## From The Horse's Mouth

This column is designed to educate the community on a variety of topics relating to the health and well-being of our pets from horses to parrots and everything in between. These monthly articles are written by your local veterinarians and address regional and seasonal topics in animal health. If you have specific questions or topics that you would like covered, please email us:

## Rattlesnake Risks

Summer heat is here and with it comes an increase in pets seeking adventure in the great outdoors with their people. Unfortunately, this season also brings out rattlesnakes which can turn an adventure into an emergency in the blink of an eye. Sometimes the snake encounter is observed by the owners, but often the happy dog is bouncing across the trail and then returns much subdued with a rapidly swelling body part. All pets are susceptible to rattlesnake bites, but dogs and horses are much more likely to encounter snakes based on their recreation in the outdoors. This article will cover treatment, prevention and avoidance to keep our pets safe.

A snakebite is an emergency of the highest degree and immediate treatment should be sought. If the snake encounter was not observed, the probable signs of a snakebite are rapid swelling, disuse of the body part, fang marks or bloody wounds, pain displayed in the animal (panting, drooling, whining, limping). Usually the bite will either be around the face or the lower limbs and swelling is immediate and rapidly enlarging. The pet will require emergency care right away, so drive to your veterinarian promptly. No specific care is needed when en route, but if ice packs are available, apply to the bite area. Your veterinarian will do a quick physical exam, then likely place an IV catheter to administer appropriate medications. One of these medications is anti-venom which can neutralize the toxins from the snakebite and reverse the risk of circulatory shock. Anti-venom is a potentially lifesaving drug, but can be extremely expensive depending on the size of the dog.

The initial risk of deadly shock should be mitigated within the first day after the bite, but there is also a serious secondary development that can occur at the site of envenomation. Venom is a very toxic substance and can cause tissue death in the skin and deeper tissues in the days and weeks following the bite. Tissue death leads to pain and infection and can also be potentially fatal with the risk of sepsis. Your veterinarian will prescribe several weeks of pain medication and antibiotics and give instructions to monitor the site closely.

There is no absolute prevention against snakebite, but there are a few strategies that can be used to lessen the chances of a severe reaction to envenomation. Rattlesnake vaccine is available for dogs and horses and contains antibodies against many (but not all) of the poisonous snakes in our region. The vaccine is a good start in the prevention of serious snakebites, but it must be stressed that in no way is the vaccine completely protective against

venom. There are many variables with a snakebite- how much venom is injected, how toxic is the venom, where on the animal is bite, etc. These variables mean that the vaccine can have protective effect in some but not all cases of snakebite. Regardless of vaccine status, the pet must immediately receive medical attention. In our observations, pets that have been previously vaccinated are less likely to develop signs of shock and less likely to develop tissue death, however this is not universally true.

The best prevention against rattlesnake bites is to avoid the snakes altogether. Rattlesnake avoidance classes are available all over this region at different times of year. These classes teach dogs to sense and avoid rattlesnakes when out adventuring. Avoidance trainings are highly recommended especially in spring time before the emergence of snakes.

Please be careful on the trail, and watch for any potential sign of bites in your pets.

Written by Dr. Taylor P. Ludwick, MS, DVM