

# FACTSHEET



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## House dust mite allergy- what should you do?



House dust mites are about a quarter of a millimetre long. They live off human skin scales and thrive in humid climates. Mites are found in bedding, carpets, soft furnishings and clothing. Dust mites often cause allergies because humans react to various proteins (allergens) contained in their droppings. Each mite produces about 20 of these waste droppings every day and the droppings continue to cause allergic symptoms even after the mite has died.

It is important to understand that a positive allergy skin test to dust mite does not necessarily mean that dust mites are a cause of your child's symptoms. Only some of the children with a positive allergy test will have symptoms caused by the allergen. The meaning of the allergy test result for your child should be discussed with the doctor who referred you for the allergy test.

House dust mite allergy is very common and is associated with asthma, eczema and allergic rhinitis, especially in climates such as Australia where the allergen is present in

large amounts. A major site of exposure to house dustmite allergen is the bed, as the allergen is heavy and must be disturbed to become airborne, however it is important to remember that dust mite allergen is found in all rooms of the house, on the floor and in soft furnishings, not just in the bedroom. It is possible that if house dust mite allergen could be totally removed from the environment this would improve allergic symptoms, however it has not been possible to do this in Australian homes. House dust mite avoidance measures may reduce house dust mite allergen but do not entirely eliminate it.

There are many methods that have been used to reduce the number of mites and their allergens. Some of the methods commonly promoted are costly and there is little evidence to support their claims of effectiveness. It is therefore important that you discuss the potential value of house dust mite avoidance strategies in managing your child's allergies with your doctor.

### Managing mites: what may or may not help to reduce mite allergen.

- Mattress, doona and pillow covers may reduce allergen exposure in the bed. Make sure they are removable and machine washable. The cover should entirely encase the mattress. Commonly available brands are Allergend® ([www.allergend.com.au](http://www.allergend.com.au)) and Mite Guard® ([www.miteguard.com.au](http://www.miteguard.com.au)). Mattress protectors that do not completely encase the mattress are not effective and should not be used.

- Washing of bedding, soft toys and soft furnishings at usual washing temperatures removes more than 95% of allergens but does not kill dust mites. Temperatures above 60 degrees are needed to kill dust mites. Regardless of wash temperature, washing should be repeated about every 8 weeks as dust mites will repopulate.
- Regular vacuuming may help reduce mite allergens in your carpets or rugs but this is not very efficient and many vacuum cleaners also increase the amount of allergen in the air. It is important to understand that vacuuming alone without undertaking other measures will not reduce the dust mite level significantly.
- Having non-carpeted flooring and reducing soft furnishings such as curtains, soft toys and sheepskins reduces the amount of house dust mite allergen.
- Weak evidence from two poor quality trials suggests regular use of chemicals which kill mites may improve symptoms of allergic rhinitis, but more research is needed.
- Other methods are of very little help, including air filtration, negative ion generators and “allergen-free” products.

### What do trials of house dust mite avoidance show?

Some of the individual trials of house dust mite avoidance measures have shown improvement in symptoms of asthma, eczema and allergic rhinitis in some but not all patients.

When **all** the evidence from the 55 trials of dust mite avoidance for asthma has been examined together by experts the conclusion is that there is not good evidence of a significant benefit for asthma.

(<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD001187.pub3/full>)

There are even fewer trials (only 9) for perennial (year-round) rhinitis. Review of these by experts concluded that avoidance measures (certain chemicals and extensive bedroom-based environmental controls) might reduce the symptoms of allergic rhinitis, but more research is needed.

(<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD001563.pub3>)

For eczema, when experts looked for all the trials comparing the effect of some form of dust mite avoidance with a control group only 7 trials were found. These trials were of short duration and low quality. When analysed they did not provide enough evidence to

recommend any of the dust mite reduction and avoidance measures tested for treatment of eczema.

(<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD008426.pub2>)

The use of dust mite avoidance measures in an attempt to prevent the development of allergic disease in non allergic babies and children is not successful and is not recommended.

### Check with your doctor

Remember, there is currently little evidence that house dust mite avoidance makes a major difference to allergic symptoms. Some doctors and specialists will recommend a trial of house dust mite avoidance in severe cases of asthma, eczema or allergic rhinitis. You should ask your doctor if this applies to your child. Check with your doctor about the need for house dust mite avoidance measures in your child before you remove your carpets and throw away your soft furnishings.