INFO for Physicians Giving Allergy Injections
By AAC

Safety Information for Physicians/Clinics Administering Allergy Injections

1. Before you give the injection check and match the patient and bottle identities. Ensure that the patient did not have large local or systemic reaction from the previous dose, does not currently have an intercurrent acute illness, does not have increased asthma symptoms, is not more than one week late for injection, has not started taking any new medications, especially beta-blockers, and is not pregnant. If the answer to any of these is yes check with the doctor before giving injection.

2. Technique: Use 1 ml allergy syringe, 27 or higher guage, 1/2 or 3/8 inch needle. Double check dose and carefully withdraw correct amount. Preferred site for allergy injection is posterior aspect of middle third of upper arm in the groove between the triceps and the deltoid muscles. Clean skin area with alcohol swab. Let the alcohol evaporate before injecting. Inject subcutaneously. Gently draw the plunger back before injecting. If blood appears, withdraw needle and select a new site. Inject slowly, withdraw needle and apply gentle pressure with alcohol swab to stop bleeding. Do not massage area. Do not cover with a band-aid because you want to see the reaction.

3. All patients must wait in the office for 30 minutes after the injection. Do not give allergy injection unless equipment and personnel to treat anaphylaxis are present in the office.

4. Local reactions: Redness and swelling (hive) up to 1 inch diameter is acceptable. Larger reactions need longer observation in the office and dosage adjustment for subsequent injections. For 1-2 inch diameter reaction repeat same dose until the reaction is less than 1 inch. For 2-3 inch reactions, or reactions lasting more than 12 hours after the injection, decrease dose to where the reaction was 1 inch or less and build up again. For reactions larger than 3 inches, or any systemic symptoms, consult the doctor before giving the next dose.

5. Systemic reactions: can occur despite all above measures designed to reduce the risk. Fortunately, most (but not all) occur within the first 20 minutes, hence the 30-minute waiting period. Symptoms include general flushing, itching, hives, itchy eyes, nose or throat, runny nose, sneezing, nasal congestion, tightness in the throat, cough, wheezing, chest tightness, asthma symptoms, faintness, and lightheadedness. They may rapidly progress to acute asthma and hypotension. Early administration of Epinephrine (1:1000) injected intramuscularly into lateral thigh (dose: adult 0.3 ml, child 0.01 ml per kg) is the treatment of choice. An additional half of the above dose may be given subcutaneously at the site of allergy injection to reduce absorption. 911 must be activated simultaneously. Patient must be lying down with feet raised 12 inches or more. Diphenhydramine I.M. (50 mg) for adults, 25 mg for children, should be given. Oxygen administration, maintenance of airway, establishing IV access, treatment of hypotension, and CPR may be
necessary until the 911 response team arrives. Epinephrine dose may be repeated after a few minutes if the symptoms are not controlled.

6. If a patient misses an allergy injection or comes in late, dose adjustment is necessary. This depends on the periodicity of their injection schedule. Thus, if they are overdue by one "period" (which would be equal to 1/2 week for those on twice a week schedule, one week for those on weekly schedule and two weeks on those on every two week schedule) the last dose should be repeated. If they are overdue by two "periods", step the dose back by one step. For each additional "period" they are overdue, step back an additional step on the dosage schedule. If there are any questions please consult the physician.

7. Advise the patient to avoid exercise two hours before and for two hours after allergy injection. This decreases the risk of exercise-induced anaphylaxis.

8. Refrigerate vaccine. Do not freeze. If frozen, exposed to extreme heat or the fluid appears cloudy, do not administer. Please notify office for replacement.

9. The vaccine should be replaced after expiration date. (In exceptional circumstances vaccine may be used for up to 10 days after.)

10. If you have any questions on this or any other aspect of your patients' allergy care please call the Asthma & Allergy Center at (304) 343-4300 and ask to speak to the physician.