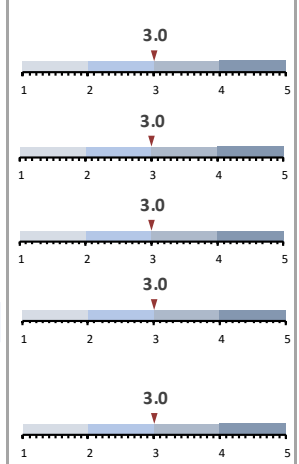


SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥3.0)

Highly Pathogenic Avian Influenza

- ◆ Preprint: Pathology of natural infection with highly pathogenic avian influenza virus (H5N1) clade 2.3.4.4b in wild terrestrial mammals in the **United States** in 2022 [Read More](#)
- ◆ A recent journal article reports the findings of HPAI H5N1 clade 2.3.4.4b in a stranded harbour porpoise (from late June 2022) in **Sweden** [Read More](#)
- ◆ **Chile** has reported a record number of marine strandings in the first quarter of 2023 with 532 sea lions, 234 Humboldt penguins and 6 marine otters being found dead from January to March this year (13 of the 187 carcasses sampled have tested positive for HPAI H5N1). Only 131 marine strandings were reported during all of 2022 [Read More](#)
- ◆ The **UK** has reported HPAI H5N1 in dolphins found dead on beaches in February, one in **Pembrokeshire (Wales)** and the other in **Devon (Britain)** [Read More](#)
- ◆ The **UK** has also reported HPAI H5N1 in 10/15 South American bush dogs that were part of a captive breeding program at a zoological premises in **England**; the virus was detected in post mortem samples that were tested as part of a routine investigation into an unusual mammal die-off in November 2022 [Read More](#)



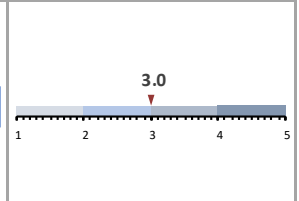
African Swine Fever

- ◆ **China** is experiencing a surge in ASF infections, which began around the Lunar New Year holiday in January; data from ASF virus testing companies shows that the order of magnitude in a single month has reached the level of the whole year of 2022 [Read More](#)



Babesiosis

- ◆ The CDC Morbidity and Mortality Weekly Report has reported a significant increase in the incidence of babesiosis from 2011-2019 across the **United States** in: **Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont**, with the largest increases reported in **Vermont** (1,602%, from two to 34 cases), **Maine** (1,422%, from nine to 138), **New Hampshire** (372%, from 13 to 78), and **Connecticut** (338%, from 74 to 328) [Read More](#)



NEW EVENTS: (events rated > 2)



Small hive beetle in Tasmania

Pathogen: N/A - pest; **Transmission:** N/A ; **Species affected in event:** N/A

① The small hive beetle has been found in a beehive at Devonport Port with a 15-kilometre exclusion zone declared. The pest beetle can fly up to 7km and infiltrate bee hives, posing a threat to Tasmania's \$12.8-million honey industry. The small hive beetle, which originates from Africa, has now been detected in all Australian states except the Northern Territory. [Read More](#)

Avg. Rating	2.6
No. of Signal	1
No. of Ratings	7

CONTINUED EVENTS: (events rated ≥ 2.4)

Highly Pathogenic Avian Influenza in South America

No. of Signals: 11

No. of weeks in report: 18

Avg. Rating: 2.1 - 3.0

- [Chile](#) has reported a record number of marine strandings in the first quarter of 2023 with 532 sea lions, 234 Humboldt penguins and 6 marine otters being found dead from January to March this year (13 of the 187 carcasses sampled have tested positive for HPAI H5N1). Only 131 marine strandings were reported during all of 2022
- [Chile](#) has reported its first outbreak of HPAI H5N1 in domestic poultry
- In [Colombia](#), HPAI has killed ~500 wild birds in the Gorgona National Natural Park
- [Uruguay](#) and [Argentina](#) have reported additional outbreaks of HPAI H5 in domestic poultry
- [Honduras](#) has reported HPAI H5N1 in wild birds

African Swine Fever in Asia

No. of Signals: 04

No. of weeks in report: 150

Avg. Rating: 2.0 - 3.0

- [China](#) is experiencing a surge in ASF infections, which began around the Lunar New Year holiday in January; data from ASF virus testing companies shows that the order of magnitude in a single month has reached the level of the whole year of 2022
- [India](#) and [Indonesia](#) have reported cases of ASF in domestic swine
- [Nepal](#) has reported cases of ASF in wild boar

Highly Pathogenic Avian Influenza in Europe

No. of Signals: 10

No. of weeks in report: 117

Avg. Rating: 2.0 - 3.0

- The [UK](#) has reported HPAI H5N1 in 10/15 South American bush dogs that were part of a captive breeding program at a zoological premises in England; the virus was detected in post-mortem samples that were tested as part of a routine investigation into an unusual mammal die-off in November 2022
- The [UK](#) has also reported HPAI H5N1 in dolphins found dead on beaches in February, one in Pembrokeshire (Wales) and the other in Devon (Britain)
- In the [Netherlands](#), two of the four vaccines tested for their efficacy against HPAI H5N1 appear effective under laboratory conditions
- [Germany](#) and [Hungary](#) have reported HPAI H5N1 in domestic poultry
- [Austria](#) has 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: 42

Avg. Rating: 2.8

- Two previously unreported human cases of infection with influenza A(H9N2) viruses were detected in [China](#) according to information received during a WHO Consultation in February 2023; details on the cases have not yet been released

Highly Pathogenic Avian Influenza in North America

No. of Signals: 07

No. of weeks in report: 61

Avg. Rating: 2.0 - 2.7

- Over the last week, [Canada](#) reported an outbreak of HPAI in commercial poultry in Ontario
- HPAI is suspected as the cause of death in birds in [Newmarket](#) and [Peel Region](#) in Ontario
- Over the last week, the [USDA](#) has reported outbreaks of HPAI H5N1 in commercial poultry in: Pennsylvania; in WOAHP poultry in: Pennsylvania; and in WOAHP non-poultry in: Michigan, Pennsylvania, Iowa, Mississippi, and Missouri
- Four skunks in Larimer county, [Colorado](#), have tested positive for HPAI
- The [USDA](#) has also added four additional reports of HPAI H5N1 detections in mammals to its list, with 148 total entries to date

Highly Pathogenic Avian Influenza in Asia

No. of Signals: 09

No. of weeks in report: 94

Avg. Rating: 2.0 - 2.5

- [Bhutan](#) has reported HPAI H5N1 in domestic poultry in Singaygang
- Japan has reported HPAI H5N1 in [domestic poultry](#) and [wild birds](#)
- [Taiwan](#) is monitoring 21 people after finding LPAI H9N2 in chickens on Kinmen island

Highly Pathogenic Avian Influenza in Africa

No. of Signals: 02

No. of weeks in report: 41

Avg. Rating: 2.0

- [Senegal](#) has reported HPAI H5N1 in wild birds in Parc national de la Langue de Barbarie

SCIENTIFIC FINDINGS & REPORTS:

Coronavirus

- ◆ Potential recombination between SARS-CoV-2 and MERS-CoV: calls for the development of Pan-CoV vaccines [Read More](#)
- ◆ Cross-species transmission of coronaviruses with a focus on severe acute respiratory syndrome coronavirus 2 infection in animals: a review for the veterinary practitioner [Read More](#)

Influenza

- ◆ Pre-print: Pathology of natural infection with highly pathogenic avian influenza virus (H5N1) clade 2.3.4.4b in wild terrestrial mammals in the United States in 2022 [Read More](#)
- ◆ Pre-print: Evolution of highly pathogenic H5N1 influenza A virus in the central nervous system of ferrets [Read More](#)
- ◆ PAHO - Epidemiological Alert: Outbreaks of avian influenza caused by influenza A(H5N1) in the Region of the Americas [Read More](#)
- ◆ CDC Technical Report: Highly Pathogenic Avian Influenza A(H5N1) Viruses [Read More](#)
- ◆ Highly Pathogenic Avian Influenza A(H5N1) Virus Outbreak in New England Seals, United States [Read More](#)
- ◆ Prevalence, evolution, replication and transmission of H3N8 avian influenza viruses isolated from migratory birds in eastern China from 2017 to 2021 [Read More](#)

Vectors and Vector Borne Diseases

- ◆ Trends in Reported Babesiosis Cases — United States, 2011–2019 [Read More](#)

Other

- ◆ Continent-wide recent emergence of a global pathogen in African amphibians [Read More](#)
- ◆ Isolation, identification, and pathogenicity analysis of newly emerging gosling astrovirus in South China [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.