

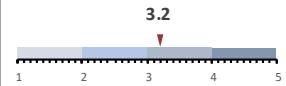
December 4th 2023 – December 10th 2023

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

Streptococcus zooepidemicus

- ◆ A recent article on a Swine Health Information Center [webinar](#) cautions that humans harboring the *Strep. zoo* bacteria could trigger outbreaks in pigs; this finding was based on the fact that an individual barn worker who transited to three different sites over three years spread *Strep. zoo* to all three sites, making this bacteria capable of a *amphixenosis* with the involvement of humans

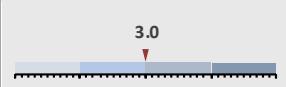
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Highly Pathogenic Avian Influenza

- ◆ Over the last week, **Canada** has reported outbreaks of HPAI in commercial poultry in: **British Columbia(1), Alberta(2), and Quebec(1)**; in non-commercial non-poultry in: **British Columbia(1)**

[Read More](#)



NEW EVENTS: (events rated > 2)



African Swine Fever in Bangladesh

Pathogen: virus; **Transmission:** direct contact, fomite, vector; **Species affected in event:** swine

- ① Bangladesh has reported cases of ASF for the first time. According to media reports, pigs started dying in the Rangamati District, Chittagong Division, on November 13, at the only official pig farm in Bangladesh. The farm kept 13 pig breeds and around 100 pigs had died by November 22. Samples sent to the Central Disease Investigation Laboratory tested positive for ASF by PCR.

[Read More](#)

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

Hantavirus pulmonary syndrome in British Columbia

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

- ① A Pemberton man is recovering after contracting hantavirus, which he thinks he contracted while cleaning his attic before leaving for a family vacation to Mexico. On average there are four to five new cases of HPS reported annually in Canada, usually observed in the spring/summer due to increased reproduction of the deer mouse population. The majority of HPS cases occur in the western provinces (British Columbia, Alberta, Saskatchewan and Manitoba) and the primary cause of the illness is the Sin Nombre virus.

[Read More](#)

Avg. Rating	2.3
No. of Signal	1
No. of Ratings	4

December 4th 2023 – December 10th 2023

CONTINUED EVENTS: (events rated ≥ 2.4)

Streptococcus zooepidemicus in North America No. of Signals: 01 No. of weeks in report: 06 Avg. Rating: 3.2

- A recent [article](#) on a Swine Health Information Center [webinar](#) cautions that humans harboring the *Strep. zoo* bacteria could trigger outbreaks in pigs; this finding was based on the fact that an individual barn worker who transited to three different sites over three years spread *Strep. zoo* to all three sites, making this bacteria capable of amphixenosis with the involvement of humans

Highly Pathogenic Avian Influenza in North America No. of Signals: 09 No. of weeks in report: 94 Avg. Rating: 2.0 - 3.0

- Over the last week, [Canada](#) has reported outbreaks of HPAI in commercial poultry in: British Columbia(1), Alberta(2), and Quebec(1); in non-commercial non-poultry in: British Columbia(1)
- Over the last week, the [USA](#) has reported outbreaks of HPAI in commercial poultry in: South Dakota(5), California(5), Minnesota(3), Wisconsin(2), Ohio(2), and Arkansas(2); in WOAH poultry in: Michigan(1); in WOAH non-poultry in: Kansas(3), South Dakota(1), Vermont(1), and Iowa(1)

Highly Pathogenic Avian Influenza in Europe No. of Signals: 24 No. of weeks in report: 155 Avg. Rating: 2.0

- [Germany](#), [France](#), [Belgium](#), the [Netherlands](#), [Hungary](#), and [England](#) have reported HPAI H5N1 in domestic birds
- [Italy](#), [Hungary](#), and [Germany](#) have reported HPAI H5N1 in wild birds
- [France](#) has raised its risk level for AI from “moderate” to “high” and has ordered that a third dose of vaccine against AI be given to ducks in areas most at risk
- A summary of the overall HPAI situation in Europe is available [here](#)

Highly Pathogenic Avian Influenza in Asia No. of Signals: 14 No. of weeks in report: 120 Avg. Rating: 2.0

- [South Korea](#) has reported four recent outbreaks of HPAI H5N1 in domestic poultry across the country; previous AI cases were reported in April 2023
- [South Korea](#) and [Japan](#) have reported HPAI in wild birds
- [Israel](#) has reported additional outbreaks of HPAI H5N1 in domestic poultry

Highly Pathogenic Avian Influenza in Africa No. of Signals: 01 No. of weeks in report: 60 Avg. Rating: 2.0

- [Ghana](#) has reported avian influenza in Ashaiman municipality, where 7,847 birds have died so far

SCIENTIFIC FINDINGS & REPORTS:

Coronavirus

- ❖ SARS-CoV-2 seroprevalence determination in pets and camels in Egypt using multispecies enzyme-linked immunosorbent assay [Read More](#)

Influenza

- ❖ Characterization of Highly Pathogenic Avian Influenza A (H5N1) Viruses isolated from Cats in South Korea, 2023 [Read More](#)
- ❖ Pre-print: Outbreak of Highly Pathogenic Avian Influenza Virus H5N1 in Seals in the St. Lawrence Estuary, Quebec, Canada [Read More](#)
- ❖ Pre-print: Pathogen-prey-predator relations of avian raptors during epizootics of highly pathogenic avian influenza virus HPAIV H5N1 (clade 2.3.4.4b) in Germany [Read More](#)
- ❖ Experimental infection of pigs and ferrets with “pre-pandemic,” human-adapted, and swine-adapted variants of the H1N1pdm09 Influenza A virus reveals significant differences in viral dynamics and pathological manifestations [Read More](#)
- ❖ Concern regarding H3-subtype avian influenza virus [Read More](#)

Foot and Mouth Disease

- ❖ Isolation, molecular characterization, and genetic diversity of recently isolated foot-and-mouth disease virus serotype A in Egypt [Read More](#)

Mpox

- ❖ ECDC - Implications for the EU/EEA of the outbreak of mpox caused by Monkeypox virus clade I in the Democratic Republic of the Congo [Read More](#)

Vectors and Vector-borne Disease

- ❖ Systematic literature review on the vector status of potential vector species of 36 vector-borne pathogens [Read More](#)
- ❖ Do birds play a role in the transmission of Toscana virus? Initial isolation results from birds in northernmost Türkiye [Read More](#)
- ❖ Dynamics of Crimean-Congo hemorrhagic fever virus in two wild ungulate hosts during a disease-induced population collapse [Read More](#)
- ❖ Alarming Update on Incidence of Crimean-Congo Haemorrhagic Fever in Iraq in 2023 [Read More](#)
- ❖ Unveiling *P. vivax* invasion pathways in Duffy-negative individuals [Read More](#)
- ❖ Infection of wild-caught wood mice (*Apodemus sylvaticus*) and yellow-necked mice (*A. flavicollis*) with tick-borne encephalitis virus [Read More](#)

Other

- ❖ Distribution and prevalence of antibodies to *Trichinella* spp. and *Toxoplasma gondii* in wild pigs (*Sus scrofa*) in the United States [Read More](#)
- ❖ Pre-print: Rat hepatitis E virus (HEV) cross-species infection and transmission in pigs [Read More](#)
- ❖ ECDC - Communicable disease threats report, 3-9 December 2023, week 49 [Read More](#)
- ❖ SHIC Global Disease Monitoring Report – December 2023 [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.