

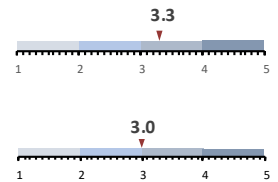
## SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥ 3.0)

### Highly Pathogenic Avian Influenza

- Over the last week, Canada has reported outbreaks of HPAI in commercial poultry in: **British Columbia(1), Manitoba(1), Saskatchewan(1), Ontario(1), and Quebec(3)**; in non-commercial poultry in: **Saskatchewan(2)**; and in non-commercial non-poultry in: **Alberta(2)**
- Spain** has reported an outbreak of avian influenza A(H5N1) in a mink farm in **A Coruña**; the mink were tested following regular surveillance procedures after the occurrence of sick mink in the farm with respiratory symptoms and an unusual increase in deaths of the animals

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## NEW EVENTS: (events rated > 2)



### Tularemia in muskrats and beavers in Quebec

**Pathogen:** Bacteria ; **Transmission:** Direct contact, aerosol, food/water, environment, vector ; **Species affected in event:** Muskrat, beaver

① *Francisella tularensis* has been confirmed in the livers of one beaver and two muskrats found dead in May 2022 near the Sainte-Anne-de-Sorel, Quebec. The bacterial strain associated with these mortalities was identified as type B (ssp. *holarctica*). Several beaver and muskrat carcasses had been observed in this region in recent weeks. These are the first cases of tularemia diagnosed in wild animals in this region of the province. *F. tularensis holarctica* (type B) is mainly described in aquatic rodents and is less virulent for humans than *F. tularensis tularensis* (type A), which mainly circulates in the snowshoe hares. [Read More](#)

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

### Influenza A(H5) in Vietnam

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

① Vietnam has reported a 5-year-old female patient from Phu Tho, in northern Vietnam, has tested positive for influenza A(H5). This is the first human case of influenza A(H5) in Vietnam since February 2014. From 2003 to present, Vietnam has recorded 128 cases of influenza A(H5) infection, including 64 deaths. The health team took 65 samples of the patient's contacts (both distant and close), the test results showed that all were negative for influenza A(H5). [Read More](#)

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

### Highly Pathogenic Avian Influenza H5N1 in Colombia

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

① Colombia has confirmed HPAI H5N1 in domestic poultry and wild birds (blue winged teal) in Choco. Epidemiological surveillance and control activities have been launched and perifocal, surveillance and protection zones were established. The likely origin of the infection is thought to be the contact of non-poultry domestic birds with wild birds. [Read More](#)

Avg. Rating	2.3
No. of Signal	1
No. of Ratings	3

### Salmonella outbreaks linked to pet bearded dragons in the USA

**Pathogen:** Bacteria ; **Transmission:** Direct contact ; **Species affected in event:** Human

① Two multistate outbreaks of *Salmonella* infections with serotypes Vitkin and IIIb 61:z52:z53 have been linked to pet bearded dragons in the USA. As of October 12, 2022, a total of 23 people infected with the outbreak strains of *Salmonella* Vitkin (10) and *Salmonella* IIIb 61:z52:z53 (13) have been reported from 15 states. State and local public health officials are interviewing people about the animals they came into contact with in the week before they got sick. Of the 20 people interviewed, 11 (55%) reported contact with a pet bearded dragon before getting sick. Illnesses started on dates ranging from 24 Mar 2021, to 13 Sep 2022. [Read More](#)

Avg. Rating	2.0 - 2.3
No. of Signal	2
No. of Ratings	2 - 4

## CONTINUED EVENTS: (events rated ≥ 2.4)

- |  |                                  |  |                                      |
|--|----------------------------------|--|--------------------------------------|
| <b><u>Highly Pathogenic Avian Influenza in North America</u></b>   | <b><u>No. of Signals: 12</u></b> | <b><u>No. of weeks in report: 41</u></b> | <b><u>Avg. Rating: 1.8 – 3.3</u></b> |
| <ul style="list-style-type: none"> <li>Over the last week, <a href="#">Canada</a> reported outbreaks of HPAI in commercial poultry in: British Columbia(1), Manitoba(1), Saskatchewan(1), Ontario(1), and Quebec(3); in non-commercial poultry in: Saskatchewan(2); and in non-commercial non-poultry in: Alberta(2)</li> <li>Over the last week, the <a href="#">USDA</a> has reported outbreaks of HPAI H5N1 in commercial poultry in: Pennsylvania, Utah, Nebraska, and South Dakota; in backyard poultry in: Virginia, Minnesota, North Carolina, Oklahoma, Colorado, Florida, Idaho, Montana, South Dakota, North Dakota, Kansas, Texas, Missouri, and Nevada; as well as animal rescue/rehabilitation settings in New Jersey and Rhode Island</li> </ul>   |                                  |  |                                      |
| <b><u>Highly Pathogenic Avian Influenza in Europe</u></b>  | <b><u>No. of Signals: 17</u></b> | <b><u>No. of weeks in report: 97</u></b> | <b><u>Avg. Rating: 2.0 – 3.0</u></b> |
| <ul style="list-style-type: none"> <li><a href="#">Spain</a> has reported an outbreak of avian influenza A(H5N1) in a mink farm in A Coruña, the mink were tested following regular surveillance procedures after the occurrence of sick mink in the farm with respiratory symptoms and an unusual increase in deaths of the animals; the mink were tested for several diseases, including SARS-CoV-2 and influenza, two samples tested positive for avian influenza A(H5N1)</li> <li><a href="#">Ireland</a>, the <a href="#">Netherlands</a>, <a href="#">France</a>, <a href="#">Italy</a>, <a href="#">Germany</a>, <a href="#">Belgium</a> and <a href="#">Russia</a> have reported outbreaks of HPAI H5N1 in domestic poultry</li> <li><a href="#">Italy</a> and <a href="#">Belgium</a> have reported HPAI H5N1 in wild birds</li> <li>A summary of the overall HPAI situation in Europe is available <a href="#">here</a></li> </ul> |                                  |  |                                      |
| <b><u>Influenza A (H3N2v) in the USA</u></b>   | <b><u>No. of Signals: 02</u></b> | <b><u>No. of weeks in report: 07</u></b> | <b><u>Avg. Rating: 2.5 – 2.7</u></b> |
| <ul style="list-style-type: none"> <li>The CDC has reported a human case of influenza A (H3N2) variant virus in a <a href="#">Michigan</a> resident; the patient is &lt;18 years of age, was not hospitalized, has recovered from their illness; no person-to-person transmission of A(H3N2)v virus associated with this patient has been identified</li> <li>A total of nine human infections with variant novel influenza A viruses have been reported in the United States in 2022, including: four H3N2v (Michigan (1) West Virginia (3)) and five H1N2v (Georgia, Michigan, Ohio, Oregon, Wisconsin)</li> </ul>   |                                  |  |                                      |
| <b><u>Influenza A (H5N6) in China</u></b>  | <b><u>No. of Signals: 02</u></b> | <b><u>No. of weeks in report: 37</u></b> | <b><u>Avg. Rating: 2.3 – 2.5</u></b> |
| <ul style="list-style-type: none"> <li><a href="#">China</a> has reported another human case of avian influenza A(H5N6), in a 3-year-old boy living in Nanning, Guangxi, who developed symptoms on September 1; from 2014 to date, 81 human cases of avian influenza A(H5N6) have been reported by Mainland health authorities</li> </ul>  |                                  |  |                                      |
| <b><u>Ebola Virus in Uganda</u></b>  | <b><u>No. of Signals: 08</u></b> | <b><u>No. of weeks in report: 04</u></b> | <b><u>Avg. Rating: 2.0 – 2.4</u></b> |
| <ul style="list-style-type: none"> <li>As of Oct 23, 2022, <a href="#">Uganda</a> has confirmed 75 cases of Sudan virus disease and 28 confirmed deaths</li> <li>Three people in an isolation unit of Uganda's Mulago isolation facility in <a href="#">Kampala</a> have tested positive for Ebola, the 1st known transmission of the virus in the city</li> <li>WHO has raised concern over the outbreak, as eight recent cases reported in <a href="#">Uganda</a> have no known links with current patients, indicating there may be more chains of transmission/more contacts not accounted for</li> </ul>  |                                  |  |                                      |
| <b><u>Highly Pathogenic Avian Influenza in Asia</u></b>  | <b><u>No. of Signals: 01</u></b> | <b><u>No. of weeks in report: 74</u></b> | <b><u>Avg. Rating: 2.3</u></b>       |
| <ul style="list-style-type: none"> <li><a href="#">South Korea</a> has reported an outbreak of HPAI H5N1 in domestic poultry in Kyongsangbuk-do</li> </ul>   |                                  |  |                                      |
| <b><u>Highly Pathogenic Avian Influenza in Africa</u></b>  | <b><u>No. of Signals: 01</u></b> | <b><u>No. of weeks in report: 35</u></b> | <b><u>Avg. Rating: 2.0</u></b>       |
| <ul style="list-style-type: none"> <li><a href="#">South Africa</a> has reported an outbreak of HPAI H5N1 in domestic poultry in Gauteng</li> </ul>  |                                  |  |                                      |

## SCIENTIFIC FINDINGS & REPORTS:

### African Swine Fever

- Estimation of basic reproduction number ( $R_0$ ) of African swine fever (ASF) in mid-size commercial pig farms in Vietnam [Read More](#)

### Influenza

- Iceland as Stepping Stone for Spread of Highly Pathogenic Avian Influenza Virus between Europe and North America [Read More](#)

### Monkeypox

- Retrospective detection of monkeypox virus in the testes of nonhuman primate survivors [Read More](#)
- Ocular Monkeypox — United States, July–September 2022 [Read More](#)

### Other

- A Bovine Viral Diarrhea Virus Type 1c Strain in China: Isolation, Identification, and Assessment of Pathogenicity in Rabbits [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.