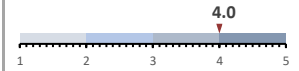


## SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥ 3.0)

### Influenza A (H5)

- ◆ **British Columbia** has reported a presumptive positive human case of avian influenza A(H5) in a teenager from the **Fraser Health region** who is receiving care at BC Children’s Hospital; this is the first detection of a presumed human case of avian influenza A(H5) acquired in **Canada** and a public health investigation has been initiated to determine the source of exposure and identify any contacts

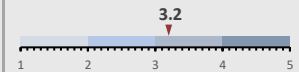
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### Highly Pathogenic Avian Influenza

- ◆ A **Campbell River** petting farm in **British Columbia** has had to depopulate ~50 chickens and ducks after HPAI H5N1 was discovered in their flock; Vancouver Island Health Authority has issued a warning to residents and visitors of the petting farm about possible exposure to avian influenza
- ◆ Over the last week, **Canada** reported additional outbreaks of HPAI in commercial poultry in: **British Columbia**(9); and in non-commercial poultry in: **Alberta**(1)
- ◆ As of November 4, 2024, CFIA laboratories have tested 391 samples of raw milk arriving at processing plants in all provinces across **Canada**; all samples have tested negative
- ◆ As of November 11, 2024, the USDA has reported influenza A(H5N1) in a total of 492 dairy herds across 15 states: **Wyoming**(1), **North Carolina**(1), **Ohio**(1), **Oklahoma**(2), **Kansas**(4), **South Dakota**(7), **Minnesota**(9), **New Mexico**(9), **Iowa**(13), **Utah**(13), **Texas**(26), **Michigan**(29), **Idaho**(35), **Colorado**(64), and **California**(278)
  - The recent outbreaks were reported from **California**(45) and **Utah**(5)
- ◆ **Oregon** has confirmed HPAI H5N1 in a second pig from the same backyard farming operation in **Crook County**, as the initial positive pig; sequencing of the sample, while incomplete due to the low level of the virus, also indicated infection from the D1.2 genotype

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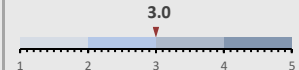
[Read More](#)



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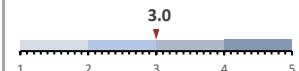
[Read More](#)



### African Swine Fever

- ◆ ASF genotype I/II recombinant strains have been reported in **China**, **Vietnam**, and **Russia** but have likely spread to other countries (neighbouring **China**); these recombinant strains are highly lethal and transmissible in pigs and current live-attenuated vaccines based on ASFV genotype II are most likely not protective against them

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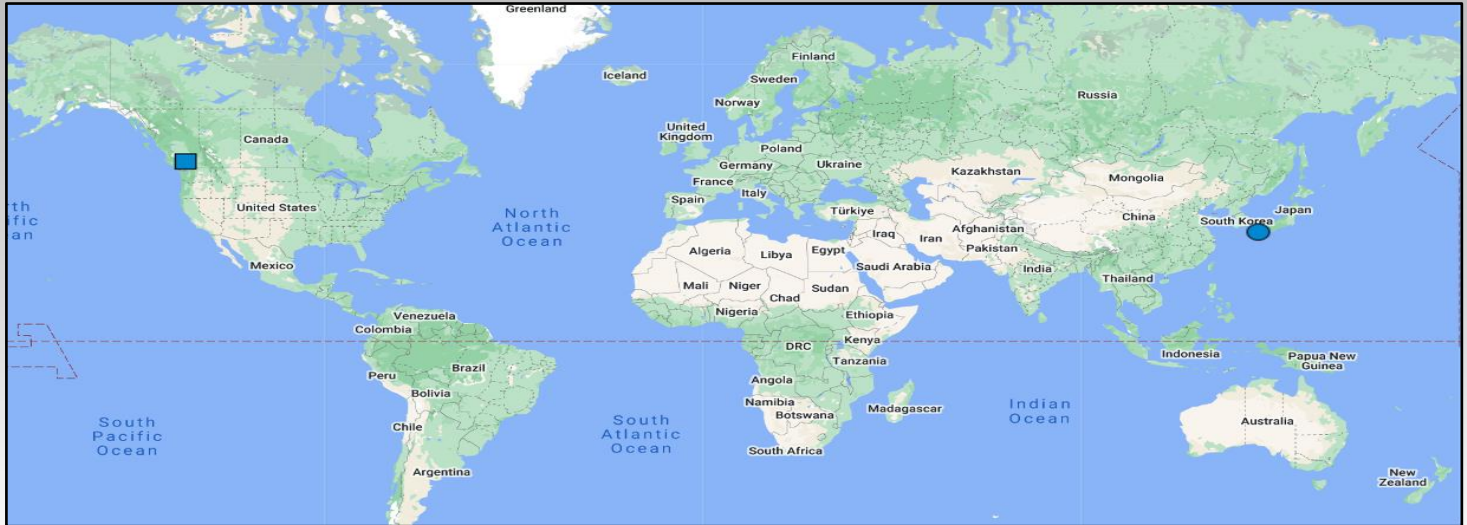
### Lumpy Skin Disease

- ◆ Lumpy skin disease has been reported in **Japan** for the first time; cases have been reported in cattle in two prefectures so far (**Fukuoka** and **Kumamoto**)

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NEW EVENTS: (events rated > 2)



**Presumptive positive avian influenza A(H5) in British Columbia**

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

① An individual in British Columbia has tested presumptive positive for avian influenza A(H5), the first detection of avian influenza due to the H5 virus in a person in BC. This is also the first detection of a presumed human case of avian influenza A(H5) acquired in Canada. The positive test for H5 was performed at the BC CDC Public Health Laboratory. Samples are being sent to the National Microbiology Laboratory in Winnipeg for confirmatory testing. The individual is a teenager from the Fraser Health region who is receiving care at BC Children's Hospital. A public health investigation has been initiated to determine the source of exposure and identify any contacts. There have been no further cases identified at this time. The source of exposure is likely to be an animal or bird, and is being investigated by BC's chief veterinarian and public health teams.

[Read More](#)

Avg. Rating	4.0
No. of Signal	3
No. of Ratings	1

**Lumpy Skin Disease in Japan**

**Pathogen:** virus; **Transmission:** vector (mosquito, fly, tick), fomite, direct contact; **Species affected in event:** cattle

① Lumpy skin disease has been reported for the first time in Japan. Initial case reports occurred in cattle in Itoshima city, Fukuoka prefecture. Three cases were then found in Ozu Town, Kumamoto prefecture, which are epidemiologically linked to the Itoshima city outbreak. Movement restrictions of all cattle, and movement restrictions and disposal of raw milk derived from cattle with clinical signs have been implemented. The source of the introduction is unknown, however Fukuoka prefecture is close to South Korea which has been recently reporting outbreaks of lumpy skin disease.

[Read More](#)

Avg. Rating	3.0
No. of Signal	2
No. of Ratings	2

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

<p><b>Highly Pathogenic Avian Influenza in North America</b></p> <ul style="list-style-type: none"> <li>• Campbell River petting farm in <a href="#">British Columbia</a> has had to depopulate ~50 chickens and ducks after HPAI H5N1 was discovered in their flock; Vancouver Island Health Authority has issued a warning to residents and visitors of the petting farm about possible exposure to avian influenza</li> <li>• Over the last week, <a href="#">Canada</a> reported additional outbreaks of HPAI in commercial poultry in: British Columbia(9); and in non-commercial poultry in: Alberta(1)</li> <li>• As of November 4, 2024, CFIA laboratories have tested 391 samples of raw milk arriving at processing plants in all provinces across <a href="#">Canada</a>; all samples have tested negative</li> <li>• Over the last week, the <a href="#">USDA</a> has reported outbreaks of HPAI in WOA non-poultry in: Washington(1)</li> <li>• <a href="#">Oregon</a> has confirmed HPAI H5N1 in a second pig from the same backyard farming operation in Crook County, as the initial positive pig; sequencing of the sample, while incomplete due to the low level of the virus, also indicated infection from the D1.2 genotype</li> <li>• As of November 11, 2024, the <a href="#">USDA</a> has reported influenza A (H5N1) in a total of 492 dairy herds across 15 states: 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(26), <a href="#">Michigan</a>(29), Idaho(35), <a href="#">Colorado</a>(64), and California(278); the recent outbreaks were reported from California(45) and Utah(5)</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>	<p><b>No. of Signals: 13</b></p> <p><b>No. of weeks in report: 141</b></p> <p><b>Avg. Rating: 2.0 - 3.2</b></p>
<p><b>Mpox Worldwide (UK)</b></p> <ul style="list-style-type: none"> <li>• In the <a href="#">UK</a>, an additional case of mpox Clade Ib has been detected in a household contact of the first UK case, bringing the total number of confirmed cases to four, all of which belong to the same household</li> </ul>	<p><b>No. of Signals: 02</b></p> <p><b>No. of weeks in report: 34</b></p> <p><b>Avg. Rating: 2.2 - 2.7</b></p>
<p><b>Highly Pathogenic Avian Influenza in Europe</b></p> <ul style="list-style-type: none"> <li>• The <a href="#">UK</a> has confirmed HPAI H5N5 in commercial poultry at a premises near Hornsea, Yorkshire</li> <li>• <a href="#">Turkey</a>, <a href="#">Hungary</a>, <a href="#">Poland</a>, and <a href="#">Austria</a> have reported outbreaks of HPAI H5N1 in domestic poultry</li> <li>• <a href="#">Germany</a> and <a href="#">Poland</a> have reported cases of HPAI H5N1 in wild birds</li> <li>• <a href="#">France</a> has moved their HPAI risk level from moderate to high</li> <li>• A summary of the overall HPAI situation in Europe is available <a href="#">here</a></li> </ul>	<p><b>No. of Signals: 13</b></p> <p><b>No. of weeks in report: 198</b></p> <p><b>Avg. Rating: 1.9 - 2.6</b></p>
<p><b>Contagious Equine Metritis in the USA</b></p> <ul style="list-style-type: none"> <li>• As of November 6, 2024 the USDA has confirmed 49 cases of CEM in Orange County, <a href="#">Florida</a>; the cases are connected to a pony stallion who tested positive for <i>Taylorella equigenitalis</i> on May 31, 2024, after live covering mares</li> </ul>	<p><b>No. of Signals: 01</b></p> <p><b>No. of weeks in report: 04</b></p> <p><b>Avg. Rating: 2.5</b></p>
<p><b>Influenza A (H5) in the USA</b></p> <ul style="list-style-type: none"> <li>• As of November 11, 2024 the <a href="#">CDC</a> has confirmed 46 total human cases of influenza A(H5), 21 of which are recent reports from California (associated with dairy farm workers) and 11 are from Washington (associated with poultry farm workers)</li> </ul>	<p><b>No. of Signals: 04</b></p> <p><b>No. of weeks in report: 29</b></p> <p><b>Avg. Rating: 2.0 - 2.5</b></p>
<p><b>Highly Pathogenic Avian Influenza in Asia</b></p> <ul style="list-style-type: none"> <li>• <a href="#">South Korea</a> has reported a case of HPAI H5N3 in a wild bird (northern pintail)</li> <li>• <a href="#">South Korea</a> has also reported cases of HPAI H5N1 in wild birds</li> <li>• <a href="#">Japan</a> has reported an outbreak of HPAI H5N1 in domestic poultry in Tainai City</li> </ul>	<p><b>No. of Signals: 03</b></p> <p><b>No. of weeks in report: 162</b></p> <p><b>Avg. Rating: 2.0</b></p>

## SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

### African Swine Fever

- ◆ SHIC Monitors Recombinant ASFV Genotype I/II Strain Emergence Globally [Read More](#)

### Influenza

- ◆ CDC - Serologic Evidence of Recent Infection with Highly Pathogenic Avian Influenza A(H5) Virus Among Dairy Workers — Michigan and Colorado, June–August 2024 [Read More](#)
- ◆ CDC MMWR - Personal Protective Equipment Use by Dairy Farmworkers Exposed to Cows Infected with Highly Pathogenic Avian Influenza A(H5N1) Viruses — Colorado, 2024 [Read More](#)
- ◆ SHIC Report - HPAI risks to swine and knowledge gaps for prevention and preparedness of H5N1 infections in the swine industry [Read More](#)
- ◆ A comprehensive epidemiological approach documenting an outbreak of H5N1 highly pathogenic avian influenza virus clade 2.3.4.4b among gulls, terns, and harbor seals in the Northeastern Pacific [Read More](#)
- ◆ Pre-print: Immune history shapes human antibody responses to H5N1 influenza viruses [Read More](#)
- ◆ Pre-print: Emergence of a Novel Reassortant Clade 2.3.2.1c Avian Influenza A/H5N1 Virus Associated with Human Cases in Cambodia [Read More](#)
- ◆ Highly Pathogenic Avian Influenza A(H5N1) Virus Infection in Cats, South Korea, 2023 [Read More](#)
- ◆ Characterization of H5N1 avian influenza virus isolated from bird in Russia with the E627K mutation in the PB2 protein [Read More](#)
- ◆ Influenza A Viruses in the Swine Population: Ecology and Geographical Distribution [Read More](#)
- ◆ CDC has released additional guidance for Public Health measures related to HPAI:
  - [Interim recommendations for Prevention, monitoring and public health investigations](#)
  - [Guidance to lower infection risk](#)
  - [Information for exposed workers](#)
  - [Interim Guidance for Employers to reduce HPAI exposure](#)
  - [Information on PPE to reduce exposure to HPAI](#)

### Other

- ◆ One Health Best Practice Case Study: Advancing National One Health Coordination in the United States through the One Health Zoonotic Disease Prioritization Process [Read More](#)
- ◆ Pre-print: Genomic characterization uncovers transmission dynamics of Marburg Virus in Rwanda following a single zoonotic spillover event [Read More](#)
- ◆ Isolation and characterization of a novel S-gene mutation porcine deltacoronavirus with high pathogenicity from diarrhea piglet in Zhejiang Province, China, 2022 [Read More](#)
- ◆ Risk factors for canine infectious respiratory disease complex and the pathogens associated with the disease [Read More](#)
- ◆ ECDC - Communicable disease threats report, 2 - 8 November 2024, week 45 [Read More](#)
- ◆ SHIC Global Disease Monitoring Report – November 2024 [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.