



AIRBORNE
ALLERGY
ACTION

Who is Airborne Allergy Action?

- Community Interest Company
- Raising Awareness of Effective Allergen Avoidance alongside medication
- UK has the highest rate of asthma in the world and 3rd highest rate of allergic rhinitis in the world
- RCPCH Report found that poor indoor air quality leads to health effects in people of all ages. In children they include breathing problems, chest infections, low birth weight, pre-term birth, wheeze, allergies, eczema, skin problems, hyperactivity, inattention, sore eyes
- Inhaled Allergy misunderstood in the UK

Aims

- Raising awareness of these allergens and the context of how non allergens and viral particles co-exist
- Raising awareness of what to do about them
- Assisting with and publicising relevant research eg. RCPCH Report, GCARE
- Aiming to provide an individual advice service
- Facebook Support Group /Twitter @AirborneAllergy

Background

- Personal Experiences of Founders
- Others' Experiences – Facebook Group 300 + Members
- International Research
 - Morgan et al -2004
 - Alameda County (Have protocol)

<https://www.pbs.org/newshour/show/control-kids-asthma-program-clears-air-home>

Current Guidelines



Children with respiratory allergies (such as asthma and rhinitis)

Taking steps to reduce exposure to allergens (from house dust mites, moulds and pets) is recommended to reduce symptoms and exacerbations.

Depending on the allergy, measures which can help include:

- reducing dust and dampness in the home
- reducing items which collect dust such as soft toys and, if possible, replacing carpets with hard flooring.
- washing bedding and covers (at 60°C every two weeks), or using allergen-impermeable covers
- avoiding direct exposure to furry pets if the child is sensitised.

Previous guidelines – used inappropriate evidence and meta analyses - did not distinguish adults and children - asked for these to be changed without delay.

Which Allergens?

House dust mite allergen

Indoor Moulds

Outdoor moulds

Allergenic Tree Pollen – especially silver birch, hazel and alder

Grass Pollen

Animal Dander – eg. cats, dogs,

Others - cockroaches, feathers, trees

House Dust Mite Allergen

What is house dust mite allergen and where is it?

Avoidance Examples

- Use of anti dust mite bedding

Preventing asthma exacerbations by allergen-impermeable bed covers in children: Double-blind randomised placebo controlled trial Murray C.S.^{1,2}, Sumner H.¹, Mycock M.¹, Duxbury A.¹, Custovic A.¹, Simpson A.^{1,11} University of Manchester, Centre for Respiratory Medicine and Allergy, Manchester, United Kingdom,

- Use of sealed hepa filter vacuum

“vacuum cleaners can release and resuspend dust and allergens.” – RCPCH Working Party

- Use of hepa filter air purifiers
- Removal of items which harbour HDM allergen

Indoor Moulds

For Example:

- Alternaria – window frames
- Aspergillus – black; damp old houses
- Cladosporium – window frames, refrigerators, condensation
- Penicillium – blue green on apples, citrus fruit, house dust

Avoidance Examples

1. Keep all walls and ceilings as dry as possible
2. Clean any black spots off immediately
3. Check the humidity level - 40%-50%
4. Use a dehumidifier to keep humidity at the right levels (steam cleaning creates humidity and mould spores)
5. Get specialist removal advice if needed

Outdoor Moulds

- Alternaria (peak Aug/Sept, plants especially cereals, rotten wood, composts etc)
- Cladosporium (frequent mould in air, highest July/August, dead and dying plants, soil etc)
- Penicillium (all year, peak winter/spring, soil, forests, grassland)
- Sporobolomyces – (damp, warm, after light rain, near trees, lakes, & camping)

1. If you're allergic to mould spores, don't walk in the woods in mild damp conditions
2. Don't kick autumn leaves about
3. Avoid storing wood indoors or too close to the house
4. Avoid rolling in the grass
5. Keep the compost heap covered to prevent the release of mould spores

Allergenic Tree Pollen

- Allergy UK Poster – The Walk to School – problems with silver birch, hazel, alder
- Problem with schools being given these as free trees
- Recommendations for Tree Planting week
<https://www.allergyuk.org/about/latest-news/1124-allergy-uk-launches-its-top-10-recommendations-for-tree-planting-in-national-tree-week>
- GCARE Booklet takes into account allergenic tree pollution in tree and green barrier selection when mitigating air pollution around schools
- OPALS Scale - Tom Ogren and Nigel Clarke from Queux Plant Centre – low allergy gardening

Grass Pollen

Asthma Spike in June due to Grass Pollen – in fact potentially a grass pollen, house dust mite allergen combo

1. Mow your lawn regularly/use decking, shingle or artificial lawn.
2. When mowing/raking leaves, use a filtration face mask
3. Limit outdoor activity when the pollen/mould count is high.
4. Close windows during high pollen/spore counts
5. Walk or cycle with a mask rather than travel by car (pollen and spores get trapped inside)

Animal Dander

- Cat dander - Highly allergenic and hard to get rid of.
- Particular problem in schools

Avoidance

1. Change clothes
2. Restrict pets to outdoors/Limit areas of house not the bedroom
3. Do not allow pets to lick your hands or face
4. Wash cats and dogs 1–2 times a week. Groom dogs regularly outside
5. Wash all bedding and soft furnishings on which an animal has lain
6. Use a good hepa air filter to reduce allergen levels in the air, or ventilate rooms well

Resources

- Allergy UK provide detailed guidance notes
- RCPCH Working Party Resources now being issued to Parents, Schools and Healthcare Professionals
- Alameda County Protocol
- Airborne Allergy Action Website Information
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