

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

### Influenza A (H5N1)

◆ A person in **Texas**, who had exposure to dairy cattle presumed to be infected with HPAI A(H5N1), has tested positive for HPAI A(H5N1); the person reported eye redness (consistent with conjunctivitis) as their only symptom and is recovering

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### Highly Pathogenic Avian Influenza

◆ **Idaho** has reported its first presumptive positive cases of HPAI in livestock, in a **Cassia County** dairy cattle operation; the affected facility recently imported cattle from another state that has identified cases of HPAI in cattle and there are some suggestions that the virus may be transmitted from cow-to-cow

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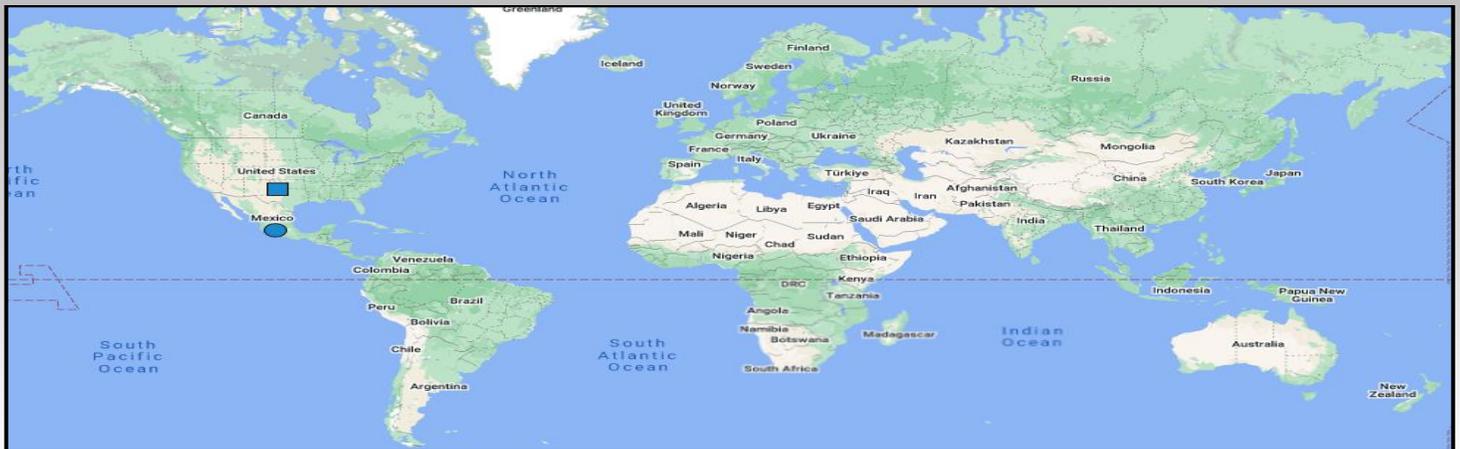


◆ **New Mexico** and **Michigan** have both confirmed first detections of HPAI H5N1 in dairy herds, while **Texas** has confirmed HPAI in five additional dairy herds; to date, the USDA has confirmed detections of HPAI in dairy herds in: **Texas(7)** **Kansas(2)**, **Michigan(1)**, and **New Mexico(1)**, with the presumptive positive test results from **Idaho** still pending

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## NEW EVENTS: (events rated > 2)



### ■ Influenza A H5N1 in a person in Texas

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

① A person in the United States has tested positive for avian influenza A(H5N1) virus, as reported by Texas and confirmed by CDC. This person had exposure to dairy cattle in Texas presumed to be infected with HPAI H5N1. The patient reported eye redness (consistent with conjunctivitis), as their only symptom, and is recovering. The patient was told to isolate and is being treated with an antiviral drug for flu. This infection does not change the HPAI H5N1 human health risk assessment for the U.S. general public, which CDC considers to be low. However, people with close or prolonged, unprotected exposures to infected birds or other animals (including livestock), or to environments contaminated by infected birds or other animals, are at greater risk of infection. [Read More](#)

Avg. Rating	4.0
No. of Signal	1
No. of Ratings	2

### ● Highly Pathogenic Avian Influenza H5N2 in Mexico

**Pathogen:** virus; **Transmission:** direct contact, fomite, aerosol; **Species affected in event:** avian - backyard birds

① Mexico has confirmed the presence of HPAI H5N2 in domestic backyard birds in the state of Michoacán. Clinical signs observed in the birds included: fever, reduced feed intake, and sudden mortality. Wild birds have been noted to live on a dam near the farm. The virus was confirmed through PCR tests, virus isolation, genetic sequencing and an intravenous pathogenicity index test. As there are no commercial poultry farms in the municipality the sanitary situation of Mexico regarding HPAI remains unchanged. HPAI H5N2 virus was previously identified in Mexico in commercial flocks in 1994 and was eradicated in 1995. [Read More](#)

Avg. Rating	2.5 - 2.8
No. of Signal	2
No. of Ratings	4

## CONTINUED EVENTS: (events rated $\geq 2.4$ )

### **Highly Pathogenic Avian Influenza in North America**

**No. of Signals: 14**

**No. of weeks in report: 109**

**Avg. Rating: 2.0 - 4.0**

- [Canada](#) has not reported any new outbreaks of HPAI in domestic poultry over the last week
- The [USA](#) has not reported any new outbreaks of HPAI in domestic poultry over the last week
- [Sequencing](#) of the HPAI H5N1 strain, reported in dairy cattle in Kansas and Texas, has revealed it to be Eurasian lineage goose/Guangdong clade 2.3.4.4b; the initial sequences represent a sporadically detected 4 gene reassortant (B3.13 per GenoFlu) descended from the previously predominant genotype B3.2 first observed in wild birds in November 2023 - no markers for mammalian adaptation nor antiviral resistance were observed
- [Idaho](#) has reported its first presumptive positive cases of HPAI in livestock, in a Cassia County dairy cattle operation; the affected facility recently imported cattle from another state that has identified cases of HPAI in cattle and there are some suggestions that the virus may be transmitted from cow-to-cow
- [New Mexico](#) and [Michigan](#) have both confirmed first detections of HPAI H5N1 in dairy herds, while Texas has confirmed HPAI in five additional dairy herds; to date, the USDA has confirmed detections of HPAI in dairy herds in: Texas(7) Kansas(2), Michigan(1), and New Mexico(1), with the presumptive positive test results from Idaho still pending
- In [New Jersey](#), dozens of dead ducks discovered in Long Beach Township and Ship Bottom throughout March are being tested for HPAI

### **Mpox Worldwide**

**No. of Signals: 03**

**No. of weeks in report: 24**

**Avg. Rating: 2.0 - 2.8**

- In the [Democratic Republic of the Congo](#), a mpox clade 1 outbreak that began in 2023 has expanded to 23 of the country's 26 provinces, including Kinshasa, with children being the most affected group; so far the DRC has reported 3,941 suspected mpox cases this year, 271 of them fatal, for a CRF of 7%, however, due to diagnostic challenges in the country, only 389 cases have been lab confirmed
- [Cambodia](#) has reported additional cases of mpox, bringing the total number of cases reported from December 2023 to 14, all in men between the ages of 20-39
- In the USA, [Virginia](#) has reported an increase in mpox cases, with 12 cases being reported since January 1, 2023

### **White-nose Syndrome in the USA**

**No. of Signals: 01**

**No. of weeks in report: 08**

**Avg. Rating: 2.5**

- [Colorado](#) has confirmed WNS in two little brown bats found in Boulder County

### **Influenza A (H1N2) in the USA**

**No. of Signals: 01**

**No. of weeks in report: 12**

**Avg. Rating: 2.3**

- The USA has confirmed its first swine influenza variant (H1N2v) human infection of 2024 in [Pennsylvania](#); the patient had contact with swine prior to their illness onset, is < 18 years of age, sought healthcare during the week ending March 9, 2024, was hospitalized, and has since recovered

### **Highly Pathogenic Avian Influenza in Asia**

**No. of Signals: 03**

**No. of weeks in report: 134**

**Avg. Rating: 2.0 - 2.3**

- [Taiwan](#) has reported HPAI H5N1 in a layer farm in Changhua County
- The [Philippines](#) have confirmed HPAI H5N1 in a breeding farm in Kananga, Leyte

### **Highly Pathogenic Avian Influenza in Europe**

**No. of Signals: 05**

**No. of weeks in report: 171**

**Avg. Rating: 2.0**

- [Germany](#) has reported HPAI H5N1 in wild mammals
- [Belgium](#) and [Romania](#) have reported HPAI H5N1 in wild birds
- [England](#) has reported HPAI H5N5 in wild birds
- A summary of the overall HPAI situation in Europe is available [here](#)

## SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

### African Swine Fever

- ◆ Wild boar (*Sus scrofa*) carcasses as an attraction for scavengers and a potential source for soil contamination with the African swine fever virus [Read More](#)

### Influenza

- ◆ ECDC - Avian influenza overview December 2023–March 2024 [Read More](#)
- ◆ Seroprevalence of Avian Influenza A(H5N6) Virus Infection, Guangdong Province, China, 2022 [Read More](#)
- ◆ Pre-print: Highly Pathogenic Avian Influenza A (H5N1) Suspected in penguins and shags on the Antarctic Peninsula and West Antarctic Coast [Read More](#)
- ◆ CDC - Highly Pathogenic Avian Influenza A(H5N1) Virus in Animals: Interim Recommendations for Prevention, Monitoring, and Public Health Investigations [Read More](#)

### Foot and Mouth Disease

- ◆ Seroprevalence, Serotyping, and Associated Risk Factors of Foot and Mouth Diseases in Bovine in Western Amhara Regional State, North Western Ethiopia [Read More](#)

### Mpox

- ◆ Study shows Mpox (monkeypox) antibodies wane within a year of vaccination [Read More](#)

### Vectors and Vector-borne Diseases

- ◆ Evaluating Temperature Effects on Bluetongue Virus Serotype 10 and 17 Coinfection in *Culicoides sonorensis* [Read More](#)
- ◆ Evaluation of landscaping and vegetation management to suppress host-seeking *Ixodes scapularis* (Ixodida: Ixodidae) nymphs on residential properties in Connecticut, USA [Read More](#)

### Other

- ◆ The evolutionary drivers and correlates of viral host jumps [Read More](#)
- ◆ Ecological countermeasures to prevent pathogen spillover and subsequent pandemics [Read More](#)
- ◆ Donkey-like kirkovirus is associated with diarrhea in piglets [Read More](#)
- ◆ Surveillance for Coccidioidomycosis, Histoplasmosis, and Blastomycosis During the COVID-19 Pandemic — United States, 2019–2021 [Read More](#)
- ◆ ECDC - Communicable disease threats report, 24 –30 March 2024, week 13 [Read More](#)
- ◆ SHIC Domestic Disease Monitoring Report - April 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.