

Triggers in Asthma



The Asthma and
Respiratory Foundation
of New Zealand (Inc.)
Te Taumatua Huango,
Mate Ha o Aotearoa



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... breathe, lungs, air, wind, ...

Triggers in Asthma

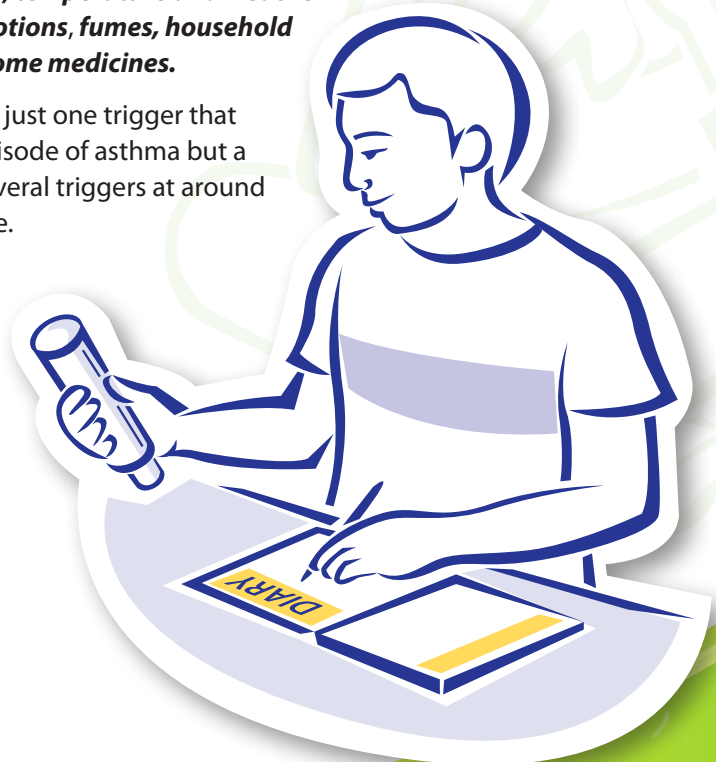
Most people with asthma can think of several things that “trigger” their asthma or make it worse. Knowing what triggers your asthma means you can:

- try to avoid the trigger, or,
- take extra treatment before or at the time of contact with your triggers.

Triggers usually show themselves straight away but sometimes take effect over several hours. Keeping a peak flow rate or symptom diary will help you work out which triggers affect you.

The most common triggers are: **colds and flu viruses, cigarette smoke, exercise and activity, allergies, chemicals and dusts at work, temperature and weather changes, emotions, fumes, household sprays and some medicines.**

Often, it’s not just one trigger that sets off an episode of asthma but a mixture of several triggers at around the same time.



Non Allergic Triggers

Colds and flu

Colds and flu viruses along with throat and nose infections can bring on asthma episodes. The first signs are usually a blocked or runny nose or a sore throat. You cannot always stop yourself catching these infections so deal with them as they appear. Everyone with asthma should have an annual flu vaccine.

WHAT TO DO ✓

- As soon as the first snuffle or blocked nose appears, follow your Self Management Plan instructions.
- Use your peak flow meter or record your symptoms to check your progress.
- See your doctor if your asthma gets worse.



Cigarette/marijuana smoke

Around three-quarters of people with asthma become wheezy in a smoky room. It has been shown that children with asthma whose parents smoke have more asthma symptoms than children of non-smokers. Also, exposure of young babies to exhaled or second-hand smoke increases their risk of developing asthma and bronchial problems. Inhaling marijuana smoke is just as harmful to the lungs as cigarette smoke.



- **If you smoke try to give up!!** *It isn't always easy, but there are groups around to help. (For help with quitting, talk with your doctor or respiratory educator about local agencies that can help you, or call the **Quitline on 0800 778 778**). Remember, each cigarette you smoke is damaging your lungs. If you have managed to quit before – well done – it will be easier next time. Smoking may make your asthma more difficult to control and there is a very real risk of developing COPD (Chronic Obstructive Pulmonary Disease) – for example chronic bronchitis or emphysema, which would limit your life much more severely than asthma does.*
- *If friends or family smoke, explain how it affects your asthma and encourage them to either give up or smoke elsewhere.*
- *If you are out avoid sitting near people who are smoking.*



Exercise and activity

Wheezing, tightness of the chest or coughing during or after exercise shows that this is triggering your asthma. If your asthma is well managed, you should be able to exercise without these symptoms (using the tips below). If you can't exercise without getting asthma, see your doctor. Remember that physical activity will help your asthma overall – so it's better to manage your asthma effectively, allowing you to exercise rather than avoiding activity.

WHAT TO DO ✓

- **Do more asthma-friendly activities.** *Activities involving a lot of stopping and starting or a warm, moist environment are less likely to cause Exercise Induced Asthma (EIA). For example try swimming, walking, trampolining, tennis, yoga, martial arts, tai chi, aerobics or team sports. Running and cycling are the hardest activities for most people with EIA.*
- **Remember to warm up.** *Stretching and a few minutes of running or skipping before exercising will:*
 - help prevent EIA
 - protect you from sprains and strains
 - get you in the mood to move!
- **Check the conditions**
 - is your asthma worse due to a cold?
 - is it a cold, dry day?

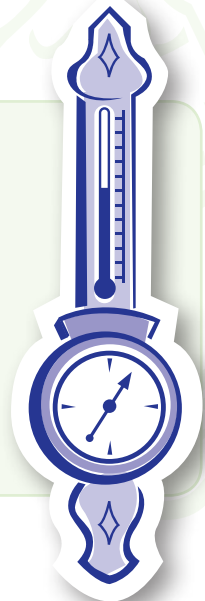


- **Use your reliever inhaler before activity**
 - take 1-2 puffs of reliever medicine (Bricanyl, Salamol or Ventolin, ... usually blue-coloured) just before you exercise.
 - other useful medications are Intal, Tilade or Vicrom – they are usually preventer medicines but can also be used 10 minutes before exercise.
- **The role of symptom controllers.** Symptom controllers (Oxis or Serevent) are very effective at preventing episodes of EIA. These medications are normally taken twice a day and extra doses are not recommended immediately prior to exercise.

☼ Temperature and weather changes

Changes of temperature and weather can affect people with asthma.

- Try to keep your home at an even temperature.
- It may help to use a thermostatically-controlled heater in bedrooms at night to keep the temperature around 20°C.
- Wearing a thin, warm scarf loosely around your lower face can help warm the air you breathe.
- If you know that certain weather affects your asthma you may need to increase your medicine during that time.



☼ Fumes

Triggers in the air include not only factory smoke and car exhaust fumes, but also cigarette smoke, fly sprays, strong perfumes and aerosol cleaning sprays. Some building materials and home furnishings may give off fumes that might make asthma worse. Formaldehyde, in particle-board, is one of these.

WHAT TO DO ✓

- *Try to find what the trigger is.*
- *Always carry your reliever medication with you.*
- *Seal particle-board floors, shelves, stairs, and household fittings with polyurethane or an oil-based paint.*
- *See your home is well-ventilated so that fumes do not accumulate.*



☼ Medicines

The common groups of medicines which can trigger asthma are:

- **Beta blockers**
These are used (in tablet form) to treat a number of illnesses – including high blood pressure, heart conditions and migraine – as well as in eye drops for glaucoma. If you are discussing any of these conditions with your doctor remember to tell him or her that you also have asthma.
- **Aspirin and non-steroidal anti-inflammatory pain relief**
One in 20 people with asthma is sensitive to aspirin and other medicines for pain relief. If aspirin upsets you, make sure when you buy any pain relief tablets that you read the packet carefully.



And remember, no children under the age of 12 should be given any aspirin. Paracetamol is the safest medication for occasional use to treat pain or colds and flu. However, research has suggested that the longer term use of high doses of paracetamol can aggravate asthma.



- **Non steroidal anti-inflammatory pain relief (NSAID)**

NSAIDS may trigger asthma in some people. Examples of non steroidal anti-inflammatory pain relief are: Ibuprofen (Brufen, Nurofen, Anafen, Motrin, Panafen), Naproxen (Naprosyn, Synflex, Naxen, Noflam) and Mefenamic Acid (Ponstan).

- **Natural products**

It is important to remember that “natural” doesn’t necessarily mean the product does not have harmful side effects. Products containing bee pollen, royal jelly or echinacea have been found to be harmful to people with asthma.

Emotions

You may find that your changing emotions such as being worried, up-tight or stressed, excited or happy can make your asthma worse. The part your emotions play in your asthma can be difficult to pinpoint. If you are aware that your feelings may be making your asthma worse, you may need professional help to help you balance your emotions. Your doctor may be able to assist you or refer you on to the appropriate person.



Triggers in Asthma

Allergic Triggers

Some people are particularly sensitive or “allergic” to certain things they come into contact with every day.

These allergies are important in hay fever and eczema as well as asthma. Hay fever causes an itchy, runny nose, sneezing and sometimes red, watery eyes. Eczema causes redness and itching of the skin.

The most common asthma-producing allergies are related to: house dust mites, animals, pollens, moulds, fungal spores, certain food and drinks.

House dust mites

House dust mites are too small to see. They live off the flakes of skin we constantly shed. We all have them in our homes, in soft furniture and carpets and especially in our mattresses and pillows.

Their waste products, which are very tiny and float in the air, can provoke an allergic reaction when breathed in. Allergies to dust mites are very common.

Signs that you might have an allergy to dust mites include wheezing when you are vacuuming or dusting or when you enter a dusty room or house, or asthma symptoms during the night or first thing in the morning.





- *Get bedding covers which provide a barrier. Most manufacturers of pillows, mattresses, bed bases and duvet inners use material which allows dust mite waste products out into the open air. However, you can buy special barrier covers for these items (ask at your local Asthma Society or call Airflow Products 0800 AIRFLOW or 0800 247 3569). If your asthma is triggered by house dust mite waste, and you take only one step towards reducing exposure to them, this should be the one – it's the single most effective measure you can take.*
- *Vacuuming does not get rid of dust mites but thorough vacuuming of carpets will reduce the level of dust mite waste as long as the carpet is not heavily worn. Vacuuming carpet, upholstery, mattresses and both sides of pillows is recommended at least once a week. If your asthma is triggered by dust mite waste have someone else do it for you. Use vacuum cleaners with a micro-filter, an "S-class" filter, or an HEPA ("High Efficiency Particulate Air") filter system. Machines without these sorts of filters are more likely to recirculate the fine dust mite waste through their exhaust vent, back into the air. If your vacuum cleaner does not have a HEPA filter always open the windows when you vacuum. Avoid using vacuum cleaners that expose you to the contents when you empty them. After vacuuming, leave the house and allow the dust to settle for a half hour or so before re-entering.*
- *Damp dust weekly (by using a damp, not wet cloth). Avoid using feather dusters. The barrier covers on mattresses and bedding (see the first item above) should be damp dusted once a week but not removed.*

Continued over...

- When you do the washing, hang sheets and pillow cases in the sun to dry. **Direct sunlight kills the dust mite.** Alternatively, if you use a drier, run it an extra half hour on warm after the contents are dry.
- Air blankets weekly, where possible in natural sunlight. Do the same with any loose rugs. Wash or dry clean blankets, pillows and quilt (duvet) inners often – at least once every six to eight weeks.
- Don't keep things under the bed, or on top of wardrobes because they gather dust.
- In addition, with any young children:
 - put soft toys in the deep freeze for at least 72 hours and then wash regularly. Use washable soft toys and avoid fluffy toys where possible;
 - avoid using sheepskins (**especially avoid using them as infant bedding**);
 - do not put young children on a bottom bunk.



🌀 Animals

Cats are the second biggest source of indoor allergen. A high proportion of New Zealand families have cats and the allergens they produce tend to stay in the house for long periods. They are not a good choice of pet for families with people who have allergies. Other pets do not seem to produce such potent allergens, but dogs, rabbits, guinea pigs and mice can cause problems in some people.

WHAT TO DO ✓

- *Never allow pets into the bedroom and, if possible, keep them outside.*
- *If you are to visit friends or family who have furry animals take extra medication beforehand, or ask them to visit you. People will understand if you explain why.*



🌀 Food and drink

The foods most commonly associated with food allergy are cow's milk, wheat, seafood, eggs, soy and peanuts. The main symptoms are hives, eczema, itching, vomiting, diarrhoea, abdominal pain, nasal congestion and wheeze.

Mild allergy affecting asthma occurs in probably one out of 50 children under the age of two. Most childhood food allergies are out-grown by the age of three. In older children and adults it is less frequent affecting about one in 500 people. If the common foods causing allergies are not introduced to a child's diet until they are 2 they are less likely to develop life long allergies.

In severe cases food allergies can cause anaphylaxis (allergic shock) which requires **urgent medical attention**. Early signs can be swelling of the face, tongue and mouth.

Some people may find their asthma is triggered by certain foods or additives in food – a common example is metasulphite, a preservative added to some soft drinks, wine and pickles.

Other people with asthma are very intolerant of foods containing salicylates, which is the main chemical in aspirin. Several fruits, especially kiwifruit, contain salicylates.

WHAT TO DO ✓

- *If you have an immediate reaction to a food, avoid it in future.*
- *Check labels on all tinned and packaged food to make sure they are free from the substances you are allergic to.*
- *If you wish to take something out of your child's diet, discuss it first with your doctor, as it may be important and necessary for healthy growth.*
- *Do not use cow's milk formulas.*
- *Delay introduction of solids for your child until six months of age.*
- *Avoid the major allergy causing foods in a child's diet until they are two (cow's milk, wheat, seafood, eggs, soy and peanuts).*



Pollens, moulds and fungal spores

Pollens can come from grasses, trees and shrubs. Privet has received publicity as a trigger for asthma but not everyone with asthma is sensitive to it. Grasses and weeds are so widespread and have such a long season that they are the major pollen problem in New Zealand.

Some of the plants to avoid if you are allergy prone:

Plant	Flowering period
Grasses	October to February
Plantains	October to February
Pines	July to September
Privets	October to March
Birches	October to November
Wattles	August to November
Oaks	August to October



WHAT TO DO

- Avoid mowing lawns.
- Replace any tree or shrub in your garden that makes your nose and eyes itch or makes you sneeze and wheeze. Wind pollinated plants should be avoided because they have light pollen that travels easily.
- Take extra medicine during the months when you know pollens are likely to make your asthma worse. If you also get hay fever, medicines may be required for this too.
- Keep the house as warm and as dry as possible to avoid moulds – do not use unflued gas heaters as they release moisture and particulates into the air.
- Remove mould or mildew from walls, shower curtains, etc. with a fungicide e.g. very-diluted household bleach.
- Air your clothes and your wardrobes regularly.



Workplace Triggers

Clues that something at work is making your asthma worse are that your asthma gets worse soon after starting a new job or while you are doing a particular part of your job, or your asthma improves when you are not at work, e.g. on holiday or at the weekend.

WHAT TO DO ✓

- Before starting a job, consider whether it involves anything that may make your asthma worse.
- Identify the cause and take advice on control measures, especially adequate ventilation.
- Avoid any triggers that you can identify. You may need to talk to your boss and see what can be done about avoiding them, or contact the Occupational Safety and Health Service. Your doctor will be able to help you with this.
- Ask if you can change to a different area of your work and see if this makes a difference.
- If the triggers can't be avoided, discuss with your doctor which medication you can increase. However, if you continue to be exposed to a trigger, then even with increasing medication your asthma is likely to worsen over time.
- As a final solution, you may have to change your job.





Some of the most common New Zealand workplace triggers are:

- *isocyanate paints*
- *foams and plastics, and the fumes given off during their manufacture*
- *animal fur and protein from laboratories and veterinary clinics*
- *flour and grain dusts from farms, granaries and bakeries*
- *wood dusts*
- *epoxy resins and other plastics from boat builders, mold manufacturers and plastic manufacturing processors.*





Summary

Every person with asthma has different triggers. Identifying them is not always easy but it is well worthwhile trying.

Using a peak flow meter or recording symptoms when your asthma gets worse will help you find out what your triggers are.

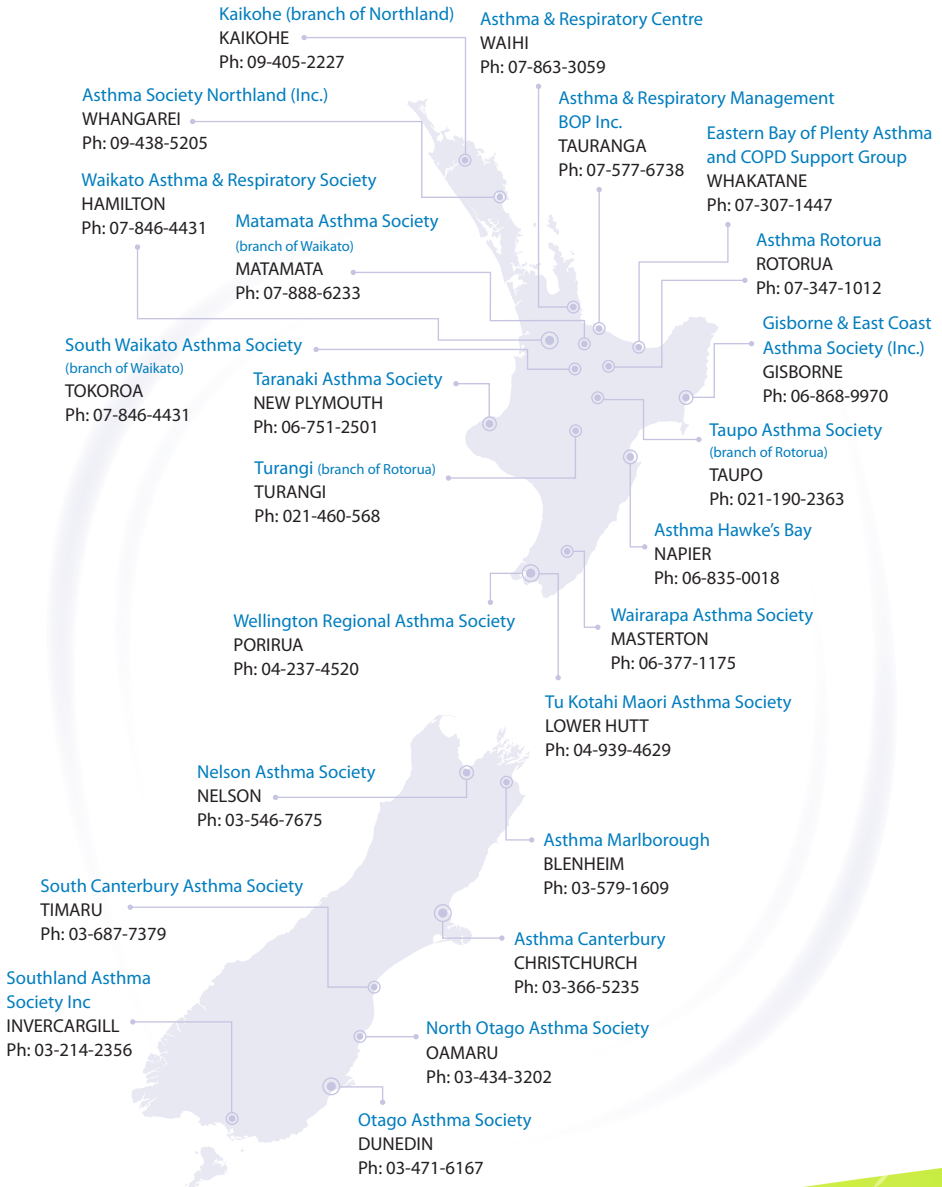
Pay particular attention to your triggers when your asthma is troublesome, as you will react more to them at this time.

Create your own list of possible asthma triggers. Take this list with you next time you visit your doctor, practice nurse or asthma educator and discuss all that can be done to avoid or deal with them.





Your local affiliated Asthma Societies



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Triggers in Asthma
...tilation, breath, puff, ...*



The Asthma and
Respiratory Foundation
of New Zealand (Inc.)
Te Taumatua Huango,
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arf@asthmafoundation.org.nz www.asthmafoundation.org.nz

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