

Situation report period covered: 16 March to 5 April 2024

This report provides an update of the high pathogenicity avian influenza (HPAI) situation, according to the information submitted through the World Animal Health Information System of the World Organisation for Animal Health (WAHIS) between 16 March and 5 April 2024 (3-week period).

Key messages

The period covered by this report is marked by the notification of HPAI in dairy cows and goats in the United States of America. On 5 April 2024, WOAHA published a [statement](#) describing the concerns related to this event and updates currently available and provided recommendations. The statement clarifies that initial investigations so far have revealed no specific adaptation of this virus to either humans or mammals. Regardless, several studies are being carried out to further explore the virulence and transmissibility of these viruses, including among cattle, and to assess the risk of transmission to animals and humans, which is currently considered low.

The World Health Organization (WHO) was notified about a [laboratory-confirmed case of human infection](#) with an influenza A(H5N1) virus on 1 April 2024 by the United States of America. The patient was exposed to dairy cattle presumed to be infected with influenza A (H5N1) virus. This appears to be the first human infection with A(H5N1) acquired from contact with an infected mammal, although human infections with other influenza subtypes have previously been acquired from mammals. WHO specified that since the virus has not acquired mutations that facilitate transmission among humans and based on available information, the public health risk to the general population posed by this virus was assessed to be low and for occupationally exposed persons, the risk of infection is considered low-to-moderate.

The WHO was also notified about a [case](#) (and subsequent death) of human infection with an influenza A(H5N1) virus on 25 March 2024 by Vietnam. Initial results from the case investigation revealed that during the second and third weeks of February 2024, the case went bird hunting.

Apart from the HPAI livestock cases in the United States of Americas, outbreaks in mammals continued to be reported in Americas and Europe during the 3 weeks covered by the report. WOAHA stresses the importance of reporting outbreaks of avian influenza in unusual hosts, as the virus has been increasingly detected in mammals in recent months, a situation that should be monitored.

The current HPAI epidemic season continues with one outbreak being reported in poultry and 17 in non-poultry birds over the 3 weeks covered by the report, in Americas, and Europe. About 86,000 poultry birds died or were culled during the 3 weeks period, in Europe. As expected from the known seasonal pattern of the disease, a decrease is noted in the number of outbreaks in poultry (to be confirmed, depending on how the disease evolves over the coming months).

WOAHA recommends that countries maintain their surveillance efforts, implement biosecurity and preventive measures at farm level, and continue timely reporting of avian influenza outbreaks in both poultry and non-poultry species.

In collaboration with its Reference Centres, OFFLU networks of experts and Members, WOAHA also continues to pay close attention to the Antarctic region and is calling on the animal health community to monitor the situation, as the situation there is of particular concern for wildlife and biodiversity. Experts fear that the negative impact of HPAI on Antarctic wildlife could be immense.

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,

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.

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 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 WOA. 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 WOA. 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 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.

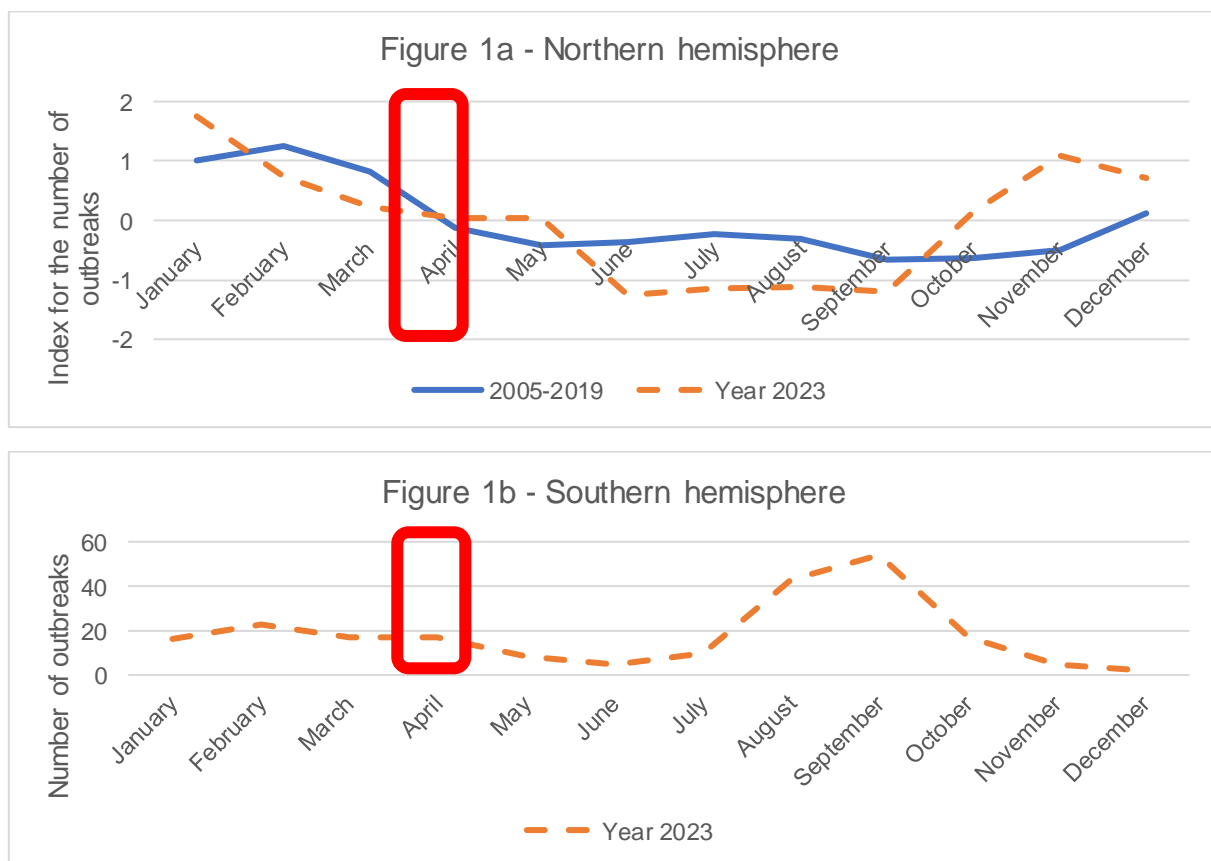


Figure 1. Number of HPAI outbreaks in poultry reported to WOA for 2023, by month and by hemisphere. For the northern hemisphere (1a), the 2023 distribution is compared to the distribution for the period between 2005 and 2019. Values were centred and scaled each year, for comparability; the average was 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.

In Europe, an unprecedented number of HPAI virus detections were reported in wild and domestic birds from June to September 2022, according to the European Food Safety Authority (EFSA)². European countries/territories reported 118 outbreaks in poultry and 781 outbreaks in wild birds via WAHIS for the summer of 2022. The number of reported

²<https://efsa.onlinelibrary.wiley.com/doi/pdf/10.2903/j.efsa.2022.7597#:~:text=Between%2011%20June%20and%209,the%20northwest%20coast%20of%20Europe.>

outbreaks in wild birds has been particularly high; whereas there were between 0 and 80 outbreaks each summer (June–September) during the period 2017–2021, the number of outbreaks increased to an unprecedented level in 2022. Between June and September 2023, the number of outbreaks in wild birds remained very high, with 648 outbreaks reported. This shows that, since 2022, the virus has persisted in wild birds in Europe during the summer, whereas it was rarely detected in previous summers.

Recent updates (16/03/2024-05/04/2024)

To describe the current disease situation of HPAI in poultry and in non-poultry birds, this section covers: (a) a list of new events³ which started during the 3-week period (reported through immediate notifications); (b) information on events that started before the 3-week period but were still ongoing during that period; (c) the geographic distribution of new outbreaks⁴ that started during the 3-week period and d) events which started before the 3-week period but were reported during the 3-week period. The different subtypes of HPAI circulating during the 3-week period are also listed below. This information is based on the immediate notifications and follow-up reports received by WOA. H.

HPAI in poultry

New events by world region (reported through immediate notifications)

Africa, Asia, Americas, Europe, and Oceania

No new events reported.

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

Europe

H5N1

Bulgaria

Africa, Americas, Asia, 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, one new outbreak in poultry was notified by Bulgaria. Details are presented in Figures 2 and 3.

³ As defined in [Article 1.1.2](#) of the WOA. H. 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.

⁴ As defined in the [glossary](#) of the WOA. H. 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

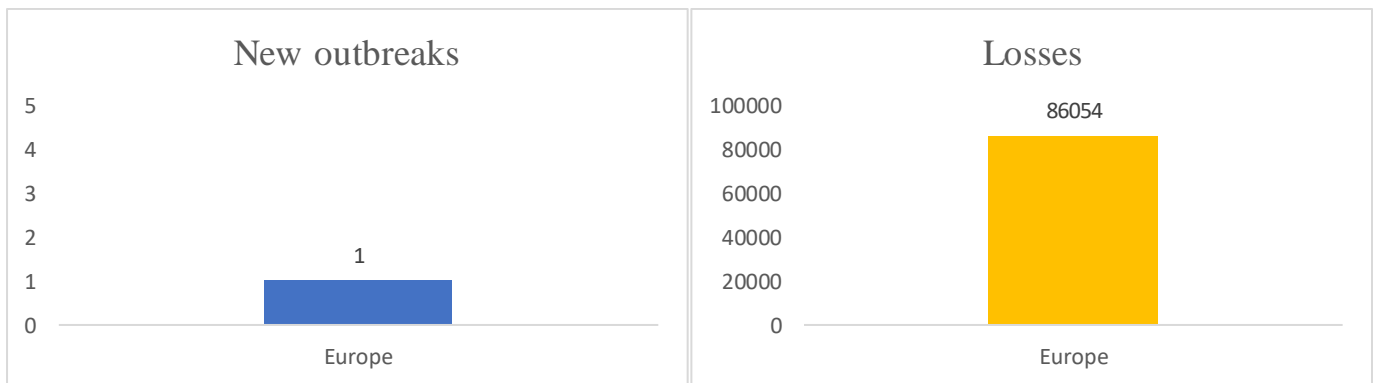


Figure 3. Number of new outbreaks and associated losses by geographical region (losses include animals dead and killed and disposed of within outbreaks – they do not include culling around outbreaks).

Events which started before the 3-week period but were reported during the 3-week period (reported through immediate notifications)

Asia

H5N1

The first occurrence in the area of Leyte started in Philippines on 7 March 2024.

Europe

H5

A recurrence started in Sweden (Svedala) on 14 March 2024.

Africa, Americas, and Oceania

No events reported.

HPAI in non-poultry

New events by world region (reported through immediate notifications)

Africa, Americas, Antarctica, Asia, Europe, 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 in non-poultry birds

United States of America

H5N1 in mammals

United States of America (dairy cattle, cats)

Europe

H5N1 in non-poultry birds

Germany, Romania

H5N1 in mammals

Germany (red fox, *Vulpes vulpes*)

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 17 outbreaks in non-poultry birds were reported through WAHIS by 4 countries (Germany, Romania, 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.

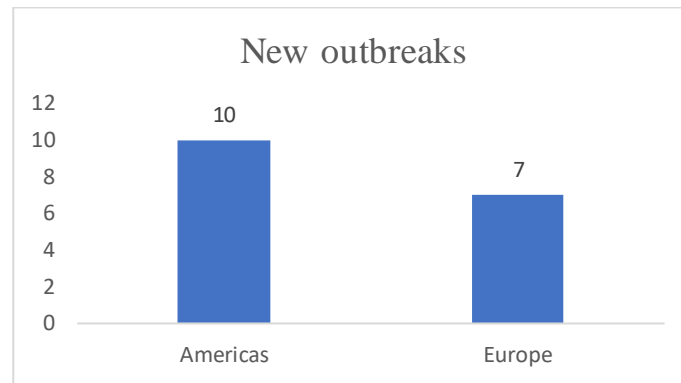


Figure 5. Number of new outbreaks reported through WAHIS by geographical region

Events which started before the 3-week period but were reported during the 3-week period (reported through immediate notifications or through emails)

Americas

H5N2 in non-poultry birds

A recurrence started in Mexico (Michoacán) on 6 March 2024.

Europe

H5N8 in non-poultry birds

A recurrence started in Germany (Schleswig-Holstein) on 28 February 2024

Africa, Asia, Antarctica, 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 submitted during the 3-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 Member submitted a self-declaration for HPAI during the 3 weeks 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 870 cases reported, of which half died), H7N9 (around 1,500 cases reported, of which about 600 died), H5N6 (around 80 cases reported, of which about 30 died), H9N2 (around 80 cases reported, of which 2 died) and sporadic cases have been reported with subtypes H3N8, H7N4, H7N7 and H10N3^{5,6,7,8,9}.

⁵ Chen H. 2019. H7N9 viruses. Cold Spring Harb Perspect Med doi: 10.1101/cshperspect.a038349

⁶ WHO. Influenza (Avian and other zoonotic), 2018, available at [https://www.who.int/news-room/fact-sheets/detail/influenza-\(avian-and-other-zoonotic\)](https://www.who.int/news-room/fact-sheets/detail/influenza-(avian-and-other-zoonotic))

⁷ 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=babfcd1_1&download=true

⁸ 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>

⁹ WHO Avian Influenza Weekly Update Number 924, <https://iris.who.int/bitstream/handle/10665/365675/AI-20231201.pdf?sequence=1906&isAllowed=y>

Recent news

- [OFFLU statement on high pathogenicity avian influenza in dairy cows](#)
- [High Pathogenicity Avian Influenza in Cattle](#)
- [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 avian influenza matching \(OFFLU-AIM\) report](#)
- [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 WOA 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](#)

Press inquiries: 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](#)