A close-up photograph of a young child with blonde hair, smiling broadly. The child is wearing a red shirt and is being held in a black carrier by a person whose arm and shoulder are visible on the left. The background is a bright, clear sky.

# Asthma in the under 5s

Information to help parents and carers of  
young children with asthma

**ASTHMA  
FOUNDATIONS**  
AUSTRALIA

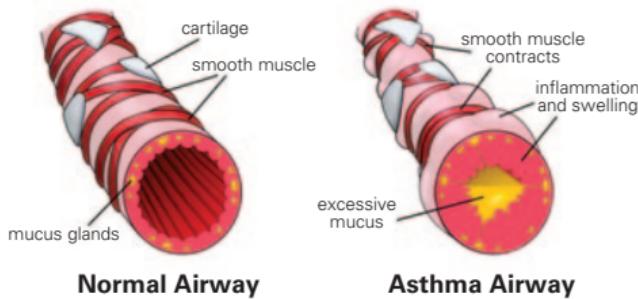
*Disclaimer: Information in this brochure is not intended to replace professional medical advice. Any questions regarding a medical diagnosis or treatment should be directed to a medical practitioner*

## Asthma facts

Approximately 1 in 9 (11%) 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?

Children with asthma have sensitive airways in their lungs. When exposed to certain triggers, their airways narrow, making it hard 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?**

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

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

## **Asthma triggers**

Every child's asthma is different. Not all children will have the same triggers, nor will they react to every trigger listed below. Common triggers may include

- Colds and flu
- Exposure to cigarette smoke (passive smoking)
- Exercise/activity
- Inhaled allergens (e.g. pollens, moulds, animal dander and dust mites)
- Environmental factors (e.g. dust, pollution, wood smoke and bush fires)
- Changes in temperature and weather
- Certain medications (e.g. ibuprofen)
- Chemicals and strong smells (e.g. perfumes, deodorants and cleaners)
- Emotional factors (e.g. laughter, stress)
- Some foods and food preservatives, flavourings and colourings

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). Exercise/activity is the only trigger that should not be avoided. 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. Recurrent or persistent cough in the absence of wheeze or shortness of breath is less likely to be due to asthma
- 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 wheeze and cough. 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 given the right circumstances.

About half of the children who wheeze in the first 3 years of their life do not have asthma and will stop wheezing by the time that they enter school.

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
- Are continually exposed to moderate levels of allergens (those with exposure to either low or high levels of allergens will have a lower risk of asthma)
- Are older when asthma first occurs
- Have sensitive airways
- Have severe, persistent asthma

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 or Ventolin

Please note that medications other than those listed in this brochure 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*.

## Asthma medications

There are three main groups of asthma medications:

1. Relievers
2. Preventers
3. Symptom controllers

### 1. Relievers

*Inhaled medications – Airomir, Asmol, Ventolin (blue)*

Relievers provide relief from asthma symptoms within minutes by relaxing the muscles around the airways for up to four hours.

### 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 the reliever medication as required but visit the doctor for a review of his/her asthma

Singulair is a non-corticosteroid preventer medication that may be prescribed by your doctor. It is a tablet that is taken daily and may be used on its own or in addition to corticosteroid medication. Ask your doctor for further information.



## Treatment of acute asthma

When there is little response to relievers, the doctor may prescribe a short course of oral corticosteroids in liquid form (Redipred/Predmix) or tablets (Prednisolone/Prednisone). 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, or when more frequent short courses are used. This treatment should be discussed with your doctor.

## 2. Preventers

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

*Oral medications – Singulair*

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 full effect.

Preventers must be taken daily to keep your child 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 (e.g. seasonal) 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 their symptoms may not be noticed for a couple of weeks. Do not stop your child's preventer medication after only a few days
- Preventers are safe for your child to use every day and they can reduce the risk of life threatening asthma attacks
- Most children can successfully control their asthma with a non-steroid preventer or low doses of inhaled corticosteroids. Discuss with your doctor whether your child's corticosteroid dose is appropriate

## 3. Symptom controllers

Symptom controllers (also called long acting relievers) help to relax the muscles around the airways for up to 12 hours. They are taken daily, usually at morning and night, and can only be prescribed for people who are taking regular inhaled corticosteroid preventers, and are still experiencing asthma symptoms.

Symptom controllers are not generally used in children under 5.

## Combination medications

*Inhaled medications – 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. Combination medications are usually used for children aged four years and over who have persistent asthma which is not controlled with regular inhaled steroid preventers.



## **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 two years should use a face mask attached to their spacer. From three to five years of age children should use a small volume spacer with a mouthpiece, as this reduces the amount of medication that is deposited in the nose. However if the child is more comfortable, a face mask can be used with a small volume spacer up to five years of age. (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 face mask 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.

### **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, pharmacist, asthma educator 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.

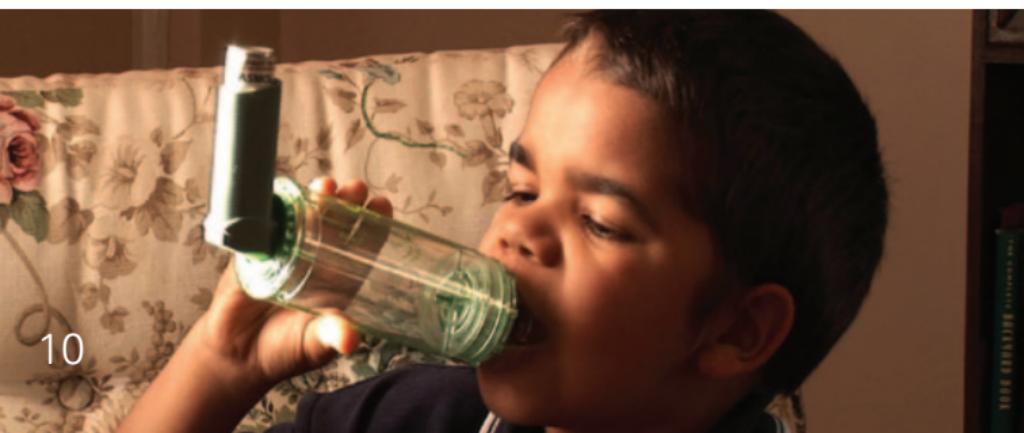
- Remove metal canister. Do not wash canister
- Wash the plastic casing only. Rinse the mouthpiece through the top and bottom under warm running water for at least 30 seconds. Wash mouthpiece cover
- Allow to air dry
- Re-assemble
- Test the puffer to make sure there isn't any water remaining in it

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

## **How do I clean my child's spacer?**

Spacers are cleaned every four weeks or more often if the valve becomes blocked.

- Wash in warm soapy water
- Do not rinse
- Allow to air dry. Do not wipe the spacer as this will regenerate a static charge and reduce medication delivery



## **Getting the most out of your child's asthma medications**

Inhalers need to be used correctly to ensure maximum benefits are achieved with minimum side effects. It is important to:

- Have your child's technique regularly checked by their doctor, pharmacist or asthma educator
- Have your child use a spacer with a puffer to minimise side effects and deliver more medication to their lungs (a spacer is a device into which you fire medication from a puffer and inhale)
- Check that there is medication left in your child's inhaler (some inhalers have a counter)
- Check that your child's medication has not expired
- Know how to care for and clean your child's medication devices
- When your child is well (no asthma symptoms and rarely using their blue reliever), talk to their doctor about a review of their medications
- Make sure you ask their doctor, pharmacist or asthma educator if you have any questions or concerns about your child's asthma and/or delivery devices

## Managing your child's asthma effectively

- Have regular reviews of your child's asthma and ask their doctor for a written Asthma Action Plan
- Provide a copy of your child's Asthma Action Plan to people who regularly care for your child; for example child care services, kinder, babysitters and grandparents
- Avoid things that make your child's asthma worse (triggers)
- Know your child's asthma symptoms and how to treat them
- Make sure you know how to use your child's asthma medications correctly
- Recognise signs of your child's worsening asthma and follow their Asthma Action Plan
- Know your child's Asthma First Aid Plan and how to use it
- Inform others about your child's asthma and how they can provide Asthma First Aid
- Discuss with your doctor whether your child's medication doses are appropriate and if your child has been well controlled for some time, whether the dose they are on could be reduced.

## 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 helps 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 the 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
- Needing extra doses of reliever medication
- Having symptoms during activity and play

## **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 to do in an asthma emergency**

If a child's condition suddenly deteriorates or you are concerned at any time call an ambulance immediately (Dial 000) and state that the person is having an asthma attack.

In an asthma emergency follow the Asthma First Aid Plan located opposite.

## **What if it is the first attack of asthma?**

If a child has difficulty breathing and is not known to have asthma, call an ambulance immediately and follow the Asthma First Aid Plan. No harm is likely to result from giving a blue reliever puffer.

# Asthma First Aid

**1**

**Sit the person upright,  
be calm and reassuring.**

Do not leave them alone.

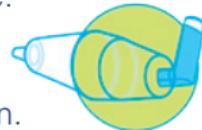


**2**

**Give 4 separate puffs of  
a blue reliever\***

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. If a spacer is not available, use the blue reliever puffer on its own.



**3**

**Wait 4 minutes.**



**4**

**If there is little or no improvement  
repeat steps 2 and 3.**

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

Continue to repeat steps 2 and 3 while waiting for the ambulance.



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

For further information:

**1800 645 130**

(office hours)

[www.asthmaaustralia.org.au](http://www.asthmaaustralia.org.au)

**ASTHMA FOUNDATIONS AUSTRALIA**



\*A Bricanyl Turbuhaler may be used in first aid treatment if a puffer and spacer is unavailable.

## Asthma Foundations

### New South Wales

Level 3, 486 Pacific Hwy  
ST LEONARDS NSW 2065  
Ph: (02) 9906 3233  
Fax: (02) 9906 4493  
Email: ask@asthmansw.org.au  
[www.asthmansw.org.au](http://www.asthmansw.org.au)

### Victoria

491 - 495 King Street  
WEST MELBOURNE, VIC 3003  
Ph: (03) 9326 7088  
Fax: (03) 9326 7055  
Email: advice@asthma.org.au  
[www.asthma.org.au](http://www.asthma.org.au)

### Queensland

51 Ballow St  
FORTITUDE VALLEY QLD 4006  
Ph: (07) 3252 7677  
Fax: (07) 3257 1080  
Email: info@asthmaqld.org.au  
[www.asthmaqld.org.au](http://www.asthmaqld.org.au)

### South Australia

300 South Road  
HILTON SA 5033  
Ph: (08) 8238 9300  
Fax: (08) 8238 9303  
Email: info@asthmasa.org.au  
[www.asthmasa.org.au](http://www.asthmasa.org.au)

### Australian Capital Territory

PO Box 687  
WODEN ACT 2606  
Ph: (02) 6286 4414  
Fax: (02) 6286 4475  
Email: info@asthmaact.org.au  
[www.asthmaact.org.au](http://www.asthmaact.org.au)

### Tasmania

139 New Town Road  
NEW TOWN TAS 7008  
Ph: (03) 6228 5631  
Fax: (03) 6228 9088  
Email: info@asthmatas.org.au  
[www.asthmatas.org.au](http://www.asthmatas.org.au)

### Northern Territory

Unit 14, 16 Charlton Court  
WOOLNER NT 0820  
Ph: (08) 8981 6066  
Fax: (08) 8981 9066  
Email: asthmant@asthmant.org.au  
[www.asthmant.org.au](http://www.asthmant.org.au)

### Western Australia

36 Ord St  
WEST PERTH WA 6005  
Ph: (08) 9289 3600  
Fax: (08) 9289 3601  
Email: ask@asthmawa.org.au  
[www.asthmawa.org.au](http://www.asthmawa.org.au)

## Call

**1800 645 130** (office hours)

for professional, confidential and  
independent information about asthma

[www.asthmaaustralia.org.au](http://www.asthmaaustralia.org.au)