Living with asthma and allergies

A guide to non-medical options

Many people with asthma or allergies are keen to discover ways to help reduce their symptoms and improve their quality of life.

This booklet looks at some products and strategies that may help the 800,000 New Zealanders living with a respiratory condition including asthma and allergies to breathe a little easier, when used alongside recommended medicines.

The Sensitive Choice® blue butterfly is a way of recognising products and services from companies that support asthma and allergy care. Products that carry the blue butterfly may be better choices for people with asthma and allergies.
Are you allergic?

Around two out of five Kiwis have allergies, including most people with asthma. Allergies tend to run in families but not every family member will have the same response.

Allergies occur when a person’s immune system reacts to substances (allergens) that are harmless to most people.

These allergen triggers can affect:

- Breathing – asthma
- Skin – dermatitis, eczema and hives
- Eyes – conjunctivitis and hay fever
- Whole body – anaphylaxis (rare but very serious)

Most people are allergic to more than one trigger and sometimes the response is different, so you could get itchy eyes around cats but a runny nose during pollen season. The severity of the allergic reaction varies between people and depends on the circumstances. A reaction may not be immediate.

If you think you are allergic, speak to your doctor to help identify exactly what triggers your allergies and how you can best manage this. For example, you may have worked out you are allergic to pollen because you get hay fever in spring, but you may not know which plant is the culprit. Your GP or an allergist can do tests such as skin prick testing or blood tests to identify the trigger.

Medical treatments

Medical treatments are at the heart of good asthma management, including taking your preventer every day if you have been prescribed one. Prescription and non-prescription medications are also important in allergy management.

If you have questions about your medical treatments, talk to your doctor or pharmacist. They are your best advisors on managing your asthma and allergies.

This booklet is not about prescription or non-prescription medications. It is intended to help you identify other strategies to reduce allergen triggers.
Allergy triggers

The best way to avoid an allergic reaction is to avoid the trigger that causes it, but this is not always possible. However, reducing exposure to your allergen triggers may make your symptoms easier to manage.

Bear in mind that efforts to avoid or reduce allergen exposure can be costly, time-consuming or impractical, and may not work for every person or circumstance.

If you’re keen to try, the first step is to know what triggers your allergies so you can focus your efforts in the right area.

- **House Dust Mites** – The source of the most common allergens in New Zealand, dust mites like moderate temperatures and high humidity. They are found in bedding, flooring, window coverings and furniture. Their poo is the main culprit – this is small enough to become airborne when stirred up.

- **Pets** – Cats, dogs and other pets can be the source of allergens.

- **Mould** – Mould needs long periods of humidity to grow. Houses in warmer areas or with rising damp may be more at risk, while poor ventilation may mean a bathroom can produce mould, even where the house is not in a humid area.

- **Pollen** – Trees, grasses and other wind-pollenated plants are the source of the most troublesome pollens. For many, spring is the worst time, but some plants produce pollen for many months.

- **VOCs/chemicals** – A number of chemicals can cause health issues. VOCs (volatile organic compounds) may not be good for your lungs and are best avoided. Other chemicals like PGEs (propylene glycol and glycol ethers) may also be harmful. VOCs and PGEs are usually found in paint and cleaning chemicals, with the main risk occurring when contents are wet or drying. General pollution is also an issue for some people.

- **Smoke** – Both cigarette and wood smoke can cause or worsen asthma symptoms.

- **Fragrances** – Strong fragrances are often overlooked but can worsen symptoms.
### Reducing exposure to triggers

<table>
<thead>
<tr>
<th>Product</th>
<th>Which triggers will it help?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dust mites</td>
</tr>
<tr>
<td>Air-conditioning</td>
<td>✓</td>
</tr>
<tr>
<td>Air fresheners</td>
<td>✗</td>
</tr>
<tr>
<td>Air purifiers</td>
<td>✓</td>
</tr>
<tr>
<td>Bedding</td>
<td>✓</td>
</tr>
</tbody>
</table>

- Dust mites
- Mould
- Pollen
- VOCs/Chemicals
- Smoke

**Comments**

- **Sensitive Choice products?**
- **Air-conditioning**
  - An air-conditioner that reduces humidity and filters the air will have the benefit of both a purifier and a dehumidifier. Evaporative air-conditioners increase humidity and should generally be avoided.
- **Air fresheners**
  - Air fresheners generally work by emitting fragrances, which mask less pleasant odours (but do not remove them). The fragrances may cause an allergic response in some people. It is more effective to deal with the underlying cause of the odours.
- **Air purifiers**
  - Purifiers remove airborne particles from the air (often by a particulate filter). Some may have an activated charcoal filter which will remove chemicals and gases. Factors to consider include how well sealed the room is, amount of air processed, type of filters, how well sealed the filter is. Heavier allergens (like dust mites) will not be airborne for long and will be less impacted by purifiers. There is little evidence that ion generators have a positive impact.
- **Bedding**
  - Mattresses, quilts and pillows made with an anti-microbial treatment are available.
The following table outlines some strategies and products that may help you reduce your exposure. See [http://www.asthmafoundation.org.nz/sensitive-choice](http://www.asthmafoundation.org.nz/sensitive-choice) for details about approved products.

<table>
<thead>
<tr>
<th>Fragrances</th>
<th>Pets</th>
<th>Comments</th>
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<tr>
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<td>Dust mites</td>
<td>Mould</td>
<td>Pollen</td>
</tr>
<tr>
<td>Bedding protectors</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Car cabin filters</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cleaning chemicals</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cleaning machines</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cosmetics</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Dehumidifiers</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
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</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>Protectors incorporating an impervious membrane have been shown to reduce the transmission of allergens from mattresses and pillows – these should be washable in hot water (above 55°C). Protectors made with an anti-microbial treatment may also assist.</td>
<td>Yes</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>Effective cabin air filtration can dramatically reduce exposure to allergens and respiratory irritants. Most cars have pollen filters, but fewer have activated carbon filters (that remove gases).</td>
<td>No</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>Some cleaning sprays may cause a skin or other reactions. Look for products with fewer harsh chemicals.</td>
<td>Yes</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>A good vacuum cleaner will effectively lift dirt and emit clean air. Try a vacuum with a HEPA filter. Even the best vacuum may stir up allergens, so stay out of the room while it’s happening. Deep cleaners and steam cleaners can both be effective at more thorough cleaning.</td>
<td>Yes</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>Some cosmetics and skin care products contain chemicals, fragrances and preservatives that can be a problem for some people. There are gentler products available.</td>
<td>Yes</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>Dehumidifiers may be a good idea where mould is a problem. Effectiveness will depend on the size of the area, how well sealed it is and the capacity of the dehumidifier.</td>
<td>Yes</td>
</tr>
<tr>
<td>Product</td>
<td>Dust mites</td>
<td>Mould</td>
<td>Pollen</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------</td>
<td>-------</td>
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</tr>
<tr>
<td>Flooring</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Furniture and window coverings</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Heating</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Insulation</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Laundering</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Paint</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Pools and spas</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Ventilation</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
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</tr>
<tr>
<td>✗</td>
<td>✗</td>
<td>Hard floors provide nowhere for allergens to be captured – this makes cleaning easy, but also means allergens can become airborne easily. Carpets and underlays made of materials that won’t rot and containing an anti-microbial treatment should suppress mould and dust mite growth.</td>
<td>Yes</td>
</tr>
<tr>
<td>✗</td>
<td>✗</td>
<td>Furniture, curtains and blinds can harbour allergens. Some may have anti-microbial properties.</td>
<td>No</td>
</tr>
<tr>
<td>✗</td>
<td>✗</td>
<td>Heating is important in a cold climate. Open fires and unflued gas heaters should be avoided, while heaters that blow air should have filters.</td>
<td>Yes</td>
</tr>
<tr>
<td>✗</td>
<td>✗</td>
<td>Insulation is an important element in keeping homes warm in winter and cool in summer. This can influence humidity which, in turn, can cause mould to grow.</td>
<td>Yes</td>
</tr>
<tr>
<td>✗</td>
<td>✔</td>
<td>Washing above 55°C is an effective way to kill dust mites and neutralise allergens. A cold wash is not as effective, but an additive like eucalyptus will help. Some detergents are better for people with asthma and allergies.</td>
<td>Yes</td>
</tr>
<tr>
<td>✗</td>
<td>✗</td>
<td>Many interior paints contain VOCs, which can cause respiratory issues. Either use low or no VOC paints, or avoid the areas being painted until a few days after the paint has dried completely. Some paints have additives that suppress mould growth</td>
<td>Yes</td>
</tr>
<tr>
<td>✗</td>
<td>✗</td>
<td>Some people are sensitised to the effects of chlorine in pools and spas. There are now some options that avoid chlorine, but that still keep pools and spas clean.</td>
<td>Yes</td>
</tr>
<tr>
<td>✗</td>
<td>✔</td>
<td>Effective ventilation can reduce humidity. Heat recovery ventilation will redistribute hot and cold air in a house and should provide filtration.</td>
<td>Yes</td>
</tr>
</tbody>
</table>
As the national authority on asthma, our ongoing priorities are to:

1. Educate New Zealanders about the importance of managing their asthma.
2. Encourage manufacturers and suppliers to produce products and services that are asthma and allergy friendly and that could benefit people with asthma and allergies.
3. Provide consumers with a way of identifying products and services that may benefit people with asthma and/or allergies and improve health and wellbeing.
4. Generate sponsorship funds to enable Asthma Foundation of New Zealand to continue working on improving asthma care.

All products and services approved by Sensitive Choice have been assessed by an independent panel, however, Sensitive Choice is not a standards-based certification program. Approval does not mean a product or service is considered superior to all other products in a category and non-approval does not mean a product is not as good as an approved product.

About the Asthma Foundation

The Asthma Foundation is a not-for-profit organisation working to improve health outcomes and quality of life for people with asthma and other respiratory conditions.

As the national authority on asthma, our ongoing priorities are to:

- Provide the latest information on asthma to health professionals to help improve their quality of care.
- Work with all members of the asthma community, including people with asthma and their families, health professionals, patient support organisations, the health industry, and government agencies.
- Continue to set the standard for best-practice asthma management.
First Aid for Asthma

1. Sit the person comfortably upright.
   Be calm and reassuring.
   Don’t leave the person alone.

2. Give 6 puffs of a blue/grey reliever (e.g. Ventolin or Respirol)
   Use a spacer, if available.
   Give 1 puff at a time with 6 breaths after each puff.
   Use the person’s own inhaler if possible.
   If not, use first aid kit inhaler or borrow one.

3. Wait 6 minutes.
   If the person still cannot breathe normally,
   give 5 more puffs.

4. If the person still cannot breathe normally,
   CALL AN AMBULANCE IMMEDIATELY (DIAL 111)
   Say that someone is having an asthma attack.
   Keep giving reliever.
   Give 6 puffs every 6 minutes until the ambulance arrives.
   Children: 6 puffs each time is a safe dose.
   Adults: For a severe attack you can give up to 8–10 puffs every 6 minutes.

WITH SPACER
- Assemble spacer
- Remove puffer cap and shake well
- Insert puffer upright into spacer
- Place mouthpiece between teeth and seal lips around it
- Press once firmly on puffer to fire one puff into spacer
- Take 6 breaths in and out of spacer
- Slip spacer out of mouth
- Repeat 1 puff at a time until 6 puffs taken – remember to shake the puffer before each puff
- Replace cap

WITHOUT SPACER
- Remove cap and shake well
- Breathe out away from puffer
- Place mouthpiece between teeth and seal lips around it
- Press once firmly on puffer while breathing in slowly and deeply
- Slip puffer out of mouth
- Hold breath for 4 seconds or as long as comfortable
- Breathe out slowly away from puffer
- Repeat 1 puff at a time until 6 puffs taken – remember to shake the puffer before each puff
- Replace cap

BRICanyl OR SymbiCort
- Unscrew cover and remove
- Hold inhaler upright and twist grip around and then back
- Breathe out away from inhaler
- Place mouthpiece between teeth and seal lips around it
- Breathe in forcefully and deeply
- Slip inhaler out of mouth
- Breathe out slowly away from inhaler
- Repeat to take a second dose – remember to twist the grip both ways to reload before each dose
- Replace cover

Not sure if it’s Asthma?
CALL AMBULANCE IMMEDIATELY (Dial 111)
If a person stays conscious and their main problem seems to be breathing, follow the asthma first aid steps. Asthma reliever medicine is unlikely to harm them even if they do not have asthma.

Severe allergic reactions
CALL AMBULANCE IMMEDIATELY (Dial 111)
Follow the person’s Action Plan for Anaphylaxis if available.
If the person has known severe allergies and seems to be having a severe allergic reaction, use their adrenaline autoinjector (e.g. EpiPen, Anapen) before giving asthma reliever medicine.

For more information on asthma visit the Asthma Foundation website: http://asthmafoundation.org.nz

Although all care has been taken, this chart is a general guide only which is not intended to be a substitute for individual medical advice/treatment. The Asthma Foundation expressly disclaims all responsibility (including negligence) for any loss, damage or personal injury resulting from reliance on the information contained.
More information
Talk to your doctor or pharmacist
Visit the Sensitive Choice® website:
www.asthmafoundation.org.nz/sensitive-choice

• Get helpful tips and advice on managing asthma and allergies
• Search for approved products and services.