

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

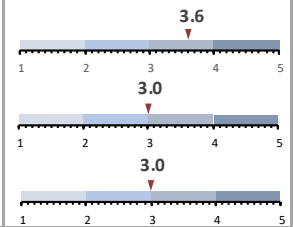
### Highly Pathogenic Avian Influenza

- Over the last week, **Canada** has reported outbreaks of HPAI H5N1 in commercial poultry in: **British Columbia(10)**
- HPAI H5N1 is suspected as the cause of snow geese mortality along the **Richelieu River** in **Montérégie, Quebec**
- Venezuela** has reported its first outbreak of HPAI H5N1 in wild birds (pelicans), located in the north-coastal region of **Anzoátegui** state

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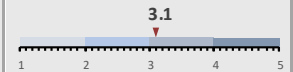
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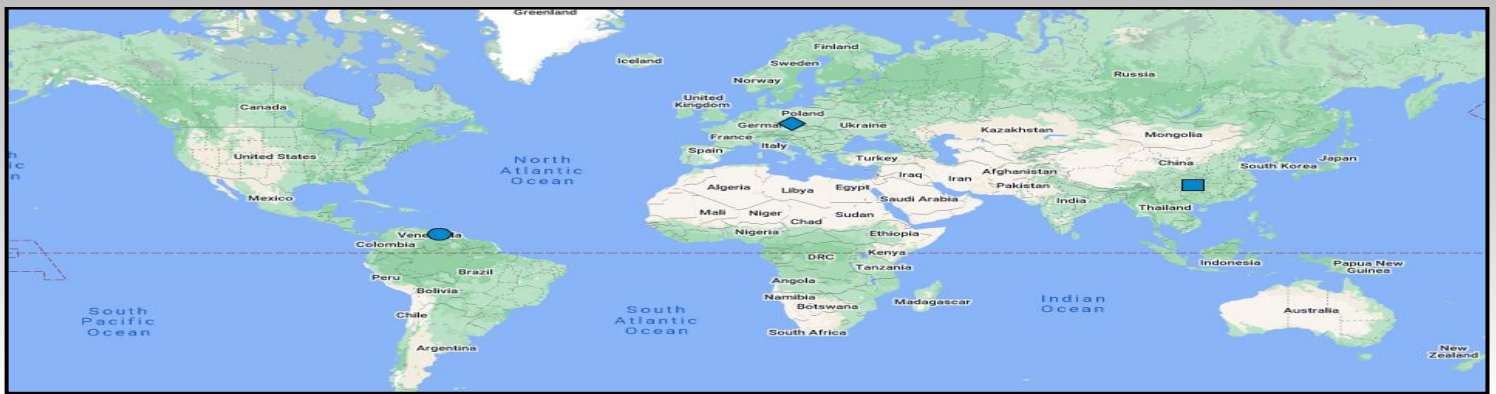
### Influenza A H5N1

- Hong Kong** has reported a human case of avian influenza A(H5N1) in a 38-year-old woman living in **Qinzhou, Guangxi**, who had exposure to live domestic poultry; she developed symptoms on September 22, was admitted for treatment on September 25, and passed away on October 18

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## NEW EVENTS: (events rated > 2)



### Influenza A H5N1 in human in China

**Pathogen:** Virus; **Transmission:** Direct contact, aerosol, fomite; **Species affected in event:** Human

Health officials in Hong Kong have reported a human case of avian influenza A(H5N1) in the Mainland. The case involves a 38-year-old woman living in Qinzhou, Guangxi, who had exposure to live domestic poultry before onset. She developed symptoms on September 22 and was admitted for treatment on September 25. She passed away on October 18. From 2005 to date, 54 human cases of avian influenza A(H5N1), including 32 fatalities have been reported by Mainland health authorities. This is the fourth human case reported globally in 2022 and the first death. [Read More](#)

Avg. Rating	2.5 - 3.1
No. of Signal	2
No. of Ratings	6 - 7

### Highly Pathogenic Avian Influenza H5N1 in Venezuela

**Pathogen:** Virus; **Transmission:** Direct contact, aerosol, fomite; **Species affected in event:** Pelican

On December 2, the Bolivarian Government of Venezuela reported the detection of HPAI H5N1 in wild birds (pelicans), located in the north-coastal region of Anzoátegui state. They've announced a health alert in the states of Anzoátegui, La Guaira, Nueva Esparta, Sucre and Miranda for 90 days. [Read More](#)

Avg. Rating	3.0
No. of Signal	1
No. of Ratings	6

### African Swine Fever in wild boar in Czech Republic

**Pathogen:** Virus; **Transmission:** Direct contact, fomite, vector-borne; **Species affected in event:** Wild boar

ASF has been detected in a dead wild boar in the Czech Republic in the north Bohemian nature range on the border with Poland. The government wants to declare an infection area of around 200 square kilometers. In this exclusion zone, entering the forests is restricted and hunting wild boar is prohibited. Any animal carcasses should be examined for the disease and disposed of. The disease last appeared in the Czech Republic four and a half years ago, but at that time in the eastern administrative region around the industrial city of Zlín. The Czech Republic announced freedom of the virus in 2021. [Read More](#)

Avg. Rating	2.6 - 2.7
No. of Signal	2
No. of Ratings	6 - 7

## CONTINUED EVENTS: (events rated ≥ 2.4)

### Highly Pathogenic Avian Influenza in North America **No. of Signals: 13** **No. of weeks in report: 47** **Avg. Rating: 1.3 - 3.6**

- Over the last week, [Canada](#) has reported outbreaks of HPAI H5N1 in commercial poultry in: British Columbia(10)
- HPAI H5N1 is suspected as the cause of snow geese mortality along the Richelieu River in Montérégie, [Quebec](#)
- Over the last week, the [USDA](#) has reported outbreaks of HPAI H5N1 in commercial poultry in: Missouri, South Dakota, and Maryland; and in backyard poultry in: Utah, Illinois, South Dakota, Missouri, Arkansas, North Carolina, and Nebraska
- In [New York](#), a live bird market has been depopulated after chickens, ducks, and guineas tested positive for HPAI; the investigation into the source continues and as a precaution other New York live bird markets have been ordered to clean and disinfect, and all markets will be tested to ensure the virus has not spread
- In [Mexico](#), HPAI H5N1 has affected ~3.9 million birds across 17 commercial poultry operations: six in Jalisco, six in Yucatan, four in Sonora, and one in Nuevo León; the Ministry of Agriculture and Rural Development has delivered ~41 million doses against HPAI H5N1 for laying birds, progenitors and breeders of Jalisco, Yucatan, Coahuila, Sonora, Durango, Nayarit and Nuevo León

### Highly Pathogenic Avian Influenza in South America **No. of Signals: 07** **No. of weeks in report: 04** **Avg. Rating: 2.0 - 2.8**

- In [Peru](#), >13 000 wild seabirds have died from HPAI H5N1 (10,257 Peruvian pelicans, 2,919 Peruvian boobies, and 614 camanay), samples have also been taken from dead sea lions to determine cause of death
- Peru has also reported its first HPAI H5N1 outbreak in domestic poultry, in [Gallito](#), Lambayeque

### Highly Pathogenic Avian Influenza in Europe **No. of Signals: 17** **No. of weeks in report: 103** **Avg. Rating: 2.0 - 2.8**

- [Cyprus](#) has reported outbreaks of HPAI on two private waterfowl collections in Paralimni where the farm owners are self-monitoring out of caution; no human cases have been confirmed as of yet – no WHO notification
- [Ireland](#), the [Netherlands](#), [Hungary](#), and [Italy](#) have reported outbreaks of HPAI H5N1 in domestic poultry
- [Slovenia](#), [Belgium](#), [Portugal](#), [Germany](#), [Russia](#), the [UK](#), and [France](#) have reported HPAI H5N1 in wild birds
- A summary of the overall HPAI situation in Europe is available [here](#)

### Influenza A (H9N2) in China **No. of Signals: 01** **No. of weeks in report: 38** **Avg. Rating: 2.5**

- [China](#) has reported a human case of influenza A H9N2 in a 3-year-old boy, with onset on September 20, 2022

### Highly Pathogenic Avian Influenza in Asia **No. of Signals: 06** **No. of weeks in report: 80** **Avg. Rating: 2.0**

- [Vietnam](#) and [South Korea](#) have reported outbreaks of HPAI H5N1 in domestic poultry
- Japan has reported HPAI H5N1 in wild birds ([red-crowned crane](#) and [hooded crane](#))

## SCIENTIFIC FINDINGS & REPORTS:

### African Swine Fever

- ◆ Climate Change Influences the Spread of African Swine Fever Virus [Read More](#)

### Influenza

- ◆ Detection of Airborne Influenza A and SARS-CoV-2 Virus Shedding following Ocular Inoculation of Ferrets [Read More](#)
- ◆ Generation of an Attenuated Chimeric Bat Influenza A Virus Live-Vaccine Prototype [Read More](#)
- ◆ Epidemiology, evolution, and biological characteristics of H6 avian influenza viruses in China [Read More](#)
- ◆ PHAO Epidemiological Update - Outbreaks of avian influenza and public health implications in the Region of the Americas [Read More](#)
- ◆ UK - Technical risk assessment for avian influenza (human health): influenza A H5N1 2.3.4.4b [Read More](#)

### Monkeypox

- ◆ Monitoring monkeypox virus in saliva and air samples in Spain: a cross-sectional study [Read More](#)
- ◆ Pre-print: Pre- and asymptomatic viral shedding in high-risk contacts of monkeypox cases: a prospective cohort study [Read More](#)

### Vectors & Vector-borne Diseases

- ◆ Rapid invasion and expansion of the Asian longhorned tick (*Haemaphysalis longicornis*) into a new area on Long Island, New York, USA [Read More](#)

### Other

- ◆ An Overview of Anthropogenic Actions as Drivers for Emerging and Re-Emerging Zoonotic Diseases [Read More](#)
- ◆ Parasitic infection increases risk-taking in a social, intermediate host carnivore [Read More](#)
- ◆ Implications of zero-deforestation palm oil for tropical grassy and dry forest biodiversity [Read More](#)
- ◆ Pre-print: An update on eukaryotic viruses revived from ancient permafrost [Read More](#)
- ◆ Canada – Wild Species Report 2020 [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.