



How Is COPD Treated?

Excerpted from the National Heart, Lung and Blood Institute.

Quitting smoking is the single most important thing you can do to reduce your risk of developing chronic obstructive pulmonary disease (COPD) and slow the progress of the disease.

Your doctor will recommend treatments that help relieve your symptoms and help you breathe easier. However, COPD cannot be cured.

The goals of COPD treatment are to:

- Relieve your symptoms with no or minimal side effects of treatment
- Slow the progress of the disease
- Improve exercise tolerance (your ability to stay active)
- Prevent and treat complications and sudden onset of problems
- Improve your overall health

The treatment for COPD is different for each person. Your family doctor may recommend that you see a lung specialist called a pulmonologist (pull-mon-OL-o-gist).

Treatment is based on whether your symptoms are mild, moderate, or severe.

Medicines and pulmonary rehabilitation (rehab) are often used to help relieve your symptoms and to help you breathe more easily and stay active.

COPD Medicines

Bronchodilators

Your doctor may recommend medicines called bronchodilators that work by relaxing the muscles around your airways. This type of medicine helps to open your airways quickly and make breathing easier. Bronchodilators can be either short acting or long acting.

- Short-acting bronchodilators last about 4 to 6 hours and are used only when needed.
- Long-acting bronchodilators last about 12 hours or more and are used every day.

Most bronchodilator medicines are inhaled, so they go directly into your lungs where they are needed. There are many kinds of inhalers, and it is important to know how to use your inhaler correctly.

If you have mild COPD, your doctor may recommend that you use a short-acting bronchodilator. You then will use the inhaler only when needed.

If you have moderate or severe COPD, your doctor may recommend regular treatment with one or more inhaled bronchodilators. You may be told to use one long-acting bronchodilator. Some people may need to use a long-acting bronchodilator and a short-acting bronchodilator. This is called combination therapy.

Inhaled glucocorticosteroids (steroids)

Inhaled steroids are used for some people with moderate or severe COPD. Inhaled steroids work to reduce airway inflammation. Your doctor may recommend that you try inhaled steroids for a trial period of 6 weeks to 3 months to see if the medicine is helping with your breathing problems.

Flu shots

The flu (influenza) can cause serious problems in people with COPD. Flu shots can reduce the chance of getting the flu. You should get a flu shot every year.

Pneumococcal vaccine

This vaccine should be administered to those with COPD to prevent a common cause of pneumonia. Revaccination may be necessary after 5 years in those older than 65 years of age.

Pulmonary Rehabilitation

Pulmonary rehabilitation (rehab) is a coordinated program of exercise, disease management training, and counseling that can help you stay more active and carry out your day-to-day activities. What is included in your pulmonary rehab program will depend on what you and your doctor think you need. It may include exercise training, nutrition advice, education about your disease and how to manage it, and counseling. The different parts of the rehab program are managed by different types of health care professionals (doctors, nurses, physical therapists, respiratory therapists, exercise specialists, dietitians) who work together to develop a program just for you. Pulmonary rehab programs can include some or all of the following aspects.

Medical evaluation and management

To decide what you need in your pulmonary rehab program, a medical evaluation will be done. This may include getting information on your health history and what medicines you take, doing a physical exam, and learning about your symptoms. A spirometry measurement may also be done before and after you take a bronchodilator medicine.

Setting goals

You will work with your pulmonary rehab team to set goals for your program. These goals will look at the types of activities that you want to do. For example, you may want to take walks every day, do chores around the house, and visit with friends. These things will be worked on in your pulmonary rehab program.

Exercise training

Your program may include exercise training. This training includes showing you exercises to help your arms and legs get stronger. You may also learn breathing exercises that strengthen the muscles needed for breathing.

Education

Many pulmonary rehab programs have an educational component that helps you learn about your disease and symptoms, commonly used treatments, different techniques used to manage symptoms, and what you should expect from the program. The education may include meeting with (1) a dietitian to learn about your diet and healthy eating; (2) an occupational therapist to learn ways that are easier on your breathing to carry out your everyday activities; or (3) a respiratory therapist to learn about breathing techniques and how to do respiratory treatments.

Program results (outcomes)

You will talk with your pulmonary rehab team at different times during your program to go over the goals that you set and see if you are meeting them. For example, if your goal is to walk every day for 30 minutes, you will talk to members of your pulmonary team and tell them how often you are walking and for how long. The team is interested in helping you reach your goals.

Oxygen Treatment

If you have severe COPD and low levels of oxygen in your blood, you are not getting enough oxygen on your own. Your doctor may recommend oxygen therapy to help with your shortness of breath. You may need extra oxygen all the time or some of the time. For some people with severe COPD, using extra oxygen for more than 15 hours a day can help them:

- Do tasks or activities with less shortness of breath
- Protect the heart and other organs from damage
- Sleep more during the night and improve alertness during the day
- Live longer

Surgery

For some people with severe COPD, surgery may be recommended. Surgery is usually done for people who have:

- Severe symptoms
- Not had improvement from taking medicines
- A very hard time breathing most of the time

The two types of surgeries considered in the treatment of severe COPD are:

- **Bullectomy.** In this procedure, doctors remove one or more very large bullae from the lungs of people who have emphysema. Bullae are air spaces that are formed when the walls of the air sacs break. The air spaces can become so large that they interfere with breathing.
- **Lung volume reduction surgery (LVRS).** In this procedure, surgeons remove sections of damaged tissue from the lungs of patients with emphysema. A major NHLBI study of LVRS recently showed that patients whose

emphysema was mostly in the upper lobes of the lung and who had this surgery, along with medical treatment and pulmonary rehabilitation, were more likely to function better after 2 years than patients who received medical therapy only. They also did not have a greater chance of dying than the other patients.

A small group of these patients who also had low exercise capacity after pulmonary rehabilitation but before surgery were also more likely to function better after LVRS than similar patients who received medical treatment only.

A lung transplant may be done for some people with very severe COPD. A transplant involves removing the lung of a person with COPD and replacing it with a healthy lung from a donor.

Source: Excerpted from the National Heart, Lung and Blood Institute of the National Institutes of Health. January 2006.