Congratulations. You are now on the path to better control of your allergies. The following is your instruction guide to allow you to become more familiar with proper home immunotherapy technique and safety. Over the next few visits, the staff at the Pasha Snoring and Sinus Center will review these techniques and safety precautions with you several times prior to allowing you to take your serum at home.

What do I need to collect before giving an injection?

Before beginning any allergy shot you must collect the following:

1. **Dosing Schedule**: your customized schedule of your weekly injections as provided by the center.
2. **Rubbing Alcohol Pads**: need to purchased at any pharmacy.
3. **28 ½ gauge 1 cc/ml Allergy Syringes**: also need to purchased at the pharmacy, however, most insurance companies will pay for your syringes with a prescription.
4. **Epinephrine Pen (EpiPen™ or EpiPen Jr™)**: a prescription for your epinephrine pen will be given to you, you must present the pen to the staff prior to taking home your serum!!
5. **Asthma Medications**: asthmatics only.
6. **Allergy Serum (vials)**: the vials that are made in our center must be kept cold, either in a refrigerator or in a cold thermos when traveling.

Where do I store my vial?

Your serum vial must be kept cool at all times. You may keep your labeled vial in a refrigerator or in cooler/cold thermos if traveling. If the vial is kept out of the cold for several hours then you should call the center immediately for a new vial.

Do not administer a vial that has been kept out of the cold for more than an hour.
How do I measure my serum?

The syringes that you will be prescribed have a total volume of 1 cc or 1 ml. You must be familiar in reading your syringe. Most syringes have tick marks that measure every 1/10th of a cc (0.1 cc) and every .01 cc’s. Distinguishing 0.1 cc and .01 cc may be confusing. Dr. Pasha’s staff will review with you proper measuring techniques during one of your appointments. Always begin your measurement from the needle side. Please note that the most you’ll ever fill your syringe will be up to the .25 cc mark, therefore, you will never inject with more than a quarter filled syringe!

![Syringe Diagram]

1.0 cc syringe

What should I watch for after I give my injection?

There are three types of reactions to watch for:

1. **Local Reaction**: You may develop soreness and redness at the site of the injection. This reaction is normal. If the area swells up to a large knot and becomes red and hot you should contact Dr. Pasha.

2. **Delayed Mild Reaction**: Remember the goal of immunotherapy is to give enough allergen without causing symptoms. If you give yourself an injection and within a few hours you begin to have allergic symptoms (runny nose, congestion, itchiness, etc…) then your dose may be too strong and may require dilution. If this occurs, you should take an antihistamine, contact our center, and do **not** give yourself another injection. You may need to have your serum diluted. You should also make sure you have your Epinephrine injection (EpiPen™) around in case your symptoms progress to anaphylaxis.

3. **Anaphylaxis**: See below.

REMEMBER The Four Steps for Mild Reactions: 1. take an antihistamine, 2. call the office, 3. do not take your next dose, 4. get your epinephrine pen (in case your symptoms worsen to anaphylaxis)
Home Injections Instructions

The staff will guide you through this process:

1. Check the name on the vial(s) to make sure it is yours.
2. Shake the vial.
3. Check then **double check** the dosing sheet to see your next dose.
4. Wipe off vial with one alcohol pad.
5. Insert needle through the center circle.
6. Turn vial upside down and hold up in a straight line. Keep the end of the needle below the liquid line, draw down slowly past your measuring line then push back serum to the proper measuring line.
7. **Double check the dose in the syringe.**
8. Wipe the site to be injected (upper arm, upper outer thigh, or hip) with an alcohol pad.
9. Hold syringe like a dart and insert straight into the arm or leg the entire length of the needle.
10. Draw back slightly on the plunger to make sure you do not draw blood. If blood does appear in the syringe, remove from the site throw it away, and start over with a new syringe. If no blood, push the plunger all the way in and remove the needle from the injection site.
11. **Record** date on dosing chart.
What is Anaphylaxis?

Anaphylaxis is the most dangerous type of adverse reaction to immunotherapy. It results in rapid breathing difficult and throat swelling. Anaphylaxis is more often caused by insect stings, foods, medications, latex, or by some unknown cause. Anaphylaxis is an allergic emergency and if not treated appropriately could lead to loss of consciousness, shock, and death. Asthmatics have a higher risk of anaphylaxis.

What are the Early Symptoms of Anaphylaxis?

It is important to treat anaphylaxis early and not wait until it becomes potentially life threatening. Always treat your early symptoms.

1. **Hives**: small raised, severely itchy, red bumps most commonly on the chest, head, and neck area; most common early sign.
2. **Rapid Heart Rate**: for most, you will know something is wrong when you feel anxious and your heart rate speeds up.
3. **Tingling or Swelling around the Mouth and Eyes**: may feel puffy.
4. **Sweating and Feeling of Doom**: your body may make you feel nervous and anxious.
5. **Metallic Taste in the Mouth**: less common symptom.
6. **Nausea or Abdominal Cramps**: may feel sick to your stomach

What are the Late Symptoms of Anaphylaxis?

If treated early you should never experience these severe symptoms.

1. **Shortness of Breath**: may become wheezy.
2. **Chest Tightness**: also associated with wheezing and shortness of breath.
3. **Throat Closing**: very dangerous situation.
4. **Loss of Consciousness**
What do I do if I have an Anaphylactic Shock?

If you have a **severe** reaction then you should do the following and go to the emergency room as well as contact Dr. Pasha.

1. Administer your prescribed EpiPen™ or TwinJect™ by removing it from its storage and take off the safety cap.

2. Make a fist around the injector and inject your outer thigh right over your clothing and hold for a few seconds. Do **not** inject in the same limb as the allergy injection site.

3. Go to the emergency room or call 911 (tell the health professionals that you have given yourself an epinephrine injection).

4. Stay warm.

5. Avoid unnecessary movement.

6. Call our office after you have received assistance.

**Do not give yourself Epinephrine for local reactions or minor allergy symptoms!!!!**

How do I avoid Anaphylaxis?

The most important prevention in anaphylaxis with your immunotherapy is to administer the **proper dosage**. Always double check you dose! Secondly, **do not skip any injections**. If you are confused on dosing call our office. Finally, contact us if you have any symptoms that occur within a few hours of your injection. The risk of anaphylaxis is greatly reduced if you report any immediate or delayed symptoms caused by your injection. The serum may be too strong and may need to be diluted before giving your next injection. Dr. Pasha always administers a test “wheel” with each new serum vile. This technique determines if you can tolerate the strength of the serum without giving a full injection amount.

What do I do if I forget one dose?

If your last dose was within 1 week then you may take the same dose as your last injection (do no advance). Your next injection should never be given within 3-4 days of your last dose. If you exceed 1 week from your last injection you should contact the center for instructions. For many cases we will adjust your dosing schedule.
What if I stop taking my allergy shots and want to resume immunotherapy?

Sometimes you may stop taking shots for months or even years. Dr. Pasha can always put you back on schedule. Many times we will estimate your new vial based on the number of months that you were off your shots.

What about traveling?

The center can provide you with documentation for you to travel with your syringes and vials. Traveling while taking allergy shots is not difficult. A small thermos with ice should suffice in protecting your vials during travel until you can store your vials in a refrigerator. Do not forget your epinephrine pen, antihistamines, and asthma medications.

What other things should I remember about Immunotherapy?

- Never alter your dosage.
- Always give your injection during the time of day when a physician or hospital can be close at hand.
- Always double-check your dosing and the measurement in the syringe.
- If you have a reaction, do not advance your dose. Call Dr. Pasha’s office.
- You must take one injection for each vial; never combine vials with one syringe. Never place two injections in the same arm.
- Do not reuse a syringe.
- With each new vial there is a chance of an allergic reaction.
- Always schedule appointment for a new vial 2 weeks in advance.