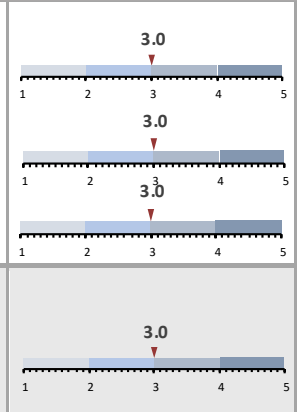


## SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥ 3.0)

### Highly Pathogenic Avian Influenza

- Over the last week, **Canada** has reported outbreaks of HPAI in non-commercial poultry in: **Saskatchewan**(1), and in non-commercial non-poultry in: **Nova Scotia**(1) [Read More](#)
- France** has reported a second outbreak of HPAI in vaccinated ducks, on the same farm in **Vendée** (in a different barn), this time involving 17,000 Muscovy ducks [Read More](#)
- HPAI H5N1 has been confirmed in elephant and fur seals on the subantarctic island of **South Georgia**; this is the first report of HPAI in mammals in **sub-Antarctica** [Read More](#)



### Lyme disease – black legged ticks

- The number of black-legged ticks is increasing in **Saskatchewan**, and due to warmer winters, tick activity may be longer than usual; scientists will also be looking to see if the tick populations have established in **Saskatchewan** [Read More](#)

## NEW EVENTS: (events rated > 2)

No new events to report this week

## CONTINUED EVENTS: (events rated ≥ 2.4)

### Highly Pathogenic Avian Influenza in South America

**No. of Signals: 01**

**No. of weeks in report: 58**

**Avg. Rating: 3.0**

- HPAI H5N1 has been confirmed in elephant and fur seals on the sub-Antarctic island of [South Georgia](#); this is the first report of HPAI in mammals in sub-Antarctica

### Highly Pathogenic Avian Influenza in Europe

**No. of Signals: 22**

**No. of weeks in report: 159**

**Avg. Rating: 2.0 - 3.0**

- [France](#) has reported a second outbreak of HPAI in vaccinated ducks, on the same farm in Vendée (in a different barn), this time involving 17,000 Muscovy ducks
- [France](#) has also reported an outbreak of HPAI in a turkey farm in Vendée; unlike ducks, turkeys are not vaccinated against HPAI
- [Sweden](#), [Bulgaria](#), [Ukraine](#), [Moldova](#), [Germany](#), and [Hungary](#) have reported HPAI H5N1 in domestic poultry
- [Germany](#), [Hungary](#), [Moldova](#), and [Romania](#) have reported HPAI H5N1 in wild birds
- [Germany](#) has reported HPAI at the Cottbus Zoo in swans and ducks
- A summary of the overall HPAI situation in Europe is available [here](#)

### Highly Pathogenic Avian Influenza in North America

**No. of Signals: 07**

**No. of weeks in report: 98**

**Avg. Rating: 2.0 - 3.0**

- Over the last week, [Canada](#) has reported outbreaks of HPAI in non-commercial poultry in: Saskatchewan(1), and in non-commercial non-poultry in: Nova Scotia(1)
- Over the last week, the [USA](#) has reported outbreaks of HPAI in commercial poultry in: Kansas(3); and in WOA non-poultry in: Maine(1), Minnesota(1), California(2), and Colorado(1)

### Porcine Epidemic Diarrhea in Canada

**No. of Signals: 02**

**No. of weeks in report: 13**

**Avg. Rating: 2.7**

- [Ontario](#) has reported five outbreaks of PED since the end of December 2023, two in finisher farms, two in farrow-to-wean farms, and one in a nursery

### Tuberculosis in Canada

**No. of Signals: 01**

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

**Avg. Rating: 2.7**

- In [Quebec's](#) far north, the number of TB cases reported throughout 2023 was one of the highest in recent decades; a total of 81 people were diagnosed with pulmonary TB in 2023

### African Swine Fever in Asia

**No. of Signals: 04**

**No. of weeks in report: 135**

**Avg. Rating: 2.0 - 2.5**

- In the [Philippines](#), ~100 doses of unauthorized ASF vaccines were recovered in recent buy-bust operations
- [Vietnam](#) has recently reported cases of ASF in Nghe An; outbreaks have also recently occurred in three provinces in the north of the country, and three more in the Mekong Delta region in the south
- [Hong Kong](#) has reported another farm positive for ASF, making it the 10<sup>th</sup> since last November, and 3<sup>rd</sup> for 2024

### Highly Pathogenic Avian Influenza in Asia

**No. of Signals: 10**

**No. of weeks in report: 124**

**Avg. Rating: 2.0**

- [South Korea](#) has reported an additional case of HPAI bringing the total number of HPAI cases at local farms this winter to 27; [the country](#) has also outlined its prevention and response measures to the HPAI H5N6 outbreaks
- Japan has reported outbreaks of HPAI in domestic poultry in [Gunma Prefecture](#) and [Gifu Prefecture](#)
- [Japan](#) and [Hong Kong](#) have reported HPAI H5N1 in wild birds

## SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

### African Swine Fever

- ◆ The Long-Jumping of African Swine Fever: First Genotype II Notified in Sardinia, Italy [Read More](#)

### Coronavirus

- ◆ Chronic shedding of a SARS-CoV-2 Alpha variant in wastewater [Read More](#)
- ◆ Experimental SARS-CoV-2 Infection of Elk and Mule Deer [Read More](#)
- ◆ Severe pneumonia with co-infection of H5N1 and SARS-CoV-2: a case report [Read More](#)

### Foot and Mouth Disease

- ◆ Detection of foot-and-mouth disease viruses from the A/AFRICA/G-I genotype in the Sultanate of Oman [Read More](#)

### Influenza

- ◆ Influenza virus immune imprinting dictates the clinical outcomes in ferrets challenged with highly pathogenic avian influenza virus H5N1 [Read More](#)
- ◆ Pre-print: Potential pandemic risk of circulating swine H1N2 influenza viruses [Read More](#)
- ◆ HA N193D substitution in the HPAI H5N1 virus alters receptor binding affinity and enhances virulence in mammalian hosts [Read More](#)

### Vectors and Vector-borne Diseases

- ◆ PAHO - Epidemiological update Western Equine Encephalitis in the Region of the Americas - 10 January 2024 [Read More](#)
- ◆ Black legged ticks increasing in Saskatchewan [Read More](#)

### Other

- ◆ Nasal bots carry relevant titers of CWD prions in naturally infected white-tailed deer [Read More](#)
- ◆ Combining Digital and Molecular Approaches Using Health and Alternate Data Sources in a Next -Generation Surveillance System for Anticipating Outbreaks of Pandemic Potential [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.*