

Asthma in children

Emergency Department factsheets



What is asthma?

Asthma is a common condition where the small airways of the lungs become narrowed by inflammation. During an asthma attack the lining of the airways swell, there is a build-up of mucous (phlegm) and the muscles around the airways tighten (bronchoconstriction). This narrowing of the airways makes breathing difficult and causes wheezing (breathing sounds like whistles).

One in four children, one in seven teenagers and one in ten adults suffer from wheezing at some stage, particularly associated with a viral illness in the very young. Some, but not all, of these will progress to develop asthma. Asthma can occur in very young children, although it is difficult to diagnose in children under the age of one.

What causes asthma?

Asthma can affect anyone and it is not known what causes it. There is evidence that smoking during pregnancy or around young children may increase the risk of them developing asthma. Those with a family history of asthma, eczema or hay fever are more likely to be affected.

Children with asthma have sensitive airways. Doctors are not exactly sure why this is. A number of things may 'trigger' or bring on an asthma attack. The most common trigger in children is a common cold or virus. Other common triggers are cigarette smoke, exercise, changes in weather and allergies such as to pet hair, pollens, mould and dust mites.

What are the symptoms?

Your child may have any of the following:

- coughing (usually a dry cough)
- wheezing (a whistle in the chest when breathing)
- difficulty breathing

- working hard to breathe, sometimes trying to 'suck in' air
- tightness in the chest
- an increased rate of breathing.

The symptoms vary from child to child. An asthma attack can take a few minutes to develop (such as when a child comes in contact with a trigger) or may come on gradually (such as with a cold).

Treatment

There are different medications to help children with asthma. These are commonly given through a metered dose inhaler (MDI), or a 'puffer'.

- **Relievers (blue puffers):** Such as *Ventolin* and *Bricanyl*, which rapidly open narrowed airways.
- **Preventers:** Such as *Pulmicort* and *Flixotide*, which treat the inflamed airways and are taken every day.
- **Controllers:** Such as *Serovent* are used in addition to a preventer when symptoms are not controlled. They are generally a long acting version of a drug similar to *Ventolin*, and combined in an inhaler with a preventer (such as *Symbicort*). **THEY ARE NOT TO BE USED ALONE OR AS EMERGENCY TREATMENT.**

In the emergency department your child may have been given large doses of reliever to help open the airways. They may feel 'shaky', or want to run around more. These are all normal side-effects of the medication and will wear off in time.

The reliever may have been given through a spacer, which allows children to breathe the medication deep into the lungs. A spacer is a clear tube that can be bought from a pharmacy. It is portable and easy to use. Spacers come in

a variety of shapes and sizes, depending on your child's age.

In the emergency department, your child may have been given a medication called prednisolone (a steroid) to help reduce swelling in the airways. It usually takes four to six hours to work. You may be instructed to give your child more doses of prednisolone at home to help their asthma while they are unwell.

Antibiotics and antihistamines are NOT helpful in treating asthma in children

What should I do in an emergency?

If your child has difficulty breathing or their asthma gets worse, follow their Asthma Action Plan. If they do not have one, use the Asthma First Aid Plan below.

Asthma First Aid Plan

Step 1) Sit your child upright and give reassurance. Do not leave your child.

Step 2) Without delay give six puffs of a reliever such as *Ventolin* (if your child is six or under) or 12 puffs (if your child is over six) through a spacer. The medication is best given one puff at a time followed by four normal breaths then another puff and so on.

Step 3) Wait five minutes. If there is little or no improvement repeat steps 2 and 3.

Step 4) If your child is getting worse, or can't speak, is pale or blue around the lips, or sweaty, call an ambulance (dial 000) without delay.

If there is improvement, you should have your child reviewed by a doctor that day – either at your local doctor or hospital emergency department

Continuously repeat steps 2 and 3 while waiting for an ambulance.

Home care

- Make sure your child uses their asthma puffers as directed.
- Get to know how to use the puffer and spacer correctly, how often and how much to use.
- Your child's puffers should be with them at all times. An older child can treat their own asthma.
- Always use a spacer to give 'puffer' medication especially in children under six years of age. Clean the spacer regularly with warm soapy water and allow to 'air' dry.
- Help your child to stay active and healthy. There is no need to restrict their activity when asthma is properly controlled.
- Ask your local doctor for an Asthma Action Plan. This will help prevent asthma attacks, warn you when your child's asthma is getting worse and teach you what to do. A copy of the plan should be given to the child's day care centre, kindergarten or school.
- Take your child to your local doctor for regular check-ups.
- Do not stop your child's medication unless your doctor tells you to.
- Do not allow people to smoke in your home, car or around your children.

Follow-up

You should take your child to see your local doctor in the next day or two, especially if your child is not getting any better or is getting worse. When your child has recovered you should visit your local doctor. This is the best time to work out an Asthma Action Plan.

What to expect

- In mild cases you will be able to treat your child's asthma at home.
- Some children need to be observed in hospital during an asthma attack.

- With the right treatment, most children with asthma can join in sports, leisure activities and lead active lives.
- Children with asthma tend to have fewer attacks as they get older. By adulthood, two out of three will no longer have asthma attacks.

Seeking help

In a medical emergency, go to the nearest hospital emergency department or call an ambulance (dial 000).

For other medical problems see your local doctor or health-care professional.

13 HEALTH (13 43 25 84) provides health information, referral and teletriage services to the public in all parts of Queensland and is available 24 hours a day, 7 days a week, 365 days a year for the cost of a local call*.

*Calls from mobile phones may be charged at a higher rate. Please check with your telephone service provider

Disclaimer: This health information is for general education purposes only. Please consult with your doctor or other health professional to make sure this information is right for you.

Want to know more?

Visit the Ambulances for asthma website

www.ambulancesforasthma.net.au

Contact the Asthma Foundation Queensland

Phone 1800 645 130

www.asthmaqld.org.au

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