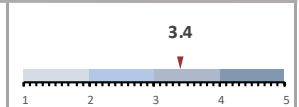


## SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥3.0)

### Chronic Wasting Disease

- ◆ CWD has been detected in **British Columbia** for the first time; two deer samples were confirmed positive south of **Cranbrook**, one in a hunter harvested male mule deer and the second in a road-kill female whitetail deer

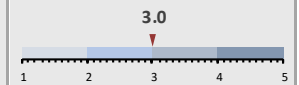
[Read More](#)



### Highly Pathogenic Avian Influenza

- ◆ Over the last week, **Canada** has reported outbreaks of HPAI in commercial poultry in: **Ontario(1)**; and in non-commercial poultry in: **Nova Scotia(1)**
- ◆ The Scientific Committee on Antarctic Research (SCAR) is monitoring the spread of HPAI in the **Antarctic** region, currently there have been 14 confirmed cases and 22 suspected cases since the initial findings from October 2023

[Read More](#)



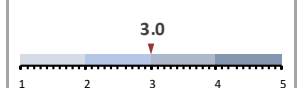
[Read More](#)



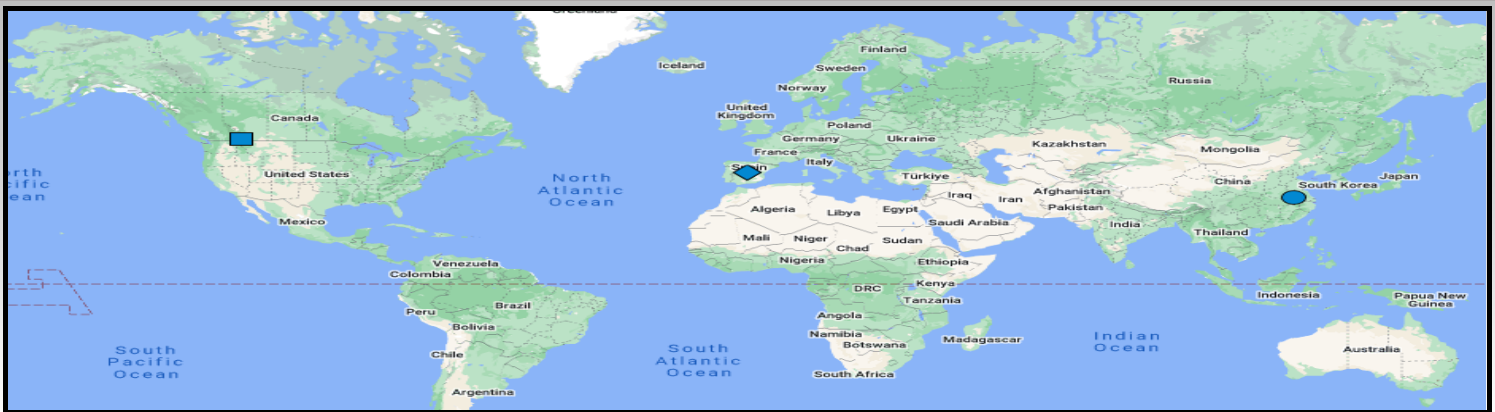
### Influenza A (H3N2 & H10N5)

- ◆ **China** has reported a human case of H3N2 and H10N5 mixed infection in a 63-year-old female with multiple underlying health conditions from **Xuancheng, Anhui Province**; the patient died on December 16, 2023, and the viruses were retrospectively identified as seasonal influenza H3N2 and avian influenza H10N5

[Read More](#)



## NEW EVENTS: (events rated > 2)



### Chronic Wasting Disease in British Columbia

**Pathogen:** prion; **Transmission:** direct contact, fomite; **Species affected in event:** deer

① CWD has been detected in deer south of Cranbrook, marking the first known cases of the condition in the province. The first sample was taken by a hunter from a male mule deer that appeared to be healthy. The second positive test result came from a road-kill female whitetail deer that was confirmed by the CFIA reference laboratory on January 31, 2024. [Read More](#)

Avg. Rating	3.4
No. of Signal	1
No. of Ratings	5

### Influenza A (H3N2 and H10N5) in China

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

① China has reported a human case of H3N2 and H10N5 mixed infection in a 63-year-old female with multiple underlying health conditions from Xuancheng, Anhui Province. The case had developed a cough, sore throat, and fever at the end of November, was admitted to hospital, and then transferred to a medical institution in Zhejiang province where they died on December 16, 2023. During a retrospective study of fatal cases, Zhejiang Province isolated seasonal H3N2 and avian H10N5 influenza viruses from case specimens. [Read More](#)

Avg. Rating	3.0
No. of Signal	1
No. of Ratings	3

### Swine Influenza A (H1N1) in Spain

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

① Spain has reported a human case of swine influenza A(H1N1) virus in a 33-year-old man who works on a pig farm in the province of Lleida. The case developed symptoms in late November 2023, and a nasal/oropharyngeal swab taken on December 12, 2024, was positive for influenza A. The regional reference laboratory in Catalonia later identified the virus as swine influenza (H1N1). No secondary cases have been detected among close family contacts or among the other 9 farm workers studied. [Read More](#)

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

## CONTINUED EVENTS: (events rated ≥ 2.4)

### **Highly Pathogenic Avian Influenza in Antarctica**

**No. of Signals: 02**

**No. of weeks in report: 04**

**Avg. Rating: 2.8 - 3.0**

- The Scientific Committee on Antarctic Research (SCAR) is monitoring the spread of HPAI in the [Antarctic](#) region, currently there have been 14 confirmed cases and 22 suspected cases since the initial findings from October 2023

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

**No. of Signals: 04**

**No. of weeks in report: 101**

**Avg. Rating: 2.0 - 3.0**

- Over the last week, [Canada](#) has reported outbreaks of HPAI in commercial poultry in: Ontario(1); and in non-commercial poultry in: Nova Scotia(1)
- HPAI is suspected to have killed 30 Canadian geese that were found along parts of [Kingston's](#) waterfront in Ontario
- Over the last week, the [USA](#) has reported outbreaks of HPAI in WOA non-poultry in: California(1)

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

**No. of Signals: 14**

**No. of weeks in report: 162**

**Avg. Rating: 2.0 - 2.7**

- The seal population in the [Caspian Sea](#) appears to be in critical condition as a recent survey has shown a catastrophically low density of seals in their seasonal places and a complete absence in the island rookeries in the spring, which is uncharacteristic during this period; dead seal findings in the region have previously been reported, with oxygen starvation, polluted waters, and HPAI identified as possible explanations
- [Moldova](#), [Germany](#), [Czech Republic](#), [Poland](#), and [Bulgaria](#) have reported HPAI H5N1 in domestic poultry
- [Ukraine](#), [Germany](#), [Belgium](#), and [Sweden](#) have reported HPAI H5N1 in wild birds
- A summary of the overall HPAI situation in Europe is available [here](#)

### **Bovine Tuberculosis in the USA**

**No. of Signals: 01**

**No. of weeks in report: 07**

**Avg. Rating: 2.5**

- [Michigan](#) has reported that a 4-year-old doe harvested in Benzie County during the 2023 deer hunting season has tested positive for bovine tuberculosis

### **Western Equine Encephalitis in South America**

**No. of Signals: 06**

**No. of weeks in report: 03**

**Avg. Rating: 2.0 - 2.5**

- [Uruguay](#) has confirmed its first human case of WEE in a 42-year-old man from San José; they are also monitoring 7 possible new cases of WEE in: San José, Soriano, Rocha, Montevideo, Paysandú, and Canelones
- [Brazil](#) has reported a positive diagnosis of WEE in a horse in the municipality of Barra do Quaraí, on the western border of Rio Grande do Sul; it is the first case of the disease recorded in the state
- In [Argentina](#), as of January 31, 2024 a total of 40 WEE human cases has been confirmed in the country, including 7 deaths, all with underlying health conditions (3 in Buenos Aires, 2 in Córdoba, 1 in Entre Ríos, and 1 in Santa Fe); ~200 additional suspected cases from 14 different provinces have been identified

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

**No. of Signals: 08**

**No. of weeks in report: 127**

**Avg. Rating: 2.0**

- [Laos](#) has reported HPAI H5N1 and LPAI H9N2 at a large live bird market in Vientiane
- [Japan](#) and [Cambodia](#) have reported HPAI H5N1 in domestic birds
- [Israel](#) has reported HPAI H5N1 in wild birds
- The [WHO](#) and [FAO](#) have released alerts regarding the increased risk of avian influenza during the Lunar New Year

### **Highly Pathogenic Avian Influenza in Africa**

**No. of Signals: 01**

**No. of weeks in report: 64**

**Avg. Rating: 2.0**

- [Ghana](#) has reported HPAI in a poultry farm in the Western Region

## SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

### Influenza

- ◆ Novel H10N3 avian influenza viruses: a potential threat to public health [Read More](#)
- ◆ A systematic review of influenza virus in water environments across human, poultry, and wild bird habitats [Read More](#)
- ◆ UK flockdown: A survey of smallscale poultry keepers and their understanding of governmental guidance on highly pathogenic avian influenza (HPAI) [Read More](#)
- ◆ Veterinarians' knowledge and experience of avian influenza and perspectives on control measures in the UK [Read More](#)
- ◆ Characteristics of two zoonotic swine influenza A(H1N1) viruses isolated in Germany from diseased patients [Read More](#)
- ◆ Transmission dynamics and pathogenesis differ between pheasants and partridges infected with clade 2.3.4.4b H5N8 and H5N1 highly pathogenicity avian influenza viruses [Read More](#)
- ◆ Incursion of Highly Pathogenic Avian Influenza A(H5N1) Clade 2.3.4.4b Virus, Brazil, 2023 [Read More](#)

### Vectors and Vector-borne Diseases

- ◆ Tick-Borne Disease Infections and Chronic Musculoskeletal Pain [Read More](#)

### Other

- ◆ Pre-print: Viroid-like colonists of human microbiomes [Read More](#)
- ◆ Climate change drives migratory range shift via individual plasticity in shearwaters [Read More](#)
- ◆ ECDC - Communicable disease threats report, January 28 – February 3 2024, week 5 [Read More](#)
- ◆ SHIC Domestic Disease Monitoring Report – February 2024 [Read More](#)
- ◆ SHIC Global Disease Monitoring Report – February 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.*