COPD stands for chronic obstructive pulmonary disease. It means that lung damage is stopping your lungs working as well as they used to. There is no cure but there are treatments that can help stop it getting worse.

We’ve looked at the best and most up-to-date research to produce this information. You can use it to talk to your doctor and decide which treatments are right for you.

What is COPD?

If you have COPD, the airways in your lungs have been damaged over many years. This damage is usually caused by smoking. But other things can cause COPD, including breathing in other poisonous chemicals (possibly through long exposure to severe air pollution), and some inherited genetic conditions.

There are two main types of lung damage that cause COPD. One is bronchitis, where your airways become narrow and inflamed, making it harder to breathe. Your lungs may also make too much mucus, which causes coughing.

The bronchitis caused by COPD lasts for a long time. It's not the same as having bronchitis that's caused by an infection.

The other type of damage is emphysema. This causes parts of your lungs to become less elastic (stretchy) so that they don't squeeze air out properly. When you breathe out, some old air gets trapped in your lungs. So you don't get the full amount of fresh air when you breathe in.

Having COPD can mean you have either bronchitis or emphysema, or both at the same time.

What are the symptoms?

The main symptoms of COPD are coughing and shortness of breath. Your cough may last a long time. And you may get short of breath doing everyday things, like going for a walk or doing housework.
You may sometimes get attacks, when your COPD symptoms suddenly get a lot worse than usual. Doctors call these **exacerbations**. If you have trouble breathing you should always see a doctor or go to hospital right away.

If you smoke, you may have got used to coughing and think it's normal. But coughing may be a sign of lung damage, so it's important to get it checked by a doctor.

**What treatments work?**

The aims of treatment for COPD are:

- to prevent and control symptoms
- to reduce the number of exacerbations you have and to make them less severe
- to help improve your lung function
- to help you live a longer and healthier life

Your treatment should include regular appointments with your doctor to check on your progress. Your doctor should make sure that you understand what COPD is and how to recognise an exacerbation.

**Stopping smoking**

These days, the main cause of COPD is smoking. Stopping smoking can:

- slow down the damage COPD does to your lungs
- reduce your chance of cancer and heart problems related to COPD
- help you live longer with a better quality of life.

Of course, stopping smoking is not easy, especially if you have smoked for many years. So your doctor may recommend a stop-smoking programme to help you stop. This may include counselling, group meetings, and medication.

For more information on ways to help you stop smoking, see our leaflet: **Stopping smoking**.

**Staying healthy**

Taking part in a lung-care programme can help you stay healthier (they'll probably be called **pulmonary rehabilitation programmes**).

These programmes are usually organised in hospitals. You'll learn about how your lungs work and how to do exercises that make them stronger. You'll need to keep doing these
exercises at home, after your programme finishes. You'll also learn about your medicines and the best way to take them. Ask your doctor if there's a local programme near you.

Taking part in a programme can:

• reduce your chances of needing to be treated in hospital

• reduce the depression and anxiety that sometimes go along with COPD

• reduce fatigue

• increase how much you are able to exercise

• help improve your quality of life: for example, by helping you feel more in control of your life and your illness.

Regular exercise can help you stay healthy. Even gentle exercise, such as walking, can help you get fitter and do more of the things you enjoy. Everyone with COPD should try to do as much exercise as they can to keep their lungs as fit as possible.

It's also important to get your flu and pneumonia jabs (vaccinations). If you have COPD, getting flu or pneumonia can be very serious. Talk to your doctor and make sure you get protected. You need a new flu jab every year.

Medicines you breathe in

The first treatment you get for COPD will probably be an inhaler, just as you would use if you had asthma. Breathing in medicine through an inhaler helps to open up the airways in your lungs and make breathing easier. There are several kinds of inhaler, so if you find yours hard to use, talk to your doctor. He or she will be able to suggest a different type.

Several types of medication can help relieve the symptoms of COPD when inhaled.

**Bronchodilators** are drugs that help to open up the airwaves by relaxing the muscles around the lungs. There are different kinds: some work quickly to give you fast relief from symptoms and others have a more long-term effect. You may hear your doctor refer to these as short-acting and long-acting drugs. Bronchodilators that you might be prescribed include:

• drugs called beta agonists. These drugs help relax the muscles in the lungs. There are short-acting and long-acting versions.

• anticholinergic drugs. These help relax the muscles in the lungs in a slightly different way from bronchodilators. They also come in short- and long-acting versions.

Other drugs are available if the main ones don't work well enough, but they are less commonly used.
Bronchodilators can cause side effects in some people. For example, bronchodilators called beta-2 agonists may make your hands tremble, or they may make your heart beat faster, especially if you already have a heart problem. Taking a beta-2 agonist for a long time slightly raises your chance of heart problems, so your doctor should monitor you regularly.

If you've already tried short-acting and long-acting inhalers and you still get symptoms, your doctor may suggest you use a steroid inhaler (the full name is corticosteroid). You use this along with a bronchodilator. You may be able to use a single inhaler that contains both drugs.

Corticosteroids help open your airways by reducing inflammation in the lungs. They can help reduce exacerbations and may even help you live longer.

Corticosteroids can cause side effects in some people. The most common side effect is a fungal infection (thrush) in the mouth or throat. It can usually be avoided by gargling with water after each puff. Other possible side effects include weakened bones and easy bruising, but these are more common with steroid tablets than with the inhaled versions.

Corticosteroids can also increase your chances of getting pneumonia. So your doctor will be cautious about prescribing them if he or she thinks you are at high risk of pneumonia.

Doctors use what's called a 'stepwise' approach for COPD medications. This means that you start on the lowest possible dose of medicine that's suitable for the severity of your symptoms. Your doctor can then increase or reduce the dose or number of drugs you use, depending on what helps you most.

For your first 'step' you'll probably use a fast-acting inhaler. You can use this for quick relief when you get breathless. The medicine keeps working for three or four hours.

If fast-acting inhalers don't seem to help much, your doctor may suggest a long-acting inhaler. They don't work as quickly, but the effects last for up to 12 hours. So you only need to take them once or twice a day.

If you are still having severe symptoms, your doctor may suggest that you need oxygen to help you breathe more easily. This will mean keeping a supply of oxygen at home. Your doctor or nurse will explain how to use the equipment.

**Other treatments you may need**

If you cough up a lot of mucus your doctor may suggest you try drugs to break up the mucus. These are called mucolytics and they usually come as tablets.

If you get an exacerbation (a bad sudden attack of COPD symptoms) your doctor may prescribe antibiotics. These will help to kill any bacteria that may be causing an infection and making your breathing worse. Steroid tablets may also help if you have a COPD attack. You'll usually only take them for a short time.
Some people who have an exacerbation need treatment in hospital. If this happens, you may be given oxygen to help you breathe more easily, as well as other treatments.

**Surgery** can help some people with COPD. Types of surgery include bullectomy, where damaged parts of the lungs are removed, and lung transplant surgery. But surgery for COPD is usually only used when all other treatments haven't worked.

**What will happen to me?**

It's hard to say what will happen to you as an individual. Treatments can't repair the damage to your lungs, but they can help stop it getting worse. Some people live with COPD that stays the same for years. For other people, COPD gets worse more quickly.

Stopping smoking helps slow the damage caused by COPD. You are also more likely to do better if you don't have other serious illnesses, if lung problems don't run in your family, and if your symptoms are not severe when you first get treatment.

Trying to keep to a healthy weight can help with your symptoms. For example, people who are underweight tend to do worse, so eating regularly and keeping your strength up is important. On the other hand, if you are overweight, losing some weight could help you breathe more easily.

It's not surprising that COPD can lead to depression in some people. Talk to your doctor if you feel depressed. There are treatments that can help.

Your doctor should see you at least every six months depending on how severe your symptoms are. These regular check-ups help your doctor to monitor whether your medication is as effective as it should be.

**Where to get more help or support**

COPD is a serious condition, and you may find that getting help and support makes your life easier. Various support groups and charities offer help and advice to people with COPD. For example, in the UK, the British Lung Foundation (blf.org.uk) runs Breathe Easy patient groups for people with breathing problems, as well as a helpline.