

Global Context

Avian influenza A(H5N1) is a highly contagious viral disease that primarily affects domestic and wild birds and, occasionally, mammals, including humans (1, 2). Since its emergence in 1996, the Goose/Guangdong lineage has been causing recurrent outbreaks in avian populations. Beginning in 2020, a genotype of the influenza A(H5N1) virus from clade 2.3.4.4b led to unprecedented mortality in wild birds and poultry across multiple countries in Africa, Asia, and Europe (2, 3). By December 2025, more than 600 wild and farmed bird species were reported to be affected by avian influenza viruses with zoonotic potential A(H5Nx) (4).

Driven by the movement of migratory wild birds, especially waterfowl, the global spread of the influenza A(H5N1) virus in recent years has coincided with increased influenza A(H5N1) detections in non-avian species, including wild and domestic terrestrial and marine mammals (1, 5). Since 2021, reported highly pathogenic avian influenza (HPAI¹) cases in mammals have shown a rise (6). As of December 2025, 68 mammalian species (wild and domestic) have been reported as affected by avian influenza viruses with zoonotic potential A(H5Nx) (4). Historically, for A(H5N1) virus, a total of 36 countries on five continents have reported outbreaks in mammals to the World Organisation for Animal Health (WOAH) (5).

HPAI viruses, including influenza A(H5N1), continue to circulate in wild avian and mammalian populations, with an increase in reported mammalian cases during 2025. The cumulative number of affected species in both birds and mammals has also risen over time, as reflected by the progressive documentation of infections in a broader range of wildlife and domestic species (4). Sustained detections in wild mammalian species underscore the risk that influenza A(H5N1) may increasingly adapt to mammalian hosts, although human infections remain sporadic. Moreover, this evolving scenario introduces new pathways for viral spread: influenza A(H5N1) can transmit efficiently between mammals under specific circumstances, as suggested by documented outbreaks affecting multiple mammalian species. The virus has been associated with multinational circulation among marine mammal populations, and in some instances, spillback events involving wild birds. These spillback events highlight a viral dynamic that is increasingly complex and evolutionarily flexible. The continued circulation of HPAI in wildlife has direct implications for public health, as well as broader consequences for animal health, food security, and biodiversity at the global level (5, 6, 7).

Between early 2003 and 26 January 2026, 993 human cases of avian influenza A(H5N1) were reported to the World Health Organization (WHO), including 477 deaths (48% case fatality rate), in 25 countries worldwide (8). Reported human cases remain primarily linked to exposure to

¹ Broadly speaking, the multiple strains of avian influenza virus can be classified into two categories according to the severity of the disease presentation in poultry: low pathogenic avian influenza (LPAI) virus and highly pathogenic avian influenza (HPAI) virus.

infected animals or contaminated environments. Since 2007, no sustained human-to-human transmission of influenza A(H5) viruses has been identified (9).

Summary of the situation in the Americas Region

Following its introduction into North America in 2021 and subsequent spread to Central and South America in 2022 through migratory waterfowl routes, detections of influenza A(H5N1) have continued to be reported across the continent (1, 5). Cumulatively, between epidemiological week (EW) 2 of 2022 and EW 9 of 2026, a total of 21 countries and territories in the Americas² have notified 5,744 outbreaks³ of influenza A(H5N1) in diverse bird and mammalian species (5, 10).

Between 1 January 2025 and 9 March 2026, influenza A(H5N1) detections were reported in 37 mammalian species across two countries and in 94 bird species across 11 countries and territories in the Americas (5). Reports during 2025 indicate a decline in detection among wild birds since mid-2025, with a growing predominance of outbreaks in poultry and other domestic birds. Fewer mammalian outbreaks have been reported since March 2025. Furthermore, between October 2025 and February 2026, animal outbreak activity has been concentrated in North America, with lower levels of reported activity in South America. Nevertheless, these findings confirm the continued circulation of the virus in animal populations and the previously described public health implications (**Figure 1 and Figure 2**) (6).

Human infections with avian influenza A(H5) virus in the Americas, 2022-2026

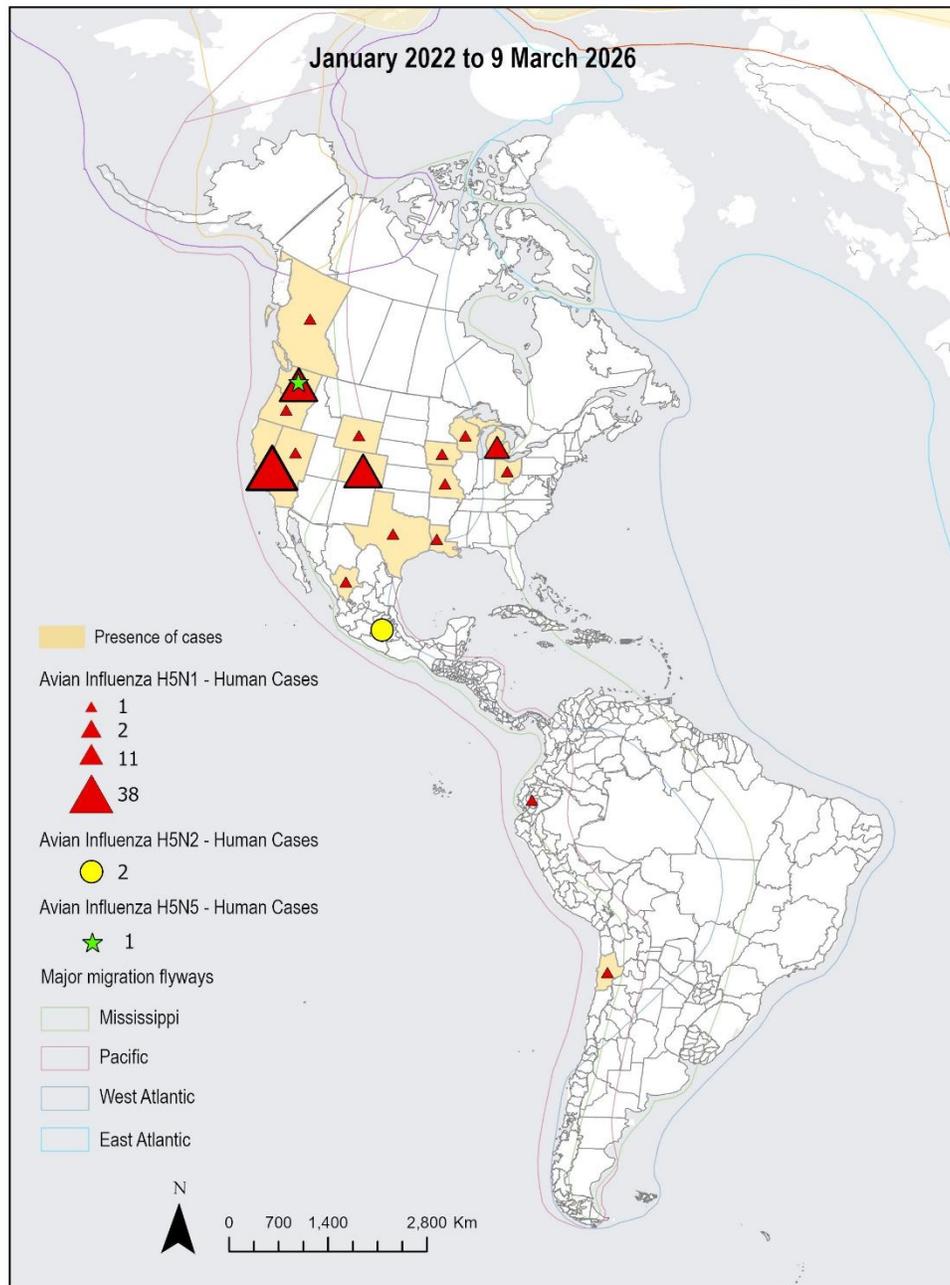
Between 20 April 2022 and 9 March 2026, a total of 75 human infections caused by avian influenza A(H5N1), including two deaths, were reported in five countries in the Americas, with no additional cases since the last PAHO/WHO epidemiological update on avian influenza on 24 November 2025 (**Figure 1**) (10). During this period, human cases of avian influenza A(H5N1) in the Americas Region were distributed as follows: one case in Mexico reported on 2 April 2025; 71 cases in the United States of America, including one in 2022 and 70 between March 2024 and February 2025; one case in Canada confirmed on 13 November 2024; one case in Chile reported on 29 March 2023; and one case in Ecuador reported on 9 January 2023 (10).

In addition to these confirmed cases of A(H5N1), other human infections with avian influenza A(H5) viruses were reported in the Americas Region over the same period. Mexico confirmed a human case of A(H5N2) on 2 October 2025, representing the second H5N2 infection identified in the country. The case had a dog as a pet at residence, and several animals were found in the courtyard of the building, including a poultry bird and two pigeons, as well as bird droppings in several areas. Samples collected from the identified animals tested positive for influenza A(H5) (10, 11). Furthermore, on 14 November 2025, the United States reported the first human case of influenza A(H5N5) globally; the case was fatal. Investigations indicated exposure to backyard poultry and domestic birds, with no additional related human cases identified (10).

² Argentina, the Plurinational State of Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Cayman Islands (the), Ecuador, the Falkland Islands, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Puerto Rico, the United States of America, Uruguay, and the Bolivarian Republic of Venezuela.

³ Please note that current figures represent the number of outbreaks, which may include multiple epidemiologically linked records and updates in reported case counts for each outbreak. This may result in lower counts than those reported in previous publications. These figures reflect only officially verified outbreaks reported to WOA, ensuring accuracy according to WOA standards.

Figure 1. Human cases of avian influenza A(H5) in the Americas Region 2022-2026, as of 9 March 2026.



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Note: Two of the cases reported in Mexico correspond to avian influenza A(H5N2) and one in the United States corresponds to avian influenza A(H5N5).

Source: Adapted from the Pan American Health Organization. Epidemiological Update: Avian Influenza A (H5N1) in the Americas Region – 24 November 2025 (10).

Situation by country and/or territory: Animal outbreaks in late 2025 and early 2026

Since 1 January 2026 and as of 9 March 2026, 105 outbreaks in domestic and wild avian species have been reported to WOAHA in six countries in the Americas Region, with no outbreaks in wild or domestic mammalian species reported. Further information, including for December 2025, is provided below disaggregated by animal group (5, 12-17).

A geographic visualization of outbreaks reported to WOAHA in animals, by type, in 2026, illustrating the main migratory routes in the Americas Region is presented in **Figure 3**.

Among birds

In December 2025, a total of 97 outbreaks in avian species were reported to WOAHA, including 96 outbreaks in domestic birds in Brazil (n= 1), Canada (n= 15), Colombia (n= 5), and the United States of America (n= 75), and one outbreak in wild birds in the United States. These reports bring the cumulative total for the calendar year 2025 (January–December) to 837 outbreaks in domestic and wild avian species (5).

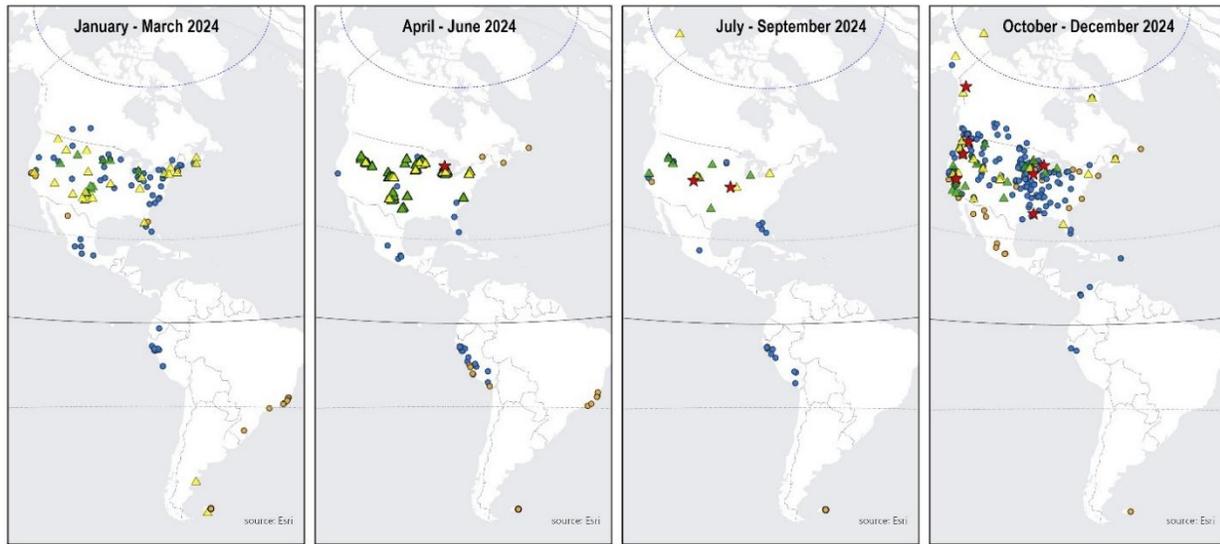
In 2026, as of EW 9, a total of 105 outbreaks have been reported to WOAHA in avian species: 95 outbreaks in domestic birds, including Argentina (n= 5), Brazil (n= 1), Canada (n= 6), the United States of America (n= 83); and 10 outbreaks in wild bird species in Argentina (n= 3), Chile (1) and Uruguay (n= 6) (**Table 1**) (5). In addition to officially reported outbreaks, official surveillance data published by competent authorities indicate that as of 9 March 2026, 678 detections of avian influenza A(H5N1) in wild birds have been reported in the United States (14); and one detection was reported in Canada (15).

Among mammals

During December 2025, no outbreaks of avian influenza A(H5N1) in wild mammals were officially reported to WOAHA in the Americas (5). As for domestic mammals, no outbreaks were officially reported to WOAHA during this period. These reports bring the cumulative total for the calendar year 2025 (January–December) to 218 outbreaks reported to WOAHA in domestic and wild mammalian species. In addition to official reports, the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) reported two affected dairy herds: one in late November 2025 in California and one in December 2025 in Wisconsin, United States (16).

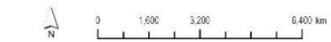
As of EW 9 of 2026, no outbreaks of A(H5N1) in domestic mammals have been officially reported to WOAHA in any country or territory in the Americas Region (5). In addition to officially reported outbreaks to WOAHA, as of 9 March 2026, 12 detections of A(H5N1) have been identified in six mammalian species in the United States (17); and one detection was reported in a striped skunk in Ontario, Canada (15).

Figure 2. Historical overview of reported A(H5N1) animal outbreaks to WOA and A(H5) human cases, in the Americas during 2024 and 2025.

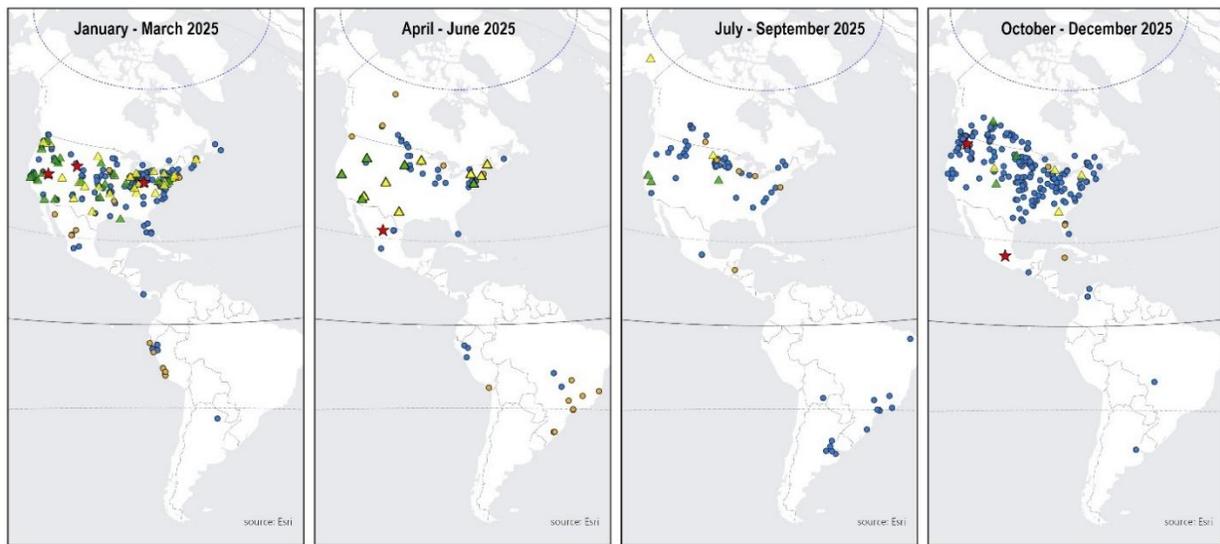


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Map producer: PAHO Health Emergency, Department Health Emergency Information and Risk Assessment Unit-06 Team.

- Avian Influenza Outbreak
Type of animal
- Poultry or domestic birds
 - Wild birds
 - ▲ Domestic mammals
 - ▲ Wild mammals
 - ★ Avian Influenza - Human Case
- Major migration flyways
- Mississippi
 - Pacific
 - West Atlantic
 - East Atlantic



Sources
- Data: World Organization for Animal Health (WOAH) (2026).
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- Falkland Islands Department of Agriculture
- Cartography: WHO Detailed ADMO Boundaries, Conservation of Arctic Flora and Fauna - Data Service (SHP) Major flyways of Arctic Birds Shapefile Accessed February 2023.



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Source: Adapted from data published by the World Organization for Animal Health and data published by the Pan American Health Organization (5, 10).

Table 1. Overview of avian influenza A(H5) outbreaks in birds and mammals in the Americas Region 2026, as of 9 March 2026

Country/Territory	In birds		In Mammals	
	Wild	Domestic	Wild	Domestic
Argentina	Yes	Yes	No	No
Brazil	No	Yes	No	No
Canada	Yes	Yes	Yes	No
Chile	Yes	No	No	No
United States (the)	Yes	Yes	Yes	Yes
Uruguay	Yes	No	No	No

Source: Adapted from data published by the World Organisation for Animal Health and data published online by Ministries of Health and official national agencies (5, 12-17).

Figure 3. Geographic distribution of influenza A(H5N1) animal outbreak reported to WOA in the Americas, 1 January to 9 March 2026.



Source: Adapted from data published by the World Organization for Animal Health (5).

Situation by country and/or territory: Human cases in late 2025 and early 2026

Throughout 2025, four human cases of avian influenza A(H5N1) were reported in the Americas Region, including one case in Mexico (n= 1), and three in the United States (n= 3) (10). Since the previous PAHO/WHO epidemiological update on avian influenza A(H5N1) in the Americas Region published on 24 November 2025, no additional human cases were reported (10). As of epidemiological week (EW) 8 of 2026, no further human cases of avian influenza A(H5N1) have been identified.

The most recent case of human infection with an influenza A(H5) virus in the Americas was confirmed in the **United States** on 14 November 2025 (10, 18). This case represented the 71st influenza A(H5) human infection reported in the country and the first human case of A(H5) virus reported in the United States of America since February 2025. Laboratory sequencing conducted by the U.S. Centers for Disease Control and Prevention (CDC) on 20 November 2025 confirmed the virus as influenza A(H5N5), representing the first globally reported human case caused by an influenza A(H5N5) virus. The patient, an adult with underlying medical conditions, developed symptoms in late October, was hospitalized in early November, and died on 21 November 2025. No additional cases were identified among contacts, and there was no evidence of human-to-human transmission (10).

The case previously reported in **Mexico** on 30 September 2025 as avian influenza A(H5) was subsequently confirmed as avian influenza A(H5N2) (10).

Recommendations for Member States

PAHO/WHO jointly with the Food and Agriculture Organization of the United Nations (FAO) and WOAHA urges Member States to work in a coordinated and intersectoral manner to ensure timely notification to global authorities and to strengthen the monitoring and characterization of circulating viruses in order to prevent transmission within and to new species, and consequently reduce the risk of human infections associated with exposure to infected animals (3, 9, 19-20).

Available virological and epidemiological data indicate that influenza A(H5) viruses continue to remain avian influenza viruses, with no evidence of established adaptation to mammals or sustained human-to-human transmission. However, while these viruses persist in wild and domestic birds and mammals, additional human infections are anticipated, particularly among individuals with direct exposure to infected animals and contaminated environments. There is no evidence that influenza A(H5) or other avian influenza viruses are transmitted through the consumption of properly prepared and thoroughly cooked poultry or eggs. FAO, WHO and WOAHA recommend the consumption of pasteurized milk to minimize potential health risks related to raw/unpasteurized milk (9, 19-23).

Specific recommendations regarding the avian influenza situation in birds and mammals have been issued by WOAHA. These recommendations advise countries to maintain intensified surveillance of the disease in domestic and wild animal species. These recommendations also advise implementing biosecurity and preventive measures in animal production sites and urge the timely reporting of outbreaks in bird and mammalian species (23, 24).

Member States are encouraged to make use of the tools and initiatives developed by PAHO to support timely risk assessment and evidence-informed decision-making, including the regional

avian influenza A(H5N1) dashboard, which consolidates information from multiple official sources.⁴

Recommendations for strengthening surveillance at the human-animal interface

PAHO/WHO encourages Member States to strengthen surveillance in both animals and humans through an intersectoral approach, ensuring timely detection of cases to monitor possible changes in the epidemiology of the virus (25). Epidemiological surveillance of avian influenza A(H5N1) should be strengthened in populations at higher risk of exposure, including agricultural workers, veterinarians, health care workers, and laboratory personnel, by systematically identifying signals. These include respiratory disease, conjunctivitis, or encephalitis in people with recent exposure to infected animals, as well as cases of severe acute respiratory infection (SARI) or pneumonia in travelers from areas with detected avian influenza A(H5) (25).

Monitoring clusters of SARI or cases with atypical symptoms in family, work, or social settings is also recommended. The implementation of surveillance in health facilities and at-risk populations, with notification and response protocols, is essential. It is recommended to actively monitor people at risk of exposure (in areas with confirmed animal outbreaks) to reinforce immediate notification of suspected events, ensuring a rapid and coordinated response that involves all sectors (21, 22, 25).

Human samples should be collected by trained personnel in accordance with all biosafety standards, including the use of appropriate personal protective equipment (PPE) for respiratory viruses (26). Upon identifying suspected human cases of avian influenza A(H5N1), a respiratory specimen (and a conjunctival swab if the patient presents conjunctivitis) should be taken and sent to National Influenza Centers (NICs) or National Reference Laboratories (NRLs) for analysis (27). For more information, refer to publications on respiratory specimen collection⁵ and the laboratory testing algorithm⁶ for samples from patients with suspected avian influenza A(H5) (27, 28).

A suspected or confirmed case of human infection with avian influenza A(H5), in accordance with Annex 2 of the International Health Regulations (IHR), should be immediately notified to the WHO Regional IHR Focal Point via the National IHR Focal Point using the official IHR channel. The report should include available epidemiological and virological findings. It is recommended that Ministries of Health establish intersectoral communication protocols to notify agricultural and environmental authorities of any suspected or confirmed human cases (22, 29).

PAHO/WHO reinforces the need for coordinated surveillance between the human, animal, and environmental health sectors, with clear responsibilities for wildlife, common definitions of suspected cases, and established flows for notification and sample shipment. PAHO/WHO also suggests using tools that facilitate rapid reporting from the field and strengthening communication with farmers and producers to improve early detection. In domestic animals, differentiated actions are recommended according to risk. These include awareness campaigns in poultry farming, information exchange between sectors, updated risk maps, and

⁴ The PAHO regional avian influenza A(H5N1) dashboard is available at: <https://shiny.paho-phe.org/h5n1/>

⁵ Respiratory sample collection for zoonotic influenza diagnosis (Influenza A/H5 and other zoonotic influenza viruses). Washington, D.C.: PAHO/WHO; 2024. Available from: <https://www.paho.org/en/documents/respiratory-sample-collection-zoonotic-influenza-diagnosis-influenza-ah5-and-other>.

⁶ Samples from patients suspected of Influenza A/H5 LABORATORY TESTING ALGORITHM. Washington, D.C.: PAHO/WHO; 2022. Available from: <https://www.paho.org/en/documents/laboratory-diagnostic-algorithm-detection-suspected-cases-influenza-ah5>.

surveillance of high- and low-pathogenicity subtypes, along with specific strategies for pigs and dairy cattle, such as sampling milk tanks in priority areas based on risk (22). Furthermore, the evolving scenario underscores the need to strengthen risk mitigation strategies across diverse production settings. Close engagement with backyard and small-scale poultry producers is essential to enhance community awareness of HPAI-related risks, promote the timely reporting of unusual events compatible with avian influenza, and reinforce practical biosecurity measures. Such efforts are critical for safeguarding animal health and reducing potential spillover risks to public health.

Ensuring sufficient laboratory diagnostic capacity is also essential to allow the timely confirmation or exclusion of suspected animal cases through a combination of molecular techniques, including sequencing, and serological assays. This capacity should be firmly established at the national level and supported, when necessary, through intersectoral collaboration and with the diagnostic services of WOA regional reference laboratories.

Additionally, PAHO/WHO recommends strengthening intersectoral genomic surveillance to detect possible rearrangements among circulating viral strains in a timely manner, such as those already documented in the region (7, 30) and in other parts of the world (31). Coordinated analysis between the human, animal, and environmental sectors allows for the interpretation of these events, the anticipation of changes in risk, and the guidance of timely actions and a rapid response to zoonotic influenza events.

Clinical management

When infections caused by avian influenza A(H5) are suspected, PAHO/WHO recommends conducting an initial triage of patients, applying infection prevention and control precautions, classifying patients according to the severity of their condition, and ensuring timely hospital care and management of complications (32-34).

With regard to antiviral treatment and prevention among persons exposed to zoonotic influenza virus, PAHO/WHO recommends the following:

- Antiviral treatment of patients with severe influenza (including infection with new influenza A associated with high mortality or unknown risk of severe disease):
 - conditional recommendation for the use of oseltamivir in treatment,
 - conditional recommendation against the use of peramivir,
 - conditional recommendation against the use of zanamivir.
- Antiviral treatment of patients with non-severe influenza:
 - conditional recommendation for the use of baloxavir in patients with non-severe influenza and high risk of progression to severe disease.

Persons exposed to zoonotic influenza virus associated with high mortality or unknown risk of severe disease:

- for asymptomatic persons exposed to zoonotic influenza viruses associated with high mortality in humans or those with an unknown risk of causing severe disease, illness in the previous two days, administration of baloxavir, laninamivir, oseltamivir, and zanamivir is suggested (conditional recommendation).

Operational infection prevention and control (IPC) measures in healthcare and agricultural settings

In response to an outbreak of avian influenza A(H5), it is essential to implement robust infection prevention and control (IPC) measures within healthcare settings. This includes reinforcing standard precautions, which aim to reduce the transmission of pathogens. Droplet transmission precautions should be applied for patients with respiratory symptoms (35). Additionally, based on risk assessment, airborne transmission precautions should be implemented during aerosol-generating procedures, using appropriate PPE to prevent transmission to healthcare workers. These measures should be in place when the patient enters the facility, making early triage critical (26, 32).

The other group of people at risk of infection includes those directly or indirectly exposed to infected birds or other animals, whether domestic, wild, or captive, such as workers involved in animal handling, slaughter, or cleaning and disinfection of affected farms. Therefore, it is recommended that good agricultural practices and strict hygiene protocols be implemented, and that appropriate PPE be used to prevent zoonotic transmission (9, 19, 20, 25, 26). These include training on the correct use of PPE, respirator fit testing, and proper disposal or disinfection procedures (26, 36). There are currently several H5 influenza vaccines authorized for use in humans during the interpandemic period for the prevention of severe disease in people at high risk of infection. The WHO is reviewing recommendations for the use of these vaccines in at-risk populations (37, 38).

Detailed information on other key recommendations for Member States, including intersectoral coordination and response, as well as prevention measures and risk communication, can be found in the epidemiological update published by PAHO/WHO on 24 January 2025, available from <https://www.paho.org/en/documents/epidemiological-update-avian-influenza-ah5n1-america-region-24-january-2025> (29).

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Useful links

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