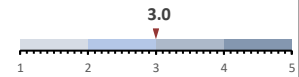


SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥ 3.0)

Influenza A (H5N1)

◆ **Missouri** has identified four additional health care workers who were exposed to the initial influenza A(H5N1) case and later developed mild respiratory symptoms; one of the workers was exposed to the case prior to droplet precautions while the other three were among 94 workers who were exposed to the case after droplet precautions were instituted – blood samples have been collected from the symptomatic workers for H5 antibody testing

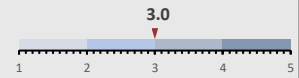
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Highly Pathogenic Avian Influenza

◆ As of September 30, 2024, the USDA has reported influenza A(H5N1) in a total of 242 dairy herds across 14 states: **Wyoming(1), North Carolina(1), Ohio(1), Oklahoma(2), Kansas(4), South Dakota(7), Minnesota(9), New Mexico(9), Iowa(13), Texas(26), Michigan(29), Idaho(33), California(43), and Colorado(64)**

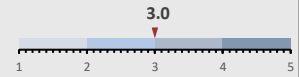
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○ The recent outbreaks have been reported from **California(9) and Idaho(1)**

◆ As of September 20, 2024, CFIA laboratories have tested 272 samples of raw milk arriving at processing plants across **Canada**; all samples have tested negative

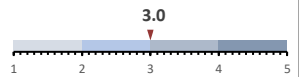
[Read More](#)



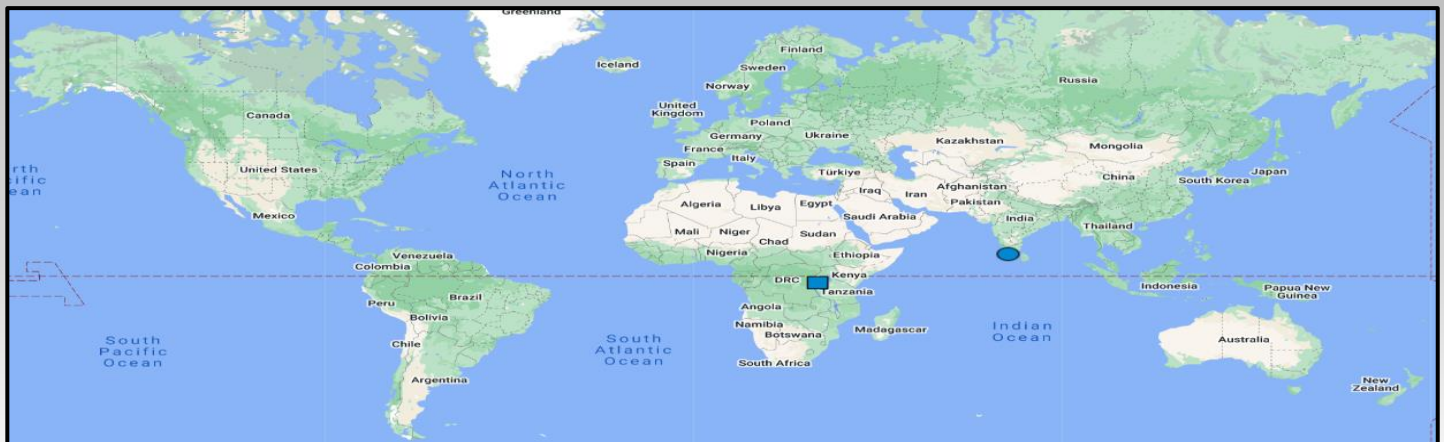
Marburg virus

◆ The **Republic of Rwanda** has reported its first outbreak of Marburg virus disease; 27 cases and nine deaths have been reported across seven of the country's 30 districts

[Read More](#)



NEW EVENTS: (events rated > 2)



Marburg virus in the Republic of Rwanda

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

① The Republic of Rwanda has reported its first outbreak of Marburg virus disease. As of September 30, 2024, Rwanda has recorded 27 cases and nine deaths across seven of the country's 30 districts. Most of the cases (70%) are health care workers, particularly those from intensive care units. Contact tracing is underway, with ~300 contacts under follow up, one of which had travelled internationally (Belgium) but completed the 21-day monitoring period without any symptoms. The source of the outbreak is under investigation.

[Read More](#)

Avg. Rating	3.0
No. of Signal	1
No. of Ratings	4

Mpox clade 1b in India

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

① On September 23, 2024, India reported its first imported case of mpox clade 1b, making it the third country outside of Africa to report the novel clade. The patient is a 38-year-old man from Malappuram district, Kerala, who travelled from the United Arab Emirates and has been hospitalized at a government medical college hospital in the district. Monitoring of 27 patient contacts and 37 airline passengers has found no related infections.

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Avg. Rating	2.7 - 2.8
No. of Signal	2
No. of Ratings	6

On September 27, 2024, India reported a second case (clade yet to be identified) of mpox in Kerala, in a 26-year-old who recently returned from the United Arab Emirates. Genome sequencing is underway.

[Read More](#)

CONTINUED EVENTS: (events rated ≥ 2.4)

Highly Pathogenic Avian Influenza in North America	No. of Signals: 09	No. of weeks in report: 135	Avg. Rating: 2.0 - 3.0
<ul style="list-style-type: none"> • Canada has not reported any outbreaks of HPAI in domestic poultry over the last week • Canada has reported HPAI H5N5 in wild birds in Nova Scotia and Newfoundland and Labrador, collected in April/May 2024 • As of September 20, 2024, CFIA laboratories have tested 272 samples of raw milk arriving at processing plants across Canada; all samples have tested negative • Over the last week, the USDA has reported outbreaks of HPAI in WOAHP poultry in: Idaho(1) • As of September 30, 2024, the USDA has reported influenza A H5N1 in a total of 234 dairy herds across 14 states: Wyoming(1), North Carolina(1), Ohio(1), Oklahoma(2), Kansas(4), South Dakota(7), Minnesota(9), New Mexico(9), Iowa(13), Texas(26), Michigan(29), Idaho(33), California(43), and Colorado(64); all recent outbreaks were reported from California(9) and Idaho(1) • A dairy farmer from Michigan who operates a closed farm, that raises its own heifers and uses artificial insemination, talked about the impact an outbreak of HPAI had on his cattle; the farmer noted that abortions increased and he had to cull about 5% (~25 cows) because they did not respond to treatment, and that milk production still has not fully recovered • Wastewater surveillance dashboards for influenza can be found at the CDC and Stanford University's WastewaterSCAN 			
Influenza A (H5N1) in the USA	No. of Signals: 02	No. of weeks in report: 23	Avg. Rating: 2.0 - 3.0
<ul style="list-style-type: none"> • Missouri has identified four additional health care workers who were exposed to the initial influenza A(H5N1) case and later developed mild respiratory symptoms; one of the workers was exposed to the case prior to droplet precautions while the other three were among 94 workers who were exposed to the case after droplet precautions were instituted – blood samples have been collected from the symptomatic workers for H5 antibody testing • CDC officials, with the help of other organizations, collected blood samples from a network of veterinarians and other veterinary professionals at the recent American Association of Bovine Practitioners conference in order to conduct a serosurvey to assess past exposure to influenza A(H5) viruses 			
Oropouche in South America and Cuba	No. of Signals: 02	No. of weeks in report: 06	Avg. Rating: 2.4 - 2.6
<ul style="list-style-type: none"> • Cuba has acknowledged that there are ~12,000 suspected cases of Oropouche in the country, significantly higher than the latest official figure of 506 confirmed cases (reported up to the beginning of August) • CDC data indicates that all of the 70 cases of Oropouche detected in Florida involved travel to Cuba 			
Contagious Equine Metritis in the USA	No. of Signals: 01	No. of weeks in report: 03	Avg. Rating: 2.4
<ul style="list-style-type: none"> • The USDA has confirmed 43 cases of CEM in Orange County, Florida, since May; in addition to the 43 confirmed cases, 59 additional horses are exposed 			
Highly Pathogenic Avian Influenza in Europe	No. of Signals: 10	No. of weeks in report: 192	Avg. Rating: 2.0 - 2.2
<ul style="list-style-type: none"> • France and Moldova have reported outbreaks of HPAI H5N1 in domestic poultry • Ukraine has reported HPAI H5 in domestic poultry • Poland, Ukraine, Moldova, Italy, and Croatia have reported cases of HPAI H5N1 in wild birds • England has reported HPAI H5N5 in wild pheasants in Worcestershire; this follows two cases of H5N5 detected in wild birds in the Highlands and in Northumberland • A summary of the overall HPAI situation in Europe is available here 			
Highly Pathogenic Avian Influenza in Asia	No. of Signals: 01	No. of weeks in report: 156	Avg. Rating: 2.0
<ul style="list-style-type: none"> • Taiwan has reported an outbreak of HPAI H5N1 in domestic poultry (layer quails) in Changhua County 			
Highly Pathogenic Avian Influenza in South America	No. of Signals: 01	No. of weeks in report: 75	Avg. Rating: 2.0
<ul style="list-style-type: none"> • The Falkland Islands have reported HPAI in one Gentoo penguin on Surf Bay 			

SCIENTIFIC FINDINGS, REPORTS, AND GUIDANCE:

Coronavirus

- ◆ Genetic tracing of market wildlife and viruses at the epicenter of the COVID-19 pandemic [Read More](#)
- ◆ Pre-print: SARS-CoV-2 Survival on Skin and its Transfer from Contaminated Surfaces [Read More](#)

Influenza

- ◆ USDA Highly Pathogenic Avian Influenza H5N1 Genotype B3.13 in Dairy Cattle: National Epidemiologic Brief [Read More](#)
- ◆ The global H5N1 influenza panzootic in mammals [Read More](#)
- ◆ Exposure Practices to Animal-Origin Influenza A Virus at the Animal-Human Interface in Poultry and Swine Backyard Farms [Read More](#)
- ◆ Utilizing citizen science data to rapidly assess changing associations between wild birds and avian influenza outbreaks in poultry [Read More](#)
- ◆ Circulation of influenza viruses in the dog population in Kazakhstan (2023–2024) [Read More](#)

Mpox

- ◆ Emerging Monkeypox Virus Sublineage C.1 Causing Community Transmission, Vietnam, 2023 [Read More](#)
- ◆ WHO – Mpox- Multi-country External Situation Report n. 38, published 28 September 2024 [Read More](#)
- ◆ Orthopoxvirus-specific antibodies wane to undetectable levels 1 year after MVA-BN vaccination of at-risk individuals, the Netherlands, 2022 to 2023 [Read More](#)

Vectors and Vector borne Diseases

- ◆ Vesicular Stomatitis Virus Detected in Biting Midges and Black Flies during the 2023 Outbreak in Southern California [Read More](#)
- ◆ Evidence of Lineage 1 and 3 West Nile Virus in Person with Neuroinvasive Disease, Nebraska, USA, 2023 [Read More](#)
- ◆ Rapid Increase in Seroprevalence of Borrelia burgdorferi Antibodies among Dogs, Northwestern North Carolina, USA, 2017–2021 [Read More](#)
- ◆ First detection of V410L kdr mutation in Aedes aegypti populations of Argentina supported by toxicological evidence [Read More](#)

Other

- ◆ A New Variant of Avian Encephalomyelitis Virus Associated with Neurologic Signs in Turkey Poults [Read More](#)
- ◆ Pathogen genomic surveillance status among lower resource settings in Asia [Read More](#)
- ◆ Nigeria CDC - Lassa Fever Situation Report [Read More](#)
- ◆ France - Weekly Bulletin for International Animal Health Surveillance 01/10/2024 [Read More](#)
- ◆ ECDC - Communicable disease threats report, 21 - 27 September 2024, week 39 [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.