INFECTIONOUS UPPER RESPIRATORY TRACT DISEASE IN HORSES

TheHorse.com: Hello everyone, and welcome to our Webinar, Infectious Upper Respiratory Tract Disease in Horses! We’d like to introduce tonight’s presenter, Nicola Pusterla, DVM, PhD, Dipl. ACVIM, Associate Professor in Equine Internal Medicine at the Department of Medicine and Epidemiology, University of California, Davis, School of Veterinary Medicine. Dr. Pusterla will be answering your questions during this live event along with Craig Barnett, DVM, who is a senior equine technical services veterinarian for Intervet/Schering-Plough Animal Health. We’d also like to offer thanks to sponsor Intervet/Schering-Plough Animal Health for bringing you this free event. Visit them online at http://www.fluavert.com.

TheHorse.com: If the video is not playing for you or is hanging up (often slow or inconsistent Internet connections can cause this), try refreshing this page.

TheHorse.com: If the video is not playing for you, try this URL: http://www.thehorse.com/webinar.aspx?vID=520

TheHorse.com: Hello everyone, is anyone still having trouble with the video?

TheHorse.com: Katherine: Which vaccine should I use against equine herpesvirus?

Nicola Pusterla: There are several commercial vaccines available via your veterinarian. All vaccines have a claim at protecting against the respiratory form or EHV-1. Further, 2 vaccines have a claim for the protection of abortion. Unfortunately, no vaccine has a claim in the protection of the neurological form of EHV-1. The take home message is that all vaccines available have been shown to reduce the severity of clinical disease, viral shedding and potentially also viremia. Talk to your veterinarian in order to customize the vaccine schedule for your horse.

Comment From Stephani: How do I know if EHV is what my horses have?

Nicola Pusterla: The diagnosis is based on historical information, clinical findings and detection of the virus in nasal secretions and/or blood. Polymerase chain reaction (PCR) is the diagnostic tool generally used for the detection of EHV-1 and EHV-4.

Comment From Carol: I have a horse with COPD. Is he more likely to be easily infected? Should I do something extra to try to protect him?

Nicola Pusterla: Your horse may be more susceptible to viral and bacterial infections due to chronic irritation of the lower airways. Improving the environment (i.e. decreasing dust exposure) and the vaccination status of your horse may minimize the effect of upper respiratory tract infections.

Dr. Craig Barnett: Yes. EHV is a contagious virus. Primarily spread through nasal secretions and direct contact. However, EHV can also be spread by aerosola and by people potentially carrying the virus from horse to horse. The virus can also be transmitted by contaminated equipment, etc.
Comment From Stephani: Is EHV contagious?

TheHorse.com: We had a webinar on the recent equine herpesvirus-1 outbreak; you can check it out here: http://www.thehorse.com/Webinars

Comment From Stephani: Is EHV contagious for other horses?

Nicola Pusterla: EHV is highly contagious. However, successful infection are generally a multifactorial process depending on the virus strain, amount of virus, environment and host.

Comment From Stephani: Is there any way to keep it from spreading from horse to horse?

Dr. Craig Barnett: You can dramatically decrease the incidence of shedding from horse to horse by immediately isolating any confirmed or suspect horse. You also need to practice good biosecurity and make sure that everyone knows about the sick horse and knows the proper biosecurity measures.

Nicola Pusterla: Allergy shots may reduce hypersensitivity to environmental allergens and may also improve airway inflammation in horses with COPD. However, allergy shots are by no means a replacement for good biosecurity protocols and preventative measures such as vaccination.

Comment From Maria Hawkins: How successful are allergy shots in reducing symptoms?

Comment From Geri: In your study, did you clump Appaloosas with Quarter Horses?

Nicola Pusterla: No, we did not clump appaloosas with QH.

Comment From Stephani: Once a horse has caught EHV, how can I get rid of it?

Dr. Craig Barnett: Unfortunately, EHV in horses is similar to herpesviruses in other species in that once the horse becomes infected most horses remain infected for life. One of the hallmarks of the herpesvirus is its ability to form latency. Latency means that the virus stays in the horse’s system and during periods of stress can reactivate and the horse may again shed virus. This is one of the primary reasons EHV continues to circulate throughout the horse population.

Comment From cindy: we have strangles at our barn has been isolated how many times will a horse have outbreaks

Nicola Pusterla: 75% of horses naturally infected by S. equi will remain protected for up to 5 years. In general, horses that become exposed a second or third time do show milder clinical disease.

Comment From Stephani: So if I was to give all the horses on my farm the vaccination, including the infected ones, would this help make it dormant?

Dr. Craig Barnett: With most infectious diseases vaccination is just one component of an infectious disease control program. Managerial practices and good biosecurity are also very important in controlling infectious disease. Although vaccination of the entire herd will help decrease the incidence and severity of disease it will not eliminate the virus or completely prevent disease in the future. Especially with EHV, we need to recognize that this vaccine is very difficult to completely control and we periodically have outbreaks even in the face of a good vaccination strategy.

Nicola Pusterla: Subclinical infections are common during outbreaks. This means that horses without
clinical signs may still be infected and shed virus. Using appropriate biosecurity protocols and minimizing contact between horses may reduce the risk of exposure.

Comment From Guest: since a horse that is infected, but not displaying symptoms can spread EHV to others, how do I keep my horse safe in group situations besides the obvious of vaccination, not sharing buckets, touching noses and keeping distance?

TheHorse.com: This Webinar will be archived for later viewing, along with a transcript from this chat on TheHorse.com.

Comment From Carol: How long do these viruses live in stalls at horse camps for example? What measures, other than vaccination, can I take to protect my horses when I travel with them and stable in stalls used by many different horses?

Nicola Pusterla: This is a very important question and the short answer is that we don’t know. We assume that viruses such as EHV and EIV have a relatively short live span outside the host. However, ambient temperature and humidity may play a key role on the longevity on these viruses. One study has found that cultured virus can remain infective on hair for up to 35 days.

Comment From cindy: what do you do when the horse keeps breaking out for 2 months

Dr. Craig Barnett: First make sure and get a confirmed diagnosis. If your horse continues to break out with strangles every few months then the horse is either being reinfected by another horse on the premises or more likely your horse has an ongoing infection that has never been completely resolved. Many horses will harbor the strangles bacteria in the guttural pouch in the back of the throat. You may need to have endoscopy done on your horse to check the guttural pouches for infection.

Comment From Guest: I may be way off subject here but I have a horse who was dx with Pneumonia in October 2010 she is an Icelandic 20 year old mare. She has in the past had issues with allergies and when Humidity and heat index kicks in she struggles. Typically it does not last long. Since October I can not get her breathing under control. We have tried several different meds, vet has been out three times and tested for EHV and not strangles. Acupuncture works for a while but now that summer is here she is struggling. Any suggestions to help her thru this?

Nicola Pusterla: I would recommend you have your horse worked up for lower airway disease. May be worthwhile considering taking radiographs and performing an ultrasound examination of her chest in order to determine what the exact cause of her respiratory signs is.

TheHorse.com: We have a downloadable report online with a good diagram of the guttural pouches: http://www.thehorse.com/Free-Reports/View.aspx?n=anatomy--the-head-and-neck&id=175

Comment From Jan Marcott: my horse has a runny nose and a cough every winter which starts around January. He gets a clear/grayish nasal discharge and will cough if stressed with exercise. This year he ran a low grade temp and would eat grain but not his hay. This all cleared when he could go outside. At our boarding stable, we have had strangles, and pneumonia cases which were isolated incidents and they were contained. He now handles trail riding well (he is a 10 y/o Q.H, but when he is really pushed, I can hear a “roaring” type of respiration but he handles excersise well. Is this early “heaves? My vet thinks it could be.

Comment From Jan Marcott: Oh, the horse on our farm that was a 2 y/o Q.H. and was the only one vaccinated for strangles got the disease.
Nicola Pusterla: You may want to have your horse work up for upper and lower airway disease. There are many non-infectious conditions that may cause nasal discharge, coughing and exercise intolerance. A good physical evaluation by your veterinarian coupled with an endoscopical evaluation of the upper and lower airways plus chest X-rays may determine your horse’s condition.

Comment From Guest: My horse had strangles 10 years ago and recently had a mild case of vasculitis and tested high positive for the strep titer. This is the only time she has been “sick” since the case of strangles, is her immune system hypersensitive to the point that it could impact her health in the future?

Dr. Craig Barnett: There are many causes of vasculitis. The vasculitis your horse recently experienced may or may not have been due to the previous strangles episode. We do believe that horses with high titers against strangles have some increased predisposition to have immune mediated type of reactions (such as vasculitis) upon subsequent exposure to the strangles bacteria either from exposure to the live bacteria or the vaccine.

TheHorse.com: For more information on equine respiratory tract disease, see more than 370 articles plus free reports and videos in our Respiratory Problems category: http://www.thehorse.com/TopicSearch/Default.aspx?n=respiratory-problems&nID=32.

Comment From Natalie: What is the treatment of lower airway disease?

Nicola Pusterla: Depends on what is causing it. If this is an infectious condition, than depending on the nature of the pathogen (bacterial versus viral) the treatment will include anti-inflammatory drugs, bronchodilators and antimicrobials (in case of confirmed bacterial dx). However, in case of environmentally-induced lower airway disease (COPD), the treatment will consist in systemic and inhalend drugs (anti-inflammatory and bronchodilator) combined with environmental changes (reduce dust exposure, soak hay, no bedding, keep on grass pasture, etc).

Comment From Terry: Please give more specifics about biosecurity.

TheHorse.com: Biosecurity is a big topic! :) We have a lot of resources on TheHorse.com about biosecurity (stall cleaning, disinfection, quarantine, precautions while traveling, much more), apologies ahead of time for the long link: http://www.thehorse.com/Search.aspx?cx=0018130774432027757262%3A-qbps-ljkt&cof=FORID%3A9&ie=UTF-8&q=biosecurity&sa.x=25&sa.y=20&sa=Search&siteurl=www.thehorse.com

TheHorse.com: We hope you have enjoyed the presentation tonight! Does anyone have another question?

Comment From Buffy: I have a 5 yr old Arab, which I have had since she was 9mts old. Each fall/winter, as soon as it freezes outside, she start breathing very funny, almost wheezing. She eats/drinks good, and I have tried all the meds the vet recommended. I was told she had foal pneumonia (sp) as a baby.

Nicola Pusterla: Cold air may be responsible for bronchoconstriction in your horse. In general foals that develop pneumonia do not have long-term complications. You may want to consider lower airway inflammation in your horse, especially if he/she is stabled during the winter time. Try to reduce dust exposure next winter and see if it makes a difference.

Comment From Terry: What disinfectant can be used in stalls/trailers will kill the virus?

TheHorse.com: We’d like to offer a special thanks to Drs. Pusterla and Barnett for taking the time to address this topic and answer your questions. And of course thanks to this event’s sponsor, Intervet/
Schering-Plough Animal Health, for bringing you this free event. Visit them online at http://www.fluavert.com.

TheHorse.com: Terry, we have had several videos on cleaning/disinfecting stalls, water buckets, equipment, etc.: http://www.thehorse.com/Videos.aspx?tab=howto

Dr. Craig Barnett: The activity of most disinfectants is decreased in the presence of organic debris such as feces, nasal discharge, pus, etc. It’s best if you can thoroughly scrub dirty surfaces and equipment prior to using disinfectants. Examples: Chlorox - Good activity against most bacteria and viruses but inactivated by organic matter. Peroxygen compounds (Virkon) - Effective against many bacteria and viruses and can be used on stall surfaces, foot baths, etc. Phenols (Tek-Trol & 1 Stroke) - Broad activity against viruses and bacteria and works pretty well in presence of organic matter. Make sure and wear protective clothing & gloves during application.

TheHorse.com: Does anyone else have a question?

TheHorse.com: That’s all the time we have for today’s Webinar. Thanks for joining us! If you have suggestions for future topics or any feedback for us, please email us at THWebinars@TheHorse.com. Don’t forget, this Webinar will be archived for later viewing, along with a transcript from this chat, at www.TheHorse.com/Video.aspx?vID=520.

TheHorse.com: Have a great evening!