

# Space to Breathe ASTHMA



SPACE TO  
BREATHE  
taking care of asthma

# WHAT IS ASTHMA?

- Asthma is a condition that affects the airways in the lungs. The airways become narrower than normal. This makes it harder for you to get air in and out of the lungs and causes wheezing (noisy breathing).
- 1 in 6 New Zealanders have asthma and 1 in 4 New Zealand children have asthma.
- Asthma is common in all parts of New Zealand.
- It can affect anyone at any age.
- Other people in your family may also have asthma, or hay fever or eczema.
- People do grow out of asthma, but it can reoccur.
- Remember that people in New Zealand continue to die from asthma every year.
- Managing your own asthma helps you and your family/whanau know what to do, when to do it, and who to call if your asthma gets worse.

**References** – Facts from “the burden of Asthma in New Zealand” by Dr Shaun Holt and Professor Richard Beasley. Published 2002.

**Resources** – The Asthma Foundation Booklet “What is Asthma”  
The Asthma Foundation Fact Sheet “Asthma in NZ”  
Breathing tubes are available from The Asthma Foundation.

# WHAT IS ASTHMA?



- Knowing what to do, when to do it and who to call is the key to managing your asthma.

# ASTHMA AND YOUR BODY

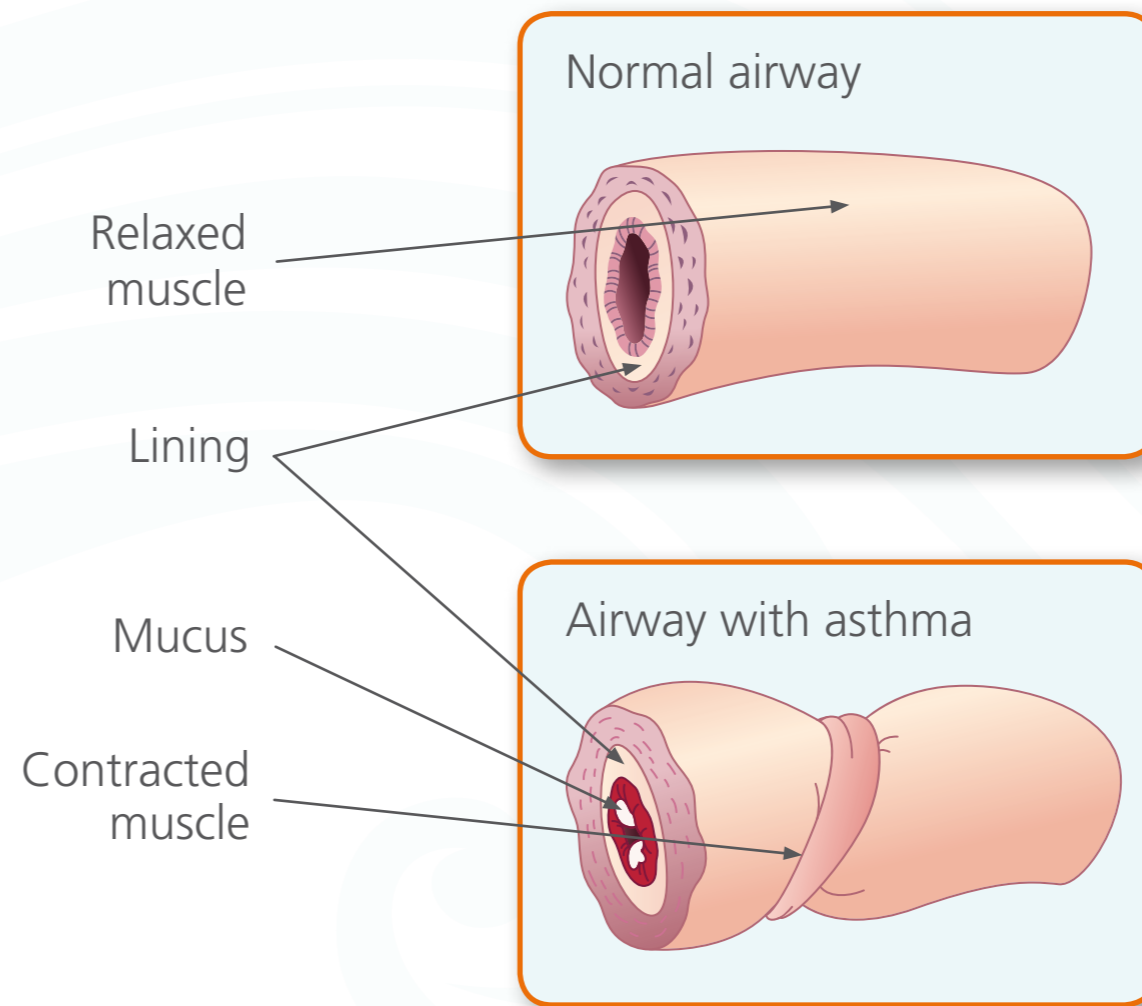
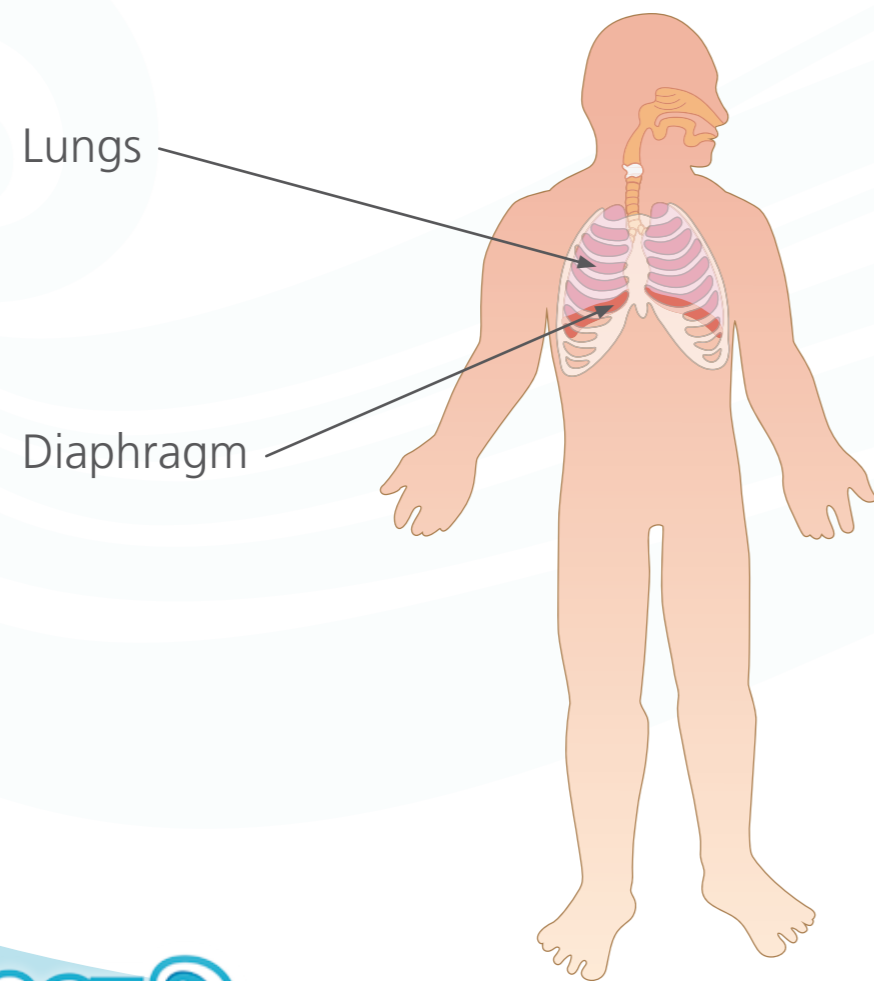
## Healthy airway

- Lining is normal.
- Outer muscle relaxed.
- Airway wide open.

## Airway with asthma

- Airways are over-sensitive and react to triggers.
- Muscle around the outside of airway tightens up.
- Lining becomes swollen and inflamed and makes more mucus.
- Breathing becomes more difficult.
- A trigger is something that makes your asthma worse.

# ASTHMA AND YOUR BODY



# SIGNS AND SYMPTOMS

- **Coughing** is often an early sign of asthma that indicates the airways are irritable.
- Asthma can make your **chest feel tight**.
- **Breathlessness** and **wheeze** while playing sport, exercising, hurrying or just managing activities of daily living.
- **Tiredness** and crankiness are both caused by lack of sleep. You may not know it is the asthma making you wake.
- You don't have to have all these symptoms – you may just have one. If you have any one of these, your asthma may not be as controlled as it could be.

# SIGNS AND SYMPTOMS



# HOW IS YOUR ASTHMA?

- Most people with asthma think it's better controlled than it really is. They get used to feeling the way they do and put up with asthma symptoms and being limited in what they can do, BUT the good news is that asthma can be controlled.

## Controlled

- Sleep through the night.
- Use reliever (blue) inhaler less than 3 times a week.
- No trouble playing sport/exercising/or managing daily activities.

**Resources** – The Asthma Foundation Booklet “Controlling your Asthma”.

## Uncontrolled

- Waking during the night.
- Using reliever most days.
- Get breathless/wheezy playing sport/exercising/or managing daily activities.

## Acute and interval symptoms

- Interval symptoms mean what is happening from day to day.
- Acute symptoms are sudden and occur during an asthma attack – usually more serious breathlessness and wheezing.
- A person's perception of “what is asthma” depends upon when the diagnosis was made ie. during a sudden attack or because of day to day difficulties.



# HOW IS YOUR ASTHMA?

## IS IT SUDDEN/ACUTE?

- Asthma attacks.

## IS IT EVERYDAY/INTERVAL?

- Do you wake up every night with asthma?
- Do you use your reliever most days of the week?
- Is your asthma affected by exercise and other activities?



# ASTHMA TRIGGERS

- Knowing and recognising your triggers is important.
- Some triggers are easier to manage than others. For example you can usually avoid tobacco smoke, household sprays and animals, but it can be tricky to avoid grass and tree pollens.

**Resources** – The Asthma Foundation Booklet “Triggers in Asthma”.

# ASTHMA TRIGGERS

- Several things can trigger asthma.
- Asthma can be well controlled – knowing your individual triggers can help with better control.



# SMOKE AND INFECTIONS

## Smoke

- Cigarette smoking is very bad for asthma – so is smoking marijuana.
- Even if you don't smoke yourself, other people's smoking is a real problem – about three quarters of people with asthma get wheezy in a smoky room.
- It's really important not to smoke near children.
- Includes smoke from fires, hangi etc.
- Often it is not just one trigger that sets off asthma but a mixture of several triggers eg. smoky room and a cold.

**Resources** – List of smoking cessation options available in your area.

## Infections

- Cold and flu viruses.
- Throat and nose infections.
- People with asthma should have a free flu vaccine.
- People with asthma need to act promptly at the first sign of a cold/flu – often extra preventer medication is needed.

# SMOKE AND INFECTIONS

ASTHMA

TRIGGERS



# DUST MITES AND POLLEN

## Dust mites

- They can be found anywhere but especially in soft furniture, carpets, mattresses and bedding.
- House dust mites are too small to see. Allergy to dust mite faeces is very common.
- Symptoms of dust mite allergy include wheezing when you vacuum or dust, or asthma symptoms during the night or first thing in the morning.
- You can get bedding covers that provide a barrier, (explain where to get these in your local area).
- Vacuum regularly – best to get someone else to do this.
- Damp dust weekly – avoid using feather dusters.
- Consider removing fitted carpet.

**Resources** – The Asthma Foundation Fact Sheet “House Dust Mites”.

## Pollen

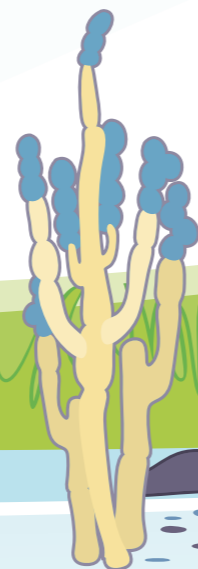
- Avoid lawn mowing and trimming during pollen season.
- Replace problem trees/shrubs if these trigger your asthma.
- Encourage nose breathing or wear a mask.
- Know times of the year when pollens that affect your asthma are released.

**Resources** – Allergy New Zealand produce a “Pollen Calendar” (a month by month calendar of the pollens produced by specific plants) which is available free of charge from Allergy New Zealand. Phone 09 623 3912. The Asthma Foundation Fact Sheets “Plants, Gardening and Asthma”, “Pets and Asthma”.

## Mould and fungal spores

- keep your house warm and dry.
- Keep your house well ventilated.
- Remove mould and mildew.

# DUST MITES AND POLLEN



# EXERCISE AND WEATHER

## Exercise

- Exercise can be a trigger but physical activity helps people with asthma, so don't avoid exercise.
- Warming up helps prevent exercise-induced asthma.
- Activities that involve a lot of stopping or starting or a warm, moist environment are less likely to cause asthma eg. swimming, walking, tramping, tennis, yoga, martial arts, tai chi, aerobics or team sports. Running and cycling are hardest.
- Care should be taken when exercising in cold air e.g. early morning PE in schools.

**Resources** – The Asthma Foundation Booklet “Asthma and physical activity”.

## Weather

- Change of season.
- Changes of temperature – moving from a warm room to a cold room.
- Weather conditions such as rain, frosts, fog, hot, dry or windy conditions.
- Gas stoves, gas heaters that are not ventilated outside, fan heaters and open fires can also trigger asthma.
- Try to keep your home at an even temperature to avoid a drop in temperature overnight in the bedroom – around 20 C.
- Encourage nose breathing.
- Wearing a light warm scarf loosely over the mouth when outside in the cold air warms the air entering the lungs.
- May need to increase preventer medication before troublesome times of the year.



# EXERCISE AND WEATHER



# STRESS/WORRY/EMOTION, WORK AND WOMEN'S HEALTH

## Stress/Worry/Emotion

- It's hard to pin point the part that emotions play in asthma. It is known they do not cause asthma, but can make it worse.
- You may need to talk to your family support worker or health professional.

## Work

- It can be hard to avoid triggers at work. Try and make a note of what makes your asthma worse, so you'll know what to avoid eg. fumes, chemicals and sprays.
- Peak flow monitoring at work and comparing this to weekends is very useful.
- Your health professional or union representative can put you in contact with Occupational Safety and Health (OSH).
- If possible consider working in a different area.
- Changing your job as a last resort.
- Remember if you can't avoid the trigger you may have to take extra treatment.

**Resources** – The Asthma Foundation Factsheet "Peak flow monitoring and "Asthma in the workplace", OSH resources available from [www.osh.dol.govt.nz](http://www.osh.dol.govt.nz)

## Women's health

- Some women find their asthma gets worse before or during their period.
- Aspirin, non-steroidal anti inflammatories such as ibuprofen or diclofenac given for period pain can make asthma worse.
- Pregnancy – 1/3 improve, 1/3 stay the same, 1/3 get worse.
- Inhaled medication will not harm your baby during pregnancy.
- The risk to a baby of uncontrolled asthma is more harmful than the risks of taking medication to control asthma.
- Peak flow monitoring/symptom diary can help clarify if worsening asthma symptoms are due to hormonal changes.

**Resources** – The Asthma Foundation Fact Sheet "Asthma and Women" and "Asthma and your unborn child".

# STRESS/WORRY/EMOTION, WORK AND WOMEN'S HEALTH



# ASTHMA MEDICATIONS

## Reliever inhalers

- Short-acting:
  - Provide immediate relief
  - Help with wheeze, cough, breathlessness and tight chest.

## Preventer inhalers

- Inhaled Corticosteroid (ICS) preventers:
  - Reduce inflammation of the airways when used every day.

## Long-acting symptom controllers (LABAs)

- Keep muscles around airways relaxed for up to 12 hours when used every day
- MUST continue to use ICS preventer as well.

## Combination (ICS+LABA) inhalers

- Reduce inflammation of the airways
- Keep muscles around airways relaxed for up to 12 hours when used twice daily.

**Resources** – PHARMAC “Staying asthma free – all you need to know about preventers”  
The Asthma Foundation Booklet “Medication Information sheets” and The Asthma Foundation Factsheet “Safety of inhaled corticosteroid”.

# ASTHMA MEDICATIONS



# RELIEVERS

## Reliever inhalers

Relievers are short-acting and help relieve your asthma symptoms when they happen by quickly relaxing the muscles around the airways that have become tight. This lets the airways open wider so you can breathe easier again. Relievers do not reduce inflammation of the airways.

- Relievers should only be used when you are having any of the following symptoms:
  - Difficulty breathing
  - Chest tightness
  - Wheeze
  - Cough.

- If you are using your reliever inhaler more than 3 times a week, your asthma is not as controlled as it could be. You should see your doctor to check if other medications are needed.
- Be careful about over-use of your reliever inhaler. Regularly using more than 6 puffs of reliever every day can cause harmful side effects.
- Ask your health professional to check that you are using your medication and puffer correctly.

Relievers are usually blue in colour eg. salbutamol and terbutaline.

**Resources** – The Asthma Foundation Booklet “Medication Information sheets”.

# RELIEVERS

- Reliever inhalers treat symptoms once they occur.

# PREVENTERS

## Preventer inhalers

Preventers work by controlling the swelling and inflammation of your airway to help prevent asthma symptoms from happening.

Most preventers are ICS preventers, and:

- Must be used every day to work properly.
- Are not addictive.
- Are like natural steroids produced in the body, not like the steroids used to enhance sports.
- Many people are concerned about taking medicines with the word steroid in them. When used correctly, preventers are very safe.
- Some people can get a hoarse voice or oral thrush: rinsing your mouth after using your preventer or using a spacer can help prevent this.

- Long-term side effects are extremely rare, and usually only occur at much higher doses than what is used for asthma eg. slow growth in children and osteoporosis.
- There are fewer side effects with non-steroidal preventers (apart from throat irritation).

Some preventers are non-steroidal. These are:

- useful for treatment of mild asthma, especially in children.
- useful in exercise induced asthma.

ICS Preventers are usually orange or brown in colour eg. beclomethasone, budesonide and fluticasone.

**Resources** – PHARMAC “Staying asthma free – all you need to know about preventers”  
The Asthma Foundation Booklet “Medication Information sheets” and The Asthma Foundation Factsheet “Safety of inhaled corticosteroid”.



# PREVENTERS

- Preventer inhalers help to prevent symptoms from happening.
- Try to get into a routine of taking your preventer eg. before brushing your teeth. This will help you remember to use it daily.

# LONG ACTING SYMPTOM CONTROLLERS

## Long acting symptom controllers (LABAs)

Long acting symptom controllers (LABAs) help control your asthma symptoms by keeping the muscles around the airways relaxed. This keeps the airways open so you can breathe easily. LABAs do not reduce inflammation of the airways.

- LABAs are usually taken twice a day to keep the muscle around the airways relaxed. They must be used with a preventer, and for safety you should also carry a reliever at all times.
- Use of your reliever should decrease.
- If your asthma is not well controlled on your ICS preventer medicine you may be prescribed a LABA. Refer to PHARMAC regulations.

**Resources** – PHARMAC “Staying asthma free – all you need to know about preventers”.

# LONG ACTING SYMPTOM CONTROLLERS

- Long-acting symptom controllers (LABAs) treat and control symptoms for around 12 hours.
- They must be used with an ICS preventer.
- They do not provide immediate relief.

# COMBINATION INHALERS

## Combination (LABAs + ICS) Inhalers

Combination inhalers combine ICS preventer and LABA medication in one inhaler to help control asthma symptoms. The ICS preventer reduces inflammation of the airways and the long acting symptom controller medicine keeps the muscle around the airways relaxed.

- Combination inhalers must be taken twice daily.
- For safety, always carry your reliever inhaler.
- Use of reliever should decrease.
- Refer to PHARMAC regulations.

# COMBINATION INHALERS

- Combination inhalers **combine** ICS preventer and LABA medication in one inhaler.

# INHALERS

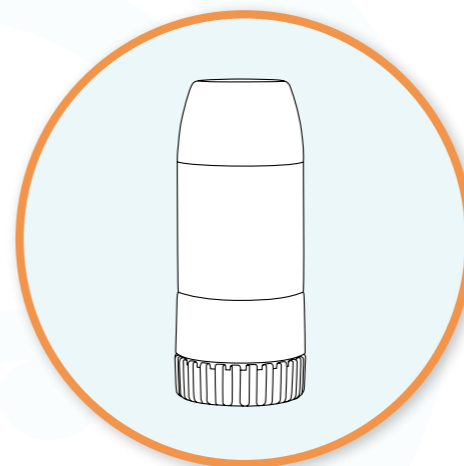
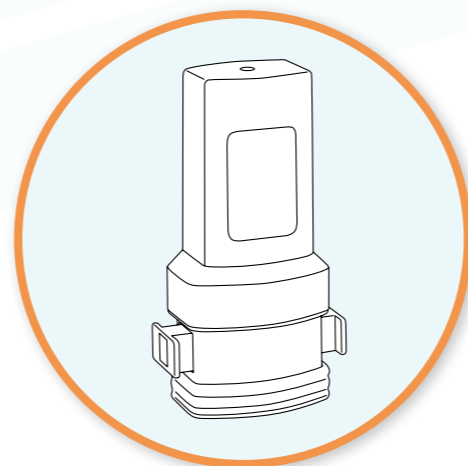
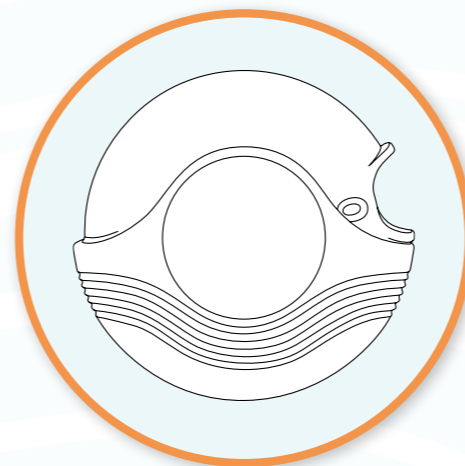
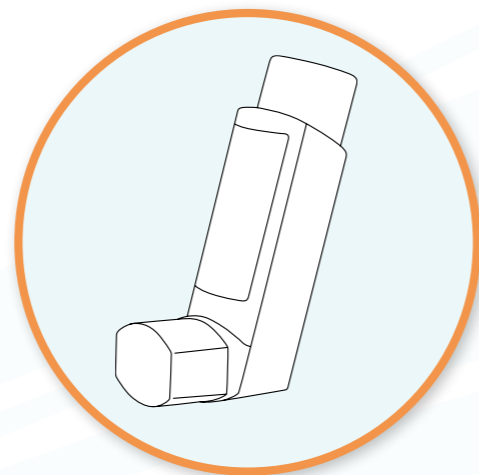
## Inhalers

- There are many choices of inhalers available. Your health professional should be able to help you choose the right one for you.
- Inhaler technique should be checked regularly.
- Benefits of inhaled medication:
  - Medication gets directly into the lungs
  - Works quickly
  - A smaller dose is required compared to using oral medication.

- A metered dose inhaler (MDI) plus spacer can be as effective as nebulisers in acute/sudden asthma.
- Tools available to assist with inhaler delivery are haleraids, turbuhaler grip and whistles.

**Resources** – The Asthma Foundation Booklet “Understanding your inhaler”.

# INHALERS



# SPACERS

## Spacers

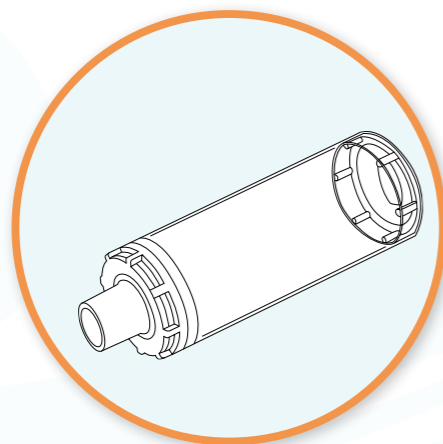
You should use a spacer with any metered dose inhaler (MDI). This includes relievers and preventers because:

- More medicine gets into the lungs than with an MDI alone. This can help reduce the dose you need.
  - Reduces side effects eg. hoarse voice, oral thrush.
  - Face masks can be used with a spacer by young children or adults with disabilities.
- Spacers are convenient, compact and an alternative to nebuliser for acute/emergency attacks or when you are very short of breath.
  - Spacers should be washed with warm water and dishwashing liquid and then drip dried.
  - Small volume spacers can be obtained for free from your doctor for children aged six years and under. Explain other ways to obtain spacers and masks. Refer to PHARMAC guidelines.

**Resources** – The Asthma Foundation Booklet “Understanding your inhaler”,  
The Asthma Foundation Factsheet “Spaces vs nebulisers”.



# SPACERS



- Using a spacer helps you get more medicine into your lungs where it is needed.



# OTHER TREATMENTS AND DEVICES

## Other treatments

### Oral steroids:

- Usually used for severe acute/sudden attacks.
- Your self management plan will tell you when to start oral steroids if you need them.
- Usually taken once a day for a specified number of days.

### Antihistamines and Antibiotics:

- Not prescribed for asthma as they are not effective in treating asthma.
- Antihistamines are helpful in managing allergic rhinitis/hayfever.
- Antibiotics are helpful for treating bacterial infections not for viral infections.

### Leukotriene antagonists:

- Reduce inflammation and airway narrowing.

- Tablets are taken once daily.
- Check PHARMAC regulations-not funded at present.

### Physiotherapy:

- A physiotherapist can help a person with asthma with breathing retraining, exercise programme development and relaxation techniques.

### Alternative/Complementary therapies:

- Include traditional medicines, diets, massage and buteyko breathing techniques.
- Should be discussed with your doctor.
- Respect people's choices to choose alternative/complimentary therapies, but ensure their safety eg. continuing to take prescribed medicines.

Royal jelly and bee pollen products have been implicated in worsening asthma and should be avoided.

# OTHER TREATMENTS AND DEVICES



# MANAGING YOUR ASTHMA

- Self management is the key to controlling your asthma.
- You can manage your asthma based on symptoms alone or use a combination of peak flows and symptoms.
- You can record your results in a simple notebook, a peak flow diary, a combination peak flow and symptoms diary or a symptom diary.

**Resources** – The Asthma Foundation Booklet “Peak flow and symptom diary”,  
The Asthma Foundation Pamphlet “Help yourself and stay well”.

# MANAGING YOUR ASTHMA



Avoid triggers



Know your symptoms



Learn how asthma medicines work



Take medicines as directed



Monitor your symptoms



Use your self-management plan

# SELF MANAGEMENT TOOLS

## Self management plan

- Self management plans are available with spaces to add your treatment details and peak flow levels. You and your health professional can fill in the spaces to create a plan that suits you.
- A self management plan helps you to know what to do if your asthma is getting worse or if you have a bad attack. It gives you instructions on what to do, who to call and where to go.

**Resources** – PHARMAC – Space to Breathe personalised asthma self-management plan. The Asthma Foundation Booklet “Keep your asthma under control”, The Asthma Foundation Factsheet “Talking with your doctor”.

## Peak flow

- You can get a peak flow meter free from your health professional.
- If you are well, the airways are open and your peak flow will be close to your best.
- If the airways are tight, your peak flow will fall.

**Resources** – The Asthma Foundation Factsheet “Peak flow monitoring” Peak flow diaries/symptoms diary sheets are available from The Asthma Foundation or drug companies.

# SELF MANAGEMENT TOOLS

- Self management is the key to controlling your asthma.



# LIVING WITH ASTHMA

- Asthma can be controlled by correctly using your inhaler(s), peak flow meter, symptom diary and self-management plan.
- Remember – if you or someone in your family has asthma the good news is – it can be controlled.
- Get to know your asthma, know how well you are and know what to do. Take time now to learn how to keep your asthma under control.



# LIVING WITH ASTHMA

