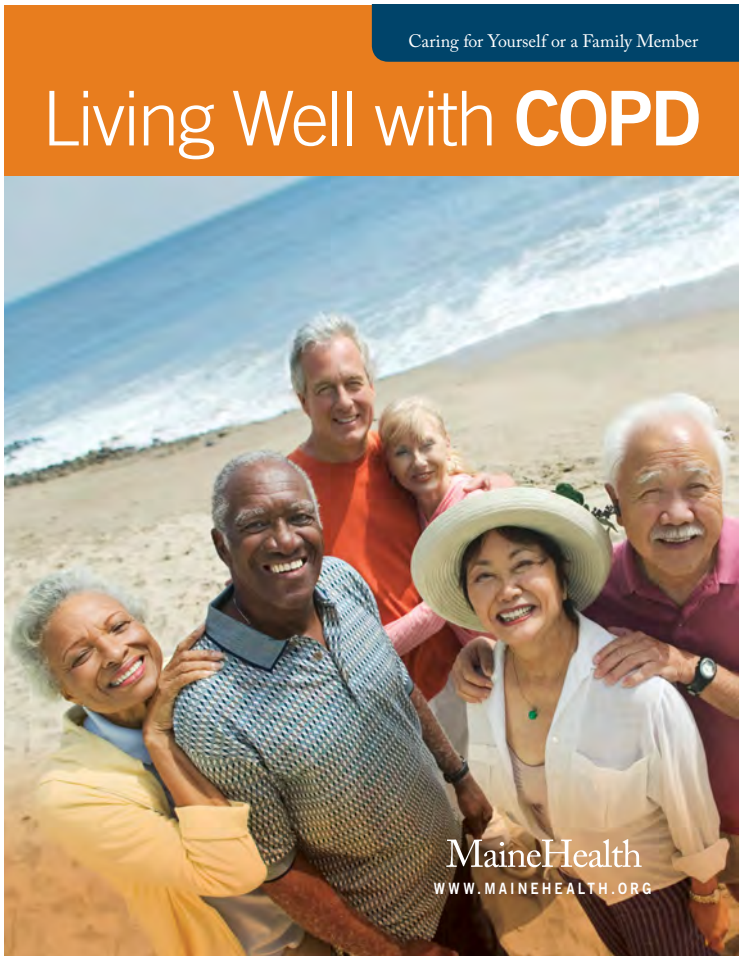
Living Well with COPD

This information is part of the MaineHealth Living Well with COPD patient education book.



SECTION 5

How to Treat COPD

In This Section:

- Quitting Smoking
- COPD Medicines
- Managing Your Mucus
- Breathing Exercises
- Surgical Options to Treat COPD
- Glossary

This book was created for patients and their families to help them manage their lung disease.

Your doctor or nurse chose this section because they felt it would be most helpful for you.

There are 10 sections in the COPD book and a list of definitions in the glossary section. Share this information with family, friends and those who help care for you.

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How to Treat COPD 5

Quitting Smoking

If you smoke, it is very important to try to quit. Quitting smoking is the most important thing you can do for your health. It can improve your COPD and prevent it from getting worse. Quitting can reduce the number of COPD flare-ups and lung infections, and reduce your risk of lung cancer. If you, a friend or a family member have COPD and want to quit smoking, ask your doctor or nurse for help. In Maine you can also call the Maine Tobacco HelpLine for free help over the phone. Free medicine to help you quit may also be available.

If you live with or are around a tobacco smoker:

- ask them to smoke outside away from people
- ask them not to smoke in your house
- ask them not to smoke in your car or truck

To help you quit smoking

- Get help to quit from family or friends, a health professional or the Maine Tobacco Helpline: 1-800-207-1230.
- Try to lower your stress.
- Talk to others or join a group to quit.
- Change your routine to not include smoking or reminders of smoking.
- Go to places where you know people aren't going to smoke.
- Make a list of reasons why you want to quit.
- Keep your hands and mind busy with things to do or think about.
- Read a book, listen to music or take a walk.
- Choose healthy foods as snacks.
- Clean out the car, or other places, of anything that reminds you of smoking.

For more information and help, contact

THE MAINE TOBACCO HELPLINE

If you live in Maine: 1-800-207-1230

National helpline: 1-800-quitnow

Medicines to help you quit smoking

Your doctor or nurse may talk to you about using **nicotine replacement** medicines to quit smoking. There are many different types:

- nicotine patch
- nicotine gum
- nicotine lozenge
- nicotine inhaler
- nicotine nasal spray

These medicines replace some of the nicotine you are no longer getting when you quit smoking. This can reduce cravings and make it easier to quit. People may use one or more kinds of nicotine replacement products. Which nicotine replacement product is best for you depends on how much you smoke, how soon you smoke after you wake up and other medicines you take.

People may also take bupropion (Zyban) and varenicline (Chantix) to help them quit. These medicines require a prescription.

Check with your doctor or nurse to see which medicines are right for you.

Vaping devices

Vaping devices are electronic items that produce steam vapor when smoked. The U.S. Food and Drug Administration (FDA) has not approved these items as a tool to help you quit smoking.

Nicotine patches

Learn more about quitting smoking:

www.thequitlink.com
www.smokefree.gov
www.cdc.gov

COPD Medicines

Although there is no cure for COPD, there are medicines that can help you feel better and reduce how often you have flare-ups.

Most COPD medicines are breathed into your lungs through an **inhaler** or **nebulizer.**

Inhalers

contain medicine as a mist or powder that is sprayed into your mouth and breathed into your lungs.

Nebulizers

are devices that turn liquid medicine into a mist that you can breathe into your lungs.

Both **quick-relief (rescue)** and **long-acting (controller) medicines** can be given through an inhaler or nebulizer.

The amount of medicine **(dose)** and kind of medicine you take will depend on your type of lung disease. Your doctor will prescribe the medicines that are best for you.

remember

Clean your nebulizer to prevent breathing in germs and getting a lung infection. Follow the cleaning instructions that come with your nebulizer.

Nebulizer treatment

Quick-relief (rescue) medicines

These contain **bronchodilators** that help open up your airways, making it easier to breathe. You should take them when you:

- are more short of breath than usual
- are wheezing
- are coughing more often than usual
- feel your chest is tight

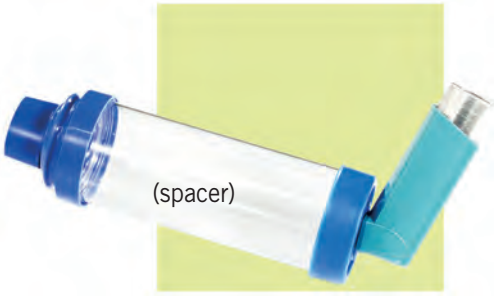
These medicines start to work in a few minutes and last a few hours.

You may want to take your quick-relief inhaler before you start anything that makes your breathing more difficult, such as:

- taking a shower
- doing housework
- climbing stairs
- walking a long distance
- exercising

Soft mist inhaler

Metered dose inhaler (MDI)



MDI with a spacer

Long-acting or controller medicines

Long-acting or **controller medicines** are taken once or twice a day to help to prevent shortness of breath and flare-ups of your COPD. Controller inhalers may have one or two medicines in them that help keep your airways open. Controller inhalers work slowly and last 12-24 hours. They need to be taken every day.

Do not use long-acting controller medicines for sudden shortness of breath.

What side effects should I watch for when using a quick-relief or controller medicine?

- fast or irregular heartbeat, pounding heart (palpitations)
- feeling nervous or restless
- shakiness or trembling
- bad taste in your mouth
- dry mouth
- sore throat
- hoarse voice
- headache
- trouble sleeping
- feeling sick to your stomach
- urinating (emptying your bladder) more often or trouble urinating
- trouble seeing or worsening **glaucoma**

These side effects can last for a few minutes and may go away after a few days of using your inhaler. Using a spacer with your metered dose inhaler (MDI) can help reduce side effects.

Tell your doctor, nurse or respiratory therapist if you have any of these side effects. Your doctor may have you stop or change your medicines.

There are different types of inhaler devices. The type your doctor or nurse prescribes depends on which medicine you need.

Handihaler

Pressair

Diskus

Ellipta

Steroids

Corticosteroids (kor-ti-ko-ster-oids), also called anti-**inflammatory** medicines, decrease swelling in the airways in your lungs. Steroids used to treat COPD are usually taken through inhalers. It may take several days or weeks to notice a change in your breathing. Inhaled steroids may be combined with other medicines in one inhaler.

What side effects should I watch for with inhaled steroid medicines?

- sore throat
- hoarse voice
- infections in the mouth and throat **(thrush)**

To lessen these side effects, brush your teeth, rinse, gargle and spit after each time you use a steroid inhaler. If your steroid medicine comes in an MDI, use it with a spacer to reduce side effects.

Steroids can also be given as a pill or through an IV **(intravenous).** These kinds of steroids are usually given for a flare-up of your COPD. If you have a bad flare-up, you may need to be treated in the hospital.

What side effects should I watch for with pill or IV steroid medicines?

The high doses of steroids in tablet or intravenous form (or smaller doses given for long periods of time) may cause problems including:

- bruising of the skin
- weight gain
- brittle bones **(osteoporosis)**
- high blood sugar levels if you have diabetes
- cloudy eyesight **(cataracts)**
- swelling of the ankles or feet
- upset stomach

Some people find that taking their steroid tablets at mealtime reduces stomach upsets. Talk with your doctor or nurse if you have any concerns about taking steroid tablets.

tips

1. Know how to use your inhalers correctly.
2. Always use a spacer with your MDI to reduce side effects and increase how much medicine gets into your lungs.
3. If you need more than 1 puff of medicine, wait 60 seconds before taking the next puff.
4. Gargle, rinse and spit after using your steroid inhalers.
5. Store your inhalers away from sunlight, heat and humidity.
6. Clean your nebulizer to prevent breathing in germs and getting a lung infection. Follow the cleaning instructions that came with your nebulizer.
7. Carry a list in your wallet or purse of all the medicines you take, including over-the-counter medicines and vitamins.
8. Always bring this list when seeing your doctor or nurse. If you are having trouble breathing and cannot talk, this list will be helpful to the doctor who is treating you.

Combination medicines

Combination medicines contain two different types of medicine in the same inhaler or nebulizer solution. While each of these medicines can be taken in separate inhalers, it is often easier for people to take both medicines in one inhaler.

Most inhalers come with a dose counter so you know how many doses of medicine you have left in your inhaler. Because COPD medicines come in many different types of inhalers, it is very important to have your doctor, nurse, respiratory therapist or pharmacist show you the correct way to use each inhaler.

Other medicines for COPD

Theophylline medicines are a type of bronchodilator taken as a pill. Theophylline relaxes the muscles in your airways making it easier to breathe.

Roflumilast is a pill that may reduce the number of flare-ups you have.

Both of these medicines can cause upset stomach, diarrhea and headache. Talk to your doctor if you have these side effects.

remember

Always use a spacer with your metered dose inhaler (MDI).

Managing Your Mucus

People with COPD are at higher risk for getting bacterial infections in their lungs. Signs of lung infection include:

- increased cough or shortness of breath
- increased mucus **(sputum)**
- mucus color changes from clear or white to green, yellow or brown

Call your doctor or nurse if you have these symptoms.

Some people with COPD have a lot of mucus in their airways, which makes breathing difficult and can increase the risk of developing a lung infection.

Making sure you are drinking plenty of water and non-caffeinated beverages can help to keep mucus loose and easier to cough out.

There are medicines called **mucolytics**, that can help to break up the mucus, making it easier to cough it up. Your doctor may order these medicines if you have difficulty coughing mucus up out of your lungs. Many of these medications are available at your pharmacy without a prescription. Always check with your doctor and pharmacist before using any over-the-counter medicine.

Another option available to help clear mucus is a handheld device that creates a vibration in your airways. This device, called a positive expiratory pressure (PEP) device, can help move mucus up to where you can cough it out easier.

PEP device

Antibiotics

If you get a lung infection, your doctor or nurse may order antibiotics. Antibiotics are medicines used to treat bacterial infections. They are not used for treating the common cold or flu.

There are many different antibiotics used to treat infections. The type and dose of antibiotic depends on the type of infection you have.

It's important to take all your antibiotics as recommended by your doctor or nurse even if you are feeling better.

Questions to ask your doctor or nurse about antibiotics:

- ☐ How long do I need to take the antibiotics?
- ☐ What are the common side effects?
- ☐ What are signs of allergic reaction?
- ☐ What should I do if I don't get better?

Cough medicines

Mucus can make it harder to breathe and can put you at higher risk for a lung infection. Coughing helps clear the mucus in your lungs. Your doctor or nurse may prescribe a cough **expectorant.** This medicine does not stop the cough, but it helps loosen the mucus so that it is easier to cough up mucus.

If a dry cough is keeping you awake at night, tell your doctor or nurse. They may give you a cough **suppressant** to help you cough less.

Never take a cough suppressant without asking your doctor or nurse.

Breathing Exercises

Breathing exercises help you move air in and out of your lungs more easily and reduce shortness of breath. Pursed-lip breathing helps keep airways open longer so you can breathe waste air out more effectively.

Your **diaphragm** is a large muscle below your lungs that does most of the work of breathing. People with COPD often use the muscles in their neck and shoulders and between their ribs to breathe instead of using their diaphragm. This takes more energy and can make you more short of breath.

Try these breathing tips to make breathing easier and use less energy.

To practice pursed-lip breathing:

- Breathe in slowly through your nose for a count of 2.
- Purse your lips like blowing out a candle or whistling.
- Breathe out slowly through your pursed lips for a count of 4.
- Your breath out should be at least twice as long as your breath in.

To practice diaphragmatic breathing:

- Sit or lie down in a comfortable position with your head and back supported.
- Place one hand on your belly and the other on your chest.
- Breathe in slowly through your nose down to your belly. Keep your belly muscles relaxed, making your belly round. Keep your chest relaxed.
- Blow out through pursed lips.

If you start to feel short of breath during exercise or regular activities, try this:

- Stop what you are doing.
- Sit down, relax your shoulders and do pursed-lip breathing until you catch your breath.
- Continue your exercise or activity, doing pursed-lip breathing as you go.

remember

Practice pursed-lip breathing and diaphragmatic breathing when you are relaxed and not short of breath. Practice will make these exercises easier and more natural.

Controlled coughing

Coughing is a normal way to clear mucus from your lungs. COPD can cause you to have more mucus and more frequent coughing. With COPD, your cough may be weak and coughing up mucus may be hard. Explosive or uncontrolled coughing can cause airways to collapse, making it hard to get mucus out.

Controlled coughing and huff coughing are good ways to clear mucus. These come from deep within the lungs and have just enough force to loosen and carry mucus through the airways without causing them to narrow and collapse.

To practice controlled coughing:

- Sit in a chair or on the edge of your bed with both feet on the floor.
- Lean forward slightly and fold your arms across your belly.
- Take a deep, slow breath through your nose.
- Press your arms against your belly.
- Cough once to loosen mucus.
- Cough again to move the mucus forward.
- Coughs should be short and sharp.
- Breathe in slowly.
- Relax.
- Repeat these steps if you still have more mucus to raise.

remember

Controlled coughing can help you feel less short of breath and save energy.

To practice huff coughing:

- Sit in a chair or on the edge of your bed with both feet on the floor
- Raise your chin slightly.
- Take a deep, slow breath through your nose.
- Press your arms against your belly.
- Hold your breath for a few seconds.
- Force the breath out your mouth in one quick burst of air while keeping the back of your throat open.
- Do 2 or 3 huff breaths.
- Then rest for 5 to 10 breaths.
- Repeat the huffs until you feel you have cleared mucus or you become tired.
- Once you feel secretions in your larger airways, try a regular cough.

If you start to get tired or short of breath, go back to relaxed breathing, using pursed lips when you breathe out. Your doctor, nurse or respiratory therapist may recommend a PEP device to help loosen mucus, making it easier to cough up.

Surgical Options to Treat COPD

There is no cure for COPD, but there are ways to help you live well with it. Surgery is an option for some, but not all, people with COPD.

Lung volume reduction surgery

Lung volume reduction surgery takes out the diseased parts of one or both of your lungs.

This surgery is not for everyone with COPD. The surgeon may only consider this surgery for you if you:

- do not smoke
- have participated in pulmonary rehabilitation classes
- are strong enough to have this surgery
- are taking your medicines correctly

Lung transplant surgery

Lung transplantation is another surgical option to treat COPD. The surgeon may replace one or both of your lungs with donor lungs during this surgery. It is important to know that lung transplant surgery requires a donor lung that is a match for you.

The surgeon may consider this surgery for you if you:

- need to use oxygen all the time
- have severe COPD that is not helped with medicines
- are strong enough to have the surgery and agree to take the medicines needed after the surgery

Talk with your doctor and a surgeon to see if this surgery is an option for you.

For more information on surgical options to treat COPD:

www.cts.usc.edu/lungvolumereductionsurgery.html

www.uchospitals.edu/specialties/thoracic-surgery/lvrs.html

Glossary

Advance directives (sometimes called living wills): forms that you fill out once you decide what is important to you if you should get into a health crisis

Air trapping: when it is difficult to exhale completely

Allergic rhinitis: runny nose caused by allergies

Alpha-1 antitrypsin deficiency: a genetic disease that can cause COPD

Alveoli: air sacs

Arteries: blood vessels that carry oxygenated blood away from the heart to the body's cells, tissues and organs

Arterial blood gas (ABG): a blood test from an artery that measures how well your lungs are able to move oxygen into your blood and remove carbon dioxide from your blood

Asbestos: mineral that can be woven into fabrics and is used in fire-resistant and insulating materials such as brake linings

Bone density test: x-ray that measures bone loss

Bronchial tubes: air passages or airways

Bronchodilators: medicines that make you breathe better by relaxing the muscles in your air passages and keep them from squeezing

Carbon dioxide: waste air

Cardiopulmonary resuscitation: emergency lifesaving procedure that is done when someone's heart has stopped

Cataracts: clouding of the lens in your eye

Comorbidities: other chronic diseases a person has that make treating chronic disease more difficult

Continuous flow oxygen: oxygen that runs constantly through a tube into your nose and throat

Continuous positive airway pressure (CPAP): a device prescribed by a doctor or nurse to treat OSA

COPD Action Plan: a guide to help you recognize the early signs of a flare-up and what you should do when a flare-up occurs

Coronary arteries: blood vessels that supply oxygen-rich blood to your heart muscle

Coronary artery disease: a disease in which a waxy substance called plaque builds up inside your coronary arteries

Cor pulmonale: a condition that causes the right side of the heart to fail

CT scan: a picture of the inside of a part of your body

Diabetes: a condition in which your body does not make enough insulin or does not use insulin correctly

Diaphragm: a large muscle that sits below your lungs and does most of the work of breathing

Dose: amount of medicine

Echocardiogram: an **ultrasound** of the heart

Electrocardiogram: a test that checks for problems with the electrical activity of your heart

Energy conservation: saving energy

Esophagus: passage that connects the mouth and the stomach

Exacerbation: flare-up of your symptoms

Expectorant: medicine that loosens mucus so it's easier to cough up

Gastroesophageal reflux disease (GERD): acid reflux

Glaucoma: a condition of increased pressure within your eyeball, causing gradual loss of sight

Healthcare agent: the person you want to speak for you if you cannot speak for yourself

Heart failure: a condition in which your heart can't pump enough blood to meet your body's needs

Hospice: care for people closer to the end of life who want their treatment focused on comfort

Hypertension: high blood pressure

Inflammatory: swelling

Inhaler: device that contains medicine as a mist or powder

Insulin: hormone that carries sugar into your cells so that it can be used for energy

Intravenous: in a vein

Long-acting (controller) medicines: medicines taken once or twice a day that prevent shortness of breath

Lung transplantation: surgically replacing one or both of your lungs

Lung volume reduction surgery: surgically removing diseased parts of one or both of your lungs

Mucolytics: medicines that break up mucus

Nebulizer: device that turns liquid medicine into mist

Nicotine replacement: medicines that replace the nicotine you do not get when you quit smoking

Obstructive sleep apnea (OSA): a condition that causes you to have periods when you stop breathing during sleep

Osteoarthritis: mechanical wear and tear on joints

Osteoporosis: illness that makes your bones brittle and fragile

Oxygenated: combined or mixed with oxygen

Palliative care: care provided at any stage of an illness focused on preventing suffering, managing symptoms and coordinating communication between the many caregivers

Peripheral vascular/arterial disease: a condition of the blood vessels that supply the legs and feet. It leads to narrowing and hardening of the **arteries.** This causes decreased blood flow, which can injure nerves and other tissues.

Pneumonia: lung infection

Pollutants: waste materials that are harmful to air, soil or water

Physician Orders for Life-Sustaining Treatment (POLST): a medical order stating a patient's wishes regarding treatments that are commonly used in a medical crisis

Pulmonary hypertension: high blood pressure in the arteries of the lungs

Pulse dose oxygen: oxygen that flows when you breathe in through your nose and stops when you breathe out

Pulse oximeter: a machine that measures the oxygen in your blood with a clip that goes on your finger, toe or earlobe

Quick-relief (rescue) medicine: medicine that starts to work in a few minutes and lasts a few hours

Reflux: when stomach acid backs up and irritates the esophagus

Rheumatoid arthritis: when your immune system mistakenly attacks the lining of your joints, causing a painful swelling that can eventually result in joint deformity

Secondhand smoke: smoke from a burning cigarette, cigar, pipe or hookah

Silica: a very common mineral found in many materials common on construction sites, including soil, sand, concrete, masonry, rock, granite and landscaping materials. The dust created by cutting, grinding or drilling can cause lung disease and cancer.

Sinusitis: swelling of the air cavities within the passages of the nose. Sinusitis can be caused by infection, but also can be caused by allergies and irritation of the sinuses.

Spirometry: a test to see how well your lungs are working

Sputum: mucus in your lungs

Stroke: when blood flow to an area of your brain is cut off

Suppressant: medicine to help you cough less

Thirdhand smoke: tobacco particles that stay on surfaces long after burning tobacco has been put out

Thrush: infection of the mouth and throat

Trachea: windpipe

Ultrasound: a test that uses sound waves to see inside your body

Vaping devices: electronic cigarettes, cigars and pipes that produce steam vapor when smoked