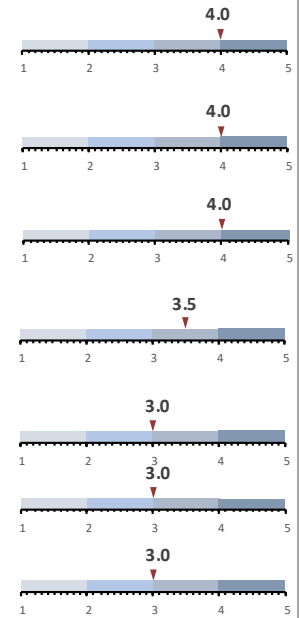


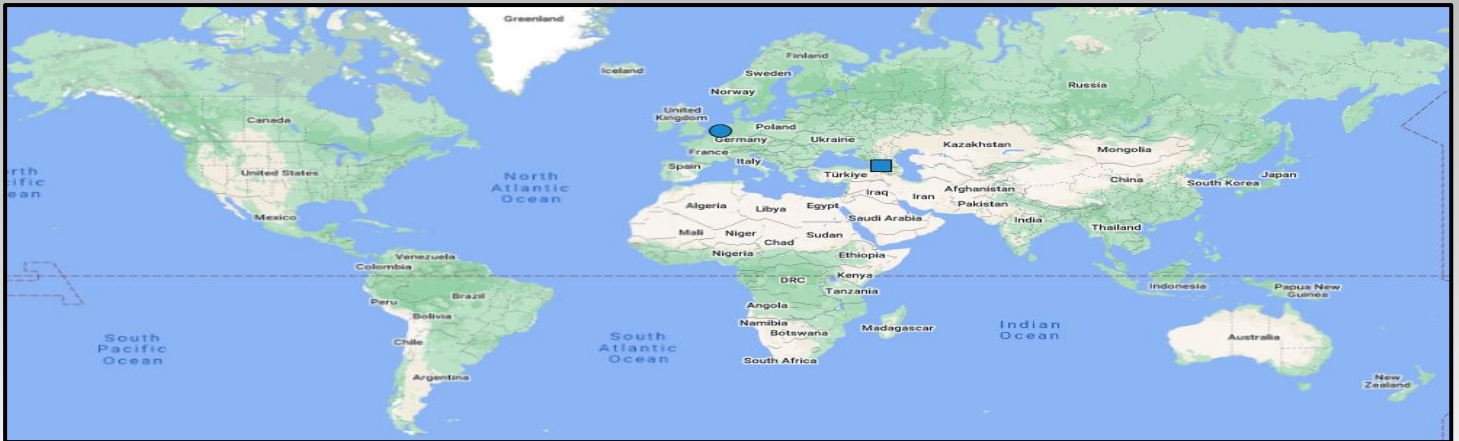
SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥3.0)

Highly Pathogenic Avian Influenza

- ◆ In the **USA**, 1 in 5 retail milk samples have tested positive for HPAI viral fragments, with a greater proportion of positive results coming from milk in areas with infected herds; however, preliminary FDA egg inoculation tests show no live/infectious virus, indicating that pasteurization is effective in inactivating HPAI virus - additional analysis is underway [Read More](#)
- ◆ Genetic sequencing of the HPAI H5N1 virus in **USA** dairy cattle indicates that the outbreak likely started months earlier (in late 2023) [Read More](#)
- ◆ The outbreak in dairy cattle is thought to be due to a single spillover event from birds to cattle; the genetic sequences from the human case (**Texas**) are slightly different from the cattle sequences, suggesting an unsampled animal population may be the source [Read More](#)
- ◆ **Colorado** has confirmed its first detection of influenza A H5N1 in dairy cattle, bringing the total number of affected states to 9; a total of 34 dairy herds have reported cases of influenza A H5N1 across 9 states: **Colorado(1), North Carolina(1), Ohio(1), South Dakota(1), Idaho(2), Kansas(4), Michigan(6), New Mexico(6), and Texas(12)** [Read More](#)
- ◆ The USDA has issued a federal order requiring reporting of HPAI in livestock and pre-movement testing for dairy cattle [Read More](#)
- ◆ Four additional cats have tested positive for HPAI H5N1 in the **USA**; three of the cats were found at two dairy farms in **New Mexico** and one in **Ohio** [Read More](#)
- ◆ Over the last week, the **USA** has reported outbreaks of HPAI in commercial poultry in: **Michigan(2)**; and in WOAH Non-poultry in: **Idaho(1)** [Read More](#)



NEW EVENTS: (events rated > 2)



Foot and Mouth Disease in Georgia

Pathogen: virus; **Transmission:** direct contact, fomite, aerosol; **Species affected in event:** cattle

① A preliminary diagnosis of FMD has been reported in animals in the villages in the Znaur district of South Ossetia, Georgia. The FMD serotype has not been identified/reported. Measures have been taken to contain and prevent the spread of infection. Disinfection barriers have been installed in farms where clinical signs of the disease have been identified and vaccination against FMD disease has begun. [Read More](#)

Avg. Rating	2.7
No. of Signal	1
No. of Ratings	3

Q Fever in the Netherlands

Pathogen: bacteria; **Transmission:** direct contact, fomite, aerosol, vector; **Species affected in event:** sheep

① Q fever has been reported on a farm in Gelderland, a re-emergence after ~eight years. The Netherlands last reported Q fever in 2016. According to the ministry, the bacteria were identified in the sheep farm's milk tank during regular checks and are likely to have come from "one or two" of the 25 young animals that had lambed but have not yet been vaccinated. [Read More](#)

Avg. Rating	2.3
No. of Signal	1
No. of Ratings	3

CONTINUED EVENTS: (events rated ≥ 2.4)

Highly Pathogenic Avian Influenza in North America No. of Signals: 30 No. of weeks in report: 113 Avg. Rating: 1.3 - 4.0

- [Canada](#) has not reported any outbreaks of HPAI in domestic poultry over the last week
- Over the last week, the [USA](#) has reported outbreaks of HPAI in commercial poultry in: Michigan(2); and in WOA Non-poultry in: Idaho(1)
- In the [USA](#), Colorado has confirmed its first detection of influenza A H5N1 in dairy cattle, bringing the total number of affected states to 9; a total of 34 dairy herds have reported cases of influenza A H5N1 across 9 states: Colorado(1), North Carolina(1), Ohio(1), South Dakota(1), Idaho(2), Kansas(4), Michigan(6), New Mexico(6), and Texas(12)
- The USDA has issued a [federal order](#) requiring reporting of HPAI in livestock and pre-movement testing for dairy cattle
- [Cow-to-cow](#) transmission of influenza A among dairy cattle has been confirmed by the USDA, anything that comes into contact with unpasteurized milk may spread the virus
- Genetic sequencing of the influenza A H5N1 virus in [USA dairy cattle](#) indicates that the outbreak likely started months earlier (in late 2023)
- The outbreak in dairy cattle is thought to be due to a single spillover event from birds to cattle; the genetic sequences from the human case (Texas) are slightly different from the cattle sequences, suggesting an [unsampled animal population may be the source](#)
- In the USA, [1 in 5 retail milk samples](#) have tested positive for HPAI viral fragments, with a greater proportion of positive results coming from milk in areas with infected herds; however, preliminary FDA egg inoculation tests show no live/infectious virus, indicating that pasteurization is effective in inactivating HPAI virus - additional analysis is underway
- [Four additional cats](#) have tested positive for HPAI H5N1 in the USA; three of the cats were found at two dairy farms in New Mexico and one in Ohio
- The [CDC](#) is monitoring influenza data to better understand the influenza A H5N1 situation, with current surveillance showing no indicators of unusual influenza activity in people; however, there have been reports of [ill dairy workers](#) who were never tested for H5N1
- USDA food safety officials are [testing beef](#) (including ground beef) from grocery stores in states where dairy cattle have tested positive, for the presence of influenza A H5N1
- [Colombia](#) has restricted the import of fresh/frozen beef and beef products coming from US states where dairy cows have tested positive for influenza A H5N1; it is the first country to officially limit trade in beef due to influenza A in dairy cattle

Theileriosis in the USA No. of Signals: 01 No. of weeks in report: 04 Avg. Rating: 2.5

- *Theileria orientalis* (ikedai) has been detected in several counties in [Missouri](#), making it the ninth state to report the parasite; the eight other states that have reported Theileria are: Virginia, West Virginia, Tennessee, North Carolina, Pennsylvania, Kentucky, Kansas, and New York

Highly Pathogenic Avian Influenza in Europe No. of Signals: 06 No. of weeks in report: 175 Avg. Rating: 2.0 - 2.3

- [Hungary](#) and [Bulgaria](#) have reported HPAI in domestic birds
- [Slovenia](#) has reported HPAI H5N1 in wild birds
- [France](#) has lowered their avian influenza risk level to “negligible” throughout the country
- The [UK](#) is not currently testing cows for influenza A, and does not consider cattle to be at risk due to the current very low levels of HPAI H5N1 in wild birds and poultry in the country
- A summary of the overall HPAI situation in Europe is available [here](#)

Highly Pathogenic Avian Influenza in Asia No. of Signals: 04 No. of weeks in report: 138 Avg. Rating: 2.0

- [India](#) has reported HPAI H5N1 in a state run poultry farm in Ranchi, Jharkhand; doctors and farm staff associated with the outbreak have all [tested negative](#)

Highly Pathogenic Avian Influenza in South America No. of Signals: 01 No. of weeks in report: 68 Avg. Rating: 2.0

- [Brazil](#) has reported additional cases of HPAI H5N1 in wild birds (tern)

SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

Foot and Mouth Disease

- ◆ Re-emergence of foot-and-mouth disease in the Republic of Korea caused by the O/ME-SA/Ind-2001e lineage [Read More](#)

Influenza

- ◆ Pre-print: Detection of hemagglutinin H5 influenza A virus sequence in municipal wastewater solids at wastewater treatment plants with increases in influenza A in spring, 2024 [Read More](#)
- ◆ Highly Pathogenic Avian Influenza A(H5N1) Clade 2.3.4.4b Virus Infection in Domestic Dairy Cattle and Cats, United States, 20 24 [Read More](#)
- ◆ UKHSA – Preliminary outbreak assessment for avian influenza A H5N1 in domestic livestock in the USA [Read More](#)
- ◆ Joint FAO/WHO/WOAH preliminary assessment of recent influenza A(H5N1) viruses [Read More](#)
- ◆ Evolution and Antigenic Differentiation of Avian Influenza A(H7N9) Virus, China [Read More](#)
- ◆ Evolution of H7N9 highly pathogenic avian influenza virus in the context of vaccination [Read More](#)
- ◆ Evidence of Reverse Zoonotic Transmission of Human Seasonal Influenza A Virus (H1N1, H3N2) Among Cats [Read More](#)
- ◆ Bat-borne H9N2 influenza virus evades MxA restriction and exhibits efficient replication and transmission in ferrets [Read More](#)
- ◆ Detection of Influenza D Antibodies in Dogs, Apulia Region, Italy, 2016 and 2023 [Read More](#)
- ◆ Avian Influenza A (H5N1) Outbreak 2024 in Cambodia: Worries Over the Possible Spread of the Virus to Other Asian Nations and the Strategic Outlook for its Control [Read More](#)
- ◆ Surveillance and Genetic Analysis of Low-Pathogenicity Avian Influenza Viruses Isolated from Feces of Wild Birds in Mongolia, 2021 to 2023 [Read More](#)
- ◆ One Health communication channels: a qualitative case study of swine influenza in Canada in 2020 [Read More](#)

Mpox

- ◆ Monkeypox virus genomic accordion strategies [Read More](#)

Rabies

- ◆ Dogs on the move: Estimating the risk of rabies in imported dogs in the United States, 2015–2022 [Read More](#)
- ◆ Deforestation and Bovine Rabies Outbreaks in Costa Rica, 1985–2020 [Read More](#)

Vectors and Vector-borne Diseases

- ◆ Detection of *Brucella* in *Dermacentor* Ticks of Wild Boar with Brucellosis [Read More](#)
- ◆ Evidence-practice gap analysis in the role of tick in brucellosis transmission: a scoping review [Read More](#)
- ◆ Crimean-Congo Hemorrhagic Fever Virus in Ticks Collected from Cattle, Corsica, France, 2023 [Read More](#)
- ◆ Case Series of Jamestown Canyon Virus Infections with Neurologic Outcomes, Canada, 2011–2016 [Read More](#)
- ◆ Molecular Epidemiology of Mayaro Virus among Febrile Patients, Roraima State, Brazil, 2018–2021 [Read More](#)

Other

- ◆ Coccidioidomycosis-Related Hospital Visits, Texas, USA, 2016–2021 [Read More](#)
- ◆ France - Weekly Bulletin for International Animal Health Surveillance 30/04/2024 [Read More](#)
- ◆ ECDC - Communicable disease threats report, 21 - 27 April 2024, week 17 [Read More](#)

Disclaimer

This intelligence report is intended to provide information to risk managers about emerging and zoonotic disease events that could pose a threat to Canada. It is based on information signals acquired and selected from twenty-one distinct disease surveillance sources via the Knowledge Integration using Web-based Intelligence (KIWI) tool hosted on the Canadian Network for Public Health Intelligence (CNPHI) informatics platform. The report is based on the activities of the CEZD Community of Practice and subject to change based on evolving user needs.