

## LUNG CANCER

This fact sheet contains the latest available data, which is for the year 2015 unless otherwise stated.

### Queensland<sup>1,2</sup>

- ✦ 2476 Queenslanders (1,478 males and 998 females) were diagnosed with lung cancer.
- ✦ There were 1807 deaths due to lung cancer. Of these deaths, 1082 were males, and 725 were females.
- ✦ Lung cancer was the leading cancer-related cause of death among both males and females.
- ✦ Lung cancer is the fourth most commonly diagnosed cancer for males after prostate cancer, colorectal cancer and melanoma.
- ✦ Lung cancer is also the fourth most commonly diagnosed cancer in females after breast cancer, colorectal cancer and melanoma.
- ✦ The approximate lifetime risk for a diagnosis of lung cancer by the age of 85 is one in 15 (one in 12 for males and one in 20 for females).
- ✦ On average, people diagnosed with lung cancer were 18 per cent as likely to live for another five years compared to the general population (15 per cent of males and 21 per cent of females).

### Trends in Queensland

- ✦ Between 1982 and 2015, lung cancer incidence rates in males have significantly declined by 1.3 per cent per year. The incidence rates for females were stable from 2009-2015 following an annual increase in rates by 2.5 per cent from 1982-2008.
- ✦ Mortality rates among males decreased by 1.6 per cent annually from 1982-2015 while for females the mortality rates were stable from 2005-2015. The rates were increasing by 2.8 per cent each year for females between 1982 and 2004.

### Australia<sup>3</sup>

- ✦ 11,788 Australians were diagnosed with lung cancer in 2015 – 6779 males and 5009 females.
- ✦ In 2016, 8410 Australians died from lung cancer – 5023 males and 3387 females.

<sup>1</sup> Queensland Cancer Register, 2018. Unpublished data (1982-2015).

<sup>2</sup> Queensland Cancer Statistics On-Line, 2018. Viertel Cancer Research Centre, Cancer Council Queensland ([qcsol.cancerqld.org.au](http://qcsol.cancerqld.org.au)). Based on data released by the Queensland Cancer Register (1982-2015; released November 2018).

<sup>3</sup> Australian Institute of Health and Welfare (AIHW) 2018 Cancer Data in Australia; Australian Cancer Incidence and Mortality (ACIM) books: lung cancer Canberra: AIHW. <https://www.aihw.gov.au/reports/cancer/cancer-data-in-australia/>.

## Types of lung cancer

There are two main types of lung cancer:

- ✦ **Non-small cell lung cancer (NSCLC)** - Non-small cell lung cancer is the most common type of lung cancer, accounting for around 80 per cent of cases. There are sub-types of non-small cell lung cancer. The most common are:
  - Adenocarcinoma - begins in mucus-producing cells and makes up about 40 per cent of lung cancers. While this type of lung cancer is most commonly diagnosed in current or former smokers, it is also the most common lung cancer in non-smokers.
  - Squamous cell (epidermoid) carcinoma – commonly develops in the larger airways of the lung.
  - Large cell undifferentiated carcinoma – can appear in any part of the lung and are not clearly squamous cell or adenocarcinoma.
- ✦ **Small cell lung cancer (SCLC)** - Small cell lung cancer usually begins in the middle of the lungs and spreads more quickly than non-small cell lung cancer. It accounts for around 15 per cent of lung cancers.

## Detection and symptoms<sup>4</sup>

- ✦ A persistent new cough or change in an ongoing cough.
- ✦ Breathlessness.
- ✦ Chest and/or shoulder pain.
- ✦ Repeated bouts of pneumonia or bronchitis.
- ✦ Coughing or spitting up blood
- ✦ A person diagnosed with lung cancer may also have experienced symptoms such as fatigue, weight loss, hoarse voice, wheezing, difficulty swallowing, abdominal or joint pain, and enlarged fingertips (finger clubbing). Having any one of these symptoms does not necessarily mean that you have lung cancer.
- ✦ Some of these symptoms may be caused by other conditions or from side effects of smoking. However, if you have symptoms, see your doctor without delay. Lung cancer symptoms can be vague and the disease is often discovered when it has spread to other parts of the body. Sometimes there are no symptoms and the cancer is found during routine tests (often x-ray or CT scan) for other conditions.

Several detection methods exist,

- ✦ Chest X-ray – An X-ray can show large tumours (more than 1 cm wide).
- ✦ CT scan – A computerised tomography (CT) scan is able to detect smaller tumours as well.
- ✦ as providing information about the tumour and lymph nodes.
- ✦ Biopsy - A small sample of tissue will be taken if a tumour is suspected after a CT scan or X-ray.
- ✦ Sputum cytology - The sputum (mucus) from your lungs will be examined under a microscope to check for abnormal cells.

<sup>4</sup> Understanding lung cancer. Cancer Council (<https://www.cancer.org.au/about-cancer/types-of-cancer/lung-cancer.html>)

<sup>5</sup> Information and symptoms of lung cancer (<https://cancerqld.org.au/cancer-information/types-of-cancer/lung-cancer/#risks>)

<sup>6</sup> Pandeya N et al. 2015, Aust NZ J Public Health. *Cancers in Australia in 2010 attributable to tobacco smoke* (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4606760/>)

- ✳ PET scan - A positron emission tomography (PET) scan is used to stage lung cancer after a diagnosis.

## Risk factors<sup>5,6</sup>

The causes of lung cancer are not fully understood, and some develop lung cancer without having any known risk factors. Following lists some of the known factors that increase the risk of developing lung cancer.

- ✳ Smoking tobacco – in Australia, approximately 80 per cent of lung cancer cases reported in 2010 were attributable to tobacco smoking (83.5 per cent for men and 73.7 per cent for women)
- ✳ Second-hand smoke – breathing in other's tobacco smoke. Approximately 6.4 per cent lung cancers are attributable to non-smokers living with smokers.
- ✳ Exposure to asbestos - People who are exposed to asbestos are more likely to develop lung cancer or pleural mesothelioma. Although the use of asbestos in building materials has been banned across Australia since 2004, there is still asbestos in some older buildings and fences.
- ✳ Exposure to radon - people exposed to radioactive gases (radon) in the workplace, such as uranium miners, have an increased risk of lung cancer
- ✳ Exposure to occupational substances such as uranium, chromium, nickel, diesel fumes and soot
- ✳ Having another lung disease (e.g. lung fibrosis, chronic bronchitis, pulmonary tuberculosis, emphysema) or HIV infection may increase the risk of lung tumours.
- ✳ Older age - lung cancer is most commonly diagnosed over the age of 60 years, though it can occur in younger people.

## Prevention<sup>5</sup>

- ✳ The most comprehensive study of cancer causation in Australia estimated that 80 per cent of lung cancers in 2010 were caused by tobacco smoking.
- ✳ While there is no proven way to prevent lung cancer you can greatly reduce your risk by not smoking or quitting smoking tobacco, avoiding second-hand smoke and avoiding cancer-causing agents (carcinogens) at work.

If you are a smoker, you should quit. There is no safe level of tobacco use and your smoking may harm others. There are many benefits to quitting smoking. Research indicates that quitting smoking, even after a cancer diagnosis, can increase your life expectancy<sup>7,8</sup>.

Smoking is addictive and many smokers find quitting difficult. Seek support and don't be discouraged if it takes several attempts before you are able to quit for good.

Quitting smoking is hard, but there is a lot of support to help you. When you are ready to quit, contact Quitline **13 QUIT** (13 7848) or speak to a health professional. These services can help you:

<sup>7</sup> Taylor DH Jr et al 2002, Am J Public Health. *Benefits of smoking cessation for longevity* (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447499/>)

<sup>8</sup> Mannan H et al 2016, BMC Public Health. Improvements in life expectancy among Australians due to reduction in smoking: results from a risk percentiles approach (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4729127/>)

- Better understand why and when you smoke.
- Choose a quitting method that is safe, effective and suits you.
- Learn more about what to expect after quitting, including coping with withdrawal symptoms.

## Information and Support

### Cancer Council 13 11 20

Being diagnosed with cancer or supporting a loved one can leave you with many questions. We want to help you find the answers. Call Cancer Council 13 11 20 Information and Support line to talk with one of the team.

Our team can provide you with cancer information, emotional and practical support. We can also refer you to Cancer Council Queensland's support programs and services.

This confidential service is available Monday to Friday 9am-5pm (excluding public holidays).

### Cancer Connect

Cancer Connect is a confidential telephone-based peer support service that connects you, your carer or loved ones with a peer support volunteer who has had a similar cancer experience. You can be matched with a Cancer Connect volunteer based on cancer diagnosis, treatment, family or work issues.

### Cancer Counselling Service

Living with a cancer diagnosis, or supporting someone along the way, is rarely easy. Talking things through with a counsellor or psychologist can help you manage your cancer related concerns.

Our Cancer Counselling Service is available for anyone distressed by cancer at any stage. We are a telephone-based counselling service, with face to face appointments available in some regional offices. Our team included nurse counsellors and psychologists trained and experienced in helping people affected by cancer.

***For further information and support, please call Cancer Council 13 11 20***

**Disclaimer:** The information in this publication should not be used as a substitute for advice from a properly qualified medical professional who can advise you about your own individual medical needs. It is not intended to constitute medical advice and is provided for general information purposes only. Information on cancer, including the diagnosis, treatment and prevention of cancer, is constantly being updated and revised by medical professionals and the research community.

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