WEEKLY INTELLIGENCE REPORT

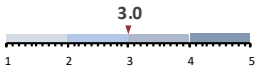
September 26th – October 2nd 2022

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: **Alberta**(2), **Saskatchewan**(1), **Manitoba**(4) and **Ontario**(1); in small flock poultry in: **Saskatchewan**(2), **Alberta**(1) and **British Columbia**(1); and in small flock non-poultry in: **Saskatchewan**(1) and **Manitoba**(1)

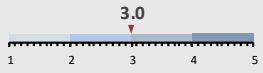
Read More



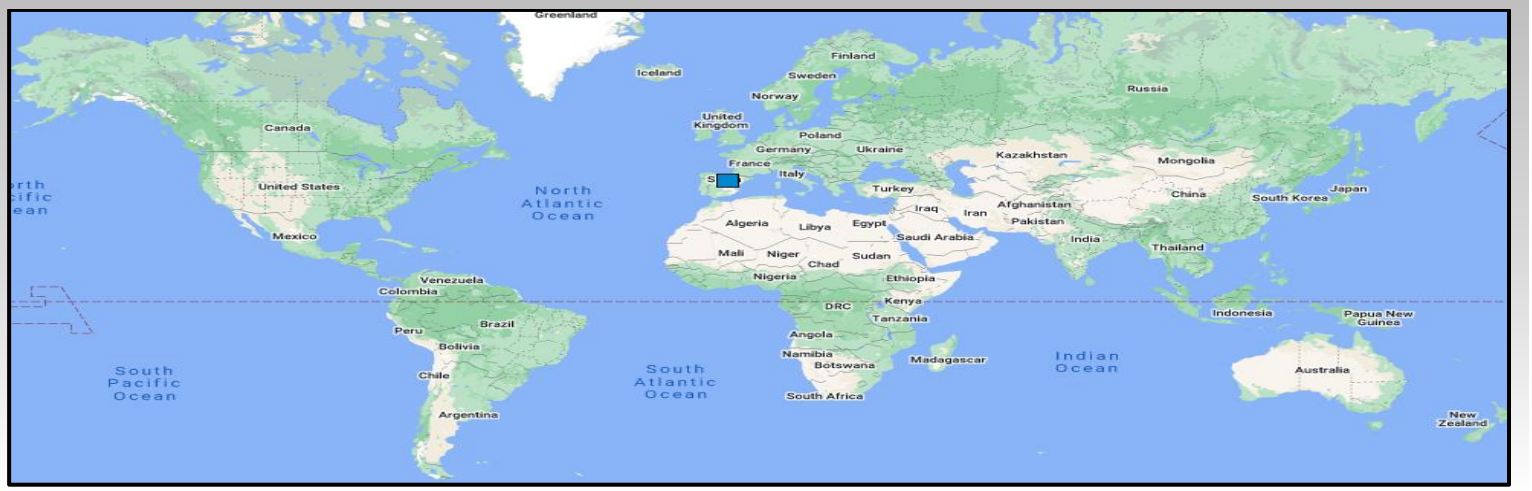
Influenza A H5N1

- On September 27, 2022, the **Spanish** National Center for Microbiology reported a case of avian influenza A(H5N1) in an asymptomatic poultry worker from **Guadalajara** who has already tested negative

Read More



NEW EVENTS: (events rated > 2)



Influenza A H5N1 in poultry worker in Spain

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

ⓘ On September 27, 2022, the Spanish National Center for Microbiology reported a case of avian influenza A(H5N1) in an asymptomatic male who has already tested negative. The infected person was a worker at a poultry farm in Guadalajara (Castilla-La Mancha) where an outbreak of the disease among poultry had been reported on September 17. The positive was detected during routine checks and the worker entered home isolation until the 28th when he tested negative via PCR test. The tests carried out on the rest of the workers on the farm as well as the infected individuals close contact were also negative. Read More

Avg. Rating	3.0
No. of Signal	1
No. of Ratings	3

CONTINUED EVENTS: (events rated ≥ 2.4)

Highly Pathogenic Avian Influenza in North America — **No. of Signals: 07** — **No. of weeks in report: 38** — **Avg. Rating: 1.8 - 3.0**

- Over the last week, Canada has reported outbreaks of HPAI in commercial poultry in: Alberta(2), Saskatchewan(1), Manitoba(4) and Ontario(1); in small flock poultry in: Saskatchewan(2), Alberta(1) and British Columbia(1); and in small flock non-poultry in: Saskatchewan(1) and Manitoba(1)
- Saskatchewan has issued an animal health order to limit the spread of HPAI; effective until at least Oct. 21, the order prohibits movement of birds across the province for auctions, agricultural fairs and other events where any bird might be brought together from multiple locations
- Ontario has also issued an order to limit the commingling of birds from different locations in the province
- Over the last week, the USDA has reported outbreaks of HPAI H5N1 in commercial poultry in: Utah, Wisconsin, and North Dakota; as well as backyard poultry in: North Dakota, Oregon, Colorado, Pennsylvania, and Minnesota

Anaplasmosis, Lyme Disease, Babesiosis in the US — **No. of Signals: 01** — **No. of weeks in report: 03** — **Avg. Rating: 2.5**

- Maine is reporting a rise in tick-borne diseases, so far this year the state has recorded ~2000 cases of Lyme disease, ~700 cases of anaplasmosis, >160 cases of babesiosis, 10 cases of hard tick relapsing fever, and four cases of Powassan

Monkeypox worldwide — **No. of Signals: 10** — **No. of weeks in report: 21** — **Avg. Rating: 1.3 - 2.5**

- As of Oct 3, 2022, the CDC is reporting 68,874 confirmed cases of monkeypox across 107 different countries
- Canada has reported 1,400 cases of monkeypox to date (2 in the Yukon, 162 cases in British Columbia, 39 in Alberta, 3 in Saskatchewan, 1 in Manitoba, 674 in Ontario, 517 in Quebec, 1 in Nova Scotia, and 1 in New Brunswick)
- Monkeypox has been reported in Sudanese refugee camps, with 120 total cases (suspected and confirmed) reported as of Sept 28
- The CDC has issued a health advisory informing healthcare providers that there have been severe manifestations of monkeypox observed in the US

Undiagnosed Disease in Ecuador — **No. of Signals: 02** — **No. of weeks in report: 02** — **Avg. Rating: 1.5 - 2.4**

- The dead pigs sampled in Ecuador that were found to be negative for Classical Swine Fever were also analyzed (and tested PCR negative) for African Swine Fever as part of routine surveillance for the disease in the country

Ebola Virus in Uganda — **No. of Signals: 10** — **No. of weeks in report: 02** — **Avg. Rating: 1.4 - 2.4**

- Uganda has reported additional cases of Ebola Sudan strain; a total of 54 cases (35 confirmed, 19 probable) have been reported with 25 deaths (7 in confirmed cases, 18 from probable infections)
- Cases have been reported in health care workers (7) and survivors have been told to refrain from sex for 3 months (unless condoms are used) as a way to prevent spread

Foot and Mouth Disease in Indonesia — **No. of Signals: 01** — **No. of weeks in report: 06** — **Avg. Rating: 2.4**

- Bali claims the island has been free of FMD for almost two months, with the last officially reported case on August 1; however sources have seen and filmed cattle with clear signs of FMD this month in separate areas of Bali and farmers have reported cattle with symptoms consistent with the disease

Highly Pathogenic Avian Influenza in Europe — **No. of Signals: 13** — **No. of weeks in report: 94** — **Avg. Rating: 1.6 - 2.2**

- The Netherlands, Russia, Italy, and Belgium have reported outbreaks of HPAI H5N1 in domestic poultry
- Denmark, Norway, Portugal have reported cases of HPAI H5N1 in wild birds
- The Netherlands have also reported HPAI H5N1 in captive birds
- 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: 73** — **Avg. Rating: 2.0**

- Japan has reported HPAI H5N1 in wild birds in Kanagawa

SCIENTIFIC FINDINGS & REPORTS:

African Swine Fever

- Pre-print: Estimating the effectiveness of control and eradication actions on African swine fever transmission in commercial swine populations in the United States Read More

Coronavirus

- An ACE2-dependent Sarbecovirus in Russian bats is resistant to SARS-CoV-2 vaccines Read More

Influenza

- Influenza A (H6N6) viruses isolated from chickens replicate in mice and human lungs without prior adaptation Read More

Monkeypox

- The risk of reverse zoonotic transmission to pet animals during the current global monkeypox outbreak, United Kingdom, June to mid-September 2022 Read More
- Pre-print: Sequencing of Monkeypox virus from infected patients reveals viral genomes with APOBEC3-like editing, gene inactivation, and bacterial agents of skin superinfection Read More
- ECDC Europe Monkeypox Surveillance Bulletin – Retrospective testing in UK identifies monkeypox case on March 7, 2022 Read More

Vectors and Vector-borne Diseases

- Asian Longhorned tick discovered in northern Missouri for first time Read More

Other

- Primate hemorrhagic fever-causing arteriviruses are poised for spillover to humans Read More
- Langya virus outbreak in China, 2022: Are we on the verge of a new pandemic? Read More
- Amphibian collapses increased malaria incidence in Central America Read More
- First report of Porcine respirovirus 1 in South Korea Read More
- Emergence of a novel PRRSV-1 strain in mainland China: A recombinant strain derived from the two commercial modified live viruses Amervac and DV Read More
- Breathing can be dangerous: Opportunistic fungal pathogens and the diverse community of the small mammal lung mycobiome Read More
- Reconsidering the incubation period of Marburg virus disease Read More
- Predicting the evolution of the Lassa virus endemic area and population at risk over the next decades Read More