

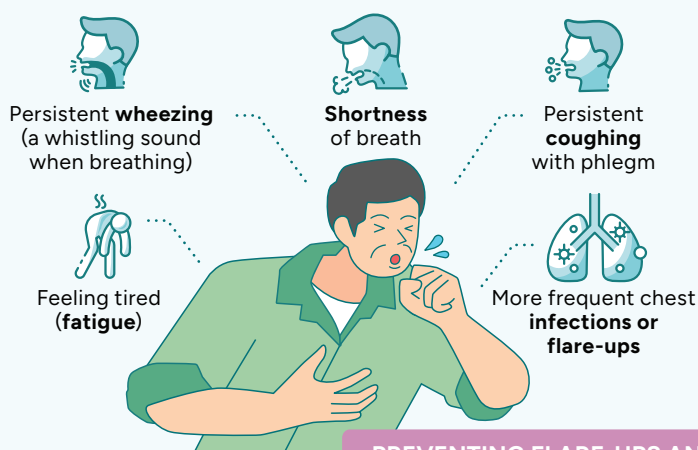


INHALERS FOR TREATING CHRONIC OBSTRUCTIVE PULMONARY DISEASE

WHAT IS CHRONIC OBSTRUCTIVE PULMONARY DISEASE?

Chronic obstructive pulmonary disease, or **COPD**, is a **long-term** (chronic) lung condition usually caused by **smoking**. It leads to inflammation and swelling of the **airways** in the lungs, and damages the air sacs at the end of these airways. This makes it **harder** for air to move in and out of the lungs.

COPD is a progressive disease, which means it worsens over time. **Early** signs of COPD can be mild and are sometimes mistaken as signs of normal ageing, poor fitness, or even asthma. However, as the condition progresses, it becomes more challenging to carry out everyday activities due to **symptoms** such as:



DID YOU KNOW?

COPD is one of the **TOP 10** causes of death in Singapore¹

C **Chronic** - means the disease is **ongoing** and will progress over time. The good news is that you can do a lot to manage symptoms and slow the disease from worsening.

O **Obstructive** - means the disease **blocks** air from moving in and out of your lungs normally. This is caused by swelling and mucus in the airways of your lungs and damage to lung tissues.

P **Pulmonary** - means the disease affects your **lungs**.

D **Disease** - means your lungs are **damaged** and not performing normally.

PREVENTING FLARE-UPS AND HEALTH COMPLICATIONS

COPD symptoms can sometimes **worsen quickly**, usually over a few days. This is called a flare-up or **exacerbation**. Flare-ups are often triggered by infections or air pollutants. If left untreated, symptoms may worsen faster and lead to **serious health complications** including heart disease and respiratory failure (when the lungs cannot exchange oxygen and carbon dioxide properly). Damage to the lungs cannot be reversed, but **early treatment** is important to help manage symptoms, and reduce the risk of flare-ups. In addition to medical treatment, you can take several steps to improve your overall health and reduce the risk of COPD complications:



Cut down and quit smoking (if you smoke)- Quitting smoking is the **most effective** way to improve your COPD. [Click here](#) to visit HealthHub's *I Quit Programme*.²



Follow a **healthy diet** as advised by your doctor³



Stay active or join special exercise programmes designed for people with chronic lung conditions (**pulmonary rehabilitation**)



Get **vaccinated** to prevent lung infections⁴

HOW IS COPD TREATED?

Spirometry is the most common breathing test used to confirm a diagnosis of COPD. [Click here](#) to learn more about spirometry tests.⁵

COPD gets worse over time, so **early** treatment is important to manage symptoms. Most patients who need treatment for COPD **start** with **inhalers** to improve symptoms. There are two main types of inhalers: **long-acting** and **short-acting** bronchodilators.

These inhalers contain drugs called **bronchodilators** that open (**dilate**) the airways (**bronchi**) and can be delivered straight into the airways when you breathe in.

Long-acting bronchodilator inhalers

- **Relax** the muscles in the airways to open them up as wide as possible and increase airflow. Each dose lasts for at least **12 hours**
- Help you **walk further** without feeling breathless
- Improve overall **health** and **reduce flare-ups**
- **Use every day even if you feel well**, usually at least once a day as instructed by a doctor

Short-acting bronchodilator inhalers

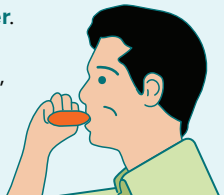

- Work in a **similar** way to the long-acting inhalers, but the effect is short and typically lasts for **3 to 6 hours**
- Provide quick relief of breathlessness
- Use **when needed**

Some people may need more than one inhaler to control their symptoms. Another type of inhaler containing **corticosteroids** may be prescribed if your COPD is **severe** and cannot be controlled with long-acting bronchodilator inhalers alone. They can help to reduce the inflammation in your airways. Some inhalers have two or three drugs in one device, making them easier to use.



USING YOUR COPD INHALER

Inhalers for treating COPD come in different types of devices:

Dry powder inhaler (DPI)	Metered dose inhaler (MDI)
<p>Delivers the drug as a fine powder. After loading the device (the method differs between inhalers), the patient must take a fast and deep breath to take in the drug.</p> 	<p>Delivers the drug as a spray. Patients must take a slow and deep breath and press the inhaler at the same time to take in the drug. It can be used with a spacer for people who find it difficult to use an MDI or take a deep breath.</p> 

Your **doctor** can discuss with you which type of inhaler works best for you by assessing how severe and frequent your symptoms are, whether you can use the inhaler correctly, as well as your treatment goals, **personal needs** and **preferences**.

Follow your doctor's or pharmacist's instructions to ensure that you get the right dose and **full benefit** of the treatment.



Click here or scan the QR code to learn how to use your inhaler correctly⁶

SUBSIDISED INHALERS ARE AVAILABLE

Drug name, device type (subsidised brand)^{7,8}

- ✓ Umeclidinium, DPI (all brands)
- ✓ Umeclidinium & vilanterol, DPI (all brands)
- ✓ Budesonide & formoterol, DPI (Symbicort Turbuhaler & Duoresp Spiromax)
- ✓ Budesonide & formoterol, MDI (Symbicort Rapihaler)
- ✓ Fluticasone furoate & vilanterol, DPI (Relvar Ellipta)
- ✓ Fluticasone propionate & salmeterol, DPI (Seretide Accuhaler)
- ✓ Fluticasone propionate & salmeterol, MDI (Seretide Evohaler)
- ✓ Fluticasone furoate, umeclidinium & vilanterol, DPI (Trelegy Ellipta)
- ✓ Beclomethasone dipropionate, MDI (all brands)
- ✓ Budesonide, DPI (all brands)
- ✓ Fluticasone propionate, MDI (all brands)
- ✓ Ipratropium bromide, MDI (all brands)*
- ✓ Salbutamol, MDI (all brands)*

Treatment costs are subsidised by **50% to 75%** for eligible patients



Key: DPI, dry powder inhaler; MDI, metered dose inhaler

KEY MESSAGES

Smoking is a leading cause of COPD. If you smoke, quitting smoking is the most effective way to improve your condition. Inhalers containing bronchodilators and steroids are safe and effective for treating COPD when used **correctly** as advised by your doctor. Many of them are subsidised, making treatment more affordable.

COPD is a long-term condition that requires **regular follow-up** with your doctor. The treatment that you need will depend on different factors such as your symptoms, ability to use the inhaler, medical history, and preferences. Discuss with your **doctor** which treatment is suitable for you, and your concerns. You can also speak to a **medical social worker** if you need financial assistance for any treatment.

Sources

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