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PROGRAM OF ALLERGY INJECTIONS

Initially the patient receives injections once weekly; sometimes more often if the treatments are started late during the pollen season. Once a "top dose" is reached, usually 5-6 months, injections are typically given every 2 weeks for the next 6 months, and then the interval is increased to every 3 weeks for the next 6 months. After that, if the patient is tolerating therapy well the interval is then increased to every 4 weeks. **During the time when a patient has increased symptoms**, such as during pollen season, it is often necessary to give injections more frequently. The necessity for changes in injection routines are usually decided at **the time of periodic re-evaluation visits with the allergist.**

Dosage increases can only be made if an injection is received within 2-14 days of preceding injection. If longer than 14 days since the preceding injection, the dose will be adjusted. Please follow the guidelines on **Allergen Immunotherapy Injections** sheet.

The main reason for postponing an allergy injection is an illness accompanied by a fever. Minor colds, hay fever, etc. are not reasons for missing injections. Generally speaking, a patient well enough to come to the office may receive an injection. If an illness requires antibiotics, you must be on your antibiotic for 24 hours.

REACTIONS TO INJECTIONS

REACTIONS ARE AN INDICATION FOR DECREASING THE DOSAGE BUT NOT FOR DISCONTINUING INJECTIONS

If reactions occur, please report to your provider and this office BEFORE the next injection is due; appropriate advice will be given.

1. LOCAL REACTIONS: Most patients have a slight redness and/or soreness at the site of injection. These are not of any significance and if bothersome can be treated with an ice pack held against the arm for a few minutes at a time or by taking a dose of antihistamine or both. If necessary, an over the counter hydrocortisone cream may be applied to the affected area.

Swelling LARGER THAN A FIFTY-CENT PIECE, LASTING MORE THAN 24 HOURS, should be reported at the time the patient comes in for the next injection. This may be an indication for not increasing the injection dosage at that time or possibly even decreasing the dosage slightly.

2. GENERAL REACTIONS: These reactions are more serious than local reactions. They occur less frequently and usually begin within 30 minutes of receiving an injection. For this reason, **every patient MUST wait in the physician's office at least 30 minutes after receiving allergy injections.** Since strenuous exercise, including sports, increases the chance of developing a generalized reaction, it is important that the patient does **NOT have increased activity for 1 hour after** receiving allergy injections. The most common signs of a general reaction are itching of the skin, hives, itching or plugging of the nose, itching of the throat, coughing, and/or wheezing. If any of these occur or increase in severity after an injection, it should be reported **immediately** to the nurse who gave the injection.

If a general reaction occurs more than 30 minutes after an injection is given the patient should take a dose of antihistamine, preferably liquid diphenhydramine (Benadryl). If the symptoms do not decrease shortly thereafter the physician whose office administered the dose should be consulted immediately. In the case of patient doubt or uncertainty the patient should always contact the physician.

IF THE SYMPTOMS BECOME WORSE CALL 911 IMMEDIATELY

Beta blockers may increase the difficulty of treating anaphylaxis. ACE inhibitors may increase the likelihood of generalized reactions for patients on venom immunotherapy. Please inform AAIR nurse of all medication use and changes during immunotherapy.



ALLERGY ASTHMA
IMMUNOLOGY OF ROCHESTER PC

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Immunotherapy Patient Financial Consent Form

Insurance plans have become highly variable regarding coverage of immunotherapy treatment. There are two costs to consider: the cost to prepare the allergy extracts from the recipe specific to you and the weekly injection administration.

Before deciding to start immunotherapy, please contact your insurance carrier to verify coverage. It is important to understand your insurance coverage and know the cost for which you may be responsible. Some insurance plans cover immunotherapy in full, while other plans may have deductibles, co-insurances and co-pays. **For patients whose insurance does not cover immunotherapy, or those with high-deductible plans, out-of-pocket costs can be expensive.** Cost is dependent upon what you are allergic to and the frequency of injections. After verifying coverage with your insurance carrier, you may contact our billing office at (585) 442-0150 option 5 to confirm costs prior to committing to treatment.

New extract orders or refills will not be prepared until account balances are paid in full.

Your allergy extracts will not be prepared until we receive your signed consent form. Your signed consent may be returned by fax at (585) 461-6191 or by mail.

I acknowledge the fact with my signature that I am authorizing the office to bill my insurance company for the allergy extracts made for me, even if, for some reason, I decide not to initiate the allergen immunotherapy program after the extracts have been made. I acknowledge that any costs incurred for this method of treatment that is not covered by my insurance carrier, such as deductibles, co-insurances, or co-pays will be my responsibility. I acknowledge that my allergy extracts will not be prepared until this signed consent is returned to my physician.

Physician Name

Patient Name

Date of Birth

Patient/Guardian Signature

Date



IMMUNOTHERAPY CAN PROVIDE LASTING RELIEF

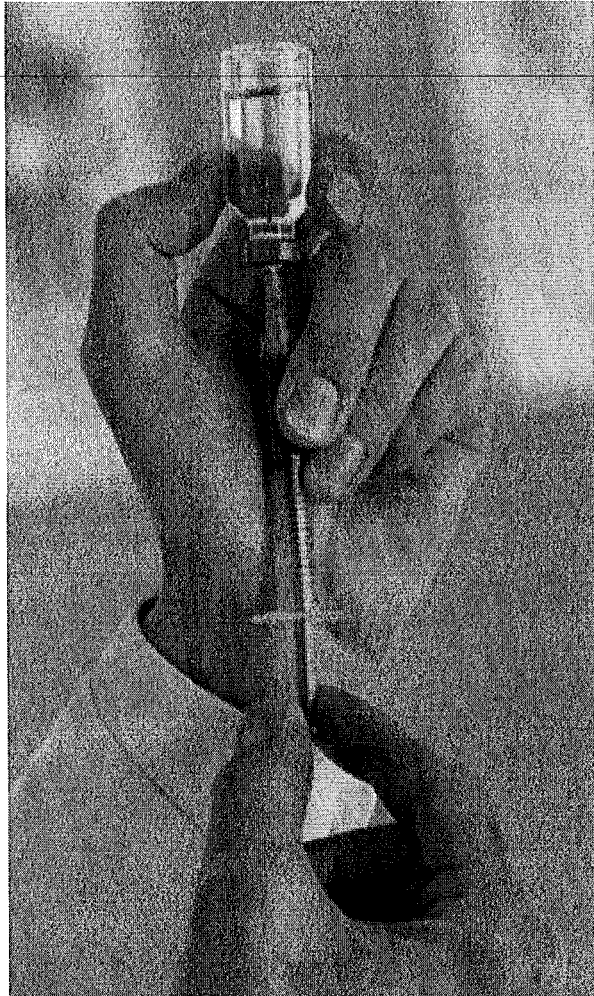
This article has been reviewed by Linda Cox, MD, FAAAAI

Immunotherapy treatment (allergy shots) is based on a century-old concept that the immune system can be desensitized to specific allergens that trigger allergy symptoms. These symptoms may be caused by allergic respiratory conditions such as allergic rhinitis (hay fever) and asthma.

While common allergy medications often control symptoms; if you stop taking the medication(s), your allergy symptoms return shortly afterward. Allergy shots can potentially lead to lasting remission of allergy symptoms, and it may play a preventive role in terms of development of asthma and new allergies.

The Process

Treatment involves injecting the allergen(s), causing the allergy symptoms. These allergens are identified by a combination of a medical evaluation performed by a trained allergist / immunologist and allergy skin or allergy blood tests.



The treatment begins with a build-up phase. Injections containing increasing amounts of the allergens are given 1 to 2 times a week until the target dose is reached. This target dose varies from person to person. The target dose may be reached in 3 to 6 months with a conventional schedule (one dose increase per visit) but may be achieved in shorter period of time with less visits with accelerated schedules such as cluster that administers 2-3 dose increases per visit.

The maintenance phase begins when the target dose is reached. Once the maintenance dose is reached, the time between the allergy injections can be increased and generally range from every 2 to every 4 weeks. Maintenance immunotherapy treatment is generally continued for 3 to 5 years.

Some people have lasting remission of their allergy symptoms but others may relapse after discontinuing immunotherapy, so the duration of allergen immunotherapy varies from person to person.

Risks involved with the immunotherapy approach are rare, but may include serious life threatening anaphylaxis. For that reason, immunotherapy should only be given under the supervision of a physician or qualified physician extender (nurse practitioner or physician assistant) in a facility equipped with proper staff and equipment to identify and treat adverse reactions to allergy injections.

The decision to begin immunotherapy will be based on several factors:

- Length of allergy season and severity of symptoms
- How well medications and avoiding allergens control allergy symptoms
- Desire to avoid long-term medication use
- Time. Immunotherapy will require a significant time commitment during the build-up phase, and a less frequent commitment during the maintenance phase
- Costs may vary depending on region and insurance coverage. Yet, allergy shots can be a cost-effective approach to managing allergy symptoms.

Another form of allergy immunotherapy therapy was recently approved in the United States called **sublingual immunotherapy (SLIT) allergy tablets**. Rather than shots, allergy tablets involve administering the allergens under the tongue generally on a daily basis.

ALLERGEN IMMUNOTHERAPY: STILL WORKING AFTER 100 YEARS

In 1911, both allergen immunotherapy and the electrical ignition system for cars were introduced. Although unrelated, these events share a common outcome. One paved the way for advances in transportation, the other led to advances in the treatment of allergies.

The earliest published successes for allergen immunotherapy were based on the work of two English scientists, Leonard Noon and John Freeman. Recognizing that pollen was the cause of hay fever, these scientists thought that they could induce immunity and tolerance by injecting hay fever patients with the pollen to which they were allergic.

This idea was based on the positive results of vaccines that produced protection against infectious disease such as small pox.

Over the years, we've learned much more about allergen immunotherapy including long-term benefits and what protocols are needed to make it very beneficial. Among the most important findings are that immunotherapy can provide long-term symptom relief for years after treatment is discontinued, and that it is a cost-effective approach to treating many allergies.

Research has demonstrated that allergy immunotherapy can be effective in treating:

- Allergic asthma
- Allergic rhinitis and conjunctivitis
- Stinging insect allergy
- Atopic dermatitis

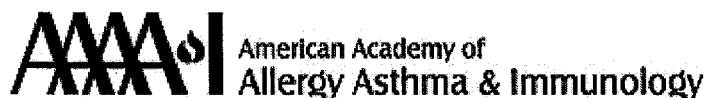
New frontier

Currently, immunotherapy for food allergies is not recommended and strict avoidance of the food is advised although investigations with oral desensitization for food allergies are in progress in the United States.

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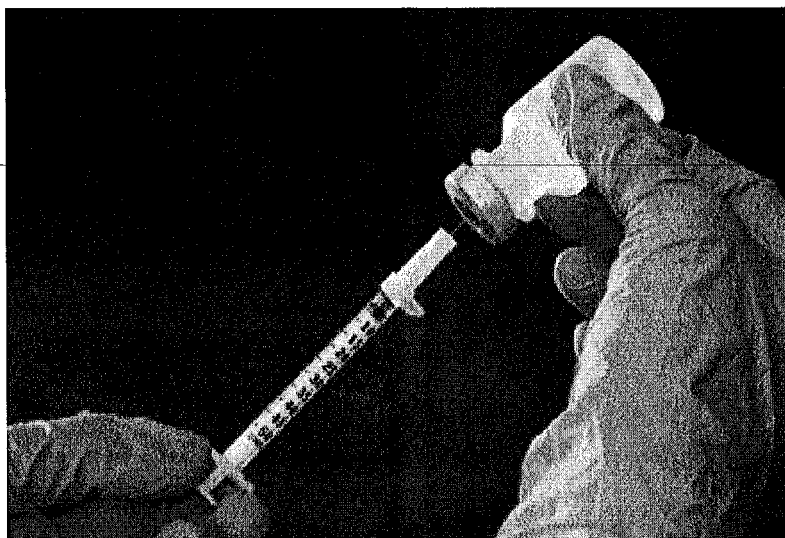
Medical content developed and reviewed by the leading experts in allergy, asthma and immunology.

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ALLERGY SHOTS (IMMUNOTHERAPY)

Allergen immunotherapy, also known as allergy shots, is a form of long-term treatment that decreases symptoms for many people with allergic rhinitis, allergic asthma, conjunctivitis (eye allergy) or stinging insect allergy.



Allergy shots decrease sensitivity to allergens and often leads to lasting relief of allergy symptoms even after treatment is stopped. This makes it a cost-effective, beneficial treatment approach for many people.

Who Can Benefit From Allergy Shots?

Both children and adults can receive allergy shots, although it is not typically recommended for children under age five. This is because of the difficulties younger children may have in cooperating with the program and in articulating any adverse symptoms they may be experiencing. When considering allergy shots for an older adult, medical conditions such as cardiac disease should be taken into consideration and discussed with your allergist / immunologist first.

You and your allergist / immunologist should base your decision regarding allergy shots on:

- Length of allergy season and severity of your symptoms
- How well medications and/or environmental controls are helping your allergy symptoms
- Your desire to avoid long-term medication use

- Time available for treatment (allergy shots requires a significant commitment)
- Cost, which may vary depending on region and insurance coverage

Allergy shots are not used to treat food allergies. The best option for people with food allergies is to strictly avoid that food.

How Do Allergy Shots Work?

Allergy shots work like a vaccine. Your body responds to injected amounts of a particular allergen, given in gradually increasing doses, by developing immunity or tolerance to the allergen.

There are two phases:

- **Build-up phase.** This involves receiving injections with increasing amounts of the allergens about one to two times per week. The length of this phase depends upon how often the injections are received, but generally ranges from three to six months.
- **Maintenance phase.** This begins once the effective dose is reached. The effective maintenance dose depends on your level of allergen sensitivity and your response to the build-up phase. During the maintenance phase, there will be longer periods of time between treatments, ranging from two to four weeks. Your allergist / immunologist will decide what range is best for you.

You may notice a decrease in symptoms during the build-up phase, but it may take as long as 12 months on the maintenance dose to notice an improvement. If allergy shots are successful, maintenance treatment is generally continued for three to five years. Any decision to stop allergy shots should be discussed with your allergist / immunologist.

How Effective Are Allergy Shots?

Allergy shots have shown to decrease symptoms of many allergies. It can prevent the development of new allergies, and in children it can prevent the progression of allergic disease from allergic rhinitis to asthma. The effectiveness of allergy shots appears to be related to the length of the treatment program as well as the dose of the allergen. Some people experience lasting relief from allergy symptoms, while others may relapse after discontinuing allergy shots. If you have not seen improvement after a year of maintenance therapy, your allergist / immunologist will work with you to discuss treatment options.

Failure to respond to allergy shots may be due to several factors:

- Inadequate dose of allergen in the allergy vaccine
- Missing allergens not identified during the allergy evaluation
- High levels of allergen in the environment
- Significant exposure to non-allergic triggers, such as tobacco smoke

Where Should Allergy Shots Be Given?

This type of treatment should be supervised by a specialized physician in a facility equipped with proper staff and equipment to identify and treat adverse reactions to allergy injections. Ideally, immunotherapy should be given in your allergist / immunologist's office. If this is not possible, your allergist / immunologist should provide the supervising physician with comprehensive instructions about your allergy shot treatments.

Are There Risks?

A typical reaction is redness and swelling at the injection site. This can happen immediately or several hours after the treatment. In some instances, symptoms can include increased allergy symptoms such as sneezing, nasal congestion or hives.

Serious reactions to allergy shots are rare. When they do occur, they require immediate medical attention. Symptoms of an anaphylactic reaction can include swelling in the throat, wheezing or tightness in the chest, nausea and dizziness. Most serious reactions develop within 30 minutes of the allergy injections. This is why it is recommended you wait in your doctor's office for at least 30 minutes after you receive allergy shots.

[Find out more about hay fever.](#)

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Medical content developed and reviewed by the leading experts in allergy, asthma and immunology.

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