



This information is a professional communication for the Equine Industry. The OAHN group is a dedicated group of veterinarians from primary care practices, academia, government and laboratories, who meet regularly to discuss Equine disease and health issues. It is the intent of this program to monitor and protect the health of horses in Ontario.

WHAT IS OAHN? The Ontario Animal Health Network is a new program focusing on early disease detection in animals in order to identify disease and welfare trends and direct the appropriate action when necessary. To do this, the program has created expert veterinary networks for each species or commodity group. The **Equine Expert Network** is comprised of seven veterinarians with representation from the Ontario Veterinary College, OMAFRA, the Animal Health Laboratory at the University of Guelph and from private veterinary clinics representing different geographical regions and disciplines in Ontario. Veterinarians who provide services to horse owners are surveyed quarterly about the diseases and issues seen in practice. Results from this survey, along with a summary of laboratory results, are discussed by the Network to **detect important trends and emerging horse health issues**. The overall goal of the network is to improve the health of Ontario's equine herd. A summary of the Network discussion with key points is presented below. This is for information purposes only. Please contact your veterinarian for diagnosis and treatment options.

TOP DISEASES OR CONDITIONS DISCUSSED ON THE NETWORK CALL - LAB DATA AND VETERINARY SURVEY (Q2 REPORT 2015)

Foals and Breeding Horses:

- Uterine infections
- Angular limb deformities
- Neonatal diarrhea Syndrome

Adult Horses (>1 year old):

- Septicemia/septic joint
- Perinatal death
- Rhodococcus pneumonia
- Pastern dermatitis
- RAO/heaves
- Strangles
- Upper Respiratory Tract Infection
- Urticaria/skin allergies
- Cushing's/Equine Metabolic

Neonatal Diarrhea

- Foal diarrhea is a significant cause of sickness and sometimes death in young foals and can have infectious and noninfectious causes.
- Dehydration, shock from bacterial toxins and bacterial infection in the blood can occur and be severe.
- Noninfectious causes of diarrhea include foal heat diarrhea (due to development of the normal bacteria populations in the intestine), gastric ulcer syndrome and eating sand/dirt.
- Infectious causes include bacterial (*Clostridium difficile*, *Clostridium perfringens*, *Salmonella*), viral (rotavirus, coronavirus) and parasitic (*Strongyloides westeri*, *cryptosporidium parvum*) causes.

Key Message: Prompt attention to correcting hydration and electrolyte abnormalities is key as is infection control to prevent a farm outbreak.

Rhodococcus pneumonia

- Rhodococcus pneumonia is caused by the bacterium *Rhodococcus equi* and usually affects foals 1-4 months of age.
- Mares will shed *R. equi* therefore a high stocking density of mares and foals increases the odds of pneumonia developing.
- The airborne concentration of *R. equi* is associated with disease and is higher in the stalls /barns than paddocks/pasture.
- Signs of illness include cough, fever, rapid breathing and flared nostrils (discharge from the nose is not common). Sudden death may occur. Other signs may include diarrhea and/or swollen joints.
- Diagnosis is by ultrasound of the chest for lung abscesses and obtaining a sample of pus from the windpipe for detection of *R. equi* DNA or bacterial growth.
- Treatment with particular antibiotics is commonplace but resistance to the most common family of antibiotics is developing in the USA.

Key Message: Early detection and treatment can help resolve disease and improve prognosis for future athletic activity.

Strangles

- Strangles is caused by the bacterium *Streptococcus equi* that enters through the nose and travels to the lymph nodes of the head which then abscess (usually under or behind the jaw).
- Fever precedes the enlargement of lymph nodes by 48 hours providing time to isolate horses with fever from other horses on the farm.
- Abscesses are allowed to mature and break open and treatment is not necessary unless the horse develops difficulty breathing.
- Horses are isolated from the herd for 30 days post-healing of the abscesses. Carrier status is determined by washing the back of the throat or guttural pouch and testing for bacterial DNA and/or growth.
- Vaccination can reduce the development of disease. Immune system reactions can be reduced by performing an antibody titre before vaccination.

Key Message: Horses should be cleared of carrier status before mingling with other horses. Biosecurity is crucial to prevent spread on farm.

Allergies

- Allergies have many causes including pollen, insects, medications and sometimes food.
- Horses can tolerate a certain amount of allergens without showing clinical signs but when that threshold is exceeded signs become obvious.
- Treatment involves removing exposure to or controlling response to allergens to bring the patient back under the threshold.
- Horses may show signs of urticaria (wheals on skin), itchy skin, gastrointestinal upset and asthma-like symptoms (RAO or heaves).
- Allergy testing (skin or serum) is used to identify environmental allergens by detecting allergen specific immunoglobulin E (IgE).
- Not all positive results are relevant and need to be interpreted in light of season, medical history and physical examination.
- Results are used to develop specific immunotherapy treatments which can reduce the use of other medications.
- Food allergies are identified by using feed challenges. Alfalfa and soybean may be common triggers.

Key Message: Allergies can be managed by identification and elimination of the trigger when possible, immunotherapy +/- appropriate medication