Chronic Obstructive Pulmonary Disease (COPD)

COPD is a lung disease that affects 14.5% (or one in seven) Australians aged 40 or over.¹
This figure increases to 29.2% in Australians aged 75 or over.¹

7.5% of Australians 40 or over have COPD that has progressed sufficiently to where symptoms may already be present and affecting daily life. Half of these people will not know they have it.²

COPD is the second leading cause of avoidable hospital admissions.³

Despite falling death rates, COPD is still a leading cause of death and disease burden after heart disease, stroke and cancer.⁴

While there is currently no cure for COPD, there are things people can do to breathe easier, keep out of hospital and improve their quality of life.⁵

COPD is preventable and treatable.⁵
COPD is diagnosed by Spirometry.⁵

Symptoms come on gradually and are often mistaken for signs of ageing or being unfit.

What is COPD?

- Chronic Obstructive Pulmonary Disease (COPD) is a serious long-term disease of the lungs which causes shortness of breath. While COPD currently has no cure, there are things that people can do to breathe easier, keep out of hospital and improve their quality of life.⁵

- COPD is an umbrella term for lung disease that includes emphysema, chronic bronchitis and chronic asthma which isn’t fully reversible.

- COPD is typically associated with:
  - Shortness of breath
  - A repetitive cough with phlegm / mucus most days
  - History of cigarette smoking or exposure to other occupational or environmental pollutants (smoke, fumes or dust)
How does a person with COPD feel?

Symptoms for an individual with COPD tend to come on gradually over years. Breathlessness may lead those with the condition to cut back on physical activities. This gradual decline continues until simple daily activities like showering, dressing or even making a cup of tea, become almost impossible. Depression and anxiety often affect those with COPD.

What causes COPD?

 In the western world, cigarette smoking is the single largest cause of COPD.5 However, despite being the highest risk group for COPD, regular smokers are less likely than the rest of the population to consider themselves at risk of developing COPD.6
 Some 20% of COPD occurs in never smokers7.
 Other known risk factors are passive smoking, especially during infancy when the lungs are still developing, as well as exposure to environmental agents, such as indoor and outdoor air pollutants including occupational fumes, dusts and chemicals.5
 Women may be at greater risk than men of COPD from exposures at work and may be more susceptible to COPD due to smaller lungs and airways and perhaps more sensitive airways.8
 Chronic asthma may evolve into COPD in later life, especially in those who have smoked and when appropriate medicines have not been taken properly.5

Prevalence of COPD

 Lung Foundation Australia estimates that approximately 1.45 million Australians have some form of COPD (GOLD Stages I-IV).1,9 This represents approximately one in seven Australians aged 40 and over.1
  o Of those with COPD currently, Lung Foundation Australia estimates that over 750,000 Australians1,9 have COPD that has progressed to a stage at which symptoms, such as breathlessness may already be present and affecting their daily lives. Half of these people do not have a doctor’s diagnosis of COPD and are therefore not taking the important steps to slow down the progression of the disease.2
  o Another 700,000 Australians1,9 have a mild form of COPD where symptoms may not yet be present. Many of these will go on to develop more severe COPD.
 People who unknowingly have COPD may mistake their symptoms as signs of ageing, lack of fitness or asthma – a simple spirometry test from a GP can diagnose COPD.
The Burden of COPD

- In Australia, despite falling death rates, COPD is still a leading cause of death and disease burden after heart disease, stroke and cancer.\(^3\)
- COPD is a significant cause of death in Australia. In 2011, 5767 people died from COPD.\(^10\) COPD is the 3\(^{rd}\) leading cause of death worldwide in 2010.\(^10\)
- Australia's mortality rates are lower than in several other developed countries, however our rates are still higher than those reported in Japan, France, Sweden and Finland (Australia placed 32 out of 45 countries).\(^10\)
- COPD is the second leading cause of avoidable hospital admissions in Australia.\(^3\)
- In 2011-12 the median length of hospital stay for COPD was 4.5 days in a public hospital and 7.7 days in a private hospital.\(^11\)
- In 2008, the economic impact of COPD was $8.8 billion in financial costs and indirect costs and loss of wellbeing were substantial.\(^12\)
  - Of the financial costs ($8.8 billion), a large proportion is due to the loss of productivity due to COPD, ie lower employment, absenteeism and the workplace impact of premature death of Australians with COPD.\(^12\)
  - The direct cost to the Australian health care system is estimated to be $900 million with hospital use contributing the largest share of health spending ($473 million).\(^12\)
  - In addition to the above costs on the public and private sector purse, there are the costs that are harder to quantify – those of lost wellbeing as a result of COPD.
- In terms of overall costs, COPD is more costly per case than cardiovascular disease, osteoporosis or arthritis.\(^12\)

COPD diagnosis and treatment

- COPD is preventable and treatable.\(^5\)
- While there is currently no cure for COPD, there is strong medical evidence to show that early diagnosis, combined with disease management programs at the early stages of the disease, can reduce the burden of COPD, improve quality of life, slow disease progression, reduce mortality and keep people out of hospital.\(^5\)
- Lower costs and burden of disease can result if diagnosis is achieved early and optimally assessed, especially as treatment can reduce exacerbations.\(^13^-^19\)
Treatment
The key aims of COPD treatment are to reduce symptoms, improve quality of life, increase the capacity for exercise and ultimately, keep people well and out of hospital. There are a number of steps people with COPD can take to breathe more easily and improve their quality of life.

- **Stop smoking** – helps slow down the rate the disease progresses and improves symptoms.\(^5\),\(^15\)

- **Pulmonary rehabilitation** – reduces breathlessness, fatigue, anxiety and depression, improves exercise capacity, emotional function and health-related quality of life and enhances patients’ sense of control over their condition. Pulmonary rehabilitation reduces hospitalisation and has been shown to be cost-effective.\(^5\) Anyone diagnosed with COPD who is experiencing symptoms should undertake pulmonary rehabilitation.

- **Inhaled medicines** – reduce symptoms, improve quality of life, reduce activity limitation and prevent exacerbations associated with hospital admissions.\(^5\)

- **Regular vaccinations** against influenza and pneumococcal infection.\(^5\)

- **Support groups/services** – as COPD worsens and patients feel less able to carry on their normal activities, patients become increasingly isolated. Support groups/services can help meet the emotional and social needs of people with the condition, helping them realise that they are not alone. Lung Foundation Australia has a list of these groups.

- **Oxygen therapy** – helps those people with advanced lung disease who are unable to absorb sufficient oxygen to supply their vital organs.\(^5\)

- People aged 35 and over with a history of cigarette smoking should speak with their GP to request a **lung health check** (and potentially a spirometry test), if they exhibit any of the following:
  - Cough several times on most days
  - Bring up phlegm or mucus on most days
  - Are short of breath compared with others their age

**Lung Foundation Australia**

- Lung Foundation Australia is the only national charity supporting all lung diseases in Australia; providing clinical and support group representation nationwide.

- Lung Foundation Australia produces a range of clinical resources to support evidence-based diagnosis and management of COPD as well as a wide range of other respiratory diseases resources.
Lung Foundation Australia offers a national network of patient support groups for people with COPD and other lung conditions. Patients can also be supported with information via:

- Our website (www.lungfoundation.com.au);
- LungNet News (a quarterly health education newsletter);
- Toll free Information and Support Centre hotline (1800 654 301).

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References

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