

## What is lung cancer?

Lung cancer occurs when abnormal cells in one or both lungs grow in an uncontrolled way.

The lungs are part of the body's respiratory system. They are made up of a series of airways called bronchi and bronchioles that end in tiny air sacs called alveoli.

## What are the different types of lung tumour?

There are several types of lung cancer, each beginning in a different type of cell in the lung.

- ▶ Small cell carcinoma (around 12% of lung cancer) usually arises from epithelial cells that line the surface of the centrally located bronchi.
- ▶ Non-small cell carcinoma (over 60% of lung cancer) consists of a different group of cancers that tend to grow and spread more slowly than small cell carcinoma. It mainly affects cells lining the bronchi and smaller airways.
- ▶ Other types account for around 25% of lung cancer.<sup>5</sup>

## What are the symptoms of lung cancer?

Lung cancer does not always cause symptoms, and may be found incidentally during a chest X-ray for another condition.<sup>2,3</sup>

Some common symptoms of lung cancer include:

- ▶ blood in sputum coughed up from the lungs – this is called haemoptysis<sup>2-4</sup>
- ▶ a new or changed cough
- ▶ chest and/ or shoulder pain or discomfort<sup>2-4</sup>
- ▶ shortness of breath
- ▶ hoarseness
- ▶ unexplained weight loss/ loss of appetite<sup>2-4</sup>
- ▶ a chest infection that doesn't go away.<sup>2</sup>

There are a number of conditions that may cause these symptoms, not just lung cancer. If any of these symptoms are experienced, it is important that they are discussed with a doctor.

## What are the risk factors for lung cancer?

A risk factor is any factor that is associated with an increased chance of developing a particular health condition, such as lung cancer. There are different types of risk factors, some of which can be modified and some which cannot.

It should be noted that having one or more risk factors does not mean a person will develop lung cancer. Many people have at least one risk factor but will never develop lung cancer, while others with lung cancer may have had no known risk factors. Even if a person with lung cancer has a risk factor, it is usually hard to know how much that risk factor contributed to the development of their disease.

While the causes of lung cancer are not fully understood, there are a number of factors associated with the risk of developing the disease. These factors include:<sup>1-5</sup>

- ▶ tobacco smoking
- ▶ environmental factors such as passive smoking, radon exposure and occupational exposures, such as asbestos and diesel exhaust
- ▶ a family history of lung cancer
- ▶ previous lung diseases such as lung fibrosis, chronic bronchitis, emphysema, and pulmonary tuberculosis.



## How is lung cancer diagnosed?

A number of tests will be performed to investigate symptoms of lung cancer and confirm a diagnosis. Some of the more common tests include:

- ▶ physical examination<sup>2,3</sup>
- ▶ chest X-ray<sup>2-4</sup>
- ▶ examination of a sputum sample<sup>2-4</sup>
- ▶ imaging of the lung and nearby organs, which may include chest X-ray, computed tomography (CT) scan or magnetic resonance imaging (MRI)<sup>4</sup>
- ▶ examination of the inside of the lung using a bronchoscopy<sup>4</sup>
- ▶ taking a sample of tissue (biopsy) from the lung for examination under a microscope.<sup>4</sup>

## Treatment options

Treatment and care of people with cancer is usually provided by a team of health professionals – called a multidisciplinary team.

Treatment for lung cancer depends on the stage of the disease, the severity of symptoms and the person's general health. Treatment may involve surgery to remove the affected area of the lung. Sometimes radiotherapy, chemotherapy or targeted therapies may be used to destroy cancer cells.<sup>2-4</sup>

Research is ongoing to find new ways to diagnose and treat different types of cancer. Some people may be offered the option of participation in a clinical trial to test new ways of treating lung cancer.

### Finding support

People often feel overwhelmed, scared, anxious and upset after a diagnosis of cancer. These are all normal feelings.

Having practical and emotional support during and after diagnosis and treatment for cancer is very important. Support may be available from family and friends, health professionals or special support services.

In addition, State and Territory Cancer Councils provide general information about cancer as well as information on local resources and relevant support groups.

The Cancer Council Helpline can be accessed from anywhere in Australia by calling **13 11 20** for the cost of a local call.

More information about finding support can be found on the Cancer Australia website [www.canceraustralia.gov.au](http://www.canceraustralia.gov.au) or the Australian Lung Foundation [www.lungfoundation.com.au](http://www.lungfoundation.com.au)

### References

1. Clinical practice guidelines for the prevention, diagnosis and management of lung cancer. Cancer Council Australia 2004. Available from <http://www.nhmrc.gov.au/guidelines/publications/cp97>. [Accessed July 2012].
2. National Cancer Institute. Non small cell lung cancer treatment (PDQ) – patient version. Available from <http://www.cancer.gov/cancertopics/pdq/treatment/non-small-cell-lung/Patient> [Accessed July 2012].
3. National Cancer Institute. Non small cell lung cancer treatment (PDQ) – health professional version. Available from <http://www.cancer.gov/cancertopics/pdq/treatment/non-small-cell-lung/healthprofessional/page4> [Accessed July 2012].
4. Assessment and Management of Lung Cancer – Evidence based guidelines. A guide for general practitioners. Available at <http://www.cancer.org.au/File/HealthProfessionals/Clinical%20Guidelines/lungguidelinesforGPs.pdf>. [Accessed July 2012].
5. Cancer Australia. Report to the Nation - Lung Cancer 2011. Cancer Australia, Sydney, NSW, 2011.

