

Health Spotlight: What is lung cancer?

What is lung cancer?

Lung cancer is one of the leading causes of cancer-related deaths in Australia.

- In 2023, about 14,782 Australians were diagnosed with lung cancer.
- Lung cancer is the leading cause of cancer deaths with a reported 8,691 deaths in 2023.
- It is the fifth most common cancer in Australia and accounts for 9% of all cancers diagnosed.¹

Causes and risk factors

The primary cause of lung cancer is smoking tobacco. Both active smokers and those exposed to second-hand smoke are at a higher risk. Other causes for lung cancer include exposure to radon gas, asbestos, pollution and a family history of lung cancer.²

Symptoms of lung cancer can vary but often include:

- Persistent cough
- Chest pain
- Shortness of breath
- Hoarseness
- Unexplained weight loss
- Coughing up blood³

The diagnosis of lung cancer typically involves:

Imaging tests: X-rays and CT scans to look for abnormal masses in the lungs

Biopsy: A Sample of abnormal cells is taken for analysis

Sputum cytology: Examining sputum under a microscope for cancer cells.⁴

Types of lung cancer

There are 2 types of lung cancer:

Non-small lung cancer (**NSCLC**) which makes up about 85% of cases

Large-cell Carcinoma (**SCLC**), accounting for 10-15% of cases. This is aggressive and typically affects smokers, spreading rapidly.⁵

Treatment options

Treatment depends on the type and state of cancer, as well as the patient's overall health.

Common treatments include:

Surgery: To remove the tumour and some surrounding healthy tissue

Radiation therapy: using high-energy rays to kill cancer cells

Chemotherapy: Involves drugs to kill cancer cells or stop their growth.

Targeted therapy: Uses drugs to target specific molecules involved in cancer growth.

Immunotherapy: Helps the immune system fight cancer.⁶

Preventing lung cancer

Preventing lung cancer starts with avoiding tobacco smoke. Other measures include testing homes for radon, avoiding carcinogens at work, eating a healthy diet, and exercising regularly.⁷

Vaping

Cigarettes and vaping each have their own set of health risks

While it may be challenging to stop smoking, swapping out cigarettes for vaping comes with its own set of health risks, including lung damage and exposure to harmful chemicals. Here are some of the potential health effects of vaping:

- 1. Nicotine addiction:** Most e-cigarettes contain nicotine, which is highly addictive and can harm brain development, especially in young people.
- 2. Respiratory problems:** Vaping can cause lung injury and other respiratory issues, including persistent coughing, shortness of breath and even lung damage.
- 3. Irritation:** The chemicals in e-cigarette vapor can irritate the mouth and airways, leading to symptoms like sore throat and mouth sores.
- 4. Headaches and dizziness:** Some users experience headaches, dizziness, and nausea from inhaling the chemicals in e-cigarettes.
- 5. Seizures:** High levels of nicotine from vaping can lead to seizures, especially in young people.
- 6. Mental health effects:** Vaping can increase stress and anxiety levels, and negatively impact mood and impulse control.
- 7. Exposure to harmful chemicals:** e-cigarette vapor can contain harmful substances like formaldehyde, acrolein, and heavy metals such as nickel and lead.⁸

Resources

For more information on how to quit smoking the following resources can help.

Quit smoking

cancer.org.au/cancer-information/causes-and-prevention/smoking/quit-smoking

How to quit smoking and vaping?

health.gov.au/topics/smoking-vaping-and-tobacco/how-to-quit

1 Lung Cancer Statistics. Australian Government, Cancer Australia 2024

2 Lung Cancer. Cancer Council Victoria. May 2024

3 Lung Cancer. Cancer Council Victoria. May 2024

4 Lung Foundation Australia. Diagnosis and Types of Lung Cancer 2024

5 Lung Cancer. St Vincents Hospital Lung Health 2024

6 Lung Foundation Australia. Diagnosis and Types of Lung Cancer 2024

7 Lung Cancer. Health Direct 2024

8 About vaping and e-cigarettes. Department of Health and Aged Care, Australian Government 2024

