Oncology Center of Excellence

Colorectal Cancer

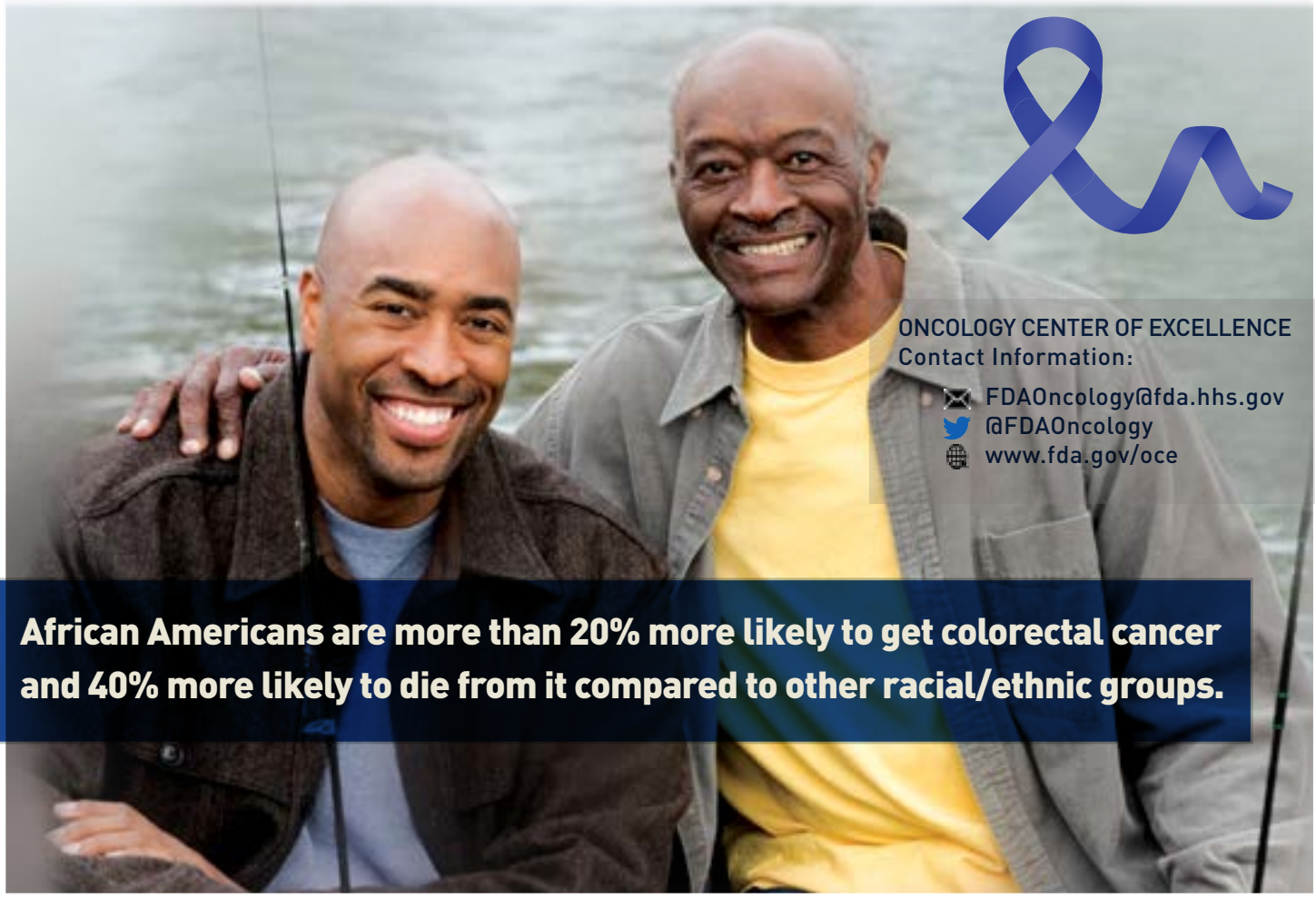
In 2021, colorectal cancer represented 7.9% of all new cancer cases in the U.S. and was the fourth most common type of cancer in the nation. It begins in the large intestine, also called the colon. The rectum connects the colon to the anus.

Though colorectal cancer generally affects older adults, the incidence among young adults is rising, with African Americans disproportionately affected by colorectal cancer in the U.S.

Colorectal cancer typically begins as small, noncancerous (benign) groupings of cells called polyps. Polyps form inside the colon, and as time passes, some polyps can become cancerous.

Polyps may not produce symptoms, so doctors recommend regular screening via a colonoscopy to identify and remove polyps before they become cancerous.

Regular screening to detect the disease early on is critical.



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Contact Information:
FDAOncology@fda.hhs.gov
@FDAOncology
www.fda.gov/oce

African Americans are more than 20% more likely to get colorectal cancer and 40% more likely to die from it compared to other racial/ethnic groups.

Symptoms

People who develop persistent symptoms associated with colorectal cancer should make an appointment with their doctor. Symptoms include:

- A recurring change in bowel habits, including diarrhea or constipation
- Rectal bleeding or blood in the stool
- Cramps, gas, or pain in the abdominal area
- Weakness, fatigue, or inexplicable weight loss

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Risk Factors and Screening

The American Cancer Society and U.S. Preventive Services Taskforce recommend that colon cancer screenings start in adults 45 years of age. Earlier screening may be necessary if you have other risk factors, such as inflammatory bowel disease or a family history of colorectal cancer.

Colonoscopy is a screening method where a doctor examines the inside of the colon and rectum using a long, slender tube attached to a video camera. If something suspicious is observed, the doctor can pass surgical tools through the tube to take a tissue sample for further analysis, called a biopsy. Doctors may also remove polyps if found.

Other effective screening methods include stool-based tests with or without flexible sigmoidoscopy, which is like a colonoscopy except that it cannot inspect the entire colon. CT colonoscopy (a test a radiologist will conduct) is also used to screen patients for colorectal cancer. If abnormalities are found, your doctor will determine if a follow-up colonoscopy is needed.

Treatment Options

Early-stage colon cancer outside of the rectum is usually treated with surgery. Depending upon the stage of the cancer, patients may also receive chemotherapy after the surgery to reduce the chance that the cancer returns (called adjuvant chemotherapy). Patients with early-stage rectal cancer typically receive treatment with chemotherapy and radiation prior to surgery.

When the disease is more advanced, having spread beyond the colon or rectum (metastasized), chemotherapy is usually used to stop the growth of cancer cells, though other cells in the body may be harmed, too.

Targeted therapies can help attack specific types of cancer cells with less harm to other cells. Some targeted drugs are typically combined with chemotherapy.

Targeted drugs include:

- Monoclonal antibodies: immune system proteins made in the lab and given through an intravenous infusion.
  - Vascular endothelial growth factor (VEGF) inhibitors: VEGF is produced by cancer cells and helps cancer cells form new blood vessels. VEGF inhibitors block VEGF and prevent new blood vessels from forming.
    - **Examples: Bevacizumab, ramucirumab, and ziv-aflibercept.**
  - Epidermal growth factor receptor (EGFR) inhibitors: EGFR are proteins found on the surface of cancer cells. Epidermal growth factor attaches to EGFRs and causes cancer cells to grow. EGFR inhibitors block access to EGFRs and prevent cancer cells from growing.
    - **Examples: Cetuximab and panitumumab.**
  - Immune checkpoint inhibitors: These monoclonal antibodies block proteins called checkpoints that are made by some types of immune system cells, such as T cells, and some cancer cells. When these checkpoints are blocked in patients with certain tumor characteristics, the immune system can kill the cancer cells.
    - **Examples: Pembrolizumab and nivolumab.**

References

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10903 New Hampshire Avenue • Silver Spring, MD 20993

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