



# Cockroach Allergy

Cockroach allergy was first reported in 1943, when skin rashes appeared immediately after the insects crawled over patients' skin.<sup>1</sup> Allergy skin tests first confirmed cockroach allergy in patients in 1964.<sup>2</sup>

## WHAT IS COCKROACH ALLERGY?

People most likely to develop cockroach allergy often have a personal or familial history of allergy or asthma.

The cockroach allergen is believed to come from the saliva, waste material, eggs, and the outer coverings of the bodies of these insects. Cockroach allergens are most often found in household dust and bedding. When a sensitive person comes in contact with these cockroach by-products, an allergic response develops. Dead cockroaches leave residual allergens that can persist for months or even years.



## WHERE IS COCKROACH ALLERGEN FOUND?

Cockroach allergy is particularly a problem for people living or working within infested dwellings where roaches are not adequately treated. However, exposure to cockroach is still common without an infestation present in the home. In one study of inner city children, 37 percent were found to have developed a sensitivity to cockroach allergens.<sup>3</sup> Cockroach allergen has also been found in lower concentrations in single family homes and in schools. Nationally, cockroach allergen levels are lower in the west.

## WHAT ARE THE SIGNS OR SYMPTOMS OF COCKROACH ALLERGY?

Symptoms vary in type and intensity depending on how sensitive the person is to the cockroach allergen. Cockroach allergy may include any of the following signs:

- Chronically stuffed up nose
- Skin rashes
- Year-round asthma symptoms of wheezing, coughing, tightness in the chest, difficulty breathing

## HOW IS COCKROACH ALLERGY DIAGNOSED?

A conclusive diagnosis can be made only by skin testing for allergies. The physician scratches or pricks the skin with a miniscule amount of cockroach allergen extract. Redness, swelling, or an itchy rash at the test site on your skin suggests you have an allergy to cockroaches.

It is estimated  
**78-98%**  
of urban households  
have cockroaches.<sup>1</sup>



## DIAGNOSING COCKROACH ALLERGY

If an allergy to cockroach is suspected, the doctor will often perform a skin test to determine if a cockroach allergy exists. In a skin test, small droplets of cockroach allergen will be applied to or under the skin. If positive, a red, raised area will develop around the site where the extract was applied. If there is no reaction, allergy is not suspected. Your medical history and a physical exam, in combination with an allergy diagnostic test (skin or serum) will help your physician identify a cockroach allergy.

## AVOIDANCE

The first step in managing any allergy is to reduce or avoid contact with known allergens. If you have cockroach allergy, you should make every effort to rid your home—and any other place where you regularly spend time—of roaches and their by-products found in household dust (eggs, waste material, saliva, outer shell droppings).

Implement the following strategies to reduce your contact with cockroaches:

- Rid your home of roaches. Because they resist many control measures, it is best to use pest control experts.
- Do not leave food and garbage uncovered.
- For ongoing control, use poison baits, boric acid, and traps. Don't use chemical agents since they can irritate allergies and asthma.

Targeted cockroach extermination and intensive cleaning can lead to dramatic reductions in the levels of cockroach allergen present in the home, according to the American Academy of Allergy, Asthma and Immunology.

Consult an allergy specialist for help in managing serious or persistent allergy symptoms. Allergy shots may be recommended to help reduce symptoms over time.

## TREATING COCKROACH ALLERGY WITH IMMUNOTHERAPY

Allergy immunotherapy is a treatment that reduces or completely alleviates your allergy symptoms<sup>5</sup>. With this treatment, your body builds up a resistance to the allergens that currently impact your day-to-day living. After six months on treatment, symptoms should start to decrease, as will your need for symptomatic medications that control the allergy-associated sneeze, runny nose, cough, wheeze or hives. As an additional benefit, immunotherapy may prevent the onset of other allergies or the development of asthma in children<sup>5</sup>. Scientific studies have shown that the results of immunotherapy are maintained for a minimum of 5-10 years after the course of treatment has been completed.<sup>4</sup> Among the wide variety of treatment possibilities available today, allergy immunotherapy is the only treatment that targets the

underlying cause of allergy and alters the natural course of the disease<sup>5</sup>. Immunotherapy is not without risks. Possible side effects may include: itching, redness and swelling at the injection site and sometimes soreness hours after an injection. These local reactions are not considered serious. Although rare, a full body allergic reaction, called anaphylaxis, can occur following an injection. To reduce the risk associated with allergy immunotherapy, it is recommended to wait in your physician's office for 30 minutes following an immunotherapy injection.

## LEARN MORE ABOUT IMMUNOTHERAPY

Consult an Allergy Specialist. If you experience allergic symptoms, it is important to talk to a doctor who specializes in the diagnosis and treatment of allergic diseases. Based on your past history and specific testing, your Allergy Specialist will be able to determine if you are a candidate for immunotherapy treatment.

### References:

1. Asthma and Allergy Foundation of America (AAFA)
2. Bernton HS, Brown H. Insect Allergy--Preliminary Studies of the Cockroach. *The Journal of allergy*. Nov-Dec 1964;35:506-513.
3. Rosenstreich DL, Eggleston P, Kattan M, et al. The role of cockroach allergy and exposure to cockroach allergen in causing morbidity among inner-city children with asthma. *The New England journal of medicine*. May 8 1997;336(19):1356-1363.
4. Cox, L., et al., Allergen immunotherapy: a practice parameter third update. *J Allergy Clin Immunol*, 2011. 127(1 Suppl): p. S1-55.
5. J Bousquet, et al, Allergen immunotherapy: therapeutic vaccines for allergic diseases. *Annals of Allergy, Asthma, & Immunology*; Nov 1998, Volume 81, p. 401-405.

