## **GENERAL CONSIDERATIONS**

In today's world, there are several different types of vaccines, which stimulate the immune system through different actions. But overall, all vaccines are meant to stimulate the immune system to help improve immunity. What is seen as a "vaccine reaction" might be completely normal for the immune response stimulated by the administered vaccination.

Every vaccine administered to our animal patients has undergone testing and approval processes through the manufacturers in conjunction with regulations set forth by the FDA. To help veterinarian's determine safety and efficacy, data is available on every vaccine administered.

## WHAT IS CONSIDERED NORMAL?

In the majority of cases, after vaccination most patients return home with no change of routine and exhibit no symptoms.

Within the first few days of vaccination, approximately 1 in 250 patients will exhibit mild undesirable effects, which may include:

- Pain at vaccine site
- Mild Fever
- Lethargy
- Reluctance to play or exercise
- Reduced appetite
- Sneezing after a nasal vaccine

In some cases, a firm knot may occur at the injection site. These reaction sites are not allergic, rather, they are inflammatory reactions caused by the immune stimulation. These growths are typically noted a few weeks following vaccination and generally resolve on their own. If a lump persists longer than 3 months, it should be evaluated by a veterinarian.

## WHEN SHOULD YOU SEEK TREATMENT?

If you are ever concerned, you should always seek evaluation by a veterinarian to ensure your patient is safe.

In extreme circumstances, a patient's immune system may react aggressively to the vaccine which require evaluation by a veterinarian. These peracute to acute reactions may include:

- Vomiting or Diarrhea
- Facial Swelling
- Hives
- Collapse
- Difficulty Breathing

When a patient exhibits these anaphylactoid reactions, additional measures may be required at future vaccination appointments to reduce the likelihood of immune system over-reaction.

## PREVENTING FUTURE VACCINE REACTIONS

- Be sure your veterinarian is aware of your patient's vaccination & vaccination reaction history
- Your patient may require a dose of antihistamine or short acting steroid prior to administration of vaccines
- Follow your veterinarian's recommendation on vaccination schedule and frequency