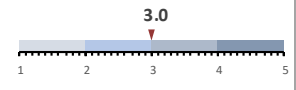


SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥3.0)

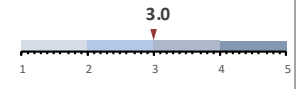
Highly Pathogenic Avian Influenza

- As of June 23, 2024, the USDA has reported influenza A H5N1 in a total of 126 dairy herds across 12 states: **Wyoming(1), North Carolina(1), Ohio(1), Kansas(4), South Dakota(5), Minnesota(6), New Mexico(8), Iowa(11), Colorado(18), Texas(20), Idaho(26), and Michigan(25)**
- Interim results of a dairy cow susceptibility study have been released in **Germany**, showing that H5N1, recently isolated from a **German** wild bird, multiplies well in the udder; additionally, bulk milk tank and serum sampling of cows in regions of **Germany** affected by HPAI, have tested negative
- As of June 18, 2024, CFIA laboratories tested 600 retail milk samples from across **Canada**; all samples have tested negative for HPAI fragments, with no evidence of disease in dairy cattle detected in milk
- Australia** has reported two outbreaks of HPAI H7N8 in **New South Wales**; this is a different strain than the two (H7N3, H7N9) reported in **Victoria**

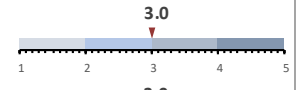
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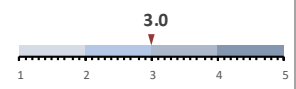
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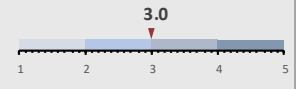
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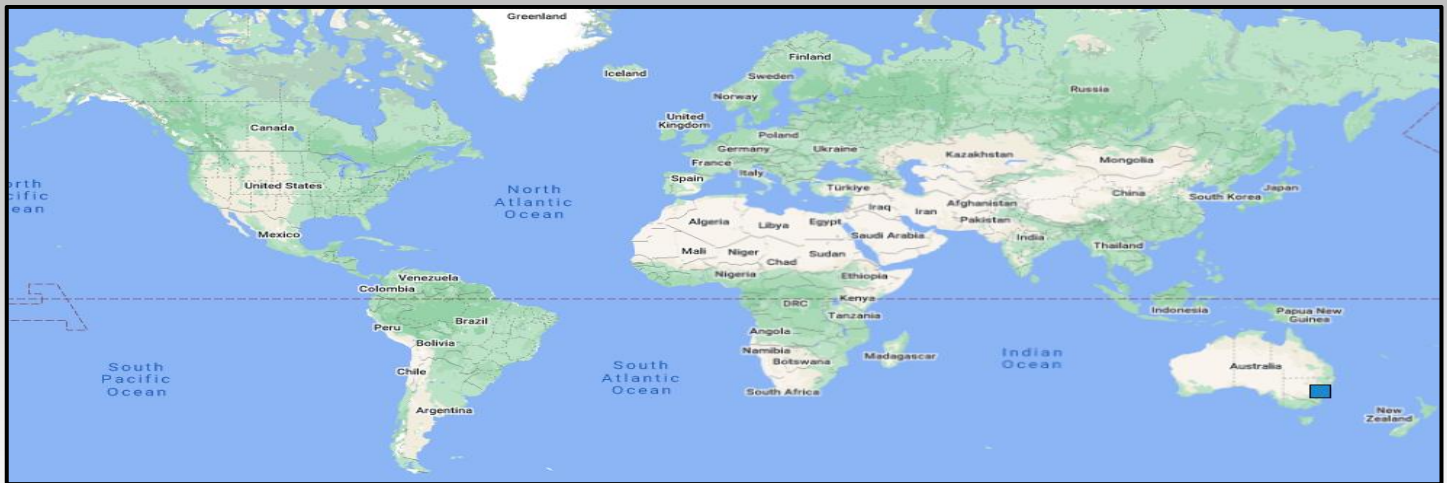
Influenza A(H5N6)

- China** has reported an additional human infection with avian influenza A(H5N6), in a 41-year-old male from **Fujian Province**, with an onset of illness on 8 May 2024; to date, a total of 92 laboratory confirmed cases of human infection with influenza A(H5N6) virus, including 37 deaths, have been reported to WHO since 2014

[Read More](#)



NEW EVENTS: (events rated > 2)



Highly pathogenic avian influenza (H7N8) in Australia

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

Australia has reported HPAI H7N8 at two commercial poultry farms in the Greater Sydney Basin of New South Wales. The first farm is an egg layer operation which contained 235,000 birds, while the second is a chicken meat farm with ~87,000 birds. Both properties are under quarantine. This is the first time HPAI H7N8 has been reported in poultry in Australia, however the virus is genetically related to strains detected in wild birds in the country.

[Read More](#)

Avg. Rating	2.8 - 3.0
No. of Signal	5
No. of Ratings	4 - 6

CONTINUED EVENTS: (events rated ≥ 2.4)

Influenza A(H5N6) in China

No. of Signals: 01

No. of weeks in report: 59

Avg. Rating: 3.0

- [China](#) has reported an additional human infection with avian influenza A(H5N6), in a 41-year-old male from Fujian Province, with an onset of illness on 8 May 2024; to date, a total of 92 laboratory confirmed cases of human infection with influenza A(H5N6) virus, including 37 deaths, have been reported to WHO since 2014

Highly Pathogenic Avian Influenza in North America

No. of Signals: 18

No. of weeks in report: 121

Avg. Rating: 2.0 - 3.0

- [Canada](#) has not reported any outbreaks of HPAI in domestic poultry over the last week
- As of June 18, 2024, CFIA laboratories tested 600 retail milk samples from across [Canada](#); all samples have tested negative for HPAI fragments, with no evidence of disease in dairy cattle detected in milk
- Over the last week, the [USA](#) has reported outbreaks of HPAI in commercial poultry in: Minnesota(2) and Iowa(1)
- As of June 23, 2024, the [USDA](#) has reported influenza A H5N1 in a total of 126 dairy herds across 12 states: Wyoming(1), North Carolina(1), Ohio(1), Kansas(4), South Dakota(5), [Minnesota](#)(6), New Mexico(8), Iowa(11), [Colorado](#)(18), Texas(20), Idaho(26), and [Michigan](#)(25)
- [Colorado](#) has provided more details on influenza A in dairy cattle on its state website, listing a total of 21 infected herds with 4 released from quarantine
- [Minnesota](#) has provided more details on influenza A in dairy cattle on its state website, listing a total of 7 infected herds with 1 released from quarantine
- The [USDA](#) has released information on its voluntary dairy herd status program, identifying only four herds (one in each Kansas, Texas, Nebraska, and New Mexico) as currently enrolled
- The [USDA](#) has added 19 more HPAI infected mice to their HPAI in mammals list bringing the total number of mice to 66 (all in New Mexico), and the total number of infected mammals to 318
- [New York](#) and [Colorado](#) have announced new guidance and testing requirement for lactating dairy cattle before being moved to fairs and exhibitions
- The [CDC](#) has released an additional week of Influenza A (not strain specific) wastewater surveillance data on its dashboard

Highly Pathogenic Avian Influenza in Europe

No. of Signals: 06

No. of weeks in report: 181

Avg. Rating: 1.8 - 3.0

- Interim results of a dairy cow susceptibility study have been released in [Germany](#), showing that H5N1, recently isolated from a German wild bird, multiplies well in the udder; additionally, bulk milk tank and serum sampling of cows in regions of Germany affected by HPAI, have tested negative
- [Poland](#) and [Spain](#) have reported cases of HPAI H5N1 in wild birds
- The [European Commission](#) is procuring 665,000 pre-pandemic vaccine doses of the up-to-date Zoonotic Influenza Vaccine Seqirus, as well as an option for a further 40 million doses over the duration of the contract; fifteen EU/EEA Member States are participating
- A summary of the overall HPAI situation in Europe is available [here](#)

New World Screwworm in Central America

No. of Signals: 03

No. of weeks in report: 07

Avg. Rating: 2.5 - 2.8

- [Costa Rica](#) has reported seven laboratory confirmed cases of New World Screwworm in humans, along with the first death associated with the parasite; the deceased is a 19-year-old woman from Guanacaste, who was diagnosed with screwworm myiasis, but also suffered from other chronic conditions
- In [Costa Rica](#), cases of New World Screwworm in animals have doubled in the last month (from 1,068 reports in early May to 2,268 in mid June) due to a more aggressive strain of fly, that moves faster and prefers to mate with field flies (as opposed to sterile flies), which has reduced the effectiveness of the sterile fly control program

Highly Pathogenic Avian Influenza in Australia

No. of Signals: 04

No. of weeks in report: 05

Avg. Rating: 2.0 - 2.8

- [Australia](#) has reported HPAI H7N3 at one additional poultry farm in Victoria, bringing the total number of affected farms to eight; HPAI H7N3 has been confirmed in seven infected properties near Meredith, and HPAI H7N9 in one infected property near Terang

Avian metapneumovirus in Canada

No. of Signals: 01

No. of weeks in report: 03

Avg. Rating: 2.5

- In [Canada](#), 11 additional outbreaks of avian metapneumovirus (turkey rhinotracheitis) have been reported in commercial poultry farms across Ontario (majority aMPV-b, one aMPV-a) and Manitoba (aMPV-a) bringing the nationwide total to 36 affected farms

Lyme Disease in Canada

No. of Signals: 01

No. of weeks in report: 05

Avg. Rating: 2.4

- [Quebec](#) has reported 89 cases of Lyme disease from January 1, 2024 until June 15, 2024, 76 of which were acquired in the province

Highly Pathogenic Avian Influenza in Asia

No. of Signals: 04

No. of weeks in report: 146

Avg. Rating: 2.0

- [Taiwan](#) has reported HPAI H5N1 in domestic poultry in Yunlin County
- [India](#) has reported additional cases of HPAI in Alappuzha

Highly Pathogenic Avian Influenza in Africa

No. of Signals: 01

No. of weeks in report: 71

Avg. Rating: 2.0

- [Gabon](#) has reported HPAI H5N1 in a poultry market in Libreville City

Highly Pathogenic Avian Influenza in South America

No. of Signals: 01

No. of weeks in report: 70

Avg. Rating: 2.0

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

SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

African Swine Fever

- ◆ The evolutionary and genetic patterns of African swine fever virus [Read More](#)
- ◆ DEFRA - African swine fever in Europe - Updated Outbreak Assessment #35 [Read More](#)

Influenza

- ◆ Pre-print: A single mutation in dairy cow-associated H5N1 viruses increases receptor binding breadth [Read More](#)
- ◆ Pre-print: Increase of permissive secondary antiviral mutations in the evolution of A(H1N1)pdm09 influenza virus neuraminidases [Read More](#)
- ◆ A Retrospective Investigation of a Case of Dual Infection by Avian-Origin Influenza A (H10N5) and Seasonal Influenza A (H3N2) Viruses — Anhui Province, China, December 2023–January 2024 [Read More](#)
- ◆ Highly pathogenic avian influenza A(H5N1) virus infections on fur farms connected to mass mortalities of black-headed gulls, Finland, July to October 2023 [Read More](#)
- ◆ ECDC - Enhanced influenza surveillance to detect avian influenza virus infections in the EU/EEA during the inter-seasonal period [Read More](#)
- ◆ Using an adaptive modeling framework to identify avian influenza spillover risk at the wild-domestic interface [Read More](#)
- ◆ Phylodynamics of avian influenza A(H5N1) viruses from outbreaks in Brazil [Read More](#)
- ◆ Zoonotic infections by avian influenza virus: changing global epidemiology, investigation, and control [Read More](#)
- ◆ Molecular epidemiology and genetic evolution of avian influenza H5N1 subtype in Nigeria, 2006 to 2021 [Read More](#)
- ◆ Pigs lacking *TMPRSS2* displayed fewer lung lesions and reduced inflammatory response when infected with influenza A virus [Read More](#)

Mpox

- ◆ UKHSA - Mpox (monkeypox) outbreak: epidemiological overview, 13 June 2024 [Read More](#)

Vectors and Vector-borne Diseases

- ◆ PAHO - Epidemiological Update - Increase in dengue cases in the Region of the Americas - 18 June 2024 [Read More](#)
- ◆ ECDC - Tick-borne encephalitis - Annual Epidemiological Report for 2022 [Read More](#)
- ◆ Comprehensive meta-analysis of severe fever with thrombocytopenia syndrome virus infections in humans, vertebrate hosts and questing ticks [Read More](#)

Other

- ◆ Where we stand on chronic wasting disease: A systematic literature review of its prevalence patterns, impacts, and management interventions [Read More](#)
- ◆ Identification and characterization of a novel circovirus in Iberian lynx in Spain [Read More](#)
- ◆ France - Weekly Bulletin for International Animal Health Surveillance 25/06/2024 [Read More](#)
- ◆ ECDC - Communicable disease threats report, 15 - 21 June 2024, week 25 [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.