Western Canadian Animal Health Network

WECAHN EQUINE NETWORK OWNER REPORT

JULY - SEPTEMBER 2025

The WeCAHN Equine Network held a quarterly videoconference meeting on December 4th, 2025. The network members discussed the animal health events from July to September. Veterinary practitioners, diagnosticians, veterinary college faculty, researchers, and industry representatives attended the meeting.

1) Overview

Data sources in this report include:

1. Clinical Impressions Surveys completed by network practitioners.
2. Data shared by western veterinary diagnostic laboratories: Manitoba Veterinary Diagnostic Services (VDS) laboratory, Prairie Diagnostic Services (PDS) laboratory, and University of Calgary College of Veterinary Medicine Diagnostic Services Unit (UCVM DSU).
3. Scan: equine surveillance reported by other sources or networks.

2) Interesting Cases

Clinical case: Stallion with low sperm production

- 17-year-old Quarter Horse stopped producing sperm after successful breeding in previous years.
- Physical exam and hormonal testing were largely normal and the stallion remained healthy and in competition, but ejaculate analysis confirmed very low sperm presence.
- Behavioral issues included dismounting before ejaculation.
- Ultrasound and urethroscopy (scoping of the urinary tract) revealed cystic structures in reproductive organs including epididymis, ampulla, and urethra likely causing discomfort and sperm retention.
- Possible congenital condition (present at birth) worsening with age.
- Referral for advanced reproductive techniques including ICSI (Intracytoplasmic Sperm Injection) planned.

Clinical case: Gelding with lymphsarcoma

- 23-year-old Quarter Horse gelding presented with chronic, unexplained weight loss, lethargy, and fever, similar to previous year.
- Two non-painful scrotal masses detected, biopsy of the masses indicated lymphosarcoma, a type of multi-organ cancer; lab tests showed kidney disease.
- Post-mortem revealed multiple organ tumors including in the kidneys, ascites (accumulation of fluid in the abdomen), and organ adhesions.
- Lymphosarcoma may cause chronic unexplained illness and weight loss in horses.

Laboratory case: Chronic kidney disease in Lusitano stallion

- 8-year-old Lusitano stallion imported from Portugal when young. Presented with weight loss, poor appetite, and abnormal bloodwork.
- Ultrasound showed multiple kidney stones and ureteral obstruction causing severe renal damage. No improvement observed despite extensive supportive treatment, quality of life was compromised and owners elected euthanasia.
- Necropsy confirmed multiple kidney stones, extensive scar tissue in the kidneys, and blockage of one ureter with urine-filled kidney. An incidental finding was granulomas (clusters of inflammation tissue) in the liver.
- PCR testing of liver granulomas identified *Echinococcus multilocularis*, a type of tapeworm that can cause severe disease in humans but usually not significant in horses.
- Some European horse breeds may be predisposed to kidney disease, with water quality or diet composition likely contributing to severe cases.

Laboratory case: pyrrolizidine alkaloid (PA) toxicosis

- 8-year-old Thoroughbred gelding exposed to pasture with toxic plants showed depression, swollen legs oozing liquid, jaundice (yellow tinged membranes), and sun burns.
- Rapid deterioration despite comprehensive treatment over 5 days led to euthanasia.
- Histopathology confirmed severe liver damage and secondary kidney damage likely caused by pyrrolizidine alkaloids present in alsike clover, yarrow, or tansy ragwort.
- Manitoba veterinarians report several PA toxicity cases yearly; early recognition and pasture management are critical.

3) Syndromic Surveillance

Important information:

Clinical impressions surveys

Never; **Rarely** = 1-2 times per 3 months; **Commonly** = 1-2 times per month; **Very frequently** = 3+ times per month.

Laboratory data

Control charts are a simple way of presenting data collected over time (e.g., increasing or decreasing detection frequencies). Each data point reflects the number of positive samples or cases reported by a diagnostic laboratory over 3 months (quarter of a year). The upper and lower horizontal lines are called control limits. Individual points lying outside the control limits suggest a need for investigation to determine whether/how significant a signal they represent.

Infectious diseases

- Influenza was reported **never** to **commonly**, with trends stable to increasing in foals.
- Potomac horse fever was reported **never** to **commonly**, and decreasing to stable in weanlings.
- Strangles (*Streptococcus equi* subsp. *equi*) was reported **never** to **commonly**, and stable to increasing in pleasure horses.
- Equine herpesvirus, EPM, and salmonellosis were reported **never** to **rarely**, and stable.
- West Nile virus was reported **never** to **very frequently**, and stable to increasing in weanlings.
- EEE, EVA, and WEE were reported **never**, and stable.

Cardiovascular disease

- Cardiovascular disease was reported **rarely**, with murmurs **rarely** to **commonly**. Other heart conditions were never to rarely reported, and trends were stable.
- Laboratory: One case of congestive heart failure was diagnosed at UCVM DSU; no cases at VDS or PDS.

Congenital disease (present at birth)

- Congenital conditions were reported **never** to **commonly**, including hernias, angular/flexural deformities, prematurity, and hypothyroidism. Trends were stable.
- Genetic conditions (e.g., lethal white foal syndrome) were **never** reported.

Dermatological disease

- Skin conditions were reported **rarely** to **very frequently**. Allergic dermatitis, bacterial infections (*Staphylococcus* spp.), and external parasites were reported **never** to **commonly**, and stable to decreasing.
- Laboratory: tumors of the skin included mast cell tumor, melanocytoma, sarcoids, and squamous cell carcinoma (approaching upper control limits). Bacteria such as *E. coli*, and *Bacteroides* spp. were within or near control limits.

Digestive system disease

- Digestive issues were reported **commonly** to **very frequently**, including dental disease, gastric ulcers, colic, diarrhea in foals and adults, and gastrointestinal parasites (strongyles, coccidia). Trends were stable to increasing.
- Laboratory: Cases included colitis, enteritis, gastric ulcer with colon volvulus, liver granulomas, and bacterial infections with *Clostridium perfringens, C. difficile, Bacillus cereus*, and others. Most pathogens were within control limits.

Multisystemic disease

- Multisystemic conditions were reported **never** to commonly, including fever of unknown origin, coagulation disorders, immune-mediated disease, septicemia, and neoplasia. Trends were stable.
- Laboratory: *Anaplasma phagocytophilum* was detected at PDS and VDS. Tumors included thyroid C-cell carcinoma and other carcinomas at UCVM DSU.

Musculoskeletal disease

- Musculoskeletal disease was reported very frequently.
- Laboratory: Fractures were diagnosed at all three labs. Additional diagnoses included Wobbler syndrome, joint luxation, cartilage degeneration, and muscle tumors.

Neurological disease

- Neurologic disease was reported rarely to commonly. Conditions included Wobbler's syndrome, cauda equina, head shaking, shivers, and infectious causes (EHV, EPM). Trends were stable.
- Laboratory: No additional specific findings reported.

Reproductive disease

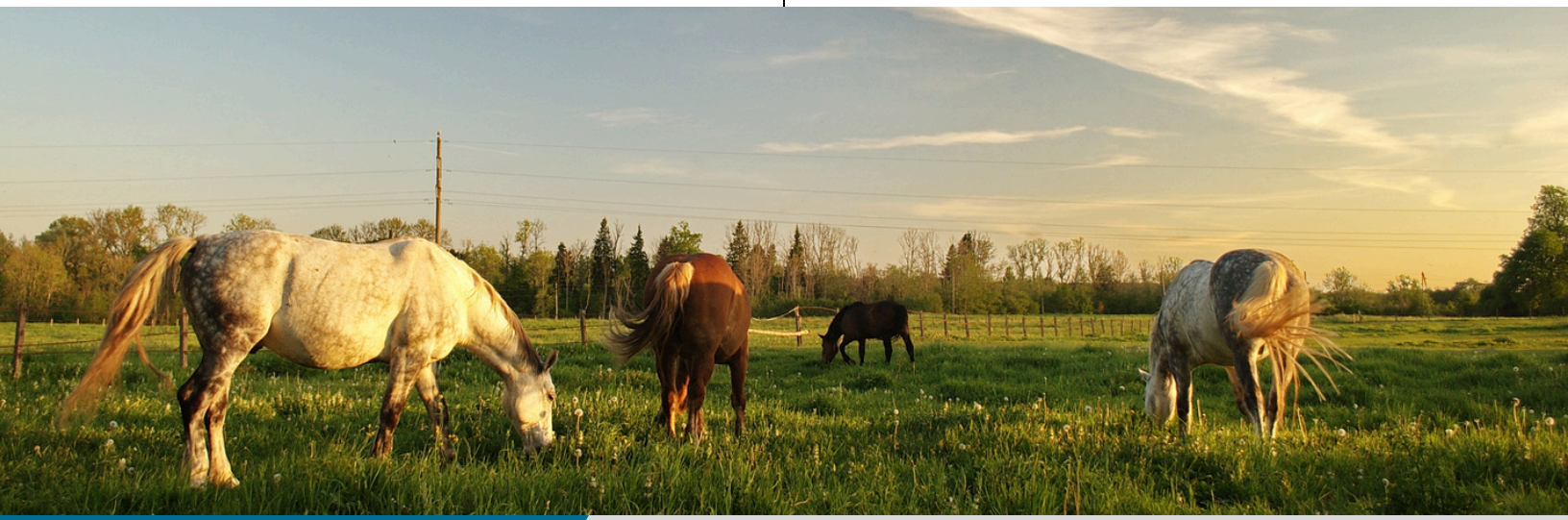
- Reproductive problems were reported commonly, including abortions, dystocia, uterine and ovarian disease, and male reproductive disease. Trends were stable.
- Laboratory: abortion of unknown cause and endometritis were each diagnosed once. *Arcanobacterium hippocoleae* was cultured in mares, and bacterial prostatitis was diagnosed in a stallion.

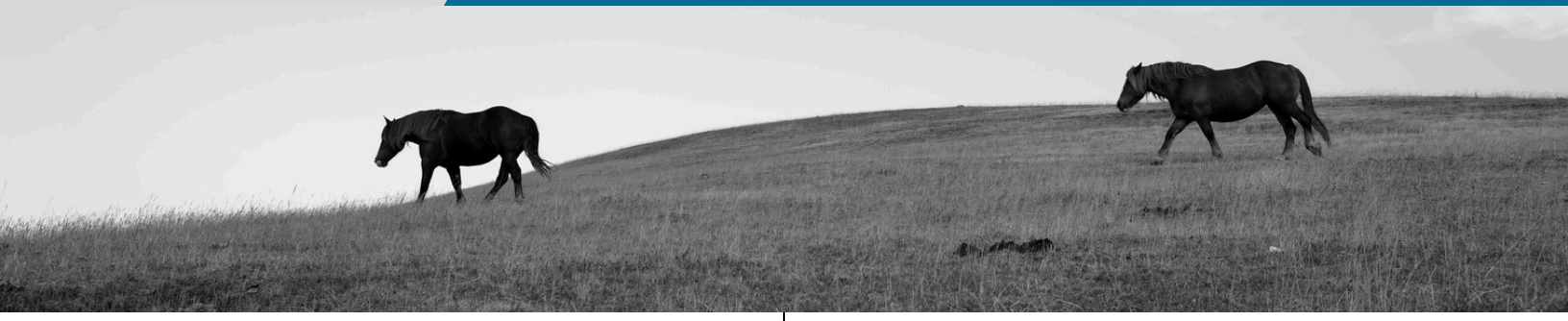
Respiratory disease

- Respiratory disease was reported rarely to very frequently. Upper respiratory infections, strangles, lower respiratory bacterial infections, asthma, and exercise-induced pulmonary hemorrhage were reported. Trends were stable to increasing in performance horses.
- Laboratory: EHV-4 detected at PDS; Strangles was detected at all labs; other cultures included Klebsiella pneumoniae, and *Bordetella bronchiseptica*. Influenza A was not detected.

Urinary system disease

- Urinary disease was reported **never** to commonly, including acute and chronic renal failure and urolithiasis (kidney stones). Trends were stable.
- Laboratory: Chronic kidney disease and kidney inflammation diagnosed at UCVM DSU.





4) Scan of emerging and external disease alerts

i) Canadian Animal Health Surveillance System (CAHSS) equine disease dashboard September 1st to December 3rd (CAHSS).

- Equine Infectious Anemia (EIA) occurred in 25 horses, all in Alberta. Post-mortem testing is limited, making research and surveillance challenging.
- Eastern Equine Encephalitis (EEE) was detected in 3 horses in Ontario and 1 in Quebec.
- West Nile Virus (WNV) affected 42 horses nationally, mainly in Saskatchewan (14) and Alberta (12).
- Human WNV illness is mostly neurological and present in ON (Health Canada). No approved human vaccines in Canada.

ii) Equine Disease Communication Centre (EDCC). Western Canada September 1 to December 3rd.

- **Strangles:** British Columbia (Dec 3, Roberts Creek), Alberta (Nov 25, Lacombe County).
- **EHV neurologic cases:** Alberta (Nov 14, Red Deer County; Nov 26, Rocky View County). Cases are unrelated to each other or to Texas outbreak. Older horses are at higher risk for neurological disease. Alberta cases involved older and middle-aged horses.

iii) Equine herpesvirus myeloencephalopathy (EHM) outbreak. (Link to EDCC update)

- U.S. EHV-1 outbreak traced to the Women's Professional Rodeo Association World Finals in Texas, Nov. 5–9, with 46 cases across 7 states. No Canadian horses affected.

iv) Vesicular Stomatitis Virus (VSV) in the US. United States Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS).

- One case confirmed in Arizona; total of four infected premises, all New Jersey serotype.
- Previous U.S. outbreak (2023) affected 319 premises across California, Nevada, and Texas over several months (USDA-APHIS).

v) Highly Pathogenic Avian Influenza (HPAI) situation.

- Europe reports unprecedented HPAI in wild birds, mostly H5N1, suggesting potential risk to North American (EFSA).
- Canada: 23% of wild bird detections in prairie provinces; BC reported 61 positive wild birds (Oct–Nov). An early start of HPAI in domestic poultry affected 66 flocks since Sept 9, mostly in BC and AB.
- No HPAI in Canadian cattle; all raw milk tested negative.
- USA: One new dairy herd infection in California; 43 commercial and 54 small poultry flocks affected across four flyways.
- Humans: First global H5N5 human case in Washington State, with fatal infection and reported contact with infected backyard flock. Total 71 human H5 cases in USA, mostly linked to exposure to infected poultry or cattle (LINK).
- Research confirms interspecies HPAI transmission: wild pigs in Alberta exposed to H5N1, dairy goats develop severe mastitis and transmit to suckling kids, and sheep can be seropositive after exposure to infected wild birds.
- No confirmed equine HPAI cases in North America to date. Concerns exist about HPAI mixing with circulating equine influenza viruses.

Key take-away messages for horse owners

- Horses showing unexplained or widespread health problems, such as reproductive issues or ongoing weight loss, should be checked promptly by a veterinarian and may need advanced testing or referral.
- Most horse diseases remained stable, but increases in respiratory infections, skin problems, and certain bacterial infections highlight the need for ongoing monitoring and early diagnosis.
- Strangles, neurologic equine herpesvirus, and West Nile virus, continue to occur in Western Canada, often in specific regions or seasons. Good biosecurity, mosquito control, careful vaccination planning, and prompt reporting are especially important for horses that travel.
- Highly pathogenic avian influenza (HPAI) is active in wild birds, poultry, and some livestock, with occasional spread to mammals and humans. Veterinarians and horse owners should remain aware and watch for unusual signs, even though no Canadian horses have tested positive

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