

Immunotherapy (Allergy Shots) **Background Information for Patients**

Allergy Shots

Allergen immunotherapy injections or "allergy shots" are prescribed for patients with allergic rhinitis (hay fever), allergic conjunctivitis (eye allergies), 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.

It usually takes 6 months or more of receiving shots before you start feeling significantly better and notice relief of allergy symptoms. If you do not feel better after 1 year of receiving allergy shots, you should talk with your doctor about other treatment options.

How long are shots given?

There are generally two phases to immunotherapy: a build-up phase and a maintenance phase:

- **Build-up phase:** involves receiving injections with increasing amounts of the allergens. The frequency of injections during this phase generally ranges from 1 to 2 times a week, though more rapid build-up schedules are sometimes used. The duration of this phase depends on the frequency of the injections but generally ranges from 3 to 6 months (at a frequency of 2 times and 1 time a week, respectively).
- **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 reactions and greater benefit in some people.
- It is generally recommended that allergy shots be given for a period of 3-5 years.

Can everyone get allergy shots?

No. If you have severe asthma or heart problems, allergy shots may not be good for you. You should not get allergy shots if you take a beta-blocker for heart problems or high blood pressure. Children younger than five years of age should not get allergy shots. Allergy shots should not be started when a woman is pregnant. However, if a woman has been taking allergy shots for some time and becomes pregnant, she should talk to her doctor and may be able to continue the shots.

Are allergy shots harmful?

Allergy shots are usually safe, but because allergy shots contain small amounts of the allergen that you are allergic to, you may have an allergic reaction to the shot itself. Local reactions (swelling) at the site of the allergy injection are common and not a problem. People can also have severe, anaphylactic reactions to an allergy shot. This type of reaction is rare, but serious. If you get your shots on schedule, you are less likely to have this kind of reaction. Greater than 95% of all reactions occur within 30 minutes of receiving an allergy shot, therefore all patients are required to remain in the office for 30 minutes after receiving allergy shots. That way, if you do have a reaction to the shot, your doctor can treat it right away.