What is asthma?

Asthma occurs when the small airways of the lungs become sensitised and then inflamed. During an asthma attack this inflammation leads to swelling of the lining of the airways. In addition, there is a build up of mucus (phlegm) and the muscles around the airways tighten (bronchoconstriction). These factors cause narrowing of the airways and make breathing difficult.

One in four children, one in seven teenagers and one in 10 adults suffer from 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.

Doctors are not exactly sure why children with asthma have sensitive airways. A number of things may ‘trigger’ or bring on an asthma attack. The most common trigger in children is viral infections such as the common cold. Other common triggers are cigarette smoke 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).

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 up to six puffs of a reliever such as Ventolin (if your child is six or under) or up to 12 puffs (if your child is over six) through a spacer. Shake the puffer before use. 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. Continuously repeat steps 2 and 3 while waiting for an ambulance.

Treatment

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

- Relievers – such as Ventolin and Bricanyl, which rapidly open narrowed airways.
- Preventers – these come in the form of puffers or tablets. Pulmicort and Flixotide are puffers that treat the inflamed airways and are taken every day. Singulair is a tablet that is taken daily.

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. It also reduces the amount of medicine deposited at the back of the throat, which does not reach 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 the airway inflammation and swelling. This 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 (the usual course of prednisolone is three days, given once per day).

Antibiotics, antihistamines and cough medicine are not helpful in treating asthma in children.

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.
- For health advice from a Registered Nurse you can call NURSE-ON-CALL 24 hours a day on 1300 60 60 24 for the cost of a local call from anywhere in Victoria.*

*Calls from mobile calls may be charged at a higher rate

Want to know more?

- Ask your local doctor or health care professional.
- Visit the Royal Children’s Hospital website www.rch.org.au/kidsinfo
- Visit the Ambulances for Asthma website www.ambulancesforasthma.net.au
- Contact Asthma Victoria Phone 1800 645 130 www.asthma.org.au
- Phone Quit line on 137 848 www.quit.org.au
- Visit the Better Health Channel www.betterhealth.vic.gov.au

Follow up

Your local doctor should be able to help you with this episode of asthma and with longer-term management. 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 to work out an Asthma Action Plan.