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## **ALLERGEN IMMUNOTHERAPY INFORMATION SHEET**

### **Allergen immunotherapy injections**

Also known as “allergy shots” are prescribed for patients with allergic rhinitis (hay fever), allergic asthma or life threatening reactions to insect stings. Immunotherapy is the only medical treatment that could potentially modify allergic disease. Some studies have shown that it may have a preventive role in allergic children, possibly preventing asthma from developing in some patients with allergic rhinitis. Immunotherapy would be considered for individuals who have moderate or severe symptoms not adequately controlled by environmental control measures and/or medications.

### **Effectiveness**

Allergen immunotherapy (Allergy shots) may “turn down” allergic reactions to common allergens including pollens, molds, animal dander and dust mites. In most cases, the initial 6 to 12 month course of allergy shots is likely to gradually decrease sensitivity to airborne allergens and continuation of injections leads to further improvement. The injections do not cure patients but diminish sensitivities, resulting in fewer symptoms and use of fewer medications. It is important to maintain shots at the proper time interval; missing your shots for a short time may be acceptable but an appropriate adjustment in the dose of vaccine may be necessary for long lapses in injections. Please see us if you miss receiving your injections for longer than what is recommended for your current vial.

### **The Benefits of Immunotherapy**

Can be appreciated early in the build-up phase but may take as long as one year on maintenance. Failure to respond after one year on maintenance therapy warrants further evaluation and possibly discontinuation of treatment. Successful maintenance treatment is generally continued for 3 to 5 years. The decision to stop immunotherapy will be discussed after 3 to 5 years of treatment. Some people may experience lasting remission of their allergy symptoms after discontinuing treatment. Others may relapse after discontinuing immunotherapy, some will have a slight increase in symptoms controllable with medications, and others may require resumption of allergy injections in time. You will be re-evaluated periodically while on injections; changes in the allergen vaccine or injection schedule may be necessary to obtain optimal results. Once a year a serum review will be done during a visit with the provider to evaluate making a new serum for the following year. Serums must be remade every year.

### **Beta-blockers and Immunotherapy**

Beta-blockers are contraindicated while on immunotherapy. Beta-blockers are medications typically used for, but not limited to, heart conditions or migraines/headaches. If you are taking a beta-blocker or are unsure if you are, please discuss this with your provider. To ensure your safety before starting allergy injections, we would be happy to review your list of medications with you. Please inform us if you start on a new medication.

### **Allergy Injection Build-up and Maintenance Schedule**

When you are starting injections for the first time there are two ways that you can begin: the traditional build up or cluster immunotherapy (shots). In order to cluster, your Provider must give his or her consent, and they will discuss this with you if they think you are a candidate. After the initial build up phase you will begin the maintenance phase.

- **Traditional build-up:** In traditional build up, for the first 12 injections you can come once or twice a week with at least one day in between. If you come twice a week you could complete this section in 6 weeks. For the next 13 injections you may only come once a week. The traditional build up can be completed in a total of 19 weeks as long as you have not had any problems or missed any shots. When you have reached the top dose you will go every other week for two weeks then maintain at once every 3-4 weeks. Most patients are on shots for 3-5 years.

- **Cluster:** This is a more advanced schedule. Each time you come in we will increase the dose 3 times at 30 minute increments. Because of this rapid advancement, you will need to see the Provider each day before starting your cluster injections. Clusters are only done in the very beginning of the buildup schedule. You can do 4 clusters at weekly intervals. Once you have finished the 4 clusters, you still need to get 7 additional weekly injections from the traditional schedule until you have reached maintenance. With the cluster schedule it is possible to reach maintenance in 11 weeks. And just like the traditional schedule, you will then need to go every other week for two weeks then once every 3-4 weeks for the duration of your treatment. Some patients may be able to schedule a 5<sup>th</sup> cluster appointment. This will be scheduled at the discretion of the Provider and will generally be decided at the time the patient is seen for their 4<sup>th</sup> cluster appointment. If a 5<sup>th</sup> cluster is completed you will need to return in 2-3 weeks to receive your maintenance dose and then every 3-4 weeks for the duration of your treatment. If a 5<sup>th</sup> cluster is completed it is possible to reach maintenance in 5 weeks.
- **Maintenance phase:** This phase begins when the effective therapeutic dose is reached. The effective therapeutic dose is based on recommendations from a national collaborative committee called the **Joint Task Force for Practice Parameters: Allergen Immunotherapy: A Practice Parameter** and was determined after review of a number of published studies on immunotherapy. The effective maintenance dose may be individualized for a particular person based on their degree of sensitivity (how “allergic they are” to the allergens in their vaccine) and their response to the immunotherapy build-up phase. Once the target maintenance dose is reached, the intervals between the allergy injections can be increased. The intervals between maintenance immunotherapy injections generally ranges from every 2 to every 4 weeks but should be individualized to provide the best combination of effectiveness and safety for each person. Shorter intervals between allergy injections may lead to fewer reaction and greater benefit in some people.

### Reactions to allergy injections

It is possible to have an allergic reaction to the allergy injection itself. Reactions can be local, which are common (swelling at the injection site) or systemic (affecting the rest of the body). Systemic reactions occurring in 7-10% of injection patients include hay fever type symptoms, hives, flushing, lightheadedness, and/or asthma, and rarely, life threatening reactions. Fatal reactions are rare but have been reported in 1 in 2 million injections. Some conditions can make allergic reactions to the injections more likely: heavy natural exposure to pollen during a pollen season and exercise after an injection. Serious systemic reaction can occur in patients with asthma that has worsened and is not well controlled on recommended medications. Therefore, if you have noted worsening of your asthma symptoms, notify your nurse or physician before receiving your scheduled injections! Reactions to injections can occur, however, even in the absence of these conditions.

- **If any symptoms occur immediately or within hours of your injection, please inform the nurse before you receive your next injection.**
- **Patient must wait for 30 minutes after receiving an allergy injection(s) in the doctor’s office staffed with appropriate medical personal.**
- **Patient should not exercise for 4-6 hours after the injection.**
- **Patient should have epinephrine on their person and at school/work in case of an anaphylactic reaction after receiving the allergy injections.**
- **To minimize reactions to allergy shots, the providers recommend that the patient take an anti-histamine within 24 hours before receiving the shots.**
- **Please inform the nursing staff if you have been diagnosed with a new medical condition or prescribed any new medications since your last visit. If any symptoms occur immediately or within hours of your injection, please inform the nurse before you receive your next injection.**

### When you decide you want to start allergy injections

After checking with your insurance company, you will need to sign an Immunotherapy Consent form. This form can be obtained in our office or on our website at [www.santanallergy.com](http://www.santanallergy.com). Once we receive it by fax, email or in person, we will notify your provider that you wish to start injections. This process will take approximately 3 weeks. When your extract is ready we will call you to schedule your first injection.

## Allergen Immunotherapy Cost

It is the responsibility of the patient to call their insurance company to see if allergen extract and allergy injections are a covered benefit and what percentage they cover.

**Allergy Extract (aka serum):** Depending on how many allergens you react to will determine how many injections you will receive (anywhere from 1-4 shots). Some extracts cannot be mixed with others so they will need to go in a separate bottle.

The following is how much we will bill for a year's supply of extract. As you can see, after your initial build up year, your renewal for subsequent years will be less. This is because in the first year you will receive more injections as you build up to maintenance.

New Start			Renewal		
1 shot	\$720.00	36 units	1 shot	\$360.00	18 units
2 shots	\$1,440.00	72 units	2 shots	\$720.00	36 units
3 shots	\$2,160.00	108 units	3 shots	\$1080.00	54 units
4 shots	\$2,880.00	144 units	4 shots	\$1,440.00	72 units

### The cost of Allergy Injections Traditional and Cluster:

- **Traditional:** Each time you come in for a shot you/your insurance will be billed according to the number of shots you will receive. At the first injection appointment there will be a nurse visit charge so you may have a co-pay. Otherwise you will not be seeing a doctor at these visits.

1 shot: \$15.00

2 or more shots: \$20.00 (per visit)

- **Cluster:** They are billed at \$160.00 per hour and usually you will be here for 2 hours. Please be aware that once the clusters are finished you still have 7 weekly injections at \$15-20.00 per shot. If you complete the optional 5<sup>th</sup> cluster, you will have 1 injection at \$15-20.00 per shot before moving to a monthly schedule.

**There will be a yearly charge for the allergy extract and an administration fee each time you come in.**

**Please check with your insurance company to see how they cover the Allergy Extract and the Allergy Injections. Make sure you ask if they fall under your deductible and if so how much of your deductible you have met. You will also want to ask them once your deductible is met what portion you are responsible for. Is it an 80/20 do they cover 100%? You may or may not have a co-pay each time you come in for an injection. Here are some codes you may want to give them: Allergy Extract 95165, Allergy Injection 95117, Clusters 95180.**

**\*PLEASE BE AWARE THAT ONCE THE SERUM IS MADE, YOU ARE ULTIMATELY RESPONSIBLE FOR ANY BALANCE YOUR INSURANCE DOES NOT COVER.**