

What is chronic obstructive pulmonary disease?

Chronic obstructive pulmonary disease (**COPD**) is a **long-term** (chronic) lung condition where the **airways** in the lungs become swollen and the air sacs at the ends of the airways become damaged, making it difficult to breathe. The first symptoms of COPD can be mild and may be mistaken as signs of ageing, lack of fitness, or asthma. As COPD progresses, it can be harder to do normal daily activities because of symptoms such as:



Feeling tired
(**fatigue**)



Persistent **coughing**
with phlegm



Persistent **wheezing**
(a whistling sound
when breathing)



More frequent
chest **infections**



Shortness of
breath

Sometimes, symptoms can worsen quickly (usually over a few days). This is known as a flare-up (**exacerbation**) and may be caused by an infection or triggered by air pollutants. If left untreated, symptoms may worsen faster and lead to **serious health complications** such as lung infections, or heart disease.

Damage to the lungs cannot be reversed, but **early treatment** is important to help manage symptoms, and reduce the risk of flare-ups.

Types of bronchodilator inhalers for treating COPD

Most patients who need treatment for COPD **start** with **inhalers** to improve symptoms.¹ These inhalers usually contain drugs called **bronchodilators** that open (**dilate**) the airways (**bronchi**) and can be delivered straight into the airways when you breathe in. There are two main types of inhalers: **short-acting** and **long-acting** inhalers.



	Long-acting inhalers	Short-acting inhalers
What do these inhalers do?	Relaxes the muscles in the airways to open them up as wide as possible and increase airflow. Each dose lasts for at least 12 hours .	They work in a similar way to the long-acting inhalers, but the effect is short and typically lasts for 3 to 6 hours .
Who can have these treatments?	People with previous flare-ups or have symptoms of COPD.	People who have very occasional shortness of breath only or who need fast relief of symptoms.
What are the benefits of these treatments?	Through regular, long-term use, this treatment: <ul style="list-style-type: none"> ✓ helps you walk further without feeling breathless, ✓ improves overall health, and ✓ reduces flare-ups 	<ul style="list-style-type: none"> ✓ Relieves shortness of breath quickly
When do I use them?	Use every day even if you feel well , usually at least once a day as instructed by a doctor	Use as needed when you feel breathless.

Some people may need more than one type of inhaler to control their symptoms. Many do not realise they are not using their inhalers **properly**. **Correct use** of your inhaler device is **important** and will ensure you get the **most benefit** from your treatment. Your doctor or pharmacist can show you how to use your inhaler.



Click here to learn how to use your inhaler correctly⁴

What else can I do to improve my health?

In addition to treatment, you can also improve your health and fitness, and reduce the risk of COPD complications by:



Cutting down and **quitting smoking**
(if you smoke)



Eating a **healthy diet**
with enough **protein** as
advised by your doctor²



Having **vaccines**
to prevent lung
infections



Staying active or joining
exercise programmes as
recommended by your doctor
(**pulmonary rehabilitation**)

Connecting with other people with COPD may also give you support and help you cope better. You can reach out to **local patient support groups**³ if you want to meet with people with COPD and share your experiences.

Sources

1. ACE Clinical Guidance on *Chronic obstructive pulmonary disease – diagnosis and management*, 3 June 2024
2. www.healthhub.sg/programmes/nutrition-hub/eat-more
3. Chronic Obstructive Pulmonary Disease Association (Singapore)
4. www.ace-hta.gov.sg/healthcare-professionals/cues/topic/inhaler-technique-videos