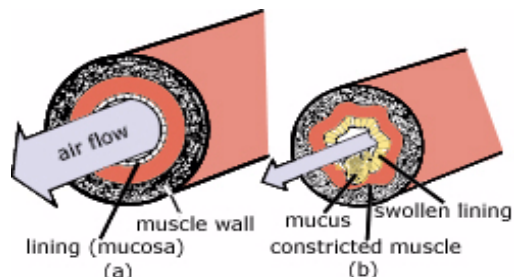


# Asthma

## What is asthma?

*Asthma* is a common chest condition in which there is temporary narrowing of the breathing tubes in the lungs (airways) because they are hyperreactive (oversensitive). In asthma these tubes have inflammation and swelling of their linings, increased mucus inside, tightening of the muscles in their walls and therefore less flow of air in and out.



(a) Normal airway; (b) airway in asthma

## What causes an attack?

No single cause has been found, but a variety of factors may trigger an attack. A check list of trigger factors is:

- infections, especially colds
- allergies (e.g. to animal fur, feathers, pollens, mould)
- house dust, especially the dust mites
- cigarette smoke; other smoke and fumes
- sudden changes in weather or temperature
- occupational irritants (e.g. wood dust, synthetic sprays, chemicals)
- drugs (e.g. aspirin, drugs to treat arthritis, heart problems and glaucoma)
- certain foods and food additives
- exercise, especially in a cold atmosphere
- emotional upsets or stress

## What are the symptoms?

The main symptoms are breathlessness, tightness in the chest, wheezing and coughing (especially at night).

### Severe asthma

Symptoms or signs of very severe asthma are anxiety, blue colour of the lips (*cyanosis*), ashen grey colour of the skin, fast pulse, rapid breathing, indrawing of the chest wall, difficulty speaking, no response to asthma medication and feeling very sick. These uncommon severe symptoms mean that you should seek urgent medical attention—they are 'call the ambulance' signs.

## How common is asthma?

About 1 child in 4 or 5 has asthma, usually in a mild form. It usually comes on between the ages of 2 and 7. Most children 'grow out of it' by puberty, but a small number get it again as

adults. Others continue with it. About 1 in 10 adults has asthma.

## What are the risks?

Severe asthma can retard the growth of children, but the biggest worry (although uncommon) is the number of deaths (including sudden deaths), especially in those who do not realise how severe the attack really is. With correct treatment, almost all children should be able to lead normal lives.

## What is the treatment?

Prevention of attacks is the best treatment, and all asthmatics and their families should aim to know the disorder very well and become expert in it.

### Know your asthma

- Read all about it.
- Try to identify trigger factors and avoid them.
- Become expert at using your medicine and inhalers. A big problem is incorrect inhaler technique (35% of patients).
- Know and recognise the danger signs and act promptly.
- Have regular checks with your doctor.
- Have physiotherapy: learn breathing exercises.
- Work out a clear management plan and an action plan for when trouble strikes.
- Learn the value of a peak expiratory flow meter (for anyone over 6).
- Always carry your bronchodilator inhaler and check that it is not empty. (Learn about the water flotation test.)

### Stay at your best

If you need medications, these should be as simple, safe and effective as possible. This is why inhaled medications are most often used for asthma. There are basically two types of inhaled medication that your doctor might advise you to use:

- the 'preventor' (such as Becotide, Pulmicort, Flixotide, Tilade or Intal)
- the 'reliever' (such as Bricanyl, Respolin, Ventolin or Atrovent), which is called a *bronchodilator*

### Key points

- Get to know how severe your asthma is.
- Avoid trigger factors such as tobacco smoke.
- Keep at your best with suitable medicines.
- Get urgent help when danger signs appear.
- Have an action plan for severe asthma.
- Use your inhalers correctly and use a spacer if necessary.
- Get a peak flow meter to help assess severity and work out your best lung function.