



# MDwise

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## COPD (Chronic Obstructive Pulmonary Disease)

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### Medicines

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Medicine for COPD is used to:

- Reduce shortness of breath.
- Control coughing and wheezing.
- Prevent COPD flare-ups, also called exacerbations, or keep the flare-ups you do have from being life-threatening.

Most people with COPD find that medicines make breathing easier.

Some COPD medicines are used with devices called inhalers or nebulizers. It's important to learn how to use these devices correctly. Many people don't, so they don't get the full benefit from the medicine.

### Medicine choices

- **Bronchodilators** are used to open or relax your airways (See figure 1 in appendix) and help your shortness of breath.
  - **Short-acting bronchodilators** ease your symptoms. They are considered a good first choice for treating stable COPD in a person whose symptoms come and go (intermittent symptoms). They include:
    - Anticholinergics (such as ipratropium).
    - Beta2-agonists (such as albuterol or levalbuterol).
    - A combination of the two (such as a combination of albuterol and ipratropium).
  - **Long-acting bronchodilators** help prevent breathing problems. They help people whose symptoms do not go away (persistent symptoms). They include:
    - Anticholinergics (such as acclidinium, tiotropium, or umeclidinium).
    - Beta2-agonists (such as formoterol or salmeterol).

- A combination of the two, or a combination of a beta2-agonist and a corticosteroid medicine.
- **Phosphodiesterase-4 (PDE4) inhibitors** are taken every day to help prevent COPD exacerbations. The only PDE4 inhibitor available is roflumilast (Daliresp).
- **Corticosteroids**(such as prednisone) may be used in pill form to treat a COPD flare-up or in an inhaled form to prevent flare-ups. They are often used if you also have asthma.
- **Other medicines** include methylxanthines, which generally are used for severe cases of COPD. They may have serious side effects, so they are not usually recommended.

## Tips for using inhalers

The first time you use a bronchodilator, you may not notice much improvement in your symptoms. This doesn't always mean that the medicine won't help. Try the medicine for a while before you decide if it is working.

Many people don't use their inhalers right, so they don't get the right amount of medicine. Ask your health care provider to show you what to do. Read the instructions on the package carefully.

Most doctors recommend using spacers (See figure 2 in appendix) with metered-dose inhalers. But you should not use a spacer with a dry powder inhaler.

- Breathing Problems: Using a Metered-Dose Inhaler with or without a spacer
- Breathing Problems: Using a Dry Powder Inhaler

## Credits

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Current as of: July 6, 2021

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## Appendix

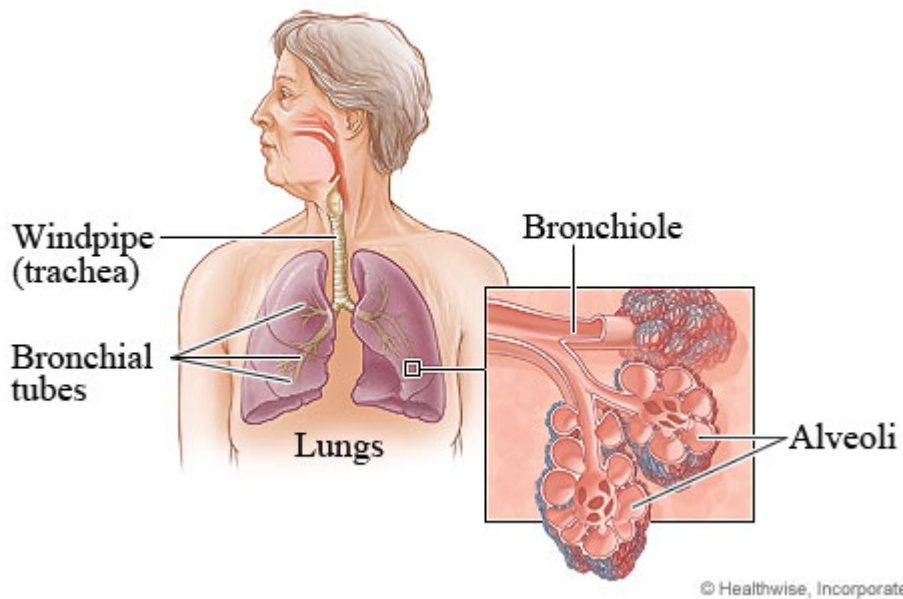
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## Topic Images

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Figure 1

**Airways Inside the Lungs**

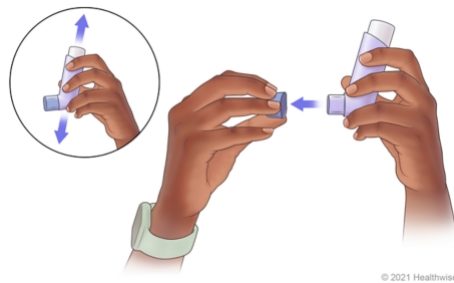


The lungs' airways (bronchial tubes) divide into smaller and smaller branches (bronchioles). The airways end in air sacs (alveoli) where oxygen moves into the blood.

**Figure 2**

## **Using a metered-dose inhaler with a spacer (adult)**

### **Shake the inhaler and remove its cap: Step 1**

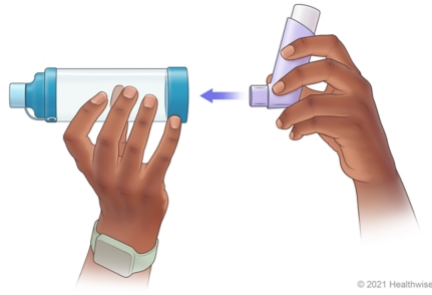


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Shake the inhaler and remove the inhaler cap. Check the inhaler instructions to see if you need to prime your inhaler before you use it. If it needs priming, follow the instructions on how to do it.

## Place the mouthpiece into the spacer: Step 2

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Place the mouthpiece of the inhaler into the end of spacer.

## Remove the spacer cap: Step 3

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Remove the cap from the end of the spacer.

## Hold the inhaler upright: Step 4

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Hold the inhaler upright with the mouthpiece at the bottom.

## Breathe out slowly and completely: Step 5

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Stand or sit up straight. Tilt your head back slightly and breathe out slowly and completely.

## Place the spacer's mouthpiece: Step 6

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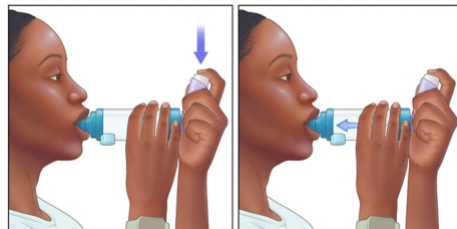


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Place the spacer's mouthpiece in your mouth.

## Press down on the inhaler and breathe in: Step 7

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Press down on the inhaler to spray one puff of medicine into the spacer and then start breathing in slowly and deeply. (Press first, then breathe in.)

## Wait for 10 seconds: Step 8

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Hold your breath for 10 seconds, to give the medicine time to settle in your lungs. Then breathe out slowly. If you need to take a second dose, wait 30 to 60 seconds to allow the inhaler valve to refill.

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Note: The "printer friendly" document will not contain all the information available in the online document. Some information (e.g. cross-references to other topics, definitions or medical illustrations) is only available in the online version.

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