

Medicines FOR COPD

How COPD medicines can help you feel better

COPD medicines cannot cure COPD, but they can improve your symptoms. By taking the right medicine at the right time, you can be more active, have less coughing and shortness of breath, and get fewer flare-ups.

This fact sheet explains the main medicines used for COPD. It also explains how to use the puffers (inhalers) and spacing chambers that deliver COPD medicines to your lungs.

What's COPD?

COPD stands for chronic obstructive pulmonary disease. It's a long-term lung disease often caused by smoking. COPD can include emphysema and chronic bronchitis.

Get to know your COPD medicines

There are many medicines to treat COPD. Your doctor will prescribe the right medicine for you. COPD medicines can be complicated. But don't worry. You don't need to learn everything about every COPD medicine. You just need to know about *your* medicines.

Make sure you know:

- which medicines you are taking
- how to take them
- when to take them
- who to ask if you have any questions



To focus on the information that you need, put a check mark next to the COPD medicines you take.

Medicines to treat shortness of breath: bronchodilators

If you have COPD, your main symptom is probably shortness of breath. You might get short of breath when you exercise, when you do chores, when you feel upset, or for no reason at all.

Bronchodilator medicines open up the airways (breathing tubes) in your lungs. When your airways are more open, it's easier to breathe. Doctors may prescribe more than one kind of bronchodilator to treat COPD.

There are two main types of inhaled bronchodilators: beta-2 agonists and anticholinergics.

Beta-2 agonists

- salbutamol (Ventolin®)
- terbutaline (Bricanyl®)
- formoterol (Oxeze®)
- salmeterol (Serevent®)

Side effects: fast heartbeat, irregular heart-beat, irritability, difficulty sleeping, muscle cramps, and shaky hands. More serious side effects are rare. Side effects are usually less noticeable as time goes on and you've been on the medicine for a while.

Anticholinergics

- ipratropium bromide (Atrovent®)
- tiotropium (Spiriva®)

Side effects: occasional dry mouth. Men who have trouble with their prostate gland may have difficulty urinating (peeing).

Some bronchodilators act quickly, others act slowly

Some bronchodilators give you relief from shortness of breath within minutes. These are called **rapid-onset bronchodilators** or **quick relief medicines**. Quick relief medicines are often used as needed, to help relieve sudden shortness of breath.

Some quick-relief medicines have effects for 4–6 hours (for example, Ventolin® and Bricanyl®). Others last for up to 12 hours (Oxeze®).

Other bronchodilators take longer to give you relief from your symptoms; these are called **slow-onset bronchodilators**. Some last for only 4–6 hours (Atrovent®), and some last up to 12 hours (Serevent®). There is one slow-onset bronchodilator that lasts for 24 hours (Spiriva®).

If you need quick relief from shortness of breath, take a quick-relief medicine like Ventolin®, Bricanyl®, or Oxeze®.

Keep your quick-relief medicine with you at all times, so it's there when you need it.

All the bronchodilators listed above come in inhalers (puffers). Pages 5 and 6 explain how to use your inhalers.

There's another kind of bronchodilator that opens your airways. This one is in pill form:

Xanthines or theophyllines (such as Uniphy® or Theodur®)

Xanthines or theophyllines are slow-onset bronchodilator pills. They don't open your airways as well as inhaled bronchodilators, and they can have serious side effects

and drug interactions. For these reasons, xanthines / theophyllines are not commonly used. When they are used, it's usually in combination with other bronchodilators.

Side effects: nausea, heartburn, restlessness and fast heartbeat.

Xanthines / theophyllines can interact with food and other medicines. Make sure your doctor and pharmacist knows all the other medicines you are taking. If you are taking these pills, your doctor will give you regular blood tests to monitor how much of the medicine is in your body.

Medicines to prevent and treat COPD flare-ups

A flare-up is when your COPD symptoms get worse. Flare-ups are often caused by:

- a trigger — like air pollution
- a chest infection — like a cold, flu or other virus.

It's very important to prevent flare-ups and to treat them as soon as you can. Flare-ups are the main reason COPD patients go to hospital. They can be deadly.

Some symptoms of a COPD flare-up are more shortness of breath, more coughing, and more phlegm (also called mucus or sputum — often it turns green or yellow or gets thicker during a flare-up).

Combination bronchodilator and inhaled corticosteroids

If you have ongoing breathing problems and moderate or severe COPD, your doctor may prescribe a combination medicine.

They combine a bronchodilator that relieves shortness of breath, and an inhaled corticosteroid that brings down the swelling in your airways. Over time, combination medicines can help prevent COPD flare-ups.

Note: *Corticosteroids for COPD are not the same thing as the anabolic steroids some bodybuilders take to build muscle.*

Some combination medicines for COPD are:

- Advair® (Flovent® combined with Serevent®)
- Symbicort® (Pulmicort® combined with Oxeze®)

Combination medicines are “preventer” medicines that need to be taken every day, usually twice a day. They help over time, but they do not help right away. If you need help right away, take a quick-relief medicine like salbutamol® (Ventolin®), terbutaline (Bricanyl®), or formoterol® (Oxeze®).

Side effects: shaky hands (tremor), fast heartbeat, thrush (a whitish film covering your throat and tongue), a sore throat or a hoarse voice.

You can have fewer side effects if you:

- take the medicine as directed by your doctor
- rinse your mouth with water after each dose: rinse, gargle, and spit the water out.
- use a spacing chamber with your puffer (see picture on page 5)

Corticosteroid pills

Corticosteroids also come as pills, (for example, Prednisone).

Corticosteroid pills have more side effects than the inhaled corticosteroids that are in combination medicines. Corticosteroid pills are used for short periods of time, usually when you have a moderate or severe COPD flare-up. They should not be taken on a regular basis unless your doctor says so.

Side effects: thinning and bruising of the skin, sore throat, hoarse voice, bloating, weight gain, emotional changes, problems with blood sugar control, problems with blood pressure control. You can talk with your doctor or pharmacist about these side effects.

Medicines to treat infections: Antibiotics

COPD flare-ups can be caused by viral infections (for example, the flu) or bacterial infections (for example, bacterial pneumonia). If you have a bacterial infection, your doctor can prescribe antibiotics. Antibiotics don't work for viral infections.

Your doctor may give you an antibiotic prescription to have at the ready, and tell you to fill the prescription if you feel a COPD flare-up coming on. Your doctor will give you a **COPD action plan** with clear directions on what to do and what medicine to take if you have a flare-up. Be sure to ask questions if you are not sure about what your COPD action plan means.

It's important to take your antibiotics as directed by your doctor and to take all of the antibiotics. When people don't take all of their antibiotics, infections can become stronger and harder to treat.

Vaccines (shots) to prevent flu and pneumonia

Vaccines can help protect you against some strains of flu and pneumonia. Flu and pneumonia shots can lower your chances of getting a flare-up and needing hospital care. You need to take a flu shot every year, usually in the fall. Most people with COPD need to take the pneumonia shot every 5–10 years.

Supplemental oxygen

If you have more severe COPD, it may be hard for you to get enough oxygen from the natural air. Low oxygen levels can make you more short of breath and tired. If your blood oxygen level is very low, the doctor may prescribe supplemental oxygen for you.

Studies show that when people who need supplemental oxygen get it, they can live longer. People who take oxygen should continue taking their other medicines as prescribed.

Not everyone who has COPD needs to be on oxygen. To find out if you need supplemental oxygen, speak to your doctor or Certified Respiratory Educator. To learn more about taking supplemental oxygen, ask for a copy of our fact sheet called "Oxygen Therapy for COPD".



Man using a spacing chamber to take his puffer (inhaler) medicine.

How do I use my inhaled medicines?

Many COPD medicines are inhaled—you breathe them in.

At first, it can be tricky to learn how to use your inhalers. Below we'll explain how to use different kinds of inhaled medicines. It's also helpful to get hands-on advice. Ask your doctor, pharmacist or Certified Respiratory Educator to watch you use your inhaler to make sure you're doing it right. Ask them how to care for and clean your inhalers and devices.

Puffers (also called inhalers, pressurized metered-dose inhalers, MDIs, or pMDIs)

Puffers have a pressurised canister that sprays a precise dose of medicine.

We strongly recommend you use a *spacing chamber* with your puffer. Spacing chambers are clear plastic tubes that fit on the end of your puffer. They're also called spacers or holding chambers.

Spacing chambers make it easier to take your puffer. Instead of spraying the puffer right into your mouth, you spray it into the spacing chamber. It traps the medicine from your puffer and holds it. This gives you time to slowly breathe in the air from the spacing chamber.

With a spacing chamber, more medicine gets deep into your lungs, where you need it.

How to use a puffer with a spacing chamber

1. Remove the cap of the spacing chamber.
2. Remove the cap of the puffer. Shake the puffer up and down.
3. Insert the puffer in the hole at the back of the spacing chamber.
4. Sit up with your back straight, or stand up.
5. Blow all your breath out until your lungs are empty.
6. Seal your lips around the spacing chamber mouthpiece.
7. Press the down once on the puffer's canister — this will spray medicine into the spacing chamber.
8. Slowly suck the air from the spacing chamber. Breathe in until you can't take in any more breath.
9. Now hold your breath for as long as you find comfortable.
10. Take the spacing chamber mouthpiece out of your mouth, and breathe out slowly. Breathe normally.
11. If you need a second puff, wait one minute and repeat these steps.
12. Do not spray more than one puff at a time into the spacing chamber.
13. Rinse your mouth out with water and spit the water out (don't swallow it).



Woman using a dry power inhaler.

Dry powder inhalers (for example Diskus[®], TurbuHaler[®])

Dry powder inhalers are plastic inhalers with dry powdered medicine inside.

How to use a dry powder inhaler

1. Load your dose of medicine—follow the directions on the package.
2. Blow out all the air from your lungs.
3. Now put the inhaler in your mouth: seal your lips around the inhaler and take a fast, deep breath in.
4. Hold your breath for 10 – 15 seconds, or as long as it's comfortable for you.
5. Take the inhaler from your mouth and breathe out slowly. Breathe normally.
6. If you need to take another dose, wait a minute and then repeat these steps.
7. Rinse out your mouth with water, spit the water out, and wash your hands.

Keep track of the doses you've taken. Make sure you write down each time you take a dose of your puffer. It's impossible to tell when a puffer is empty by feeling its weight or by shaking it — the only way to know how many doses are left is to write down each time you take a dose. Once you've taken all the doses in your inhaler, throw it out. It might seem like the inhaler still has something inside, but what's left is not medicine, just propellant (propellant is an ingredient they add to your puffer to help the medicine come out).

Don't float your puffer in water to see how full it is. This is not a reliable way to see how much medicine is left, and water could get into your puffer and damage it.

Nebulizer with mask or mouthpiece

Very rarely, people with COPD can't use puffers and other inhalers, so the doctor will prescribe medicine in nebulizers. Nebulizers are pre-mixed pouches of medicines that you put in a machine called a nebulizer or compressor. The nebulizer has a mask you put over your nose and mouth, or a mouthpiece you put in your mouth. The nebulizer takes the medicine inside the nebulizer and turns it into a fine mist. Then you breathe in the mist through the mask or mouthpiece.

Seven tips to get the most out of your COPD medicine

1. Write a list of all the medicines you take so that your health care providers can check for possible drug interactions. If you take over-the-counter medicine or natural health products, write those down too. They could interact with your medicines and make your breathing worse.

2. Go to the same pharmacy for all your medicines. If you fill all your prescriptions at the same place, your pharmacy record will show all the medicines you're taking. This way the pharmacist can make sure you're not taking any medicines that interact badly together.

3. Make sure you can tell the difference between your inhalers, and make sure you know how to use them properly. You may use several different inhalers for the different medicines you take. You can tell the inhalers apart by their names and colours. Make sure you know which is your quick-relief medicine to take when you're short of breath, and keep it with you at all times.

4. Work with your doctor to decide the best way to treat your COPD symptoms. Talk about your symptoms, activities and concerns. Tell the doctor how you think your medicines are working. Ask questions. Keep asking questions until you're sure you understand.

5. Speak up if you're worried about side effects. Like all medicines, COPD medicines may cause side effects. If you have concerns, talk to your doctor, pharmacist or Certified Respiratory Educator. They'll help you understand the pros and cons of each treatment.



6. Ask your doctor for a written action plan to help you manage COPD flare-ups. This action plan will explain what to do if you notice your COPD symptoms getting worse. Follow your COPD action plan.

7. Visit a COPD clinic to learn more about your COPD medicines and how to take them. Ask your doctor about COPD clinics in your area or find the clinics in your area by searching in our online directory: www.lung.ca/programs .

Get complete treatment for your COPD

Medicines are an important way to treat COPD, but there are other treatments too. To get the most out of life and to improve your symptoms, you also need to:

Quit smoking and stay away from smoke and other air pollution. To get help quitting, ask your doctor or go to www.lung.ca/quit.

Join a pulmonary rehabilitation program or do other exercise, with your doctor's permission. Pulmonary rehabilitation (also called respiratory rehabilitation or rehab) is a class that teaches you to exercise and manage your symptoms. Pulmonary rehab participants exercise, learn breathing techniques, and get practical advice, like how to eat well, how to keep up your energy, and how to do chores with less effort. To learn about pulmonary rehabilitation programs in your area, ask your doctor, visit www.lung.ca/rehab or call our free BreathWorks COPD Helpline at 1-866-717-COPD (2673).

Avoid the germs that can cause flare-ups: wash your hands carefully and often. Get your flu and pneumonia shots.

Exercise, eat well, keep a healthy weight and get plenty of rest.

Where can I go for more information on COPD medicines?

The Lung Association's BreathWorks™ program can help you understand COPD medicines and how to live with COPD.

To find out more:

- **Visit our website** at www.lung.ca/copd
- **Call our free BreathWorks COPD Helpline at 1-866-717-COPD (2673).** A Certified Respiratory Educator will answer your questions about COPD medicines, and anything else you'd like to know about COPD.
- **Ask your doctor**, pharmacist, or Certified Respiratory Educator.

The Lung Association's commitment to COPD education and research.

Established in 1900, The Lung Association is one of Canada's oldest and most respected health charities. We're the leading national organization for science-based information, research, education, support programs and advocacy on COPD. We rely on donations from the public. To make a donation, please call toll-free 1-888-566-LUNG (5864).

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