

Vaccine Reactions

Vaccines can have a range of adverse effects, including:

1. Local inflammation, swelling or hair loss (most common)
2. Mild symptoms such as sneezing or lethargy
3. Systemic reactions including swollen nose and eyes, panting, reduced appetite, fever, or in worst case an anaphylactic reaction

Signs indicating an **anaphylactic vaccine reaction** (usually several, or all, of these signs are seen together, usually within one hour of vaccine administration):

- Lethargic/ depressed / unresponsive
- Pale mucous membranes
- Weak pulse
- Rapid heart rate
- Diarrhea
- Vomiting
- Seizures
- Swollen muzzle or face

This is an **emergency situation** that can be life threatening and needs medical attention **IMMEDIATELY!** If there is no medical personnel in the building the animal should be transported immediately to an emergency clinic for treatment. The emergency clinic is located at: _____, phone number is: _____.

The following procedures should be followed in case of an anaphylactic or other severe adverse reaction:

- **Ensure clear airways: intubation and oxygen supplementation is indicated in severe cases**
- **Adrenaline/Epinephrine (1:1000)**
 - Severe cases: 0.01 ml/kg IV, repeat in 20-30 minutes
 - Mild-moderate cases: 0.2-0.5 ml subcutaneously
- **Dexamethasone:** 4 mg/kg IV
- **Benadryl** (diphenhydramine): 2.2 mg/kg SQ, IM or IV
- **IV fluids:** lactated Ringer's solution **90ml/kg** administer ¼ of dose at a time, re-evaluate patient
- **Monitor** closely for 1 hour. If the animal recovers within 10 minutes prognosis is good

In case of mild reactions such as swelling of the face within 24 hours of vaccination administer the following drugs and monitor the animal for a minimum of 1 hour:

- Benadryl: 2.2 mg/kg IM
- 0.25 mg/kg Dexamethasone SQ

Documentation and follow-up:

- Document all adverse vaccine reactions on the animal's permanent record so that adopters can be made aware of this history. Make a note of vaccine reactions in the exam record and create a medical memo and medical alert. Include date, vaccines given, and symptoms.
- Do not revaccinate these animals in the shelter except under the direct supervision of a veterinarian.
- Contact the vaccine manufacturer to report the reaction. Adverse vaccine reactions should also be reported to the Center for Veterinary Biologics, (800) 752-6255 or online