

# Asthma



Asthma is a common condition caused by narrowing of the small air passages in the lungs. The narrowing happens when air passages become swollen and inflamed, causing more mucus to be produced. In addition, the muscle bands around the air passages become tighter. These changes make it harder for air to get in and out of the lungs, and cause wheeze, cough and problems with breathing.

Wheezing is very common in babies and toddlers, but not all children with wheeze go on to develop asthma. About one in four children will be diagnosed with asthma sometime during childhood.

With the right treatment, nearly all children with asthma will be able to join in sport and lead active lives. Children with asthma should have an Asthma Action Plan that will tell you how to prevent asthma episodes (sometimes called asthma attacks) and how to manage asthma episodes when they happen.

Asthma can be unpredictable, and affects each child differently. Many children will grow out of their asthma.

## Signs and symptoms of asthma

Common signs that your child is having an episode of asthma are:

- Breathing problems – your child might be out of breath at rest, feel tightness in the chest, have to work hard to breathe, or be unable to complete full sentences due to feeling out of breath. They might seem to be lacking energy.
- Wheezing – when your child's breathing sounds like whistles.
- Coughing – this usually happens at night or early hours of the morning; when the weather is cool; and during exercise. Cough alone does not mean asthma.

The above are the symptoms of a mild asthma episode. These symptoms will often go on for two to three days, and sometimes longer. Most asthma episodes are mild.

In a severe episode of asthma:

- your child might struggle to breathe, become very distressed, exhausted or even limp
- you may see deep sucking movements at their throat or chest as they try to breathe.

**Call an ambulance immediately in a severe episode of asthma.**

## What causes asthma?

The cause of asthma is often not known. It can run in families, and some children's asthma is related to other conditions, such as eczema, hay fever and allergies.

There are many things that can cause an asthma episode. The most common is a respiratory infection caused by a virus, such as a cold. Other common asthma episode causes include:

- exercise
- changes in the weather or windy conditions
- dust mites in the house, pollens or pets.

Cigarette smoke, even on clothes or furniture, can cause an asthma episode, so do not allow anyone to smoke in your home or around your child.

While it is not always possible to know when an episode will occur, it is helpful for you to know what may set off your child's asthma, so you can try to avoid it.

## When to see a doctor

If your child has problems breathing, wheezing or coughing, it is important to take them to the doctor to discuss whether it might be asthma. If your child has asthma, ask your doctor to create an Asthma Action Plan. The plan will tell you how to prevent asthma episodes and how to manage episodes when they happen.

# Treatment – Asthma Action Plans

Your child's Asthma Action Plan should be kept in a place where you can find it easily. Make sure anyone caring for your child knows your child has asthma and understands what to do during an asthma episode.

Prevention is the most important part of treatment. Avoid things that commonly result in an asthma episode, and keep other conditions like hay fever and eczema under control.

The two types of medication most often used by children with asthma are relievers and preventers. In some more serious cases, controllers may be required.

Relievers
Relievers help open up the airways to make it easier to breathe. They relax the narrowing of the breathing tubes and make it easier for air to get through, relieving the symptoms of asthma. They work very quickly – usually in minutes. The most common reliever medication is salbutamol, commonly known as Ventolin.  During an episode of asthma, your child will need their reliever every two to four hours. Once the initial episode has improved, your child will need to keep taking the reliever three to four times a day until the cough and wheeze are gone.  Your doctor may also prescribe prednisolone (a type of steroid). This helps by making the breathing tubes more responsive to Ventolin. It also helps prevent the lining of the air passages from swelling or restricting.
Preventers
Preventers help prevent episodes of asthma from happening. Flixotide or Pulmicort are preventers that are inhaled, and Singulair is a preventer in tablet form. Preventer medicines have to be taken every day.  Not all children need preventer medicine. If your child is showing symptoms of asthma more than once a week, your doctor may suggest preventer medicine. Children taking preventers need to see the doctor regularly, to make sure the medicines are working well. The doctor will adjust the dose of medicine as needed.
Controllers
When symptoms of asthma cannot be controlled by preventers alone, a group of medicines called symptom controllers, such as Serevent and Formoterol, may also be used. They help in a similar way to Ventolin and Bricanyl, but are long-acting. Symptom controllers are always used in addition to preventers, and are often combined into one inhaler.

## Giving asthma medicine

Inhalation is the best way to take most asthma medicines. Nebulisers are machines that change liquid medication into a vapour that can be inhaled through a mask or mouthpiece. Most children will use spacer devices with puffers, which work just as well as nebulisers. Spacer devices are cheaper, faster and much more portable than nebulisers, which are usually used in hospitals and ambulances.

Make sure your child knows how to take their asthma medications, and that you understand how to assist them. See our fact sheet [Asthma – use of spacers](http://rhc.org.au/kidsinfo/fact_sheets/Asthma_use_of_spacers) (rhc.org.au/kidsinfo/fact\_sheets/Asthma\_use\_of\_spacers).

Make sure your child carries their asthma medication with them at all times.

## What to do during an episode of asthma

If your child is having an asthma episode, follow the advice in your child's Asthma Action Plan, or follow the below 4x4x4 asthma first aid steps:

1. Sit your child comfortably upright and remain calm.
2. Shake a blue reliever puffer and give four separate puffs through a spacer, if available. Give one puff at a time and ask your child to take four breaths from the spacer after each puff.
3. Wait four minutes. If there is no improvement in your child's asthma repeat step 2.
4. **If there is still no improvement, call an ambulance immediately.** State that your child is having an asthma emergency. Continuously repeat steps 2 and 3 while waiting for the ambulance.

## Key points to remember

- Ask your doctor for an Asthma Action Plan.
- Reliever treatment should be taken to relieve symptoms of asthma.
- Preventer treatment should be taken every day, if it has been prescribed by your doctor.
- Make sure your child knows how to take their asthma medications, and that you understand how to assist them.
- Make sure your child carries their asthma medication with them at all times.

- If your child has an asthma episode, follow their Asthma Action Plan or the 4x4x4 asthma first aid steps.
- **Call an ambulance if your child's symptoms get worse very quickly, or if they are severely short of breath, unable to talk, or their lips turn blue.**

## For more information

- Kids Health Info: [Asthma – Use of spacers](http://rch.org.au/kidsinfo/fact_sheets/Asthma_Use_of_spacers) (rch.org.au/kidsinfo/fact\_sheets/Asthma\_Use\_of\_spacers)
- Kids Health Info: [Asthma - videos](http://rch.org.au/kidsinfo/fact_sheets/asthma-videos) (rch.org.au/kidsinfo/fact\_sheets/asthma-videos)
- Better Health Channel: [Asthma Emergency first aid](http://betterhealth.vic.gov.au/health/conditionsandtreatments/asthma-emergency-first-aid) (betterhealth.vic.gov.au/health/conditionsandtreatments/asthma-emergency-first-aid)
- [National Asthma Council Australia](http://nationalasthma.org.au) (nationalasthma.org.au)
- [Asthma Australia](http://asthmaaustralia.org.au/vic/home) (asthmaaustralia.org.au/vic/home)
- [ASCIA- Australia Society Clinical Immunology and Allergy inc.](http://allergy.org.au) (allergy.org.au)
- Community Asthma Program in Victoria's [western region](http://cohealth.org.au/health-services/child-and-family-health/community-asthma-program-cap) (cohealth.org.au/health-services/child-and-family-health/community-asthma-program-cap) or Victoria's [northern region](http://dpvhealth.org.au/all-services/community-asthma-program) (dpvhealth.org.au/all-services/community-asthma-program).



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