyps should always be removed and tested to see if they are cancer. Most polyps do not contain cancer but can turn into cancer.
    - 1% (1 out of 100) of people has a family history of polyps.
    - People with inherited disorders, such as Gardner's Syndrome, are at a higher risk of having polyps.
- Inflammatory bowel disease (ulcerative colitis, Crohn's disease). People who develop colitis at an early age are at a higher risk.
- Drinking alcohol, especially in men (two or more drinks per day) [see note below, Statistics]. For information about alcohol and cancer risk: www.bccancer.bc.ca/health-info/prevention/alcohol/reduce-your-risk
- Higher amount of body fat and abdominal fat (fat around your midsection)
- Low level of physical activity

Statistics on colorectal cancer

- B.C. statistics: www.bccancer.bc.ca/health-info/disease-system-statistics/statistics-by-cancer-type
- Canada statistics: www.cancer.ca/en/cancer-information/cancer-type/colorectal/statistics/?region=bc

Note: Available statistics do not have information about the inclusion of transgender and gender diverse participants. It is unknown how these statistics apply to transgender and gender diverse people. Patients are advised to speak with their primary care provider or specialists about their individual considerations and recommendations.

Can I help prevent colorectal cancer?

Research shows that about 50% (half) of colorectal cancers can be prevented by following a healthy lifestyle. This includes:

- **High levels of physical activity**. The evidence for this is stronger for colon cancer than for rectal cancer.
    - Visit the BC Cancer Physical Activity and Cancer Prevention page: www.bccancer.bc.ca/health-info/prevention/physical-activity
- **Having regular colon cancer screening** (see screening below).
- **Eating healthy, nutritious foods**.
    - Follow Canada's Food Guide: www.canada.ca/en/health-canada/services/canada-food-guides.html
    - Visit the BC Cancer Food Choices and Cancer Prevention page: www.bccancer.bc.ca/health-info/prevention/food-choices
- **Not drinking too much alcohol.**
    - Visit the BC Cancer Alcohol and Cancer Prevention page: www.bccancer.bc.ca/health-info/prevention/alcohol

Is there screening for colorectal cancer?

- B.C. has a Colon Screening Program: www.screeningbc.ca/Colon
- Doctors of B.C. (formerly the B.C. Medical Association) has screening guidelines for colon cancer.
    - Patient guideline: www2.gov.bc.ca/assets/gov/health/managing-your-health/patient-information-guides/colorectal_pg.pdf
    - Health professional guideline: www.bcguidelines.ca/gpac/pdf/colorectal_det.pdf
- You should start colon screening when you are 50 years old. All people aged 50-74 should get both of these tests:
    - **A digital rectal examination (DRE) each year.** This is when a doctor or nurse practitioner puts their finger in your bum and examines you.
    - **A fecal occult blood test, called FIT (Fecal Immunochemical Test).** This is a test that looks for blood in your feces (poop) that cannot be seen with your eyes. Fecal occult blood tests can lower the risk of dying from colorectal cancer by 25 - 45% (25-45 out of 100 people).
        - If you can see blood in your stool, you do not need to do this test. This test is only to check for hidden blood. If you find blood in your stool, please call your doctor.
- People with a higher risk of colorectal cancer should have tests and exams more often and starting at a younger age. The screening guidelines above will help you and your doctor decide what is best for you.

Where can I find more information?

- If you have questions about colorectal cancer, please talk to your health care team.
- Our librarians can help you find the information you need. Visit our Library page: bccancer.bc.ca/our-services/services/library
- BC Cancer Library Colorectal Cancer pathfinder: bccancer.libguides.com/pathfinder-colorectal
- Managing Your Symptoms: www.bccancer.bc.ca/health-info/coping-with-cancer/managing-symptoms-side-effects
- Emotional Support: www.bccancer.bc.ca/health-info/coping-with-cancer/emotional-support