# Allergy Shots (Immunotherapy) FAQ

# What are allergy shots?

With allergy shots, specific amounts of natural allergen extracts are injected under the skin of the arm which causes the body to produce antibodies that block allergic symptoms over time. Allergy shots help your body build its natural resistance to the effects of tree, grass, and weed pollen, dust mites, mold spores, animal dander, and insect venom. Allergy shots are also known as "allergen immunotherapy." It is also the only treatment currently available that strengthens the immune system to provide lasting relief and prevent new allergies and asthma.

# Who should get allergy shots?

You may benefit from allergy shots if you:

- Have symptoms not controlled with allergy medications
- Have side effects from allergy medicines
- Want to decrease medication use
- Have allergy triggers that you cannot avoid (e.g., pollen, dust, pets)
- Have severe reactions to stinging insects (bees, wasps, hornets)
- Want to spend more time outdoors
- Want a better long-term solution to your allergy problem

Allergy shots are also effective in the treatment of allergic asthma. Over time, they can help your breathing and decrease the need for asthma medicines. Allergy shots also benefit some patients with eczema or atopic dermatitis, when the condition is associated with other allergies.

#### Why should I get allergy shots at Allergy & Asthma Specialists of Kansas City?

"NOT ALL ALLERGY SHOTS ARE CREATED EQUAL". We completely individualize testing and treatment recommendations. For allergy shots, we use the highest quality allergy extracts in recommended doses proven to be clinically effective. We offer various options during build up phase of allergy shots so the schedule can be shorter so that most patients improve and achieve monthly dosing faster. We have a high level of clinical success and are constantly striving to improve all aspects of treatment.

# How much do allergy shots cost?

Most insurance plans cover both the cost of vaccine preparation and administration of shots. Some insurance plans may cover 100% of costs, however some insurance plans may require a co-pay or deductible. This will be dependent on your individual insurance plan. Allergy shots in our office do not involve a specific office visit level co-pay, but there is a smaller charge for administration of the allergy shot. We would recommend contacting your individual insurance plan to determine your benefits.

# How effective are allergy shots?

Allergy shots are over 90% effective when given properly. It has been proven in clinical studies to decrease allergy symptoms, medication use, prevent new allergies and asthma in children, and promote lasting-relief of allergy symptoms even after treatment is stopped. Research shows allergy shots are cost-effective and reduce overall health care expenses, including costs from prescription medicine use, office visits, hospitalizations, and missed work/school.

# Are allergy shots effective for children?

Allergy shots are especially effective in children, because treatment has been proven to help prevent the development of new allergies and asthma. As many as 25% of allergic children may develop asthma as they get older if untreated. This observation is sometimes referred to as the "atopic march." Allergy shots are normally given to children 5 years or older, but may occasionally be given earlier.

#### Can allergies go away on their own?

While it is certainly possible that allergies may improve, most people will continue to have symptoms that remain the same or worsen over time. Individuals with seasonal allergies may often develop year round symptoms, and individuals with year round allergies may also develop seasonal flare-ups.

#### Where can I get allergy shots?

Allergy shots are normally provided by a **board certified allergist**, such as Dr. Khalid. Allergy shots must be given under the supervision of a physician in a facility equipped and trained to identify and treat adverse reactions to allergy injections. For this reason, allergy injections are not administered at home.

#### Are allergy shots safe?

The most common type of reaction to an allergy shot is a local reaction. These vary from a dime-sized itchy spot to a large lemon-sized area of swelling. These often do not require specific treatment and improve as allergy shots are continued. The risk of a serious allergic reaction is rare, but may include serious life-threatening anaphylaxis. Most of the time, a shot of epinephrine will relieve symptoms. Serious allergic reactions normally occur within 30 minutes. As a result, patients are required to remain in the office 30 minutes after their shots are given for observation. Less frequently, patients may have a delayed reaction outside of 30 minutes. We also require and train patients to use an auto-injectable epinephrine pen to carry to and from their shot appointments to cover this rare situation.

#### Why do allergy shots need to be repeated?

Allergy shots work like vaccines. The body develops stronger immunity and decreased symptoms as the allergy vaccine dose is increased and repeated over time. The body's reaction to allergens is switched from allergy to "tolerance", which means the body develops the normal state of ignoring allergens in the environment.

#### What is the process of allergy shots?

There are two major phases, including build up and maintenance. During the build up phase, the strength of the allergy vaccines is gradually increased by a fixed schedule to reach a target dose referred to as the maintenance dose. Shot are normally given 1 to 2 times per week initially. This duration is normally 3 to 6 months depending on how often shots are received. The maintenance phase is started after the target therapeutic dose is achieved.

# What is Cluster Immunotherapy?

What makes cluster immunotherapy different from conventional therapies is the frequency with which the shots are given - and how quickly a patient gets to what is known as their maintenance dose. The maintenance dose is the dose that proves most effective for treating the individual patient's allergies. Because patients get to the maintenance dose faster with cluster immunotherapy, they also often feel better faster with this approach. During Cluster, the patient receives 2-3 injections every 30 minutes and by the

end of the visit, most patients have completed a month's worth of immunotherapy injections in a 2 hour visit.

# How long will it take to feel better on allergy shots?

Some patients will notice an early improvement of symptoms within several weeks during the build up phase, but it may take as long as 6 to 12 months on the maintenance dose to see a significant improvement. The effectiveness of immunotherapy is related to the strength of allergy vaccines and the length of treatment.

#### How long do I have to take shots?

The standard duration of treatment is 3-5 years to receive maximum benefit. Most patients can be stopped at that time. Most people have lasting remission of allergy symptoms, but others may relapse after stopping allergy shots. The duration of therapy can vary from person to person and some individuals may need to stay on allergy shots longer than the usual duration.

# What happens if I don't get better on shots?

As stated previously, allergy shots are over 90% effective in reducing allergy symptoms. Most patients will improve clinically and decrease the need to take medication, however, not everybody will be able to stop taking all allergy medications. The effectiveness of immunotherapy should be evident after 1 year on maintenance dosing. If a patient has not seen improvement after this time, the individual's specific treatment should be reviewed to discuss possible reasons why the treatment failed and explore other treatment options.

#### What are the reasons that allergy shots don't work?

There are multiple reasons that allergy shots may not be as effective as they should. First, it is important to identify and treat all clinically relevant allergens the patient is exposed to. Second, it is necessary to use allergy vaccines in levels high enough to improve symptoms. Clinical studies provide us with specific dosing recommendations to be effective. Third, allergy vaccines have very specific mixing recommendations. If incompatible allergens are treated in the same vial, they can decrease the effective strength of the vaccine. Not following recommended guidelines for dosing and mixing will decrease the effect of treatment. Finally, allergy shots must be given long enough at therapeutic doses to be effective. As mentioned previously, it may take as long as 1 year on maintenance therapy to notice significant improvement in symptoms and medication use.

#### How are specific allergens selected for allergy vaccines?

Allergy shots should be completely individualized based on clinical history, allergen exposure, and allergy test results. A unique treatment mixture is then created for every individual. Allergy vaccines should be prescribed by a board certified allergist with specific training in formulating allergy vaccines.