## Situation report period covered: 2 to 22 June 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 2 and 22 June 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., 2018¹). 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.

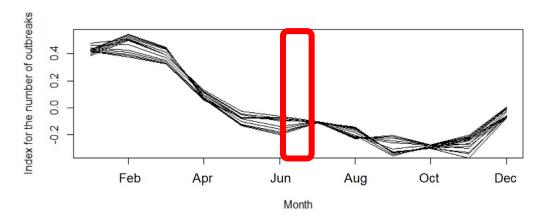


Figure 1. Seasonal trend in global HPAI incidence in poultry

### Recent updates (02/06/2023-22/06/2023)

To describe the current disease situation of HPAI in poultry and in non-poultry birds, this section covers: (a) a list of new events<sup>2</sup> 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 outbreaks<sup>3</sup> 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 WOAH.

### **HPAI** in poultry

New events by world region (reported through immediate notifications)

**Europe** 

<u>H5N1</u>

A strain recurrence started in Russia (Mariy-El) on 6 June 2023 **Africa, Americas, Asia, and Oceania** 

No new events reported.

<sup>&</sup>lt;sup>1</sup> 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

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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):

**Americas** 

Subtype H5

Argentina

Asia

Subtype H5N1

Nepal

Europe

Subtype H5N1

France

### Africa, 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, a total of four new outbreaks in poultry were reported by four countries (Argentina, France, Nepal, Russia). Details are presented in Figures 2 and 3.

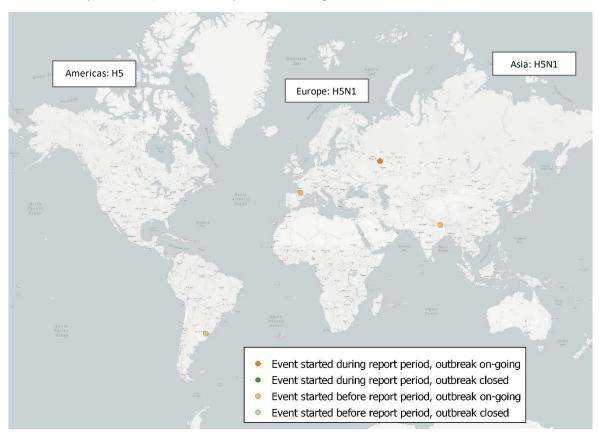


Figure 2. Distribution of HPAI new outbreaks in poultry, and corresponding subtypes

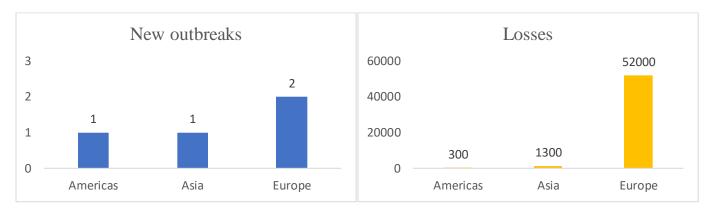


Figure 3. Number of new outbreaks and associated losses by geographical region (losses include animals dead and killed and disposed of within outbreaks – they do not include culling around outbreaks)

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

### **Americas**

H5N1

The first occurrence in the area of Región Metropolitana de Santiago in Chile started on 31 May 2023 (Clade: 2.3.4.4b - Lineage: Reassortment Eurasian and North American).

#### Africa, 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 Russia (Maga Buryatdan) on 8 June 2023.

A strain recurrence started in Finland (Lounais-Suomen aluehallintovirasto) on 13 June 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):

#### **Americas**

H5N1 in non-poultry birds

Brazil

# **Europe**

H5N1 in non-poultry birds

Austria, Belgium, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Norway (Clade: 2.3.4.4b - Lineage: Reassortment Eurasian and North American), Poland, Russia, Sweden, Switzerland

#### Africa, Asia, 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 60 outbreaks in non-poultry were reported by 16 countries (Austria, Belgium, Brazil, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Norway, Poland, Russia, Sweden, Switzerland). Details are presented in Figures 4 and 5.

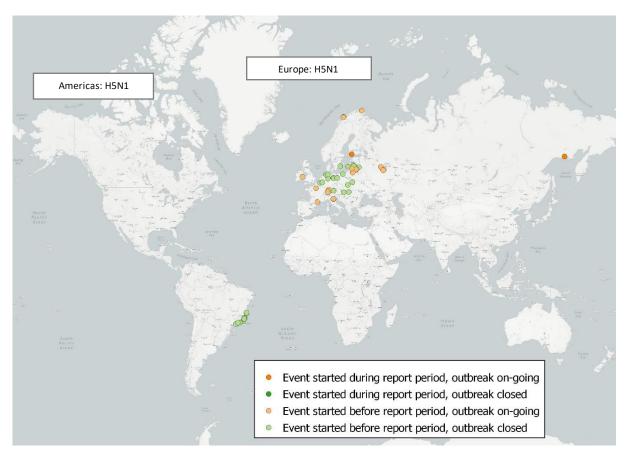


Figure 4. Distribution of HPAI new outbreaks in non-poultry animals, and corresponding subtypes.

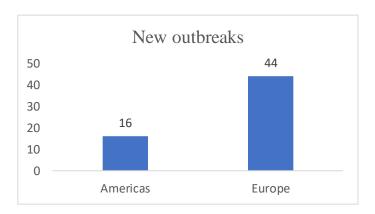


Figure 5. Number of new outbreaks by geographical region

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

#### **Americas**

## H5N5 and HHN6 in non-poultry birds

A new strain was reported in United States of America (Massachusetts, Minnesota and New York). The event started on 9 February 2023 (fully Eurasian lineage goose/Guangdong clade 2.3.4.4b; reassortant of genotype B1.3 with a North American N6 gene).

#### **Europe**

## H5 in non-poultry birds

A recurrence started in Finland (Etelä-Suomen aluehallintovirasto) on 22 May 2023

### H5N1 in non-poultry birds

A recurrence started in Luxembourg (Grevenmacher) on 24 May 2023

### Africa, Asia, 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<sup>4,5,6,7,8</sup>.

### Key messages

The current HPAI epidemic season continues with 4 outbreaks being reported in poultry and 60 in non-poultry birds over the 3 weeks covered by the report, mainly in Europe, and also in the Americas and Asia. About 54,000 poultry birds died or were culled worldwide during the 3 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 very low figures for the 3 weeks covered by the report, while some new outbreaks continue to be detected in non-poultry birds.

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.

On 30 May 2023, the World Health Organization (WHO) posted information<sup>9</sup> on the detection of avian influenza in humans in the United Kingdom. The case was detected in a poultry worker at a farm in England where poultry was infected with HPAI H5N1 viruses. Another detection was reported in a second individual performing culling operations on the farm. Both detections were later confirmed by additional testing as A(H5N1). Both cases were asymptomatic and detected as part of an ongoing enhanced surveillance study of asymptomatic workers exposed to poultry infected with avian influenza. Based on the available information, WHO considers these as sporadic detections of avian influenza viruses among humans with no evidence of person-to-person transmission to date. Thus, the likelihood of international disease spread through humans is considered to be low.

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'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

<sup>&</sup>lt;sup>4</sup> Chen H. 2019. H7N9 viruses. Cold Spring Harb Perspect Med doi: 10.1101/cshperspect.a038349

<sup>\*</sup> Chen H. 2019. H7N9 viruses. Cold Spring Hard Perspect Med dol: 10.1101/cshperspect.au38349

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

<sup>&</sup>lt;sup>6</sup> WHO. Cumulative number of confirmed human cases for avian influenza A(H5N1) reported to WHO,

<sup>2003-2022, 25</sup> 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

<sup>8</sup> WHO Avian Influenza Weekly Update Number 899, https://cdn.who.int/media/docs/default-source/wpro---documents/emergency/surveillance/avian-influenza/ai\_20230608.pdf?sfvrsn=5bc7c406\_26

<sup>9</sup> https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON468

- 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
- <u>Epidemiological Alert Outbreaks of avian influenza and human infection caused by influenza A(H5) public health implications in the Region of the Americas</u>
- WHO, Influenza at the human-animal interface, Summary and risk assessment, from 4 March to 24 April 2023