HIGH PATHOGENICITY AVIAN INFLUENZA (HPAI) Situation Report 62

Period covered:

13 July – 23 August 2024

This report provides an update of the high pathogenicity avian influenza (HPAI) situation, according to the information submitted to the World Organisation for Animal Health (6-week period).

Key messages and Recommendations

The current HPAI season continues with 13 outbreaks being reported in poultry and 52 in non-poultry birds and mammals over the 6 weeks covered by the report, in the Americas, Asia, and Europe. More than 1.6 million poultry birds died or were culled during the 6-week period, mostly in the Americas.

The number of new outbreaks and new events notified in birds worldwide is currently relatively low, which is consistent with the known seasonality of HPAI in poultry. WOAH continues to pay close attention to the situation of HPAI in dairy cows in the United States of America (USA) and disseminate information provided by the official services of the USA via WAHIS. According to the US Centers for Disease Control and Prevention (CDC), 4 human cases contracting the infection following exposure to dairy cows have been detected since 1 April 2024, and 9 human cases contracting the infection following exposure to poultry have been detected in 2024, in the USA.

On 14 August 2024, WOAH, together with the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) published an <u>updated joint assessment of recent influenza A(H5N1) virus events in animals and people</u>. FAO-WHO-WOAH assessed the global public health risk of influenza A(H5N1) viruses to be low, while the risk of infection for occupationally exposed persons is low to moderate depending on the risk mitigation measures in place. Although additional human infections associated with exposure to infected animals or contaminated environments are likely to continue to occur, the overall public health impact of such infections at a global level is minor.



Countries are recommended to:

- increase surveillance efforts for the early detection of A(H5) influenza viruses in domestic and wild birds.
- include infection with an A(H5) influenza virus as a differential diagnosis, in non-avian species, including cattle and other livestock and farmed domestic and wild animal populations, with high risk of exposure to A(H5) viruses.
- report promptly HPAI events in all animal species, including unusual hosts, to WOAH
- share genetic sequences of avian influenza viruses and associated metadata in publicly available databases.
- prevent the introduction and spread of the disease in animals by implementing biosecurity in livestock holdings/premises and along the value chain; and
- employ good production and hygiene practices when handling animal products and protect persons in contact with suspected/infected animals.

High quality of information is key to support prevention and rapid response to HPAI.

Seasonal trend

One of the major changes in the dynamics of HPAI in recent years has been its seasonal nature. Traditionally, the global seasonality of HPAI in poultry was as follows: the spread was lowest in September, began to increase in October and peaked in February¹. This seasonality pattern was mainly influenced by countries in the northern hemisphere. Every year since 2005, the majority of outbreaks have occurred in the northern hemisphere, except, according to WAHIS data, in 2008, 2009 and 2019, the three years in which Indonesia was the country that reported the highest number of poultry outbreaks.

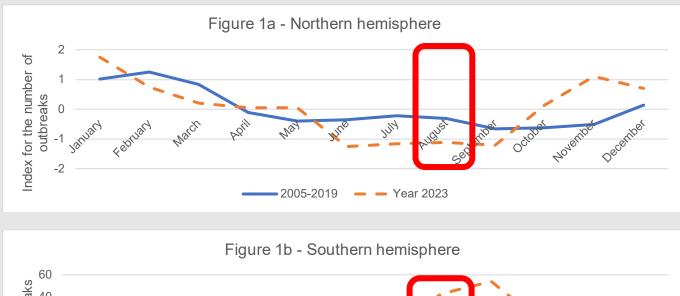
Figure 1 focuses on poultry outbreaks and shows the seasonality of HPAI separately for the northern and southern hemispheres. For the northern hemisphere (Figure 1a), given that more than 180 outbreaks have been notified each year since 2005, a comparison between the seasonal pattern for 2023 and the seasonal pattern observed between 2005 and 2019 has been provided, based on the number of outbreaks notified to WOAH. To compare seasonality between years, the number of outbreaks was centred and scaled by calendar year. The average was then computed for each month of the period between 2005 and 2019. The figure shows that the peak traditionally observed in February at a global level has shifted to January and that the increase traditionally starting in October has remained in place.

For the southern hemisphere (**Figure 1b**), as outbreaks have been rarer over time, only the seasonal profile for 2023 is presented, based on the raw number of outbreaks notified to WOAH. In that year, 217 outbreaks were notified by five countries in South America (Argentina, Bolivia, Chile, Ecuador, and Peru) and two countries in eastern and southern Africa (Mozambique and

¹ Awada, L., Tizzani, P., Noh, S.M., Ducrot, C., Ntsama, F., Caceres, P., Mapitse, N. and Chalvet-Monfray, K., 2018. Global dynamics of highly pathogenic avian influenza outbreaks in poultry between 2005 and 2016—focus on distance and rate of spread. Transboundary and Emerging Diseases, 65(6), pp.2006-2016.

South Africa). The graph shows an initial small peak in February (corresponding to the peak in South America); then the spread began to increase again in July and reached a higher peak in September (corresponding to the peak in South Africa).

The red rectangle indicates where we currently are in the 2024 cycle based on the period covered in "recent updates" below.



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Figure 1. Number of HPAI outbreaks in poultry reported to WOAH for 2023, by month and by hemisphere. For the northern hemisphere (1a), the 2023 distribution is compared to the distribution for the period between 2005 and 2019. Values were centred and scaled each year, for comparability; the average was then computed for each month of the period between 2005 and 2019. For the southern hemisphere (1b), only the 2023 distribution is presented, based on the raw number of outbreaks. The comparison with 2005–2019 is not shown as outbreaks were rare in the southern hemisphere during this period.

Recent Updates (13/07/2024-23/08/2024)

To describe the current disease situation of HPAI in poultry and in non-poultry birds, this section covers: (a) a list of new events² which started during the 6-week period (reported through immediate notifications); (b) information on events that started before the 6-week period but were

² As defined in Article 1.1.2. of the WOAH Terrestrial Animal Health Code, an "event" means a single outbreak or a group of epidemiologically related outbreaks of a given listed disease or emerging disease that is the subject of a notification. An event is specific to a pathogenic agent and strain, when appropriate, and includes all related outbreaks reported from the time of the initial notification through to the final report. Reports of an event include susceptible species, the number and geographical distribution of affected animals and epidemiological units.

still ongoing during that period; (c) the geographic distribution of new outbreaks³ that started during the 6-week period and d) events which started before the 6-week period but were reported during the 6-week period. The different subtypes of HPAI circulating during the 6-week period are also listed below. This information is based on the immediate notifications and follow-up reports received by WOAH.

HPAI in poultry

New events by world region (reported through immediate notifications)

Europe

H5: a recurrence started in France (Bretagne) on 7 August 2024.

H5N1:

A recurrence started in Germany (Mecklenburg-Vorpommern) on 11 August 2024. A recurrence started in Poland (Lubuskie) on 21 August 2024.

Africa, Americas, Asia, and Oceania

No new events reported.

On-going events for which there were new reported outbreaks, by world region (reported through follow-up reports):

Americas

H5N1: United States of America

Asia

H5N1: Cambodia

Africa, Europe, and Oceania

No new outbreaks reported in the on-going events, or no on-going events.

New outbreaks and associated subtypes

During the period covered by this report, 13 new outbreaks in poultry were notified by five countries (Cambodia, France, Germany, Poland, United States of America). Details are presented in Figures 2 and 3.

³ As defined in the glossary of the WOAH Terrestrial Animal Health Code, an "outbreak" means the occurrence of one or more cases in an epidemiological unit.



Figure 2. Distribution of HPAI new outbreaks in poultry, and corresponding subtypes.

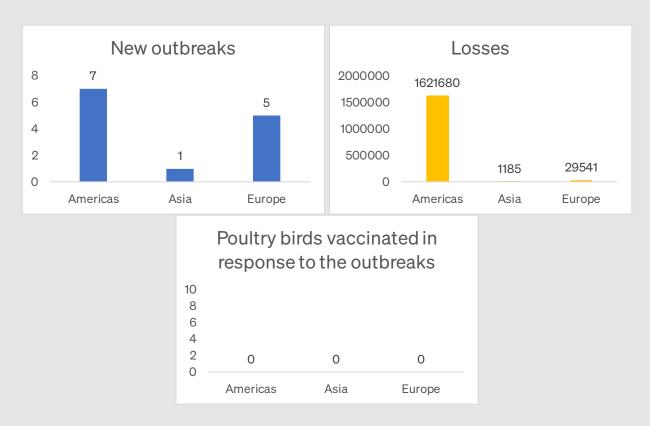


Figure 3. Number of new outbreaks, associated losses, and number of poultry birds vaccinated in response to these outbreaks by geographical region (losses include animals dead and killed and disposed of within outbreaks – they do not include culling around outbreaks; vaccinated poultry birds include animals that were vaccinated as a control measure in response to the outbreaks, they do not include other official vaccination programmes, for which data is reported through the six-monthly reporting channel).

Events which started before the 6-week period but were reported during the 6-week period (reported through immediate notifications)

Asia

H5N1:

A recurrence started in Chinese Taipei on 29 June 2024 (Clade 2.3.4.4b; Lineage: Fully Eurasian). A recurrence started in Bhutan (Samtse) on 10 July 2024.

Africa, Americas, Europe, and Oceania

No events reported.

HPAI in non-poultry

New events by world region (reported through immediate notifications)

Americas

H5N1 in non-poultry birds: a recurrence started in Mexico (México) on 26 July 2024 (Clade: 2.3.4.4b - Lineage: Reassortment Eurasian and North American).

Europe

H5N1 in non-poultry birds:

Several recurrences started in Portugal:

- One in Faro on 23 July 2024 (Clade 2.3.4.4b Lineage: Fully Eurasian).
- One in Aveiro on 25 July 2024
- Another one in Faro on 29 July 2024.
- One in Coimbra on 29 July 2024
- One in Aveiro, Leiria and Portuguese Exclusive Economic Zone on 5 August 2024
- One in Viana do Castelo on 13 August 2024

A recurrence started in Germany (Mecklenburg-Vorpommern) on 23 July. 2024

A recurrence started in Denmark (Veterinary Inspection Unit East) on 12 August 2024.

Africa, Antarctica, Asia and Oceania

No new events reported.

On-going events for which there were new reported outbreaks, by world region (reported through follow-up reports):

Americas

H5 in non-poultry birds: Peru

H5N1 in non-poultry birds: United States of America

H5N1 in mammals: United States of America (bovine and cats)

Europe

H5N1 in non-poultry birds: Belgium, France (Clade 2.3.4.4b - Lineage: Fully Eurasian), Spain

H5N5 in non-poultry birds: United Kingdom

Africa, Asia, Antarctica, and Oceania

No new outbreaks reported in the on-going events, or no on-going events.

New outbreaks

During the period covered by this report, a total of 54 outbreaks in non-poultry birds and mammals were reported through WAHIS by 10 countries (Belgium, Denmark, France, Germany, Mexico, Peru, Portugal, Spain, United Kingdom, United States of America). Details are presented in **Figures 4** and **5**.

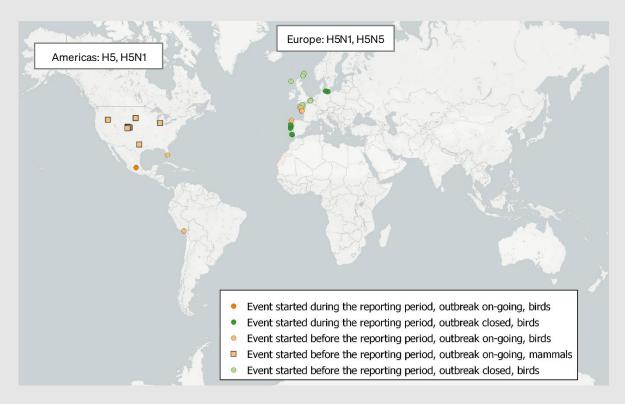


Figure 4. Distribution of HPAI new outbreaks in non-poultry animals reported through WAHIS, and corresponding subtypes.

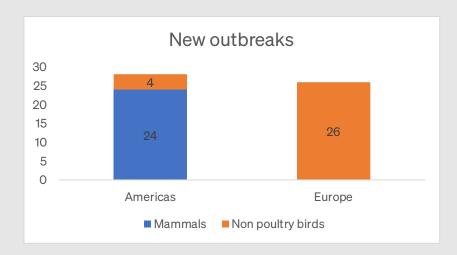


Figure 5. Number of new outbreaks reported through WAHIS by geographical region.

Events which started before the 6-week period but were reported during the 6-week period (reported through immediate notifications or through emails)

Americas

H5N1 in non-poultry birds: A recurrence started in Argentina (Argentinean Exclusive Economic Zone, Buenos Aires, Catamarca, Chubut, Córdoba, Río Negro, Salta, Santiago del Estero) on 26 July 2024

Africa, Antarctica, Asia, Europe, and Oceania No new events reported.

Other cases in mammals by world region (reported through emails)

Africa, Americas, Asia, Antarctica, Europe, and Oceania No new cases reported.

Self-declarations of freedom published during the 6-week period

In accordance with the provisions of the *Terrestrial Animal Health Code*, Members may wish to self-declare the freedom of their country, zone or compartment from HPAI. A Member wishing to publish its self-declaration for disease-freedom, should provide the relevant documented evidence of compliance with the provisions of the Code.

No declaration was published during the period covered by this report.

Epidemiological background

High pathogenicity avian influenza (HPAI) is caused by influenza A viruses in the family Orthomyxoviridae. Since its identification in China (People's Rep. of) in 1996, there have been multiple waves of intercontinental transmission of the H5Nx Gs/GD lineage virus. HPAI has led to the death and mass slaughter of over 557 million poultry worldwide between 2005 and 2023, with an unprecedented peak of 141 million in 2022. During this peak in 2022, more than 85 countries and territories in the world were affected with HPAI. In addition, up to now, humans have occasionally been infected with subtypes H5N1 (around 890 cases reported, of which half died), H7N9 (around 1,500 cases reported, of which about 600 died), H5N6 (around 80 cases reported, of which 2 died) and sporadic cases have been reported with subtypes H3N8, H7N4, H7N7 and H10N3⁴⁵⁶⁷⁸.

⁴ Chen H. 2019. H7N9 viruses. Cold Spring Harb Perspect Med doi: 10.1101/cshperspect.a038349

 $^{^{5}}$ WHO. Influenza (Avian and other zoonotic), 2018, available at https://www.who.int/news-room/fact-sheets/detail/influenza-(avian-and-other-zoonotic)

⁶ WHO. Cumulative number of confirmed human cases for avian influenza A(H5N1) reported to WHO, 2003-2022, 25 November 2022, available at https://cdn.who.int/media/docs/default-source/influenza/human-animal-interface-risk-assessments/2022_nov_tableh5n1.pdf?sfvrsn=babfcad1_1&download=true

⁷ Yang L, Zhu W, Li X, Chen M, Wu J, Yu P, Qi S, Huang Y, Shi W, Dong J, Zhao X, Huang W, Li Z, Zeng X, Bo H, Chen T, Chen W, Liu J, Zhang Y, Liang Z, Shi W, Shu Y, Wang D. 2017a. Genesis and spread of newly emerged highly pathogenic H7N9 avian viruses in mainland China. J Virol doi: https://doi.org/10.1128/JVI.01277-17

WHO Avian Influenza Weekly Update Number 924, https://iris.who.int/bitstream/handle/10665/365675/Al-20231201.pdf?sequence=1906&isAllowed=y

Recent news

<u>Updated joint FAO/WHO/WOAH assessment of recent influenza A(H5N1) virus events in animals and people</u>

OFFLU Avian Influenza Matching (AIM) for Poultry Vaccines

Global strategy for the prevention and control of high pathogenic avian influenza (2024–2033)

High Pathogenicity Avian Influenza in Cattle

Joint FAO/WHO/WOAH preliminary assessment of recent influenza A(H5N1) viruses

OFFLU statement on high pathogenicity avian influenza in dairy cows

Updated OFFLU statement on high pathogenicity avian influenza in dairy cows

OFFLU diagnostic guidance: HPAI dairy cattle

GF-TADs meeting: Detection of HPAI in ruminants and humans in the USA

Wildlife under threat as avian influenza reaches Antarctica

WOAH policy brief: Avian influenza vaccination: why it should not be a barrier to safe trade

OFFLU statement: Continued expansion of high pathogenicity avian influenza H5 in wildlife in

South America and incursion into the Antarctic region

OFFLU call to discuss AI in the Latin America and Caribbean Region

OFFLU ad-hoc group on HPAI H5 in wildlife of South America and Antarctica: Southward

expansion of high pathogenicity avian influenza H5 in wildlife in South America: estimated

impact on wildlife populations, and risk of incursion into Antarctica

OFFLU's annual report: tackling animal influenza through data sharing

WOAH's Animal Health Forum reshapes avian influenza prevention and control strategies

WOAH Statement on avian influenza and mammals

OFFLU statement: Infections with Avian Influenza A(H5N1) virus in cats in Poland

WOAH resources

Avian influenza portal

Self-declared disease status

World Animal Health Information System (WAHIS)

Animal Health Forum on avian influenza: policy to action: The case of avian influenza – reflections for change

Strategic challenges in the global control of high pathogenicity avian influenza

Resolution adopted in WOAH General Session 2023: Strategic challenges in the global control of HPAI

Considerations for emergency vaccination of wild birds against high pathogenicity avian influenza in specific situations

Practical guide for authorised field responders to HPAI outbreaks in marine mammals

Awareness tools

Infographic: Understanding avian influenza

Avian influenza: understanding new dynamics to better combat the disease

Avian influenza: why strong public policies are vital

Video: Avian influenza threatens wild birds across the globe

For any press inquiry on HPAI, email us at media@woah.org.

OFFLU resources

OFFLU annual report 2023

OFFLU Statement on high pathogenicity avian influenza caused by viruses of the H5N1 subtype OFFLU avian influenza matching (AIM) pilot study

OFFLU avian influenza VCM report for WHO vaccine composition meetings (February 2024)

Other relevant resources

Cumulative number of confirmed human cases for avian influenza A(H5N1) reported to WHO, 2003-2023

WHO, Human infection with avian influenza A(H5) viruses

Epidemiological Alert Outbreaks of avian influenza and human infection caused by influenza A(H5) public health implications in the Region of the Americas

WHO, Influenza at the human-animal interface, Summary and risk assessment, from 27 February to 28 March 2024

HPAI detections in livestock