Situation report period covered: 14 July to 24 August 2023

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 14 July and 24 August 2023.

Seasonal trend

Using data reported to the World Organisation for Animal Health (WOAH) between 2005 and 2019 by 76 affected countries and territories for 18,620 outbreaks in poultry, we carried out a Seasonal and Trend decomposition using Loess (STL) analysis to determine the seasonal pattern of the disease (detailed methodology presented in Awada et al., 2018[1]). Based on the data reported to WOAH, spread is lowest in September, begins to rise in October, and peaks in February. Figure 1 shows the global seasonal pattern of HPAI in poultry and the red rectangle indicates where we currently are in the cycle based on the period covered in "recent updates" below.

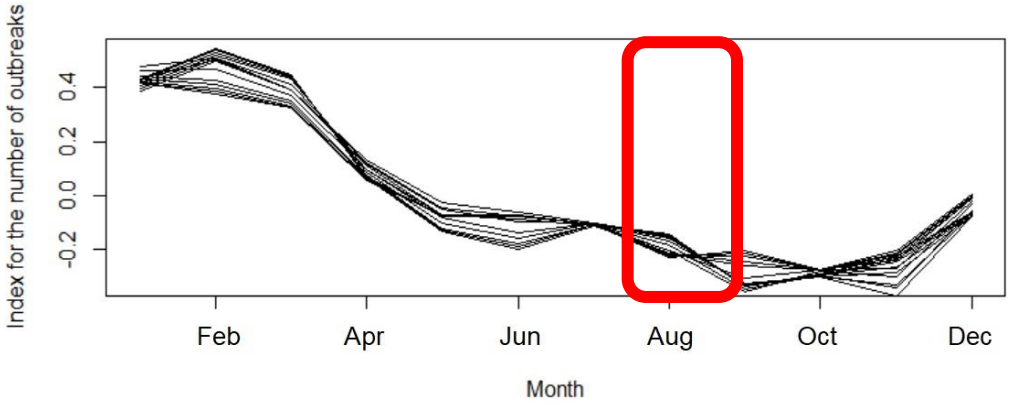

Figure 1. Seasonal trend in global HPAI incidence in poultry

Recent updates (14/07/2023-24/08/2023)

To describe the current disease situation of HPAI in poultry and in non-poultry birds, this section covers: (a) a list of new events[2] which started during the 6-week period (reported through immediate notifications); (b) information on events that started before the 6-week period but were still ongoing during that period; (c) the geographic distribution of new outbreaks[3] 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

H5N1

The first occurrence in the area of Vologda in Russia started on 21 July 2023.

A recurrence started in Netherlands (Flevoland) on 24 July 2023.

A recurrence started in Russia (Bashkortostan) on 9 August 2023.

Africa, Americas, Asia, and Oceania

No new events reported.

[1] Awada L, Tizzani P, Noh SM, 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, 2006–2016. https://doi.org/10.1111/tbed.12986

[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.

[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.

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

Africa
Subtype H5
South Africa
Subtype H5N1
Nigeria
Subtype H7
South Africa
Americas
Subtype H5N1
Ecuador and United States of America
Asia
Subtype H5N1
Chinese Taipei (Clade 2.3.4.4b; Lineage: Fully Eurasian)
Europe
Subtype H5N1
United Kingdom
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, a total of 38 new outbreaks in poultry were reported by eight countries and territories (Chinese Taipei, Ecuador, Netherlands, Nigeria, Russia, South Africa, United Kingdom and United States of America). Details are presented in Figures 2 and 3.

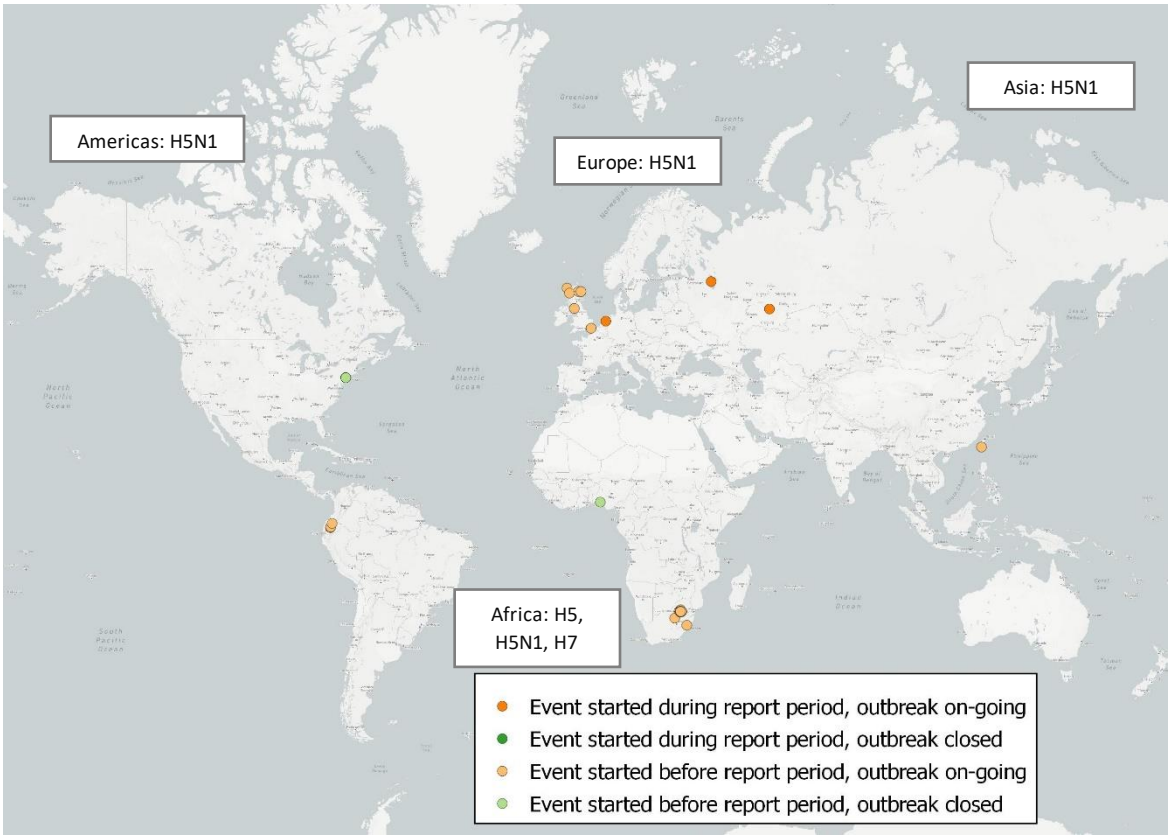

Figure 2. Distribution of HPAI new outbreaks in poultry, and corresponding subtypes

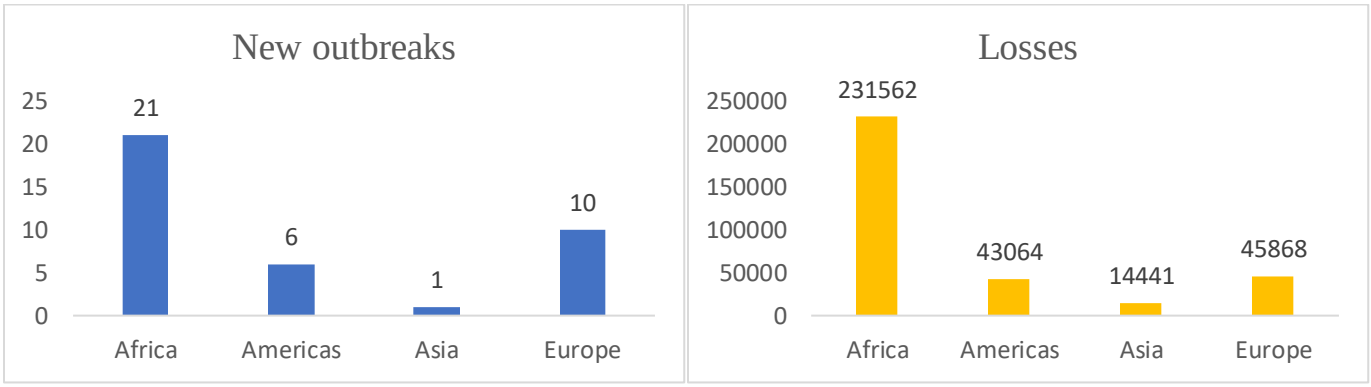

Figure 3. Number of new outbreaks and associated losses by geographical region (losses include animals dead and killed and disposed of within outbreaks – they do not include culling around outbreaks)

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

Africa, Americas, Asia, Europe, and Oceania
No events reported

HPAI in non-poultry

New events by world region (reported through immediate notifications)

Europe
H5N1 in non-poultry birds
A recurrence started in Czech Republic (Ústecký) on 17 July 2023 (Clade 2.3.4.4b - Lineage: Fully Eurasian).
A recurrence started in United Kingdom (Jersey) on 17 July 2023.
A recurrence started in Finland (Ahvenanmaan valtionvirasto) on 27 July 2023.
Asia
H5N1 in non-poultry birds
Two recurrences started in the Asian part of Russia:
- One in the area of Sakhalin on 20 July 2023.
- The other in the area of Primor'ye on 14 August 2023.

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):

Africa
H5 in non-poultry birds
South Africa
Americas
H5 in non-poultry birds
Colombia
H5N1 in non-poultry birds
Brazil
Asia
H5N1 in mammals
Korea (Rep. of)
Europe
H5N1 in non-poultry birds
Belgium, Denmark (Clade 2.3.4.4b - Lineage: Fully Eurasian), Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Norway, Russia, Slovenia (Clade 2.3.4.4b - Lineage: Fully Eurasian), Spain, Sweden, United Kingdom
Europe
H5N1 in mammals
Finland

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

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

Europe
H5N1 in mammals
A red fox (*Vulpes Vulpes*) was found dead in Sweden (Uppsala) on 20 July 2023
Samples were collected from two dead red foxes (*Vulpes Vulpes*) in United Kingdom (Northern Ireland) on 25 July 2023

New outbreaks

During the period covered by this report, a total of 152 outbreaks in non-poultry birds and mammals were reported through WAHIS by 21 countries (Belgium, Brazil, Colombia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Korea (Rep. of), Latvia, Norway, Russia, Slovenia, South Africa, Spain, Sweden and United Kingdom). Details are presented in Figures 4 and 5.

The outbreaks reported by Sweden and United Kingdom in red foxes are not shown in Figures 4 and 5, since the information was provided by email and not all details were available (such as the outbreaks' geolocations).

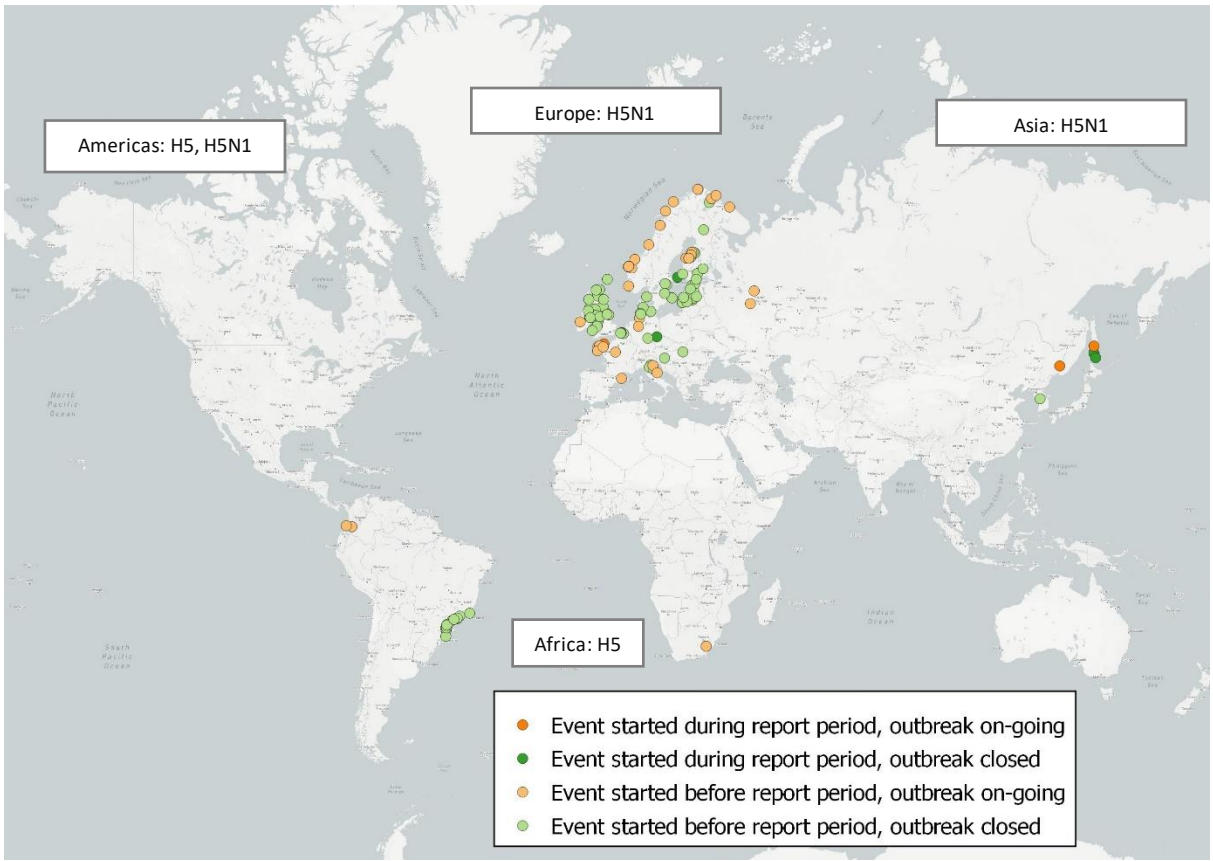

Figure 4. Distribution of HPAI new outbreaks in non-poultry animals reported through WAHIS, and corresponding subtypes.

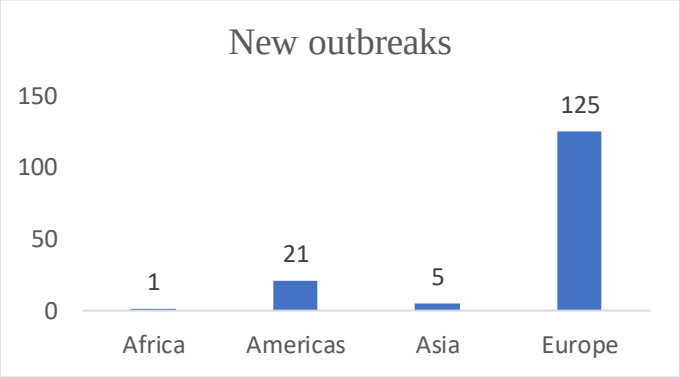

Figure 5. Number of new outbreaks reported through WAHIS by geographical region

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

Americas
H5 in non-poultry birds
A recurrence started in Colombia (Córdoba) on 11 July 2023.
H5 in mammals
An event started in Peru (Huancayo, Lima, Tacna) on 18 January 2023 in South American sea lions (*Otaria flavescens*) and lions (*Panthera leo*).
Asia
H5N1 in non-poultry birds
A recurrence started in China (People's Rep. of) (Xizang) on 4 July 2023.
H5N1 in mammals
An event started in Korea (Rep. of) (Seoul) on 4 January 2023 in feral cats (*Felis catus*).
Europe
H5N1 in non-poultry birds
A recurrence started in United Kingdom (Isle of Man) on 12 July 2023
The first occurrence in the area of Leningrad in Russia started on 28 June 2023.
H5N1 in mammals
An event started in Latvia (Latgales, Zemgales) on 1 June 2023 in red foxes (*Vulpes vulpes*)
An event started in Norway (Troms Og Finnmark) on 27 June 2023 in red foxes (*Vulpes vulpes*)
Africa, and Oceania
No events reported

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 resulted in the death and mass slaughter of more than 316 million poultry worldwide between 2005 and 2021, with peaks in 2021, 2020 and 2016. During each of the years 2006, 2016, 2017 and 2021, more than 50 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[4,5,6,7,8].

[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
[8] WHO Avian Influenza Weekly Update Number 909, https://cdn.who.int/media/docs/default-source/wpro---documents/emergency/surveillance/avian-influenza/ai_20230818.pdf?sfvrsn=22ea0816_32

Key messages

The current HPAI epidemic season continues with 38 outbreaks being reported in poultry and 152 in non-poultry birds and mammals over the 6 weeks covered by the report, in all world regions except Oceania. About 230,000 poultry birds died or were culled worldwide during the 6 weeks period. Based on the previous HPAI seasonal patterns, the number of outbreaks in animals is expected to have passed the peak and decline. This is what we are seeing for poultry worldwide, with low global figures for the 6 weeks covered by the report, while some new outbreaks continue to be detected in non-poultry birds, sometimes causing high mortality, such as the large mortality event among black-legged kittiwake (*Rissa tridactyla*) reported in Norway (Troms Og Finnmark), with 12,000 dead birds detected in a single outbreak (see event). The disease remains a concern, with the virus circulating in all regions of the world (except Oceania) in both poultry and other animals.

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

WOAH also 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. Over the 6 weeks covered by the report, cases in mammals were reported to WOAH by Finland, Korea (Rep. of), Latvia, Peru, Sweden, and United Kingdom.

On 23 August 2023, OFFLU experts published a statement on HPAI H5 in wildlife in South America, summarizing the spread of HPAI H5 clade 2.3.4.4b in South America since it was first detected in the region in October 2022, and evaluating the risk for incursion into Antarctica in the near future. In this statement, experts highlight the potential threat to the conservation of several wild animal species and the substantial risk for HPAI to continue southwards and in the near future reaching Antarctica and its offshore islands. Experts underline that the negative impact of HPAI H5 on Antarctic wild birds and mammal populations could be immense, both because of their likely susceptibility to mortality from this virus, and their occurrence in dense colonies of up to thousands of pinnipeds and hundreds of thousands of birds, allowing efficient virus transmission.

High quality of information is key to support early detection and rapid response to potential threats to both animal and public health.

Recent news

- 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)
- Q & A: Avian influenza in cats
- 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
- Preliminary FAO/WHO/WOAH Joint Rapid Risk Assessment - Human infection with influenza A(H5N1), Cambodia (2023)
- One health Joint plan of action (2022 – 2026)
- The first meeting of the Standing Group of Experts on HPAI for Europe, May 2023
- Technical meeting on HPAI vaccination, GF-TAD Americas, March 2023

Awareness tools

- 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 2022
- 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 2023)

Other relevant resources

- 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 4 March to 24 April 2023