

WEEKLY INTELLIGENCE REPORT

September 2nd 2024 - September 8th 2024

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

Influenza A (H5)

The CDC has confirmed a human case of avian influenza A(H5) in a resident of Missouri; this is the 14th human case of H5 reported in the USA during 2024 and the first case of H5 without a known occupational exposure to sick or infected animals



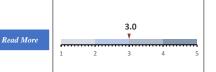
Rabies

Ontario has confirmed its first human case of rabies since 1967; the case is a resident of Brantford-Brant, is currently hospitalized, and is suspected to have contracted the virus through exposure from a bat in the Gowganda area of the Timiskaming region



Highly Pathogenic Avian Influenza

Canada continues to report findings of HPAI in wild birds; a 4 September 2024 WOAH report revealed recent cases of HPAI in wild birds in: British Columbia (four dunlin, one cackling goose, one American crow, and one merlin), Saskatchewan (one great horned owl and one Canada goose), and Ontario (one great horned owl)



NEW EVENTS: (events rated > 2)



Rabies in Ontario

Pathogen: virus; Transmission: direct contact; Species affected in event: human

① Ontario has confirmed its first human case of rabies since 1967. The case is a resident of Brantford-Brant, ~40km west of Hamilton. The suspected exposure was from a bat and occurred in the Gowganda area of the Timiskaming region, in northeastern Ontario. The infected individual is hospitalized.

Avg. Rating	3.3
No. of Signal	1
No. of Ratings	3

Oropouche virus in Québec (traveller)

Pathogen: virus; Transmission: vector - culicoides, mosquito; Species affected in event: human

① A case of Oropouche has been reported in Quebec, in a traveller who recently visited Cuba. Additional details are not listed. Read More

Avg. Rating	2.7
No. of Signal	1
No. of Ratings	6

Swine influenza A H1N1 variant in Vietnam

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

① Vietnam has confirmed a human case of swine influenza A H1N1 variant in a 70-year-old female, with underlying medical conditions, from the northern province of Son La. This is the first-ever reported human infection caused by influenza A(H1N1)v virus in Vietnam. The source of exposure to the virus is currently unknown. The patient developed fever, fatigue, and loss of appetite one week after returning from spending a month in her home village in Hung Yen province. On 1 June 2024, she was admitted to a district hospital. On 5 June, a rapid test confirmed influenza A and she was transferred to the National Hospital for Tropical Diseases where she underwent treatment for six days but died on 11 June.

Read More

Avg. Rating	2.0 - 2.4
No. of Signal	2
No. of Ratings	5



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CONTINUED EVENTS: (events rated ≥ 2.4)

Influenza A (H5) in the USA

No. of weeks in report: 20 No. of Signals: 04 Avg. Rating: 3.3

• The CDC has confirmed a human case of avian influenza A(H5) in a resident of Missouri; this is the 14th human case of H5 reported in the USA during 2024 and the first case of H5 without a known occupational exposure to sick or infected animals

Highly Pathogenic Avian Influenza in North America

No. of Signals: 05

No. of weeks in report: 132

Avg. Rating: 2.0 - 3.0

- Canada has not reported any outbreaks of HPAI in domestic poultry over the last week • Canada continues to report findings of HPAI in wild birds; a 4 September 2024 WOAH report revealed recent cases of HPAI in wild birds in: British
- Columbia (four dunlin, one cackling goose, one American crow, and one merlin), Saskatchewan (one great horned owl and one Canada goose), and Ontario (one great horned owl)
- As of 5 September 2024, CFIA laboratories have tested 1,211 retail milk samples from across Canada; all samples have tested negative for HPAI fragments, with no evidence of disease in dairy cattle
- The USDA has not reported any outbreaks of HPAI in domestic poultry over the last week
- The USDA has not reported any additional outbreaks of influenza A H5N1 in dairy cattle over the last week; the total stands at 197 dairy herds across 14 states: Wyoming(1), North Carolina(1), Ohio(1), Oklahoma(2), California(3), Kansas(4), South Dakota(7), Minnesota(9), New Mexico(9), Iowa(13), Texas(24), Michigan(28), Idaho(31), and Colorado(64)
- The USDA has added 16 additional cat entries to its HPAI in mammals list, all of which predate the influenza A H5N1 in dairy cattle outbreak
- Wastewater surveillance dashboards for influenza can be found at the CDC and Stanford University's WastewaterSCAN

Eastern Equine Encephalitis in Canada

No. of Signals: 02 No. of weeks in report: 07 Avg. Rating: 2.2 - 2.8

- Three horses and one donkey in Ontario recently tested positive for EEE; the cases are located in the District of Parry Sound, City of Ottawa, and United Counties of Leeds and Grenville
- Two unvaccinated horses in Quebec recently tested positive for EEE; the horses lived in MRC Thérèse-De Blainville and MRC Haut-Saint-Laurent

Oropouche in South America and Cuba

No. of Signals: 03 No. of weeks in report: 05 Avg. Rating: 2.0 - 2.8

- The Dominican Republic has issued an epidemiological alert for Oropouche virus surveillance after samples that initially tested negative for dengue, were positive for Oropouche
- Florida has reported 30 cases of Oropouche in travellers returning from Cuba
- Spain has reported three additional cases of Oropouche in travellers returning from Cuba

Bluetongue virus in Europe

No. of Signals: 07 No. of weeks in report: 12

Avg. Rating: 1.3 – 2.7

- The UK has reported additional outbreaks of BTV-3, as of 8 September 2024 there are a total of 34 affected premises; three vaccines have been given special permission for use under licence in the UK
- Luxembourg has reported a significant rise in BTV-3 cases, with 492 animals (361 cattle, 125 sheep, and six goats) across 246 farms now infected
- Spain has reported an outbreak of BTV (likely serotype 8) in sheep in Mallorca
- Norway and the Czech Republic have reported cases of BTV, but the serotype has yet to be identified

West Nile Virus in Canada

No. of Signals: 01

No. of weeks in report: 12

Avg. Rating: 2.5

• In Ontario, mosquitoes collected on 20 August 2024 from three different trap sites in Chatham-Kent have tested positive for the virus, bringing the total number of positive mosquito pools to nine; which is a total not seen since 2018, and the season is not yet over

Influenza A (H5N1) in Cambodia

No. of Signals: 01

No. of weeks in report: 14

Avg. Rating: 2.2

• The WHO has released more information on the recent case of influenza A H5N1 in a 15-year-old Cambodian girl; a sample was successfully sequenced, and phylogenetic analysis of the HA gene showed the virus to be H5 clade 2.3.2.1c, however its internal genes belong to H5 clade 2.3.4.4b viruses

Highly Pathogenic Avian Influenza in Asia

No. of Signals: 05

No. of weeks in report: 153

Avg. Rating: 2.0 - 2.2

- India has reported an outbreak of HPAI H5N1 in domestic poultry Kendrapara district
- Taiwan has reported two outbreaks of HPAI H5N1 in domestic poultry (meat chickens) in Yunlin County
- Israel has reported an outbreak of HPAI H5N1 in domestic poultry (meat turkeys) in Hazafon

Highly Pathogenic Avian Influenza in Europe

No. of Signals: 06

No. of weeks in report: 189

Avg. Rating: 2.0

- France has reported its third outbreak of HPAI H5N1 this season in domestic poultry, in an outdoor poultry farm in Hanvec
- The Czech Republic has reported an outbreak of HPAI H5 in domestic poultry
- Germany, Portugal, Denmark, and France have reported cases of HPAI H5N1 in wild birds
- A summary of the overall HPAI situation in Europe is available here

Highly Pathogenic Avian Influenza in South America

No. of Signals: 01

No. of weeks in report: 73

Avg. Rating: 2.0

• Peru has reported HPAI H5N1 in domestic unspecified birds in Lambayeque



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SCIE	INTIFIC FINDINGS, REPORTS, AND GUIDANCE:		
Foot	and Mouth Disease		
*	Multiple incursions of foot-and-mouth disease virus serotype O into the Republic of Korea between 2010 and 2019		
Intiu	lenza		
•	Pre-print: Promising effects of duck vaccination against highly pathogenic avian influenza, France 2023-24 Read More		
*	Pathogenicity of Highly Pathogenic Avian Influenza A(H5N1) Viruses Isolated from Cats in Mice and Ferrets, South Korea, 2023 Read More		
\&	Susceptibility of Synanthropic Rodents (Mus musculus, Rattus norvegicus and Rattus rattus) to H5N1 Subtype High Pathogenicity Avian Influenza Viruses		
	Susceptibilities and viral shedding of peridomestic wildlife infected with clade 2.3.4.4b highly pathogenic avian influenza virus (H5N1)		
•	Experimental infection of Chickens, Pekin ducks, Eurasian wigeons and Barnacle geese with two recent highly pathogenic avian influenza H5N1 clade 2.3.4.4b viruses		
	Detection and spread of high pathogenicity avian influenza virus H5N1 in the Antarctic Region Read More		
	Viewpoint: H5 Influenza Vaccines—Moving Forward Against Pandemic Threats Read More		
	Spatial patterns of influenza A virus spread across compartments in commercial swine farms in the United States		
Mpc	<u>)x</u>		
\$	ECDC - Epidemiological update – Week 36/2024: Mpox due to monkeypox virus clade I		
<u>Vect</u>	ors and Vector borne Diseases		
	A New Orthonairovirus Associated with Human Febrile Illness		
	Aedes aegypti found in Oregon for the first time Read More		
Other Other			
	Farmed fur animals harbour viruses with zoonotic spillover potential Read More		
\&	WHO global framework to define and guide studies into the origins of emerging and re-emerging pathogens with epidemic and pandemic potential		
	France - Weekly Bulletin for International Animal Health Surveillance 10/09/2024 Read More		
*	ECDC - Communicable disease threats report, 31 August – 6 September 2024, week 36 Read More		
*	Africa CDC Epidemic Intelligence Weekly Report, August 2024 Read More		
*	SHIC Domestic Disease Monitoring Report – September 2024 Read More		
*	SHIC Global Disease Monitoring Report – September 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.