

# ASTHMA AND YOUR CHILD

A RESOURCE PACK FOR PARENTS AND CARERS

# IMPORTANT

*This resource provides information to help you manage your child's asthma. It should not replace medical advice that you have received.*

*It is recommended that you read the information in this resource and talk to an asthma health professional or your child's doctor for further information or explanation.*

*Your feedback is valued. If you would like to comment on this pack or would like further information please email: [SCHN-SCH-AAIC@health.nsw.gov.au](mailto:SCHN-SCH-AAIC@health.nsw.gov.au)*

## IMPORTANT TELEPHONE NUMBERS

**AMBULANCE: DIAL 000**

**112 CAN ALSO BE DIALLED FROM A MOBILE PHONE**

Child's doctor	Phone
Local hospital	Phone
Local pharmacy	Phone
Asthma educator	Phone
Other	Phone
Other	Phone
Other	Phone
Health Direct Australia	<b>1800 022 222</b>
National Home Doctor Service	<b>137425 – 13SICK</b>

## FURTHER INFORMATION AND RESOURCES, INCLUDING OTHER LANGUAGES

Sydney Children's Hospitals Network, Aiming for Asthma Improvement in Children Program (AAIC)  
[www.asthmainchildren.org.au](http://www.asthmainchildren.org.au)

National Asthma Council Australia (NAC)  
[www.nationalasthma.org.au](http://www.nationalasthma.org.au)

Australian Society of Clinical Immunology and Allergy (ASCIA)  
[www.allergy.org.au](http://www.allergy.org.au)

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

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## REFERENCES

National Asthma Council Australia. Australian Asthma Handbook - Quick Reference Guide, Version 1.2.  
National Asthma Council Australia, Melbourne, 2017. Available from [www.astmahandbook.org.au](http://www.astmahandbook.org.au)

Asthma is a condition that affects many children in Australia. Although there is no known cure, good asthma control can enable children to lead normal, healthy and active lives.

# GOOD ASTHMA CONTROL CHECKLIST

## ACHIEVING AND MAINTAINING GOOD ASTHMA CONTROL FOR YOUR CHILD

- Have an up to date Asthma Action Plan for your child
- Ask your child's asthma doctor to explain how to use the plan
- Make an appointment with your child's asthma doctor every 3-6 months even if they have been well with their asthma
- Take your child's asthma medicine delivery device/s and asthma action plan with you at every visit so that device technique can be checked and plan updated if needed
- Keep an asthma symptom diary to show to your child's asthma doctor at each visit
- Ensure your child continues to take their asthma medications as prescribed - only stop them on your child's doctor's advice

## WARNING SIGNS OF WORSENING ASTHMA - SEEK MEDICAL REVIEW ASAP

- Night time coughing or wheezing
- Early morning coughing or wheezing
- Child unable to participate in usual activities without wheezing, coughing, or becoming short of breath
- Needing to use reliever medicine on more than 2 days per week (*excluding for exercise*)
- Needing to use reliever medicine every 3-4 hours

## WHEN TO CALL AN AMBULANCE

- Needing to use reliever more frequently than every 2 hours
- Child is distressed and anxious
- Child is sucking in at the throat and ribs when they breath
- Child has a bluish tinge to the lips
- Child is unable to talk due to breathlessness
- If you have concerns or doubts

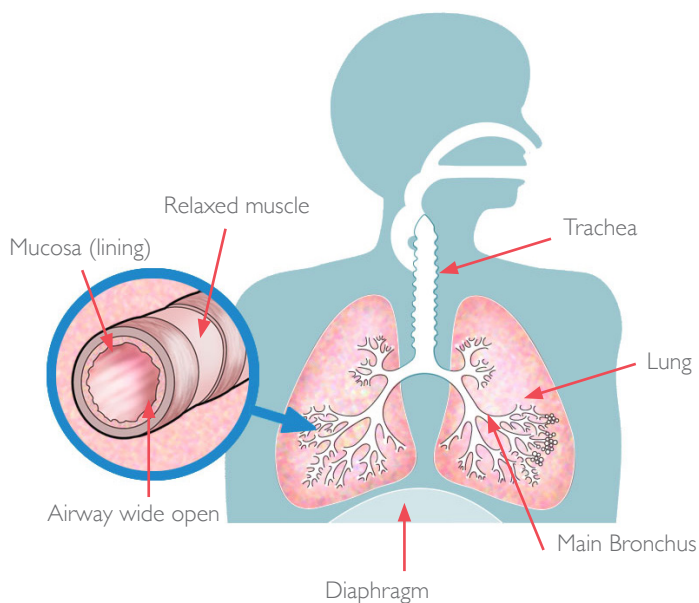
# WHAT IS ASTHMA?

To understand asthma, it is helpful to know how normal breathing works. Our lungs are made up of many breathing tubes. The largest breathing tube (*Trachea*) divides into smaller breathing tubes, ending in a tiny air sac. When we breathe, air passes through the breathing tubes and when it reaches the air sacs, oxygen passes into the blood stream to be transported throughout the body and carbon dioxide is removed.

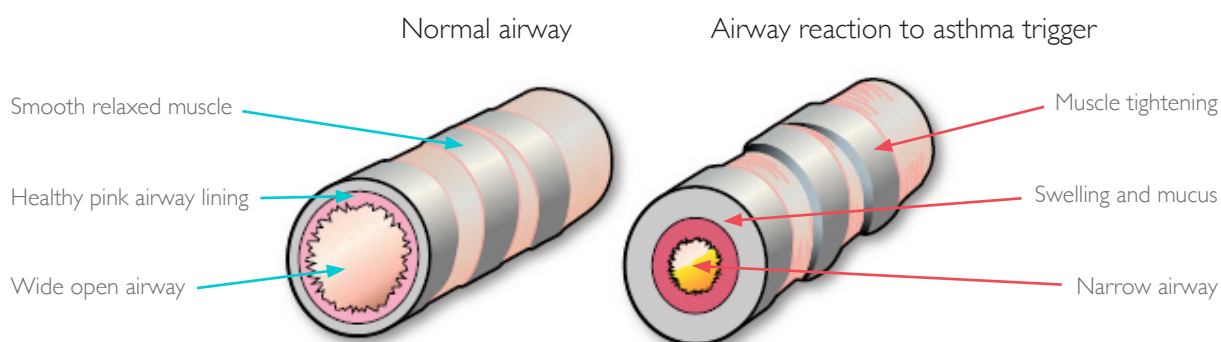
This collection of breathing tubes is known as the airways and tends to look like an upside down tree.

Children with asthma have inflamed and sensitive airways in their lungs. When exposed to certain triggers the airways react abnormally and become narrow on the inside. As a result, asthma symptoms are experienced.

This narrowing is due to swelling of the inside lining of the airways, an increase of mucus (*phlegm*) inside the airways, and tightening of the muscles around the outside of the airways.



Reference: Buchanan N & Cooper P, 1995: *Childhood Asthma: What it is and what you can do.*



## COMMON ASTHMA SYMPTOMS INCLUDE:

- shortness of breath/difficulty breathing (*younger children may complain of a sore tummy*)
- wheezing (*whistling sound when breathing*)
- coughing (*often dry, worse at night and on waking*)
- tightness in the chest (*younger children may complain of a sore tummy or generally feeling sore or hurting*)

# DIAGNOSING ASTHMA IN CHILDREN

Asthma in children can present at any age and diagnosis is based on:

- presence of confirmed allergies or a family history of asthma or allergies
- symptoms that improve when the child is given inhaled asthma reliever medicine (*blue/grey puffer*).

A spirometry lung function test (*breathing test*) assists in confirming the diagnosis.

Most children under the age of five years are unable to perform a spirometry lung function test. Regular assessment of their symptoms over time may be required before a confirmed diagnosis is made because:

- wheezing and coughing are common respiratory symptoms, particularly under the age of three years, and are not always associated with asthma
- many young children who respond to inhaled asthma reliever medicine do not necessarily go on to have asthma by primary school age.

Discussing any concerns about your child's asthma diagnosis with a doctor will help you understand more.

Wheezing is common in young children but not all wheezing is asthma

## WHEEZING AND THE COMMON COLD

The symptom of wheezing (*a whistling sound heard when breathing*) is very common in children in the first few years of life. When wheezing occurs in asthma, it is caused by a narrowing of the airways. However, wheezing can also occur when a child is happy and well, or may occur during a respiratory viral infection (*common cold or flu*).

Children who have wheezing episodes when they have a respiratory viral infection do not necessarily have asthma. We refer to this type of wheezing as being a 'viral-induced wheeze'. Many of these children are often well in between the viral infections and do not have a history of allergy. Their symptoms are short lived and usually disappear by the time they reach primary school age.

However, as most children under the age of six years will have between 6-10 respiratory viral infections a year, this group of children may be susceptible to many episodes of wheeze, cough and breathlessness. These episodes may require asthma medicines to treat the symptoms. For more information on viral-induced wheeze click here or go to [www.schn.health.nsw.gov.au/files/factsheets/wheeze\\_-\\_viral\\_induced\\_wheeze-en.pdf](http://www.schn.health.nsw.gov.au/files/factsheets/wheeze_-_viral_induced_wheeze-en.pdf)

# WHAT CAN TRIGGER ASTHMA SYMPTOMS?

Understanding what triggers your child's asthma can take time. Asthma triggers may not be the same for each child and there may be more than one trigger. You may not always be able to avoid your child's asthma triggers but knowing what they are may assist you in taking steps to manage them. The most common triggers are listed below.

## COLDS AND FLU

Childhood respiratory viruses are the most common trigger for an acute asthma flare-up and are a difficult trigger to avoid

### What can you do?

Always be prepared by ensuring that your child has an updated Asthma Action Plan for you to follow at the first sign of a runny nose or cold. If you do not have an Asthma Action Plan, ask your child's doctor to develop one for you. Always encourage children to cover their nose and mouth when coughing or sneezing, use tissues, and dispose of them afterwards. Washing hands thoroughly with soap and water is a good way to prevent infection spreading from person to person. Where possible, avoid your child having contact with anyone with obvious cold or flu symptoms. Speak with your child's doctor for further information regarding flu vaccination before the flu season arrives.

For further information go to: [www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/immunise-influenza](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/immunise-influenza)

Tobacco smoke is a trigger that can be avoided

## EXPOSURE TO TOBACCO SMOKE

Tobacco smoke contains over 4,000 chemicals and its effect on your child's health can be very serious. A child can be exposed to passive smoking when near a person who is smoking. The smoke a child breathes in is commonly known as Second Hand Smoke (SHS). Exposure to SHS can occur when the child breathes in the smoke that is breathed out by the person who is smoking (*mainstream smoke*) or breathes in the smoke from the burning end of a cigarette (*sidestream smoke*). Sidestream smoke tends to remain in a room longer than mainstream smoke and contains many cancer causing substances. Third hand smoke is also a concern as children are exposed to residual gas particles and nicotine left on clothes, hair, and skin of the smoking parent or carer.

For children, exposure to second hand smoke can result in:

- a higher risk of having asthma symptoms before the age of five years
- an increase in asthma flare-ups and an increase in the severity of the flare-ups
- severe asthma
- respiratory infections such as bronchiolitis, middle ear infections and sudden infant death syndrome

**Note:** Electronic cigarettes (*e-cigarettes*) are battery-powered devices which heat liquid (*e-liquid*) into an aerosol or vapour which is inhaled into the lungs. This vapour, which often contains nicotine and other chemicals is also breathed out by the smoker. Exposing children to smoke from e-cigarettes has the potential to trigger an asthma flare-up and should be avoided.

Smoking tobacco through a water pipe (e.g. *Narghile, Shisha, Hookah smoking*) carries the same risks for children with asthma as cigarette smoking.

For further information visit: [www.health.nsw.gov.au/tobacco/Pages/electronic-cigarettes.aspx](http://www.health.nsw.gov.au/tobacco/Pages/electronic-cigarettes.aspx) and/or [www.quit.org.au/downloads/resource/facts-evidence/waterpipe-tobacco-smoking-fact-sheet.pdf](http://www.quit.org.au/downloads/resource/facts-evidence/waterpipe-tobacco-smoking-fact-sheet.pdf)

## What can you do?

If you are a smoker, the most important thing you can do for the health of your child is to stop smoking.

Help for quitting is available at Quitline - **13 QUIT (13 7848)** / <https://www.icanquit.com.au>.

This is a free, confidential telephone service designed to help smokers to quit smoking (*Aboriginal and Multilingual advisors are available*). A 24/7 message service is available where you can leave your contact details for a Quitline advisor to call you back. You can also make an online request for Quitline to call you back.

Talk with your local doctor, paediatrician, specialist, or asthma health professional for further information on options for quitting and advice on keeping car and home smoke free.

If you are not ready to give up smoking or your friends and family smoke, the following tips can be helpful to minimise your child's exposure to SHS. (*It is important women do not smoke when pregnant or breastfeeding*).

- Do not smoke in your car even when your child is not with you. In NSW, smoking regular cigarettes or e-cigarettes in a car with a child under the age of 16 years is an offence.
- Do not allow smoking inside the home. Opening windows and doors will not protect your child from SHS.
- Wear additional clothing which can be removed after smoking and wash your hands afterwards.
- Display smoke free zone signs and or stickers in your home and car.
- Where possible avoid taking your child to places where people are, or have been smoking.

## EXERCISE, SPORT AND PLAY

Exercise is a common asthma trigger with symptoms occurring either during the exercise or some time afterwards. This is known as exercise-induced asthma (EIA). It is often worse in cold weather. When exercising or playing sport, children breathe more quickly and often breathe through their mouth. This results in breathing air that remains cool and dry. This can trigger muscle tightening, leading to the development of asthma symptoms. Exercise is important for normal growth and development and should be encouraged, but when it triggers asthma symptoms, children can try to avoid it. Simple steps can be taken to manage EIA. Ask your child's doctor if exercise becomes troublesome.

### What can you do?

Begin and finish exercise and play with warm-up exercises and cool-down exercises. Your child's doctor may also recommend taking blue reliever medicine prior to exercise. Speak with your child's doctor about this.

Avoid outdoor exercise or play when the air quality level is outside of the 'good' or 'very good' range, the pollen count is high to extreme ([www.weatherzone.com.au/pollen-index/](http://www.weatherzone.com.au/pollen-index/)), or if your child is unwell with cold or flu symptoms. If asthma symptoms develop during exercise it is important that your child stop exercising and use their reliever medicine according to their Asthma Action Plan. If this is unavailable, follow the Asthma First Aid instructions listed on **page 18**.

## AIR ENVIRONMENT

Changes in weather - a change from low humidity to high humidity, changes in air temperature, windy conditions, and thunderstorms - can be a trigger for a child with asthma (*more information on thunderstorms can be found in the Inhaled Allergens section*). Your child's asthma may also get worse during a change of season. Poor air quality due to air pollution, including smoke from wood burning barbecues, open fires / bush fires can trigger asthma.





## What can you do?

Be aware of any predicted changes to the weather forecast. Air quality can be monitored through the Air Quality Index (AQI) by accessing the following website [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au) or by ringing **131 555**.

The lower the index value the better the air quality. See AQI table below. If the index value is in the 'poor', 'very poor' or 'hazardous' range, or there are changes in temperature especially during thunderstorms, and this is a trigger for your child, it is recommended they remain indoors with windows and doors closed.

Very good 0 - 33	Good 34 - 66	Fair 67 - 99	Poor 100 - 149	Very poor 150 - 199	Hazardous 200
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There is currently a lack of evidenced-based research to support the use of humidifiers for children with asthma.

## INHALED ALLERGENS

Everyday substances in the environment that cause an allergic reaction in some susceptible people are referred to as allergens. When inhaled (*breathed in*), these allergens can trigger asthma symptoms in children with asthma. Inhaled allergens include dust and dust mites, moulds, animal hair and dander (*cats and dogs*), and pollens. Not all children react to the same allergens. It is important to identify the ones that may cause a reaction and avoid them where possible, or reduce exposure to them. Your child's doctor can arrange a simple allergy skin prick test or blood test to detect if your child has any allergies.

## What can you do?

### Cockroaches

Avoid leaving food uncovered and use sealable containers. Ensure food crumbs and spills are cleaned up quickly and consider environmentally safe pest control.

### Dust

Wipe hard surfaces, shutters, venetians blinds and hard floors with a damp or electrostatic cloth weekly rather than dry dusting, sweeping, or vacuuming.

### Dust mites

It is difficult to remove dust mites completely from a home and there is no evidence that physical and chemical methods of reducing house dust mite levels improves asthma control; however the options below may assist in reducing their number:

- Use a dust mite resistant cover (*available from pharmacies and major department stores*) for mattresses, pillows, and quilts, and wash them every two months. Shake pillows and quilts outside and air in the sun weekly. Sheepskins or woollen underlays should be avoided.
- Wash sheets, pillowcases, weekly in hot water (*hotter than 60 degrees Celsius*) including any soft toys kept in the child's bedding. This temperature will kill the dust mite and remove the allergen they produce. If only cold water is available for washing, use products containing eucalyptus oil or tea tree oil formulated to kill dust mites in cold water. Dry cleaning is not as effective as it will only kill the dust mite but will not remove the allergen. If possible, avoid clutter in the bedrooms such as soft toys, extra cushions or pillows.
- Vacuum carpets and soft furnishings weekly to reduce the risk of inhaling airborne allergens. Vacuum cleaners fitted with a high efficiency particulate air filter may remove more allergens. However, the vacuuming process temporarily increases the number of dust mites in the air so it is recommended that the individual with asthma avoids re-entering the room for approximately 20 minutes.

## Mould

Mould is more likely to develop in areas in the home where there is continual dampness or humidity. The likelihood of mould occurring is reduced in a dry, well-ventilated house with adequate natural insulation. Exhaust fans are effective but dehumidifiers have not been shown to be of any benefit in controlling asthma.

Remove visible mould from bathrooms, kitchens, indoor windows and wardrobes. Clean refrigerator drip trays regularly, maintain air conditioning units by cleaning filters regularly, remove indoor plants, and avoid your child being exposed to garden compost, mulch and fresh grass clippings. On cold days try to keep the inside temperature at least 5°C higher than the outside temperature and provide continuous low-level dry heat. Continuous, even heating will allow warmth to penetrate walls and ceilings.

## Cats, dogs and other pets

Cats and dogs are a major source of allergens in the home, in particular the sweat glands in cats and the salivary glands in dogs. These allergens can be found on their skin and hair. Groom pets regularly and, where possible, keep them out of the house. If that is not possible, keep them out of the bedrooms and living areas. Ensure hands are washed thoroughly following the handling of pets and wash clothing afterwards in hot water.

## Pollens

Find out which grasses and plants in your area have wind-borne pollens and try to avoid them where possible. Consider planting a low-allergen garden.

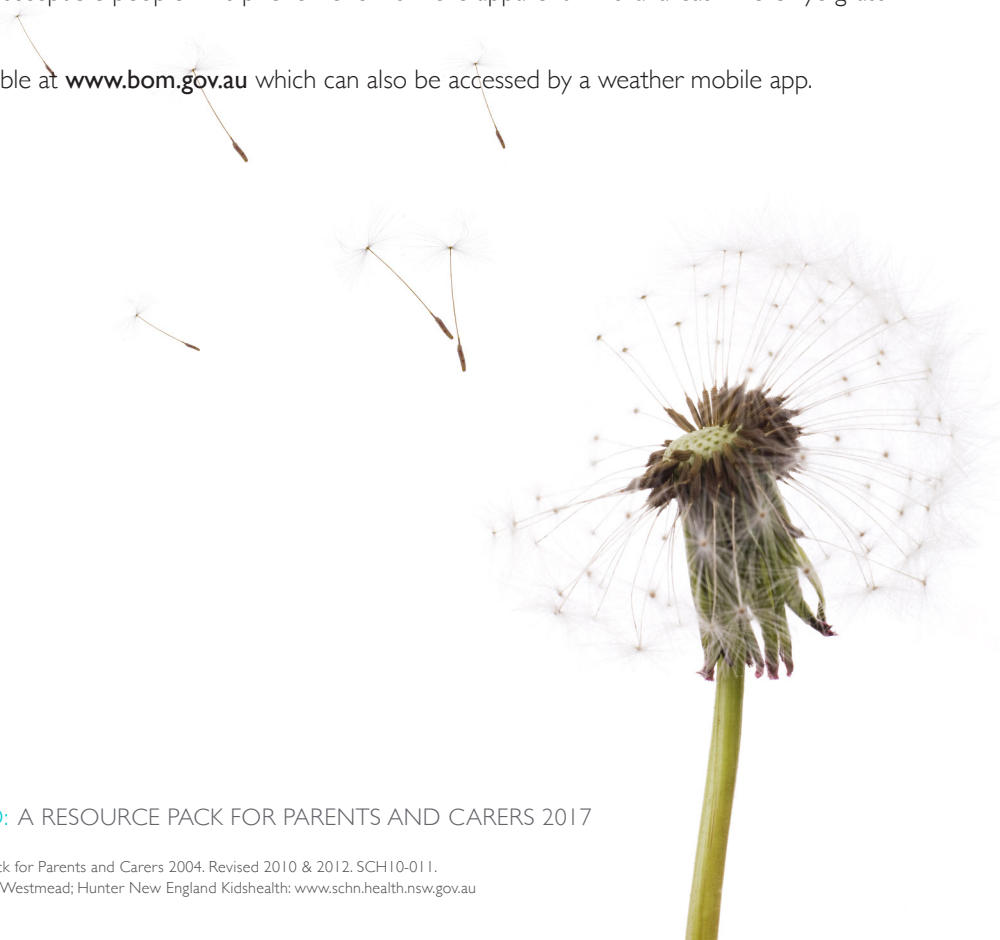
Further information can be accessed at [www.nationalasthma.org.au/living-with-asthma/resources/patients-carers/factsheets/the-low-allergen-garden](http://www.nationalasthma.org.au/living-with-asthma/resources/patients-carers/factsheets/the-low-allergen-garden) or contact Asthma Australia on **1800 278 462**.

Encourage your child to remain indoors during windy, high pollen-count days, particularly from 7 am to 9 am, 4 pm to 6 pm, and during or after thunderstorms. Avoid outdoor activities where there is high exposure to pollen e.g. lawn mowing. Wet bedding and clothing should be dried inside on high pollen count days. Check the following website: [www.pollenforecast.com.au](http://www.pollenforecast.com.au)

This site provides a four-day forecast that measures the potential of pollen triggering a person's asthma.

Stormy winds and excess moisture associated with thunderstorms can cause airborne pollens to rupture resulting in tiny allergen particles being released into the air. These tiny particles, which often concentrate at ground level, are easily inhaled causing 'thunderstorm asthma' in susceptible people. This phenomenon is more apparent in rural areas where rye grass is abundant.

Thunderstorm warnings are available at [www.bom.gov.au](http://www.bom.gov.au) which can also be accessed by a weather mobile app.



## FOODS AND ADDITIVES

Although food allergy is becoming more common in children, it is not a common trigger for asthma. Asthma is more likely to be triggered by food additives such as metabisulphite/sulphur dioxide (220–228), tartrazine (synthetic yellow dye [102]), monosodium glutamate (621), and acetylsalicylic acid (ASA). Some of these additives may also occur naturally in some foods.

However, food allergy can cause allergic reactions. If there is a sudden onset of severe breathing difficulty following ingestion of food this may be anaphylaxis (severe allergic reaction). Immediate medical attention is required.

**Call an ambulance by dialling 000.**

### What can you do?

A healthy diet should always be encouraged. Avoid foods only if your child is known to be allergic to them and this has been confirmed by an allergy specialist. Unless there is a confirmed food allergy, eliminating certain foods from a child's diet is unlikely to improve their asthma. If you suspect that a certain food or food additive is triggering your child's asthma, talk to your doctor and ask for a detailed assessment from an allergy specialist.

## MEDICATIONS / HERBAL REMEDIES

The non-steroidal anti-inflammatory drugs such as Ibuprofen, Nurofen, and Aspirin are rarely asthma triggers for children. Homeopathic or herbal remedies such as Echinacea, Royal Jelly, Willow Tree bark extracts and Camomile may be potential triggers.

### What can you do?

Speak to your child's doctor before using any of these medications or remedies.

Medicines used in the treatment and management of asthma either relax the tight muscles around the airways or reduce or prevent swelling of the inside airway lining. These medicines relieve asthma symptoms and assist in preventing asthma flare-ups (attacks). The aim is to gain good asthma control while using the least amount of medicine, thereby limiting side effects.

## EMOTIONS

Anxiety, stress, distress and laughing can be asthma triggers.

### What can you do?

Provide reassurance and find ways to teach your child relaxing and breathing exercises.



# WHAT ARE ASTHMA MEDICINES?

## GOOD ASTHMA CONTROL IS:

- **NOT** waking up with asthma symptoms and not having symptoms on more than two days per week.
- **NOT** needing to take reliever medicine on more than two days per week (*not counting before exercise*), and asthma symptoms going away quickly after taking reliever medicine.
- **BEING ABLE** to participate in usual activities without having asthma symptoms.

The most common way for your child to take their asthma medicine is by breathing it directly into their lungs through their mouth. During an asthma flare-up, the best way for your child to take their medicine is with a puffer and spacer device (*refer to page 19 for instructions*). At other times, for example before exercise and play, or in the daily management of asthma, and depending on your child's age and ability, other devices may be an appropriate alternative. Speak with your child's doctor or asthma health professional to determine the most suitable device. Step by step instructions for using other devices can be found on **page 20-21**.

## RELIEVER MEDICINE

**Ventolin<sup>®</sup>, Asmol<sup>®</sup>, Airomir<sup>®</sup>, Bricanyl<sup>®</sup>**

Inhaled asthma reliever medicine is easily identified by its blue or blue/grey coloured container. Your child should always have immediate access to their reliever medicine, including at school, childcare, and sporting activities, as asthma symptoms can be experienced at any time without warning.



**Ventolin<sup>®</sup>**  
Metered Dose Inhaler



**Asmol<sup>®</sup>**  
Metered Dose Inhaler



**Airomir<sup>®</sup>**  
Metered Dose Inhaler



**Airomir<sup>®</sup>**  
Autohaler<sup>®</sup>



**Bricanyl<sup>®</sup>**  
Turbuhaler<sup>®</sup>

Reliever medicine:

- is used in asthma first aid
- relieves symptoms by relaxing tight muscles to open the airway
- works within minutes and is usually effective for 3-4 hours
- is used when symptoms are present and may also be used before exercise or play.

Possible side effects include a fast heart rate, shaky hands, hyperactivity and excitability. These side effects can vary between children and in most instances subside on their own.

Always have a spare reliever medicine for immediate use when the current one runs out.  
Keeping it in its original packaging until it is time to use it will identify it as the full one.

## PREVENTER MEDICINE (ANTI-INFLAMMATORIES)

Steroid-based (inhaled corticosteroids) e.g. Flixotide®, Pulmicort®, Alvesco®, Qvar®

Non-Steroidal e.g. Montelukast® (e.g. Singulair®, Lukair®), Intal® Forte.

When children need to use their reliever medicine frequently for control of asthma symptoms (*generally on more than two days per week*), despite effective management of triggers and good device technique, a preventer medicine may be prescribed. Unlike reliever medicine, which is taken when symptoms are present or prior to exercise, preventer medicine is taken on a regular daily basis. Preventer medicine helps to make the airways less sensitive to trigger factors, as well as lessening the swelling inside the airways that can occur in an asthma flare-up.

Preventer medicines are either steroid or non-steroid based and the type that your child is prescribed will depend on their current needs. As preventer medicines do not work immediately, it may take anywhere from a few days to two weeks before noticing an improvement in your child's asthma.

**It is important that your child does not miss doses and continues to take them as prescribed and only stops taking the medicine on a doctor's advice.**



**Flixotide®**  
Metered Dose Inhaler



**Flixotide®**  
Accuhaler®



**Pulmicort®**  
Turbuhaler®



**Alvesco®**  
Metered Dose Inhaler



**Qvar®**  
Metered Dose Inhaler



**Qvar®**  
Autohaler®

Possible side effects - steroid based (*inhaled corticosteroids*):

- unpleasant taste and cough with non-steroid medicine.
- oral thrush (*sore mouth*) and/or voice change with steroid-based medicine.

To reduce the risk of side effects it is recommended that your child:

- rinse their mouth with water and spit out, or clean teeth after taking the inhaled preventer medication
- when using a metered dose inhaler preventer medicine, use it with a spacer device.

Possible side effects - non-steroid based:

- Montelukast® (Singulair®, Lukair®) - rare but may include headache, sleep disturbances, behavioural issues.
- Intal® Forte - may include sore throat, cough.

## OTHER INHALED MEDICINES

Some children need additional asthma medicine in the form of a long acting reliever medicine in order to achieve good control of their asthma. These medicines are only prescribed in conjunction with a steroid-based preventer medicine and are combined together in the one device, making it a more convenient way to take both medications.

These medicines should only be prescribed by a Paediatrician or Respiratory Specialist for children with severe/persistent asthma

Asthma medicines that contain a long acting reliever and inhaled steroid based preventer in the one device include Symbicort<sup>®</sup>, (available in a red and white turbuhaler<sup>®</sup> or red and white rapihaler<sup>®</sup> [puffer]), Seretide<sup>®</sup>, (available in a purple puffer or accuhaler<sup>®</sup>), Flutiform<sup>®</sup>, (available in a grey and white puffer), and Breo<sup>®</sup> (available in an aqua and grey ellipta<sup>®</sup> device). Possible side effects are similar to those that may occur with inhaled steroid based preventers and therefore should be managed the same way to reduce the risk of side effects.

### A note about Symbicort<sup>®</sup>

Because the long acting reliever medicine in Symbicort<sup>®</sup> works very quickly, some children over the age of 12 years may be prescribed this medicine to be used as a regular medicine to be taken twice daily as well as a reliever medicine to be taken when symptoms occur or during an asthma flare-up. In this case, your child's doctor will give you a Symbicort<sup>®</sup> Maintenance And Reliever Therapy (SMART<sup>®</sup>) plan to follow. To use Symbicort<sup>®</sup> in asthma first aid for children over 12 years refer to asthma first aid on [page 18](#).



**Seretide<sup>®</sup>**  
Metered Dose Inhaler



**Seretide<sup>®</sup>**  
Accuhaler<sup>®</sup>



**Symbicort<sup>®</sup>**  
Turbuhaler<sup>®</sup>



**Symbicort<sup>®</sup>**  
Rapihaler



**Flutiform<sup>®</sup>**  
Metered Dose Inhaler



**Breo<sup>®</sup>**  
Ellipta<sup>®</sup>

## RESCUE MEDICINE (ORAL CORTICOSTEROIDS)

Prednisone (tablet), Prednisolone (tablet or syrup), Predmix<sup>®</sup> and Redipred<sup>®</sup> (syrup)

As the name suggests, rescue medicine is sometimes used for short periods (3-5 days) during an asthma flare-up when there is little or no response to inhaled reliever medicine. It is taken orally (tablet or liquid) and works by decreasing airway inflammation. Rescue medicine may be given to your child in hospital or by your child's local doctor. It may also be included in your child's asthma action plan as part of their asthma flare-up management. If your child needs more than 4 courses a year you need to discuss this with your child's doctor as this is above the recommended amount of oral steroid.

Possible side effects:

- Hunger; puffy face, weight gain, mood swings - these are unlikely to occur if the medicine is only used for short periods. However, if these symptoms do occur they will resolve once the medicine has stopped.

**Note:** Whilst the most common possible side effects have been listed for each asthma medicine group, some children may not experience any and some children may experience others not listed. Always discuss any concerns about your child's asthma medicines, their side effects and the delivery device, with your child's doctor or asthma health professional.

# MANAGING YOUR CHILD'S ASTHMA

Depending on how often your child wheezes and coughs, particularly during the night, or has difficulty breathing, and these may interfere with your child's participation in daily activities and maintenance of a normal quality of life, your child will be assessed as having good, partial, or poor asthma control. Your child's asthma control will be assessed over a four-week period. The aim is to achieve and maintain good asthma control through appropriate asthma management.

## WHAT IS A GOOD ASTHMA CONTROL PLAN?

- Not having daytime asthma symptoms on more than two days per week, with these symptoms being quickly relieved by asthma reliever medicine.
- Not having asthma symptoms during the night or upon waking.
- Being able to participate in usual activities without having asthma symptoms.

## VISIT YOUR CHILD'S DOCTOR IF YOUR CHILD EXPERIENCES:

- Being unable to participate in usual activities without having asthma symptoms.
- Recurrent night-time Wheezing or coughing
- Wheezing or coughing on waking
- The need for regular doses of reliever medicine on more than two days per week, not including taking it prior to exercise
- Having to miss out on school or childcare due to asthma symptoms
- Needing to use reliever puffer within a 4 hour period of last using it
- Asthma symptoms with usual activities.

*These are signs of poor asthma control which require immediate review from your child's doctor.*

## HOW CAN I HELP MY CHILD ACHIEVE AND MAINTAIN GOOD ASTHMA CONTROL?

### Seek a regular medical review every 3-6 months

It is important that your child is reviewed regularly by their doctor or specialist to assess and monitor the level of their asthma control. A stand-alone appointment, best attended when your child is well and free from asthma symptoms, is an ideal time to do this and provides an opportunity to discuss any concerns about your child's asthma management. Children who have been assessed as having good asthma control should be reviewed at least every six months. Children whose asthma is partially or poorly controlled should be reviewed more often. As your child's asthma control can change from season to season, your child's asthma review may need to be more frequent. If at any stage between scheduled review appointments your child is experiencing more or severe asthma symptoms, or you feel that your child's asthma control has deteriorated, or you would like to discuss any concerns about your child's asthma management, we encourage you to make an additional appointment.

### Ask your child's doctor for an asthma action plan

An asthma action plan is a detailed plan designed specifically for your child which will help you manage their asthma or in the case of an adolescent, help you to encourage them to manage their own asthma. It is based on your child's current asthma control level and provides information about the type of medicine your child is prescribed, how much to give, and how often they need to take it. It also gives you a clear understanding of when to seek medical advice or help from a hospital Emergency Department.

It is important that you take your child's Asthma Action Plan with you every time your child visits their doctor so that the Asthma Action Plan can be reviewed and updated if necessary. At a minimum, it should be reviewed every six months. Ask your child's doctor to explain how the plan works and how best to use it. If you do not have an Asthma Action Plan, ask your child's doctor to develop one for you.

#### **Examples of asthma action plans for children can be found at:**

Sydney Children's Hospitals Network  
[www.schn.health.nsw.gov.au](http://www.schn.health.nsw.gov.au)

National Asthma Council Australia  
[www.nationalasthma.org.au](http://www.nationalasthma.org.au)

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

### **Be aware of your child's asthma triggers**

Understanding what triggers your child's asthma can take time and feel like piecing a big puzzle together. This is because asthma triggers may not be the same for every child and often children will have more than one trigger. Knowing what those triggers are can assist you in taking steps to minimise exposure or, if that's not possible, to manage them by monitoring your child in those situations and being prepared with appropriate asthma medicine. This will assist your child in maintaining good control of their asthma. Keep a record of any asthma symptoms and potential triggers and discuss these with your child's doctor. It is important to inform your child's school or children's service if you know what triggers your child's asthma.

### **Record your child's asthma symptoms**

Recording information about your child's asthma symptoms will assist your child's doctor in prescribing appropriate asthma medicine as well as adjusting your child's Asthma Action Plan if necessary. One way to keep track is by using a Symptom Diary. This is a record of the type of symptoms that your child experiences, when they occur, whether symptoms disturb their sleep or interfere with their usual activities, and how often reliever medicine was needed to control their symptoms. An example of a Symptom Diary can be found on **page 26**. Discuss with your child's doctor or asthma educator what type of diary and monitoring may be helpful and how often to record your child's asthma symptoms. Making a sound recording or video of your child's breathing may also be helpful.

### **Check that your child's asthma medicine delivery device technique is correct**

When children use their asthma devices correctly they have the best chance of receiving the full dose of medicine. Poor device technique can mean that children receive an inadequate dose, leading to poor asthma control. As a result, additional doses of reliever medicine may be needed to relieve symptoms. Take your child's asthma delivery device each time you visit the doctor so that your child's technique can be checked. Refer to pages **19-21** for detailed instructions for using a spacer device as well as other inhaled asthma medicine delivery devices. Instructional videos can be viewed here or go to:

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

## **IN SUMMARY**

- Know the signs of poor asthma control
- Have an up to date Asthma Action Plan
- Have your child reviewed every 3-6 months even if they have been well with their asthma
- Be aware of your child's triggers and if able take steps to minimise exposure to these
- Ensure your child takes their asthma medications correctly, and as prescribed



# HOW TO TELL THE DIFFERENCE BETWEEN MILD, MODERATE AND SEVERE ASTHMA SYMPTOMS

When your child experiences asthma symptoms it is important to assess the severity of the symptoms and treat them promptly. Having an Asthma Action Plan that has been developed specifically for your child will instruct you in the appropriate action to take for mild, moderate, and severe asthma symptoms.

Your child is experiencing an asthma flare-up (*attack*) when their symptoms:

- are worse than usual and do not respond to usual asthma reliever medicine.
- respond to asthma reliever medicine but come back again quickly - less than four hours after taking the last dose of reliever medicine.

Below is a guide to assist you in recognising a mild, moderate, and severe asthma flare up.

MILD	MODERATE Make an appointment for your child to see their doctor	SEVERE Call an Ambulance
Mild difficulty in breathing Your child may tell you that they are finding it harder to breathe than normal	Obvious difficulty in breathing, using stomach muscles to breathe, child may complain of a sore tummy  Skin may suck in between the ribs when child breathes	Great difficulty in breathing with short, quick breaths  Sucking in at the base of the throat or sucking in of the chest  May be distressed, anxious, drowsy, confused, exhausted  Pale and sweaty - may have bluish tinge to the lips
Soft wheeze	Louder wheeze than usual	Often no wheeze
Dry cough	Persistent cough	Persistent cough
No difficulty speaking in sentences	Speaks in short sentences only  Very young children may become restless, unable to sleep, and have difficulty feeding	Speaks no more than a few words in one breath or may not be able to speak at all

Severe flare-ups (*attacks*) require an emergency response and an ambulance should always be called by **dialing 000**, as well as following the **emergency instructions in your child's asthma action plan**.

**112** can also be dialled **from a mobile phone** for an emergency response.

In the absence of an asthma action plan, commence nationally recognised asthma first aid. See **page 18**.

# ASTHMA FIRST AID\*

The below is an adapted version of the National Asthma Council Australia 'Kids' First Aid for Asthma' plan which can be used for mild, moderate, and severe asthma flare-ups.

In the event of severe symptoms, i.e. great difficulty in breathing; sucking in at the throat or chest; distressed, anxious, drowsy, confused, exhausted; lips have a bluish tinge; only able to speak in words or unable to speak at all, call an ambulance.

**Dial 000** and commence asthma first aid as per the below steps.

## STEP 1

**Place the child in an upright position, stay calm and provide reassurance.**

- Locate the child's blue/grey reliever puffer (e.g. *Salbutamol, Ventolin<sup>®</sup>, Asmol<sup>®</sup> or Airomir<sup>®</sup>*), remove the dust cap and shake the puffer well.
- Insert the puffer into the end of the spacer device and have the child place their lips around the mouthpiece of the spacer forming a good seal. Alternatively, for a young child (*usually under four years*), attach a mask to the mouthpiece of the spacer and place the mask over the child's mouth and nose to form a good seal.

## STEP 2

**Give 4 separate puffs of reliever medicine with 4 breaths after each puff.**

- Press down on the top of the puffer canister to release one puff of reliever medicine and instruct or watch the child take 4 breaths from the spacer.
- Repeat until a total of 4 puffs of reliever medicine have been given, remembering to shake the reliever puffer before each puff.

## STEP 3

**Wait 4 minutes - if there is no improvement give another 4 puffs of reliever medicine as per above.**

- Continue to calm and reassure the child.

## STEP 4

**If the child still cannot breathe normally, call an ambulance immediately Dial 000 and continue giving 4 puffs of reliever medicine every 4 minutes until the ambulance arrives.**

If a blue/grey reliever puffer is not available a Bricanyl<sup>®</sup> Turbuhaler<sup>®</sup> can be used for children aged 6 years and over as follows:

- Give 2 separate doses of Bricanyl<sup>®</sup>
- Wait 4 minutes - if there is no improvement give 1 more dose
- If there is still no improvement call an ambulance and continue giving 1 dose every 4 minutes

A Symbicort<sup>®</sup> Turbuhaler<sup>®</sup> or Rapihaler<sup>®</sup> can be used for children aged 12 years and over as follows:

- Give 2 separate doses of Symbicort<sup>®</sup>
- Wait 4 minutes - if there is no improvement give 1 more dose
- If there is still no improvement call an ambulance and continue giving 1 dose every 4 minutes (*up to 3 more doses - 6 doses in total*)

Refer to **pages 19-21** for instructions on correct use of a spacer device and Turbuhaler<sup>®</sup> device.

*\*Adapted from Kids' First Aid for Asthma - National Asthma Council Australia. 2014. [www.nationalasthma.org.au](http://www.nationalasthma.org.au)*

**Note:** If a child with known anaphylaxis to food/s, insects or medication/s has sudden breathing difficulty (*including wheeze, persistent cough or hoarse voice*) even if there are no skin symptoms always give adrenaline autoinjector first, if available, then blue/grey puffer.

# SPACER DEVICES

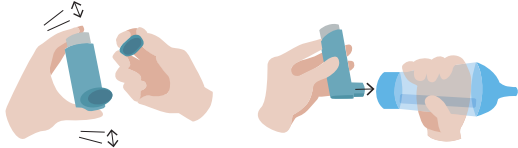
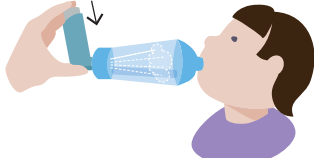

A spacer device is a holding chamber that helps children with asthma to use their aerosol inhalers or metered dose inhalers (*puffers*) effectively. It is highly recommended that spacers be used by all children who require a puffer as this will allow more medication to be delivered directly to the airways.

View video demonstrations at [www.asthmainchildren.org.au](http://www.asthmainchildren.org.au)

## A small volume spacer with a mask - recommended for children aged under 4 years.

<p><b>1.</b> Remove cap and shake the puffer:</p>	<p><b>2.</b> Fit the puffer into the end of the spacer:</p>
<p><b>3.</b> Gently place the attached facemask over the mouth and nose of the child. Ensure there are no gaps around the edges of the mask.</p>	<p><b>4.</b> Release one puff of medicine into the spacer by pressing down on the top of the puffer: Watch the child breathe normally in and out 4 to 6 times before removing the mask.</p> <p>If more than one puff (dose) is required repeat step remembering to shake puffer before each dose.</p>

## A small or large volume spacer without a mask - recommended for children aged over 4 years.

<p><b>1.</b> Remove cap, shake the puffer well and insert into spacer:</p>	
<p><b>2.</b> Place mouthpiece of spacer between teeth, closing lips to form a seal. Push down on top of puffer to release 1 puff of medicine into spacer:</p>	
<p><b>3.</b> Take 4 normal breaths in and out through spacer. For each additional puff of medicine shake puffer and repeat steps 2 &amp; 3.</p> <p>Masks can be attached to spacers for children under 4 years or those with developmental/cognitive delay.</p>	

# OTHER ASTHMA INHALATION DEVICES

A mask may be used with a spacer in hospital for older children during the night to avoid disturbing their sleep. In the daily home situation, children who are capable are encouraged to use the mouthpiece of the spacer.

View video demonstrations at [www.asthmainchildren.org.au](http://www.asthmainchildren.org.au)

As different medicines are available in different asthma inhalation devices it is important to follow the manufacturer's instructions in regards to the priming requirements for each device, if any, and which devices have a dose counter etc.

## AEROSOLS

### A Metered Dose Inhaler (puffer)

It is recommended that a puffer is used with a spacer device, particularly in asthma first aid situations.

If a spacer device is unavailable, a puffer can be used on its own, however, as they require good coordination, children under seven years cannot successfully manage them. To use a puffer on its own:



1. Remove inhaler cap/or mouthpiece cover.
2. Shake the inhaler for 5 seconds.
3. Breathe out gently, away from inhaler.
4. Keeping the inhaler upright, tilt head back slightly.
5. Place inhaler mouthpiece between teeth and close lips to get a good seal.
6. Commence breathing in slowly and deeply, at same time pushing down on top of the inhaler to release 1 dose of medicine.
7. Continue to breathe in slowly and deeply.
8. Remove inhaler from the mouth and hold breath for 6 to 10 seconds.
9. Breathe out gently, away from inhaler.
10. If more medicine is required repeat steps 2 to 8.
11. Replace inhaler cap/or mouthpiece cover.

### Autohaler® *not recommended for children under 7 years*

1. Remove mouthpiece cover.
2. Shake autohaler®.
3. Holding autohaler® upright, push the lever on top into the upright position.
4. Breathe out away from the autohaler®.
5. Place the autohaler® in mouth, between teeth and close lips, ensuring a good seal.
6. Breathe in slowly and deeply, continuing to breathe in after hearing the click.
7. Remove autohaler® from mouth and hold breath for 6 to 10 seconds.
8. Breathe out gently, away from inhaler.
9. Push the lever back down.
10. If more medication is required repeat steps 2 to 9.
11. Replace mouthpiece cover.



#### Notes:

- Remember to push the lever upright to load the device.
- On commencement of breathing a clicking sound will be heard - continue to inhale after this for 6 to 10 seconds.
- Avoid placing thumb underneath device as this may cover the air vent and prevent it from working properly.

## DRY POWDER DEVICES

### Turbuhaler® *Not recommended for children under 6 years*

1. Unscrew the turbuhaler® cover.
2. With the turbuhaler® in the upright position, turn the coloured base to the right as far as it will go and then turn back to the left until it clicks.
3. Breathe out away from the turbuhaler®.
4. Place the turbuhaler® in mouth, between teeth and close lips to form a good seal.
5. Breathe in fast and deeply.
6. Remove the turbuhaler® from mouth.
7. Breathe out.
8. If more medication is required repeat steps 2 to 8.
9. Replace the cap.

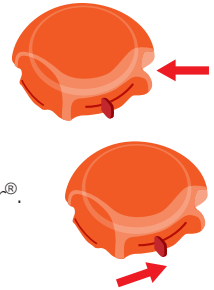


#### Notes:

- Turbuhalers® must be loaded in an upright position so you may find it easier to place it on a flat surface, holding the coloured base and turning the top section of the turbuhaler®.
- Avoid keeping device in humid or moist places.

### Accuhaler® *Not recommended for children under 7 years*

1. Place thumb in groove and open accuhaler® by pushing the groove to the right until it clicks.
2. Slide lever to the right until it clicks.
3. Breathe out away from the accuhaler®.
4. Place the accuhaler® in mouth, between teeth and close lips.
5. Breathe in slowly and deeply.
6. Remove the accuhaler® from mouth and hold breath for 6 to 10 seconds.
7. Breathe out, away from the accuhaler®.
8. Close accuhaler® by pushing thumb groove to the left.
9. If more medication is required repeat steps 1 to 8.



#### Notes:

- Avoid keeping device in humid places.
- Accuhalers® should not be shaken.

### Ellipta®

Currently this device only comes in Breo® which is not recommended for children under 12 years.

1. When ready to take the dose, open cover by sliding it in a downward motion until you hear a click.
2. Breathe out gently away from the Ellipta® device.
3. Place mouth piece between teeth and close lips to create a good seal.
4. Breathe in steadily and deeply for up to 5 seconds.
5. Remove Ellipta® device from mouth and breathe out gently away from it.
6. Slide the cover upwards as far as it will go to cover the mouthpiece.
7. If more doses are required repeat steps 1 - 6.

#### Notes:

- The Ellipta® Device should not be shaken.
- Only open the cover when ready to take a dose as each time the cover is opened the dose counter counts down one dose.
- Avoid covering the vent on the device with your hand.



# CLEANING SPACER DEVICES, PUFFERS & OTHER MEDICINE INHALATION DEVICES

## SPACERS

- Take the spacer apart if possible.
- Wash in warm soapy water (*dishwashing liquid*).
- Do not rinse.
- Allow the parts to air dry. Rinsing and drying with a cloth may cause static electricity to build up resulting in the medication clinging to the inside of spacer.
- When dry put spacer back together ready for use.

**Note:** Some spacers are made from anti-static material therefore these spacers can be rinsed and dried with a cloth without creating static electricity.

## PUFFERS

- Remove the canister from the plastic holder.
- Do not wash the canister.
- Rinse the plastic holder under warm running water.
- Shake out excess water and dry.
- Place the canister back in the holder.
- Keep the cap in place when not using puffer.

Clean your spacer and puffer canister regularly and whenever the puffer does not spray well.  
Change and wash Intal® and Intal® Forte plastic holders daily to prevent blockage (*an extra holder is supplied*).  
There is no need to wash other medicine plastic holders - just wipe the mouthpiece with a cloth.  
Store puffer below 20 degrees Celsius and regularly check the expiry date, found on the side of the canister.

## OTHER ASTHMA MEDICINE INHALATION DEVICES

Turbuhalers®, accuhalers®, autohalers®, and elliptas® only require minimal cleaning which consists of wiping the mouthpiece with a tissue after use and replacing the cover of the turbuhaler® and autohaler®, or closing the accuhaler® and ellipta®.

As turbuhalers®, accuhalers®, and elliptas® contain dry powdered asthma medicine, it is important that they do not come into contact with moisture. Therefore, do not breathe directly into these devices or wash under tap water.

# MANAGEMENT OF ASTHMA AWAY FROM HOME

## SCHOOLS AND CHILD SERVICES

Leaving your child for the first time at school, out of school hours care, or childcare can be an anxious moment for parents, but more so if your child has a medical condition such as asthma. This is a time when the management of your child's asthma will become the responsibility of someone else during the time that your child is in their care. In Australia, it is a requirement that childcare and out of school hours care services have at least one staff member on duty at all times, who has current Australian Child and Education Care Quality Authority (ACECQA) approved asthma management training. In addition, although not a mandatory requirement, the vast majority of schools participate regularly in asthma management training. Knowing that there are staff available who can competently provide nationally recognised asthma first aid to your child if needed, will enable you to feel comfortable and confident when you leave your child in their care.

To enable school, out of school hours care, or childcare staff to appropriately care for your child, it is important they are aware that your child has asthma, or has previously been treated for asthma. This information is provided at the time of enrolment, or as soon as possible when a diagnosis is made. Depending on the policies and procedures of the school, out of school hours care, or childcare your child attends, you may be asked to provide documentation which will inform the staff of your child's current asthma management. It is important that this information is updated at least every year, or whenever your child's asthma management changes. The NSW Health Schools and Child Services Action Plan for Asthma Flare-Up (*refer to page 27*) provides succinct and easy to follow asthma first aid instructions for staff caring for your child. The form has been developed by expert Asthma Clinicians in collaboration with the NSW Ministry of Health, and State and National Education Sectors. It is based on the nationally recognised asthma first aid procedure, which is the asthma first aid procedure that school, out of school hours care, and childcare staff are trained in.

Discussing your child's asthma management with the school, out of school hours care, or childcare service will assist staff in having a good understanding of your child's asthma

Providing the school, out of school hours care, or childcare service with your child's reliever medicine, spacer device, or alternative reliever medicine delivery device, clearly labeled with the child's name, will enable staff to provide prompt treatment to your child if required. It is also recommended that your child's reliever medicine be clearly labeled with the dose to be given as well as the expiry date of the medicine. Check the expiry date regularly so that a replacement can be readily available.

Always discuss any concerns that you may have with staff caring for your child

**Note:** If your child requires reliever medicine from time to time for asthma like symptoms (*i.e. wheezing and coughing*), but has not yet been given a confirmed diagnosis of asthma, completing health-related documentation when enrolling them into a childcare service can become tricky. It is important that you discuss this with the Director/Supervisor of the institution your child attends to ensure that they are aware of your child's unconfirmed diagnosis so that they may act accordingly if your child suddenly shows signs of having an asthma flare-up whilst in their care. In this case the Schools and Child Services Action Plan for Asthma Flare-Up (*refer to page 27*) may be an appropriate document for your child's doctor to complete.

## OVERNIGHT STAYS

All children love to have a sleepover at a friend's home and asthma should not prevent this. However, it is important to make sure that your child has good asthma control before going. This will help to reduce the likelihood of them having an asthma flare-up whilst away from home. Speaking with the parents of the sleepover house about your child's asthma will assist in making it an enjoyable sleepover experience. Below are some useful tips.

- Tell the parents that your child has asthma. This is important even if your child has good asthma control and they have not had a flare-up for some time.
- Discuss your child's asthma triggers i.e. pets, cigarette smoke, house dust etc. and how best these can be avoided or minimised. Being in a different environment can potentially expose your child to triggers that would normally be avoided or minimised in their own home.
- Give the parents an up to date copy of your child's asthma action plan (*even if your child is old enough to have their own copy*) and explain thoroughly the steps to take should your child have asthma symptoms or an asthma flare-up.
- Check in advance that your child's asthma medicine has not expired or depleted. Give these to the parent (*unless your child is old enough to carry his or her medicine*) and if your child is on a regular preventer medicine discuss the dose and time your child should take it.
- Spend some time to show the parents how to correctly use your child's asthma medicine delivery device, even if your child is old enough to do this on their own.

## HOLIDAYS/TRAVELLING

When going away with a child with asthma it is important that you are well organised to enable the daily management of their asthma to be maintained.

### Before going away

- Visit your child's doctor to have their asthma management reviewed and asthma action plan updated.
- Make copies of the asthma action plan to be packed in a few different places. Copying it to your smartphone is ideal.
- Check that you have sufficient asthma medicine to cover your child for the trip, as well as some extra in case of misplacing or losing it. Have a back-up plan to replace it while you are away i.e. prescription.
- Check the condition of your child's spacer device/mask and replace these with new ones if needed.

### If travelling overseas

- Check to see if there are any regulations that you may need to follow in regards to bringing asthma medicine into each country you are visiting, or any restrictions that you need to be aware of.
- Asthma medicines may have different names and colours in other countries. Writing down the medical name of your child's medicine may assist in identifying the correct one if you need a replacement. For example, the medical name for Ventolin<sup>®</sup>, Asmol<sup>®</sup>, and Airomir<sup>®</sup> is Salbutamol.
- Ideally asthma medicine should be carried in all hand luggage for quick access but it is a good idea to check in advance if you need to follow any specific procedures for this.
- Make a list of the emergency contact numbers for each country you visit.

### Whilst away

- Try to keep your child's asthma medicine times as close as possible to their usual times. Holidays are a time when parents and children are often distracted from their normal routines.
- Travelling across different time zones may make it difficult to keep to routine. Ask your child's doctor for advice on how best to work out the times for when to give any regular asthma medicine doses.
- Find out the address of the closest hospital or medical centre for each place you stay at, how best to get there, and what the contact numbers are.

Always discuss your travel plans with your child's doctor who will be able to advise you on how best to manage your child's asthma whilst away, as well as providing you with contact details for obtaining additional information



# HOSPITAL DISCHARGE CHECKLIST

If your child visits the emergency department or is admitted to hospital for their asthma, the below checklist will assist you in preparing for their discharge and continued management when at home.

If at any time during your child's hospital stay you do not understand anything or would like additional information, do not be afraid to ask your child's doctor, asthma educator, or nurse to explain further.

## Before your child goes home from hospital make sure you have the following:

- discharge letter for your child's doctor
- short term reducing asthma medicine plan (*or other short term instructions to follow*)
- asthma action plan
- asthma medicines and/or prescription, and spacer device
- instruction on how to use your child's asthma medicine delivery device
- asthma education from a health professional.

## Please make an appointment with your child's doctor within 2-3 days after leaving hospital (or earlier if advised), and take the following with you:

- discharge letter
- short term reducing asthma medicine plan / discharge weaning plan (*if you received one*)
- asthma action plan
- spacer device
- other asthma medicine delivery devices that your child uses
- Schools and Child Services Asthma Action Plan for Asthma Flare-Up

## On your child's return to school, out of school hours care, or childcare:

- inform the staff of your child's recent emergency department or hospital visit
- provide staff with an updated Schools and Child Services Action Plan for Asthma Flare-Up
- ensure your child has an in date blue reliever puffer and spacer device for use whilst in care

**Note:** A Short-Term Reducing Asthma Medicine Plan or Discharge Weaning Plan will outline specific instructions to follow for the first few days after discharge and provide a transition to your child's asthma action plan. It includes details of what asthma medicine to give, how much, and when to give it, as well as when to make an appointment with your child's doctor.

# DAILY ASTHMA SYMPTOMS DIARY

Name: \_\_\_\_\_

Every evening (for each symptom below) record the number (0, 1, 2, or 3) that best matches how you/your child felt in the last 24 hours. Please photocopy as required.

SYMPTOMS	DATE																	
<b>Sleep disturbance due to asthma</b>	<b>Write number in box</b>																	
Slept well last night (no asthma)	0																	
Slept well but tended to wheeze or cough	1																	
Woke up twice or more with wheeze or cough	2																	
Bad night, mostly awake with asthma	3																	
<b>Cough</b>																		
None	0																	
Occasional	1																	
Frequent	2																	
Most of the time	3																	
<b>Wheeze</b>																		
None	0																	
Mild	1																	
Moderate	2																	
Severe	3																	
<b>Breathlessness on exertion</b>																		
None	0																	
Mild	1																	
Moderate	2																	
Severe	3																	
<b>Runny, snuffly or blocked nose</b>																		
None	0																	
Mild	1																	
Moderate	2																	
Severe	3																	
<b>Reliever Medication</b>	<b>Record the number of times Reliever medication was used during the last 24 hrs.</b>																	
1. 12 midnight to 12 noon																		
2. 12 noon to 12 midnight																		

'Daily Asthma Symptoms Diary' developed by Hunter New England kidshealth Network



Child's photo

Child's name: \_\_\_\_\_

Date of birth: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

This child has confirmed food, insect, or medication allergies:

Yes  No

This child has an ASCIA Action Plan:

Yes  No

Name of Medical / Nurse Practitioner completing this form: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

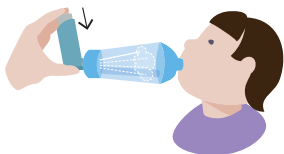
Plan due for review: \_\_\_\_\_

**How to use a puffer with a spacer**

Remove cap, shake puffer well and insert into spacer.



Place mouthpiece of spacer between teeth, closing lips to form a seal. Push down on top of puffer to release 1 puff of medicine into spacer.



Take 4 normal breaths in and out through spacer. For each additional puff of medicine shake puffer and repeat steps 2 & 3.



Masks can be attached to spacers for children under 4 years or for those with developmental/cognitive delay.

**Note for Medical or Nurse Practitioner:** This form has been developed specifically for use within the Education and Care sector and is **to be completed and signed by a Medical or Nurse Practitioner only** (emergency contact details can be completed by parent or guardian). If the child's school or child's service asthma first aid instructions differ from this Action Plan for Asthma Flare-up, please provide parent/guardian with written detailed instructions.

**SIGNS OF A MILD TO MODERATE ASTHMA FLARE-UP\***

- Mild or moderate difficulty in breathing
- Wheezing (high pitched whistling sound, generally heard when breathing out)
- Dry and irritable cough
- Chest tightness or sore chest
- Mostly able to talk in full sentences

\* Not all need to be present

**ACTION FOR A MILD TO MODERATE ASTHMA FLARE-UP**

Be calm and reassuring. If possible, get someone to help.

**STEP 1:** Place the child in a seated upright position.

**STEP 2:** Shake blue/grey puffer (e.g. Ventolin®, Asmol®, Airomir®), give 4 separate puffs, preferably with a spacer, allowing child to take 4 breaths in and out through spacer with each puff. Shake puffer before each puff.

**STEP 3:** Wait 4 minutes. If the child still cannot breathe normally, give another 4 separate puffs of the blue/grey puffer as in STEP 2.

**STEP 4:** If no improvement in the child's breathing, **call an ambulance - DIAL 000** and continue to give 4 separate puffs of blue/grey puffer every 4 minutes until the ambulance arrives.

**SIGNS OF A SEVERE / LIFE-THREATENING ASTHMA FLARE-UP\***

- Extreme difficulty in breathing-unable to talk freely
- Sucking in at the base of the throat/caving in of the rib cage
- Bluish tinge to the lips, pale, sweaty
- Distressed, anxious, exhausted, confused, drowsy

\* Not all need to be present

**ACTION FOR A SEVERE / LIFE-THREATENING ASTHMA FLARE-UP**

Place child in a seated upright position.

**CALL AN AMBULANCE - DIAL 000**

Be calm and reassuring. If possible, get someone to help.

Shake blue/grey puffer (e.g. Ventolin®, Asmol®, Airomir®), give 4 separate puffs, preferably with a spacer, allowing child to take 4 breaths in and out through spacer with each puff. Shake puffer before each puff. Repeat every 4 minutes until the ambulance arrives.

**Note:** If child with known anaphylaxis to food/s, insects or medication/s has sudden breathing difficulty (including wheeze, persistent cough or hoarse voice) even if there are no skin symptoms always give adrenaline autoinjector first, if available, then blue/grey puffer.

**Attention Parents / Guardian**

Please complete the below information and return this form to your child's school or childcare.

**Emergency contact details:**

Name: \_\_\_\_\_ Relationship to child: \_\_\_\_\_

Best contact phone number/s: \_\_\_\_\_

