

House Dust Mite Allergies

Patient Information Leaflet

House dust mite allergies can affect your nose, chest, eyes or occasionally the skin. Allergy to house dust mite can cause any of the following symptoms:

1. An itchy, runny or blocked nose with or without sneezing
2. Itchy, watering or inflammation of both eyes
3. Coughing, sneezing or other symptoms of asthma
4. Itchy skin or occasional worsening of eczema.

Usually if your symptoms are due to house dust mite allergy, they will be present most days of the year, although they may be more severe occasionally. Depending on where you go on holidays, you may find that your symptoms improve. Evidence of sensitisation to house dust mite with a positive skin or blood test may help to confirm a suspected allergy based on your symptoms.

What are House Dust Mites?

House dust mites are tiny creatures which cannot be seen with the naked eye. They live in all our homes and feed on the scales of skin that we shed. The mites are harmless to most but are a common cause of allergy, particularly in children. They are most common in warm, damp areas where dust containing skin scales gather, particularly in the bedroom. These areas include pillows, mattresses, carpets, soft furnishings, soft toys and even clothing. They do not survive in very dry or cold conditions. Most people are allergic to protein allergens found in the mite droppings rather than the mite itself. The droppings are so small that they form a fine powder on surfaces which becomes airborne and breathed in leading to symptoms. Each mite produces about 20 of these droppings every day which continue to cause allergic symptoms even after the mite has died.

Why do house dust mites need to be controlled?

Drugs can treat and control the symptoms of allergic asthma, eczema and rhinitis but do not provide a cure. Measures to avoid house dust mite will lower, but do not totally remove, dust mite allergens. Sometimes, this will be sufficient to significantly improve symptoms. There is no way to predict whether someone will benefit from avoidance measures, except by trying them. It is better to properly carry out several allergen avoidance measures to see an improvement in symptoms. Trying single avoidance measures one at a time is unlikely to be helpful.

For best results, the steps below should be carried out over the whole house. If this is not practical, concentrate on the rooms where the person with the allergy spends most of their time i.e. the bedroom or sitting room. The first steps mentioned are the easiest and cheapest, the later steps are more expensive.

The number of steps needed to give an effect will differ from person to person and it will take at least two to three months before the effects of carrying out the steps are noticed.

REDUCING HOUSE DUST MITE LEVEL EXPOSURE

STEP 1. PREVENT BUILD UP OF DUST

Removing dust is important in the homes of allergy sufferers. To help prevent dust building up in the home:

- **Remove unnecessary soft furnishings and reduce items which dust can build up on**, especially if they are difficult to clean e.g. keep ornaments in display cabinets, place books in closed cases, and put clothes and other objects in cupboards or drawers.
- **Damp-wipe weekly** all surfaces e.g. (pelmet tops, window sills, window blinds, tops of cupboards and so forth) (Dry cloths will not pick up all the dust and will cause dust to become airborne)
- **Vacuum frequently** preferably in the morning. As vacuuming causes a large amount of the dust to become airborne, it is preferable if somebody other than the person with house dust mite allergy performs the vacuuming. Following the vacuuming the person who is allergic should avoid the room for at least an hour. Vacuum clean soft furnishings and curtains as well as carpets/floors. Replace the air filter or dust bag in the vacuum cleaner regularly. Vacuum clean mattresses every two weeks.

STEP 2. HIGH EFFICIENCY FILTER VACUUM CLEANERS

There are vacuum cleaners on the market, which are better at removing dust than ordinary vacuums so:

- **Use a high efficiency filtered vacuum cleaner** capable of retaining a high proportion of the smallest particles (HEPA filter, or similar) and use regularly on floors, carpets, soft toys, and soft furnishings. (Details of suitable vacuum cleaners are available from <https://www.allergyuk.org>). Alternatively, you can fit a HEPA filter on an existing vacuum cleaner if possible.

STEP 3. HIGH TEMPERATURE WASHING

Washing fabrics at a minimum of 60°C kills house dust mites therefore:

- **Wash bedding weekly at 60°C.** Wash all bedding that is not encased in barrier covers (e.g. sheets, blankets) every week. Use sheets, pillowcases and duvet covers that can be washed at 60°C.
- **Use curtains that can be washed at 60°C** and wash regularly at this temperature.

STEP 4. BEDDING AND SOFT TOYS

House dust mites are found in large numbers in mattresses and pillows where there are lots of skin scales.

To reduce the number of mites in these areas:

- **Replace blankets with duvets which are made of synthetic material**
- **Enclose your mattress, pillow and duvet in allergen barrier covers.** Buy products that have been tested to make sure that they prevent the escape of house dust mite allergen (product lists available at <https://www.allergyuk.org>). Micro-porous allergen-proof membrane covers should be breathable and completely enclose the item. These covers need to be wiped clean with a damp cloth each time the bedding is changed and allowed to dry thoroughly before placing sheets on top. Allergic children should not sleep in the bottom bunk bed where allergen levels can be higher.

- **Limit soft Toys. Wash at 60°C every week or freeze for 12 hours every month.**

Stuffed soft toys can also contain house dust mites so try to reduce the allergy sufferer's contact with these toys and keep away from the bed. However, it is important not to deprive a child of a favourite furry toy. Washable stuffed toys which remain in the bedroom overnight should be washed every week at 60°C.

Alternatively, if the toy cannot be washed at 60°C place it in a plastic bag in the freezer for at least 12 hours once a month to kill House Dust Mites and then wash at the recommended temperature if possible, or thaw slowly.

STEP 5. CARPETS

Carpets also contain a lot of house dust mites. Replacing carpets can be expensive but if you are going to change your carpet anyway these are some options, which will reduce the number of mites present:

- **Replace carpets with hard surfaces.** Linoleum/vinyl flooring or sealed natural flooring such as cork, tiles, or wood. Make sure that the new floor does not have cracks in which dust may build up
- **Choose very short pile, synthetic carpets,** if you cannot avoid carpet as they tend to hold fewer mites than long piled wool carpets
- **Use cotton rugs that can be washed at 60°C** if you cannot avoid rugs and wash them regularly.

STEP 6. REPLACE FURNISHINGS

When you buy new furnishings, you should consider:

- **Replacing woven fabric covered chairs and sofas with cane, canvas, leather-like or leather** covered furnishings which are easy to clean and do not harbour dust mites
- **Replace heavy curtains** with light weight washable curtains (preferably washable at 60°C) or with roller or vertical blinds or shutters. Venetian blinds are not recommended as dust frequently builds up on the slides and may contribute to symptoms unless they are regularly cleaned by damp dusting.

STEP 7. REDUCE DAMPNESS IN THE HOME

House dust mites prefer warm, damp homes. Reduce humidity by enhancing ventilation. Aim for a humidity of 35- 50%. This can be very effective in countries with a dry climate but is difficult to achieve consistently in Ireland.

These are some ways of avoiding dampness:

- **Open windows or vents and use extraction fans** in kitchens and bathrooms during and after cooking, washing and bathing. To stop dampness spreading to the rest of the house, keep the door to these rooms closed.
- **Avoid drying clothes indoors**, especially in the bedrooms and living rooms, unless using dryers which are vented outdoors. If you must dry clothes indoors, open a window and close the door to the room where the damp clothes are.
- **Ventilate bedrooms daily.** Air bedding before remaking beds. Open windows and doors and it may also be helpful not to block up open chimneys.
- **Lower Temperature in the bedroom.** Run central heating a few degrees lower (especially in the bedroom)

OTHER CONSIDERATIONS

The advice given above is for people who have had a diagnosis of house dust mite allergy which will be based on both clinical history and skin tests or blood tests performed by a trained allergist. A number of people with allergies find that their symptoms are exasperated by exposure to non-specific irritants. It is important that you avoid such irritants as well as taking measures to reduce exposure to house dust mite.

1. Cigarette smoke makes all allergic conditions worse as it causes further inflammation on already inflamed surfaces. It is important that you make every effort to give up smoking if you smoke yourself. It is also important that nobody else smokes in bedroom or living area of your house. If anybody does smoke in doors, they should do so in a well-ventilated place.
2. Some people also find that spray polishes and perfume sprays can aggravate their symptoms. It is important that to test if avoiding such sprays over a period of at least two weeks improves your symptoms and if you notice an improvement that you continue to avoid these irritants.

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