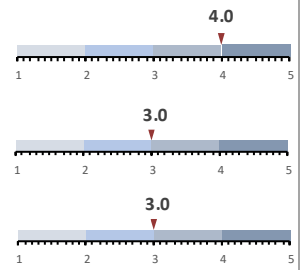


SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥ 3.0)

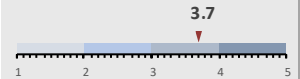
Influenza A (H5)

- ◆ The CDC has confirmed a severe case of IAV H5N1 in **Louisiana**; genetic analysis indicates that the virus belongs to the D1.1 genotype related to other D1.1 viruses recently detected in wild birds and poultry in the USA and in recent human cases in British Columbia and Washington state [Read More](#)
- ◆ **Iowa** has reported its first human case of IAV H5 (CDC confirmed) in an individual exposed to infected poultry while working with a commercial flock in northwest Iowa [Read More](#)
- ◆ **Wisconsin** has reported its first human case of IAV H5N1 (CDC confirmed) in an individual in **Barron county** who had exposure to infected poultry [Read More](#)



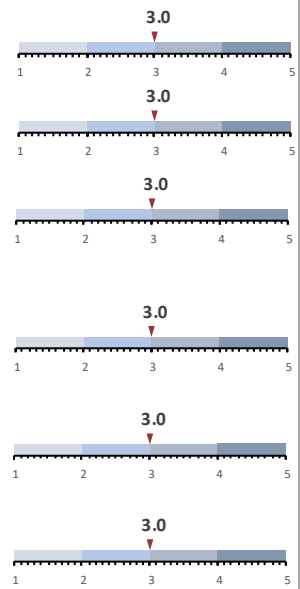
Bovine Tuberculosis

- ◆ The CFIA is conducting an investigation after bovine tuberculosis was found in a 6-year-old cow that was slaughtered in **Alberta**, and traced back to **Saskatchewan**; the farm is under quarantine and further testing of other animals is underway [Read More](#)



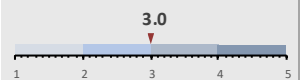
Highly Pathogenic Avian Influenza

- ◆ Over the last week, **Canada** reported additional outbreaks of HPAI in commercial poultry in: **British Columbia**(2) and **Ontario**(4) [Read More](#)
- ◆ As of December 19, 2024, CFIA laboratories have tested 1,432 raw milk samples from processing plants across all provinces in **Canada** for HPAI, with all samples testing negative [Read More](#)
- ◆ As of December 23, 2024, the USDA has reported influenza A(H5N1) in 880 dairy herds across 16 states: **Nevada**(1), **Wyoming**(1), **North Carolina**(1), **Ohio**(1), **Oklahoma**(2), **Kansas**(4), **South Dakota**(7), **Minnesota**(9), **New Mexico**(9), **Iowa**(13), **Utah**(13), **Texas**(27), **Michigan**(29), **Idaho**(35), **Colorado**(64), and **California**(664)
 - The recent outbreaks were reported from **California**(19) and **Texas**(1)
- ◆ **Illinois** has reported a large waterfowl mortality event due to HPAI at numerous locations throughout the state [Read More](#)
- ◆ In **California**, **Los Angeles County** is investigating additional possible cases of HPAI H5 in cats from a different household; these cats did not consume raw milk but became ill presumably after consuming two different brands of raw pet food diets composed of raw poultry and raw beef [Read More](#)
- ◆ **Washington** has confirmed the presence of HPAI in the Wild Felid Advocacy Center, after the passing of 20 large wild cats, including: 1 Bengal Tiger, 4 Cougars, 1 African Caracal, 2 Canada Lynx, 1 Geoffroy Cat, 1 Bengal Cat, 1 Eurasian Lynx, 4 Bobcats, and 5 African Servals; the source of exposure has not been identified but may be due to consumption of raw meat [Read More](#)

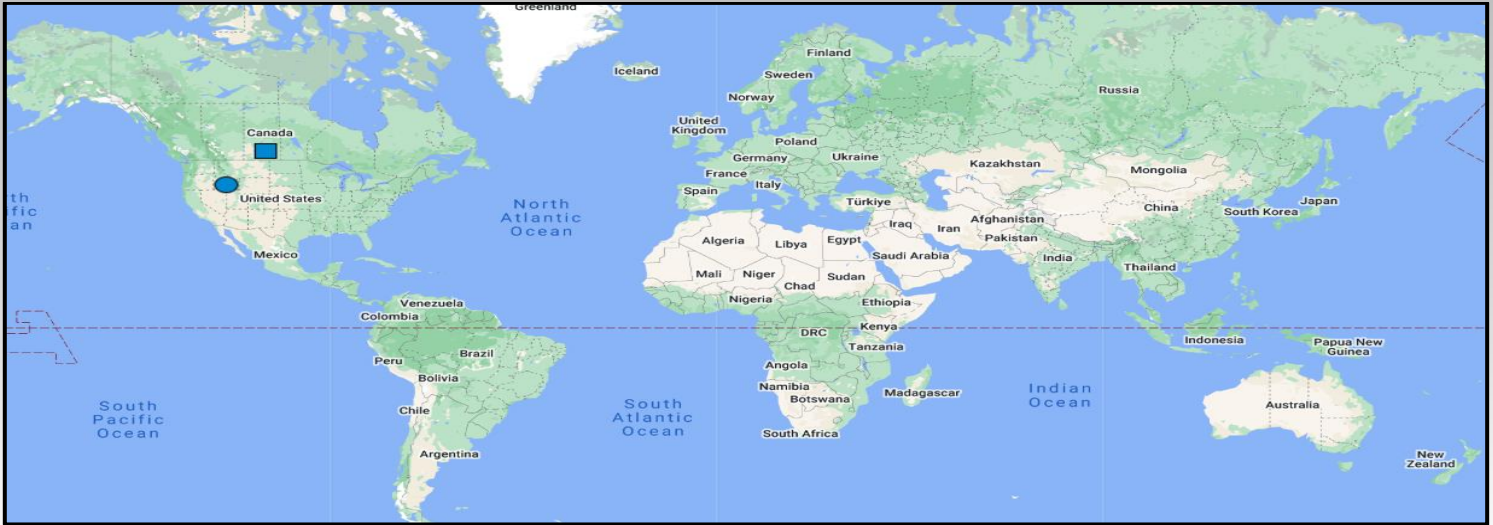


Chronic Wasting Disease

- ◆ **Idaho** has reported CWD in a bull elk in **Madison County** that had died earlier and tissue samples were submitted for routine testing; the infected bull was among a group of elk transported to the Idaho ranch in March 2023 from a facility in **Alberta, Canada** [Read More](#)



NEW EVENTS: (events rated > 2)



■ Bovine Tuberculosis in Saskatchewan

Pathogen: bacteria; **Transmission:** direct contact; **Species affected in event:** cattle

① The CFIA is conducting an investigation after bovine TB was found in a Saskatchewan cow. The infected animal was slaughtered in Alberta, where tests confirmed the disease. The cow, aged six, tested positive on November 29, 2024, leading to the tracing back to a farm in Saskatchewan. The farm is under quarantine and additional testing and tracing is underway. [Read More](#)

Avg. Rating	3.7
No. of Signal	1
No. of Ratings	3

● Chronic Wasting Disease in Idaho

Pathogen: prion; **Transmission:** direct contact; **Species affected in event:** bull elk

① CWD has been detected in a captive elk for the first time in Idaho. The Idaho State Department of Agriculture announced a domestic bull elk tested positive for CWD in Madison County. It had died earlier, and tissue samples were submitted for routine testing. The USDA confirmed the findings. The infected bull was among a group of elk transported to the Idaho ranch in March 2023 from a facility in Alberta, Canada. The elk facility had been approved to import the herd. Shortly after the shipment arrived in Idaho, the ranch in Alberta confirmed a CWD-positive elk. Once notified of the CWD-positive elk from the Canadian ranch, the shipment that arrived in Idaho was placed under a protective quarantine to restrict further movement of the CWD-exposed animals. All remaining elk that arrived in the 2023 shipment are alive and will remain under state-issued quarantine. [Read More](#)

Avg. Rating	3.0
No. of Signal	1
No. of Ratings	4

CONTINUED EVENTS: (events rated ≥ 2.4)

Influenza A (H5) in the USA

No. of Signals: 16 **No. of weeks in report: 35** **Avg. Rating: 2.0 - 4.0**

- The CDC has confirmed a severe case of IAV H5N1 in [Louisiana](#); genetic analysis indicates that the virus belongs to the D1.1 genotype related to other D1.1 viruses, recently detected in wild birds and poultry in the USA and in recent human cases in British Columbia and Washington state
- [Iowa](#) has reported its first human case of IAV H5 (CDC confirmed) in an individual exposed to infected poultry while working with a commercial flock in northwest Iowa
- [Wisconsin](#) has reported its first human case of IAV H5N1 (CDC confirmed) in an individual in Barron county who has exposure to infected poultry
- As of December 23, 2024, the [CDC](#) has reported 65 confirmed human cases of IAV H5, along with an additional seven probable cases (H5 positive at a public health laboratory but not confirmed by CDC), including one from Delaware

Highly Pathogenic Avian Influenza in North America

No. of Signals: 23 **No. of weeks in report: 148** **Avg. Rating: 1.4 - 3.0**

- Over the last week, [Canada](#) reported additional outbreaks of HPAI in commercial poultry in: British Columbia(4) and Ontario(1)
- As of December 19, 2024, [CFIA laboratories](#) have tested 1,432 raw milk samples from processing plants across all provinces in Canada for HPAI, with all samples testing negative
- The [Newfoundland and Labrador](#) Department of Fisheries, Forestry and Agriculture's Wildlife Division is conducting testing for avian influenza in furbearers; trappers are encouraged to submit skinned carcasses of various species and will be compensated \$10 per carcass
- Over the last week, the [USDA](#) has reported outbreaks of HPAI in commercial poultry in: Iowa(3), California(3), Minnesota(3), South Dakota(2), Alabama(1), and Mississippi(1); in WOAHP poultry in: South Dakota(1), Wisconsin(1), Nebraska(1); in WOAHP non-poultry in: Idaho(2), Oregon(2), Nebraska(1), Iowa(1), North Dakota(1), Louisiana(1), Alabama(1), Minnesota(1), Kansas(1), and Arkansas(1); and in commercial birds raised for release in: Kansas(2)
- [Illinois](#) has reported a large waterfowl mortality event due to HPAI at numerous locations throughout the state
- [Kentucky](#) and [Idaho](#) have also reported cases and die-offs in wild birds
- [Texas](#) has reported HPAI H5N1 in a wild bird in Galveston County; staff involved have been tested for influenza, with two negative results and two other currently being monitored for symptoms
- As of December 23, 2024, the [USDA](#) has reported influenza A (H5N1) in 880 dairy herds across 16 states; Nevada(1), Wyoming(1), North Carolina(1), Ohio(1), Oklahoma(2), Kansas(4), South Dakota(7), [Minnesota](#)(9), New Mexico(9), Iowa(13), Utah(13), Texas(27), [Michigan](#)(29), Idaho(35), [Colorado](#)(64), and California(664); the recent outbreaks were reported from California(19) and Texas(1)
- [Vermont](#) is sampling raw milk for HPAI at the farm level; so far none of Vermont's dairy herds have contracted the virus
- In [California](#), Los Angeles County is investigating additional possible cases of HPAI H5 in cats from a different household; these cats did not consume raw milk but became ill presumably after consuming two different brands of raw pet food diets composed of raw poultry and raw bee f
- [Washington](#) has confirmed the presence of HPAI in the Wild Felid Advocacy Center, after the passing of 20 large wild cats, including: 1 Bengal Tiger, 4 Cougars, 1 African Caracal, 2 Canada Lynx, 1 Geoffroy Cat, 1 Bengal Cat, 1 Eurasian Lynx, 4 Bobcats, and 5 African Servals; the source of exposure has not been identified but may be due to consumption of raw meat
- Wastewater surveillance dashboards for influenza can be found at the [CDC](#) and Stanford University's [WastewaterSCAN](#); during the first week of December, 60 sites (~19%) were positive for H5 (including states that have yet to report outbreaks in dairy cattle: Florida, Delaware, Maine, and New Jersey)

New World Screwworm in Central/North America

No. of Signals: 03 **No. of weeks in report: 18** **Avg. Rating: 2.3 - 2.7**

- [Mexico](#) has reported another case of NWS, this time in the state of Campeche; a one-week-old zebu calf had fly larva in a wound on the umbilical cord

African Swine Fever in Europe

No. of Signals: 03 **No. of weeks in report: 160** **Avg. Rating: 2.0 - 2.5**

- [Germany](#) has expanded its ASF zone after finding infected wild boar carcasses on the island of Rhine
- [Latvia](#) has detected ASF in 78 wild boars in the last week
- [Poland](#) has also reported ASF in wild boars

African Swine Fever in Asia

No. of Signals: 08 **No. of weeks in report: 137** **Avg. Rating: 2.0 - 2.4**

- [Indonesia](#) has reported ASF in 32 of its 38 provinces, warning of risks of further spread
- [India](#) has reported outbreaks of ASF in domestic swine in multiple regions
- [South Korea](#) has reported its 11th outbreak of ASF of the year
- [Vietnam](#) has reported cases of ASF in domestic swine
- [China](#) has reported ASF in a wild boar collected in late November 2024

Highly Pathogenic Avian Influenza in Europe

No. of Signals: 15 **No. of weeks in report: 204** **Avg. Rating: 1.8 - 2.4**

- [France](#) has declared itself free of HPAI in the absence of new outbreaks for more than a month, though the country remains on high alert
- [Poland](#) and the [UK](#) have reported outbreaks of HPAI H5N1 in domestic poultry
- [Hungary](#), [France](#), [Denmark](#), [Austria](#), [Germany](#), and [Romania](#) 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 Asia

No. of Signals: 07 **No. of weeks in report: 168** **Avg. Rating: 1.8 - 2.0**

- [Japan](#) and [South Korea](#) have reported outbreaks of HPAI H5N1 in domestic poultry
- [Japan](#) and [South Korea](#) have reported cases of HPAI H5N1 in wild birds
- [India](#) has reported an outbreak of HPAI H5N1 in domestic poultry from August 2024

SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

Influenza

- ◆ Highly pathogenic avian influenza virus H5N1 infection in dairy cows confers protective immunity against reinfection [Read More](#)
- ◆ Distribution of lesions and detection of influenza A(H5N1) virus, clade 2.3.4.4b, in ante- and postmortem samples from naturally infected domestic cats on U.S. dairy farms [Read More](#)
- ◆ Infectivity and Persistence of Influenza A Virus in Raw Milk [Read More](#)
- ◆ ECDC - Avian influenza overview September-December 2024 [Read More](#)
- ◆ Serological response to avian influenza viruses among occupationally exposed population in Taiwan, a longitudinal cohort study, 2021–2023 [Read More](#)
- ◆ Systematic Review of Avian Influenza Virus Infection and Outcomes during Pregnancy [Read More](#)
- ◆ Pre-print: Establishing methods to monitor H5N1 influenza virus in dairy cattle milk [Read More](#)
- ◆ Pre-print: Rapid Surge of Reassortant A(H1N1) Influenza Viruses in Danish Swine and their Zoonotic Potential [Read More](#)
- ◆ Pre-print: Polygenic Determinants of H5N1 Adaptation To Bovine Cells [Read More](#)
- ◆ Detection of antibodies against H5 subtype highly pathogenic avian influenza viruses in multiple raccoons in Tokachi District, Hokkaido, Japan, from 2022 to 2023 [Read More](#)
- ◆ Meta-Analysis of Seroprevalence and Prevalence of Influenza A Viruses (Subtypes H3N2, H3N8, and H1N1) in Dogs [Read More](#)
- ◆ The novel H10N3 avian influenza virus acquired airborne transmission among chickens: an increasing threat to public health [Read More](#)
- ◆ Infection Tracing and Virus Genomic Analysis of Two Cases of Human Infection with Avian Influenza A(H5N6) — Fujian Province, China, April–May 2024 [Read More](#)

Vectors and Vector Borne Diseases

- ◆ First isolation of the Sindbis virus in mosquitoes from southwestern Spain reveals a new recent introduction from Africa [Read More](#)
- ◆ Potential mechanisms underlying bluetongue virus emergence and spread [Read More](#)
- ◆ Fatal case of imported visceral leishmaniasis in a dog caused by *Leishmania infantum* in French Guiana [Read More](#)

Other

- ◆ France - Weekly Bulletin for International Animal Health Surveillance 24/12/2024 [Read More](#)
- ◆ ECDC - Communicable disease threats report, 14-20 December 2024, week 51 [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.