


# Colorectal Cancer


Colorectal cancer (CRC) is the **third most commonly diagnosed** cancer in the world. Worldwide incidence is expected to increase from 1.9 million cases diagnosed in 2020 to **3.1 million cases by 2040**.

### What is CRC?




CRC forms in the tissues of the colon or rectum, often beginning as a growth called a polyp, which may form on the inner walls of the gastrointestinal system.

CRC is more common in men than women



1,066,000



866,000

Source: GLOBOCAN 2020

Median Age

67

At Diagnosis

72


At Death

Source: SEER 2014-2018

### Common CRC Subtypes

Some cases of CRC are microsatellite instability-high (MSI-H) or DNA mismatch repair deficient (dMMR), which occurs when there are deficiencies in the cell's ability to repair DNA errors during cell division.


Patients with these subtypes often have a poor prognosis with lower survival rates.




Patients with **advanced forms of CRC** have fewer treatment options and lower survival rates.

About 4-5% of patients with **metastatic CRC** have **MSI-H** or **dMMR** tumors.

Kirsten rat sarcoma virus (KRAS) is one of the most frequently mutated oncogenes in human cancer. It acts as the “on-off switch” for cell growth and, when it is mutated, cells continuously generate, often developing into some of the most aggressive cancers.



KRAS genetic mutations drive cancer growth in up to 50% of patients with CRC.



One KRAS mutation, KRAS<sup>G12C</sup>, occurs in approximately 3-4% of CRC cases.

### Global Incidence

Estimated numbers of annual new CRC cases by region:

North America  
**180,600**

Central America & the Caribbean  
**31,000**

South America  
**104,000**

Europe  
**519,800**

Africa  
**66,200**

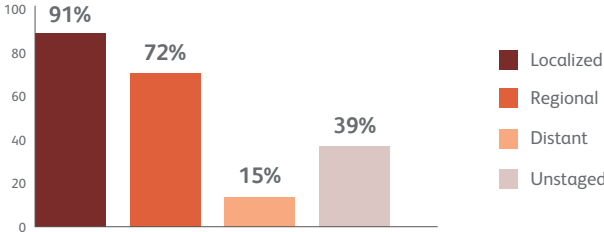
Asia  
**1,009,400**

Oceania  
**20,700**

Source: GLOBOCAN 2020


### Staging & Survival Rates

The five-year relative survival rates for CRC vary depending on its stage and type:




Source: SEER 2011-2017


### Common Risk Factors




Obesity




Physical Inactivity




Smoking



Heavy Alcohol Use

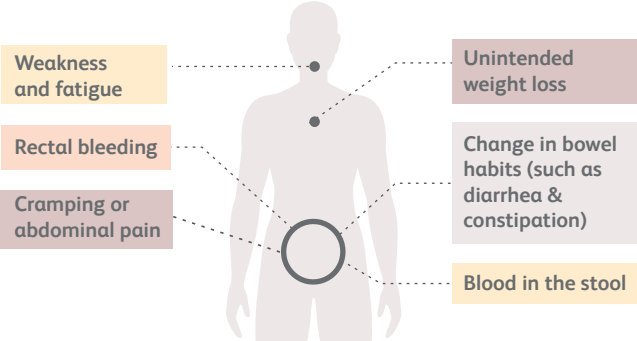


Adults Ages 50+




Family History

### Signs & Symptoms




### Treatment Options


A patient's treatment options are largely dependent on the stage of disease, and in some cases biomarkers, and may include:




Surgery




Targeted Therapy



Chemotherapy



Radiation Therapy



Immunotherapy