

# Understanding Lung Cancer

## What is lung cancer?

Lung cancer is caused by the growth of abnormal cells in the lung. It can start anywhere in the lungs and affect any part of the respiratory system. The change from normal cells into cancerous cells usually happens over a period of years.

## What causes it?

Smoking is the number one cause of lung cancer, accounting for nearly 90 percent of cases. Tobacco and the smoke from tobacco contain many cancer-causing substances, known as carcinogens. Carcinogens damage lung cells and, over time, these damaged cells may develop into lung cancer.

Other causes of lung cancer include exposure to secondhand smoke, asbestos and other industrial carcinogens, and to high concentrations of radon – an odorless gas that is released into the air from the breakdown of uranium in soil and water.

## Who gets it?

Smokers and those exposed to smoking are most at risk of developing lung cancer. It is the leading cause of cancer death for both men and women, killing more people than colon, breast and prostate cancers combined. Nearly 70 percent of people diagnosed with lung cancer are older than 65.

## What are the symptoms of lung cancer?

Since most lung cancers do not cause any symptoms until they have spread, only about 15 percent of cases are found in the early stages. When lung cancer is found early, it is often because of a chest x-ray, CT scan or other test that was being done for another reason. When symptoms do occur, the most common warning sign is a cough, which happens when a tumor irritates the lining of the airways or blocks the passage of air. Other symptoms of lung cancer may include:

- Constant chest pain, often made worse by deep breathing
- Weight loss and loss of appetite
- Coughing up blood
- Shortness of breath
- Recurring infections, such as bronchitis and pneumonia
- New onset of wheezing
- Swelling of the neck and face
- Hoarseness that lasts more than two weeks
- Fatigue

## How is it diagnosed?

If there is any reason to suspect lung cancer, the doctor will first take a medical history and conduct a physical exam. The doctor may also order a chest x-ray or CT scan.

To confirm the presence of lung cancer, the doctor may examine tissue from the lung. A biopsy – the removal of a small sample of tissue for examination under a microscope – can show whether a person has cancer.

If the diagnosis is cancer, the doctor will conduct additional tests to determine what “stage” the disease is in (how far the cancer has grown or spread).

### **How serious is it?**

Lung cancer is the leading cause of cancer death for both men and women. Nearly 75 percent of people diagnosed with lung cancer die within two years of their diagnosis. In those cases when the cancer is still in the early stage when first diagnosed, the five-year survival rate for lung cancer is approximately 50 percent. Despite the very serious prognosis of lung cancer, people do survive. There are currently about 330,000 long-term survivors.

### **How is lung cancer treated?**

Treatment options for lung cancer may include surgery, chemotherapy and radiation therapy. These treatments are either used alone or in combination, depending on the type and stage of the cancer.

Surgery involves an operation to remove the cancer. Depending on the type, stage and location of the cancer, surgery may be used to remove the tumor and some of the lung tissue around it. Some tumors are inoperable (cannot be removed by surgery) because of their size or location, and some patients cannot have surgery for other medical reasons.

Chemotherapy is the use of drugs to kill cancer cells throughout the body. Even if a tumor is removed from the lung, cancer cells may still be present in nearby tissue or elsewhere in the body. Most chemotherapy drugs are either injected or administered as a pill, allowing them to enter the bloodstream and spread throughout body, which makes the treatment useful for cancers that have spread to distant organs. Chemotherapy may be used to control cancer growth or to relieve symptoms.

Radiation therapy uses highly targeted radiation beams to shrink or kill cancer cells, or to relieve certain symptoms. Radiation therapy is directed at a small area and designed to affect only the cancer cells in that area. It may be used before surgery to shrink a tumor, or after surgery to destroy any cancer cells that remain in the treated area. Doctors may use radiation therapy, often combined with chemotherapy, as the primary treatment for lung cancer instead of surgery.

Clinical trials of new treatment methods can also provide important treatment options for lung cancer patients.

### **More information about lung cancer**

A patient’s own lung specialist is the best source for information about lung cancer.

Other sources include:

The American Lung Association

[www.lungusa.org](http://www.lungusa.org)

The National Cancer Institute, U.S. National Institutes of Health

[www.nci.nih.gov](http://www.nci.nih.gov)

### **Contact Us**

For more information/question or comment about Lung Cancer

Contact us at [info@thelungcenter.co.in](mailto:info@thelungcenter.co.in)