



alert



FAO ALERT ON AVIAN INFLUENZA – RISK OF UPSURGE AND REGIONAL SPREAD THROUGH WILD BIRDS IN LATIN AMERICA AND THE CARIBBEAN

6 December 2024

Key facts:

1. Avian influenza (AI) is a highly contagious viral disease with zoonotic potential that has severe impacts on animal health, livelihoods, economy and human health.
2. Wild waterfowl are considered the natural reservoir for AI viruses. Wild migratory bird movements are one of the main drivers for the long-distance and intercontinental spread of highly pathogenic avian influenza (HPAI) viruses. Contacts between wild birds and poultry is a major risk factor for HPAI introduction into farms.
3. Unregulated trade in live poultry, shared vehicles or other fomites, and poor management of dead birds are some of the main drivers for HPAI spread between farms.
4. In its highly pathogenic form, AI affects most severely gallinaceous birds (e.g. chickens, turkeys, quails, or guinea fowls), resulting in severe and acute systemic infection and high mortality. Domestic ducks have shown more resilience to HPAI virus infections however, fatal outcomes may be reported even in these species.
5. In late 2021, H5N1 virus clade 2.3.4.4b was introduced in North America by migratory birds. It spread along established flyways, reaching South America by October 2022, the sub-Antarctic by October 2023 and has since continued to circulate in the region.
6. HPAI has caused significant mortalities in wild bird and mammalian populations in recent epidemics, including endangered species under conservation efforts. More than 50 wild bird species and several marine mammal species were affected by HPAI in Latin America in 2023.

FAO calls for heightened surveillance and preparedness for avian influenza (AI) during the Southern hemisphere's summer period. The H5N1 viruses, particularly those within clade 2.3.4.4b, continue to genetically diversify and spread across the Americas. Given the ongoing situation in the region, the risk of (re) introduction to countries along the wild bird migratory corridors is regarded as high.

FAO recommends countries and territories in the Region of Latin America and the Caribbean (RLC) enhance efforts on biosecurity, early detection, diagnosis, outbreak response, and coordination with neighbouring countries under a One Health approach, including sequencing of viruses and sharing data where possible.

Since the start of autumn in the Northern hemisphere, HPAI cases in wild and domestic birds have increased in North America. During this period, the United States (US) reported 80 H5N1 HPAI outbreaks across 18 states in commercial (44) and non-commercial (36) flocks, which affected nearly seven million birds including those culled as part of control measures [[USDA APHIS, 2024a](#)]. In addition, more than 170 samples collected from hunted or dead wild birds across 14 states tested positive for H5 HPAI virus [[USDA APHIS, 2024b](#)]. In March 2024, genotype B3.13 H5N1 virus was first detected in dairy cattle in the United States and has since affected dairy cattle in 15 states [[FAO 2024a](#); [USDA APHIS, 2024c](#)]. As of 4 December 2024 the Animal and Plant Health Inspection Service (APHIS) within the US Department of Agriculture (USDA) has confirmed H5N1 virus in 707 dairy herds across 15 states. H5N1 viruses have been also detected in mammals (alpacas, goats and pigs) on several mixed species farms where viruses were also found in sick poultry on the same premises. [[USDA APHIS, 2024e](#); [2024f](#)]. In Canada, 72 H5N1 HPAI outbreaks have been reported in four provinces over the past two months, with British Columbia being the most affected accounting for 62 outbreaks in domestic birds, primarily on commercial farms [[CFIA, 2024a](#)]. These outbreaks, attributed to the genotype D1.1 H5N1 virus, coincided with its detection in wild birds in the province [[CFIA, 2024b](#)].

In RLC, Peru has reported at least 13 H5 HPAI outbreaks in domestic birds since August 2024. In addition, Colombia confirmed its first HPAI outbreak of the year on a backyard farm on 2 December 2024 [[WOAH, 2024](#); [ICA, 2024](#)]. Although no additional HPAI outbreaks in domestic birds have been

Useful Links

AI situation updates

- ▶ [Global avian influenza virus with zoonotic potential situation update](#) – (available through e-mail distribution; if interested please contact: EMPRES-Livestock@fao.org)
- ▶ [FAO EMPRES Watch - A\(H5N1\) influenza in dairy cattle in the United States of America](#)
- ▶ [USDA APHIS – 2024 Detections of Highly Pathogenic Avian Influenza](#)
- ▶ [Canadian Food Inspection Agency \(CFIA\) – Status of ongoing avian influenza response by province](#)
- ▶ [WHO avian influenza surveillance webpage](#)
- ▶ [WOAH avian Influenza webpage](#)
- ▶ [OFFLU statement on continued expansion of H5 HPAI in wildlife in South America and incursion into the Antarctic region](#) (2023)
- ▶ [FAO Rapid Qualitative Risk Assessment – Risk of H5 HPAI introduction in Central and South America and the Caribbean](#)

Guidelines for AI surveillance and response

- ▶ CMS FAO Scientific Task Force on Avian Influenza and Wild Birds (2023). [Statement on H5N1 high pathogenicity avian influenza in wild birds – Unprecedented conservation impacts and urgent needs](#).
- ▶ WOAHP [practical guide for authorised field responders to HPAI outbreaks in marine mammals](#) (2024).
- ▶ Biosecurity for highly pathogenic avian influenza - issues and options (FAO Paper No.165 - 2008) – [English](#), [French](#)
- ▶ Preparing for highly pathogenic avian influenza (FAO Manual No.3 - 2006) – [Spanish](#), [English](#), and [French](#)
- ▶ Biosecurity guide for live poultry markets (FAO Manual No.17 - 2015) – [English](#), [French](#)
- ▶ Good Emergency Management Practice: The Essentials (FAO Manual No. 25 - 2021) – [Spanish](#), [English](#), and [French](#)
- ▶ Carcass management guidelines – Effective disposal of animal carcasses and contaminated materials on small to medium-sized farms (FAO Guidelines No. 23 - 2020) – [Spanish](#), [English](#), and [French](#)
- ▶ [FAO risk communication in animal disease outbreaks and emergencies](#)

Vaccination guidance in humans and animals

- ▶ [FAO Focus on: Rational use of vaccination for prevention and control of H5 highly pathogenic avian influenza](#)
- ▶ [OFFLU avian influenza poultry vaccine matching \(OFFLU-AIM\) report – October 2024](#)
- ▶ [WHO recommended composition of zoonotic influenza A virus vaccines – September 2024](#)

reported in RLC over the past months, the extent of HPAI virus circulation and its establishment within wild bird populations of the region remains unclear.

In affected countries, HPAI often causes significant losses to the poultry industry, with particularly severe impacts on the economy and livelihoods of vulnerable small-scale producers. In 2023, 16 countries were affected by HPAI in Latin America, of which 12 reported outbreaks in backyard birds and 5 in commercial birds. Once HPAI virus is introduced on farms, live poultry and egg trade and related activities play a key role in its spread and amplification in domestic bird populations.

The ongoing H5N1 HPAI epizootic has led to numerous detections in wild birds in multiple regions, although it is being detected at lower rates compared to previous years (2021-2023) [[FAO 2024b](#), [2024c](#)]. This has given opportunities for reassortments of H5N1 virus with other low pathogenic AI viruses leading to increased genetic diversity. The continuous virus circulation in wild birds poses a significant challenge for AI prevention and control and has resulted in multiple separate infections in wild terrestrial and marine mammals, threatening endangered wild animal species and related ecosystems, as well as numerous spillover events to poultry. Clade 2.3.4.4b virus infections reported in mammals in the Americas, Asia and Europe have resulted in severe diseases with neurological signs and/or respiratory and fatal outcomes in some species. In 2022-2023, wild marine mammal populations along the Atlantic and Pacific coasts of the Americas weathered a significant H5N1 epizootic resulting in over 50 000 deaths in Argentina, Brazil, Chile, Peru, and Uruguay [[OFFLU](#), [2023](#)].

Importantly, H5N1 clade 2.3.4.4b viruses have demonstrated their zoonotic potential, meaning they can transmit from animals to humans. In 2023, two human cases were reported in Latin America, one in Ecuador and another in Chile, linked to exposure to backyard poultry and contaminated environments, respectively [[WHO](#), [2023a](#); [2023b](#)]. Since April and through 4 December 2024, the U.S. Centers for Disease Control and Prevention has confirmed 57 influenza A(H5) detections in humans in the United States, with all but two associated with exposure to sick or infected animals [[CDC](#), [2024](#)]. Canada also reported its first domestically acquired influenza A(H5N1) human case on 9 November [[CFIA](#), [2024b](#)]. For more details on the risk of zoonotic transmission, FAO, the World Organisation for Animal Health (WOAH) and the World Health Organization (WHO) published a [joint assessment of recent influenza A\(H5N1\) virus events in animals and people, updated](#) in August 2024. An updated issue will be released in the coming weeks. The WOAHP/FAO Network of expertise on animal influenza (OFFLU) collaborates extensively on data tracking of viral evolution through the [Avian Influenza Matching project \(AIM\) for poultry vaccines](#) and its [data package contributions to the WHO Vaccine Composition Meeting \(VCM\)](#).

RECOMMENDED ACTIONS

Considering the elevated risk, FAO is calling on all countries and territories in Latin America and the Caribbean to increase AI prevention and preparedness activities to reduce the likelihood of poultry outbreaks and subsequent impacts on livelihoods, economies and public health.

Enhance biosecurity and reduce wild bird attractants on farms

- Ensure implementation of biosecurity measures along the poultry value chain, particularly on farms near wild bird habitats, to limit the introduction and further spread of the virus.
- Limit direct and indirect contact between domestic poultry, including ducks and wild birds. This may include keeping poultry indoors,

improving barn structures to keep wild birds out, and/or using fences or nets to reduce contact between domestic poultry and wild birds; securing sources of poultry drinking water to ensure they cannot be contaminated with feces from wild birds or are treated appropriately before use; properly storing feed to prevent wild bird access as well as promptly cleaning up feed spills, reducing or eliminating areas of standing water which may attract wild birds, preventing water infiltration into barns that could be contaminated with fecal matter from roofs or other wild bird nesting sites, and effective rodent control.

- Do not take action against wild birds, particularly indiscriminate hunting or destruction of habitat. Additionally, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and its partners organized a webinar series in April and May 2024 to raise awareness on the impacts of the AI outbreak on wildlife in UNESCO World Heritage sites, Biosphere Reserves and Ramsar sites. Recordings and presentations of the webinars are available at this [link](#), with guidance and additional examples.

Support surveillance, early detection and rapid response

- Identify areas of higher risk of HPAI introduction through wild birds and increase surveillance efforts in these areas by immediately sampling and testing sick or dead poultry and dead or hunted wild birds for AI virus. Targeting sick or freshly dead birds as well as sampling their environment will increase the probability of detecting AI viruses.
- Ensure laboratories have adequate capacities to diagnose circulating H5Nx HPAI viruses.
- Collaborate closely with the environment sector and wetlands or wildlife management authorities to foster information-sharing and joint AI surveillance and prevention activities.
- Facilitate early reporting and response by consulting closely with the private sector (i.e. producers, traders and related businesses). Preparing and sharing communication materials prior to AI virus introduction will help minimize misunderstandings and rumours.
- Raise awareness among poultry keepers, the general population, traders, marketers, hunters, and other relevant stakeholders about HPAI. Emphasize precautionary and personal protection measures. Provide mechanisms for reporting sick or dead birds and unusual mortalities in wild mammals (hotlines, collection points) and raise awareness about the importance of reporting.
- Review and/or update HPAI contingency plans.

Respond effectively and timely share information

- Upon detection of outbreaks, alert neighbouring countries quickly as well as international organizations, including WOAHA.
- On infected farms, conduct appropriate cleaning and disinfection and take action on carcasses, slurry and fecal waste to ensure they do not pose a risk for further transmission and spread of virus.
- Initiate/reactivate a compensation policy and allocate financial resources; ensure compensation for poultry culled as part of control measures during a HPAI outbreak is provided in a timely manner, see [Good emergency management practice: The essentials](#) pp. 18-19.
- Share full genome sequences, studies on antigenic characterization and virus isolates with the scientific community for further analysis and research; or send specimens for full genome sequencing to an international Reference Laboratory - for the benefit of all countries at risk.

Contacts

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Vaccinate responsibly

- Countries may implement vaccination to prevent and control HPAI in a manner consistent with the standards described in the [WOAH Terrestrial Manual](#).
- If vaccines are being used to prevent avian influenza, assess antigenic characteristics of any new viruses detected using antisera from vaccinated birds, ensure antigenic assessments are done on any H5 HPAI viruses detected in well vaccinated, clinically affected flocks and, where necessary, update vaccine virus.
- Post-vaccination monitoring of antibody levels in vaccinated flocks should be used to assess the response to vaccination against circulating AI viruses.

WHAT FAO IS DOING

In light of the elevated risk, FAO is calling on all Chief Veterinary Officers (CVOs) in Asia to increase AI prevention and preparedness activities to reduce the likelihood of poultry outbreaks and subsequent impacts on livelihoods and economies, and human infections.

Specifically, FAO recommends countries to:

- Continuing to monitor and assess the evolving disease situation. To share updates on your country's situation, please contact FAO at FAO-GLEWS@fao.org
- Liaising with FAO/WOAH Reference Laboratories and partner organizations to assess virus characteristics and provide laboratory protocols for detection.
- Raising awareness and building capacity on emergency response, as well as important epidemiological and virological findings and their implications.
- Open-access AI courses are available on FAO Virtual Learning Centers (VLCs) platform. The Spanish and Portuguese version of the course can be found in the Animal Health section of [FAO Campus page for Latin America and the Caribbean](#). For specific tutored course on AI preparedness or vaccination stewardship, contact VLC-Global@fao.org and RLC-Capacitacion@fao.org.
- Providing recommendations and technical cooperation for affected countries and those at-risk addressing preparedness, prevention and disease control.
- Providing support for risk assessment and mapping to identify hot spots for risk mitigation and the implementation of risk-based surveillance.
- Offering support in the provision of diagnostic reagents and personal protective equipment, provided certain conditions are met (contact: EMPRES-Lab-Unit@fao.org).
- Offering assistance to national authorities for shipment of samples as well as virus sub-typing and sequencing, provided certain conditions are met (contact: EMPRES-Shipping-Service@fao.org).
- Supporting the activities of the OFFLU (WOAH/FAO network of expertise on animal influenza) Network.
- To contact FAO for further information or support please write to empres-animal-health@fao.org.

