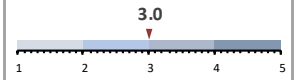


SUMMARY: RELEVANT SIGNALS (includes all signals rated ≥ 3.0)

Influenza A (H5)

- WHO has released an update on the **Ecuador** human H5 case - as of January 17, 2023 the patient remains hospitalized, under isolation, and with non-invasive mechanical ventilation

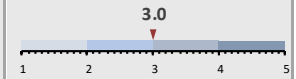
[Read More](#)



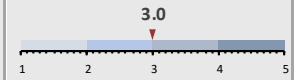
Highly Pathogenic Avian Influenza

- Montana** has reported three juvenile grizzly bears tested positive for HPAI virus this past fall; these were the first documented cases of HPAI in grizzly bears
- A publication regarding the HPAI H5N1 outbreak in a mink farm in **Spain** has been released indicating that an uncommon mutation (T271A) in the PB2 gene with potential public health implications was found; onward mink transmission of the virus may have occurred on the affected farm

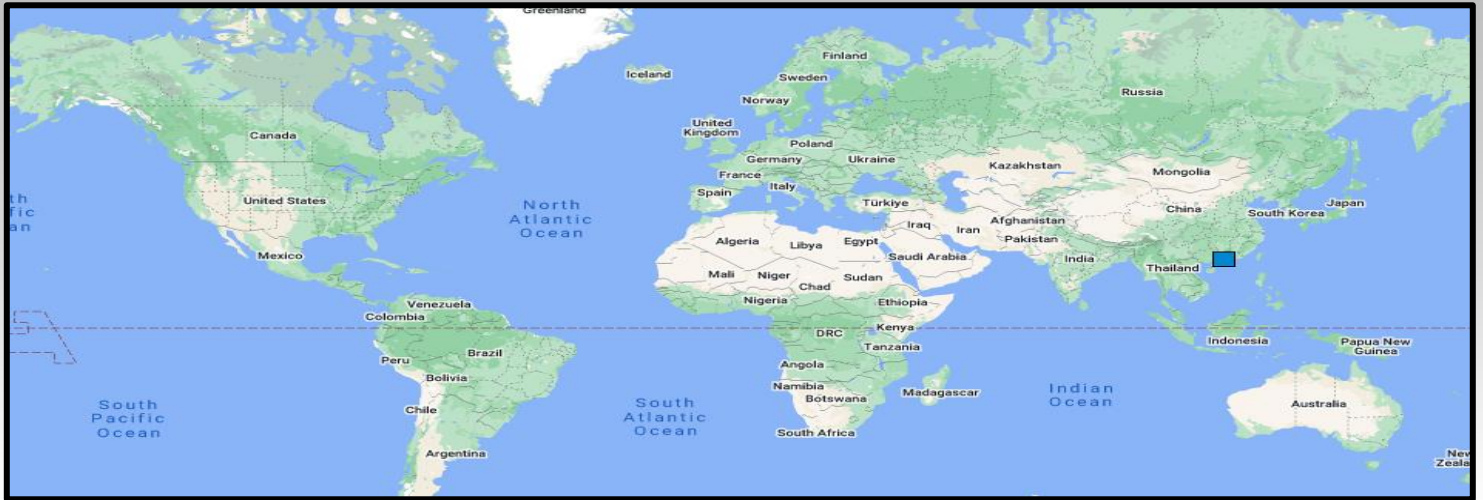
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NEW EVENTS: (events rated > 2)



Unidentified illness in China

Pathogen: Unknown; **Transmission:** Unknown; **Species affected in event:** Human

① A leaked memo addressed to Nigerian health authorities dated January 16, 2023 showed the Chinese CDC raised an alarm on December 13, 2022 regarding the symptoms of an unidentified disease following an outbreak leading to the death of residents in China, including three Nigerians. The initial clinical analysis ruled out COVID-19, but the symptoms of the disease include dry throat, fever, and difficulty in breathing. Hospitals in Guangzhou have been inundated with patients having the disease, with 7 Nigerians said to be in critical condition as a result. The NCDC is considering reactivating its COVID-19 isolation center.

[Read More](#)

****Note this information remains unconfirmed, it should be interpreted with caution.**

Avg. Rating	2.3
No. of Signal	1
No. of Ratings	5

CONTINUED EVENTS: (events rated ≥ 2.4)

<p><u>Influenza A (H5) in Ecuador</u></p> <ul style="list-style-type: none"> • WHO has released an update on the Ecuador human H5 case - as of January 17, 2023 the patient remains hospitalized, under isolation, and with non-invasive mechanical ventilation 	<u>No. of Signals: 02</u>	<u>No. of weeks in report: 02</u>	<u>Avg. Rating: 3.0</u>
<p><u>Highly Pathogenic Avian Influenza in North America</u></p> <ul style="list-style-type: none"> • Over the last week, Canada has reported outbreaks of HPAI H5N1 in commercial poultry in: British Columbia(2) • Over the last week, the USDA has reported outbreaks of HPAI H5N1 in commercial poultry in: Kansas, Virginia, and Tennessee; in WOAHP poultry in: Texas; and in WOAHP non-poultry in: Ohio, Washington, and California • Montana has reported three juvenile grizzly bears tested positive for HPAI virus this past fall marking the first documented cases of HPAI in grizzly bears; since then, a grizzly bear in Nebraska has also tested positive for HPAI • Mexico has reported that the outbreak of AI H7N3 in farms in La Laguna and Southeast Coahuila is under control; the outbreak affected 550 farms and ~6 million birds 	<u>No. of Signals: 08</u>	<u>No. of weeks in report: 53</u>	<u>Avg. Rating: 1.7 – 3.0</u>
<p><u>Porcine Reproductive and Respiratory Syndrome in the USA</u></p> <ul style="list-style-type: none"> • PRRS lineage 1C RFLP 1-2-4 detection has continued to increase across the USA, with 264 sequences in 2022, more than 62.7% of the total number of sequences detected from 2009 to 2021 (n=421); since November 2022, there has been an increase in the number of detections in Iowa, and the East Mississippi states, raising concern about this ongoing winter season 	<u>No. of Signals: 02</u>	<u>No. of weeks in report: 14</u>	<u>Avg. Rating: 2.0 - 2.8</u>
<p><u>Highly Pathogenic Avian Influenza in Europe</u></p> <ul style="list-style-type: none"> • Last year, Scotland reported HPAI in four otters identified as part of routine surveillance; HPAI was also reported in four foxes in England • Russia, Germany, and the Czech Republic reported HPAI H5N1 in domestic poultry • The Czech Republic, Belgium, Hungary, and Sweden reported HPAI H5N1 in wild birds • A summary of the overall HPAI situation in Europe is available here 	<u>No. of Signals: 07</u>	<u>No. of weeks in report: 109</u>	<u>Avg. Rating: 2.0 - 2.8</u>
<p><u>African Swine Fever in Europe</u></p> <ul style="list-style-type: none"> • Greece has reported ASF in a dead female wild boar in the municipal unit of Petritsi, Serres; the last time Greece reported cases of ASF was in February 2020, at a small pig farm in the same region • Serbia and Moldova have reported ASF in domestic swine • Hungary, Latvia, North Macedonia, and Italy have reported cases of ASF in wild boar 	<u>No. of Signals: 07</u>	<u>No. of weeks in report: 141</u>	<u>Avg. Rating: 1.4 - 2.7</u>
<p><u>Canine Influenza in North America</u></p> <ul style="list-style-type: none"> • Canine influenza H3N2 has been reported in the metro Atlanta area, Georgia, in Fulton and DeKalb counties, with 3 shelters reporting confirmed cases 	<u>No. of Signals: 01</u>	<u>No. of weeks in report: 02</u>	<u>Avg. Rating: 2.5</u>
<p><u>Highly Pathogenic Avian Influenza in South America</u></p> <ul style="list-style-type: none"> • Ecuador has reported new cases of HPAI in domestic birds in Tungurahua • Honduras has declared a national 90-day health emergency after AI was confirmed in waterfowl, including brown pelicans, at La Ceiba beach in Atlantida department and in Alvarado Lagoon in Puerto Cortes, Cortes department 	<u>No. of Signals: 02</u>	<u>No. of weeks in report: 10</u>	<u>Avg. Rating: 2.1 - 2.3</u>
<p><u>Highly Pathogenic Avian Influenza in Asia</u></p> <ul style="list-style-type: none"> • Japan has reported an outbreak of HPAI H5N2 in domestic poultry in Ooita • The Philippines have reported an outbreak of HPAI H5N1 in domestic poultry in Central Luzon 	<u>No. of Signals: 04</u>	<u>No. of weeks in report: 86</u>	<u>Avg. Rating: 2.0</u>

SCIENTIFIC FINDINGS & REPORTS:

Coronavirus

- ◆ Pre-print: The Ecology of Viruses in Urban Rodents with a Focus on SARS-CoV-2 [Read More](#)

Influenza

- ◆ Highly pathogenic avian influenza A(H5N1) virus infection in farmed minks, Spain, October 2022 [Read More](#)
- ◆ The role of transforming growth factor beta-1 protein in *Escherichia coli* secondary infection induced by H9N2 avian influenza virus in chickens [Read More](#)

Mpox

- ◆ Monkeypox Virus Evolution before 2022 Outbreak [Read More](#)

Vectors and Vector-borne Diseases

- ◆ Using Zoos as Sentinels for Re-Emerging Arboviruses: Vector Surveillance during an Outbreak of Epizootic Hemorrhagic Disease at the Minnesota Zoo [Read More](#)
- ◆ Epidemic of lumpy skin disease in Pakistan [Read More](#)
- ◆ Powassan Virus Lineage I in Field-Collected *Dermacentor variabilis* Ticks, New York, USA [Read More](#)

Other

- ◆ Novel Species of *Brucella* Causing Human Brucellosis, French Guiana [Read More](#)
- ◆ Autochthonous *Angiostrongylus cantonensis* Lungworms in Urban Rats, Valencia, Spain, 2021 [Read More](#)
- ◆ Genetic characteristics and pathogenicity of avian pox virus for a new host, Cherry Valley breeder ducks in China [Read More](#)
- ◆ A novel grovirus is abundant in yellow-eyed penguin (*Megadyptes antipodes*) chicks with a fatal respiratory disease [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.