



Cockroach Allergy

Why does house dust cause allergies and asthma?

House dust is a mixture of many things that has been shown to include animal dander and hair, fungi or molds, insect proteins (primarily from cockroach), human skin cells, food particles, various fibrous materials of both plant and animal origin and dust mites.

People allergic to cockroaches react to proteins shed from bodies and feces of these insects. Cockroach allergens are widely distributed in house dust, though levels tend to be highest in the kitchen. These allergens or protein particles are so light that they float easily into the air and are increased when anyone vacuums, runs a fan, walks on a carpet or disturbs bedding.

In allergic individuals, inhalation of these particles causes nasal symptoms or asthma. However, it is not unusual to be unaware of a relationship between exposure to house dust and worsening of symptoms.

In individuals allergic to cockroach, the risk of developing asthma is directly related to levels of cockroach allergen present in the bedroom. Methods for decreasing exposure are still not well established but aim at decreasing cockroach populations through control of food and water sources, routine extermination and the same house dust control measures advocated for dust mite and animal dander allergens.

Recommended Measures to Decrease Cockroach Allergen Levels

~ in order of importance ~

Control of Source

Eliminate availability of food and water sources. This is an issue primarily in the kitchen and other areas where food is eaten.

Routine extermination methods utilizing the insecticides hydramethylon or avermectin.

Control of Allergen Reservoirs

Beds

- ★ Encase mattress/pillows with allergen impermeable covers and wash bedding weekly.
- ★ Remove all items from bed unless able to wash at least monthly.

Floor Coverings

- ★ There are no good methods to render wall to wall carpets free of allergens.
- ★ If possible, replace carpets with smooth flooring and vacuum/damp mop weekly.
- ★ Loose rugs over smooth flooring is a possible compromise as long as rugs are washed monthly.

Soft Furnishings and Clothing

- ★ Where possible, replace with cleanable items that do not retain allergens (leather, vinyl, wood, plastic)
- ★ Compromise is allergen impermeable encased cushions with loose coverings that are washed monthly.
- ★ Clothing should be washed weekly and before wearing after prolonged storage.

Washing and Cleaning

- ★ Standard washing practices at any temperature will wash out most allergens.
- ★ Allergens accumulate in the dust on hard surfaces therefore these should be wiped with damp or oiled cloth at least once weekly.
- ★ Frequent dry vacuuming picks up excess dust and reduces reservoirs of allergens in carpets. A HEPA filter fitted vacuum is preferable.

Mechanical Devices

- ★ HEPA air filtering units offer some benefits by removing airborne allergen; however other measures listed above are much more important.