



## Lung Cancer Basics

### Key points



1. Lung cancer happens when cells in the lung change (mutate). They grow without control and group together to form a tumour.
2. Lung cells often change because we have breathed in dangerous chemicals.
3. There are two main types of lung cancer, small cell lung cancer and non-small cell lung cancer.
4. Non-small cell lung cancer is more common.

Lung cancer symptoms usually do not show until the cancer has spread to other parts of the body. At this point, it is harder to treat lung cancer.

### What is lung cancer?

Lung cancer is a cancer that starts in the lungs. When a person has lung cancer, they have abnormal cells that group together to form a tumour. Unlike normal cells, cancer cells grow without order or control, destroying the healthy lung tissue around them. These types of tumours are called malignant tumours. When the cancer cells grow too fast, they stop organs of the body performing properly.

### Why are malignant tumours dangerous?

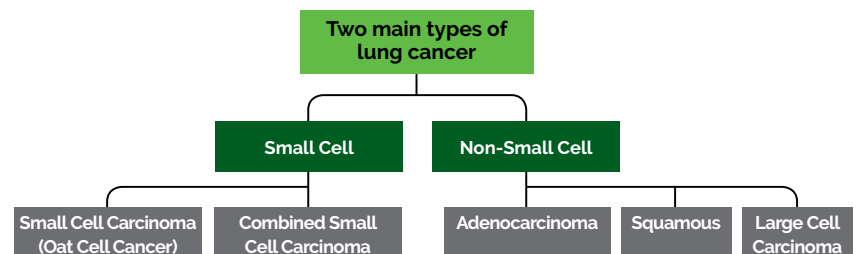
Malignant tumors are dangerous because they grow without control. When the cancer cells grow too fast, they stop your organs from working well. For example, if cancer affects the lungs, the tumour may grow so large that it blocks a major airway so that part of the lung cannot breathe.

Cancerous tumours can also spread to other parts of the body. Sometimes, a cancerous tumour sheds cells. These cells can be carried to other parts of the body in the blood or the natural fluid around the lungs called lymph. The cancer cells can begin to grow in a new place in the body, causing problems there. Sometimes other types of cancer spread to the lungs.

### What are the types of lung cancer?

[Watch pulmonologist Dr. Anil Vachani, talk about the different types of lung cancer.](#)

There are two main types of lung cancer: small cell lung cancer (SCLC) and non-small cell lung cancer (NSCLC). There is a third less common type of lung cancer called carcinoid.



### Small cell lung cancer (SCLC)

There are two different types of small cell lung cancer: small cell carcinoma (oat cell cancer) and mixed small cell/large cell cancer or combined small cell lung cancer. Small cell lung cancer tends to be quite fast growing.



## What are the types of lung cancer? (cont.)

### Non-small cell lung cancer (NSCLC)

Non-small cell lung cancer is more common. This type of cancer usually grows and spreads to other parts of the body more slowly than small cell lung cancer does.

There are three different types of non-small cell lung cancer:

1. **Adenocarcinoma:** A form of non-small cell lung cancer often found in an outer area of the lung. It develops in the cells of epithelial tissues, which line some of our 'insides' and the surfaces of our body, and form glands.
2. **Squamous cell carcinoma:** A form of non-small cell lung cancer usually found in the center of the lung next to an air tube (bronchus).
3. **Large cell carcinoma:** A form of non-small cell lung cancer that can occur in any part of the lung and tends to grow and spread faster than adenocarcinoma or squamous cell carcinoma.

Each type is different, but they are grouped together because they are treated in the same ways.

### Carcinoid

Lung carcinoid tumours are rare and tend to grow slower than other types of lung cancers. They are made up of cells called neuroendocrine cells. They are usually described as typical or atypical carcinoids. Carcinoids are very rare, slow-growing and most commonly treated with surgery.

### Summary

Each person's type of lung cancer is different. Doctors will find out what type of cancer a person has and offer the treatments most likely to work and kill that type of lung cancer.

## What causes lung cancer?

Anyone can get lung cancer. Lung cancer happens when cells in the lung change or mutate. There are a few reasons why cells change – a permanent change in the way a DNA gene is ordered.

Breathing in dangerous chemicals will cause cells to change. Sadly, people are still at risk of lung cancer, even if they were exposed to these things many years ago.

[Learn more about what can increase your risk for lung cancer.](#)

## Related content

[American Lung Association \(2016\) "What Are The Symptoms of Lung Cancer?"](#)

[European Lung Foundation \(2016\) "Lung Cancer"](#)

[Lung Foundation Australia \(2012\) "Better Living with Lung Cancer: A Patient Guide"](#)



## About Lung Foundation New Zealand

Lung Foundation New Zealand is a non-government organisation dedicated to promoting healthy lungs and early detection of lung disease (including lung cancer, New Zealand's biggest cancer killer). The Lung Foundation is devoted to supporting people affected by lung disease and provides a voice for patients and their families.

Lung Foundation New Zealand advocates on a range of issues, including access to more effective funded treatments, an increase in research funding and a commitment to making Aotearoa a smoke free nation by 2025.

## Support us

Lung Foundation New Zealand is an independent organisation and is reliant on support from fundraising events, donations and bequests. This resource has been produced as the result of generous support provided by members of the public.

If you or a member of your family would like to support our work we would love to hear from you. Together we can save lives by increasing awareness about lung health and early detection of lung disease. Please visit our website [www.lungfoundation.org.nz](http://www.lungfoundation.org.nz) or contact Philip Hope, CEO on (+64) 021 959 450 or [philip.hope@lungfoundation.org.nz](mailto:philip.hope@lungfoundation.org.nz)

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**Expert Review Policy:** Our information was checked for accuracy and clarity by cancer specialists. This resource has been approved by Medical Director & Associate Professor of Oncology, Chris Atkinson of Christchurch; assisted by Dr Greg Frazer, Respiratory Physician, Christchurch Hospital; Catherine Smith, Clinical Nurse Specialist - Lung Cancer, Christchurch Hospital; and Anne Fraser, Oncology Nurse Practitioner, Auckland City Hospital. Lung Foundation New Zealand writes in plain English. We review our information every two years so it is kept up to date.

Thanks to the American Lung Association and the European Lung Foundation for allowing us to adapt their resources for our New Zealand readers.

*This information sheet is one in a series produced by Lung Foundation New Zealand on lung disease, its treatment and related issues and is correct at time of print. It is designed to be used as a guide only; it is not intended or implied to be a substitute for professional medical treatment. Please consult your family doctor or specialist if you have further questions relating to this information.*