

## Vaccine Reactions



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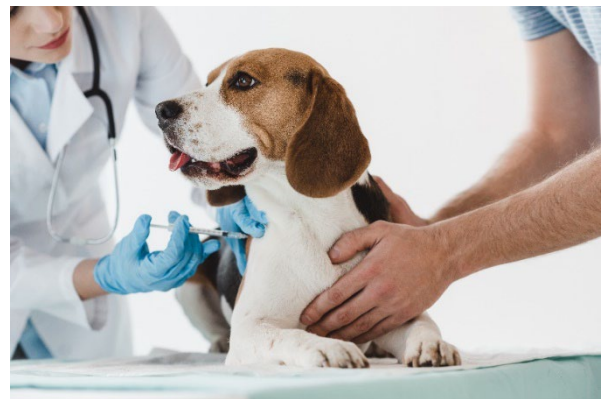
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From the first months of pet ownership to the last few years, routine vaccinations are essential to your pet's health and overall well-being. Vaccines help prevent contagious and life-threatening diseases that can be contracted from other pets, animals, and the environment. By vaccinating your pet, it helps prolong your pet's life by a significant amount. Although the benefits of preventative vaccines far outweigh the risks, there is a small chance your pet may experience a vaccine reaction. Similar to humans, vaccines in pets stimulate the immune system, which can cause a range of clinical symptoms.



Most of the vaccines that veterinarians administer are injections underneath the skin of your dog or cat. Although this is only a pinprick sensation for your pet, it is a new stimulus for them and may cause fear or anxiety. Because of this, it is not uncommon for a pet to yelp, cry, or vocalize while receiving a vaccine. To help mitigate this, giving your pet treats or other positive reinforcement is beneficial to help associate future vaccines with a reward.

Fortunately, the vast majority of vaccine reactions are mild, short in duration, and resolve naturally. Your pet's immune system will work in overdrive to build an immune response following vaccines. This immune stimulation can cause a slight fever and lethargy, the most common side effects of a vaccine. Lethargy can manifest in a few ways in your pet. They may act tired, sluggish, or not as excited to perform their daily activities. This lethargy and fever should resolve on its own within 24 to 48 hours. If it does not

resolve within this time frame or your pet seems excessively lethargic, you should follow up with your veterinarian.

When we as humans feel feverish, it is common for us to take a non-steroidal anti-inflammatory drug such as Ibuprofen to help reduce our fever and feel better. It is crucial to not administer these medications to your dog or cat. Non-steroidal anti-inflammatories can be very toxic to your pet and cause kidney damage or stomach ulcers. If you do find that a family member or friend gave their pet a non-steroidal anti-inflammatory drug, please have them contact their veterinarian immediately.

Another common vaccine reaction is local swelling. Because a needle is injected through your pet's skin, the local cells and tissue can become inflamed, forming a lump or welt. Following vaccinations, you should ensure you know the locations where they were administered to your pet. If you do notice that your pet has developed a small lump from a vaccine site, it is important to monitor it to ensure it does not grow, develop redness, or start producing discharge. This lump should not be uncomfortable for your pet and should slowly reduce in size after a week or two. One treatment you can do at home to try and reduce the swelling is to apply a warm compress to the area once or twice daily. If the swelling does not resolve, grows, or starts to look infected, you should contact your veterinarian.

While most vaccines are injectable, some can be administered intra-nasally. For example, the canine kennel cough vaccine is most effective when administered in this way. These vaccines stimulate a local immune response in these tissues; therefore, a vaccine reaction can look like the common cold in a human. Therefore, your pet may develop a runny nose, sneezing, and cough. Again, these clinical signs tend to resolve within 24 to 48 hours. If these symptoms are not resolving, you should contact your veterinarian. Lastly, pet owners often report bouts of diarrhea following vaccination. This diarrhea may be secondary to the stress of receiving a vaccine itself or due to the immune response. If your pet commonly develops diarrhea following their vaccines, notify your veterinarian. This may be avoidable with supportive care in the form of a probiotic or bland diet.



Fortunately, most vaccine reactions in dogs are very mild and self-resolving. However, a small subset of pets will have a more severe reaction that requires emergency intervention. Symptoms of a serious reaction will generally occur very quickly after the vaccine is given but can take up to 48 hours to appear. Signs of more severe reactions include facial swelling, vomiting, hives, difficulty breathing, pale gums, and difficulty walking. If you notice one or more of these signs, we recommend bringing your pet immediately to the nearest emergency room. Again, it is advised not to give human medications without consulting your veterinarian first.

If your dog or cat has reacted to vaccines in the past, it is essential to notify your veterinarian of this beforehand. They may recommend certain medications to give before and after to help mitigate the clinical signs. If your pet had a more serious vaccine reaction in the past, or if your pet is receiving

vaccines for the first time, it would be wise to wait in the exam room or lobby for ten to fifteen minutes before leaving to ensure no immediate complications occur. Smaller breed dogs tend to have more vaccine reactions than larger dogs. Because of this, your veterinarian may recommend splitting up his or her vaccines when multiple are due.

With this being said, it is important to note that a very small subset of pets develop a vaccine reaction. Of those that do develop a reaction, the vast majority are mild and self-resolving. The benefits of preventative vaccines far outweigh the small risk of a vaccine reaction, and this article should not deter you from bringing your pet in annually for them.