

# Lung cancer

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Evidence from the UK and other countries shows that lung cancer is more common in HIV-positive people than the general HIV-negative population.

Before effective HIV treatment became available, it was already clear that lung cancer occurred more frequently in HIV-positive people. With the introduction of effective HIV treatment, lung cancer has become more common still. It is important to emphasise that HIV treatment does not cause lung cancer. It is also important to remember that lung cancer is very rare in people with HIV.

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## Causes of lung cancer

As in HIV-negative people, smoking is a very important risk factor for the development of lung cancer in HIV-positive people. Having a very weak immune system for a long time (or having had a very weak immune system before starting HIV treatment) may also increase the risk of lung cancer. HIV itself and chronic lung problems are also thought to increase the risk of lung cancer in people with HIV.

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## Types of lung cancer

Lung cancers are divided into two broad types: small cell cancers and non-small cell cancers. Non-small cell cancers are more common.

The main groups of non-small cell cancer are:

- adenocarcinoma: this occurs in the outer part of the lung and often spreads to other parts of the body.
- bronchoalveolar-alveolar carcinoma: this occurs either as a single mass or spread throughout the body.
- squamous cell carcinoma: this occurs in the central lung.
- large cell carcinoma.

Small cell cancer is more aggressive, growing quickly and rapidly spreading to other parts of the body.

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## Symptoms

Often people have no symptoms of lung cancer and it is only diagnosed after a chest X-ray.

If symptoms do occur, they can differ according to the type of cancer. Squamous and small cell cancers are generally associated with cough, shortness of breath, bloody sputum, chest pain, wheezing and pneumonia.

Adenocarcinoma causes chest pain when breathing, cough and shortness of breath.

If lung cancer spreads, symptoms can cause a hoarse voice, difficulty swallowing, swelling of the face, arms and neck, headache, weakness, numbness, pain in the bones and stomach, and paralysis.

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## Treatment for lung cancer

There are three main types of treatment: surgery, radiotherapy and chemotherapy.

The cure rate for lung cancer in HIV-negative people is very poor (less than 10%) but does not appear to be worse in HIV-positive people.

Because lung cancer is often not diagnosed until it has spread, surgery is not an option for about 75% of people with HIV.

Radiation therapy does not cure lung cancer, but it can mean that a person lives longer and has a better quality of life.

Chemotherapy is the primary treatment for small cell cancer, and may be able to cure the cancer, particularly if it is restricted to the lungs.

Chances of survival are better if the doctors providing treatment are knowledgeable about both HIV and lung cancer.