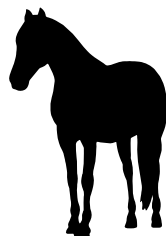




The WeCAHN Equine Network met 13th December 2024 with veterinarians, laboratory diagnosticians, researchers, and provincial veterinarians in attendance, to discuss equine health events of Q3 (July - September) 2024.

H5N1 and equine influenza surveillance



Scientific study: blood testing Mongolian horses for evidence of H5N1 influenza

Damdinjav B, Raveendran S, Mojsiejczuk L, Ankhanbaatar U, Yang J, Sadeyen J-R, et al. Evidence of influenza A(H5N1) spillover infections in horses, Mongolia. *Emerg Infect Dis*. 2025 Jan [date cited]. <https://doi.org/10.3201/eid3101.241266> DOI: 10.3201/eid3101.241266

Overview:

“In surveillance studies during July 2021–October 2023, we collected blood samples from 10 horses from 24 herds, 3 times per year. Fourteen herds were in the Ugiinuur area of Arkangai Province, a region that exhibits substantial wetlands and hosts a large population of migratory birds. The other 10 herds were in the Dashinchilen area of Bulgan Province and Burd soum of Uvurkhangai, a dry area near the Gobi Desert with low density of wild birds (Figures 1, 2).

Results:

- 9 samples were positive [for H5], 8 doubtful, and 980 negative.
- Two samples were serum neutralization (SN) antibody positive.”

Important to note that the significance of this study to Canadian horses is unclear as nothing similar has been reported here to date.



Case report: Mare seizing post-sedation

History:

- Mare presented 1 month history Right Fore lameness, non-responsive to treatment for hoof abscess. Suspicion of bone fragment in foot. Treated with oral sedative drug to keep quieter on stall rest.
- Routine blood work on arrival to clinic normal.
- Mare mildly reactive and anxious for exam so gave an additional injectable sedative, 30 min later noted mare down in stall and seizing. On video realize she had laid down quietly, got up and then collapsed, then started to seizure. She repeatedly thrashed and banged her head.
- She was then treated with a variety of supportive measures and medications to reduce seizing, but nothing was successful and she continued to seizure and violently bang her head. The decision was made to humanely euthanize her.

Post-mortem and microscopic tissue exam:

Post-mortem exam showed mild areas of hemorrhage in the brain, likely reflecting damage from the mare seizing and hitting her head. No cause for the initial collapse or seizures was identified.

Discussion: collapse following sedation

COMMENT 1: I would wonder about a drop in blood pressure causing collapse. We had a similar case about a month ago in a 27-year-old Arab cross receiving the same oral sedative longer-term. He was pacing and anxious and so we administered another injectable (faster-acting) sedative. About 15 minutes later he laid down, mildly seized, and then fortunately was fine.

COMMENT 2: Low blood pressure could definitely cause the horse to go down, and a variety of combinations of sedatives can cause low blood pressure.

We could also discuss the choice to use these oral sedatives. These drugs can have rebound effects meaning we see side effects some time after they are administered. We see lots of cases of bad reactions to these human anti-psychotics.

COMMENT 3: We frequently see cases of low blood pressure associated with these drugs.

By themselves they can result in low blood pressure. They are especially problematic when combined with other sedatives or anesthetics.

COMMENT 4: We also need to discuss the ethics of using these drugs. Their effects (e.g. involuntary movements) have been well known for a long time.

Practitioners are under lots of pressure to prescribe these drugs, and as a group we need to discuss the ethics of their use.

Strangles

Strangles was reported **Never** (n=1) to **Rarely** (n=2) to **Very frequently** (n=1) in upper respiratory disease and **Very frequently** by one practitioner associated with **guttural pouch disease**.

Discussion: factors contributing to incidence of cases

QUESTION: Thoughts on why we are still seeing so many cases?

ANSWER 1: Still seeing new additions to barn not being isolated adequately on arrival.

- Biosecurity generally is a problem when we see cases.
- That said, we just ran across a barn requiring a negative PCR test for *Strep. equi equi* (the bacteria causing strangles) prior to arrival. So that's progress.

ANSWER 2: we are still seeing some odd cases, e.g. from unilateral nasal discharge.

Generally, the more we look for it, the more we find it.

Update from WeCAHN:

A podcast interviewing Dr. Ashley Whitehead and targeting horse owners, outlining the clinical signs, diagnosis, management and control of strangles in western Canada has just been released.

LINK: <https://wecahn.podbean.com/e/wecahn-equine-health-update-strangles-risk/>

Meeting takeaways

1. Evidence of H5N1 infections in horses in Mongolia has been recently reported. Significance here in Canada is unclear as nothing similar has been reported.
2. Problems with use of oral sedatives in pleasure and performance horses: clients may seek veterinary prescriptions for some of these products. However their use is associated with a variety of extremely problematic physical responses including low blood pressure and rebound effects which may be exacerbated by their combination, knowingly or unknowingly, with other medications or anesthetics.
3. Update from WeCAHN: A podcast interviewing Dr. Ashley Whitehead (UCVM) and targeting horse owners, outlining the clinical signs, diagnosis, management and control of strangles in western Canada has just been released. LINK: <https://wecahn.podbean.com/e/wecahn-equine-health-update-strangles-risk/>



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