

Diagnosing and testing for lung cancer

Doctors gather information from their patient and then arrange tests that will give them a diagnosis (what's wrong with a person).

If you think you are at risk for lung cancer or if you have any symptoms, talk to your doctor about tests to see if you have lung cancer.

How lung cancer is diagnosed

Doctors will ask about a person's medical history, how they've been feeling, their symptoms and will listen to their chest.

Imaging tests to help find lung cancer

Doctors arrange imaging tests to help find lung cancer. Imaging tests take pictures and video of the inside of the body. Doctors will see cancer show up on the images and scan results. They use imaging tests to see if cancer has spread, and if treatment is working. Doctors may use the tests below to see if cancer has spread to other parts of the body.

These tests include:

- Computed tomography (CT) scan
- Positron emission tomography (PET) scan
- Bone scan
- Chest x-ray.

To look at anything unusual they find in imaging tests, doctors look at tissue or fluid from the lung. Doctors use a few ways to remove cells from the body and look at them under a microscope to decide if they are cancer.

These tests include:

- [Bronchoscopy](#)
- [Endobronchial ultrasound](#)
- [Endoscopic esophageal ultrasound](#)
- [Mediastinoscopy and mediastinotomy](#)
- [Thoracentesis](#)
- [Thoracoscopy](#)
- [Sputum cytology](#)
- [Fine needle biopsy \(FNA\)](#)
- [Surgical biopsy](#)

Lung Cancer Screening – In Aotearoa New Zealand, lung cancer is often diagnosed late. Screening allows earlier detection before symptoms spread, improving treatment.

Lung function test (Spirometry)

Spirometry is a lung function test that measures the amount of air taken in (volume) and exhaled as a function of time.

Staging

Staging is part of the diagnosis and helps shape your treatment plan. Staging means finding out if and how much the lung cancer has spread. This is important because your treatment and the general outlook for your recovery depend on the stage of your lung cancer.

[Learn more about lung cancer staging.](#)

Tumour testing

Depending on the tumour type it is recommended that your lung cancer tumour be tested for certain DNA changes. These tests - sometimes called molecular, biomarker or genomic testing - look for changes (mutations) in the tumour's DNA and work out the levels of some proteins in the tumour. When doctors have this information, they may suggest treatment that targets the mutation in the cells.

[Learn more about tumour testing.](#)