

Patient information sheets: Practical allergen avoidance advice

House dust mite allergen reduction:

Aims to reduce the amount of mite allergens in the home

Major strategies (WHO Strength of Recommendation A)

- Wash bedding regularly (every 1 – 2 weeks) at 55-60°C, if possible, to kill mites: (*washing with cold water removes 90% of mite allergens; washing at 55-60°C kills mites but does not denature mite allergens*)
- Wash pillows and duvets in hot water 55-60°C and encase pillows and encase mattresses with documented protective coverings
- Sufficient ventilation of dwellings to decrease humidity; aim to reduce indoor relative humidity to below 50% and avoid damp housing conditions

Additional strategies

- Use a good quality vacuum cleaner (if possible one fitted with HEPA filter)
 - Use a damp duster when dusting and cleaning surfaces
 - Replace wall to wall carpets with linoleum or wooden floors which can be wiped clean
 - Remove/reduce curtains and soft furnishings in the bedroom
 - Replace fabric-covered seating with leather or vinyl
 - Remove soft toys from the bedroom; wash them at 55-60°C or freeze them (in a kitchen deep-freezer) to kill house dust mites
 - Do not allow pets in the bedroom
 - House dust mites are transparent and have no natural protection against sunlight. Exposure of mattresses, rugs and carpets to direct strong sunlight (for more than 3 hours) kills mites and can be used in appropriate regions.
 - A hammock, easily washable and susceptible to air and sun drying, is used in many areas of the world
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Pollen avoidance:

Provides mechanical barriers to pollen contact

- Keep windows closed at peak pollen times, eg, in the evening when airborne pollens descend to lower altitudes
 - Wear glasses or sunglasses to prevent pollens entering the eyes
 - Consider wearing a mask over nose and mouth to prevent inhalation of pollens at peak time
 - Do not cut grass yourself
 - Keep windows closed when the grass has been mown
 - Use air-conditioning if possible
 - Install car pollen filters if possible
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Pet allergen avoidance:

Reduces the amount of pet allergen indoors

- If possible, find another home for the pet, and do not bring new animals into the home
 - Exclude pets from bedrooms and if possible keep pets outdoors
 - Vacuum carpets, mattresses and upholstery regularly, if a power source and equipment are available
 - Change clothes before going to school/work if you have attended your horse/cat/dog
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Cockroach allergen avoidance:

Removes the cockroaches, eliminates the places and conditions in which they can live, and removes allergens

- Eradicate cockroaches with appropriate insecticides
 - Seal cracks in floors and ceilings
 - Remove sources of food
 - Control dampness
 - Scrub floors with water and detergent to remove allergens
 - Bedding, curtains and clothing can be contaminated and must be washed
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Mould allergen avoidance:

Prevents mould from growing, and mould spores from becoming airborne during mould removal

Indoors:

- Use dehumidifiers in the home if relative humidity is constantly high (*above 50%*)
- Ensure heating, ventilation or air-conditions systems are properly maintained
- Use 5% ammonia solution to remove mould from bathrooms and other contaminated surfaces
- Replace carpets with hard flooring; replace wallpaper with paint
- Repair indoor water damage immediately

Outdoors:

- Avoid cutting grass in late summer when mould spores are present in decaying vegetation
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Severe Reactions, Allergic Anaphylaxis

Aims to prevent contact with the allergens that induce anaphylaxis in susceptible individuals, and to provide strategies for dealing with episodes of allergic anaphylaxis

- Carry an epinephrine auto-injector and know how and when to use it; always have a spare auto-injector available
- Carry an emergency pager or mobile telephone to call assistance
- Carry/wear Medic-Alert information
- When travelling abroad, carry an anaphylaxis-alert card in the language of the country being visited, detailing food, drug, and insect allergies
- Avoid stinging insects, and learn how not to attract them:
 - do not wear perfumes or bright colours
 - do not pick ripe fruit, avoid refuse bins and compost heaps which attract insects
 - keep car windows closed when driving
- Avoid allergenic ingredients in ready-made food by learning how to interpret ingredient lists
- If eating out check with the chef that allergenic foods/oils are not used in dishes; explain the significance of avoiding allergenic ingredients

In the school environment:

Ensure that parents, teachers, fellow students, and school administrators are aware of the necessity to provide a safe environment for children at risk for anaphylaxis to foods or insect stings.

- Create a no-food area of the school playground
- Identify a supervisor to carry a telephone for emergencies

In the occupational environment:

- Avoid contact with airborne or contact allergens; for example, airborne latex can be avoided by co-workers using powder-free latex gloves

Content of Educational Programs in Allergy and Allergic Asthma

Allergic asthma and allergic rhinitis

Appropriate actions for guided self-management include:

1. Developing good communication between patient and physician to improve patient compliance
 2. Promoting understanding about the basic facts, causes and triggers of allergic asthma/ allergic rhinitis
 3. Identifying and controlling factors that aggravate asthma/rhinitis symptoms and provoke exacerbations
 4. Following a written action plan to avoid or handle exacerbations
 5. Emphasizing the importance of proper drug use and correct use of spacers and inhalers, for long-term control
 6. Monitoring symptoms and peak flow values in persistent asthma and adjusting medication accordingly
 7. Educating to decrease reliance on unproven treatments
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Eczema

Educational programs in eczema should include:

1. Informing about nature, heredity, causes and triggers of eczema
 2. Identification and avoidance of individual provocation factors, skin care and treatment options, including complementary therapies
 3. Discussion of diagnosis and treatment of food allergies and adequate nutrition in childhood
 4. Behavior-oriented psychological intervention to interrupt the itching-scratching cycle. Training to improve stress-management and reduce the negative social effects of illness-specific problems
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Severe Reactions, Allergic Anaphylaxis

Each patient should have an individual management protocol to include:

1. Carrying an epinephrine auto-injector and knowing how and when to use it; always have a spare auto-injector available
2. Carrying an emergency pager
3. Carrying/wearing Medic-Alert information
4. Avoiding stinging insects, learning how not to attract them
5. Avoiding allergenic ingredients in ready-made food

In the school environment:

Education of parents, teachers, fellow students, and school administrators is necessary to provide a safe environment for children at risk for anaphylaxis to foods or insect stings.

1. Creating a no-food area of the school playground
2. Identifying a supervisor to carry a telephone for emergencies

In the occupational environment:

Health and Safety measures should be introduced to prevent exposure of affected workers to airborne or contact allergens