

## **[HIV and AIDS-Related Cancer - Diagnosis](#) [1]**

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 01/2016

**ON THIS PAGE:** You will find a list of common tests, procedures, and scans that doctors use to find the cause of a medical problem. To see other pages, use the menu.

Doctors use many tests to find, or diagnose, cancer. They also do tests to learn if cancer has spread to another part of the body from where it started. If this happens, it is called metastasis. For example, imaging tests can show if the cancer has spread. Imaging tests show pictures of the inside of the body. Doctors may also do tests to learn which treatments could work best.

For most types of cancer, a biopsy is the only sure way for the doctor to know whether an area of the body has cancer. In a biopsy, the doctor takes a small sample of tissue for testing in a laboratory. If a biopsy is not possible, the doctor may suggest other tests that will help make a diagnosis.

This list describes options for diagnosing an HIV/AIDS-related cancer, and not all tests listed will be used for every person. Your doctor may consider these factors when choosing a diagnostic test:

- The type of cancer suspected
- Your signs and symptoms
- Your age and medical condition

- The results of earlier medical tests

The following tests may be used to diagnose an HIV/AIDS-related cancer or determine if or where it has spread:

- **Biopsy.** A [biopsy](#) [3] is the removal of a small amount of tissue for examination under a microscope. Other tests can suggest that cancer is present, but only a biopsy can make a definite diagnosis. A pathologist then analyzes the sample(s). A pathologist is a doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease.
- **Computed tomography (CT or CAT) scan.** A [CT scan](#) [4] creates a 3-dimensional picture of the inside of the body using x-rays taken from different angles. A computer then combines these images into a detailed, cross-sectional view that shows any abnormalities or tumors. A CT scan can also be used to measure the tumor's size. Sometimes, a special dye called a contrast medium is given before the scan to provide better detail on the image. This dye is usually injected into a patient's vein. CT scans of the chest and abdomen can help find cancer that has spread to the lungs, lymph nodes, or liver.

## Kaposi Sarcoma

- **Endoscopy.** [An endoscopy](#) [5] allows the doctor to see the inside the body with a thin, lighted, flexible tube called an endoscope. The person may be sedated as the tube is inserted through the mouth, down the esophagus, and into the stomach and small bowel. Sedation is giving medication to become more relaxed, calm, or sleepy. If abnormal areas are found, the doctor can remove a sample of tissue and check it for cancer. The doctor can examine the large intestine with a specific endoscopic procedure called a [colonoscopy](#) [6].
- **Bronchoscopy.** [A bronchoscopy](#) [5] allows the doctor to see inside the lungs with a thin, lighted, flexible tube called a bronchoscope. The person is sedated as the tube is inserted through the mouth or nose, down through the windpipe, and into the breathing passages of the lungs. This procedure may be performed by a surgeon or a pulmonologist. A pulmonologist is a doctor who specializes in lung disease. Tiny tools inside the tube can collect samples of fluid and tissue, so the pathologist can examine the samples.
- **X-ray.** An x-ray is a way to create a picture of the structures inside of the body, using a small amount of radiation.

- **Photography.** Because multiple and scattered skin lesions can develop, doctors regularly photograph parts of the skin in order to find out whether new lesions have developed over time. This is sometimes called mapping.

## Non-Hodgkin Lymphoma

- **Blood tests.** Many different [blood tests](#) [7] provide information about a lymphoma diagnosis, the disease's effect on the body, and how well treatment is working.
- **Bone marrow aspiration and biopsy.** Lymphoma often spreads to the bone marrow, and looking at a sample of the bone marrow can be important for doctors to diagnose lymphoma and to find out if it has spread. [A bone marrow aspiration and biopsy](#) [8] are similar procedures and often done at the same time. Bone marrow has both a solid and a liquid part. An aspiration removes a sample of fluid with a needle. A bone marrow biopsy is the removal of a small amount of solid tissue using a needle. A pathologist then analyzes the sample(s). A common site for a bone marrow aspiration and biopsy is the pelvic bone, which is located in the lower back by the hip. The skin in that area is usually numbed with medication beforehand, and other types of anesthesia (medication to block the awareness of pain) may be used.
- **Molecular testing of the lymphoma cells.** Your doctor may recommend running laboratory tests on a sample of the lymphoma cells to identify specific genes, proteins, and other factors unique to the tumor. Results of these tests will help decide whether your treatment options include a type of treatment called targeted therapy (see [Treatment Options](#) [9]).
- **Magnetic resonance imaging (MRI).** An [MRI](#) [10] uses magnetic fields, not x-rays, to produce detailed images of the brain and spinal column. MRI can also be used to measure the tumor's size. In addition, MRIs create more detailed pictures of soft tissues and nerves than CT scans. A special dye called a contrast medium is given before the scan to create a clearer picture. This dye is usually injected into a patient's vein.
- **Bone scan.** A [bone scan](#) [11] uses a radioactive tracer to look at the inside of the bones. The tracer is injected into a patient's vein. It collects in areas of the bone and is detected by a special camera. Healthy bone appears gray to the camera, and areas of injury, such as those caused by cancer, appear dark.
- **Positron emission tomography (PET) scan.** A PET scan is usually combined with a CT scan (see above), called a [PET-CT scan](#) [12]. However, you may hear your doctor refer to

this procedure just as a PET scan. A PET scan is a way to create pictures of organs and tissues inside the body. A small amount of a radioactive sugar substance is injected into the patient's body. This sugar substance is taken up by cells that use the most energy. Because cancer tends to use energy actively, it absorbs more of the radioactive substance. A scanner then detects this substance to produce images of the inside of the body.

Most subtypes of lymphoma often show up very well on PET scans. Many oncologists will recommend a PET scan as part of the initial evaluation, especially for the types of lymphoma that are more likely to grow quickly. A PET scan may also help doctors monitor how well treatment is working. There is some evidence that using a PET scan after initial cycles of treatment may be a useful way to predict if that treatment is likely to completely get rid of Hodgkin lymphoma. It may possibly also help with some types of aggressive NHL, such as diffuse large B-cell lymphoma. A negative PET scan means that there are no signs of lymphoma found during this test. A negative PET scan after finishing all treatment cycles is linked with a better chance of recovery from aggressive B-cell and follicular types of lymphoma.

## Cervical Cancer

- **Pap test.** During a [Pap test](#) [13], the doctor gently scrapes the outside of the cervix and vagina and takes samples of the cells for testing.
- **Colposcopy.** The doctor may do a [colposcopy](#) [5] to check the cervix for abnormal areas. A special instrument called a colposcope is used. A colposcope is an instrument that magnifies the cells of the cervix and vagina, similar to a microscope. The colposcope gives the doctor a lighted, magnified view of the tissues of the vagina and the cervix. The colposcope is not inserted into the woman's body. This examination is not painful, can be done in the doctor's office, and has no side effects. It can even be done on pregnant women.

After diagnostic tests are done, your doctor will review all of the results with you. If the diagnosis is cancer, these results also help the doctor describe the cancer; this is called staging.

*The [next section in this guide is Stages](#) [14]. It explains the system doctors use to describe the extent of an HIV/AIDS-related cancer. Or, use the menu to choose another section to continue reading this guide.*

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### Links

[1] <http://www.cancer.net/cancer-types/hiv-and-aids-related-cancer/diagnosis>

[2] <http://www.cancer.net/about-us>

- [3] <http://www.cancer.net/node/24406>
- [4] <http://www.cancer.net/node/24486>
- [5] <http://www.cancer.net/node/24511>
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