

## Allergies: An Overview

Allergies are considered American's most common disease of the abnormal-response immune system. They cause an overreaction to substances that are ordinarily harmless, called allergens, which affect 2 out of 10 Americans through environmental issues. Allergies are characterized by an overreaction to a foreign protein substance ("allergen") that is eaten, breathed into the lungs, injected, or touched. This can be a one-time occurrence or exposure to that allergen over a period of time. This immune overreaction can result in symptoms such as coughing, hives, or another skin reaction, sneezing, itchy eyes, runny nose, difficulty breathing, scratchy throat, and asthma. An estimated 50 million Americans suffer from all types of allergies. It is not just a kid illness anymore, with a high amount of people getting treated for allergies starting over the age of 30.

Allergies can be both indoor and outdoor. The most common allergens are ragweed, dust mites, animal dander, mold, and grass, and tree pollen. The most common indoor/outdoor allergy triggers are: trees, grass and weed pollen; mold spores; dust mite and cockroach allergen; and animal dander. Insect allergies consist of bee/wasp stings and venomous ant bites; cockroach and dust mite allergen may also cause nasal or skin allergy symptoms. Skin allergies are contact allergies of the skin such as atopic dermatitis, eczema, and hives. Plants, such as poison ivy, oak and sumac, are the most common skin allergy triggers. Eye allergies are allergic conjunctivitis and ocular allergies, and are caused by outside sources.

Food allergies are milk, soy, eggs, wheat, peanuts, tree nuts, fish, and shellfish. Oftentimes, affected people must also follow a gluten-free diet. For drug allergies, penicillin is the most common allergy trigger. Latex allergies are allergies to latex.

With allergies you can end up with nasal congestion, a runny nose, itchy eyes, and itchy skin. When your lungs or airways get blocked or they narrow, breathing becomes more difficult. In turn, your asthma kicks in and you end up coughing, wheezing, and shortness of breath as you suffer both allergic and asthmatic symptoms. There are many things you can do to eliminate the effects of allergies. First of all a decongestant might help. When allergies make your nose stuffed up, an antihistamine won't help. But decongestants might—and they shrink swollen blood vessels and tissues. That relieves the congestion. Common decongestants include: Afrin, Dristan, Vicks Sinex (oxymetazoline), Sudafed PE, Suphedrin PE (phenylephrine), Silfedrine, and Sudafed, Suphedrin (pseudoephedrine). Antihistamines block the effects of allergies. Many medicines combine an antihistamine and decongestant, like Allegra-D, Benadryl Allergy Plus Sinus, Claritin-D, Xzol, and Zyrtec-D. Anticholinergic nasal sprays decrease secretions from the glands lining the nasal passage. This diminishes the symptom of a runny nose. Examples of steroid nasal sprays include Beconase, Dymista, Flonase, Nasacort, Nasarel, Nasonex, Rhinocort, Vancenase, Qnasl, Zetonna, and Veramyst. Montelukast (Singulair) is a drug that relieves allergy symptoms and is also used to prevent asthma attacks. It reduces congestion in your nose and also cuts down on sneezing, itching, and eye allergies. For people with allergies and asthma, it helps keep airways to your lungs open. It works by stopping the action of a chemical called leukotriene, which causes your nasal passages to swell and make a lot of mucus. The same chemical is also responsible for tightening airways when you have asthma, making it harder to breathe. Singulair is a prescription medication; it is the only drug of this type that's approved for allergies.

For extreme cases the allergist might prescribe allergy shots. Allergy shots are a form of treatment called immunotherapy. Each allergy shot contains a tiny amount of the specific substance or substances that trigger your allergic reactions. These are called allergens. Allergy shots contain just enough allergens to stimulate your immune system—but not enough to cause a full-blown allergic reaction. Over time, your doctor increases the dose of allergens in each of

your allergy shots. This helps get your body used to the allergens (desensitization). Your immune system builds up a tolerance to the allergens, and your allergy symptoms diminish over time. Patients undergoing allergy shots need to be careful with exercising heavily two hours before and after the shots, and must get them each week initially, staying half an hour at the doctor's office to make sure that they don't have a reaction to the shots.

Another important thing is to change your environment from the causing allergens. You should clean your bedroom from ceiling to floor, including furniture and curtains. Carpet should be removed and dust-collecting furniture should be cleaned a minimum of at least once a week. Put into cases mattresses and box springs in covers, and wipe mattresses weekly with a damp cloth before you put on clean sheets. The bed clothing should be only washable blankets, and sheets that can be washed in hot water once a week. Non-essentials should be removed from the bedroom, including toys, books, and other knickknacks. Take out feather and down pillows or comforters in the bedroom. The bedroom should be closed to the outside and closed when not in use. During hot weather the air conditioner should be used with the windows closed. Vacuum all furniture often and well. Use no scented items in the bathroom including powders, deodorants, hair spray, and after-shave lotion. Using an air purifier in the bedroom would help to decrease the animal dander. Keep humidity level at 40 to 50 percent. Shower after working the garden and avoid the outside if possible if pollen counts are higher. Avoiding allergens can help reduce the risk of allergy-induced asthma attacks. With some knowledge, allergies can be controlled and eventually life can reoccur as it once did before. The important thing is just be patient, no matter what treatment is pursued.

American Academy of Allergy, Asthma & Immunology.

<http://www.aaaai.org/conditions-and-treatments/allergies.aspx>

Mayo Clinic

<http://www.mayoclinic.com/health/allergies/DS01118>

Webmd

<http://www.webmd.com/allergies/default.htm>