

Asthma in the under 5s

Information for parents and carers of young children with asthma



Asthma facts

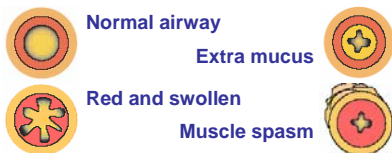
Approximately 1 in 6 (15%) of Australian children have currently diagnosed asthma. Asthma is one of the most common causes of hospital admission and visits to the doctor in this age group.

What is asthma?

People with asthma have sensitive airways in their lungs. When they are exposed to certain triggers their airways narrow, making it hard for them to breathe.

Three main factors cause the airways to become narrow:

- The inside lining of the airways becomes red and swollen (inflammation)
- Extra mucus (sticky fluid) may be produced
- The muscle around the airways tightens (bronchoconstriction).



How do you recognise asthma?

- A dry, irritating, persistent cough, particularly at night, early morning, with exercise or vigorous play
- Chest tightness
- Shortness of breath/ "tummy" breathing
- Wheeze (noisy breathing when breathing out)

Children with asthma may have one of more of the above symptoms. They often describe their symptoms as a sore tummy, sore chest, or a frog in their throat.

Asthma triggers

- Colds and 'flu (most common trigger in young children)
- Cigarette smoke
- Exercise/activity
- Inhaled allergens (e.g. pollens, moulds, animal dander and dust mites)
- Environmental (e.g. dust, pollution, wood smoke, bush fires)
- Changes in temperature and weather
- Certain medications (e.g. aspirin)
- Chemicals and strong smells (e.g. perfumes, cleaners)
- Emotional factors (e.g. laughter, stress)
- Some foods and food preservatives, flavourings and colourings (uncommon)

Every child's asthma is different. Not all children will have the same triggers, nor will they react to every trigger listed above. You may not always know what triggers your child's asthma. It is helpful to identify triggers in order to avoid them however this is not always possible (e.g. colds and flu). Your doctor or local Asthma Foundation will assist you.

How is asthma diagnosed in children?

- A pattern of repeated episodes of cough/wheeze or shortness of breath
- A persistent cough or "chestiness" that lingers long after a cold or 'flu
- Improvement in symptoms after a trial of asthma medications
- A family history of asthma or allergy

Note: It is often difficult to diagnose young children with asthma, as many children have asthma-like symptoms of cough and wheeze. Doctors may prescribe asthma medications to treat these symptoms, even without a diagnosis of asthma.

Will my child "grow out" of asthma?

It is impossible to predict if your child will "grow out" of asthma. Children may experience long periods free of asthma symptoms, however asthma may re-occur at any time.

Children are more likely to continue to have asthma in adult life if they:

- Have allergies
- Are female
- Have a parent, brother or sister with asthma
- Are exposed to cigarette smoke or
- Continue to be exposed to high levels of allergens
- Are at an older age when asthma first occurs
- Have sensitive airways and
- Have severe, persistent asthma

Asthma medications

There are three main groups of asthma medications:

- Preventers
- Relievers
- Symptom Controllers

Please note that medications other than those listed here are also available, but have not been included as either the medication itself, or the delivery device is generally not suitable for children under five years of age. See your doctor for further information or ask your local Asthma Foundation for a copy of the brochure "Asthma Medications and Delivery Devices".

1. Preventers

Inhaled medications: *Flixotide (orange), Intal Forte (white), Qvar (brown), Tilade (yellow)*

Oral medications: *Singulair, Prednisolone, Prednisone*

Preventers make the airways less sensitive, reduce the redness and swelling inside the airways and dry up the mucus. It may take a few weeks for preventers to reach their optimal effect.

Preventers must be taken daily to keep you well, reduce the risk of asthma attacks and to prevent lung damage. A number of these medications are corticosteroids (more commonly known as 'steroids'). They are similar to steroids that we produce naturally in our bodies. They are not the same as the anabolic steroids misused by some athletes.

Important points

- Some children may only need preventers for a set period while other children need to take preventers all year round
- Preventers need to be taken at the same time each day at the dosage prescribed by your child's doctor

- Preventers take time to work, so an improvement in your child's symptoms may not be noticed for a couple of weeks. Do not stop your child's preventer medication after only a few days
- When your child is well (no asthma symptoms and rarely using his/her blue reliever), talk to your child's doctor about a review of his/her medications
- Make sure you ask your child's doctor if you have any questions or concerns about his/her asthma medication and/or asthma delivery devices

2. Relievers

Inhaled medications: *Airomir, Asmol, Epaq, Ventolin (blue)*

Relievers provide relief from asthma symptoms within minutes. They relax the muscles around the airways for up to four hours, allowing air to move easily through the airways.

Important points

- Keep your child's blue reliever medication with him/her at all times. It is the only medication to use in an asthma emergency
- If your child is using reliever medication more than three times per week to ease asthma symptoms it may be a sign that his/her asthma is not well controlled. Keep using your reliever medication as required but visit your child's doctor for a review of his/her asthma

Note: Atrovent (green) is a different type of medication that may be prescribed. Ask your child's doctor for further information. This medication can keep the airways open for up to six to eight hours. It can take up to 30 minutes to work and is more commonly used for other lung conditions.

If any or all of the following symptoms occur:

- Wheezing (noisy breathing)
 - Coughing, particularly at night or early morning, or during play
 - Shortness of breath/"tummy" breathing
- Use a blue reliever medication such as *Airomir, Asmol, Epaq or Ventolin*

3. Symptom Controllers

Serevent (green)

Symptom Controllers (also called Long Acting Relievers) help to relax the muscles around the airways for up to 12 hours. They are taken daily and are only prescribed for children who are aged over four years and are taking regular inhaled 'steroid' preventers.

Seretide (Flixotide and Serevent - purple)

Combination medications combine a Preventer with a Symptom Controller in the same delivery device.

Combination medications need to be taken at the same time each day at the dosage prescribed by your child's doctor. It is usually used for children aged four years and over.

Treatment of acute asthma

When there is little response to relievers, the doctor may prescribe a short course of oral steroids in liquid form (Redipred/Predmix) or tablets (Prednisolone). These are used to reduce the inflammation in the airways and quickly regain control of asthma in an acute attack or when symptoms persist.

When used in short courses of 3-5 days, a few times a year, oral steroids are generally free of significant side effects. They may cause side effects when used in high doses for weeks to months at a time. This treatment should be discussed with your child's doctor.

How are asthma medications given to young children?

All children under five years should use a puffer and small volume spacer to take their medication. Children under four years should use a facemask attached to their spacer. (This does not apply to oral medications e.g. Singulair).

What is a spacer?

A spacer is a clear plastic tube that has a mouthpiece or a facemask attached at one end and an opening at the other end for the puffer. This is the easiest way to give inhaled medications. More medication reaches the lungs if a spacer is used with the puffer.

Spacers come in many shapes and sizes. You should choose one appropriate for your child's medication, his/her age and ability. For more information talk to your doctor, pharmacist or local Asthma Foundation.

Does my child need a nebuliser?

Most children get the same effect by using a puffer and spacer. In most cases it is not necessary to have a nebuliser at home. All medications delivered through a nebuliser are also available in a puffer.

For more information talk to your doctor or local Asthma Foundation.

How do I clean my child's puffer?

Your child's puffer should be cleaned every week* to prevent blockage from the build-up of medication.

- Remove metal canister. Do not wash canister
- Wash the plastic casing only. Rinse the mouthpiece through the top and bottom under warm running water for at least 30 seconds. Wash mouthpiece cover
- Allow to air dry
- Re-assemble
- Test the puffer to make sure there isn't any water remaining in it

(**Intal Forte and Tilade* puffers should be cleaned every day.)

How do I clean my child's spacer?

Spacers are cleaned every two weeks, more often if the valve becomes blocked or the spacer is cloudy.

- Wash in warm soapy water
- Do not rinse
- Allow to air dry. Do not wipe

Getting the most out of your child's asthma medications

The aim of delivery devices (puffers/spacers) is to get the maximum amount of medication into your lungs with minimum side effects. It is important to:

- Know how to care for and clean your child's medication devices
- Ensure there is medication left in your child's device
- Ensure that your child's medication has not expired
- Use a spacer with a puffer to minimise side effects and deliver more medication to your child's lungs
- Have your/your child's technique regularly checked by your doctor, pharmacist or asthma educator

How should I manage my child's asthma?

- Find a doctor who has a keen interest in asthma and have regular reviews of his/her asthma
- Develop an Asthma 3+ Visit Plan with your child's doctor
- Ask your child's doctor for a written Asthma Action Plan
- Avoid things that make your child's asthma worse (triggers)
- Know your child's asthma symptoms and how to treat them
- Make sure your child uses asthma medications correctly
- Recognise signs of worsening asthma and following your child's written Asthma Action Plan
- Know your child's Asthma First Aid Plan and how to use it
- Inform your family members/child's caregivers about his/her asthma and how they can provide Asthma First Aid

What is an Asthma Action Plan?

An Asthma Action Plan is a written set of instructions prepared in partnership with your child's doctor that assists you to manage their asthma at different times.

This plan should help you to:

- Recognise worsening asthma symptoms
- Start treatment quickly
- Seek the right medical assistance

Early attention to worsening asthma may prevent your child from having a serious attack. Ask your child's doctor for a written Asthma Action Plan.

How do I recognise signs of worsening asthma in my child?

Signs of worsening asthma include:

- Increasing night-time wheeze, cough or shortness of breath
- Having symptoms regularly in the morning when he/she wakes up
- Having a need for extra doses of reliever medication
- Having symptoms during activity and play

What is the Asthma 3+ Visit Plan?

The Asthma 3+ Visit Plan involves a minimum of three visits with your child's doctor over a four month period to discuss and plan asthma care for children with moderate to severe asthma. Asthma 3+ Visit Plans encourage a partnership between you and your child's doctor with the focus being assessment, regular review and asthma education. Ask your doctor for more information.

Should I alter my child's diet?

Dietary restrictions are usually not necessary unless there is a proven food allergy (e.g. peanuts, eggs). Dairy foods are an important source of calcium for strong bones and teeth. There is no medical basis for the widely held view that dairy foods increase mucus production in the airways. A healthy balanced diet should include a wide variety of nutritious foods. Speak with your doctor if you think your child has a food allergy.

What should I do in an emergency?

If a child has difficulty breathing or his/her asthma becomes worse, follow the Asthma First Aid Plan (shown below) while waiting for the ambulance to arrive.

What if it is the first attack of asthma?

If a child has difficulty breathing and it is not known whether he/she has asthma, no harm is likely to result from giving reliever medication. In this situation call an ambulance immediately (**DIAL 000**).

ASTHMA FIRST AID PLAN

Step 1. Sit the child upright and give reassurance. Do not leave the child alone.

Step 2. Without delay give 4 separate puffs of a reliever (*Airomir, Asmol, Epaq or Ventolin*). The medication is best given one puff at a time via a spacer device*. Ask the person to take 4 breaths from the spacer after each puff of medication.

Step 3. Wait 4 minutes. If there is little or no improvement repeat steps 2 and 3.

Step 4 If there is still no improvement call an ambulance immediately (DIAL 000**).**

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

If the child's condition suddenly deteriorates or you are concerned at any time call an ambulance immediately. (Dial 000)

****If a spacer is not available, simply use the puffer on its own.***

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(office hours) for professional, confidential and independent information about asthma

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