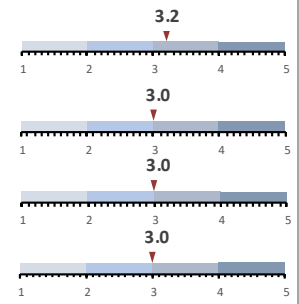


SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥3.0)

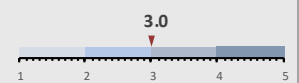
Highly Pathogenic Avian Influenza

- As of May 14, 2024, lab testing of 142 retail milk samples from a cross **Canada** has not detected HPAI fragments in any samples (all have tested negative) [Read More](#)
- Canada** has reported HPAI H5N5 (2.3.4.4b) in a wild bird in **Quebec**; this is the first detection of HPAI H5N5 outside of the Atlantic provinces [Read More](#)
- In the **USA**, a total of 51 dairy herds have reported cases of influenza A H5N1 across 9 states: **North Carolina(1), Ohio(1), South Dakota(1), Colorado(2), Kansas(4), Idaho(6), New Mexico(8), Texas(13), and Michigan(15)** [Read More](#)
- Michigan** has reported 3 additional influenza A affected dairy farms on their state website, bringing the **Michigan** total to 18 [Read More](#)



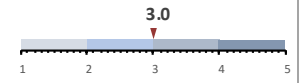
Influenza A

- China** has reported another human infection of avian influenza A(H5N6) in a person from **Fujian Sheng**; no other sources have confirmed or reported this incident [Read More](#)



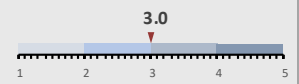
New World Screwworm

- Nicaragua** has confirmed at least 55 cases of New World Screwworm (41 cases in cattle, 8 in pigs, 4 in horses, and 2 in dogs) since it declared an animal health alert in early April 2024 [Read More](#)



Elaeophora schneideri

- Journal Article: Geographic Distribution and Neuropathology of *Elaeophora schneideri* in Moose (*Alces alces shirasi*) in **Idaho, USA** [Read More](#)
 - Elaeophorosis was diagnosed in 24% (10 of 41) of moose sampled, all from southeastern **Idaho**; microfilariae were detected histologically in 9 of 10 infected moose, most consistently in brain tissue



NEW EVENTS: (events rated >2)



Cat mortality/morbidity in South Korea

Pathogen: unknown; **Transmission:** unknown; **Species affected in event:** cat

① In South Korea, as of May 12, 2024, there have been reports of a total of 513 cats displaying similar neuromuscular disease symptoms (acute neuromuscular diseases, high fever, elevated liver enzymes and kidney failure), of which 181 have died. The cats are of different breeds, and have varying living and medical profiles. Recent investigations into common pet food products have found no correlation between their consumption and the cat deaths. Officials tested over 50 pet food samples currently available, including those suspected by cat owners, for 78 toxic substances, seven viruses and two types of parasites and germs. Additional tests conducted on 10 deceased cat bodies, aiming to detect 17 types of infection, 34 substances associated with myopathic disorders, and 859 harmful substances did not yield conclusive results. [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: 16

No. of weeks in report: 116

Avg. Rating: 1.7 - 3.2

- [Canada](#) has not reported any outbreaks of HPAI in domestic poultry over the last week
- As of May 14, 2024, lab testing of 142 retail milk samples from across [Canada](#) has not detected HPAI fragments in any samples (all have tested negative)
- Canada has reported HPAI H5N5 (2.3.4.4b) in a wild bird in [Quebec](#); this is the first detection of HPAI H5N5 outside of the Atlantic provinces
- The [USA](#) has not reported any outbreak of HPAI in domestic poultry over the last week
- In the [USA](#), a total of 51 dairy herds have reported cases of influenza A H5N1 across 9 states: North Carolina(1), Ohio(1), South Dakota(1), Colorado(2), Kansas(4), Idaho(6), New Mexico(8), Texas(13), and Michigan(15)
- [Michigan](#) has reported 3 additional influenza A affected dairy farms on their state website, bringing the Michigan total to 18
- USDA researchers examined the survival of HPAI H5N1 in [ground beef patties](#) by injecting them with high levels of an H5N1 surrogate virus, identifying that properly cooking hamburgers to a temperature of about 145-160°F keeps them safe for consumers; however when the virus-laden beef patties were cooked to 120°F degrees, tests were able to find some evidence of the virus
- The [CDC](#) has released a wastewater surveillance dashboard displaying influenza A (not strain specific) findings in wastewater across the country; of the states not having reported influenza A in dairy cattle, California, Illinois, Florida, New York, and Alaska have displayed above average to high detections of influenza A (from April 28, 2024 to May 11, 2024)
- The [CDC](#) has announced plans to conduct a pandemic risk assessment using the [Influenza Risk Assessment Tool](#) on the (A/Texas/37/2024) H5N1 virus

Influenza A (H5N6) in China

No. of Signals: 01

No. of weeks in report: 55

Avg. Rating: 3.0

- [China](#) has reported another human infection of avian influenza A(H5N6) in a person from Fujian Sheng; no other sources have confirmed or reported this incident

New World Screwworm in Central America

No. of Signals: 03

No. of weeks in report: 06

Avg. Rating: 1.8 - 3.0

- [Nicaragua](#) has confirmed at least 55 cases of New World Screwworm (41 cases in cattle, 8 in pigs, 4 in horses, and 2 in dogs) since it declared an animal health alert in early April 2024
- [Mexico](#) has increased its preventive measures against the New World Screwworm due to an increased risk of the entry from the flow of Central American migrants, livestock, pets and wild animals

Highly Pathogenic Avian Influenza in Europe

No. of Signals: 01

No. of weeks in report: 177

Avg. Rating: 2.0

- [Bulgaria](#) has reported HPAI H5N1 in domestic poultry
- A summary of the overall HPAI situation in Europe is available [here](#)

Highly Pathogenic Avian Influenza in Asia

No. of Signals: 03

No. of weeks in report: 141

Avg. Rating: 2.0

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

SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

African Swine Fever

- ◆ Strategic Challenges to the Eradication of African Swine Fever Genotype II in Domestic Pigs in North Italy [Read More](#)
- ◆ EFSA - Epidemiological analysis of African swine fever in the European Union during 2023 [Read More](#)

Chronic Wasting Disease

- ◆ Lack of Transmission of Chronic Wasting Disease Prions to Human Cerebral Organoids [Read More](#)
- ◆ Classical BSE dismissed as the cause of CWD in Norwegian red deer despite strain similarities between both prion agents [Read More](#)

Influenza

- ◆ CEZD: Rapid Literature Review - Influenza Virus Replication in and Transmission through Mammary Glands/Milk [Read More](#)
- ◆ 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](#)
- ◆ Risk assessment of a highly pathogenic H5N1 influenza virus from mink [Read More](#)
- ◆ Antibodies to Influenza A(H5N1) Virus in Hunting Dogs Retrieving Wild Fowl, Washington, USA [Read More](#)
- ◆ Detection of clade 2.3.4.4b highly pathogenic H5N1 influenza virus in New York City [Read More](#)
- ◆ Molecular Characterization of Non-H5 and Non-H7 Avian Influenza Viruses from Non-Mallard Migratory Waterbirds of the North American Flyways, 2006–2011 [Read More](#)
- ◆ Sequence-based epitope mapping of high pathogenicity avian influenza H5 clade 2.3.4.4b in Latin America [Read More](#)
- ◆ Evidence of reassortment of avian influenza A(H2) viruses in Brazilian shorebirds [Read More](#)
- ◆ Epitopes in the HA and NA of H5 and H7 avian influenza viruses that are important for antigenic drift [Read More](#)
- ◆ Influenza D virus infection in China, 2022–2023 [Read More](#)
- ◆ Global seroprevalence and prevalence of infection of influenza in dogs (*Canis familiaris*): A systematic review and meta-analysis [Read More](#)

Mpox

- ◆ Incubation Period and Serial Interval of Mpox in 2022 Global Outbreak Compared with Historical Estimates [Read More](#)
- ◆ Monkeypox in the Democratic Republic of the Congo: Epidemiological Situation Report Sitrep N°013 (29 April - 05 May 2024) [Read More](#)

Vectors and Vector-borne Diseases

- ◆ Outbreak of Natural Severe Fever with Thrombocytopenia Syndrome Virus Infection in Farmed Minks, China [Read More](#)
- ◆ Nine-year seroepidemiological study of severe fever with thrombocytopenia syndrome virus infection in feral horses in Cape Toi, Japan [Read More](#)
- ◆ Estimating the effects of temperature on transmission of the human malaria parasite, *Plasmodium falciparum* [Read More](#)
- ◆ Vector competence of Swedish *Culex pipiens* mosquitoes for Japanese encephalitis virus [Read More](#)
- ◆ PAHO - Epidemiological Alert Oropouche in the Region of the Americas - 9 May 2024 [Read More](#)

Other

- ◆ Geographic Distribution and Neuropathology of *Elaeophora schneideri* in Moose (*Alces alces shirasi*) in Idaho, USA [Read More](#)
- ◆ Detection of Rat Hepatitis E Virus in Pigs, Spain, 2023 [Read More](#)
- ◆ European Society of Clinical Microbiology and Infectious Diseases proceedings – Rat Hepatitis E in Spain – New human case findings [Read More](#)
- ◆ ECDC - Communicable disease threats report, 12-18 May 2024, week 20 [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.