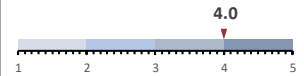


## SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥ 3.0)

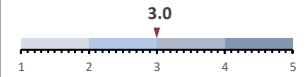
### Highly Pathogenic Avian Influenza

- ◆ On February 13, 2025, the USDA confirmed, by whole genome sequence, a detection of HPAI H5N1 clade 2.3.4.4b, genotype D1.1 in dairy cattle in **Arizona**; this confirmation was a result of state tracing and investigation, following an initial detection on silo testing under the National Milk Testing Strategy
- ◆ As of February 17, 2025, the USDA has reported influenza A(H5N1) in 972 dairy herds across 17 states: **Arizona(1), Wyoming(1), North Carolina(1), Ohio(1), Oklahoma(2), Kansas(4), Nevada(7), South Dakota(7), Minnesota(9), New Mexico(9), Iowa(13), Utah(13), Texas(27), Michigan(31), Idaho(35), Colorado(64), and California(747)**
  - The recent outbreaks were reported from **California(3), Nevada(6), and Arizona(1)**
- ◆ Over the last week Canada has reported outbreaks of HPAI in non-commercial poultry in: **Newfoundland and Labrador(1)**
- ◆ HPAI has been confirmed in two cats living in different households in **Multnomah County, Oregon**; both cats had consumed raw pet food (Wild Coast LLC Boneless Free Range Chicken Formula) produced in **Olympia, Washington** (which has now been recalled)
- ◆ **India** has confirmed HPAI in samples of cats from a market in **Chhindwara**, leading to the closure and sanitization of the market
- ◆ Journal Article: Transmission of highly pathogenic avian influenza H5N1 to calves fed unpasteurized milk from experimentally infected cows
  - Calves fed infected milk showed clinical signs including nasal discharge, mild fever, mild lethargy, loose stool and slightly increased respiratory effort for 5-6 days
  - Signs of clinical disease were mild and may not be recognized under field conditions with other environmental or health stressors
  - Viral RNA was consistently detected in nasal swabs from all four calves from 2 to 4 DPI

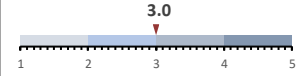
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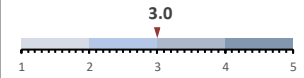
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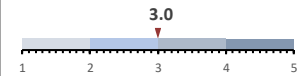
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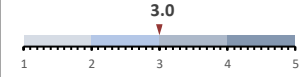
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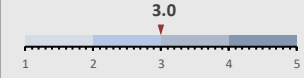
### Influenza A (H5)

- ◆ **Nevada** has confirmed its first human case of influenza A(H5N1) genotype D1.1 in a dairy worker who experienced mild symptoms (conjunctivitis)
- ◆ **Ohio** has reported its first probable human case of influenza A(H5) in an adult male poultry farm worker from **Mercer County**, who had contact with deceased infected commercial poultry
- ◆ **Wyoming** has reported its first human case of influenza A(H5N1) in an adult female from **Platte County**, who had contact with backyard poultry; she is currently hospitalized
- ◆ CDC MMWR: Notes from the Field: Seroprevalence of Highly Pathogenic Avian Influenza A(H5) Virus Infections Among Bovine Veterinary Practitioners — United States, September 2024
  - A serosurvey of 150 bovine veterinary practitioners, three practitioners had evidence of recent infection with HPAI A(H5) virus, including two without exposures to animals with known or suspected HPAI A(H5) virus infections and one who did not practice in a U.S. state with known HPAI A(H5) virus-infected cattle

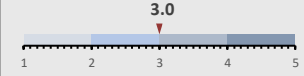
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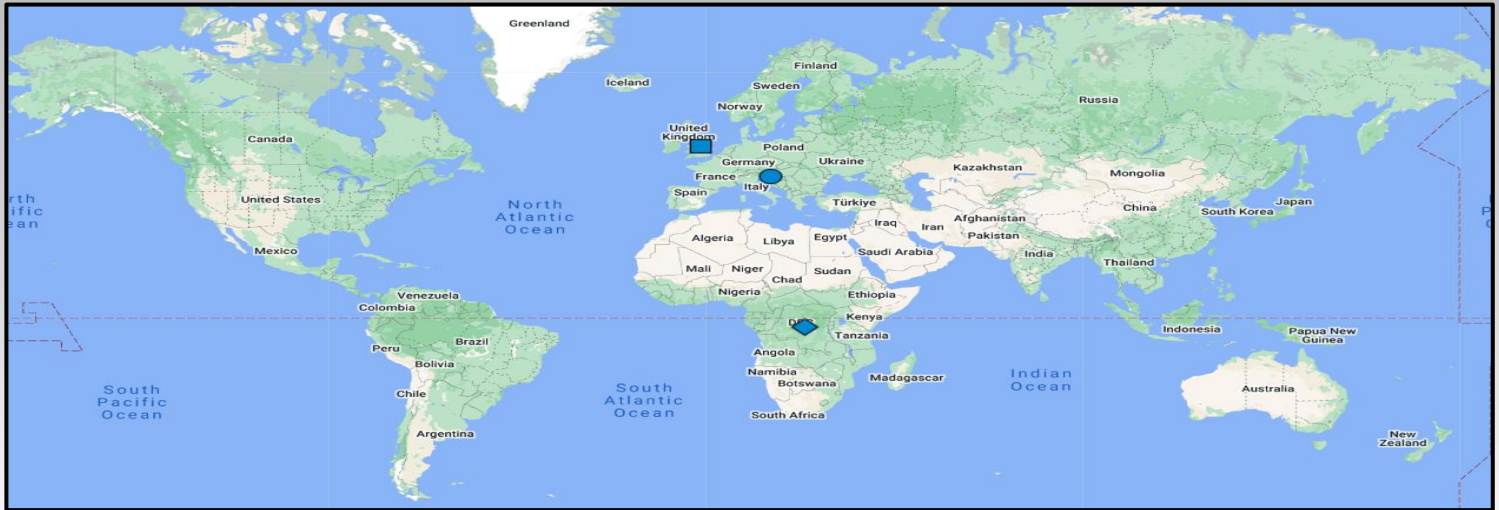
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**NEW EVENTS: (events rated > 2)**



**Bluetongue Serotype 12 in the UK**

**Pathogen:** virus; **Transmission:** vector - culicoides; **Species affected in event:** cattle

① BTV-12 has been reported in England for the first time. One out of 15 cattle sampled in Ashford, Kent, tested positive for BTV-12. The same animal was negative for BTV-3 and did not show clinical signs of BTV prior testing. Additionally, 3 other animals within the same group tested positive for BTV-3 and negative for BTV-12. The emergence of BTV-12 was previously reported in the Netherlands in 2024.

[Read More](#)

Avg. Rating	2.8
No. of Signal	1
No. of Ratings	4

**Bluetongue Serotype 4 in Slovenia**

**Pathogen:** virus; **Transmission:** vector - culicoides; **Species affected in event:** cattle

① Slovenia has reported a reoccurrence of BTV-4, last reported in December 2016. Three cases have been reported in cattle in northern Slovenia.

[Read More](#)

Avg. Rating	2.7
No. of Signal	2
No. of Ratings	3

**Undiagnosed Pig Deaths in the Democratic Republic of the Congo**

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

① The DRC has reported an unidentified epidemic in pigs in Sankuru province, Kole territory, whose symptoms resemble those of mpox (or swinepox?) and African swine fever. The lack of treatment for this new epidemic has led to stamping out, the implementation of biosecurity measures on farms, and the disinfection of pastures. Additional information is limited.

[Read More](#)

Avg. Rating	2.5
No. of Signal	1
No. of Ratings	4

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

- Highly Pathogenic Avian Influenza in North America** **No. of Signals: 28** **No. of weeks in report: 155** **Avg. Rating: 2.0 - 4.0**
- Over the last week, [Canada](#) has reported outbreaks of HPAI in non-commercial poultry in: Newfoundland and Labrador(1)
  - In [Ontario](#), HPAI was detected in a dead goose at the Rouge National Urban Park in Scarborough
  - Over the last week, the [USDA](#) has reported outbreaks of HPAI in commercial poultry in: Ohio(7), Indiana(4), Pennsylvania(2), California(1), Iowa(1), and Missouri(1); in WOAHP poultry in: Pennsylvania(1), Colorado(1), and California(1); in WOAHP non-poultry in: Washington(1), New York(1), Wyoming(1), Minnesota(1), Colorado(1), Michigan(1), Delaware(1), and Indiana(1)
  - In [Michigan](#), preliminary samples indicate HPAI has caused the deaths of >300 wild birds in the south of the state
  - Two [New York City](#) zoos have reported the deaths of 15 ducks/wild birds due to HPAI
  - On February 13, 2025, the USDA confirmed by whole genome sequence a detection of HPAI H5N1 clade 2.3.4.4b, genotype D1.1 in dairy cattle in [Arizona](#); this confirmation was a result of state tracing and investigation, following an initial detection on silo testing under the National Milk Testing Strategy
  - As of February 17, 2025, the [USDA](#) has reported influenza A (H5N1) in 972 dairy herds across 17 states; Arizona(1), Wyoming(1), North Carolina(1), Ohio(1), Oklahoma(2), Kansas(4), Nevada(7), South Dakota(7), [Minnesota](#)(9), New Mexico(9), Iowa(13), Utah(13), Texas(27), [Michigan](#)(31), Idaho(35), [Colorado](#)(64), and California(747); the recent outbreaks were reported from California(3), Arizona(1), and Nevada(6)
  - [Pennsylvania](#) has reached a critical “stage four” milestone granting HPAI-free status in the USDA’s National Milk Testing Strategy
  - HPAI has been confirmed in two cats living in different households in Multnomah County, [Oregon](#); both cats had consumed raw pet food (Wild Coast LLC Boneless Free Range Chicken Formula) produced in Olympia, Washington (which has now been recalled)
  - Wastewater surveillance dashboards for influenza can be found at the [CDC](#) and Stanford University’s [WastewaterSCAN](#)
- Influenza A (H5) in the USA** **No. of Signals: 10** **No. of weeks in report: 39** **Avg. Rating: 2.3 - 3.8**
- [Nevada](#) has confirmed its first human case of influenza A(H5N1) genotype D1.1 in a dairy worker who experienced mild symptoms (conjunctivitis)
  - [Ohio](#) has reported its first probable human case of influenza A(H5) in an adult male poultry farm worker from Mercer County, who had contact with deceased infected commercial poultry
  - [Wyoming](#) has reported its first human case of influenza A(H5N1) in an adult female from Platte County, who had contact with backyard poultry; she is currently hospitalized
- Highly Pathogenic Avian Influenza in Asia** **No. of Signals: 14** **No. of weeks in report: 175** **Avg. Rating: 1.5 - 3.0**
- [India](#) has confirmed HPAI in samples of cats from a market in Chhindwara, leading to the closure and sanitization of the market
  - [India](#), [Japan](#), and [South Korea](#) have reported additional outbreaks of HPAI H5N1 in domestic poultry
- Highly Pathogenic Avian Influenza in Australia** **No. of Signals: 01** **No. of weeks in report: 09** **Avg. Rating: 2.8**
- [Australia](#) has reported a second outbreak of HPAI H7N8 at a poultry property in northern Victoria; both of the recently infected properties are connected and are in quarantine
- Influenza A (H9N2 & H10N3) in China** **No. of Signals: 02** **No. of weeks in report: 64** **Avg. Rating: 2.7 - 2.8**
- [China](#) has reported two additional human cases of influenza A(H9N2), both in children, with onset dates in December 2024 and January 2025
  - In [China](#), the fourth human case of influenza A(H10N3) has been successfully treated and discharged from the hospital
- SARS-CoV-2 worldwide (Italy)** **No. of Signals: 01** **No. of weeks in report: 65** **Avg. Rating: 2.7**
- An outbreak of SARS-CoV-2 has been reported in mink in Capergnanica, [Italy](#), identified in October 2024; 900 mink were culled as a result
- New World Screwworm in Central/North America** **No. of Signals: 02** **No. of weeks in report: 23** **Avg. Rating: 1.7 - 2.7**
- [Nicaragua](#) has reported 30 human cases of NWS along with >11,000 cases in animals throughout the country
- Highly Pathogenic Avian Influenza in Europe** **No. of Signals: 16** **No. of weeks in report: 211** **Avg. Rating: 2.0 - 2.5**
- In [Switzerland](#), hundreds of birds have been vaccinated against HPAI at the Bern Zoological Park and Basel Zoo, however widespread vaccination is still a few years away
  - [Italy](#) has reported HPAI H5N1 in red foxes
  - [Moldova](#), [Bosnia and Herzegovina](#), [Hungary](#), and the [UK](#) have reported outbreaks of HPAI H5N1 in domestic poultry
  - The [Netherlands](#), [Italy](#), [Germany](#), and [Belgium](#) have reported cases of HPAI H5N1 in wild birds
  - The [UK](#) has issued a nationwide ban on all poultry gatherings
  - A summary of the overall HPAI situation in Europe is available [here](#)
- Highly Pathogenic Avian Influenza in Africa** **No. of Signals: 02** **No. of weeks in report: 77** **Avg. Rating: 2.0**
- [Nigeria](#) and [Niger](#) have reported outbreaks of HPAI H5N1 in domestic poultry

## SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

### African Swine Fever

- ◆ Assessing Virus Survival in African Swine Fever Virus-Contaminated Materials—Implications for Indirect Virus Transmission [Read More](#)

### Influenza

- ◆ CDC - Notes from the Field: Seroprevalence of Highly Pathogenic Avian Influenza A(H5) Virus Infections Among Bovine Veterinary Practitioners — United States, September 2024 [Read More](#)
- ◆ Transmission of highly pathogenic avian influenza H5N1 to calves fed unpasteurized milk from experimentally infected cows [Read More](#)
- ◆ Pre-print: Genetic data and meteorological conditions: unravelling the windborne transmission of H5N1 high-pathogenicity avian influenza between commercial poultry outbreaks [Read More](#)
- ◆ Pre-print: Pathology of Influenza A (H5N1) infection in pinnipeds reveals novel tissue tropism and vertical transmission [Read More](#)
- ◆ mGem: Transmission and exposure risks of dairy cow H5N1 influenza virus [Read More](#)
- ◆ Highly Pathogenic Avian Influenza Virus H5N1 in Double-crested Cormorants (*Nannopterum auritum*) of the Chesapeake Bay, USA [Read More](#)
- ◆ Novel H16N3 avian influenza viruses isolated from migratory gulls in China in 2023 [Read More](#)
- ◆ Limited transmission of avian influenza viruses, avulaviruses, coronaviruses and Chlamydia sp. at the interface between wild birds and a free-range duck farm [Read More](#)

### Mpox

- ◆ WHO - Multi-country outbreak of mpox, External situation report #47 - 13 February 2025 [Read More](#)
- ◆ Epidemiological and genomic evolution of the ongoing outbreak of clade Ib mpox virus in the eastern Democratic Republic of the Congo [Read More](#)

### Vectors and Vector Borne Diseases

- ◆ Lack of Competence of US Mosquito Species for Circulating Oropouche Virus [Read More](#)
- ◆ PAHO - Epidemiological Alert Risk of dengue outbreaks due to increased circulation of DENV-3 in the Americas Region [Read More](#)
- ◆ PAHO - Epidemiological Update Oropouche in the Americas Region [Read More](#)

### Other

- ◆ The clinical characteristics of *Streptococcus equi ssp. zooepidemicus* causing acute death in pigs and its prevention with chimeric monoclonal antibodies [Read More](#)
- ◆ WHO - Global framework to define and guide studies into the origins of emerging and re-emerging pathogens with epidemic and pandemic potential [Read More](#)
- ◆ New York State - Global Health Update Report - 02/13/2025 [Read More](#)
- ◆ France - Weekly Bulletin for International Animal Health Surveillance 18/02/2025 [Read More](#)
- ◆ ECDC - Communicable disease threats report, 8 - 14 February 2025, week 7 [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.