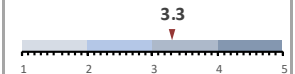


SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥3.0)

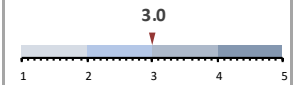
Highly Pathogenic Avian Influenza

- Over the last week, **Canada** has reported outbreaks of HPAI in commercial poultry in: **British Columbia**(2) and **Alberta**(1)
- Finland** has reported HPAI H5N1 in additional fur farms, bringing the total number of affected farms to 65 (mink, foxes, and raccoon dogs); the serosurvey of 182 (non-mink) fur farms has yielded 32 positives
 - It is unclear if any of these animals showed active infection/clinical signs and there is no further information on the spread or source of virus introduction on the farms

[Read More](#)



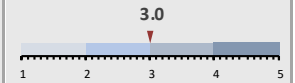
[Read More](#)



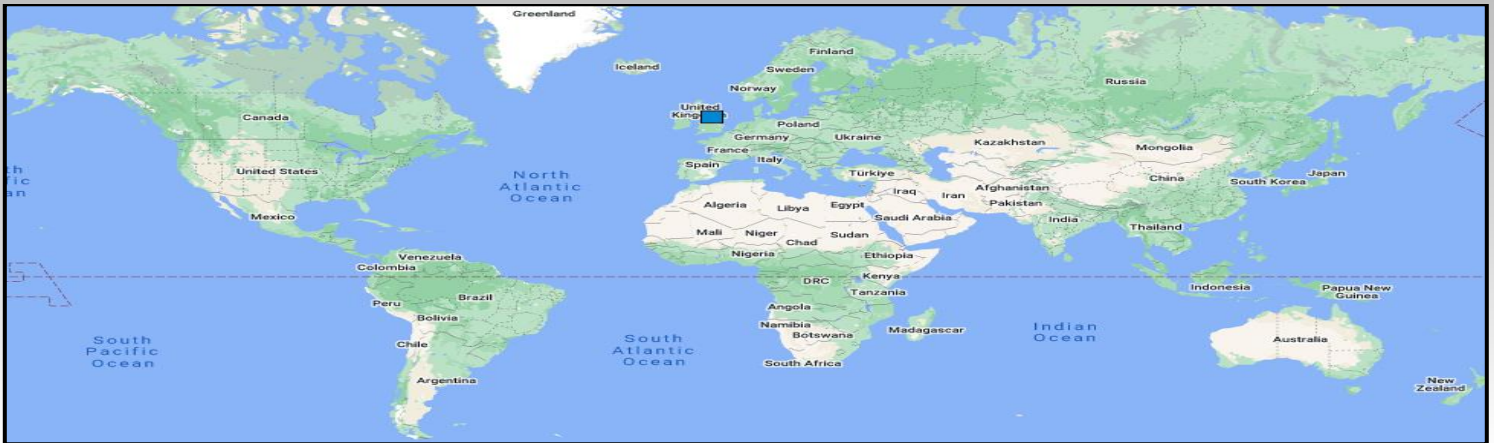
Influenza A (H5N1)

- The two recent human cases of avian influenza H5N1 in **Cambodia** have been sequenced as clade 2.3.2.1c, showing close similarity to the viruses circulating in **Cambodia** and **Southeast Asia** since 2013-2014, and clustering most closely with the viruses from the two human cases reported in October 2023

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NEW EVENTS: (events rated >2)



- Swine influenza A (H1N2) variant in the United Kingdom**
Pathogen: virus; **Transmission:** direct contact, fomite, aerosol; **Species affected in event:** human

① On November 25, 2023, the UK reported its first human case of swine-origin influenza A(H1N2) variant. The case was identified as part of routine surveillance of respiratory illnesses. The source of infection for this case is under investigation and contact tracing is in process. There is no clear indication of direct contact with pigs or any ill individuals. To date, no other confirmed cases associated with this event have been reported. Sequencing has revealed the virus belongs to clade 1B.1.1, similar to viruses previously detected in pigs in the UK.

[Read More](#)

Avg. Rating	2.0 - 2.8
No. of Signal	4
No. of Ratings	4

CONTINUED EVENTS: (events rated ≥ 2.4)

Highly Pathogenic Avian Influenza in North America

No. of Signals: 09

No. of weeks in report: 93

Avg. Rating: 2.0 - 3.3

- Over the last week, [Canada](#) has reported outbreaks of HPAI in commercial poultry in: British Columbia(2) and Alberta(1)
- Over the last week, the [USA](#) has reported outbreaks of HPAI in commercial poultry in: Minnesota(4), California(3), Wisconsin(2), South Dakota (2), North Dakota(1), Iowa(1), Arkansas(1), and Ohio(1); in WOAHP poultry in: North Dakota(1) and Colorado(1); in WOAHP non-poultry in: Iowa(2), Washington(1), North Dakota(1), Nebraska(1), Colorado(1), South Dakota(1), Montana(1), and Idaho(1)

Influenza A (H5N1) in Cambodia

No. of Signals: 01

No. of weeks in report: 06

Avg. Rating: 3.0

- The two recent human cases of avian influenza H5N1 in [Cambodia](#) have been sequenced as clade 2.3.2.1c, showing close similarity to the viruses circulating in Cambodia and Southeast Asia since 2013-2014, and clustering most closely with the viruses from the two human cases reported in October 2023

Highly Pathogenic Avian Influenza in Europe

No. of Signals: 29

No. of weeks in report: 154

Avg. Rating: 2.0 - 3.0

- [Finland](#) has reported HPAI H5N1 in additional fur farms, bringing the total number of affected farms to 65 (mink, foxes, and raccoon dogs); the serosurvey of 182 (non-mink) fur farms has yielded 32 positives, it is unclear if any of these animals showed active infection/clinical signs and there is no further information on the spread or source of virus introduction on the farms
- [Germany](#), [Hungary](#), [UK](#), [Belgium](#), and [France](#) have reported HPAI H5N1 in domestic birds
- [Serbia](#), [Denmark](#), [Austria](#), [Italy](#), [Spain](#), [Germany](#), [Croatia](#), [Finland](#), [Hungary](#), and [Sweden](#) have reported HPAI H5N1 in wild birds
- [Bulgaria](#) has reported HPAI H5 in domestic birds
- A summary of the overall HPAI situation in Europe is available [here](#)

Influenza A (H3) in China

No. of Signals: 01

No. of weeks in report: 48

Avg. Rating: 2.5

- [China](#) has reported a case of severe paediatric influenza A (H3) infection in a 13-year-old boy admitted to Hong Kong Children's Hospital; the boy had not received seasonal influenza vaccination for this season and had no recent travel history, his home contacts are currently asymptomatic, and investigations are ongoing

Highly Pathogenic Avian Influenza in Asia

No. of Signals: 11

No. of weeks in report: 119

Avg. Rating: 2.0

- [Israel](#) has reported HPAI H5N1 in domestic turkeys in Jerusalem
- [Japan](#) has recently reported four outbreaks of HPAI in domestic poultry across the country
- [Taiwan](#) has reported HPAI H5N1 in domestic poultry
- [Cambodia](#) has reported HPAI H5N1 in domestic poultry in Kampot province (the same region where the recent human cases were reported)

Highly Pathogenic Avian Influenza in South America

No. of Signals: 05

No. of weeks in report: 54

Avg. Rating: 2.0

- [Argentina](#) has reported 220 dead flamingos in Catamarca as a result of HPAI H5N1
- [Costa Rica](#) has reported HPAI H5 in wild birds (frigate)

SCIENTIFIC FINDINGS & REPORTS:

Influenza

- ◆ Vaccination of African penguins (*Spheniscus demersus*) against high-pathogenicity avian influenza [Read More](#)
- ◆ First report and genetic characterization of the highly pathogenic avian influenza A(H5N1) virus in Cabot's tern (*Thalasseus acuffavidus*), Brazil [Read More](#)
- ◆ Climate change impacts on bird migration and highly pathogenic avian influenza [Read More](#)
- ◆ Effect of 2020–21 and 2021–22 Highly Pathogenic Avian Influenza H5 Epidemics on Wild Birds, the Netherlands [Read More](#)
- ◆ Responding to avian influenza A H5N1 detection on a hospital property in Maine —An interdisciplinary approach [Read More](#)

Mpox

- ◆ Clade I—Associated Mpox Cases Associated with Sexual Contact, the Democratic Republic of the Congo [Read More](#)

Vectors and Vector-borne Disease

- ◆ Cache Valley virus: an emerging arbovirus of public and veterinary health importance [Read More](#)
- ◆ De novo genome assembly of the invasive mosquito species *Aedes japonicus* and *Aedes koreicus* [Read More](#)

Other

- ◆ Serological identification of MERS-CoV in camels of Wasit province, Iraq [Read More](#)
- ◆ Range area and the fast–slow continuum of life history traits predict pathogen richness in wild mammals [Read More](#)
- ◆ Identification and characterization of porcine Rotavirus A in Chilean swine population [Read More](#)
- ◆ ECDC - Communicable disease threats report, 26 November – 2 December 2023, week 48 [Read More](#)
- ◆ SHIC Domestic Disease Monitoring Report – December 2023 [Read More](#)
- ◆ Centre for Health Protection – Avian Influenza Report – Volume 19, number 46 [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.