

# Anal Cancer

Anal cancer occurs when the cells within the tissues of the anus (the opening at the lower end of the intestines that connects to the outside of the body) become cancerous. Anal cancer is rare but treatable. Over the last three decades, the number of new cases has risen. While the cause of anal cancer is not entirely known, the disease has been linked to human papillomavirus (HPV) infection, which is also associated with cervical cancer. Many cases of anal cancer can be found in the early stages when the cancer is most treatable, creating a high chance of survival.

## Statistics

- In 2021, an estimated **9,090 new cases** of anal cancer will be diagnosed in the United States, and an estimated **1,430 people** will die from the disease. Women have a higher incidence of anal cancer than men, with 6,070 new cases expected in the U.S., compared to 3,020 for men.
- HPV has been linked to approximately **91 percent** of anal cancers.
- About **69 percent** of newly diagnosed patients with anal cancer are expected to survive five years or more.

## Risk Factors

- **Age:** The majority of patients are diagnosed between the ages of 50 and 80.
- **Gender and ethnicity:** The incidence of anal cancer is higher in black men and white women.
- **HPV:** Infection with HPV can lead to anal and other types of cancer.
- **Anal warts:** People with anal warts are more likely to develop anal cancer, although the warts themselves are unlikely to become cancerous.
- **Weakened immune system:** People with a weakened immune system, including those who have had transplants, those who take drugs to suppress their immune systems, and those with HIV or AIDS, are at higher risk.
- **Sex:** Having many sexual partners increases risk of contracting HPV and HIV, which also increases risk of anal cancer. Anal sex also increases risk of anal cancer.
- **Smoking:** People who smoke are more likely to have anal cancer than nonsmokers. Quitting smoking decreases the amount of harmful chemicals in the bloodstream, which reduces risk.
- **Other cancers:** Those who have cancer of the vagina, cervix, or vulva face an increased risk of the disease. This is likely due to the link to infection caused by HPV. People previously treated with radiation to the pelvic area also have an increased risk.
- **Chronic local inflammation:** People with anal fistulas, open wounds, frequent redness, swelling, or soreness have a higher risk.

## Symptoms and Signs

Symptoms of anal cancer are not always apparent. Some cases, however, are discovered early during digital rectal exams (DRE) because of the cancer's formation on an easily accessible part of the body. Physicians can also perform an anal Pap test for high-risk patients, or those showing symptoms. Signs of anal cancer may include:

- Anal bleeding or itching
- Pain in the area
- Feeling of fullness in the area
- Narrower stools or change in bowel habits
- Unusual anal discharge
- Enlarged lymph nodes in the anal or groin region
- Mass or lump in the area

## Tips for Prevention

Although some people with anal cancer have no risk factors, there are steps that men and women can take to help reduce their risk for the disease. The most effective prevention method is to avoid HPV infection through an HPV vaccine. Using condoms can reduce risk, but cannot eliminate it completely due to the possibility of skin contact. Treating HIV can help control the infection and lower the risk for developing anal cancer. Since smokers face an increased risk, avoiding tobacco greatly reduces risk.

## Treatment

Anal cancer is a very treatable cancer, especially if identified in the early stages. Treatment options vary depending on how advanced the cancer is and if it has spread to other parts of the body.

Physicians will determine the most appropriate treatment for each patient, but potential treatment options include surgery, radiation therapy, chemotherapy, immunotherapy, and palliative care. A combination of two or more of these treatments may be used to provide the best chance of disease control.

Sources: American Cancer Society, American Society of Clinical Oncology, American Society of Colon and Rectal Surgeons, Centers for Disease Control and Prevention, and National Cancer Institute

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