WHAT ARE ALLERGY TREATMENT OPTIONS?
The best therapy for your allergies is avoidance of substances to which you are allergic. In addition, many medications can aid in symptom control. Allergy injections are an extremely effective, safe, and more definitive long-term therapeutic option and are able to affect the natural cause of allergic disease. Avoidance is often challenging, as allergens are found in all environments. Medications generally offer only 30-40% relief, oral immunotherapy (allergy drops) approximately 60%, and subcutaneous immunotherapy (allergy injections) approximately 80% improvement.

WHAT IS IMMUNOTHERAPY?
Allergy injections target your allergies directly, rebalance the immune system, and help you to become immune to the allergens presently causing your symptoms. Initially, very small doses are administered weekly, gradually increasing to the highest tolerated dose (maintenance). Symptom control generally occurs upon completion of this buildup phase. In many patients, injections will help prevent development of new sensitivities and related diseases such as asthma. Immunotherapy is unique in that there is often a sustained remission once the program has been discontinued.

WHAT ARE THE BENEFITS OF IMMUNOTHERAPY?
By decreasing your allergen sensitivity, you should have fewer allergy symptoms. The amount of improvement is individual for each person. A reasonable expectation is an 80% improvement in 80% of patients, usually occurring within the first year. This means that immunotherapy will help most patients although there is a chance that no benefit will occur from this treatment. There is no way to predict beforehand if you will improve from immunotherapy. If your allergies get better, the treatment is continued for at least 3-5 years.

HOW OFTEN AND FOR HOW LONG WILL I GET MY ALLERGY INJECTIONS?
You will receive your first injection in our office. Then you may choose to make arrangements for administration in a more convenient medical setting, under a physician’s supervision. Injections should be given weekly until maintenance dose is reached. For a more rapid buildup, they may be given every two days. Once maintenance doses are achieved, you may be able to extend the interval between injections to one to four weeks, potentially discontinuing after three to five years. If you develop increased allergy symptoms when the interval between injections is lengthened, receiving injections every 1-2 weeks for a longer period or during difficult seasons may be helpful. Annual revisits are required while you are receiving injections to review your medications, provide prescription renewals, and make any adjustments necessary in your immunotherapy regimen. You may be a candidate for an accelerated (Rush or Cluster) program. Your allergist will discuss this with you.

WHAT IF I CANNOT BE CONSISTENT IN GETTING MY INJECTIONS?
Dose adjustments are made at the next injection visit. This is determined by length of time since last injection and your specific allergy history. If injections cannot be given weekly, it will take longer to reach maintenance dose and dilutions may be required. This will add both cost and time to the program as well as delay improvement. There are expiration dates on the extract, so timely injections are important.

HOW IS EXTRACT REORDERED?
If you receive your injections in our office, our nurses will notify you when a new vial will need to be ordered. If injections are received elsewhere, the office administering injections will send reorder form. This form is sent with all allergen extract and is the written record of allergy injections you receive. We ask that you ask your doctor’s office to let you know when vials have been reordered. Vials must be refrigerated upon receiving, please discuss with your doctor’s office if vials will be sent to the office or your home. If vials are not refrigerated immediately, the vials may need to be replaced at the patient’s cost. You are responsible for keeping us apprised of any changes. You need not wait until the last injection from the vial is given before sending in a copy of the injection schedule. We ask that you allow three weeks for processing the order. The vial will then be sent to the requested address. REFRIGERATE the extract upon arrival.

WHAT IF MY EXTRACT FREEZES OR IS LEFT UNREFRIGERATED?
REFRIGERATE EXTRACT WHEN RECEIVED. Extract does not tolerate extreme heat for an extended length of time as heat destroys the potency, thus reducing the benefit of the injections. If vial is frozen upon arrival, please call the office for replacement.
WHAT IF I BECOME PREGNANT?
Please notify us if you become pregnant. Immunotherapy need not be stopped during pregnancy, but doses will not be increased, as the risk of a systemic reaction may include uterine cramping with possible miscarriage (rare). There is no known risk of fetal abnormality as a result of allergy shots. As most medications must be avoided during pregnancy, this mode of therapy remains important.

WHAT ARE THE REACTIONS/RISKS OF IMMUNOTHERAPY?
Since you will be receiving injections of substances to which you are allergic, there is the possibility that you may develop a reaction. Injections must be given at a doctor’s office and you must wait **30 minutes** following injections. Reactions are of two types:
- **Local** - reactions occurring only at the site of injection, may include a small, itchy red bump. Holding a cotton ball at the site of the injection for 60 seconds without rubbing may help prevent this. If local reactions persist despite varying technique, contact our office.
- **Systemic** – reactions involving the skin, chest, nose, throat, etc., are more serious. **Our office should always be notified.** Immediately tell the nurse or physician who administered the injection if there is itching, so appropriate therapy can be started.
  - **Mild systemics** are not uncommon, and consist of increasing allergy symptoms with itching, sneezing, and occasional wheezing.
  - **Severe systemics** usually begin with intense itching of the hands/feet and/or tightness in the throat or hoarseness. Asthma, hay fever, hives, or generalized redness may also develop. Some patients report they simply experience a vague feeling that something is wrong.
  - **Life-threatening** reactions are extremely uncommon. The risk is estimated to be 1 in 2.5 million shots. This is far less than the death rate associated with lightning strikes, adverse drug reactions, or auto accidents. Most serious reactions tend to occur in asthmatic patients, patients who have had prior systemic reactions, injections during the peak allergy season, or if there is a delay in administration of epinephrine. Most reactions occur within twenty minutes, and for your safety you must remain under medical supervision after receiving your injection. Report all symptoms immediately. Allergic reactions can occur with the very first injection or after many years of therapy.

**Beta blocker medications (used for migraines, hypertension, or as eyedrops for glaucoma) make it difficult to treat any reaction to an injection which might occur. Allergy injections are contraindicated in patients who are receiving beta blocker medications**

CAN A REACTION BE PREVENTED?
Grand Rapids Allergy suggests pretreating with an antihistamine such as Claritin or Zyrtec approximately one hour before receiving an injection, which may prevent or reduce the severity of a reaction. Patients who have experienced prior reactions may elect to carry an EpiPen for use in the event of a rare delayed systemic reaction.

IF YOU RECEIVE ALLERGY INJECTIONS AT GRAND RAPIDS ALLERGY
Injections are usually given Monday, Wednesday, and Thursday, 7:30 a.m. until 5:00 p.m., including the lunch hour, with extended hours until 6 p.m. on Tuesday. Cluster administration hours will end promptly at 3:00 p.m. on Monday, Wednesday and Thursday and at 4:30 p.m. on Tuesday to allow time to complete each cluster visit. There is a mandatory wait of 30 minutes after injections to monitor for reactions. If you are not compliant with this wait period, injections will be discontinued. If a reaction develops after you have left the office, please notify us prior to coming for your next injection so that a plan can be prepared for your next visit.

Questions and Prescriptions – Your nurse may not be able to address medical questions when administering your injections. You may call with questions or for prescription renewals (prescription line is option #6), or if you prefer, forms are available for you to write questions or prescription requests and leave at the front desk. We will generally call you (or your pharmacy) within 24 hours. Front desk personnel can also assist you.

To protect our patients with life-threatening food allergy,
WE REQUEST NO FOOD OR DRINK IN THE WAITING ROOM.
As a courtesy to others,
PLEASE REFRAIN FROM WEARING PERFUME, SCENTED LOTIONS, etc., WHEN VISITING OUR OFFICE.
Strong odors may trigger significant reactions in sensitive patients.
FREQUENTLY ASKED QUESTIONS REGARDING
ALLERGY INJECTION PROGRAMS
(SUBCUTANEOUS IMMUNOTHERAPY)

Ref: Allergen Product Manufacturers Association, April '97
ACAAI fact sheet: Efficacy and Safety of Immunotherapy
Immunotherapy: 1999-2004, JACI, vol.113#6, June'04: p 1129