



ADVICE FOR PET OWNERS

# Allergen-specific immunotherapy: 4 easy steps for home administration

**Y**our veterinarian has determined that your dog has allergies to certain substances, such as house dust mites and various grasses and insects, and may benefit from allergen injections to slowly lessen your pet's reaction to the substances. You can easily administer these injections at home.

You will receive vials from your veterinarian that contain different concentrations of the allergen solution as well as syringes to administer the injections. Store the allergen solutions in the refrigerator. Your veterinarian will provide you a schedule of how often you will need to administer the injections (such as every other day) and what amount to administer each time. Over time, you will slowly increase the amount you inject. You can train your dog to readily accept the injections (*see boxed text "Make Injection Administration a Treat"*); your veterinarian will teach you to give the injections, which involves these four steps.

## Step 1: Prepare the injection

Take the appropriate vial, and draw the amount of allergen solution specified in your schedule into a syringe. Use a new syringe for every injection, and properly dispose of each syringe and needle after use. Record the date of administration on your injection schedule. To make the injection more comfortable for your dog, allow the solution in the syringe to reach room temperature before you administer it.



**1.** Prepare to grasp the dog's skin with your thumb and middle finger as shown.



**2.** Slightly lift the skin, and then place your index finger between your thumb and middle finger.

## Step 2: Find the right site

The injections are usually given in the nape of the neck. It is helpful to move the injection location each time, so the same site is not repeatedly injected. You may wish to locate the center of the neck and vary the injection sites by visualizing a clock and giving subsequent injections at the various hours rotating clockwise.



**3A.** Indent the fold of lifted skin so that it forms a Y or V shape.



**3B.** The V-shaped skin fold is visible in a shorthaired dog.

## Step 3: Administer the injection

Grasp the skin where you will inject the solution with your thumb and middle finger (*Figure 1*), and slightly lift the skin up. Then place your index finger between your thumb and middle finger (*Figure 2*) to indent the fold of skin being held up so that it forms a Y or V shape (*Figures 3A & 3B*). Hold the syringe like a dart (*Figure 4*) and do not put any pressure on the plunger as



4. Hold the syringe like a dart, and touch the plunger only after inserting the needle.



5. Insert the needle into the center of the V-shaped skin fold parallel to or at a slight angle from the back or neck.

you insert the needle. Make sure to point the syringe directly to the center of the skin fold and insert the needle parallel to or at a slight angle from the back or neck (*Figure 5*). Touch the plunger only after you have inserted the needle through the skin.

If you angle the needle toward one side, the needle may penetrate through the skin fold, and you'll inject the solution outside the skin. Be sure to avoid puncturing your own skin as you give the injection—be especially cautious if you have any allergies.

#### Step 4: Monitor for reactions

You should be able to observe your dog for the first 30 minutes and preferably one hour after the injection. Note any reactions, and report them to your veterinarian.

Reactions that require contacting your veterinarian immediately include vomiting, diarrhea, weakness, collapse, hives,

### Make Injection Administration a Treat

The administration process will be much easier if you train your dog to associate the injection with a reward. Begin by going through the administration process without actually giving an injection: Take the allergen solution out of the refrigerator, position your dog, make a skin fold, touch the fold with a covered needle, and, finally, give a reward. For some dogs, it is best to only give treats or rewards after the dog has sat still for a practice injection once or even several times a day. These dogs should not receive rewards at other times on those days.

Once you begin the treatment protocol, always give a treat to your dog after administering the injection. And on days when your dog is not scheduled to receive an injection, go through the administration training process anyway, as described above. With this daily routine, many dogs can be trained to happily anticipate receiving their injections instead of hiding when the refrigerator is opened.

or facial swelling. These reactions can occur with any injection, so it's important to monitor your dog even if it has been receiving the injections for months.

Milder allergic reactions that should be reported to your veterinarian before you give any more injections are increased itching, listlessness, sleepiness, and anxiousness. Tenderness or swelling at the injection site occurs infrequently and is usually minimal if you administer the injections correctly and have trained your dog to accept them. Other reactions that may occur are panting, hyperactivity, increased bowel sounds, changes in urinary habits, and frequent swallowing.

Reactions may occur relatively rapidly after the injections, but changes in activity and pruritus (itch) may occur one or two days later. Monitor the pruritus in relation to when injections are given, as your veterinarian often uses this as a basis for making adjustments in the treatment protocol. Grade the pruritus, and note the locations of pruritus. Use a scale of 0 (no pruritus) to 10 (the most severe pruritus for your dog before beginning the injections). Record this information in a column next to the administration date on your injection schedule, or consider keeping a diary to note this information. ■

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