Allergen Minimisation
Frequently Asked Questions

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For patient or carer support contact Allergy & Anaphylaxis Australia or Allergy New Zealand.

Q 1: Why is it important to confirm allergens?

Allergies are common in Australia and New Zealand, affecting around 20% of people at some time in their lives. Allergy to aeroallergens such as house dust mites, pollen and animal dander are major triggers of allergic rhinitis, eczema, and asthma. If left untreated, this makes these conditions hard to manage.

Knowing what allergens cause symptoms is an important part of managing allergic disease. Sometimes the allergen is easy to confirm, but some people may need allergy testing. A doctor will assess the medical history together with results of allergy tests (skin prick tests or allergen specific IgE blood tests). A referral to a clinical immunology/allergy specialist may also be needed.

Once allergens are confirmed, the following practical advice on how to avoid or minimise exposure can help reduce symptoms.

Q 2: Are house dust mites common allergens?

Dust mites are commonly found in homes with high humidity and constant warm temperatures. They are more likely to be in coastal cities and towns, where there is more moisture in the air, than in drier, inland areas. House dust mites can trigger symptoms in people with asthma, allergic rhinitis (hay fever) and eczema.

House dust mites cannot be completely removed from the home. Regardless of claims, there is no vacuum cleaner, dust mite spray or dry cleaning process that will completely remove house dust mites. It is possible to reduce their numbers and minimise exposure to their allergen.

Q 3: How is exposure to house dust mite minimised?

The ways to minimise exposure to dust mites in bedrooms are:

- **Wash sheets, pillowcases, and other bedding once a week in hot water (>60ºC).** This will kill dust mites and wash away the allergen they produce. If you cannot wash bedding in hot water, try using a commercial washing product containing tea tree or eucalyptus oils. Many of these products are specially formulated to kill dust mites and can be used in cold water. If using regular laundry detergent, dry bedding outside, then put the items in a tumble dryer on a hot setting for at least ten minutes. This will help to kill the dust mites. Having bedding dry cleaned will kill dust mites, but this does not remove the allergen they produce.
- **Cover mattress, pillows, and quilts with dust mite resistant covers.** These must be washed at least every two months. Some health funds may provide a rebate for the purchase of these. If covers are not available, wash blankets and washable quilts every three months in hot water.
- **Remove sheepskins or woolen underlays from the bed and bedroom**. These provide an ideal environment for dust mites and should be avoided.

- **Reduce the number of soft toys in the bedroom.** Soft toys provide an ideal environment for dust mites, so they should be washed in hot water regularly. If the soft toy cannot be washed, place them in a bag and then into the freezer overnight. This will kill dust mites but does not remove the allergen they produce.

The following advice can apply to any room in the house:

- **Consider replacing carpets with hard floors** such as wood, tiles, linoleum or concrete, where practical and affordable. Carpets can contain large amounts of house dust mite which cannot be completely removed by vacuuming.
- **Damp dust or use electrostatic cloths** to clean hard surfaces including hard floors weekly.
- **Vacuum carpets and sofas weekly**. High efficiency particulate air (HEPA) filter vacuum cleaners may remove more allergens than other vacuum cleaners, but all vacuuming increases the amount of dust mite allergen in the air. Consider wearing a mask or asking someone else to do the vacuuming and waiting 20 minutes before re-entering the room.
- **Reduce humidity**. It helps to have a dry and well-ventilated house with good floor and wall insulation. Avoid using water cooled air conditioners and unflued gas heaters, as these release water into the air which can increase indoor dust mite and mould levels.
- **Use blinds on windows if possible**. Blinds are easier to clean than curtains. Other options include washable curtains or external shutters.
- **Consider ways to reduce house dust mites** if renovating or building a home.

Q 4: How is exposure to animal dander minimised?

Allergic reactions may be triggered by exposure to the dander from pets such as cats, dogs, guinea pigs, horses, rabbits, mice, rats and birds. Exposure can happen either at home from the family pet, or from exposure to animals at work or elsewhere.

Animal dander is made up of the animal's skin cells, sweat and/or saliva. When animals shed their hair, dander becomes airborne, often staying in the air for a long time.

Cats and dogs are a major source of allergens in the home environment. The amount of allergen released can vary between breeds, but there is no breed of dog or cat that is completely allergen free. The allergen produced by cats can be hard to remove from homes and can also be found in places where cats have never lived, carried on clothing to schools and offices.

Horse dander can travel long distances in the air and may cling to clothes. This may be enough to trigger asthma symptoms in people with serious allergy to horses. Care should be taken to shower and change clothes before going to the home of a person allergic to horses.

Dogs, guinea pigs, mice and rabbits are not as allergenic as cats, and are more easily kept outside the house.

Birds may occasionally cause allergic symptoms. This is different to a condition known as pigeon fancier's lung, a serious condition that requires complete avoidance of birds.

The most effective method of minimising exposure to allergens for people who are allergic to animal dander is to avoid the animal. This may involve finding a new home for a pet. For people with mild reactions, keeping pets out of bedrooms and living areas may help reduce symptoms.

There is not enough evidence to prove the effectiveness of washing animals frequently and using HEPA air filters when vacuuming to reduce allergens.

Q 5: How is exposure to mould minimised?

Mildew often grows on the surface of moist, warm areas with little air circulation. Mould grows underneath the surface of anything that has become wet. Mould and mildew may trigger allergy symptoms and, if untreated, can lead to other health problems.

If you are allergic to mould:

- Removing visible mould by cleaning with bleach or other commercial mould reduction products.
- Ensuring there is natural ventilation in mould prone areas.
- Finding and sealing leaks in bathrooms and roofs.
- Clearing overflowing gutters and unblocking under floor vents.
- Removing indoor pot plants which may promote mould growth.
- Drying, removing or replacing wet carpets.
- Avoiding working with garden compost, mulch, or mowing lawns.

Q 6: How is exposure to pollen minimised?

In Australia and New Zealand, grass pollen counts are usually highest between late September and December. This has been affected by changing weather patterns and climate.

Grass, weed and tree pollen can be blown long distances on windy days, but most pollen is found a short distance from the plant.

High levels of pollen can be present during thunderstorms. When pollen granules meet water, starch granules are released that are small enough to be breathed into the airways, triggering allergic rhinitis (hay fever) and asthma in some people. This is known as Thunderstorm Asthma. For more information www.allergy.org.au/patients/asthma-and-allergy/thunderstorm-asthma

It is hard to minimise exposure to pollen, but the following advice may help reduce symptoms:

- Remain indoors on windy days, and just before, during and after thunderstorms in spring and summer.
- Avoid activities known to cause exposure to pollen.
- Shower after outdoor activities where exposure to pollen is high.
- Use re-circulated air in the car when pollen levels are high.
- Wear sunglasses to reduce the amount of pollen in contact with your eyes.
- Dry bedding and clothing inside.
- Talk to your doctor or pharmacist about medications or treatments that will relieve your symptoms.
- Visit www.pollenforecast.com.au for up to date information on pollen counts in Australia.

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