Investigating symptoms of lung cancer

a guide for all health professionals May 2020

This guide has been developed to assist all health professionals to investigate symptomatic people with suspected lung cancer and support their early and rapid referral into the diagnostic pathway. This is a general guide to appropriate practice to be followed subject to the clinician's judgement in each individual case. The guide is based on the best available evidence and expert consensus.



69%

All cancers combined

5-yr survival

17%

Lung cancer overall

5-yr survival

Lung cancer is the leading cause of cancer death in Australia. Symptoms of lung cancer can often be non-specific which may hinder early diagnosis and treatment.

Risk factors for lung cancer

Lifestyle factors

- current or former tobacco smoking
- Environmental or occupational factors
- passive smoking
- occupational exposures e.g. radon, asbestos, diesel exhaust, silica
- air pollution

- Personal factors
- increasing age
- chronic lung disease e.g. chronic obstructive pulmonary disease (COPD), pulmonary fibrosis
- personal history of cancer e.g. lung cancer, head and neck cancer, bladder cancer

Risk of lung cancer in different populations

- While smoking is the largest single cause of lung cancer, people who have never smoked may also be diagnosed with lung cancer. About 90% of lung cancer in males and 65% in females is estimated to be a result of tobacco smoking.¹
- Aboriginal and Torres Strait Islander people are twice as likely to be diagnosed with and die from lung cancer² and have lower 5-year survival³ compared with non-Indigenous Australians.
- Incidence and mortality increase with remoteness and are highest for those living in lower socioeconomic areas.³
- The association of lung cancer with smoking can lead to lung cancer patients feeling stigmatised, contributing to delays in help-seeking for symptoms^{4,5} and psychological distress.6

Symptoms and signs of lung cancer

- Symptoms can present in a similar manner to other conditions such as COPD, chronic heart failure and coronary heart disease.⁷
- Please refer to the flow chart overleaf for symptoms and signs of lung cancer, recommended investigations and referrals, and timeframes for referral.

Accepted Clinical Resource Endorsed by







50 40 30 20

100

10

Stage 1



17%

Stage 3

Early detection and diagnosis of lung cancer improves chances of survival⁸

Health professionals working in primary care are integral to early detection, as the majority of patients with cancer

first present to primary care settings.⁹ In the three months leading up to diagnosis, patients often see a GP \ge 4 times

Stage at diagnosis and 5-year survival of lung cancer^{11,12}

Stage 2 Optimal imaging modalities for lung cancer

before a diagnosis of lung cancer is made.¹⁰

Chest CT scans should be offered when there is a strong clinical suspicion of lung cancer. They should be delivered with contrast unless contraindicated.

Stage 4

Unknown

stage

- Low-dose CT (LDCT) scans have a lower radiation dose compared to conventional chest CT scans, provide good clinical information and are more sensitive than chest X-ray in the diagnosis of lung cancer.¹³
- From July 2025, low-dose CT scans will be used to detect lung cancer in high-risk, asymptomatic individuals in Australia's National Lung Cancer Screening Program. For more information on the Program, visit the National Lung Cancer Screening Program website.

Multidisciplinary care is the best practice approach to providing evidence-based cancer care¹⁴

- All patients with suspected lung cancer should be referred to a specialist with expertise in lung cancer who is affiliated with a multidisciplinary team (MDT).
- Ensure referrals are made in a timely manner; the first specialist appointment should take place within two weeks of referral.
- Lung Foundation Australia's MDT directory provides useful information about MDTs with expertise in lung cancer, visit lungfoundation.com.au/lung-cancer-mdt/

For the full recommendations, the evidence underpinning this guide and reference list, visit canceraustralia.gov.au



- family history of lung cancer

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