

# ASTHMA MEDICATIONS & DEVICES



 $This \, resource \, is \, up \, to \, date \, as \, of \, March \, 2023. \, Visit \, \underline{asthma.org.au} \, \, for \, more \, medication \, and \, device \, information.$ 

## **QUICK REFERENCE GUIDE**

#### **Medications**

Reliever medications (short-acting bronchodilators)		4
Dual Purpose Reliever medications (budesonide/formoterol used as-needed)		5
Preventer medications (inhaled corticosteroids)		6
Combination Preventer medications (inhaled corticosteroids and long-acting bronchodilators in fixed dose)		7
Other Preventer medications (non-steroidal preventers)		8
Add-on inhaled medications (long-acting bronchodilators)		9
Other add-on injectable medications (biologics)	100	10

Other medications for short-term use

(oral corticosteroids)

11

#### **Devices**



The images in this resource represent the majority of asthma medications in use and those currently available in Australia at the time of printing this brochure. There is ongoing research and development occurring into asthma medications and new medications will be added to this booklet in coming years. All dosages and newly released asthma medications may not be pictured.

If you have further queries about your medications, please speak to your doctor, pharmacist or call **1800 ASTHMA** (1800 278 462).





## UNDERSTANDING YOUR LEVEL OF ASTHMA SYMPTOM CONTROL

Think about your asthma over the last four weeks and look at the chart below to see if your asthma control is good, partial or poor.

Good	Partial	Poor
control	control	control
All of:	One or two of:	Three or more of:
Able to do all	Less able to	Less able to
your usual	do your usual	do your usual
activities	activities	activities
No asthma	Any asthma	Any asthma
symptoms	symptoms	symptoms
during night or	during night or	during night or
on waking	on waking	on waking
Daytime	Daytime	Daytime
symptoms no	symptoms more	symptoms more
more than two	than two days	than two days
days per week	per week	per week
Need reliever no	Need reliever	Need reliever
more than two	more than two	more than two
days per week*	days per week*	days per week*

<sup>\*</sup>Not including reliever taken before exercise.



Did you know...

## **UP TO 90%**

of people on asthma medications do not use them properly

## **ASTHMA MEDICATIONS**

Asthma medications play a vital role in keeping you well and helping you to achieve good control of your asthma symptoms. Asthma medications work very well when taken correctly. However, up to 90% of people on asthma medications don't use them properly.¹ This means many people put up with asthma symptoms when they don't need to and their everyday life is affected. Making your medication work for you is an important step in living well with asthma.

## **TAKING YOUR MEDICATION**

It is very common for people to use their asthma medication devices incorrectly and miss out on the full benefit of their medications. Using asthma medications incorrectly can also increase the risk of side effects. Even if you think you are using your medication correctly, it is important to have your technique checked regularly. Ask your doctor to review your medications and check your technique at your next visit. You can also ask your pharmacist to check your technique or visit asthma.org.au to watch our videos on correct device technique. Always check with your doctor or pharmacist if you experience side effects or you think your medication is not working as it should.

## **LOOKING AFTER YOUR ASTHMA**

Asthma Australia recommends that everyone with asthma should have an overall plan for managing their asthma. This should include but is not limited to a written Asthma Action Plan and regular review with your doctor, at least twice per year.

## **STORAGE**

Check your medication expiry date and exact storage instructions. Most asthma medications require storage at room temperature. Do not leave asthma medication in your car.

### **PRESCRIPTIONS**

Most asthma medications require a prescription. Ask your doctor if you need a repeat prescription to make sure you don't run out.

Most reliever medications can be bought over the counter in Australia, but you should still make sure your doctor knows when and how you are using these. If you are using your reliever medication more than two days per week, speak to your doctor. This is a sign that your asthma is not well-controlled or your medication may need to be changed.

## FIND OUT MORE ABOUT YOUR MEDICATIONS

Asthma medications come with Consumer Medicine Information leaflets which can be provided by any pharmacist or doctor, or you can find them and other information about medications online at nps.org.au

 Bashati IA, Armour CL, Bosnic-Anticevich SZ, Reddel HK, Evaluation of a novel educational strategy, including inhaler based reminder labels, to improve asthma inhaler technique. Patient Educ. Couns 2008; 72: 26-33

## **RELIEVER MEDICATIONS**

(SHORT-ACTING BRONCHODILATORS)



Common names	Airomir, Asmol, Bricanyl, Ventolin, Zempreon	Commonly called reliever puffer, or short acting beta-2 agonist or short acting bronchodilator		
What they do	Relax tight airway muscles	Helps to relieve asthma symptoms for up to 4 hours		
How long they take to work	Very quickly	Provides relief from symptoms within 4 minutes		
How to take them	Inhaled	See the devices section to check that you are taking your medication properly		
When to take them	When you have symptoms	Symptoms may include:     breathlessness     wheezing     tight chest     persistent cough		
	Emergency	Use a reliever with a spacer (where appropriate) for Asthma First Aid		
	Sometimes before exercise	In general, usually taken 15 minutes before exercise if prescribed*		
Helpful to know	Carry it with you always	In case of symptoms, or for Asthma First Aid		
	If you are using your reliever more than 2 days per week*	Indicates that your asthma is not well-controlled See your doctor for an asthma review		
	Many relievers now come with dose counters to enable you to keep track of how much medicine is left in your device.			
Common side effects	Headache; nausea; shaky (tremor) or tense, agitated or restless feeling; increased heart rate or palpitations	These will pass quickly Use of a spacer with a puffer can reduce oral side effects Speak to your doctor if you are concerned		

<sup>\*</sup>Not including before exercise.

## **DUAL PURPOSE RELIEVER MEDICATIONS**

(BUDESONIDE/FORMOTEROL USED AS-NEEDED)







Common names	DuoResp, Symbicort	Dual purpose reliever (budesonide/formoterol as-needed): relieves symptoms and reduces risk of serious flare-ups by treating inflamed airways		
What they do  Relax tight airway muscles and reduces airway inflammation		Relief provided by Symbicort and DuoResp can last up to 12 hours		
How long they take to work	Very quickly	Provides relief from symptoms within 4 minutes		
How to take them	Inhaled	See the devices section to check that you are taking your medication properly		
When to take them	When you have symptoms	Symptoms may include:     breathlessness     wheezing     tight chest     persistent cough		
	Emergency	Use a reliever with a spacer (where appropriate) for Asthma First Aid		
	Sometimes before exercise	Speak to your doctor		
Helpful to know	Carry it with you always	In case of symptoms, including during an Asthma First Aid situation		
	If you are using your reliever most days per week*	Indicates that your asthma is not well-controlled See your doctor for an asthma review		
Common side	Sore, yellowish, raised patches in	These will pass quickly		
effects	the mouth (thrush); hoarse voice; irritation of the tongue and mouth;	Patients may rinse, gargle and spit (where possible) after Symbicort or DuoResp Spiromax use		
	Coughing; headache; trembling or shakiness; feeling anxious, nervous,	Use of a spacer with a puffer can reduce oral side effects		
	restless or upset; fast or irregular heart rate or pounding heart	Speak to your doctor if you are concerned		

<sup>\*</sup>Not including before exercise.

## **PREVENTER MEDICATIONS**

(INHALED CORTICOSTEROIDS)











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Common names	Alvesco, Arnuity, Flixotide, Fluticasone Cipla, Pulmicort, Qvar	Inhaled corticosteroid preventer medications are some of the most effective and safe preventers for adults and children when used appropriately		
What they do	Reduce swelling Reduce mucus	Use of preventers make airways less sensitive to triggers		
How long they take to work	May take a few weeks of consistent use to show improvement	Preventers taken regularly reduce the risk of having asthma symptoms or flare-ups		
		If you take a preventer regularly and still experience asthma symptoms speak to your doctor		
		Preventers are not used in emergency situations		
How to take them	Inhaled	See the devices section to check that you are tak your medication properly		
When to take them	Every day as prescribed	Take your preventer every day as prescribed even if you feel well		
Helpful to know	A preventer is the key to keeping well with asthma, but don't forget that a reliever needs to be carried with you always in case of breakthrough symptoms	Preventers are most effective if you take them every day as prescribed		
Common side effects	Sore, yellowish, raised patches in the mouth (thrush); hoarse voice; irritation of the tongue and mouth; coughing	You can reduce these by:  using a spacer with puffers  always rinse, gargle and spit after using preventer medication or have a drink of water for young children		
		Speak to your doctor if you have any concerns about side effects		

## **COMBINATION PREVENTER MEDICATIONS**

(INHALED CORTICOSTEROIDS AND LONG-ACTING BRONCHODILATORS IN FIXED DOSE)



		OSEI UI IIII OF MALION	
Common names	Atectura, Breo, DuoResp, Enerzair, Fluticasone Cipla, Flutiform, Fostair, Seretide, Symbicort	Contains two or three asthma medications in combination – a corticosteroid and one or two long-acting bronchodilators	
What they do  Combination medication  Preventer (reduces swelling and reduces mucus) plus long-acting reliever (relaxes tight airway muscles)		Use of preventers make airways less sensitive to triggers  Long-acting relievers relax airway muscles for up to 12 hours, some up to 24 hours	
How long they take to work	Preventers may take a few weeks of consistent use to show improvement Long-acting bronchodilators are either fast or slow acting Some medicines contain a long-acting reliever that works within minutes. Others take up to 30 minutes to start working	experience asthma symptoms speak to your doctor	
How to take them	Inhaled	See the devices section to check that you are taking your medication properly	
When to take them	Combination preventers must be taken every day to be effective  Low dose DuoResp, Fostair and Symbicort can sometimes be used as a preventer and a reliever, under strict conditions. This is called 'Maintenance and Reliever Therapy', and means you use the same device to relieve symptoms if they occur	Take your combination preventer everyday as prescribed, even if you feel well	
Helpful to know	Prescribed for people who have asthma symptoms despite simple, regular preventer use	If you take a combination preventer regularly and still experience asthma symptoms speak to your doctor	
Common side effects	Sore, yellowish, raised patches in the mouth (thrush); hoarse voice; irritation of the tongue and mouth; coughing Headache; trembling or shakiness; feeling anxious, nervous, restless or upset; fast or irregular heart rate or pounding heart	You can reduce these by:  using a spacer with a puffer  always rinse, gargle and spit after using combination preventer medication or have a drink of water for young children  Speak to your doctor if you have any concerns about side effects	

## **OTHER PREVENTER MEDICATIONS**

(NON-STEROIDAL PREVENTERS)





Inhaled non-steroids: Intal and Intal Forte  Tablets: APO-Montelukast, Lukair, Montelair,	Intal and Intal Forte are non-steroid preventers  Mainly used in children as a preventer	
<b>Tablets:</b> APO-Montelukast, Lukair, Montelair,		
Montelukast, Montelukast APOTEX, Montelukast GH, Montelukast Lupin, Montelukast Mylan, Montelukast Sandoz, Respikast, Singulair	treatment option and occasionally considered add-on therapy in adults	
Reduce swelling Reduce mucus	These other preventer medications make the airway less sensitive but are typically not as effective as inhaled corticosteroid preventers	
Montelukast starts to work within a day but can take days to weeks of consistent use to show improvement	Ongoing improvements can occur over months	
Inhaled or Intal Forte may take days to weeks to show improvement		
Montelukast – oral tablet Intal and Intal Forte – inhaled	See the devices section to check that you are taking your inhaled medication properly	
Montelukast should be taken once every day	Take as prescribed	
Intal and Intal Forte should be taken 3-4 times every day		
Non-steroid preventers are less effective than inhaled corticosteroid preventers	Intal Forte inhalers must be washed thoroughly every day to avoid blockage	
If taking your non-steroidal preventer regularly and still experiencing asthma symptoms speak to your doctor	Montelukast is available in a chewable tablet for children	
Inhaled non-steroids:  Sore throat; cough; difficulty breathing. You can reduce puffer related side effects by using a spacer  Montelukast: Fluid retention; nose bleed; headache; dizziness; drowsiness; feeling unusually weak or tired; upper respiratory tract infection; bedwetting in children. Behaviour and mood-related changes, including suicidal thoughts and actions, have been reported in patients taking montelukast. If you or your child experience these changes while taking montelukast, tell your doctor		
	Montelukast Mylan, Montelukast Sandoz, Respikast, Singulair  Reduce swelling Reduce mucus  Montelukast starts to work within a day but can take days to weeks of consistent use to show improvement Inhaled or Intal Forte may take days to weeks to show improvement  Montelukast – oral tablet Intal and Intal Forte – inhaled  Montelukast should be taken once every day Intal and Intal Forte should be taken 3-4 times every day  Non-steroid preventers are less effective than inhaled corticosteroid preventers If taking your non-steroidal preventer regularly and still experiencing asthma symptoms speak to your doctor  Inhaled non-steroids: Sore throat; cough; difficulty breathing. You a spacer  Montelukast: Fluid retention; nose bleed; headache; dizzin tired; upper respiratory tract infection; bedw changes, including suicidal thoughts and act montelukast. If you or your child experience	

## **ADD-ON INHALED MEDICATIONS**

(LONG-ACTING BRONCHODILATORS)







		Useful information		
Common names	Oxis, Serevent, Spiriva	These medicines should only to be used in combination with an inhaled corticosteroid		
What they do	They work to relax the muscles around the airways	They are safest when used in what we call 'fixed dose combination' in one device, such as those listed on page 7, or in the case of Spiriva, as an add on therapy to a combination device		
How long they	Oxis acts quickly, within 4 minutes	These add-on medicines are all long lasting		
take to work	Serevent up to 15 minutes	Oxis and Serevent last approximately 12 hours		
	Spiriva takes 5-7 minutes	and Spiriva lasts up to 24 hours		
How to take them	These are all inhaled medicines	See the devices section to check that you are taking your inhaled medication properly		
When to take them	You should follow the instructions provided by your doctor and pharmacist	It is very important that these medicines are not used without also using regular inhaled		
	Usually Oxis and Serevent are prescribed twice daily and Spiriva once daily	corticosteroid preventer inhalers		
Helpful to know	These medicines are called 'add-ons' because the guidelines recommend they are added to your treatment regime, not used alone or as the first option			
Common side effects	Oxis and Serevent:  Tremor, agitation, restlessness; headache, dizziness; fast/irregular heart rate; muscle cramps; sleep disturbances  Spiriva:  Dry mouth: this is usually mild; sore mouth, gums, or throat; swollen, red, sore tongue; or thrush; hoarse voice; cough			
	Always inform your doctor about any side effects you experience			

## OTHER ADD-ON INJECTABLE MEDICATIONS

(BIOLOGICS)



		Useful information	
Common names	Dupixent, Fasenra, Nucala, Xolair	Commonly known as 'biologics' or 'monoclonal antibodies'	
What they do	Reduce inflammation (swelling and sensitivity) in the airways by targeting the molecules that cause the inflammation in asthma  They are prescribed by specialists for patients diagnosed with severe asthma	These medicines are used to reduce symptoms, reduce the risk of flare-ups, reduce the need for oral corticosteroids (OCS) and preserve the health of the lungs in people diagnosed with severe asthma	
How long they take to work	These medicines can take up to several months for patients to notice the effectiveness		
How to take them	These medicines are administered by injection		
When to take them	Your treatment plan will be prescribed by your specialist. Depending on the medicine, you will have an injection every 2 to 8 weeks		
Helpful to know	These medicines are subsidised for use provided certain strict criteria are met  They can only be prescribed and obtained from a specialist  If planning travel or holidays, discuss your treatment schedule with your doctor or nurse prior to travelling, to prevent missed doses		
Common side effects	Bruising, redness or pain at the injection site; for infection	ever; headache; nasal, throat or chest	

## OTHER MEDICATIONS FOR SHORT-TERM USE

(ORAL CORTICOSTEROIDS)





	Oscial information			
Common names	Panafcortelone, Predmix, Prednisolone, Redipred, Solone	Also known as rescue medication, or oral or systemic corticosteroids		
What they do	Acts in the body to reduce inflammation. in cases where symptoms are severe or p	Prednisolone products are prescribed and used only rolonged		
How long they take to work	It can take up to 1-2 hours to start working  You will usually take this medicine for 3-5 day children and 5-10 days for adults			
How to take them	These medicines are usually taken orally, as either a liquid or a tablet Injectable forms of these medications can also be administered during emergencies	It is usually recommended to continue to take your inhaled medication as prescribed at the same time as taking your course of rescue medication		
When to take them	Only take this medicine as and when prescribed by your doctor			
Helpful to know	Liquid prednisolone formulations should be kept in the fridge  Weaning down doses of oral corticosteroids is required when taken longer term, over 14 days			
Common side effects	Mood changes, nausea, anorexia, vomiting, increased appetite, bloating, diarrhoea or constipation  Please discuss all side effects with your doctor  Side effects associated with long terming and rounding of face  headache  dizziness  weight gain  redistribution of body fat  water retention  cramps or weakness  slowed growth in children  irregular menstrual periods  changes to the skin  changes to the immune system  changes in behaviour  changes in the eyes  Please discuss all side effects with			

## **DEVICES**

Asthma medications come in a range of different shaped containers (devices), and some come in more than one type of device. This means you can work with your doctor to choose the combination of medicine and device that works best for you.

Most people with asthma will benefit from a regular review of their device technique. Taking your medication properly, means that your medication will work better and you will have less chance of side effects. Ask your doctor to check your technique at your next visit.

By using the device properly and taking medication as prescribed, you are giving yourself the best chance of reducing asthma symptoms and living well with asthma. If you find the device tricky to use, or you are not sure if you are using it properly, always ask your doctor or pharmacist for help.



All devices need to be used and maintained according to the manufacturer's instructions. Spacers and some puffers will require regular cleaning, though dry powder inhalers must never be washed. It is very important that dry powder devices are never wet.

For more information see your doctor, pharmacist or call 1800 ASTHMA (1800 278 462).

## **KEY POINTS TO CONSIDER WHEN CHOOSING A DEVICE**

Checklist Importance		Solution / options		
Age	Very young children are not physically able to use all device types	For puffers, very young children (under 4) will need to use a spacer and mask. Children should always use a spacer with their puffer to effectively deliver the medication. Young children are unlikely to get full benefit from dry powder inhaler devices		
Breath intake	Some devices require you to take in a deep, forceful breath	Before you are prescribed a new asthma medication, ask your doctor to check that you can use the device correctly		
Hand strength	Some people find their hands are weaker e.g. frail, arthritis	Ask for a device that requires little hand strength, or if you are using a puffer ask about obtaining a Haleraid* from your pharmacy or our online shop at <b>asthma.org.au</b>		
Coordination	It can be difficult to coordinate breathing in and pressing down the puffer	Use a spacer with your puffer or talk to your doctor about prescribing a different device you may find easier to use		
Technique	People are more likely to use their devices correctly if they have been given clear instructions, including a demonstration and their technique is checked regularly	Talk to your doctor about the different device options that are available to you. Ask your doctor or pharmacist to show you how to use your device. Take your devices to your next appointment and have your technique checked		
Review	Regular check-ups are necessary to look at symptoms, how the medication is working and check device technique	Communicating with your doctor and pharmacist is important to living well with asthma. If your medication changes, make a follow up appointment with your doctor 1-3 months after the change		

<sup>\*</sup> Haleraids are a type of device that make it easier to use a puffer. They are only available for use with some puffers.

Examples of Haleraids —



## SPACERS: WHAT YOU NEED TO KNOW

#### What is a spacer?

Spacers assist with taking asthma medication. Spacers are only needed with puffers. Spacers are usually plastic or polycarbonate and cylinder shaped. A spacer has a mouthpiece at one end and at the other end a space to insert your puffer.

A spacer helps to increase the amount of medicine going down into your airways and reducing the amount of medicine that lands in the mouth and throat.

#### **Choosing your spacer**

Spacers come in different sizes and shapes. Small spacers are useful for children, but can be used by everyone (including adults).

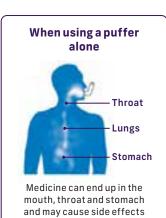
Choosing a spacer depends on the medication type, your personal preference, budget and advice from your doctor, pharmacist or call **1800 ASTHMA** (1800 278 462).

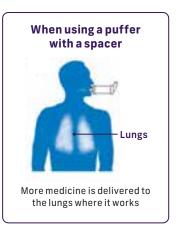
#### Why use a spacer?

It is recommended that all puffers are used with a spacer because:

- More medication is inhaled into the lungs
- It is easier to use as it requires less coordination than a puffer alone
- There are fewer side effects from the medication
- For children, it is important to always use a spacer with reliever and preventer puffers, a spacer may also be more effective and easier to manage in a first aid situation
- For adults and adolescents, it is recommended to always use a spacer with puffers. If you use your puffer without a spacer, ask your doctor to check that you are using your puffer correctly or it may not be effective.

The diagrams below show the difference between how much medication goes into the lungs, with and without a spacer.



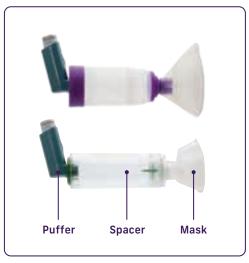


## SPACERS AND MASKS

#### **Masks**

Some spacers can be used with masks. Most children under four years will need a mask with their spacer to ensure as much asthma medication as possible gets into their airways.

#### Examples of typical spacers and masks



#### Cleaning your spacer

Check the manufacturer's instructions about the need to wash the spacer before the first use and for ongoing use.





#### **Spacer storage**

After spacers have been washed in warm water and detergent, and allowed to air dry, they should be stored in a way to avoid static, which can affect effective medicine delivery.

Check the manufacturer's instructions about how to best store the spacer.



#### Spacers are not for sharing

Spacers are made for single person use to stop the spread of infectious disease – each person should have their own spacer, which they can wash and reuse as shown above.

## **HOW TO USE A PUFFER AND SPACER**



- Remove cap from puffer
- Hold puffer upright and shake well
- Attach puffer to end of spacer



 Put mouthpiece of spacer in your mouth, between your teeth, and create a good seal with your lips

Breathe out gently into spacer



Press down on puffer once to fire medication into spacer



- Breathe in slowly and deeply
- Hold your breath for about 5 seconds or as long as comfortable
- Breathe out gently

#### OR

 Breathe in and out normally for 4 breaths (keeping your mouth on spacer). This technique is recommended for Asthma First Aid

To take more medication, shake puffer and repeat steps 2 - 4

## **HOW TO USE A PUFFER AND SPACER WITH A MASK**



- Remove cap from puffer
- Hold puffer upright and shake well



- Attach puffer to end of spacer
- Attach mask to other end of spacer



 Gently place mask over mouth and nose to create a good seal around the edges, there should be no gaps

Ask child to breathe out gently, or for younger children, watch when they have breathed out



- Press down on puffer once to fire medication into spacer
- Ask the child to breathe in and out normally for 4 breaths

Use this technique for all puffers and in Asthma First Aid

To take more medication, shake puffer and repeat steps 3 - 4

## **HOW TO USE A PUFFER**



- Remove cap from puffer
- Hold puffer upright and shake well
- Breathe out, away from puffer



- Tilt your chin upward to open your airways
- Put mouthpiece in your mouth, between your teeth, and create a good seal with your lips
- Start to breathe in through your mouth, then fire one puff of medication and continue to breathe in strongly and deeply



- Hold your breath for about 5 seconds or as long as comfortable
- Remove puffer from your mouth
- Breathe out gently, away from puffer



Replace cap

For Asthma First Aid, it is preferable to use a spacer with the puffer (if available)

To take more medication, shake puffer and repeat steps 2 - 3

## **HOW TO CLEAN A PUFFER**

Preventers, dual purpose relievers and combination puffers don't usually need to be washed (Intal Forte is the exception). Puffers that don't need to be washed should only be wiped with a dry tissue.

Blue/grey reliever puffers require cleaning every week to prevent blockage from a build up of medication.

Intal and Intal Forte puffer mouthpieces should be washed every day and allowed to dry for more than 24 hours before re-use. Alternate between the two mouthpieces provided by the pharmacist.



#### For puffers that require washing

(Asmol, Intal, Intal Forte, Ventolin and Zempreon)



- Remove metal canister
- Do not place in water
- Wash the plastic casing only
- Rinse mouthpiece through top and bottom under warm running water for at least 30 seconds
  - Wash mouthpiece cover
- 3 Allow to air dry
- 4 Reassemble

## **HOW TO USE AN AUTOHALER**

#### Autohalers are breath-actuated so the need for coordination is reduced.



- Hold Autohaler upright, without blocking air vents at base
- Shake Autohaler well



- Remove cap
- Lift lever at the top of Autohaler
- Breathe out, away from Autohaler

#### Do not blow in it



- Tilt your chin upward to open your airways
- Put mouthpiece in your mouth, between your teeth, and create a good seal with your lips
- Breathe in through your mouth strongly and deeply.
   Continue to breathe in after you hear it click
- Autohaler will fire a dose of medication automatically



- Hold your breath for about 5 seconds or as long as comfortable
- Remove Autohaler from your mouth during this time
- Breathe out gently, away from Autohaler



Push lever down and replace cap

To take more medication, repeat all steps

## **AUTOHALER NOTES**

#### How to look after an Autohaler

- Remove canister and rinse the mouthpiece in warm water as per manufacturer's instructions (Airomir only - do not wash Qvar)
- Leave it to air dry, then replace mouthpiece cover
- Do not push anything into the mouthpiece as this may cause damage
- Autohaler is not compatible with spacer. Don't try to use Autohaler with a spacer device

#### How can I tell when the Autohaler is empty?

- Load the Autohaler by holding it upright and lifting up the grey lever
- There is a small sliding lever on the bottom of the Autohaler. Slide the lever across
- If the Autohaler does not fire any medication, it is empty

## **NEBULISERS**

Nebulisers convert liquid medication into a fine mist inhaled through a mouthpiece or mask. The air flow and pressure of your nebuliser should be checked regularly (at least once a year). Depending on use, disposable nebuliser bowls may need replacing regularly, according to the manufacturer's instructions. It is advisable to always have a spare bowl. Nebuliser filters should be changed regularly and the machine serviced according to the manufacturer's instructions.

Used correctly, a puffer and spacer are not only as effective as a nebuliser, they are also easier, faster, cheaper, more portable and can reduce side effects. A nebuliser is sometimes recommended by the doctor if using a puffer and spacer is difficult for someone.

For more information, talk to your doctor, pharmacist or call 1800 ASTHMA (1800 278 462).

#### Examples of typical nebuliser devices



## **HOW TO USE A RESPIMAT**

#### Loading before first use

The Respimat cartridge needs to be loaded before using the inhaler for the first time. We suggest that you ask your pharmacist to show you how to do this.



- Hold Respimat upright with the cap closed
- Turn base in direction of arrows on label until you hear it click (half a turn)

#### Do not shake Respimat



- Open the cap until it snaps fully open
- Breathe out gently, away from Respimat



 Put mouthpiece in your mouth, between your teeth, and create a good seal with your lips

#### Do not cover air vents

- Start to breathe in through your mouth slowly and deeply and, at the same time, press down on the dose button
- Continue to breathe in through your mouth slowly and deeply



- Hold your breath for about 5 seconds or as long as comfortable
- Remove Respimat from your mouth during this time



- Breathe out gently, away from Respimat
- Close cover (click shut)

2 inhalations is the usual dose for medicines used with Respimat. To get the full dose, repeat all steps

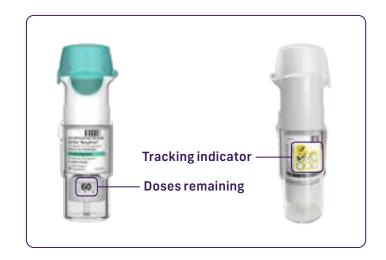
## **RESPIMAT NOTES**

#### How to look after a Respimat

- Before first use, ask your pharmacist to load the cartridge for you and ask the pharmacist to supervise you loading your own device
- Always keep it dry and closed when not in use
  - The outer case of the Respimat can now be re-used up to 5 times
- Avoid breathing into the Respimat
- Wipe the mouthpiece including the metal part inside the mouthpiece with a clean, damp cloth or tissue only, at least once a week to clean
- Do not remove the metal cartridge until it's empty
- Do not shake

#### How can I tell when a Respimat is empty?

- There are 30 doses of medication in a Respimat
- The new Respimat device has a dose counter which indicates exactly how many doses remain in the device
- The new Respimat also has a device tracking indicator so you know how many times you've reloaded your device and when you will need a new casing



## **HOW TO USE AN ACCUHALER**



- Hold Accuhaler horizontally (by its base) in one hand
- Place thumb of other hand on thumb grip
- Open Accuhaler by pushing thumb grip around until you hear it click

Do not shake Accuhaler



- Slide lever until you hear it click
- A single dose of the medication is now loaded
- Breathe out, away from Accuhaler

Do not blow in it



- Put mouthpiece in your mouth, between your teeth, and create a good seal with your lips
- Breathe in through your mouth strongly and deeply



- Hold your breath for about 5 seconds or as long as comfortable
- Remove Accuhaler from your mouth
- Breathe out gently, away from Accuhaler

If another dose is required, push lever back to starting position and repeat steps 2 - 4



When finished, close Accuhaler

## **ACCUHALER NOTES**

#### How to look after an Accuhaler

- Avoid breathing into the Accuhaler
- Keep it closed when not in use
- Never wash the device, always keep it clean and dry
- Wipe the mouthpiece with a clean, dry tissue
- Do not shake

#### How can I tell when the Accuhaler is empty?

There are 60 doses of medication in an Accuhaler. A dose counter on the side of the Accuhaler will show you how many doses remain.

#### The last 5 doses show up in RED



## **HOW TO USE A BREEZHALER**



#### **Open device:**

- Remove cap
- Flip mouthpiece to open



#### Load capsule:

- Remove capsule from blister and place in chamber
- Close mouthpiece until it clicks
- Press side buttons in once and release (do not shake)



#### Inhale single dose:

- Breathe out gently away from inhaler
- Put mouthpiece between teeth without biting and close lips to form a good seal
- Breathe in quickly and steadily, so capsule vibrates
- Hold breath for about 5 seconds or as long as is comfortable
- Remove inhaler from mouth while holding your breath
- Breathe out gently away from inhaler



#### Close device:

- Open mouthpiece and remove the capsule
- Close mouthpiece and replace cap

Remember: Rinse your mouth out with water after use

### **BREEZHALER NOTES**

#### How to care for your Breezhaler device

- Follow the instructions on the user information about how to clean the device
  - Wipe the device with a dry lint-free cloth inside and out
  - Never wash a Breezhaler in water
  - Store in a cool dry place away from moisture

#### Other notes

- Only use the capsules provided in the pack with the inhaler
- Keep capsules in the blister until you need them
- Peel the blister back to retrieve the capsule, do not push the capsule through the blister
- Pierce each capsule once only

#### When do I need to replace the Breezhaler?

 You need to replace the Breezhaler when all of the capsules have been used



## **HOW TO USE AN ELLIPTA**



Slide Ellipta cover down until you hear it click
 Do not shake Ellipta



Breathe out, away from Ellipta



 Put mouthpiece in your mouth, between your teeth, and create a good seal with your lips

#### Do not cover air vents

Breathe in through your mouth strongly and deeply



- Hold your breath for about 5 seconds or as long as comfortable
- Remove Ellipta from mouth during this time
- Breathe out, away from Ellipta
- Close the cover

To take more medication, repeat all steps

### **ELLIPTA NOTES**

#### How to look after an Ellipta

- Before first use, the Ellipta must be removed from the foil packaging. The Ellipta must be used within a month of opening
- Write the date the inhaler should be discarded on the label in the space provided. The date should be added as soon as the inhaler has been removed from the foil
- Avoid breathing into the Ellipta
- Never wash the device, always keep it clean and dry and closed when not in use
- Wipe the mouthpiece with a clean, dry tissue to clean
- Do not shake

#### How can I tell when an Ellipta is empty?

- There are 30 doses of medication in an Ellipta
- Every time you open the device (by sliding the cover down until you hear it click) a dose is loaded. If you close the cover without inhaling the medication the dose is lost
- A dose counter on the front of the device will show you how many doses remain



## **HOW TO USE A SPIROMAX**



- Check dose counter
- Hold upright and open cover downward until you hear it click

Do not shake Spiromax



Breathe out, away from Spiromax



 Put mouthpiece in your mouth, between your teeth, and create a good seal with your lips

#### Do not cover air vents

Breathe in through your mouth strongly and deeply



- Hold your breath for about 5 seconds or as long as comfortable
- Remove Spiromax from your mouth during this time



Breathe out gently, away from Spiromax



• Close mouthpiece cover

To take more medication, repeat all steps

## **SPIROMAX NOTES**

#### How to look after a Spiromax

- Even though it looks like a 'puffer', it is a dry powder inhaler, and to use it the steps are different. There is no need to shake the device before use
- It is important that you swing down the mouthpiece cap until you hear it click
- Do not try to remove the cap, it is manufactured to remain in place and acts to load the dose when it clicks
- Do not open and close the cap unless intending to take a dose
- Do not block the vents in the front of the device during use
- Keep in a cool dry place, with the cap firmly in place
- Never wash the device, always keep it clean and dry
- You can wipe the device after use with a dry cloth or tissue

#### How can I tell when a Spiromax is empty?

- The indicator on the side of the device will indicate '0' when empty. It's important to note the doses as you use the device before it gets to zero
- The mouthpiece cover will still click even when the Spiromax is empty



#### **Asthma First Aid using Spiromax**

If you use DuoResp Spiromax 200/6 as a reliever (adults 18 years and over), in a first aid situation:

- Sit upright and try to be calm
- Take 1 inhalation following the technique described opposite
- Wait 4 minutes. If symptoms continue, take 1 further inhalation
- Wait 4 minutes. If symptoms do not improve, dial TRIPLE ZERO (000) for an ambulance
- Keep taking 1 inhalation every 4 minutes until:
  - your symptoms improve

#### OR

- an ambulance arrives

#### OR

 you have taken up to a max of 4 more inhalations

## **HOW TO USE A TURBUHALER**



Unscrew and lift off cap

Do not shake Turbuhaler



- Hold Turbuhaler upright
- Twist coloured base around all the way and then back all the way until you hear it click

You can place the Turbuhaler on a table to make sure it stays upright as you twist the base all the way around and back



Breathe out gently, away from Turbuhaler

Do not blow in it



- Put mouthpiece in your mouth, between your teeth, and create a good seal with your lips
- Breathe in through your mouth strongly and deeply
- Hold your breath for about 5 seconds or as long as comfortable
- Remove Turbuhaler from your mouth during this time



- Breathe out gently, away from Turbuhaler
- Replace cap

To take more medication, repeat steps 2 - 4

## **TURBUHALER NOTES**

It is very important to hold the Turbuhaler upright when you are twisting the base, otherwise you will not get the dose.

The rattling you hear when you shake the Turbuhaler is the drying agent built into the coloured base of the Turbuhaler and is not the medication.

#### How to look after a Turbuhaler

- Avoid breathing into the Turbuhaler
- Keep cap on when not in use
- Never wash the device, always keep it clean and dry
- Wipe the mouthpiece with a clean dry tissue
- Do not shake

#### How can I tell when a Turbuhaler is empty?

The indicator on the side of the device will either highlight the doses left in the device (Bricanyl, Symbicort and Oxis) or appear as a red mark to indicate that it is nearly empty (Pulmicort).

You will need to check regularly to see if the red mark has appeared in the window, or how many doses remain.



## TREATMENT OF AN ASTHMA FLARE-UP

An asthma flare-up can happen to anyone with asthma, at any time. A flare-up can develop slowly (over hours to days) or can get worse very quickly (in seconds to minutes). A sudden or severe asthma flare-up is also called an asthma attack.

If you are very unwell with a flare-up of your asthma symptoms, your doctor may prescribe a short course of oral steroids in liquid or tablet form (Prednisolone/ Prednisone). This is used to reduce the swelling in the airways and quickly improve asthma during a sudden or severe flare-up (sometimes called an asthma attack) or when an asthma flare-up persists.

When used in short courses of 3-5 days for children and 5-10 days for adults, oral steroids generally don't cause side effects, but some patients experience temporary mood changes, weight gain, or worsening of diabetic control. They may be more likely to cause side effects when used for weeks to months at a time, or when more frequent short courses are used.

The risks of not taking this treatment when needed are usually more serious than any side effects. If you are concerned, discuss this with your doctor.

One of the most effective things most people can do to avoid a flare-up is to use the right preventer, correctly and regularly, as prescribed.



## **ASTHMA EMERGENCY KITS**

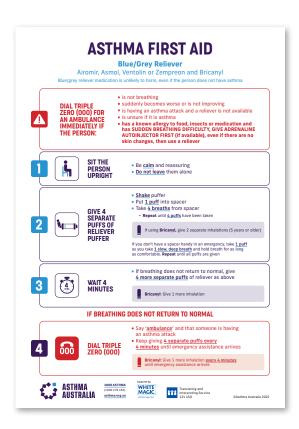
Asthma Emergency Kits provide basic equipment and instructions to assist someone during an asthma attack.

Asthma Emergency Kits are available to order online at asthma.org.au

## **ASTHMA FIRST AID**

We encourage everyone to learn Asthma First Aid or visit asthma.org.au

Asthma First Aid can save someone's life. Do not wait until asthma is severe to start first aid.



This resource has been developed for the community by Asthma Australia.

#### It provides information about:

- Asthma medications and devices
- Using asthma medication to keep you well
- Using asthma devices properly
- How to look after your device

#### Other Asthma Australia resources:

- Asthma Basic Facts
- Asthma Triggers
- Things to Ask and Tell Your Doctor
- Asthma, Anxiety and Depression
- Asthma and Pregnancy
- Asthma and Smoking











Translating and **Interpreting Service** 131 450

All Asthma Australia information is consistent with the National Asthma Council's, The Australian Asthma Handbook (2020).

Asthma Australia information does not replace professional medical advice. People should ask their doctor any questions about diagnosis and treatment.

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## **ASTHMA FIRST AID**

## **Blue/Grey Reliever**

Airomir, Asmol, Ventolin or Zempreon and Bricanyl

Blue/grey reliever medication is unlikely to harm, even if the person does not have asthma



DIAL TRIPLE ZERO (000) FOR AN AMBULANCE IMMEDIATELY IF THE PERSON:

- is not breathing
- suddenly becomes worse or is not improving
- is having an asthma attack and a reliever is not available
- is unsure if it is asthma
- has a known allergy to food, insects or medication and has SUDDEN BREATHING DIFFICULTY, GIVE ADRENALINE AUTOINJECTOR FIRST (if available), even if there are no skin changes, then use a reliever





SIT THE PERSON UPRIGHT

- Be calm and reassuring
- Do not leave them alone

2



GIVE 4 SEPARATE PUFFS OF RELIEVER PUFFER

- Shake puffer
- Put 1 puff into spacer
- Take 4 breaths from spacer
  - Repeat until 4 puffs have been taken



If using **Bricanyl**, give 2 separate inhalations (5 years or older)

If you don't have a spacer handy in an emergency, take <u>1 puff</u> as you take <u>1 slow, deep breath</u> and hold breath for as long as comfortable. **Repeat** until all puffs are given

3



WAIT 4 MINUTES If breathing does not return to normal, give
 4 more separate puffs of reliever as above



Bricanyl: Give 1 more inhalation

#### IF BREATHING DOES NOT RETURN TO NORMAL





DIAL TRIPLE ZERO (000)

- Say 'ambulance' and that someone is having an asthma attack
- Keep giving <u>4 separate puffs every</u>
   <u>4 minutes</u> until emergency assistance arrives



**Bricanyl:** Give 1 more inhalation <u>every 4 minutes</u> until emergency assistance arrives



1800 ASTHMA (1800 278 462) asthma.org.au



