Colorectal Cancer in the US

Excluding skin cancers, colorectal cancer is the third most common cancer in men and women. Colorectal cancer incidence has generally declined since the mid-1980s, aided by widespread uptake of screening among adults ages 50 and older. From 2014 to 2018, incidence rates decreased by about 2% per year in adults 50 and older. However, for unknown reasons, rates increased by 1.5% per year in younger individuals.

Types of Colorectal Cancer

Most colorectal cancers start as polyps, which might or might not develop into cancer. However, the risk for colorectal cancer increases if a polyp is larger than 1 cm, if more than 3 polyps are found, or if a polyp shows dysplasia.

Most colorectal cancers are adenocarcinomas. Some subtypes of adenocarcinomas, such as signet ring cell or mucinous, may have a worse prognosis.

Risk Factors

About 55% of colorectal cancers in the US are attributable to potentially modifiable risk factors.

Modifiable risk factors include: excess body weight, physical inactivity, long-term smoking, high consumption of red or processed meat, low intake of calcium, very low intake of fruits, vegetables, and whole grains, and heavy alcohol consumption.

Personal, hereditary, and medical risk factors include:

- Older age: Rates in younger adults have increased in recent years, but colorectal cancer is more common after age 50.
- Personal or family history of colorectal cancer or adenomatous polyps
- Race and ethnicity: For colorectal cancer, African Americans have the highest incidence and mortality rates in the US. Ashkenazi Jews have one of the highest risks in the world.
- Hereditary syndromes: About 5% of people who develop colorectal cancer have inherited gene mutations. These may include: Lynch syndrome (hereditary non-polyposis colorectal cancer, or HNPCC), familial adenomatous polyposis (FAP), Peutz-Jeghers syndrome (PJS), or MUTYH-associated polyposis (MAP).
- Personal history of inflammatory bowel disease
- Type 2 diabetes

Screening and Detection

Screening is a process used to look for cancer in people who have no symptoms. The American Cancer Society recommends the following for people at average risk for colorectal cancer.

Regular screening should start at age 45. People who are in good health and with a life expectancy of at least 10 years should continue regular colorectal cancer screening through the age of 75. For people ages 76 through 85, the decision to be screened should be based on patient preference, life expectancy, overall health, and prior screening history. People over 85 should no longer get colorectal cancer screening.

Screening can be done either with a stool-based test or a visual (structural) exam, like a colonoscopy.

People at high risk based on family and/or personal history or other factors may need to start screening before age 45, get more frequent screening, or get specific tests.

Stool-based tests

- Highly sensitive fecal immunochemical test (FIT)* every year, or
- Highly sensitive guaiac-based fecal occult blood test (gFOBT)* every year, or
- Multi-targeted stool DNA test (MT-sDNA) every 3 years*
Visual exams of the colon and rectum
• Colonoscopy every 10 years, or
• CT colonography (virtual colonoscopy)* every 5 years, or
• Flexible sigmoidoscopy* every 5 years

*If a person chooses to be screened with a test other than colonoscopy, any abnormal test result should be followed up with a timely colonoscopy.

Signs and Symptoms 1, 2
Early-stage colorectal cancer patients are typically asymptomatic. Some signs and symptoms may include: rectal bleeding, blood in the stool, change in bowel habits, feeling that the bowel is not completely empty, abdominal cramping or pain, decreased appetite, unintended weight loss, or anemia.

Prevention 1, 2
Regular screening for colorectal cancer can help prevent it by identifying pre-cancerous polyps before they become invasive tumors.

Also, improving diet and physical activity, maintaining a healthy weight, and avoiding alcohol and tobacco may help decrease the risk of colorectal cancer.

Some patients with hereditary risk factors might benefit from meeting with a certified genetic counselor to better understand their risk and make an informed decision about having genetic testing. If found to have a cancer syndrome, recommendations for earlier screening or surgery might be considered.

Treatment 1, 2, 4, 5
Surgery is the primary treatment for localized colorectal cancer. Radiation therapy and chemotherapy are sometimes used for initial treatment. For metastasized colorectal cancer, chemotherapy, targeted therapy, or immunotherapy may be used.

Colorectal cancer in the US:
2022 estimates
New cases:
• 106,180 cases of colon cancer
• 44,850 cases of rectal cancer
Deaths:
• 52,580 from colon and rectal cancers combined
5-year relative survival rate for localized stage (Colon cancer): 91%
5-year relative survival rate for all stages combined (Colon cancer): 64%
5-year relative survival rate for localized stage (Rectal cancer): 90%
5-year relative survival rate for all stages combined (Rectal cancer): 67%

Quality of Life 2, 4-6
The most common concerns patients and survivors have include chronic diarrhea, cramping, urgency, or stool incontinence; pain; fatigue; neuropathy; change in body image; managing daily activities if they have an ostomy; problems with intimacy or sexual dysfunction; or emotional distress. Younger men and women might be concerned about fertility.

A cancer diagnosis can profoundly impact quality of life. Clinicians should assess for any physical, social, psychological, spiritual, and financial issues. Integrating palliative care can help manage symptoms, address issues, and improve quality of life. It can be offered at any time, from diagnosis until the end of life. Throughout a patient’s cancer journey, it’s very important for clinicians to share information and coordinate care to ensure ongoing surveillance.

References