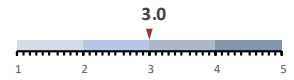


SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥3.0)

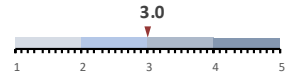
Highly Pathogenic Avian Influenza

- ◆ Pre-print: Virome Sequencing Identifies H5N1 Avian Influenza in Wastewater from Nine Cities
 - HPAI H5N1 has been detected in wastewater in nine **Texas** cities, over a two-month period from March 4th to April 25th, 2024
 - 19 of 23 monitored sites had at least one detection event, and the H5N1 serotype became dominant over seasonal influenza
 - the increase in H5N1 sequences has not correlated with human influenza-related hospitalizations, which have continued to decline during the spring
 - the exact cause of the signal is unclear/unknown, but genomic information suggests avian or bovine origin
- ◆ In the **USA**, a total of 42 dairy herds have reported cases of influenza A H5N1 across 9 states: **North Carolina(1), Ohio(1), South Dakota(1), Colorado(2), Idaho(3), Kansas(4), New Mexico(8), Michigan(10), and Texas(12)**

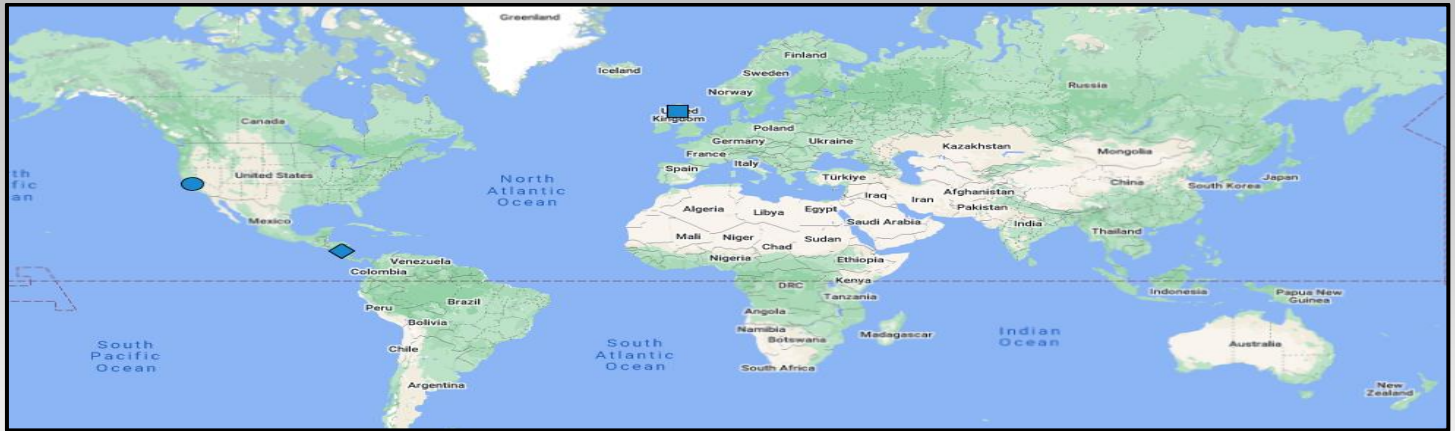
[Read More](#)



[Read More](#)



NEW EVENTS: (events rated > 2)



Classical Bovine Spongiform Encephalopathy in Scotland

Pathogen: prion; **Transmission:** direct contact, consumption of contaminated feed; **Species affected in event:** cattle

① Scotland has confirmed a case of classical bovine spongiform encephalopathy at a farm in the southwest of the country, the first British case of the disease in over two years. Movement restrictions have been imposed at impacted premises and on animals that have been in contact with the case in Ayrshire. Further investigations to identify the origin of the disease are ongoing. [Read More](#)

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

Chronic Wasting Disease in California

Pathogen: prion; **Transmission:** direct contact; **Species affected in event:** deer

① Chronic wasting disease (CWD) has been detected for the first time in California. Positive results from samples collected from two deer, one in Madera County and the other in Inyo County, were confirmed on May 6, 2024. The deer in Madera County was found dead due to unknown causes and the Inyo County deer was found dead after a vehicle collision. California has been monitoring its elk and deer populations for CWD through lymph node sampling and testing since 2000. [Read More](#)

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

New World Screwworm in Nicaragua

Pathogen: parasite; **Transmission:** obligatory wound parasites; **Species affected in event:** cattle, horses, pigs, dogs

① Nicaragua has confirmed 13 cases of New World Screwworm, a pest for which it declared an animal health alert since the beginning of April. The 13 cases have been detected in cattle, horses, pigs, and dogs. However, the data has not been updated since April 7, 2024. Meanwhile, Costa Rica and Panama have reported thousands of infected animals as well as cases in humans. [Read More](#)

Avg. Rating	2.2
No. of Signal	1
No. of Ratings	6

CONTINUED EVENTS: (events rated ≥ 2.4)

Highly Pathogenic Avian Influenza in North America

No. of Signals: 17

No. of weeks in report: 115

Avg. Rating: 1.4 - 3.0

- [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 WOAHP poultry in: Idaho(1); in WOAHP Non-poultry in: Idaho(2) and Michigan(1); and in a live bird market in: California(1)
- In the [USA](#), a total of 42 dairy herds have reported cases of influenza A H5N1 across 9 states: North Carolina(1), Ohio(1), South Dakota(1), Colorado(2), Idaho(3), Kansas(4), New Mexico(8), Michigan(10), and Texas(12)
- The USA has announced [financial support](#) for farms to test for and prevent the spread of HPAI in dairy cattle; up to \$28,000 will be available per premises over the next four months to support specific steps to prevent the spread of HPAI in dairy cattle
- The [CDC](#) has asked that jurisdictions make PPE available to workers on dairy farms, poultry farms, and in slaughterhouses, prioritizing distribution to farms with confirmed positive cows
- In [Colorado](#), ~70 farm workers, from the initial affected premises reported last week, are being monitored for signs of influenza A and none have had symptoms
- The [FDA](#) announced that all final egg inoculation tests associated with the retail dairy sampling study have been completed and were also found to be negative for viable HPAI H5N1 virus
- There have been additional reports of [HPAI H5N1 in cats](#), some associated with infected farms, and one domestic cat in Montana that may have had contact with a dead skunk

Highly Pathogenic Avian Influenza in Asia

No. of Signals: 02

No. of weeks in report: 140

Avg. Rating: 2.0

- [India](#) has reported an additional outbreak of HPAI H5N1 in poultry in Kerala
- [Japan](#) has reported HPAI H5N1 in domestic poultry in Tiba

SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

Influenza

- ◆ CEZD: Rapid Literature Review - Influenza A and Dairy Cattle [Read More](#)
- ◆ Pre-print: Virome Sequencing Identifies H5N1 Avian Influenza in Wastewater from Nine Cities [Read More](#)
- ◆ WOA/FAO: Updated OFFLU Statement on high pathogenicity avian influenza in dairy cows [Read More](#)
- ◆ Pre-print: Avian Influenza Virus Infections in Felines: A Systematic Review of Two Decades of Literature [Read More](#)
- ◆ Pigs are highly susceptible to but do not transmit mink-derived highly pathogenic avian influenza virus H5N1 clade 2.3.4.4b [Read More](#)
- ◆ Blowflies are potential vector for avian influenza virus at enzootic area in Japan [Read More](#)
- ◆ Outbreak of Highly Pathogenic Avian Influenza A(H5N1) Virus in Seals, St. Lawrence Estuary, Quebec, Canada [Read More](#)
- ◆ Novel Avian Influenza A(H5N6) in Wild Birds, South Korea, 2023 [Read More](#)
- ◆ H6N2 reassortant avian influenza virus isolate in wild birds in Jiangxi Province, China [Read More](#)
- ◆ Pre-print: Evaluating the epizootic and zoonotic threat of an H7N9 low pathogenicity avian influenza virus (LPAIV) variant associated with enhanced pathogenicity in turkeys [Read More](#)
- ◆ Iceland: an underestimated hub for the spread of high-pathogenicity avian influenza viruses in the North Atlantic [Read More](#)

Mpox

- ◆ Experimental Inoculation of Pigs with Monkeypox Virus Results in Productive Infection and Transmission to Sentinels [Read More](#)

Vectors and Vector-borne Diseases

- ◆ UKHSA: 7 May 2024: risk assessment for entry of bluetongue virus (BTV-3 and BTV-8) into Great Britain [Read More](#)
- ◆ PAHO: Guidelines for the Detection and Surveillance of Emerging Arboviruses in the Context of the Circulation of Other Arboviruses [Read More](#)
- ◆ PAHO: Situation Report No 16 - Dengue Epidemiological Situation in the Region of the Americas - Epidemiological Week 16, 2024 [Read More](#)
- ◆ CDC: *Notes from the Field*: Increases in Imported Malaria Cases — Three Southern U.S. Border Jurisdictions, 2023 [Read More](#)

Other

- ◆ Infection and transmission of henipavirus in animals [Read More](#)
- ◆ Prevalence of *Baylisascaris procyonis* in wild rodents in central Georgia, USA [Read More](#)
- ◆ The first human case report of molecularly confirmed co-infection of *Brucella melitensis* and *Coxiella burnetii*: A case report [Read More](#)
- ◆ Porcine kobuvirus enhances porcine epidemic diarrhea virus pathogenicity and alters the number of intestinal lymphocytes in piglets [Read More](#)
- ◆ France - Weekly Bulletin for International Animal Health Surveillance 14/05/2024 [Read More](#)
- ◆ ECDC - Communicable disease threats report, 5-11 May 2024, week 19 [Read More](#)
- ◆ SHIC Domestic Disease Monitoring Report - May 2024 [Read More](#)
- ◆ SHIC Global Disease Monitoring Report - May 2024 [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.