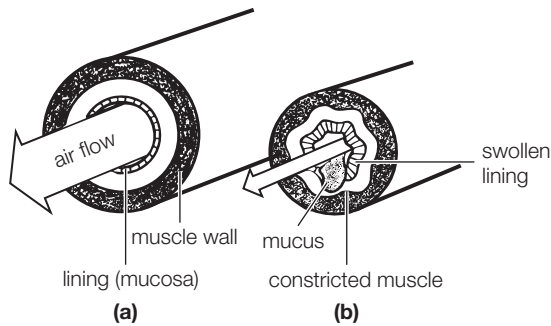


Asthma in children

What is asthma?

Asthma is a common chest condition that affects the small air passages (*bronchi*) of the lungs, which are very sensitive. During an asthma attack these breathing tubes become narrow from the spasm of the muscles in the wall and the secreting of mucus. This makes it harder for the air to flow in and out of the lungs.



(a) Normal airway

(b) Airway in asthma

How common is asthma?

About 1 child in 4 or 5 may wheeze and at least half of these have only mild asthma. It is more common between the ages of 2 and 8 years. Many children appear to 'grow out of it' by puberty, but a small number have it again as adults.

What causes asthma?

Asthma is brought on in different ways for each child, and the time of an attack is often unpredictable. Trigger factors include a cold, a sudden change in weather or temperature, dust, allergies, cigarette smoke, pollens, some animals, certain foods (e.g. peanuts) and certain drugs (e.g. aspirin). Often it is difficult to know what has caused an attack.

How long does an attack last?

It may last from a few hours to a few days. Most children are normal between attacks, although there may be a mild amount of wheezing heard with the stethoscope.

How do I know if my child has asthma?

The main symptoms are a cough, breathing problems and a wheeze. A persistent cough may be a symptom of asthma. The cough is most likely to occur during the night (usually in the early hours of the morning), with cool weather and with exercise. These symptoms should be checked out by your doctor.

What is the medicine for asthma?

There are medicines that really help children with asthma. Three types of medications used in children are:

- *relievers* (such as Bricanyl, Ventolin and Atrovent) that treat the spasm during an attack and are quick-acting— they are called *bronchodilators*
- *preventers* (such as QVAR, Pulmicort, Flixotide, Tilade and Intal) that help prevent attacks by treating the inflammation in the airways
- *new anti-inflammatory agents* (such as Accolate and Singulair) that can be added to the preventers for children with frequent asthma.

If your child is having asthma attacks more than once a month, or needing lots of relievers, talk to your doctor about preventive treatment.

Methods of delivery of medicine

The most effective delivery is by inhalation into the lungs. This can be done using a:

- puffer with a spacer device
- dry powder inhaler
- nebuliser.

It is usual to use spacer devices, which are very effective. They are plastic chambers which make delivery easier to manage and allow the medication to get well into the lungs. In infants and toddlers a face mask attached to the spacer is used to help deliver the aerosol to the lungs.

The Asthma Action Plan

Ask your doctor or asthma nurse educator to provide you with an Asthma Action Plan for an acute attack or for an emergency situation.

A guide to what to do is as follows:

In an acute attack

- Sit the child down and remain calm.
- For coughing and wheezing give reliever medication (4 separate puffs, one puff at a time and take 4 breaths from a spacer) over 4 minutes and then repeat as needed.
- If this fails to control the symptoms, contact your doctor or go to a hospital emergency department.

In an emergency

Call an ambulance if your child is:

- finding it difficult to breathe
- unable to talk
- turning blue
- getting worse quickly
- drawing in the chest wall

and say 'my child is having a severe asthma attack'.

While waiting for the ambulance, give your child 4 puffs of reliever medication (such as Ventolin) every 4 minutes by a spacer device.