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## The Crossroads Quarterly

### What's New?

We hope that 2015 has been a wonderful year. Every year we continue to exist, we feel very blessed. We appreciate your support and loyalty. We will continue to strive to be your go to source for information about your horses. We will also continue to be dedicated to providing the most advanced diagnostic and treatment modalities that the area will support. There are a lot of good things that happened to people this year. However, we know that for some it has been a very trying year. My wife lost her mare this year that she raised from a young filly 21 years ago. I know that many of you have experienced loss and personal tragedy this year as well. We are hoping that 2016 will be a fabulous year and we wish you a very prosperous and blessed new year.

Last year we were looking to purchase a new **wireless DR radiology system**. We did make that investment so we can enhance our ability to make more accurate and efficient diagnoses. It has been a wonderful tool. We don't need to have power at the barn anymore. We just fire the xray machine and the image pops up immediately on the computer screen. Many of you have gotten to see this in action this year. This is a very large investment for the practice but we felt it was time to move up to this level of technology and raise the bar for **standard of care** in the area.

We also have added **Serum Amyloid A** to our in house lab diagnostic capabilities. This is a test that can be run stall side. It has been proven to be a very reliable tool in the diagnosis of infection in the horse. For example, your horse has a nasal discharge. There are any number of things that can cause that. Some are infectious and some are inflammatory, like COPD or heaves. In either case, traditional blood work like a CBC and Fibrinogen



may have very similar abnormalities which makes it hard to differentiate. Of course it is important to know which is which because the treatment plans are vastly different.

By using the SAA test we can now reliably determine which is affecting the horse. A COPD horse will have a very low or negative SAA, where a horse with a respiratory infection will have a very high SAA level.

Also it is useful for following a horse already on antibiotics to know when to stop antibiotics. Studies show that it moves in step with the infection. As the infection goes down, SAA goes down with it at the same time. With other blood parameters, there is some lag time.

Do you have a **big performance** coming up? We can check your horse, who may otherwise look healthy, and determine whether there is any infectious process brewing.

It will also be a useful tool for monitoring foals. There are many ways this will be a valuable tool for helping care for your horses.

There are new **USEF rules** in place now that you need to be aware of. It is now required to at least have a rhino-flu immunization within 6 months and have that documented when going to a show. We can add that to your health certificate as well.

Check out Crossroads Equine on the **web**. The address is [www.crossroadsequinevet.com](http://www.crossroadsequinevet.com). It will

have a lot of information posted for you and your horses. We will advertise specials there as well.

**Like us on Facebook.** The link is [www.facebook.com/#!/pages/Crossroads-Equine-Veterinary-Services/113768701969304](http://www.facebook.com/#!/pages/Crossroads-Equine-Veterinary-Services/113768701969304) or search for Crossroads Equine Veterinary Services.

As always, if you have a question you would like to see covered in a future issue, please e-mail it to me at [crossroadsequine@inbox.com](mailto:crossroadsequine@inbox.com).

### **Reminders**

If you haven't dewormed your horse this winter with an ivermectin or moxidectin product, this is your reminder. We have had a couple of hard frosts, and should be past the threat of the bot fly. An ivermectin or moxidectin dewormer now would be ideal to ensure no problems with bot infestation of the stomach. **If you use moxidectin, also known as Quest, remember to strictly dose according to your horse's weight and do not use it in any animals under 2 years of age.**

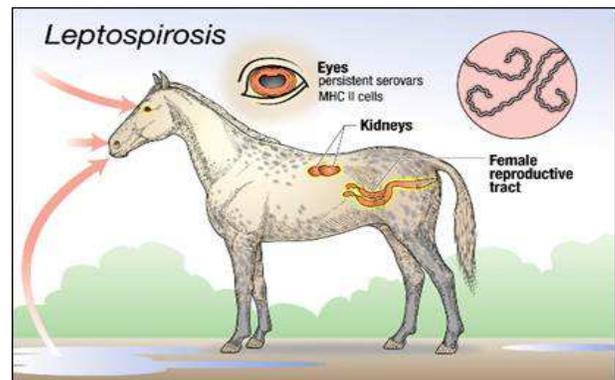
While this winter has been fairly mild thus far, I am sure we have some cold weather in front of us. There are a few things that we need to be aware of when we go into this time of year.

- Water consumption is really important. Some horses will not drink as much water when the water gets colder. As a result, an impaction colic can occur. Signs include but aren't limited to dry feces, depression, inappetence, and laying down a lot. Electrolytes in the feed, giving weekly bran mashes, or keeping out a salt block are some things we can do to encourage water consumption.
- Remember that it takes energy to keep warm. Your horse typically will require more calories in the winter because of the increase in metabolism required to maintain his body temperature. On the flip side, if your horse is a little overweight, use the winter to help him/her shed some unneeded pounds.
- Hoof care is very important in the winter. The hooves may be a lot wetter due to the environment. Therefore, thrush can be more prevalent. Clean and pick out the hooves daily. Watch for abscesses from bruising on the frozen ground.
- You may be seeing your loved ones falling victim to the winter bug—but don't let it be your horse! Get up-to-date on rhinopneumonitis and influenza vaccinations today!

### **New Vaccine Available**

Zoetis has brought a new vaccine on the market. It is a vaccination against Leptospirosis.

Equine leptospirosis is an infectious bacterial disease caused by spirochetes belonging to *Leptospira* species. *Leptospira interrogans* serovar Pomona, known as *L. pomona*, is the serovar most often associated with leptospirosis infections in horses in North America.<sup>4</sup> *L. pomona* can colonize in the kidneys, be shed in the urine and cause horses to become septicemic.<sup>1</sup> The bacteria is circulated in the blood and can cause uveitis, or moon blindness (the most common cause of blindness in horses), as well



as abortions and kidney failure.\*

Horses can become infected with leptospires from standing or slow-moving water contaminated by *Leptospira*-infected urine, contaminated soil, bedding, feed and drinking water as well as urine from infected cattle or dogs.<sup>4,5</sup> Common maintenance hosts — including skunks, raccoons, white-tailed deer and opossums — can become infected with *L. pomona*, which can be shed into shared environments and infect horses. After penetrating through mucous membranes or skin abrasions, leptospires can concentrate in the kidneys and can cause devastating clinical disease.

(info taken from [www.zoetis.com/news-and-media/zoetis-introduces-first-licensed-equine-leptospirosis-vaccine.aspx](http://www.zoetis.com/news-and-media/zoetis-introduces-first-licensed-equine-leptospirosis-vaccine.aspx))

### **Disease Spotlight**

#### **Rhinopneumonitis(EHV-1)**

(Info taken from the website <http://animalscience.uconn.edu/extension/publications/herpesvirus.htm>)

Equine herpesvirus infections have been highlighted in many news articles since they are very common in horse populations. This results in sporadic outbreaks in equine populations. Therefore, it is good to be familiar with the types of equine herpesviruses, clinical signs associated with the disease,

transmission, diagnosis, treatment and especially, ways to protect your horses from infection.

### **Types of Equine Herpesvirus**

Equine herpesviruses (EHV) are in the family Alphaherpesviridae and are enveloped double stranded DNA viruses. There are 5 alpha herpesviruses that infect horses (EHV-1, 2, 3, 4, and 5). For the purposes of this fact sheet, we will focus on EHV-1 and EHV-4, which are the two that result in serious clinical disease in the horse. EHV-1 and EHV-4 used to be considered subtypes of the same virus, but are now recognized as closely related but different viruses. EHV-1 is commonly found in horse populations worldwide and was previously referred to as the equine abortion virus. Although EHV-1 is well known for causing reproductive disease, it is also known to cause respiratory and neurological disease. EHV-4 is also known as equine rhinopneumonitis virus and is most common among foals and yearlings. Although EHV-4 most commonly causes respiratory disease, it can also cause abortion and neurological disease.

### **Clinical Signs Associated with Equine Herpesvirus Infection**

The incubation period (period of time from exposure to development of first clinical signs) ranges from 2 to 10 days. Respiratory signs for EHV-1 and EHV-4 include fever of 102 -107° F that lasts for 1-7 days, coughing, depression, inappetence (going off feed), and nasal discharge. Abortion usually occurs between months 7 and 11 of gestation, about 2-12 weeks after infection. There is no evidence that the mare's reproductive tract is damaged, and it does not affect her ability to conceive in later pregnancies. Signs of neurologic disease for EHV-1 and EHV-4 include mild incoordination, hindlimb paralysis, recumbency (lying down and being unable to get up), loss of bladder and tail function, and loss of sensation to the skin around the tail and hindlimb areas.

### **Transmission**

Transmission occurs when infected and uninfected horses come in either direct (nose to nose contact) or indirect (through buckets, clothing, blankets that are contaminated) contact with nasal discharges of infected horses. The virus can travel via aerosol (in the air) for short distances. The virus may also be transmitted by contact with aborted fetuses, placental fluids, or placentas from infected horses. Also, following infection, horses may become latent

carriers of EHV; virus may be reactivated after stress or high doses of corticosteroids.

### **Diagnosis and Treatment**

Upon detection of clinical signs suggestive of EHV, the veterinarian may choose to take a nasopharyngeal (nose and throat) swab of the horse, blood sample, or tissue from the aborted fetus for detection of virus in the tissues. Paired blood samples for detection of antibody titers (levels) may also be taken. Treatment involves supportive care and treatment of the symptoms. Non-steroidal anti-inflammatory drugs are commonly used to reduce fever, pain and inflammation. In uncomplicated cases, complete recovery will occur in a few weeks. Horses with neurological disease have variable recovery rates depending on severity of the clinical signs. The prognosis is poor if the horse is recumbent (unable to stand) for an extended period of time. The horse should be rested until fully recovered and gradually returned to work.

### **Protection**

There are two types of vaccines available for use in the horse for prevention of the disease, but their use remains controversial. Vaccination may reduce the severity and duration of disease, but will not totally prevent the disease. Your equine veterinarian should be consulted regarding the most appropriate use of vaccination in your particular circumstance. Since latent infection is still a problem, vaccination must go hand-in hand with the use of best management practices.

There are both modified live virus and killed virus vaccines available. The modified live virus vaccine contains virus that has been altered to make it unlikely to cause disease but is still able to reproduce in the body cells and stimulate immunity. The killed vaccine contains virus that has been inactivated or killed using either heat or chemicals. The modified live vaccine is administered intranasally and offers quicker protection. There is no scientific basis to indicate that the modified live vaccine will cause disease. The killed vaccine is given intramuscularly. Vaccine usage in light of the recent outbreaks of neurological EHV-1 is currently being re-evaluated. Consult your veterinarian for recommendations.

In order to prevent an outbreak, horses arriving on a farm from other locations should be isolated for 3-4 weeks before being introduced into the resident horse

population. Reduce management-related stressors that may increase the possibility of stress-induced reactivation of latent EHV-1 in carrier horses. Keep horses separated by physiological state or group, especially with regards to pregnant mares, who should be kept away from weanlings, yearlings, and performance horses that frequently travel.

In the case of an outbreak, infected horses should be isolated from other horses. The stable should be quarantined for at least three weeks after signs of clinical disease in the last case subside. All stable equipment should be disinfected. People handling the infected horses should be sure to wash their hands after handling each horse, dip their shoes in a disinfecting foot bath, and change clothes before working with healthy horses. Some sources suggest that bedding be removed and burned. Barn stalls, aisles and other surfaces should be cleaned and disinfected as well. Although this virus can last for several weeks in the environment, it is readily killed by most common disinfectants; phenol based disinfectants are commonly used.

Equine herpesvirus infection can become a serious problem. Being aware of the types of equine herpesvirus, clinical signs associated with the disease, transmission, diagnosis, treatment and especially, ways to protect your horses from infection, will aid you if there is an outbreak in your area. Incorporating measures to protect your horse now may prevent problems in the future.

#### **Q & A**

Q: How do I know if my horse needs dental work performed?

A: There are several different signs that would point to your horse's teeth needing some attention. The most common sign that people notice is the horse dropping grain when he eats. This is a very good sign that he needs some dental work. Also, fighting at the bit, tossing his head a lot when riding, and sometimes reluctance to turn in one direction can indicate a

dental problem. If your horse doesn't seem to be holding his weight properly, it is a good idea to rule out his teeth as a contributor to the problem. Sometimes, your horse may not show a problem visually. I see horses all of the time with a lot of sores in their mouth from the sharp points that wear on the teeth or severe dental abnormalities, and they were showing no outward signs of a problem. As a general rule, I like to perform a thorough dental prophylaxis at least once a year whether they are showing outward signs or not. An older horses' teeth do not grow at the same rate as younger horses. A lot of times, they can go every other year without actually being filed. However, thorough dental exams are still important at that age to insure there are no loose teeth or other problems. If you wait until a horse of any age is having problems, he may already have significant dental abnormalities that will be more involved and more expensive to correct. If you have any further questions or concerns, don't hesitate to contact me.

*If you have a friend who would like to receive this newsletter, please e-mail me at [crossroadsequinevet@gmail.com](mailto:crossroadsequinevet@gmail.com).*

*As always, thanks for supporting Crossroads Equine*

