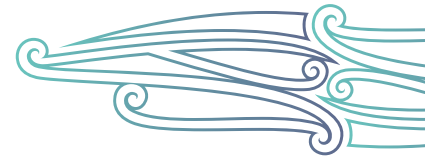


Chronic obstructive pulmonary disease (COPD)

He mate puru ia auraki



The information in this guide is accurate to the best of our knowledge as of June 2026. This guide is based on New Zealand COPD Guidelines: 2025 update (Hancox et al 2025). For full details refer to that guideline.

Definition

Chronic obstructive pulmonary disease (COPD) is a generic term covering three conditions: chronic bronchitis, emphysema and chronic airflow obstruction. All three result in a limited flow of air through the lungs that worsens over time. Unlike asthma, this limitation is not reversible with treatments. Primary symptoms are cough, sputum production, shortness of breath and wheezing (Hancox et al 2025). However, COPD affects every aspect of a person's life.

Key points

- Exacerbations are common and have a significant mortality risk.
- Many people with COPD also have comorbidities that have a substantial impact on their wellbeing and may be the underlying cause of an apparent exacerbation (Hancox et al 2025).
- COPD is a risk factor for heart failure (HF), and the two diagnoses often co-exist in older people: an estimated 20 percent of people with COPD have HF, while 25–50% of those with HF also have COPD (Corneanu et al 2025).

Why this is important

Severe COPD impacts every aspect of a person's life and contributes significantly to their state of frailty.

Implications for kaumātua

Breath and breathing are significant in Māori culture. [Te reo Māori](#) has several words for breath, many of which link breath and breathing to [te taiao](#) (the natural world) and to Māori creation stories. While these cultural constructs do not change the occurrence, cause or treatments of breathlessness or COPD, it is important to understand them

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

because experiencing breathlessness may contribute to anxiety or [wairua](#) (spiritual) unrest. For more information, see our Guide for health professionals *caring for kaumātua* | *Kupu arataki mō te manaaki kaumātua*.

Assessment

COPD is diagnosed, and the severity of disease is assessed by a combination of symptoms experienced every day, as well as lung function testing.

State	Symptoms	FEV ₁
Mild	- Few symptoms - Breathless with moderate exertion - Little effect on daily activity - Cough and sputum production	60–80% of predicted
Moderate	- Breathless walking on flat - Increased limitation on daily activity - Recurrent chest infections - Exacerbations requiring oral corticosteroid and/ or antibiotics	40–59% of predicted
Severe	- Breathless on minimal exertion - Daily activities severely impacted - Exacerbations increasing in frequency and severity	< 40% of predicted

Note: Forced expiratory volume (FEV₁), measured by spirometry, is the amount of air that can be forced out of the lungs over 1 second.

Treatment

Non-pharmacological

- Provide support for smoking cessation.
- Provide physical activity support (pulmonary rehabilitation where available).
- Offer breathlessness management strategies (pursed lip breathing, handheld fan, energy conservation – Note that oxygen is not an effective strategy for breathlessness in people who are not hypoxic or who are on long-term oxygen therapy).
- Provide culturally informed, complementary therapies that promote breath control, such as [Hikitia te Hāte](#) ([te ao Māori](#) breathing exercises) or [waiata](#) (singing). Whānau or a cultural advisor may recommend other therapies.
- Support sputum clearance.
- Provide nutritional support.
- Support the resident and their whānau or family to understand the disease process.
- Develop an individual management or action plan (including documentation of the patient's normal oxygen saturation (SpO₂) and whether the resident is a known carbon dioxide (CO₂) retainer).

- Discuss goals of care.
- Support sleep with positioning, temperature and ventilation and consider timing of bronchodilators (Braghiroli et al 2020).

Pharmacological

Long-term management with inhaled medication

Many different inhaled medications for COPD are used in combination to manage symptoms and prevent exacerbations, with specific inhalers, depending on the severity of disease and primary presenting issues. Important nursing roles in managing COPD regimes include the following.

- Inhaler reconciliation – given patients often have multiple inhalers (from different treatment stages), this involves checking that the regimen the patient is following matches the regimen prescribed.
- Supporting inhaler use, management, technique (including spacer) and infection control.
- Monitoring and reporting COPD symptoms (as this is a progressive disease, treatments may need to change).

Although treatment may vary between individuals, generally treatment escalates through steps to get maximum control of COPD symptoms.

1. Provide short-acting relief of breathlessness.
 - a. Choices are short-acting beta2 agonist (SABA) or short-acting muscarinic agonist (SAMA) or a combination (SAMA salbutamol or terbutaline, SAMA ipratropium).
2. Introduce long-acting muscarinic antagonist (LAMA).
 - a. Examples are tiotropium, glycopyrronium and umeclidinium.
 - b. SABA can continue.
 - c. Ipratropium stops – except in emergency situations.
3. Replace LAMA with a combination of LAMA with long-acting beta2 agonist (LABA).
 - a. Examples are glycopyrronium/indacaterol, umeclidinium/vilanterol and olodaterol/tiotropium.
4. Use inhaled corticosteroids for people with severe disease.
 - a. Examples include fluticasone and budesonide.

Identifying inhalers

The Asthma and Respiratory Foundation New Zealand provides an 'Inhaler device identification' chart on its website: asthmafoundation.org.nz/resources/inhaler-devices-identification-chart

Immunisations

Immunisations are recommended to reduce the risk of viral or bacterial exacerbation of COPD, with recommended vaccinations the following.

- Annual influenza (funded)
- Pneumococcal vaccination (unfunded)
- COVID-19 (funded)
- Respiratory syncytial virus (RSV) (unfunded).

Long-term oxygen therapy

Accessed through a specialist respiratory service, oxygen is prescribed for hypoxia (not breathlessness) to improve survival and quality of life by reducing right heart strain. Delivered via nasal cannula, it is used for 15 hours a day (Hancox et al 2025).

Care planning (long-term COPD)

Continuing care for COPD

Severe COPD impacts all aspects of a person's health and wellness on a daily basis. Help an older person save their breath for doing the things that are most important to them. Care planning includes, but is not limited to, nutrition and hydration, bowel management, skin and bone health, strength and balance, anxiety (particularly panic attacks) and social isolation.

For kaumātua, consider culturally informed holistic interventions, including physical activities such as [kapa haka](#), [waiata](#) and/or te ao Māori breathing exercises ([Hikitia te Hā: allright.org.nz/tools/hikitia-te-ha](#)).

Whānau or a cultural advisor may recommend other interventions.

Care planning (exacerbation of COPD)

Identify an exacerbation

An exacerbation of COPD is a temporary (often reversible) worsening of COPD symptoms, different to usual variation. It can occur in people with mild, moderate or severe disease. Exacerbations can develop over hours or days and are most often caused by a viral or bacterial respiratory tract infection. Having an individual management plan developed that includes a record of the resident's usual oxygen saturation, nurse-initiated treatment and goals of care can be helpful.

Symptoms of an acute exacerbation of COPD include:

- increased difficulty breathing
- increased sputum purulence and production
- increased cough and wheeze
- for some, a reduction in oxygen saturation.

BE AWARE that:

- acute exacerbations can be difficult to distinguish from heart failure, pulmonary embolus, acute coronary syndromes and pneumonia, so evaluation by a general practitioner (GP) or nurse practitioner (NP) is required
- acute deterioration events may be unrelated to COPD refer to [acute deterioration](#) and/or [syncope and collapse](#) guides.

Guide to exacerbation severity

It is important to recognise individual variation; not all residents will exhibit all these symptoms.

Mild to moderate	Severe	Life threatening
More short of breath than usual	Very short of breath	Extremely short of breath
Able to speak in sentences	Speaks only a few words	Unable to speak
Usually has a wheeze	–	May not has a wheeze
Some chest/neck indrawing	Severe chest/neck indrawing	May be no chest/neck indrawing
–	Tripod positioning	–
SpO ₂ near usual level	SpO ₂ well below usual	SpO ₂ falling rapidly
Normal level of consciousness	May be agitated	Severe agitation or falling level of consciousness

This guide has been reproduced from the *New Zealand COPD Guidelines: 2025 update* (the guidelines) (Hancox et al 2025).

Exacerbation treatment guide

Treatments are aimed at addressing symptoms. They include optimum positioning, bronchodilators, corticosteroids and antibiotics, and sometimes oxygen therapy.

Positioning

Allow the person to position themselves according to their preference. Maximise physical support with pillows, a chair back or over-bed table to help them save their energy for breathing (Barnett et al 2022).

Bronchodilators

The guidelines recommend the use of a short-acting bronchodilator (salbutamol) metered dose inhaler (Hancox et al 2025). The inhaler should be delivered via a spacer, one actuation at a time (one puff with 4–5 tidal breaths). Some people are established users of an air-driven nebuliser, which may be the required delivery method. Nasal prongs can remain in place during bronchodilator therapy (Barnett et al 2022).

Notes

- In life-threatening exacerbations, the guidelines recommend nebulised salbutamol 2.5 mg and ipratropium 500 mcg via air nebulizer.
- Oxygen-driven nebulisation is **not** recommended.

Corticosteroids

Systematic corticosteroids can improve lung function, oxygenation and recovery. The guidelines recommend 40mg prednisone daily for five days (Hancox et al 2025).

Antibiotics

Antibiotics can shorten recovery time and reduce risk of relapse if there is evidence of infection. Consider sputum culture if the person has recurrent exacerbation or does not respond to antibiotics.

Oxygen in exacerbation of COPD

If indicated (the person has lower than usual oxygen saturation), administer oxygen via nasal prongs or controlled oxygen flow device (for example, venturi mask).

Titrate oxygen to reach the target oxygen saturation of 88–92%.

The role of opioids, benzodiazepines and antidepressants therapy in COPD

Treatment of COPD breathlessness with opioids, benzodiazepines and anti-depressants is no longer recommended except in palliative and end-of-life care (Hancox et al 2025). People living in care with severe COPD may meet this definition or require the following medications for comorbidities.

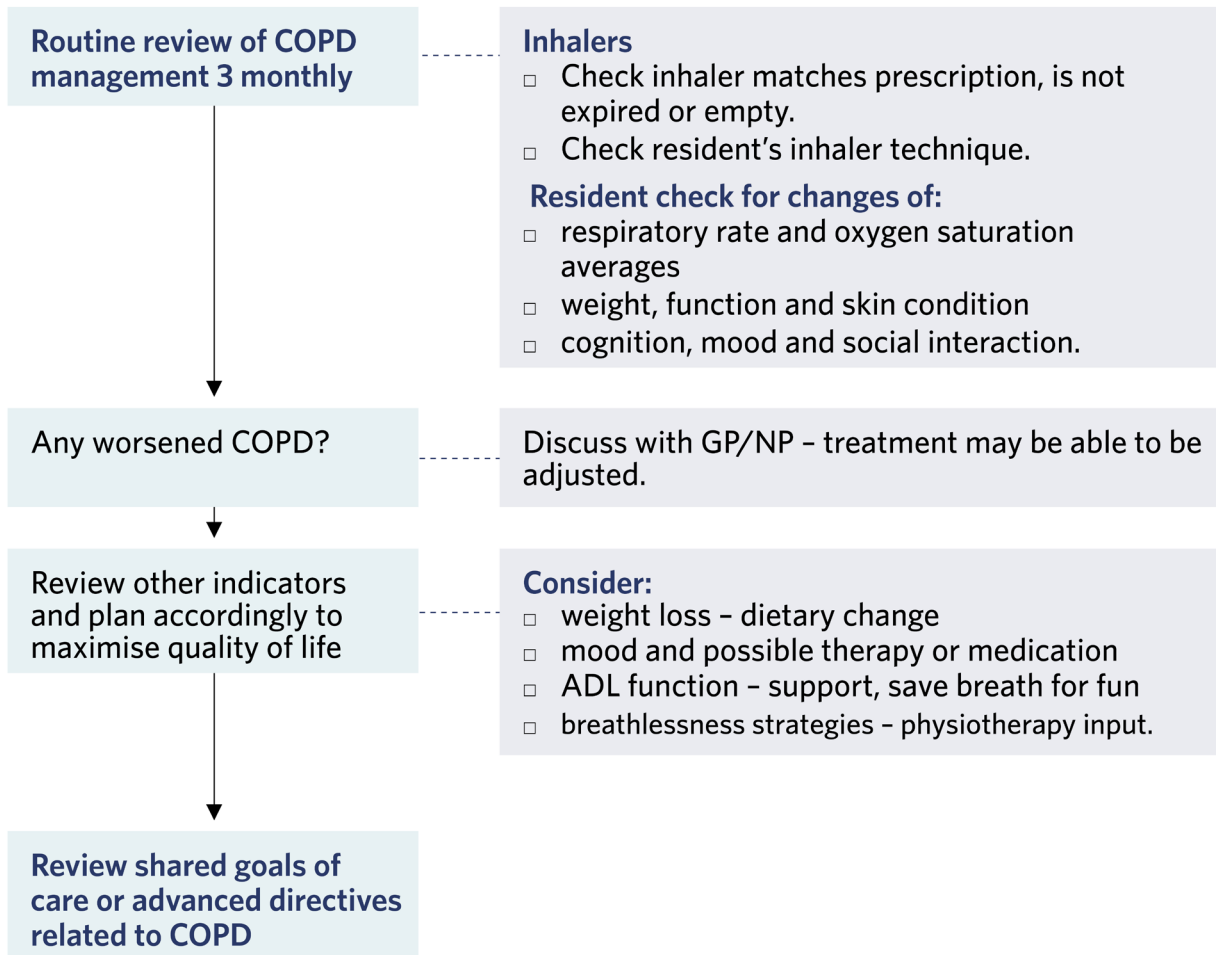
- Use of opioids requires shared decision making, considering adverse effects as well as potential benefits. Toward end-of-life benefit may outweigh risk of harm.
- Benzodiazepine and antidepressants do not reduce breathlessness in severe COPD. They may be required for treating depression and anxiety.

Associated care guides

- Acute deterioration
- Syncope and collapse
- Approach to breathlessness
- Shared goals of care.

Decision support

Routine review of COPD care



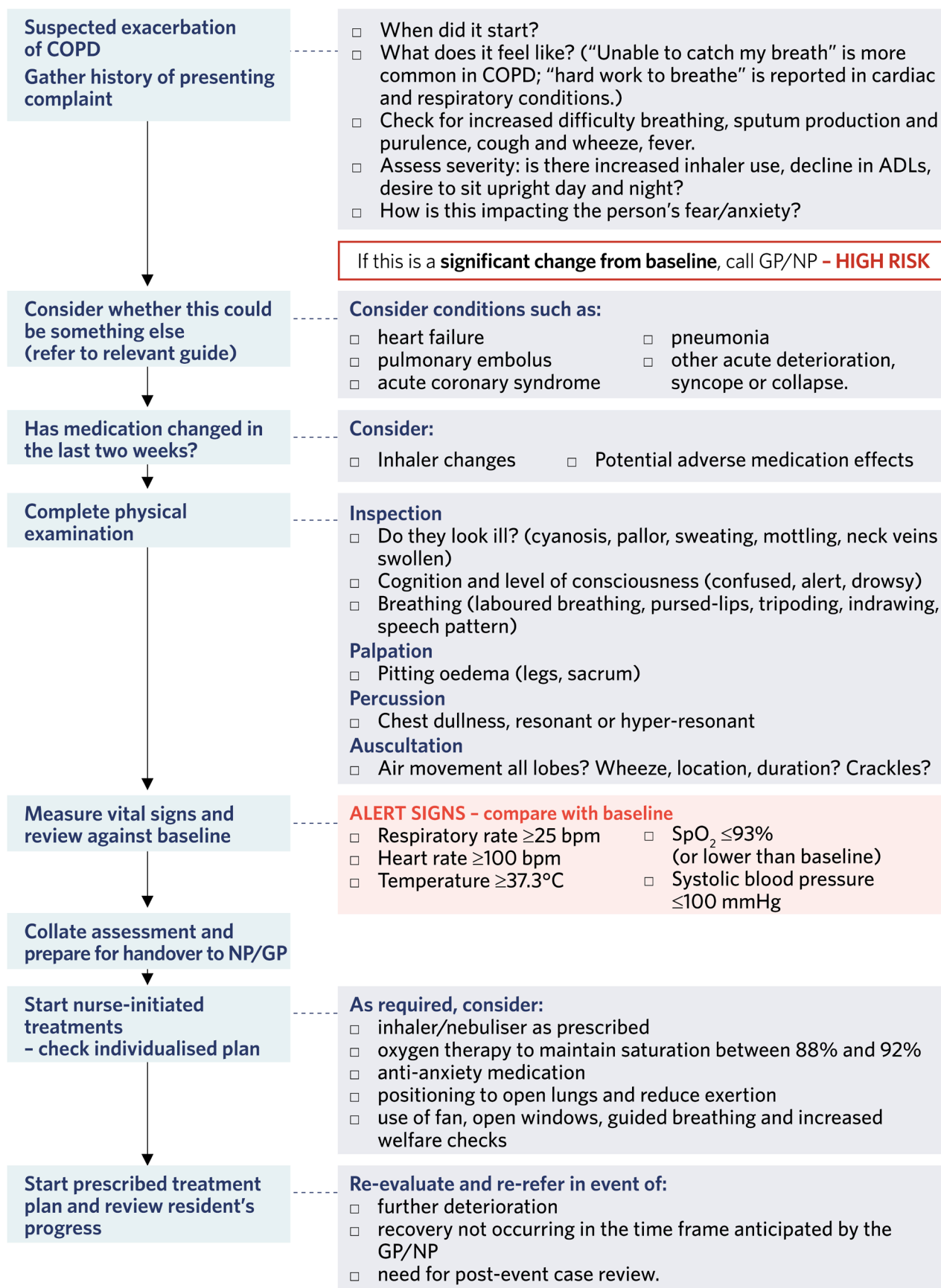
ADL = activities of daily living

GP = general practitioner

COPD = chronic obstructive pulmonary disease

NP = nurse practitioner

Exacerbation of COPD



ADL = activities of daily living
GP = general practitioner

bpm = beats per minute
NP = nurse practitioner

COPD = chronic obstructive pulmonary disease

References | Ngā tohutoro

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