New Zealand Chronic Obstructive Pulmonary Disease Guidelines: 2025 update

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ABSTRACT

This update revises the Asthma and Respiratory Foundation NZ's Chronic Obstructive Pulmonary Disease (COPD) Guidelines in line with the latest national and international evidence. The aim is to provide simple, practical, evidence-based recommendations for the diagnosis, assessment and management of COPD in clinical practice in an Aotearoa New Zealand context. The intended users are health professionals responsible for delivering acute and chronic COPD care in community and hospital settings, and those responsible for the training of such health professionals.

In February 2021, the New Zealand Chronic Obstructive Pulmonary Disease (COPD) Guidelines were published in the *New Zealand Medical Journal*.[1] These were the first ever COPD guidelines for Aotearoa New Zealand and were based on the comprehensive evidence reviews from the Australian COPD-X guidelines and the international Global Initiative for Chronic Obstructive Lung Disease (GOLD) Report, supplemented with additional evidence specific to Aotearoa New Zealand. They also included several innovations, such as strategies for managing breathlessness and algorithms for managing COPD exacerbations in the community and in hospital.

Uptake of the guidelines has been substantial. Around 7,000 print copies of the guidelines and Quick Reference Guide and over 22,000 COPD Action Plans have been distributed to health professionals across Aotearoa New Zealand. Many more copies of the guideline resources have been accessed digitally. Although we do not have data back to 2021, in the past year alone there were nearly 7,000 downloads of the COPD resources. The downloadable breathlessness strategies and a COPD patient handbook based on the guidelines have been particularly popular. We believe that these resources are helping to improve COPD management and patient experiences across Aotearoa New Zealand.

The 2021 guidelines will expire in 2025. To update them, a review has been undertaken by a multidisciplinary team of health professionals with expertise in COPD, and a patient representative. The updated version was published on the Asthma and Respiratory Foundation NZ website in October 2025 (see: www.asthmafoundation.org.nz/resources). As before, the main sources of evidence were the latest COPD-X guidelines (2024)[2] and the GOLD Report (2025),[3] with additional references as required. Peer review was sought from key professional organisations.

Although a line-by-line review has been undertaken, readers of the new guidelines will notice evolution rather than revolution. The structure of the guidelines is similar and much of the evidence and many of the recommendations remain unchanged. Some key messages and highlights are:

- Although we have updated the numbers with the latest data, the unacceptable reality is that major health disparities persist, with COPD among Māori and Pacific people remaining more common, severe and fatal than among other New Zealanders.[4] Reduction and elimination of these inequities requires an approach that begins with addressing the basic causes of inequities, stemming from colonisation and racism. We highlight ways in which healthcare services can be delivered in a culturally safe way that promotes equity.
- We note emerging evidence from several

studies that vaping may be a cause of COPD, even in people who have never smoked, and emphasise our concerns about young people vaping and dual use of cigarettes and vaping.
- We have added a section on the initial assessment of COPD and reiterate the essential role of spirometry in diagnosis. We highlight the fact that traditional reversibility testing (spirometry before and after a bronchodilator) is not usually necessary—diagnostic spirometry can be done even if the patient has been using a bronchodilator.
- Non-pharmacological management of COPD remains essential, with a greater potential for impact on outcomes than drug therapy. Important measures include smoking cessation, pulmonary rehabilitation and promotion of physical activity, techniques to manage breathlessness and clear sputum, optimising nutrition and improving housing.
- Self-management is optimised when patients and whānau are empowered to manage the medical (taha tinana), social (taha whānau), psychological (taha hinengaro) and spiritual (taha wairua) aspects of their health, in alliance with healthcare providers. Education and support for patients undertaking health promoting activities can be optimised when delivered within a therapeutic alliance that is based on trust.
- Disease education and personalised action plans (self-management plans) should be offered to all people with COPD. The action plans have been updated with this version of the guidelines and include spaces to record the patient's normal oxygen saturation (SpO2), the distance a patient can walk when they are well and a QR code to scan for the Breathlessness Quick Reference guide.
- Changes to pharmacological management recognise increasing understanding of the effectiveness of combinations of long-acting antimuscarinics, long-acting beta-agonists and inhaled corticosteroids.
- Regular use of short-acting bronchodilators is not recommended—these are for short-term relief of breathlessness as-required only. Most patients with symptomatic COPD will benefit from long-acting bronchodilators: either a long-acting antimuscarinic (preferred) or a long-acting beta-agonist. Many patients will need both and we recommend rapid titration to combination therapy (noting the current Pharmac restrictions around funding).
- Inhaled corticosteroids should be added to the regimen of patients who exacerbate more than once a year (or one exacerbation needing hospital admission). We recommend that these are prescribed as a single inhaler triple therapy to improve adherence. Inhaled corticosteroids are particularly important for patients who have eosinophilic inflammation measured on peripheral blood counts.
- We note that dry powder and soft mist inhalers have a substantially lower impact on greenhouse gas emissions than pressurised metered dose inhalers.
- Sadly, we note that several evidence-based medications are either unavailable or unfunded in Aotearoa New Zealand. These include alpha-1 antitrypsin augmentation therapy, phosphodiesterase 4 (PDE4) inhibitors, biologic drugs for those with type 2 inflammation and mucolytic treatments.
- Based on recent evidence, we note that using long-term oxygen therapy for 24 hours a day has no advantage over 15 hours a day.
- Viral and bacterial infections are major causes of COPD exacerbations and vaccinations can help prevent these. Adding to existing recommendations for influenza (funded) and pneumococcal vaccinations (unfunded), we now recommend COVID-19 (funded) and respiratory syncytial virus (RSV) vaccine (unfunded).
- We have kept the algorithms for managing COPD exacerbations, with minor modifications to emphasise the importance of considering advance care plans when managing patients with severe exacerbations.
- Consistent with the earlier guidelines, we have kept the diagnosis of asthma–COPD overlap as an option. Although some international guidelines no longer refer to this, we believe this remains a useful term when it is unclear whether the patient has COPD or asthma. As before, the recommendation is to treat for asthma in the first instance.
- Recommendations for pharmacological management of dyspnoea have changed. While managing dyspnoea is a major goal of COPD care, few pharmacological agents

have been shown to have a role. Recent studies indicate that neither opioids, benzodiazepines nor antidepressants reduce breathlessness or improve quality of life in COPD.[5,6] They also have significant side effects and, in contrast to GOLD and COPD-X, we no longer recommended them outside of palliative, end-of-life care.

- We emphasise that many (perhaps most) patients with COPD have important comorbidities. Lung cancer, bronchiectasis, cardiovascular disease, diabetes, anxiety, depression, gastro-oesophageal reflux and osteoporosis are all common among people with COPD. These conditions impair the management of COPD. Assessing and managing comorbidities can have substantial benefits for patient wellbeing.

These updated guidelines and the associated resources are available online and free of charge on the Asthma and Respiratory Foundation NZ website. Printed copies can be ordered (for the cost of postage). We hope that they will continue to help health practitioners improve outcomes for patients with COPD. The next planned review of the guidelines is in 2030. If major new evidence emerges in the meantime, they will be reviewed earlier.

COMPETING INTERESTS

R J Hancox reports grants and speaker fees from AstraZeneca, and grants and speaker fees from GlaxoSmithKline, and honoraria from Pharmac, outside the submitted work. RJH is the medical director of the Asthma and Respiratory Foundation NZ.
S L Jones reports receiving honoraria from GlaxoSmithKline and AstraZeneca for speaking at education events and attending advisory meetings, outside the submitted work.
C Baggott reports honoraria and personal fees from AstraZeneca and GlaxoSmithKline for giving educational talks and attending advisory meetings, outside the submitted work. CB reports participation on advisory boards for AstraZeneca and GlaxoSmithKline.
S Candy reports honoraria for attending advisory meetings for AstraZeneca, outside the submitted work.
N Corna reports receiving honorarium from AstraZeneca and GlaxoSmithKline for providing educational talks on airways disease and attending advisory boards, outside the submitted work. NC has also received honoraria from Boehringer Ingelheim as a panellist at a Boehringer Ingelheim–sponsored event, and travel and accommodation to that event. NC reports fees paid to their organisation and to them for educational presentations from Mobile Health NZ. NC has participated in the GlaxoSmithKline advisory board; is TSANZ Nursing SIG co-convenor; is an Asthma and Respiratory Foundation Scientific Advisory Board member; and is an ALINA steering group member.
J Fingleton reports grants, personal fees and non-financial support from AstraZeneca; grants from Chiesi; grants, personal fees and non-financial support from GlaxoSmithKline; grants from Sanofi; all outside the submitted work. JF is previous president of Thoracic Society of Australia and New Zealand (New Zealand branch) and NZ Director, TSANZ Ltd; and an Asthma and Respiratory Foundation Scientific Advisory Board member.
S Hotu received support from Te Toka Tumai Auckland City Hospital, Health New Zealand – Te Whatu Ora and The University of Auckland for this manuscript.
S Hussain reports honoraria from GlaxoSmithKline for giving educational talks on COPD management or attending advisory meetings, and support for attending meetings/travel from AstraZeneca and GlaxoSmithKline, outside the submitted work.
B Poot is a member of the Asthma and Respiratory Foundation Scientific Advisory Board and a member of the Respiratory Specialist Advisory Committee PHARMAC.
S Rhodes is president of the Thoracic Society of Australia and New Zealand (New Zealand branch).
J Turner is a member of the Asthma and Respiratory Foundation Scientific Advisory Board.
R Young reports honoraria from GlaxoSmithKline and AstraZeneca for educational talks on COPD management or attending advisory meetings outside the submitted work. RY holds stock in Synergenz BioScience.
C Davies, W McRae, M Moore, J Reid, J Travers have no competing interests.

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REFERENCES
1. Hancox RJ, Jones S, Baggott C, et al. New Zealand COPD Guidelines: Quick Reference Guide. N Z Med J. 2021;134(1530):76-110.
2. Yang IA, George J, McDonald CF, et al. The COPD-X Plan: Australian and New Zealand Guidelines for the management of Chronic Obstructive Pulmonary Disease 2024 [Internet]. 2024 Dec [cited 2025 May 23]. Available from: https://copdx.org.au/copd-x-plan/
3. Global Initiative for Chronic Obstructive Lung Disease. Global Strategy for Prevention, Diagnosis and Management of COPD (2025 Report) [Internet]. 2025 [cited 2024 Nov 20]. Available from: https://goldcopd.org/2025-gold-report/
4. Telfar Barnard L, Zhang J. The impact of respiratory disease in New Zealand: 2023 update [Internet]. Wellington, New Zealand: University of Otago, Asthma and Respiratory Foundation NZ; 2024 Sep [cited 2025 Jul 26]. Available from: https://www.asthmafoundation.org.nz/assets/documents/Respiratory-Impact-Report-2023.pdf
5. Smallwood NE, Pascoe A, Wijsenbeek M, et al. Opioids for the palliation of symptoms in people with serious respiratory illness: a systematic review and meta-analysis. Eur Respir Rev. 2024:33(174):230265. doi: 10.1183/16000617.0265-2023.
6. Holland AE, Spathis A, Marsaa K, et al. European Respiratory Society clinical practice guideline on symptom management for adults with serious respiratory illness. Eur Respir J. 2024:63(6):2400335. doi: 10.1183/13993003.00335-2024.