

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.



Ontario Animal Health Network (OAHN) Equine Expert Network Quarterly Owner Report – July to September 2017

July—September 2017

Report #9

Highlights

Key Points

Antimicrobial use and resistance—change is coming

*Looking Ahead—
Pneumonia and pleuropneumonia*



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Ontario Equine Disease Surveillance (July to September) - Key points

- An increased number of horses were diagnosed with West Nile Virus and Potomac Horse Fever in Q3. Please go [here](#) for the location of West Nile virus affected horses in Ontario.
- Fever of unknown origin, non-itchy skin diseases and equine asthma were also reported with greater frequency and were likely due to the wet, warm weather during the quarter.
- There was also an unusual increase in atrial fibrillation and high post-race heart rates with rhythm abnormalities noted in some Thoroughbred racehorses.
- Rabies continues to occur in Ontario. Please go [here](#) for further information. To date, no horses in Ontario have died due to the rabies virus.

Antimicrobial Use and Resistance – Change is Coming

Pending Federal Changes to Address Antimicrobial Resistance

Increasing antimicrobial resistance is a global concern and its effects on human and animal health have been raised by experts at local, national and international levels.

The Government of Canada is working to help control antimicrobial resistance and promote improved antimicrobial stewardship in both humans and animals. Health Canada has announced how it is taking action to help reduce the use of antimicrobials in animals and enhance veterinary oversight:

By December 2018, **growth promotion claims** will no longer be allowed on the labels of veterinary products containing antimicrobials that are important to human medicine.

By December 2018, a **veterinary prescription** will be required for the purchase of antimicrobials that are important to human medicine. This means that Ontario producers will no longer be able to purchase such products at Livestock Medicines Outlets. Producers will need a veterinary prescription to purchase these products through a veterinarian or pharmacist which means they will need to have a valid veterinary client patient relationship.

Antimicrobials in mixed feed will still be available at feed mills and will also require a prescription. Producers should discuss delivery options with their veterinarian if there are concerns about geographical distance to a veterinary office or obtaining products for timely treatment.

Products containing the following active ingredients will require a prescription (subject to change):

Apramycin
Bacitracin
Erythromycin

Sulphonamides
Tetracycline/Chlortetracycline/Oxytetracycline
Tilmicosin



Lincomycin
Neomycin
Penicillin G
Spectinomycin
Streptomycin/Dihydrostreptomycin

Tiamulin
Tylosin/Tylyalysin
Virginiamycin
Salts/derivatives of any of the listed products

Ionophore products and coccidiostats will NOT be affected by this change.

Recent OAHN podcasts:

- *Special Horseman / Horsewoman series: Debunking Myths about Strangles - Part 1 with Dr. Memo Arroyo*
- *Special Horseman / Horsewoman series: Debunking Myths about Strangles - Part 2 with Dr. Chris Grossenbacher*
- *Special Horseman / Horsewoman series: Debunking Myths about Strangles - Part 3 with Dr. Melissa McKee*
- *Special Horseman / Horsewoman series: Debunking Myths about Strangles - Part 4 with Dr. Jessica Peatling*
- *Equine Proliferative Enteropathy (Lawsonia) Part 1 and 2 with Dr. Nathan Slovis*
- *Equine Proliferative Enteropathy in Ontario with Dr. Memo Arroyo*

Available [here](#)

Since November 2017, approvals and access to low-risk veterinary health products such as “nutraceuticals” have been improved to give producers/owners greater access to a broader range of products for animal health.

In November 2017, importation of antimicrobials important to human medicine for producers'/ owners' own use was no longer permitted. National producer organizations were consulted on products to be exempted, but no products containing antimicrobials were eligible for exemption.

By May 2018, only those with a Canadian Food Inspection Agency Drug Establishment License (DEL) will be able to import active pharmaceutical ingredients. Producers/owners will otherwise no longer be able to import these ingredients to mix on farm.

Beginning with the 2018 sales year, reporting of veterinary antimicrobial sales will be mandatory for manufacturers, importers and compounders of veterinary antimicrobials.

For more information about changes to federal policy and the regulations related to antimicrobial use and resistance, please visit: [Government of Canada's response to antimicrobial resistance](#).

To review OMAFRA's evolving approach to complement federal changes to address antimicrobial resistance, please visit: [Antimicrobial Resistance in Agriculture](#).

Looking Ahead - “Shipping Fever” in Horses

It's that time of year again when Ontario “Snowbirds” head south for the winter with their horses for training and competition. Horses may be on the trailer for an average of 14-24 hours depending on the final destination. Long haul transport has been identified as a risk factor for the development of pneumonia and pleuropneumonia in horses, also called “shipping fever”.

Pneumonia means inflammation in the lung caused by infection with an organism such as a bacterium or virus. Pleuropneumonia is a combination of pleuritis (fluid in the chest cavity due to inflammation of the lining of the lung and chest wall) and pneumonia.

There are many risk factors associated with the development of pneumonia and pleuropneumonia. The stress of transport weakens the horse's immune response to certain bacteria and viruses predisposing it to infection. Tying the horse's head in an elevated position has been shown to impair its ability to clear debris such as hay and dust as well as normal respiratory bacteria from its airway increasing the potential for infection in the lung. As well, the comingling of horses with different health statuses, such as yearlings recently bought from sales barns, can lead to the spread of respiratory viruses such as influenza, equine herpesvirus 1 and 4 and rhinitis virus. These viruses further impair the immune system creating a prime environment in the lung for the development of pneumonia.



Since transport can have a negative effect on health, it is important to closely monitor the horse after it arrives at the destination. Twice daily temperature checks should be performed for the



The National Farm and Facility Level Biosecurity Standard for the Equine Sector is available [here](#):

The *Equestrian Canada Emergency Planning and Action Plans—A Guide for event organizers*

outlines the development of action plans, communications, dealing with extreme weather and the health and welfare of horses at competition and is available [here](#)

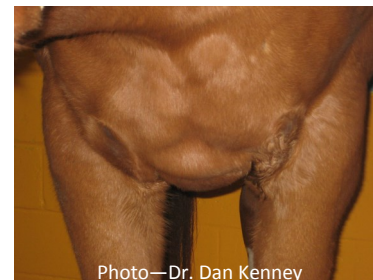
¹Prognosis for return to racing after recovery from infectious pleuropneumonia in thoroughbred racehorses; 70 cases (1984-1989). Seltzer et al. JAVMA 1996; 208:1300.

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week after arrival as a fever will often be the earliest sign of a problem. Other indicators include nasal discharge (often yellow/green), cough, poor appetite, lethargy, exercise intolerance, and chest pain. Signs of chest pain include discomfort along the chest wall noted when pressure is applied by the fingers, girth or harness which is manifested as grunting or defensive behaviours such as ear pinning, biting and/or kicking. Standing with the elbows slightly turned outward, a fast heart rate (>40 beats per minute) and a fast and often shallow respiratory rate (>12 breaths per minute) are other signs of chest pain. Other indicators of a problem include edema which may be felt between the front legs or under the chest in the area where the girth often sits. This edema has the consistency of play-dough and indents easily. This is often a sign that there is fluid in the chest cavity (pleuritis).



Photo—Dr. Dan Kenney

Edema between front legs

Your veterinarian should be called out at the first suspicion of a problem since a mild pneumonia can rapidly develop into a pleuropneumonia. After examining the horse and listening to the chest with a stethoscope, your veterinarian may percuss the chest (tap on the chest listening for dullness which indicates fluid in the chest cavity or compromised lung) and/or ultrasound the chest to look for the presence of fluid, areas of pneumonia and the severity of the inflammation. If fluid is observed, the veterinarian will decide if draining the fluid is necessary based on the amount of fluid and the severity of the disease itself. A sample of the fluid, if there, is sent to a laboratory to look for bacterial growth and the types of cells present in the fluid. As well, with either pneumonia or pleuropneumonia the veterinarian should take a sample of discharge from the trachea (windpipe)



Photo—Dr. Dan Kenney
Drainage of fluid in the chest cavity

either through an endoscope or needle passed through the skin on the neck into the trachea, and send it to the laboratory for bacterial growth and cell determination. Some veterinarians are more comfortable referring the horse to a hospital for these procedures.

While waiting for laboratory results, the veterinarian will treat the horse with antibiotics as well as anti-inflammatories to help control the pain. The antibiotics may be changed when the results of testing are received. If there is a lot of fluid in the chest or if the fluid smells suggesting an anaerobic infection, a chest drain may be put in place and frequent drainage and sometimes lavage of the chest cavity will be performed daily.

In some situations medical treatment is unsuccessful and surgical intervention is needed to remove thick pockets of abnormal fluid or abscesses. A procedure called a thoracotomy is performed, whereby an area in-between the ribs is opened to allow drainage and lavage of the area. Sometimes a rib is partially removed. With appropriate case selection, these horses do very well.

In one study of Thoroughbred racehorses with uncomplicated pleuropneumonia¹, two-thirds of the horses returned to racing. Early intervention and prompt attention to complications of the disease such as thrombosed veins, antimicrobial-associated diarrhea and laminitis lead to the best outcome.

There are some things one can do to reduce the likelihood of pneumonia/pleuropneumonia developing. Ensure your horse is as healthy as possible, and especially well hydrated, prior to transport. Vaccinations for respiratory diseases should be up-to-date. Your veterinarian may also provide a product to support the immune system (called an immunomodulator) closer to the time of travel. Ship horses in box stalls when possible so their heads can be down. If it's standing room only, consider not providing access to hay in the trailer to limit the inhalation of dust etc. if the trip is shorter than 12 hours. Providing hay without access to water during long transport times will only serve to dehydrate and further compromise your horse so if hay is fed, offer water frequently.