

Smoking and chronic respiratory disease

Factsheet for health professionals

1. In people with chronic obstructive pulmonary disease (COPD) and asthma, continued smoking impacts adversely on health outcomes.¹
2. Smoking cessation, at any age, has health benefits for people with COPD and asthma.² Smoking cessation reduces symptoms and improves response to treatment.²
3. Help your patients to stop smoking by offering referral to Quitline (13 7848) and facilitating access to pharmacotherapy, if clinically appropriate.

Key facts and figures

Tobacco use is the single **leading cause** of preventable death and disease in Australia.³ In 2019, 11% of Australians aged 14 and over smoked tobacco daily.⁴

Tobacco smoking is the **predominant cause** of COPD.¹ In Australia, 70% of the burden of COPD disease was attributable to tobacco use in 2015.⁵

1 in 4 Australians aged ≥ 45 years and diagnosed with COPD smoke daily.⁶

People with chronic respiratory disease who smoke are often **highly nicotine dependent**.⁷

Most people who smoke **want** to quit and have already tried to quit.⁴ Smoking cessation treatment is an integral part of managing respiratory disease.⁷

How does continued smoking impact people with chronic respiratory disease?

In people with COPD, continued smoking can:

- increase the risk of respiratory infections¹
- accelerate the decline in lung function²
- increase the symptom burden and increase mortality compared with those who stop smoking.²

In people with asthma, continued smoking can:

- adversely impact asthma control¹
- increase asthma severity, frequency of asthma exacerbations and the use of emergency care¹
- act synergistically with asthma to accelerate the decline in lung function⁸
- decrease the effectiveness of inhaled corticosteroid treatment ('corticosteroid resistance or insensitivity').²

Why is smoking cessation treatment a priority in people with chronic respiratory disease?

In people with COPD, smoking cessation is the only established intervention to reduce excessive decline in lung function.² Smoking cessation has also been shown to reduce the risk of exacerbations⁹, decrease hospitalisations¹⁰ and decrease all-cause mortality.¹¹

People with COPD who stopped smoking experienced improvement in respiratory symptoms as early as 1–3 months after smoking cessation. After 2 years of successful quitting, the reduction in their rate of FEV1 decline approximated that of people who have never smoked.²

In people with asthma who smoke, smoking cessation has been associated with improved lung function, reduction in asthma symptoms, and decreased use of both inhaled bronchodilators and corticosteroids. Stopping smoking also results in improved quality of life.²

What smoking cessation treatment is effective for people with chronic respiratory disease?

In general, people who smoke have the best likelihood of successful quitting when treated with a combination of multi-session behavioural intervention and pharmacotherapy (if clinically appropriate)¹² – this is also true of those with COPD.¹³

First-line smoking cessation pharmacotherapy options include nicotine replacement therapy (NRT), varenicline and bupropion.¹⁴

How can I best support my patients to stop smoking?

You can support your patients to stop smoking by using the Ask, Advise, Help (AAH) model. The AAH model promotes cessation and connects people who smoke with evidence-based tobacco dependence treatment (a combination of multi-session behavioural intervention through Quitline and pharmacotherapy, if clinically appropriate).

This can be delivered in a few minutes via the following steps:

- **Ask** all patients about their smoking status and document this in their medical record
- **Advise** all patients who smoke to quit in a clear, non-confrontational, personalised way, and advise of the most effective way to quit
- **Help** all patients who smoke to quit by offering an opt-out referral for behavioural intervention through Quitline (13 7848) and by facilitating access to pharmacotherapy, if clinically appropriate.

What is the Quitline and how can it help my patients?

- **Quitline (13 7848)** is a confidential, evidence-based telephone counselling service. Professional Quitline counsellors deliver counselling over multiple sessions to help people plan, make and sustain a quit attempt.
- **Aboriginal Quitline** is also available to support Aboriginal and/or Torres Strait Islander people who smoke.
- Making a proactive referral to Quitline increases the likelihood of patients enrolling in treatment.¹⁵ Refer your patients using Quit's online referral form: quitcentre.org.au/referral-form
- Quitline also provides information and advice to health professionals about smoking cessation.

Where can I find more information?

- Quit has developed online training and a range of resources. Access these at: quitcentre.org.au
- For more information about the link between smoking and respiratory diseases, visit: www.tobaccoinaustralia.org.au/chapter-3-health-effects/3-2-respiratory-diseases
- For information, follow Quit Centre on [X \(Twitter\)](#) or [LinkedIn](#).

References

- 1 U.S. Department of Health and Human Services. The health consequences of smoking 50 years of progress. A report of the surgeon general. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014.
- 2 U.S. Department of Health and Human Services. Smoking cessation: a report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2020.
- 3 Australian Institute of Health and Welfare. Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2018. Canberra: AIHW, Australian Government 2021. Available from: <https://www.aihw.gov.au/reports/burden-of-disease/abds-impact-and-causes-of-illness-and-death-in-australia/summary>.
- 4 Australian Institute of Health and Welfare 2020. National Drug Strategy Household Survey 2019 Canberra: AIHW. Available from: <https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey-2019/data>.
- 5 Australian Institute of Health and Welfare. Burden of tobacco use in Australia: Australian Burden of Disease Study 2015 Canberra: AIHW; 2019. Available from: <https://www.aihw.gov.au/reports/burden-of-disease/burden-of-tobacco-use-in-australia/summary>
- 6 Australian Institute of Health and Welfare. Chronic obstructive pulmonary disease (COPD), associated comorbidities and risk factors [Internet] Canberra: AIHW; 2020 Available from: <https://www.aihw.gov.au/reports/chronic-respiratory-conditions/copd-associated-comorbidities-risk-factors>.
- 7 Tonnesen P, Carrozzi L, Fagerstrom KO, et al. Smoking cessation in patients with respiratory diseases: a high priority, integral component of therapy. *Eur Respir J*. 2007;29(2): 390-417.
- 8 Thomson NC, Chaudhuri R, Livingston E. Asthma and cigarette smoking. *Eur Respir J*. 2004;24(5):822-33.
- 9 Au DH, Bryson CL, Chien JW, et al. The effects of smoking cessation on the risk of chronic obstructive pulmonary disease exacerbations. *J Gen Intern Med*. 2009;24(4):457-63.
- 10 Godtfredsen NS, Vestbo J, Osler M, Prescott E. Risk of hospital admission for COPD following smoking cessation and reduction: a Danish population study. *Thorax*. 2002;57(11): 967-72.
- 11 Anthonisen NR, Skeans MA, Wise RA, et al. The effects of a smoking cessation intervention on 14.5-year mortality: a randomized clinical trial. *Ann Intern Med*. 2005;142(4):233-9.
- 12 Stead LF, Koilpillai P, Fanshawe TR, Lancaster T. Combined pharmacotherapy and behavioural interventions for smoking cessation. *Cochrane Database Syst Rev*. 2016;3:CD008286.
- 13 van Eerd EA, van der Meer RM, van Schayck OC, Kotz D. Smoking cessation for people with chronic obstructive pulmonary disease. *Cochrane Database Syst Rev*. 2016(8):CD010744.
- 14 The Royal Australian College of General Practitioners. Supporting smoking cessation: A guide for health professionals. 2nd ed. East Melbourne, Vic: RACGP; 2019.
- 15 Vidrine JI, Shete S, Cao Y, et al. Ask-Advise-Connect: a new approach to smoking treatment delivery in health care settings. *JAMA Intern Med*. 2013;173(6):458-64.

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