

Types of Cancer

# Anal Cancer

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What is anal cancer?

Cancer develops when cells grow out of control. Anal squamous cell carcinoma, starts in the cells around the anus and is usually caused by human papillomavirus (HPV). When found early, treatment is generally effective and many people with this cancer can be cured. More advanced disease is harder to treat.

Who gets anal cancer?

Anal cancer is fairly rare, affecting about 8,200 people each year (5,250 women and 2,950 men) and leading to about 1,100 deaths in the United States, according to the American Cancer Society. However, anal cancer rates are rising, and the lifetime risk of being diagnosed with anal cancer is about one in every 500 people.

Women are almost twice as likely as men to develop anal cancer in most racial and ethnic groups, except for African Americans, where it is more common among men. Anal cancer is diagnosed mainly in older adults and is rare among people younger than 35.

What are the risk factors for anal cancer?

The vast majority of anal cancers are linked to HPV infection, the same virus that can cause cancers of the cervix, vagina, penis and some head and neck cancers. There are more than 100 types of HPV, but only a small number are linked to cancer; some other HPV types cause genital warts. HPV is spread through skin-to-skin contact and it is often sexually transmitted. Anal cancer can be prevented with vaccines against the more dangerous or high-risk types of HPV.

People at increased risk for developing anal cancer include those who have had anal sex (both men and women) and people with weakened immune systems, including people with HIV and those taking immunosuppressive medications after an organ transplant. Smoking is also a risk factor for cancers caused by HPV.

What are the symptoms of anal cancer?

The anus, at the end of the long intestine, is part of the body's digestive system. Stool (solid waste) leaves the body through the anus. Anal cancer can cause many symptoms, including:

- Bleeding from the anus

- Itching in the anal area
- Pain or pressure in the anal area
- Discharge of mucus from the anus
- A lump or swelling near the anus
- A change in bowel habits

How is anal cancer diagnosed?

Early detection and treatment of anal cancer increases the likelihood of long-term survival. Diagnosis starts with a physical exam and health history, which may include questions about symptoms, sexual behavior and family history of cancer.

The physical exam may include an anal cytology or Pap test and a test for human papillomavirus (HPV), a virus that causes abnormal cell growth and cancer. In a Pap test, a doctor scrapes a small sample of cells from the anal opening to examine in a laboratory for abnormal cell changes. There may also be a digital rectal exam, in which a doctor inserts a finger into the anus to feel for lumps or swelling, and a pelvic exam for women. Anal cancer is sometimes detected during treatment of minor conditions such as hemorrhoids or during routine colon cancer screening in older adults.

If a Pap test shows abnormal cell growth, a detailed examination of the anus may be done using a lighted magnifying device called an anoscope to look for abnormal tissue—known as dysplasia or neoplasia—that could progress to invasive cancer. In some cases precancerous tissue can be removed or destroyed before cancer develops. A biopsy, or small tissue sample, may be taken for further laboratory examination.

If cancer is more advanced, imaging tests including transrectal ultrasound (TRUS), X-rays, computed tomography (CT), positron emission tomography (PET) or MRI scans may be done to check how much it has spread.

How is anal cancer treated?

Treatment for anal cancer depends on how advanced the cancer is when it is detected, including how large it is and whether it has spread to nearby lymph nodes or other parts of the body.

**Precancer treatment:** Areas of abnormal cells (dysplasia or neoplasia) may be cut out or destroyed using lasers, freezing or topical medications before they progress to cancer.

**Surgery:** Some anal tumors can be surgically removed; this is known as resection. In more advanced cases, parts of the rectum and colon may also be removed.

**Radiation therapy:** Radiation may be used to kill cancer cells that remain after surgery or to shrink tumors that cannot be surgically removed.

**Chemotherapy:** Traditional chemotherapy works by killing fast-growing cells, including cancer

cells. It can also destroy rapidly dividing healthy cells, such as those in the gut or hair follicles, leading to side effects including nausea and hair loss.

**Chemoradiation:** This type of treatment combines chemotherapy and radiation at the same time. This is the main treatment for anal cancer. This may include radiosensitizers, or drugs that make cancer cells more sensitive to radiation.

**Targeted therapy:** Targeted drugs work against cancers with specific characteristics. For example, they may interfere with signaling pathways that regulate cell growth. Targeted treatment is often better tolerated than chemotherapy, but cancer may develop resistance over time.

**Immunotherapy:** Immunotherapy helps the immune system target cancer. For example, some tumors can turn off immune responses against them, and drugs known as checkpoint inhibitors can restore T cells' ability to recognize and destroy cancer cells.

For more information on anal cancer, visit:

[American Cancer Society](#)

[National Cancer Institute](#)

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<http://beta.docker.cancerhealth.com/basics/health-basics/anal-cancer>