

ASTHMA MEDICATIONS

During an asthma 'attack', your child may need reliever medication urgently.

A child with asthma has inflammation within the breathing tubes (airways) of the lungs, making these sensitive and over-reactive to triggers like colds, allergies or exercise. This reaction makes the airways narrower and harder to breathe through.

The purposes of asthma treatment are:

- to make the airways wider so the child can breathe easily
- to settle down the inflammation within the lungs that causes the symptoms.

The overall aim is to find just the right amount of medication needed to prevent asthma symptoms, while avoiding giving your child unnecessary medication.

There are two main types of medications used in children: relievers and preventers. For most children, the only medication they need is a reliever to use when asthma symptoms occur. Some children also need ongoing treatment with a preventer medication to settle inflammation over time.

Almost all asthma can be managed effectively with medications. Good asthma control means a child can be active and enjoy life as much as children without asthma.

How well asthma is controlled may vary from season to season and may change over time, so your child's treatment plan might need to be altered from time to time.

The treatment that is best for your child will depend on individual factors including the type of asthma symptoms and when they occur, whether your child's airways are very inflamed and sensitive or just a little, and your child's age. Your doctor will weigh up all the possible benefits and unwanted effects of each option. You can ask your doctor to explain the reasons for prescribing a particular medication.

The information below includes examples of medications available in Australia that are commonly used to manage children's asthma. This applies to children under 12 years old.

For safety information and more details about each medication, read the *Consumer Medicine Information* leaflet inside the package and ask your doctor or pharmacist if you have any questions.

Relievers

These medications are taken when needed to relieve the symptoms of asthma such as wheeze and breathlessness.

All children with asthma need a reliever, and most children don't need any other medications.

How relievers work

Relievers reduce the symptoms of asthma by opening the airways (breathing tubes).

These should not be taken as a regular medication, but only when the child has asthma symptoms (including attacks and emergencies) or before exercise (for children who get asthma symptoms when they exercise).

What you should know

Relievers are normally given using an inhaler with a spacer. A mask can be used for younger children (under 3 to 4 years of age).

If a child needs to take a reliever more than 3 times per week (except for exercise), this can be a sign that asthma is not well controlled.

If asthma symptoms are not relieved quickly, or symptoms come back soon after taking a reliever, it could be an emergency.

Types of relievers

Relievers are given as inhaled medications. Examples include:

Airomir (salbutamol)

Asmol (salbutamol)

Bricanyl (terbutaline)

Epaq (salbutamol)

Ventolin (salbutamol)

Preventers

Preventers are prescribed for children whose asthma is not controlled well enough by a reliever on its own.

If your child needs a preventer, remember:

- it must be taken **every day** to work properly
- every child **also needs a reliever** to use whenever asthma symptoms occur.

How preventers work

Preventers reduce inflammation (redness and swelling) inside the lungs, and help to keep the air passages open.

When used every day, preventers help to ease breathing problems and prevent asthma attacks.

What you should know

Preventers are not for use in an asthma attack (use a reliever for this).

Preventers must be taken regularly to work properly.

Types of preventers

There are two types: non-steroidal preventers (tablets or inhalers) and inhaled corticosteroids.

Non-steroidal preventers

These are normally prescribed for children with mild to moderate asthma (e.g. have asthma symptoms every 6–8 weeks or more often) and whose asthma is classified as frequent intermittent or mild persistent.

Non-steroidal preventers are available as tablets or inhalers.

Non-steroidal tablet

An example of a non-steroidal tablet is:

Singulair (montelukast sodium)

This medication can be used to prevent asthma symptoms due to exercise. It can also be used to treat the symptoms of seasonal allergic rhinitis (hay fever)

Non-steroidal tablets are sometimes used to treat children who get asthma symptoms triggered by a cold

Non-steroidal inhalers

Examples of non-steroidal inhalers include:

Intal (cromoglycate)

Tilade (nedocromil)

Non-steroidal inhalers can be used to prevent asthma symptoms due to exercise. They can also help prevent asthma symptoms caused by allergies

These medications can be sticky and the inhaler mouthpiece needs to be cleaned regularly to prevent blockage.

Inhaled corticosteroids

Inhaled corticosteroid preventers are normally prescribed for children who have asthma symptoms more than once per week, including children whose asthma is moderate to severe.

What you should know

Inhaled corticosteroids are usually started at a low dose and gradually adjusted to find the dose that works for the child.

They can cause hoarseness of the voice or sore throat if not taken properly. You can prevent this by rinsing and gargling with water after each dose and by using a spacer (ask your doctor).

Certain doses might reduce a child's growth by up to 1 cm in height, but uncontrolled asthma might also reduce a child's growth. High doses can cause problems with the adrenal gland.

Types of inhaled corticosteroids

Examples include:

Alvesco (ciclesonide)

Flixotide (fluticasone)

Pulmicort (budesonide)

QVAR (beclomethasone)

Symptom controllers

Symptom controllers are another type of asthma medication that is prescribed for some children (as well as a preventer and a reliever). These are like relievers, but the effect lasts much longer. They are often in a single inhaler with the preventer as a "combination" medication.

How they work

Symptom controllers keep the airways (breathing tubes) in the lungs open and relieve the symptoms of asthma. Sometimes they are prescribed for children whose asthma is not well controlled when taking a regular inhaled corticosteroid preventer.

What you should know

Symptoms controllers should not be used in an asthma attack (use a reliever for this).

The child must also be taking an inhaled corticosteroid preventer (either in two separate inhalers or one combination inhaler).

Types of symptom controllers

Symptom controllers are given as inhaled medications. Examples include:

Foradile (formoterol)

Serevent (salmeterol)

Combination medications

Combination medications combine a preventer and a symptom controller in a single inhaler.

How they work

They are a combination of a preventer and a symptom controller in one inhaler.

What you should know

Combination medications should not be used in an asthma attack (use a reliever for this).

Types of combination medications

Symptom controllers are given as inhaled medications. An example includes: *Seretide* (fluticasone and salmeterol)

I can't see my child's medication on these lists

If your child's medication is not on these lists, you can ask your doctor or pharmacist for this information. The examples do not include the brand names of medications that are used with nebulisers, or medications that are used routinely only for children older than 12 years.

Medications used routinely only for children older than 12 years include:

- *Oxis* (eformoterol) – a symptom controller inhaler
- *Symbicort* (budesonide and eformoterol) – a combination medication inhaler
- *Xolair* (omalizumab) – a preventer injection

Other medications

Prednisolone (e.g. *Predmix, Redipred, Solone*) is sometimes used short-term, when asthma needs to be brought back under control. Children are usually given a course of medicine (liquid or tablets) after a trip to the emergency department for asthma.

Ipratropium (e.g. *Atrovent*) is also a reliever. But unlike the relievers listed above, it cannot be used as the main medication during an attack or asthma emergency. It is sometimes given to children as an extra reliever during a more severe asthma episode (for example, in a hospital or emergency department).

Theophylline (e.g. *Austyn, Nuelin*) is a medication that is not commonly used now. It is sometimes used to help manage severe asthma.

You might also like to try matching your medication on the National Asthma Council's poster guide *Managing your asthma*. This chart shows photographs of each medication and inhaler type used in Australia.

If you have any questions about your child's asthma or medicines mentioned in this website, please talk to your doctor or pharmacist.

Complementary medicines and alternative therapies

Many people are interested in complementary medicines and alternative therapies for managing asthma.

Speak to your doctor first before starting your child on complementary medicines or alternative therapies. Your doctor can let you know about possible interactions with conventional medications and help monitor the effects on your child's asthma.

Some complementary medicines can cause asthma symptoms or allergic reactions. Echinacea and royal jelly can cause life-threatening allergic reactions (anaphylaxis) in children with asthma who are sensitive to them.

More information

National Asthma Council Australia

Managing your asthma – a chart with photos of the different asthma medications
http://www.nationalasthma.org.au/html/management/other_resources/or_001_myac.asp

Asthma and complementary therapies – an evidence-based guide

http://www.nationalasthma.org.au/html/management/infopapers/consumer/5001_ct.asp

Asthma Foundations Australia

Asthma medications and delivery devices – a guide for people with asthma

<http://www.asthmaaustralia.org.au/info/medications.pdf>

Asthma medications: questions to ask your doctor

Medications are an important part of controlling your child's asthma. Most parents have questions about the effectiveness and safety of their children's asthma medications. It's a good idea to write down the questions you want to ask and take them along next time you take your child to the doctor for an asthma check-up.

Some people like to use these questions as a guide, whenever it is time to consider changing the treatment.

1. What are the treatment options for my child's asthma?

Depending on your child's asthma, the treatment options might include:

- starting or changing to a new medication. This could sometimes mean choosing between two or more suitable medications. Sometimes, there might be a choice between different ways to take medication (e.g. inhaler or tablets), between different types of medication (e.g. corticosteroid or non-steroidal options) or between different types of inhalers for the same medication.
- increasing or decreasing the dose or frequency of a medication your child is already taking
- stopping a medication your child is already taking
- making no change to the treatment plan.

2. What should we expect if we choose this treatment?

For each option, you could ask these questions:

- What is the purpose of this treatment?
- How likely is it that this medication will improve my child's asthma?
- What are the possible side effects of this treatment? (How likely are these? What should I do if any of these happen?)
- What could happen if we choose not to use this treatment?

3. What is the best way to use this medication?

For each medication, you could ask:

- When should my child take this medication?
- How should the medication be taken to get the best effect?
- What should I do if my child misses a dose?