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Vaccination Time of Year

Spring is on the horizon, and for horses that has many health implications. Foals are born; pastures green up, and mosquitoes start to bite; to mention just a few. It is those pesky mosquitoes, that slender, delicate, blood-savaging pest, a cousin to the fly that I want to take aim at in this article. Even more to the point, I want to talk just a minute about a virus pest carried within the mosquito pest. Deep inside the female mosquitoes salivary glands the West Nile Virus (WNV) can reside. These salivary glands are connected to the mosquito's long piercing proboscis. It is through this proboscis that she extracts a blood meal from our horses, leaving behind the unwanted West Nile Virus (WNV). The WNV is a member of the flavivirus family. Prior to 1999 it was found living only in mosquitoes piercing horses for blood in Africa, Eastern Europe, and West Asia. Today however, we have the WNV firmly established within the United States. Because of its introduction into the United States, we must protect our horses from WNV's destructive ways.

Mosquitoes acquire the WNV from infected birds and pass it onto other birds and animals, including man and horses. Mosquitoes spread the virus after they feed on infected birds and then bite your horse-or you-. There does not appear at our current level of understanding that the infection can spread from horse to horse. Furthermore there is no evidence to suggest people can become infected from handling horses with WNV infection.

WNV within the horse attacks the brain, destroys some nerve cells, and causes brain inflammation and swelling. It's important to be reminded about WNV in this spring season, because along with spring foals, greening pastures, and mosquito bites, spring is horse vaccination season. It is time now to make preparations to vaccinate your horses, and WNV prevention climbs to the top of our vaccination consideration list.

One major reason we vaccinate our horses in the spring is because there is greater vaccine protection offered the closer we vaccinate our horse to the season of disease exposure. Let me say that another way: We strive to vaccinate our horse as close as possible to the season we expect our horse to have exposure to the disease we are attempting to prevent by our vaccination. In general, WNV season is August through October. I'll say more about when to vaccinate your horse in just a moment, but first let me make a case for WNV horse vaccination necessity.

The USDA reported 4,636 cases of equine WNV infection in the United States for the year 2003. The USDA reported 15,257 nation wide cases for the year 2002. That is a significant decrease in WNV horse disease in a one-year period. How should we interpret this decrease in WNV horse

disease incidence? Keep in mind; I just implied that it is more important than ever to vaccinate your horse against WNV this year. In making that statement I am suggesting one major reason the equine WNV incidence dropped in 2003 is because we vaccinated many horses last year. Along with these vaccination numbers, I credit educational awareness of the dangers of WNV infection. Equally, I credit effective mosquito control programs that prevented exposure of our horses from mosquito bites. WNV awareness and mosquito control programs cooperated with our vaccination practices to reduce the overall 2003 WNV equine disease incidence. Let me further make my equine vaccination case by looking at the human WNV infection for 2002-2003. The CDC reported 9,136 human West Nile Virus cases for 2003 resulting in 228 deaths. From that 9,136 total Delaware reported 17 human cases with 2 deaths. Maryland reported 73 human cases with 6 deaths and Virginia reported 23 human cases resulting with 1 death. Human cases increased in 2003 from the CDC report of 4,156 cases in 2002. In 2002 Delaware reported 1 human case, Maryland reported 36 cases and Virginia reported 29 human cases. We can presume that humans had equal awareness of WNV dangers, and hopefully humans benefited from prevented measures to control and reduce mosquito attacks. We do not however have a WNV vaccine for humans at this time. My suggestion: Contact your veterinarian and make arrangements to vaccinate your horses, mules, and donkeys against West Nile Virus infection.

Let me now respond to the question I left you with a paragraph back. When is the best time to give my horse its WNV vaccine? Remember the principal: for maximum vaccination benefit, anticipate the exposure season. The highest WNV incidence reported for horses is August through October in our area. I suggest you do not have your vaccination more than 4-6 month in the horse when the horse is under greatest risk. That means May/June in our area is the optimum vaccination season for preventing equine WNV infection. Involve your veterinarian in your equine WNV prevention and vaccinate your horses, mules, and donkeys this spring against WNV.

By the way, please continue to practice mosquito control measures for yourself as well as for your horses.