

March – Colorectal Cancer Awareness Month 2026

Colorectal Cancer (CRC), also known as colon cancer, is a malignant disease that can develop along the entire length of the large intestine or in its final part, the rectum. The large intestine is a long, tube-like organ in the digestive system. After food passes through the stomach and the small intestine, the large intestine is responsible for removing water and some nutrients from the food consumed. It then pushes the remaining solid waste into the rectum, from where it is expelled from the body.

The term colorectal cancer refers not only to cancer of the colon but also to cancers that develop in the rectum. The rectum is the final part of the large intestine where stool and waste products are stored before being eliminated from the body through the anus.

In recent years, colon cancer has increasingly affected younger individuals, and it has now become a leading cause of cancer-related death among younger populations. Physicians report that something fundamentally different appears to be happening with colorectal cancer in younger people. While the overall number of cancer deaths is decreasing, one concerning trend is moving in the opposite direction. Colon cancer is now a leading cause of death among adults under the age of 50, according to a report published in the *Journal of the American Medical Association (JAMA)*.

Among three out of four patients under the age of 50, colon cancer is diagnosed when the disease is already in an advanced stage, which partly explains the increase in mortality despite significant progress in treatment and therapy. Findings from recent studies align with a broader trend showing a rise in the incidence of colorectal cancer among individuals under 50 years of age. Research indicates that since 2000, the number of new cases in this age group has increased by an average of nearly 1.4% per year, while incidence rates among individuals over 50 have decreased by approximately 3.1% annually.

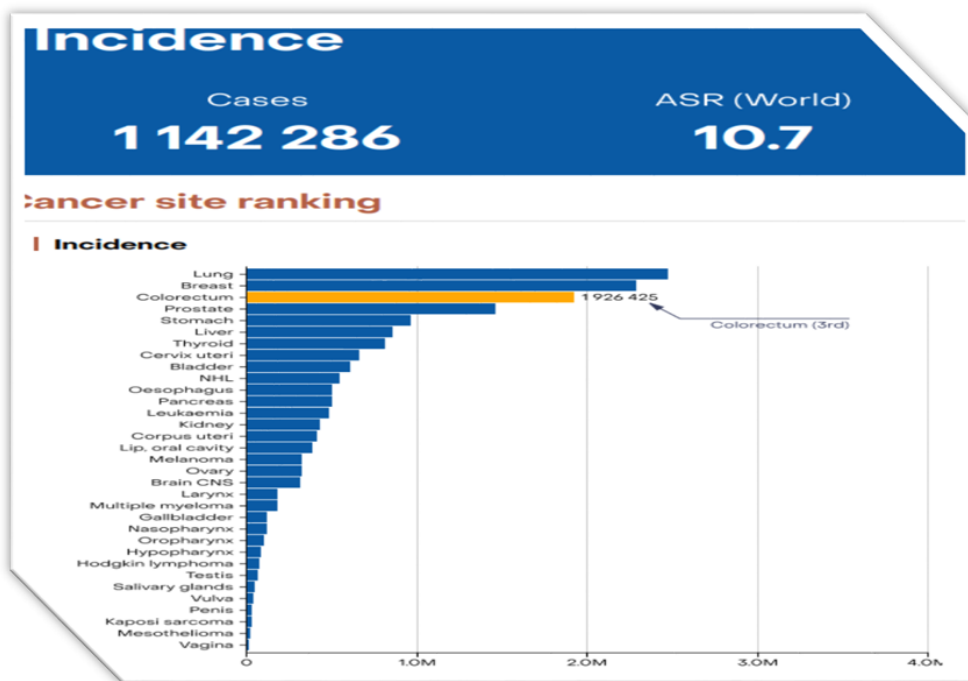
Although the exact reasons for this trend are not yet fully understood, experts believe it is likely due to a combination of several factors:

- Dietary habits
- Increased body weight
- Sedentary lifestyle
- Changes in the gut microbiome
- Exposure to various environmental influences

Cancer accounts for 20% of deaths in the European Region. With more than 3.7 million new cases and 1.8 million deaths each year, cancer is the second leading cause of mortality and morbidity in Europe, after cardiovascular diseases.

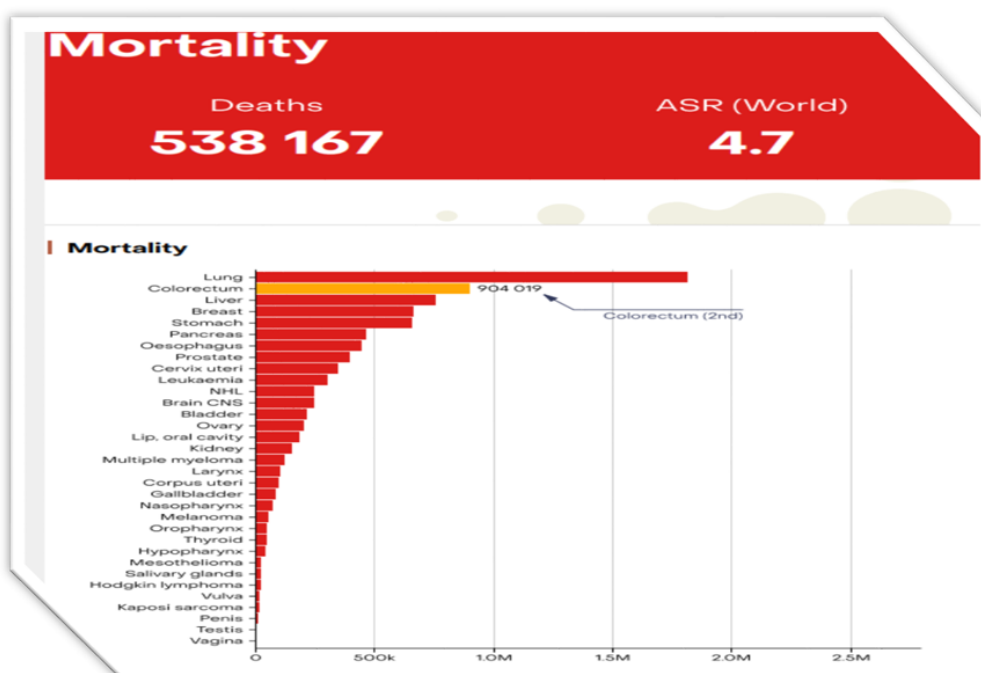
In Macedonia, according to the latest data from the Cancer Registry, 829 new cases of colorectal cancer and 393 deaths were recorded in 2023. Among people aged 30–50 years, the incidence was 90 cases, with 36 deaths. Based on the ten most common primary cancer sites, colon cancer ranks as the third leading cause of cancer-related mortality and the fourth leading cause of cancer morbidity in the country.

According to the latest data from the World Health Organization (WHO), in 2022 there were 1,926,425 new cases of colorectal cancer worldwide and 904,019 deaths, making it the second leading cause of cancer-related death and the third most common cancer globally. Incidence rates are highest in Europe, Australia, and New Zealand, while mortality rates are highest in Eastern Europe.



The incidence and mortality of Colorectal Cancer have decreased in several high-income countries, mainly due to early detection of the disease.

In many cases, cancer can be prevented, and early detection significantly increases the chances of successful treatment. It is known that early detection can prevent at least one third of all cancers. This group includes some of the most common cancers, such as Breast Cancer, Colorectal Cancer, and Cervical Cancer. These cancers can often be successfully treated if detected at an early stage.



Globally, more than 70% of cancer deaths occur in low- and middle-income countries, which often have limited or no resources for cancer prevention, diagnosis, and treatment. Regardless of the level of resources, all countries can implement the four key components of cancer control:

- Prevention
- Early detection
- Diagnosis and treatment
- Palliative care

1. PREVENTION OF COLORECTAL CANCER RISKS

There are several proven ways to significantly reduce the risk of developing colorectal cancer. These include:

- A balanced diet rich in fiber, large amounts of fresh fruits and vegetables (at least five servings per day), and whole grains
- Limiting red meat and processed meat consumption to once or twice per week
- Regular physical activity for at least 30 minutes, five days per week
- Physical activity should increase heart rate and can be achieved through brisk walking or walking uphill.
- Smoking is one of the leading causes associated with colorectal cancer. Quitting smoking has been proven to reduce the risk of colon cancer as well as other cancers.
- Maintaining a healthy body weight is also an important factor in preventing colorectal cancer. A balanced diet combined with regular physical activity helps maintain a healthy weight.

2. EARLY DETECTION OF COLORECTAL CANCER

Screening is a method used to detect disease before symptoms appear. Screening allows cancer to be identified at an early stage before it becomes invasive. It is intended for individuals at average risk, including the general population.

Screening aims to: Increase survival, reduce morbidity, improve quality of life in individuals who develop cancer. Its purpose is risk reduction, but it does not itself diagnose disease.

Several screening methods exist, including annual or biennial tests for occult blood in stool. Although many screening options are theoretically available, research aiming to identify the most effective screening protocol for the general asymptomatic population mainly recommends the Fecal Occult Blood Test (FOBT).

The occult blood test in stool has proven to be a suitable method for early detection of colorectal cancer due to its relatively simple application and relatively low cost.

3. DIAGNOSIS AND TREATMENT

Early diagnosis is essential for successful treatment of colorectal cancer.

The simplest screening tests include: digital rectal examination, Fecal Occult Blood Test (FOBT)

Recommended Screening Intervals

- FOBT – every year
- Colonoscopy – every 10 years
- Flexible sigmoidoscopy – every 5 years
- Irrigography (barium enema X-ray) – every 5 years

Abnormal results from virtual colonoscopy, double-contrast barium enema, FOBT, immunochemical tests, or DNA tests should always be followed by a colonoscopy.

Colonoscopy

Colonoscopy is a modern diagnostic procedure that allows doctors to directly examine the entire colon. The procedure is performed using a colonoscope, a flexible sterile instrument about the thickness of a finger. Thanks to its flexibility and optical fibers, it enables a safe and precise examination of the entire colon.

As an initial screening method, colonoscopy is more expensive and more invasive than the FOBT test, but it plays a key role in colorectal cancer screening and is considered the gold standard for confirming positive results obtained from other screening methods.

Colonoscopy is a highly sensitive method capable of detecting very small changes, even those smaller than 5 mm, enabling tumors to be detected at a very early stage. Many of these changes can also be removed during the procedure, making colonoscopy both a diagnostic and therapeutic method.

It detects 90–95% of all tumor changes in the colon and rectum. Due to its cost, colonoscopy is usually used for monitoring individuals with moderate or high risk, as a diagnostic procedure, and for patients with a positive FOBT result.

Flexible Sigmoidoscopy

Flexible sigmoidoscopy is a procedure used to examine the lower part of the colon. However, it does not allow visualization of the entire colon, meaning cancers or polyps located deeper in the colon may not be detected with this procedure.

Irrigography

Irrigography is performed similarly to bowel cleansing procedures. A barium sulfate solution, which is clearly visible on X-ray images, is introduced into the intestine. During the procedure, the movement of the solution through the intestines is observed, which helps detect abnormal bulges or blockages.

Treatment of Colorectal Cancer

Treatment of colorectal cancer depends on several factors, including: stage of the disease, tumor grade, patient age, overall health condition ect.

Treatment options include:

- Surgery
- Radiotherapy
- Chemotherapy
- Targeted therapy

Surgery is the primary and most common treatment option for colon cancer. The goal of surgery is to remove the entire primary tumor together with a portion of healthy colon tissue.

During the procedure, lymph nodes draining that part of the colon are also removed. If nearby tissues or organs are affected by the malignant process, they may also be surgically removed.

When cancer is locally advanced or metastatic, combined therapy may be used, including radiotherapy, chemotherapy, and targeted therapy.

Radiotherapy

Radiotherapy is a local treatment that destroys cancer cells only in the region being treated. It is performed using special machines called linear accelerators, which produce high-energy X-rays.

When radiation is delivered externally through the body, it is called external radiotherapy.

External radiotherapy is primarily used in the treatment of rectal cancer, not colon cancer. It is usually combined with other treatment methods such as surgery, chemotherapy, or targeted therapy.

Chemotherapy

Chemotherapy uses drugs called cytostatics, which block the division of cancer cells and inhibit their growth and spread. It is typically used in locally advanced or metastatic colon cancer and is often combined with other treatments.

Targeted therapy

Targeted therapy is a newer and effective treatment for advanced and metastatic colon cancer. It involves targeted medications that selectively attack cancer cells while minimizing damage to healthy cells. These drugs are most often used in combination with chemotherapy, and less frequently as monotherapy.

4. PALLIATIVE CARE

The World Health Organization has updated the definition of palliative care several times. The latest definition states:

Palliative care is an approach that improves the quality of life of patients and their families facing life-threatening illness, through the prevention and relief of suffering by means of early identification and accurate assessment and treatment of pain and other problems—physical, psychosocial, and spiritual.

An incurable disease such as cancer is a burden carried not only by patients but also by their families. Family members often face difficult decisions about whether their loved one should receive treatment and care outside the home.

Many families choose palliative care because it provides comprehensive care for patients whose disease no longer responds to treatment, with the aim of relieving suffering. Palliative care views death as a natural process and seeks to ensure the best possible quality of life until the end of life.

Some form of palliative care services currently exists in about half of the countries worldwide.

Prepared by:

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