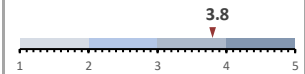


## SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥ 3.0)

### Foot and Mouth Disease

- Germany had reported cases of FMD serotype O in water buffalo in **Märkisch-Oderland, Brandenburg**; three water buffalo have died and 11 have been culled as a precautionary measure

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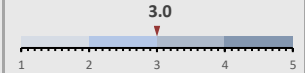
### Highly Pathogenic Avian Influenza

- Over the last week, **Canada** reported additional outbreaks of HPAI in commercial poultry in: **British Columbia(2)** and **Ontario(1)**
- As of January 13, 2025, the USDA has reported influenza A(H5N1) in 925 dairy herds across 16 states: **Nevada(1), Wyoming(1), North Carolina(1), Ohio(1), Oklahoma(2), Kansas(4), South Dakota(7), Minnesota(9), New Mexico(9), Iowa(13), Utah(13), Texas(27), Michigan(29), Idaho(35), Colorado(64), and California(708)**
  - All recent outbreaks were reported from **California(5)**
- In **California**, as a result of the influenza A H5N1 in dairy cattle, some veterinarians are reporting worsening calf health and increased abortions in adult cattle
- Iceland** has reported HPAI H5N5 in a 10-week-old kitten, two other cats from the same litter have also died but were not investigated; the cats were most likely infected after exposure to wild birds

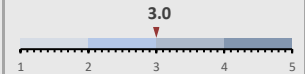
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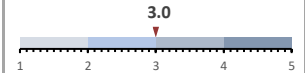
[Read More](#)



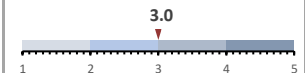
### Influenza A (H5N1)

- Cambodia** has reported its first human case of IAV H5N1 for 2025; the 28-year-old man from **Kampong Cham Province** had cooked sick chickens for food, developed severe illness, and died on January 10, 2025
- California** has reported a presumptive positive IAV H5N1 case in a child from **San Francisco** who experienced symptoms of fever and conjunctivitis and has since fully recovered

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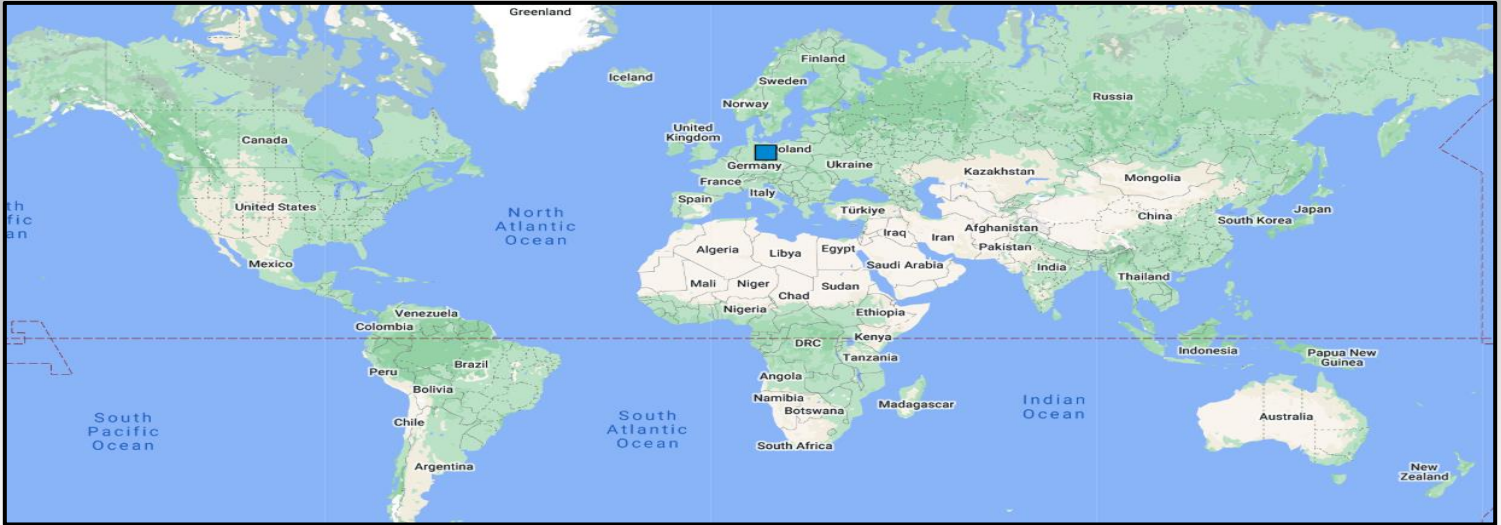
### Theileriosis

- Kansas** has recently reports *Theileria orientalis* Ikeda in calves imported from the east of the country

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NEW EVENTS: (events rated > 2)



**Foot and Mouth Disease (serotype O) in Germany**

**Pathogen:** virus; **Transmission:** direct contact, fomite, aerosol; **Species affected in event:** water buffalo

① An outbreak of FMD (serotype O) has been detected in the German state of Brandenburg for the first time since 1988. The National Reference Laboratory for FMD of the Friedrich-Loeffler-Institute has confirmed an infection with FMD virus in water buffalo in Märkisch-Oderland, Brandenburg. Three water buffalo in the region have died and 11 have been killed as a precautionary measure. Closely related FMD viruses are found in the Middle East and Asia, but the exact origin and route of entry into livestock is still unknown. Suitable vaccines against these viruses are available in the German FMD antigen bank.

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<b>Avg. Rating</b>	3.3 - 3.8
<b>No. of Signal</b>	3
<b>No. of Ratings</b>	3 - 30

## CONTINUED EVENTS: (events rated $\geq 2.4$ )

<b>Influenza A (H5N1) in Cambodia</b> <ul style="list-style-type: none"> <li><a href="#">Cambodia</a> has reported its first human case of IAV H5N1 for 2025; the 28-year-old man from Kampong Cham Province had cooked sick chickens for food, developed severe illness, and died on January 10, 2025</li> </ul>	<b>No. of Signals: 02</b>	<b>No. of weeks in report: 15</b>	<b>Avg. Rating: 3.0</b>
<b>Theileriosis in the USA</b> <ul style="list-style-type: none"> <li><a href="#">Kansas</a> has recently reported <i>Theileria orientalis</i> Ikeda in calves imported from the east of the country</li> </ul>	<b>No. of Signals: 01</b>	<b>No. of weeks in report: 05</b>	<b>Avg. Rating: 3.0</b>
<b>Highly Pathogenic Avian Influenza in Europe</b> <ul style="list-style-type: none"> <li><a href="#">Iceland</a> has reported HPAI H5N5 in a 10-week-old kitten, two other cats from the same litter have also died but were not investigated; the cats were most likely infected after exposure to wild birds</li> <li><a href="#">Iceland</a> has also reported HPAI H5N5 in wild birds</li> <li><a href="#">Germany</a>, <a href="#">England</a>, <a href="#">Poland</a>, and <a href="#">France</a> have reported outbreaks of HPAI H5N1 in domestic poultry</li> <li><a href="#">Belgium</a>, <a href="#">England</a>, <a href="#">Scotland</a>, <a href="#">Slovenia</a>, <a href="#">Hungary</a>, <a href="#">Germany</a>, <a href="#">Italy</a>, and the <a href="#">Netherlands</a> have reported cases of 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>No. of Signals: 22</b>	<b>No. of weeks in report: 206</b>	<b>Avg. Rating: 2.0 - 3.0</b>
<b>Highly Pathogenic Avian Influenza in North America</b> <ul style="list-style-type: none"> <li>Over the last week, <a href="#">Canada</a> reported additional outbreaks of HPAI in commercial poultry in: British Columbia(2) and Ontario(1)</li> <li>One of the recently reported HPAI outbreaks in <a href="#">British Columbia</a> involves an ostrich farm with ~400 birds</li> <li>Update: The Canadian importer of the previously reported voluntary recalled pet food (Northwest Naturals brand 2lb Feline Turkey Recipe) confirmed that they did not receive any of the product that was recalled on December 24, 2024</li> <li>Over the last week, the <a href="#">USDA</a> has reported outbreaks of HPAI in commercial poultry in: Ohio(2), Indiana(1), North Carolina(1), and Delaware(1); in WOAHP poultry in: Puerto Rico(1) and Oregon(1); and in WOAHP non-poultry in: South Dakota(2), Texas(2), Minnesota(1), Iowa(1), Georgia(1), Florida(1), Missouri(1), Idaho(1), and Michigan(1)</li> <li>As of January 13, 2025, the <a href="#">USDA</a> has reported influenza A (H5N1) in 925 dairy herds across 16 states; Nevada(1), Wyoming(1), North Carolina(1), Ohio(1), Oklahoma(2), Kansas(4), South Dakota(7), <a href="#">Minnesota</a>(9), New Mexico(9), Iowa(13), Utah(13), Texas(27), <a href="#">Michigan</a>(29), Idaho(35), <a href="#">Colorado</a>(64), and California(708); all recent outbreaks were reported from California(5)</li> <li>The <a href="#">USDA</a> announced 15 more states have enrolled in its National Milk Testing Strategy, bringing the total number of participating states to 28 and covering 65% of the nation's milk production</li> <li>In <a href="#">California</a>, as a result of the influenza A H5N1 in dairy cattle, some veterinarians are reporting worsening calf health and increased abortions in adult cattle</li> <li><a href="#">California</a> has banned all poultry and dairy cattle exhibitions until further notice</li> <li>In <a href="#">Pennsylvania</a>, HPAI is suspected to have caused the deaths of about 200 snow geese in the greater Allentown area</li> <li><a href="#">Washington</a> has reported the deaths of two wild mountain lions due to HPAI</li> <li>Wastewater surveillance dashboards for influenza can be found at the <a href="#">CDC</a> and Stanford University's <a href="#">WastewaterSCAN</a></li> </ul>	<b>No. of Signals: 15</b>	<b>No. of weeks in report: 150</b>	<b>Avg. Rating: 2.0 - 3.0</b>
<b>Influenza A (H5) in the USA</b> <ul style="list-style-type: none"> <li><a href="#">California</a> has reported a presumptive positive IAV H5N1 case in a child from San Francisco who experienced symptoms of fever and conjunctivitis and has since fully recovered</li> <li>In <a href="#">Michigan</a>, eleven people who had contact with infected birds in Oakland County are being monitored for signs of the IAV H5N1, two of which have flu-like symptoms</li> </ul>	<b>No. of Signals: 06</b>	<b>No. of weeks in report: 37</b>	<b>Avg. Rating: 2.0 - 3.0</b>
<b>New World Screwworm in Central/North America</b> <ul style="list-style-type: none"> <li>As of January 9, 2025, authorities in <a href="#">Honduras</a> have confirmed 242 cases of NWS, with no reports in humans so far</li> <li><a href="#">Belize</a> has confirmed its second case of NWS in the Toledo District, with the source of introduction still under investigation</li> </ul>	<b>No. of Signals: 03</b>	<b>No. of weeks in report: 20</b>	<b>Avg. Rating: 2.3 - 2.5</b>
<b>Highly Pathogenic Avian Influenza in Asia</b> <ul style="list-style-type: none"> <li><a href="#">India</a> has reported the deaths of three tigers and one leopard at a rescue center Nagpur due to HPAI H5N1, likely acquired by consuming infected chickens</li> <li><a href="#">South Korea</a> has reported HPAI H5N3 in a wild bird from October 2024</li> <li>The <a href="#">Philippines</a> have reported an outbreak of HPAI H5N2 in backyard ducks in Camarines Norte province</li> <li><a href="#">Vietnam</a>, <a href="#">Israel</a>, <a href="#">Japan</a>, and <a href="#">South Korea</a> have reported outbreaks of HPAI H5N1 in domestic poultry</li> <li>In China, the city of <a href="#">Shanghai</a> is suspending the sale of live poultry until the end of 2027</li> </ul>	<b>No. of Signals: 17</b>	<b>No. of weeks in report: 170</b>	<b>Avg. Rating: 2.0 - 2.5</b>
<b>Mpox worldwide (China, France)</b> <ul style="list-style-type: none"> <li><a href="#">China</a> has reported a cluster outbreak of mpox clade Ib, with the source of introduction identified as a foreign individual with a history of living in the DRC; four cases have been found in people infected after close contact with the foreigner</li> <li><a href="#">France</a> has reported its first case of mpox clade Ib in a woman who had contact with travellers from Central Africa</li> <li><a href="#">Sierra Leone</a> has reported its first case of mpox (clade unknown) in a 27-year-old man from the Western Zone</li> </ul>	<b>No. of Signals: 04</b>	<b>No. of weeks in report: 38</b>	<b>Avg. Rating: 2.0 - 2.5</b>

## SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

### Influenza

- ◆ Pre-print: Polymerase mutations underlie early adaptation of H5N1 influenza virus to dairy cattle and other mammals [Read More](#)
- ◆ Comparison of Contemporary and Historic Highly Pathogenic Avian Influenza A(H5N1) Virus Replication in Human Lung Organoids [Read More](#)
- ◆ Detection and characterization of high pathogenicity avian influenza virus (H5N1/H5N8) clade 2.3.4.4b, Hong Kong SAR, China, 2021 to 2024 [Read More](#)
- ◆ The H5N6 Virus Containing Internal Genes From H9N2 Exhibits Enhanced Pathogenicity and Transmissibility [Read More](#)

### Mpox

- ◆ WHO - Mpox Multi-country external situation report no. 45, published 11 January 2025 [Read More](#)

### Vectors and Vector Borne Diseases

- ◆ Human Infection with a Novel Tickborne Orthonairovirus Species in China [Read More](#)
- ◆ Eilat virus isolated from *Culex univittatus* mosquitoes from the Namibian Zambezi Region influences in vitro superinfection with alpha- and flaviviruses in a virus-species-dependent manner [Read More](#)
- ◆ Two Human Infections with Diverse Europe-1 Crimean-Congo Hemorrhagic Fever Virus Strains, North Macedonia, 2024 [Read More](#)

### Other

- ◆ Catastrophic and persistent loss of common murre after a marine heatwave [Read More](#)
- ◆ Cross-species recognition of two porcine coronaviruses to their cellular receptor aminopeptidase N of dogs and seven other species [Read More](#)
- ◆ CIDRAP Chronic Wasting Disease Spillover Preparedness and Response: Charting an Uncertain Future [Read More](#)
- ◆ CDC - National One Health Framework to Address Zoonotic Diseases and Advance Public Health Preparedness in the United States [Read More](#)
- ◆ France - Weekly Bulletin for International Animal Health Surveillance 14/01/2025 [Read More](#)
- ◆ ECDC - Communicable disease threats report, 4 - 10 January 2025, week 52 [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.