Anaphylaxis in Dogs: Severe Acute Allergic Reactions

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Anaphylaxis is a rare, life-threatening, immediate allergic reaction to something ingested or injected. If untreated, it results in shock, respiratory and cardiac failure, and death.

What types of agents can cause anaphylaxis?
Stinging insects, antibiotics, vaccines, certain hormones and medications, and foods can cause anaphylaxis in susceptible animals.

What are the symptoms of anaphylaxis?
The most common symptoms are the sudden onset of diarrhea, vomiting, shock, seizures, coma, and death. The animal's gums will be very pale, and the limbs will feel cold. The heart rate is generally very fast, but the pulse is weak. There can be facial swelling.

How is anaphylaxis treated?
Anaphylaxis is an extreme emergency. If you think your dog is having an anaphylactic reaction, seek emergency veterinary assistance immediately. Epinephrine should be given as soon as possible - we are talking within a few minutes. IV fluids, oxygen, and other medications are given as needed.

Can anaphylaxis be prevented?
In general, there is no way to predict which animals may have an anaphylactic reaction to which substances. If a dog has already had a reaction, such as anaphylaxis, angioedema, or hives, to a substance, the substance should be avoided. If your dog has ever had a reaction to a vaccine or medication, be sure your veterinarian knows and the information is placed in your pet's medical record.

If your dog has ever had a reaction to a vaccine, subsequent vaccinations should be given by your veterinarian. In some cases, certain vaccines may be excluded from your dog's vaccination regimen, or a different type of vaccine will be used.

If you vaccinate your own pets, you should have epinephrine available and know how to use it in case a reaction occurs. If your dog has an anaphylactic reaction after a vaccination, inject the proper dose of epinephrine and seek emergency veterinary assistance immediately.

Many vaccines contain antibiotics as preservatives. If your dog is allergic to an antibiotic, be sure to check all vaccines for the presence of that antibiotic before use.

For animals that are allergic to insect bites, such as bees, ask your veterinarian about getting a prescription for an 'epi-pen' and be sure to take the 'epi-pen' with you on any trips or hikes. An 'epi-pen' is a special syringe and needle filled with a single dose of epinephrine. If your pet has an anaphylactic reaction, inject the epinephrine using the 'epi-pen' and seek emergency veterinary assistance immediately.