Colorectal Cancer (CRC)

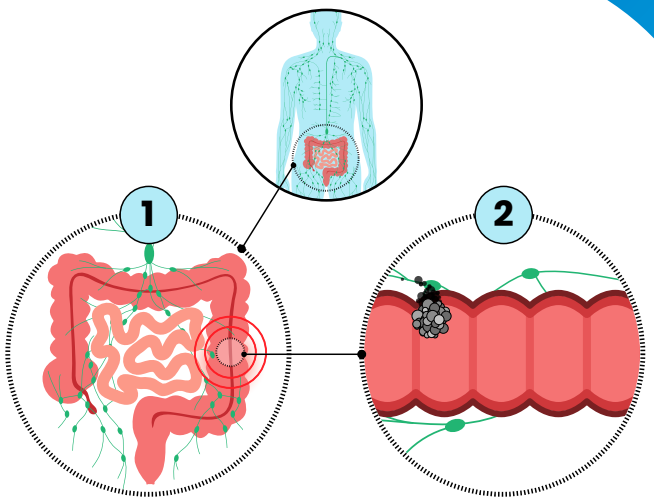
ABOUT CRC

Colorectal cancer (CRC) affects the large intestine, which is made of the colon and rectum.[1] This cancer can also be called bowel, colon, or rectal cancer depending on where it starts.

CRC often begins as a growth called a polyp on the inner lining of the colon or rectum. Over time, some polyps can become cancerous, eventually spreading into blood vessels and lymph nodes.[2]

While the exact cause of CRC is unknown, some risk factors include:[1,3,4]

- Ages 50 and older
- Lifestyle factors such as smoking, excessive alcohol consumption, and diet
- Previous history of certain types of polyps
- Family history and genetic conditions



PREVALENCE

CRC is most commonly diagnosed in older adults, though early onset cases are increasing steadily.[5]

Men are diagnosed with CRC 30% more than women.[7]

According to WHO data, **CRC is the 3rd most common cancer worldwide,** but the **2nd leading cause of death globally.**[1,6]

The average five-year survival rate is estimated to be around 60%, with significant differences by stage or region.[10]

The five-year survival rate for metastatic colorectal cancer (mCRC) is only 5-15%.[11]

30-40% of people with CRC will eventually develop metastases, which is when the cancer spreads to other areas of the body.[8,9]

There were approximately **1.9 million new CRC cases around the world** in 2022.[7]

SIGNS & SYMPTOMS

Most people with CRC don't show clear symptoms early on, so it's often not caught until the cancer is more advanced, making screening crucial.[1,8]

Common symptoms include:*[,1]

- **Rectal bleeding**
- **Abdominal pain**
- **Weakness or fatigue**
- **Changes in bowel habits such as diarrhea, constipation, or narrowing of the stool**
- **Decreased appetite or unintentional weight loss**

**If you are experiencing symptoms, please contact your physician or a qualified healthcare provider.*

This resource is for information purposes only and does not replace the independent judgment or guidance of (your) healthcare providers.

DIAGNOSIS

Screening has the potential to play a vital role in early identification of CRC, which may improve treatment outcomes and help prevent the progression of disease.

At an appointment, a healthcare provider may ask personal and family health history questions to gather relevant medical information. To confirm a diagnosis, providers may order the following tests:[1]

Colonoscopy

A physician will perform a colonoscopy and take tissue samples, biopsies, which will be sent to a lab for analysis.

Imaging

To see if cancer has developed and/or where it has spread, physicians will complete CT scans, MRIs, and an abdominal ultrasound.

BIOMARKER TESTING

What is a biomarker in cancer?

- A biomarker is a molecule in the body or tumor that can be detected and used to provide information about a person's cancer.[12]
- Actionable biomarkers associated with CRC include RAS (KRAS and NRAS), BRAF, MSI/MMR, HER2, among others.[13]

What is biomarker testing?

- Biomarker testing is the assessment of blood, bodily fluids, or tissue to identify a patient's specific tumor makeup.[1]
- Biomarkers can indicate driver mutations, which are DNA changes that can cause cancer cells to grow and spread, and can help doctors understand what may be driving the cancer.[14,15]

TREATMENT

CRC treatment options depend on the stage of the cancer, where it's located in the colon or rectum, and a patient's overall health. **Some treatment options include:**[1]

CHEMOTHERAPY

Chemotherapy are medicines that damage or stop the growth of rapidly dividing cancer cells.[16]

- Combination chemotherapy regimens can be used as first-line treatment, particularly for metastatic disease.
- It may be given in non-metastatic disease before or after surgery to help reduce recurrence.

IMMUNOTHERAPY

Biological treatment used to boost the body's immune system to destroy cancer cells.[17]

- Considered for CRC tumors with certain genetic markers.[16]
- Testing tumor tissue for biomarkers in metastatic disease can help inform more personalized treatment decisions for patients.[18]

RADIATION THERAPY

Uses high-energy beams that are often combined with chemotherapy in rectal cancer to shrink tumors before surgery or control symptoms in metastatic disease.

SURGERY

Surgical removal of the portion of the colon or rectum with tumors. Surgery is the primary treatment for many early-stage colon and rectal cancers.

TARGETED THERAPY

Medications designed to hone in on specific molecular features of cancer cells to block specific proteins or signals needed for cancer cells to grow and survive. They can also indirectly change the area around tumors, including blood vessels and immune cells, to stop tumor growth and help the body's immune system fight the cancer better.[19]

This resource is for information purposes only and does not replace the independent judgment or guidance of (your) healthcare providers.

References

1. World Health Organization. Published 2025. Accessed October 16, 2025. https://www.who.int/news-room/fact-sheets/detail/colorectal-cancer
2. Sheng J, Li N, Li S, et al. *J Transl Med.* 2025;23(1):723.
3. Morris VK, Kennedy EB, Baxter NN, et al. *J Clin Oncol.* 2023;41(3):678-700.
4. Win AK, Dowty JG, Reece JC, et al. *Lancet Oncol.* 2021;22(7):1014-1022.
5. Sung H, Siegel RL, Laversanne M, et al. *Lancet Oncol.* 2025;26(1):51-63.
6. Xi Y, Xu P. *Transl Oncol.* 2021;14(10):101174.
7. Bray F, Laversanne M, Sung H, et al. *CA Cancer J Clin.* 2024;74(3):229-263.
8. Duineveld LA, van Asselt KM, Bemelman WA, et al. *Ann Fam Med.* 2016;14:215-220.
9. De Falco V, Napolitano S, Roselló S, Huerta M, Cervantes A, Ciardiello F, Troiani T. *ESMO Open.* 2019;4(suppl 2):e000813.
10. Jiang Y, Yuan H, Li Z, et al. *Cancer Biomed.* 2022;19(2):175-190.
11. Li Z, Huang Y, Zhao R, Cui Y, Zhou Y, Wu X. *Sci Rep.* 2018;8(1):510. doi:10.1038/s41598-017-19001-6
12. Sarhadi VK, Armengol G. *Biomolecules.* 2022;12(8):1021.
13. Chen W, Frankel WL. *Mod Pathol.* 2019;32(suppl 1):S1-S15
14. Goossens N, Nakagawa S, Sun X, Hoshida Y. *Transl Cancer Res.* 2015;4(3):256-269.
15. Mehta A, Vasudevan S, Sharma SK, et al. *Appl Cancer Res.* 2020;40(1);4.
16. Marchewczyk P, Costeira B, Silva F, et al. *Qual Life Res.* 2025;34(5): 1501-1514.
17. Oh JM, Kim S, Tsung C, et al. *Front Immunol.* 2025;16:1571731.
18. Krishnamoorthy A, Arasaradnam R. *Transl Oncol.* 2023;23:101174.
19. Xie Y-H, Chen Y-X, Fang J-Y. *Signal Transduct Target Ther.* 2020;5:22.

AMGEN

©2026 Amgen Inc. All rights reserved.

This resource is for information purposes only and does not replace the independent judgment or guidance of (your) healthcare providers.