

PORT PERRY VETERINARY SERVICES

-QUARTERLY-

WEST NILE VIRUS

West Nile Virus (WNV) is a potentially fatal virus that was identified in horses in Ontario just over 10 years ago. The virus is carried and transmitted by mosquitoes (they acquire it from birds), and cannot be transmitted directly from horse to horse or from horses to humans. The horse contracts the virus when bitten by an infected mosquito and then the virus travels in the bloodstream to the horse's brain, causing inflammation in its nervous system. Because this virus requires mosquitos for its spread, it is a seasonal disease in horses with most cases occurring in the spring and summer months.

Once a horse is infected with West Nile Virus, they can show; no clinical signs; develop a fever; or most commonly, they will show neurologic signs including incoordination (ataxia), depression, partial paralysis, muscle trembling, recumbency (down and unable to get up) which can progress to death. West Nile Virus is fatal in approximately 35% of equine cases.

Vaccination is highly recommended to prevent your horse from contracting WNV. The vaccines available are highly effective and safe. Annual vaccination in the spring or early summertime is suggested. Many people assume because there have been fewer cases in horses in recent years they do not need to vaccinate, but this is not the case. According to

the Animal Health Lab (AHL) at the University of Guelph, in 2002 there were 101 confirmed cases in horses! In the years following that, there was widespread vaccination against the virus and the numbers decreased to 5 or fewer cases/year from 2004-2010. Over the past few years, the numbers have started to creep up again, to 8 confirmed cases in 2011 and 7 in 2012. This is in part due to horse owners declining having their horses vaccinated against WNV, in addition to environmental factors. Because WNV is transmitted by mosquitoes, reducing your horse's exposure to them is also important for minimizing

risk (reducing sites of standing water accumulation, avoiding outdoor activities at dusk and dawn, and applying insect repellent/fly sheets).

Treatment is aimed at supportive care as there is no specific treatment for horses affected with this virus. Some horses recover fully and some recover but some show permanent residual effects like weakness, stumbling, and muscle loss.

Should you suspect your horse is demonstrating signs of a neurologic condition, you should contact your veterinarian immediately.

WHAT'S NEW AT THE CLINIC?

Many of you have probably heard about (or seen) the addition to the clinic. We are very excited about the extra space! We've also been working on updating our website. Our revamped website is almost ready for viewing. Once it is complete, it can be found at www.portperryvetservices.ca.

The veterinarians have been updating their knowledge over the past few months. Between courses about respiratory disease and dentistry, back pain, colic prevention, research updates on a variety of topics and dairy goat nutrition, the vets have been very busy!

Spring is here and with that comes vaccination time. If you haven't already booked your horses annual boosters, you can do so by calling 905-982-1243. Again we are offering our recreational and competitive horse wellness packages that include vaccinations, a physical and dental exam, dewormers, fecal egg count, and more. For those enrolled in either program they can also receive discounted dentistry with sedation and a powerfloat. For pricing or questions about these programs please contact the office.

CARING FOR THE YOUNG – A CRITICAL TIME

Every spring marks the beginning of a fresh year full of young calves, lambs and kids. As the weather gets warmer, the increased risk of diseases and illnesses also becomes evident. There are many ways we can help prevent our young livestock from developing clinical disease.

The first step to ensuring the health of young animals is to make sure the dam is in the best health possible and is receiving adequate nutrition to support her offspring. For cattle the critical period for nutrition is thought to be right at the time of calving and extending out into the first few weeks of lactation. For small ruminants, the few weeks leading up to lambing/kidding are more important for ensuring proper nutrition. For small ruminants we also suggest deworming a month prior lambing/kidding to help decrease environmental burdens. A clean environment to give birth in is going to help protect the offspring from coming into high levels of pathogens right away. For the same reason a lower stocking density of a birth area will ensure that the immediate environment stays as clean as possible. Cleanliness is important as the young can easily contract diseases orally and through the umbilicus if it is not sealed.

Once the offspring are born the dam will help to clean, dry and stimulate them. It is advisable though that you clean the naval to prevent uptake of pathogens and to get it to dry. Iodine solutions are among the most common and most effective at cleaning and drying the naval and should be used daily for the first few days of life. Shortly after birth it is also common practice to give an injection of

vitamin E and selenium. This is important to help prevent white muscle disease in our area.

After the dam has cleaned and stimulated the young the next big task is getting them up and nursing to receive adequate colostrum. These young have what we call an “open gut” for the first 24 hours of life. This means that both antibodies and pathogens ingested into these animals can cross the gut and get into the bloodstream easily. This ability to have particles diffuse easily across the GI system begins to shut down immediately after birth, but in particular, after the first 10-12 hours of life. For this reason, we want the young to be nursing and ingesting a lot of good quality colostrum as soon as possible to allow for passive transfer of antibodies from the dam to the offspring. Visibly seeing the animal nurse is good but it can be difficult to assess the volume and quality of the colostrum to know if they are getting enough. Measuring the colostrum and bottle feeding it to the young initially will allow for a better perspective on how much they have received during the critical early hours of life. There are also some cow side tests available to assess if adequate passive transfer of immunity has occurred in the young. These tests require a blood sample from the calf about 8 hours after they have ingested the colostrum. Failure of passive transfer of antibodies from the dam to the offspring will set up the young animal for future problems, as they will not have a good immune system on their own for a while. Occasionally the dam may suffer from a traumatic event, have an illness herself or not take to her offspring and allow them to nurse. All of these will result in

poor colostrum quality or intake. In these situations having banked frozen colostrum from previous dams or having a fresh source is important so that time isn't wasted.

The most common initial diseases the young will encounter typically results in diarrhea. In calves we vaccinate the cow prior to calving to allow her to pass on her immunity to the calf via colostrum and we also have the option of vaccinating the calf at birth. Secondly, these young may develop pneumonia. Colostral immunity as well as clean, warm, well ventilated, low stress environments will help to decrease the risk.

Although to most producers a lot of this information seems basic or obvious, it is important to review and find areas that you could improve in your own herd. Getting these young livestock off to a good and healthy start will dramatically help their survival rates and also their gain rates making your operation more profitable in the long run.

