



## Ontario Animal Health Network (OAHN) Equine Expert Network

*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. 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.

### TOP 3 DISEASES OR CONDITIONS DISCUSSED ON THE NETWORK CALL - LAB DATA AND VETERINARY SURVEY (Q1 REPORT 2015)

#### Foals and Breeding Horses:

- Late-term abortion
- uterine infections
- anthelmintic resistance

#### Key Points:

##### Late-term Abortion

- The most common causes for abortion diagnosed at the Animal Health Laboratory were:
  - Mineralization of the placenta, torsion of the umbilicus, bacterial infection & stillbirth. Many were of an "undetermined" cause.
  - Two mares aborted due to infection with the organism associated with Potomac Horse Fever (*Neorickettsia risticii*).

**Key Message: Diagnostic testing is important for breeders to rule out infectious causes of abortion, such as EHV-1, but in a number of cases a cause for the abortion may not be identified.**

#### Uterine Infections

- Uterine Infections are a common cause of infertility in the mare and many different organisms have been implicated in disease.
- Uterine infections may lead to inflammation and thickening of the uterine wall (endometritis).
- Veterinarians diagnose uterine infections by obtaining samples from the uterus and then submitting them to a laboratory for culture and analysis of the inflammatory cell types present.
- Treatment usually consists of lavaging the uterus with sterile fluid, appropriate antibiotics and therapies to help the uterus contract and clear the fluid and correcting any conformational defects with a minor surgical procedure when necessary.

#### Anthelmintic (Dewormer) Resistance

- Roundworms (ascarids) in young animals (<2 years) and small strongyles (cyathostomes) have been the two species identified as demonstrating resistance to dewormers on certain farms in Ontario.
- Roundworms may develop resistance to the macrocyclic lactone drug family (ivermectin, moxidectin) and cyathostomes to the benzimidazole family (fenbendazole)
- Resistant worms can increase the worm burden leading to colic and diarrhea and may be fatal in certain circumstances

**Key Message: Fecal egg counts should be performed routinely in consultation with your vet to design an appropriate farm deworming protocol.**

#### Colic

- Colic is a general term used to describe abdominal or visceral pain and can be caused by many conditions.
- The harsh nature of the past winter was likely a significant factor in the number of colicky horses requiring veterinary treatment.
- Horses should be offered warm water frequently along with good quality hay and regular exercise to maintain healthy gut function. Snow should never be used as a replacement for water.

#### Viral Upper Respiratory Tract Infection (URTI)

- Nasal discharge, cough and sometimes fever are common clinical signs.
- The most common infectious organisms involved are: influenza virus, rhinitis virus, equine herpesvirus 1 and 4
- Rhinitis virus is becoming an increasingly significant cause of respiratory disease in Ontario for which there is no available vaccine.
- Diagnosis of URTI includes taking a swab from the nose and testing for the presence of viral DNA and/or by serum titre testing.
- Treatment involves managing the fever with anti-inflammatories, providing rest and, only rarely, administering appropriate antibiotics.

**Key Message: Biosecurity measures are key to preventing spread through the barn.**

#### Pastern Dermatitis (scratches, mud fever)

- Inflammation of the skin over the back of the pastern is caused by infectious agents (bacteria, fungi, parasites) and non-infectious agents (trauma, contact irritants, immune-mediated reactions, drug reactions, blood vessel inflammation, photosensitization)
- Draft breeds are more susceptible
- Veterinarians may diagnose this condition using skin scrapings, swabs for bacterial/fungal culture and/or skin biopsies
- Treatment depends on the inciting cause but may involve applying antibiotic, antifungal and/or anti-inflammatory ointments, changing the bedding type, adjusting feed and turnout times, and/or keeping the area clean and dry.