



# Patient education: COPD exacerbation (The Basics)

Written by the doctors and editors at UpToDate

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## What is COPD?

COPD stands for "chronic obstructive pulmonary disease." It is a lung disease that makes it hard to breathe. In people with COPD, the airways (the branching tubes that carry air within the lungs) become narrow and damaged ( [figure 1](#)). This makes people feel short of breath and tired.

COPD can be a serious illness. It cannot be cured and can get worse over time. But there are treatments that can help.

You might have heard COPD referred to as "chronic bronchitis" or "emphysema." These are types of COPD.

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## What is a COPD exacerbation?

An "exacerbation" is when COPD symptoms flare up or get worse. This is most often caused by an infection, like the common cold, the flu, or COVID-19. It can also be caused by breathing polluted air. Less commonly, exacerbations are related to other health conditions, like heart problems.

People who are older, and who have had COPD for longer, are more likely to have exacerbations.

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## What are the symptoms of a COPD exacerbation?

During an exacerbation, regular COPD symptoms get worse. This usually happens within hours to days.

Symptoms can include:

- Feeling short of breath, especially when moving around
- Coughing up more sputum (mucus) than usual, or thicker sputum

- A change in color of the sputum you cough up, for example, yellow or green

You might also have wheezing (a whistling sound when you breathe) or breathe faster than normal.

In severe cases, your body might not be able to get enough oxygen during an exacerbation. This requires treatment in the hospital.

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## Will I need tests?

Maybe. Your doctor will ask you questions about your symptoms and whether you have had exacerbations in the past. They will also do an exam. Depending on how severe your symptoms are, they might also do tests. Tests can include:

- Pulse oximetry – This test uses a small device to measure how much oxygen is in your blood.
- Chest X-ray
- Blood tests

If the doctor thinks that your symptoms might be from something other than a COPD exacerbation, they might do other tests, too.

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## How is a COPD exacerbation treated?

Most people with COPD take medicines every day to control their symptoms. During an exacerbation, more or different treatments are usually needed.

Depending on how severe your exacerbation is, treatment involves 1 or more of the following:

- Inhaler medicines – These are medicines that help open the airways so you can breathe more easily.
- A steroid medicine that comes as pills
- Antibiotics
- Extra oxygen

Some people need treatment in the hospital. In this case, medicines might be given through a thin tube that goes into a vein, called an "IV." In severe cases, a person might need to be put on a machine to help them breathe. This is called a "ventilator."

## What can I do to help prevent another COPD exacerbation?

To lower your risk of having another exacerbation:

- **Avoid smoking** – Quitting smoking is the most important thing you can do for your health. This is true no matter how long you have smoked or how much you smoke. If you are having trouble quitting, your doctor or nurse can help.
- **Avoid triggers** – If things like fumes, pollution, or dust make your breathing worse, try to avoid these things.
- **Take all of your COPD medicines** – Follow your doctor's instructions about how and when to take each of your medicines. It's especially important to know what to do if you have another exacerbation in the future.
- **Keep your lungs strong** – If your doctor gave you breathing exercises, do them as instructed. It can also help to get physical activity when you are able. Even gentle forms of exercise, like walking, are good for your health. Your doctor or nurse can talk to you about what forms of exercise are best for you.
- **Lower your risk of infection** – Certain infections can trigger a COPD exacerbation. You can lower your risk by getting certain vaccines. These include vaccines to protect against the flu, pneumonia, and COVID-19. In addition, wash your hands often and stay away from people who are sick.

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[Patient education: Chronic obstructive pulmonary disease \(COPD\) \(The Basics\)](#)

[Patient education: Medicines for COPD \(The Basics\)](#)

[Patient education: How to use your dry powder inhaler \(adults\) \(The Basics\)](#)

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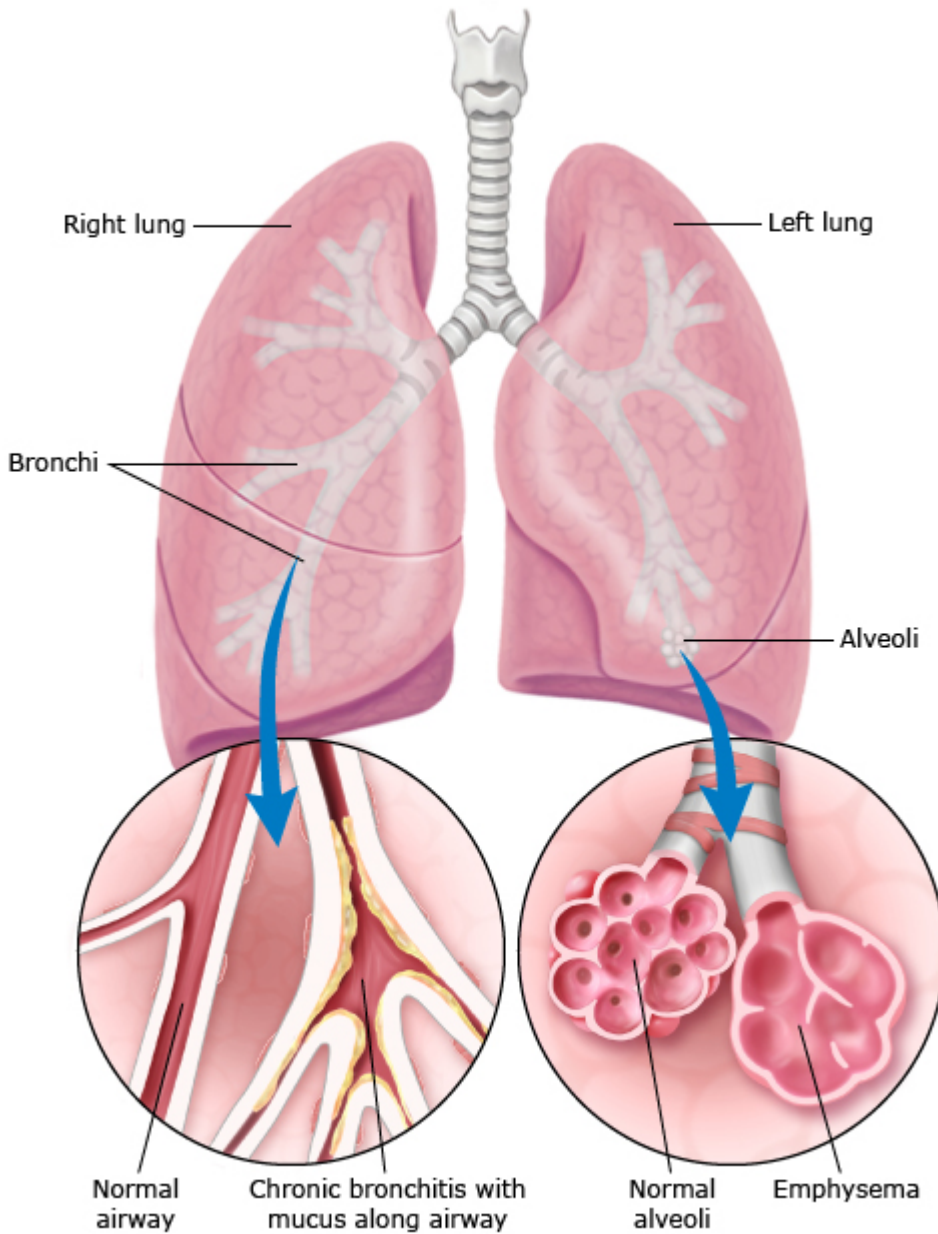
**This topic retrieved from UpToDate on:** Jan 03, 2025.

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Topic 142333 Version 1.0

## GRAPHICS

### Changes to the lungs in COPD



In COPD, the airways ("bronchi") of the lungs become narrow and can be clogged with mucus. The air sacs ("alveoli") that make up the lungs can also become damaged.

Graphic 121872 Version 2.0

