



# Asthma

## What is asthma?

Asthma is a common, long-term disease. It affects about five million people in the UK. This information is for adults and children over 12 years old.

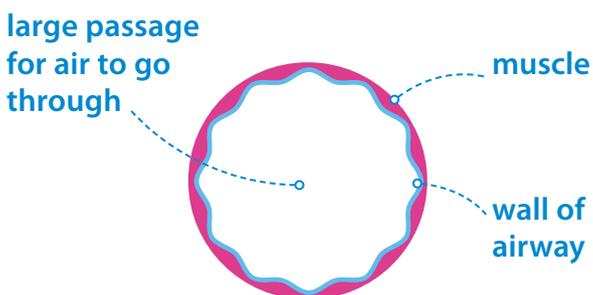
People with asthma have very sensitive airways that become inflamed and tighten when they breathe in anything that irritates them. This can cause chest tightness and wheezing and make it harder to breathe.

Most people with asthma who receive the right treatment – and take it correctly – can control their symptoms and lead normal lives.

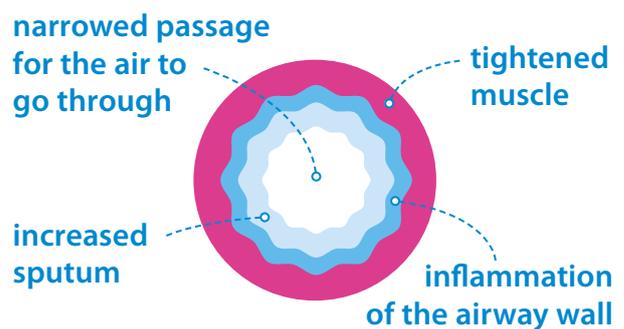
## What happens in asthma?

Your airways carry air in and out of your lungs. If you have asthma, they are very sensitive. Certain things trigger the muscles around your airways to tighten, making your airways narrower. The airway lining also becomes inflamed causing a build-up of sputum. This makes your airways even narrower. With narrow airways, it's harder to get air in and out of your lungs.

### Normal airways



### Airways of a person with asthma



## What causes asthma?

We do not know what causes asthma, but we do know that many things can make it more likely that someone will get asthma. Asthma often runs in families and people who have allergies – especially those under the age of 16 – are at a higher risk.

There are different types of asthma. Asthma associated with allergy usually starts in children. But some people develop asthma as adults and this is often not associated with allergic triggers.

Some people can develop asthma by repeatedly breathing in certain substances, especially while they're at work, for example when they're paint spraying, baking and welding.

## What are the symptoms?

Symptoms of asthma include:

- shortness of breath
- wheezing – making a noise like a whistle when you breathe out
- tightness in the chest
- coughing

Sometimes the airways only narrow a little, resulting in mild symptoms. But some people's airways can become so narrow that they can't get enough oxygen into their lungs and their bloodstream. This is very dangerous and requires immediate medical attention.

## What triggers symptoms?

Anything that irritates and inflames your airways can make your asthma worse. This could be an infection or something you breathe in. The air itself can make asthma worse, for example if you are breathing more quickly or if the air is cold or damp. Common situations – or triggers – are:

- the common cold
- allergies to things like pollen and animal fur
- irritants, like tobacco smoke, spray cleaners and dust
- heightened emotions
- air pollution especially from traffic

Physical activity, particularly running in cold weather, can make asthma worse. This is sometimes called exercise-induced asthma. But don't avoid exercise. Taking your reliever medication before exercise can often prevent symptoms.

## How is asthma diagnosed?

Your health care professional makes a diagnosis of asthma based on your symptoms, family history of allergies and the results of breathing tests.

If you have asthma, your symptoms will tend to:

- come and go over a period of time
- be worse at night and in the early morning
- be made worse when you come into contact with a trigger like smoke

Breathing tests help to confirm the diagnosis. People with asthma symptoms have narrowed airways so they breathe less air out. The amount of air you breathe out is measured by spirometry or by a peak flow meter, which you can use at home. You can read more about breathing tests at [blf.org.uk/breathing-tests](http://blf.org.uk/breathing-tests)



Spirometry



Peak flow

Your health care professional may also do other breathing tests. For example, to measure inflammation of the lung lining or a chest X-ray to help to rule out other lung problems.

## How is asthma treated?

The most common form of treatment is medication taken through an inhaler, also called a pump or a puffer. Inhalers contain measured doses of medication that you take into your airways when you breathe in.

The most common inhalers are **preventer inhalers**, which try to stop asthma symptoms from occurring, and **reliever inhalers**, which relieve asthma symptoms when they do occur.

Different inhalers work in different ways. It's vital you have an inhaler that you can use correctly. It's important that your doctor, nurse or pharmacist:

- teaches you how to use your inhaler correctly when you first use it
- checks you use it properly at every asthma check up

If you don't use your inhaler correctly, the medication won't get into your airways and you won't get the full benefit of it.

## Preventer inhalers

The most important thing in treating asthma is to control the inflammation in your airways.

Preventer inhalers usually contain medication called inhaled steroids. They are similar to substances our bodies make naturally. Inhaling extra steroids every day helps to control the inflammation and reduces symptoms.

The dose of steroid given by an inhaler is usually very low and unlikely to cause any side effects. Occasionally the steroid can make your mouth dry or sore. You can reduce the chance of this by rinsing your mouth with water after using the inhaler, or by using a spacer. A spacer is a large, empty container made of plastic.

Most people with asthma need to take their preventer medication regularly, once or twice a day.



## Reliever inhalers

You only need to take your reliever inhaler when symptoms start. You should take it as early as possible when you get symptoms like wheezing, breathlessness or a tight chest.

Reliever inhalers contain medication called short-acting beta agonists, or SABAs, which relax the muscles around the tightened airways, so the airways can open wider. This makes it easier to breathe and reduces your symptoms. The most common SABA is salbutamol, often known as Ventolin.

Reliever inhalers work very quickly – often within seconds – and you will usually be able to feel the benefit straight away.

## Other treatments for asthma

If your asthma is not under control, your health care professional may suggest other preventer treatments to reduce inflammation. They include a tablet such as montelukast or an injection given in hospital.

It may also help to avoid triggers such as smoke, animal fur and dust. Your health care professional may refer you to a specialist immunologist to treat your allergies. A physiotherapist can give advice on breathing exercises.

You can also help to manage your asthma by:

- maintaining a healthy weight, and keeping fit and active
- having an annual flu jab
- quit smoking if you're a smoker

## Medication to avoid if you have asthma

Most tablets and medicines are safe if you have asthma. But if you have high blood pressure or angina, you should avoid taking beta blockers. These work in the opposite way to your reliever inhaler and bring on asthma symptoms.

Some people with asthma should avoid taking non-steroidal anti-inflammatory drugs – used to relieve pain, reduce inflammation and lower high temperature – including aspirin and ibuprofen. In around one in ten people with asthma, these drugs make symptoms suddenly and severely worse.

## How is asthma managed?

It's important you and your doctor or practice nurse manage your asthma together. Make sure you have regular appointments to review your symptoms and a full review at least once a year.

### What is an asthma review?

An asthma review should cover

- measuring your breathing by spirometry or peak flow
- reviewing your inhaler technique
- discussing your asthma triggers
- adjusting your treatment. If your asthma has been well controlled for six months, it may be possible to reduce your medication
- discussing your asthma action plan

### What is an asthma action plan?

You should agree a written asthma action plan with your health care professional. If you have a plan, you're more likely to control your asthma and be less at risk of a severe attack.

Your plan will cover:

- what's normal for you when your asthma is under control
- which medications you should take
- how to recognise when your asthma gets worse
- what to do about worsening symptoms: who to contact and how to alter your medications. You may be prescribed a rescue course of steroids to keep at home.

In general, your asthma is well controlled if you use your reliever medication up to three times per week, your asthma does not stop you doing anything or wake you up at night, and you haven't had a recent attack.

### What is an asthma attack?

You're having an asthma attack if any of the following happens:

- your reliever isn't helping or lasting over four hours
- your symptoms are getting worse
- you're too breathless or it's difficult to speak, eat or sleep
- your breathing is getting faster and you feel you can't draw in a full breath

## If you have an asthma attack

- Sit comfortably and try to keep calm.
- Take one puff of your reliever inhaler every 30-60 seconds. You can take up to 10 puffs.
- If your symptoms improve, you still need to contact your GP, nurse or out-of-hours service the same day.
- **If you feel worse while you're using your inhaler or you don't feel better after 10 puffs or you're worried, call 999.**
- In this case, take 10 more puffs after 15 minutes, if you need to.

### Important!

This doesn't apply if you're on a SMART or MART regime. Ask your GP or nurse for asthma attack information.

## Further information

We have information online about asthma in children and breathing tests. Visit [blf.org.uk/support](https://blf.org.uk/support) or call our friendly helpline team on **03000 030 555**.

Asthma UK has more detailed information about asthma and you can also download an asthma action plan. Visit [asthma.org.uk](https://asthma.org.uk) or call **0300 222 5800**.

Get in touch with us to find support near you.

Helpline: 03000 030 555

Monday to Friday, 9am-5pm

Ringing our helpline never costs more than a local call and is usually free, even from a mobile.

[helpline@blf.org.uk](mailto:helpline@blf.org.uk)

[blf.org.uk](https://blf.org.uk)

British Lung Foundation  
73-75 Goswell Road  
London EC1V 7ER

Registered charity in England and Wales (326730), Scotland (038415) and the Isle of Man (1177)



**Code:** FL7

**Version:** 3

**Last medically reviewed:** April 2017

**Due for medical review:** April 2020

We value feedback on our information. To let us know your views, and for the most up to date version of this information and references, call the helpline or visit [blf.org.uk](https://blf.org.uk)