

Situation report period covered: 8 December 2023 to 5 January 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 8 December 2023 and 5 January 2024 (4-week period).

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 HPAI 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.

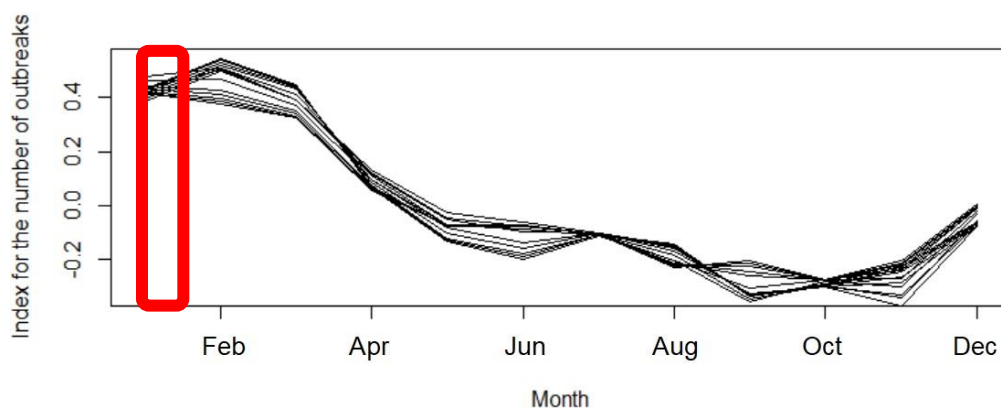


Figure 1. Seasonal trend in global HPAI incidence in poultry

Recent updates (8/12/2023-5/01/2024)

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 4-week period (reported through immediate notifications); (b) information on events that started before the 4-week period but were still ongoing during that period; (c) the geographic distribution of new outbreaks³ that started during the 4-week period and d) events which started before the 4-week period but were reported during the 4-week period. The different subtypes of HPAI circulating during the 4-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**

2 events started in Hungary:

- A recurrence in Komárom-Esztergom on 8 December 2023
- Another recurrence in Győr-Moson-Sopron on 18 December 2023

2 events started in Germany:

- A recurrence in Nordrhein-Westfalen on 11 December 2023
- Another recurrence in Sachsen-Anhalt on 19 December 2023

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.

Italy reported H5N1 as a new strain in the area of Apulia, with a start date on 14 December 2023

4 events started in Moldova:

- A recurrence in Drochia on 15 December 2023 (Clade 2.3.4.4b; Lineage: Fully Eurasian)
- Another recurrence in Florești on 21 December 2023 (Clade 2.3.4.4b; Lineage: Fully Eurasian)
- The first occurrence in the area of Ștefan Voda on 2 January 2024 (Clade 2.3.4.4b; Lineage: Fully Eurasian)
- A third recurrence in Rezina on 2 January 2024 (Clade 2.3.4.4b; Lineage: Fully Eurasian)

A recurrence started in Lithuania (Marijampoles) on 18 December 2023

2 events started in Poland:

- A recurrence in Mazowieckie on 18 December 2023
- Another recurrence in Kujawsko-Pomorskie on 20 December 2023

A recurrence started in Romania (Olt) on 21 December 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

H7N6

South Africa

Americas

H5N1

Canada (Clade: 2.3.4.4b - Lineage: Reassortment Eurasian and North American), United States of America

Asia

H5N1

Korea (Rep. of)

H5N6

Korea (Rep. of)

Europe

H5

France

H5N1

Belgium, Denmark, Germany, Hungary, Poland

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 95 new outbreaks in poultry were notified by 14 countries (Belgium, Canada, Denmark, France, Germany, Hungary, Italy, Korea [Rep. of], Lithuania, Moldova, Poland, Romania, South Africa, United States of America). Details are presented in Figures 2 and 3.

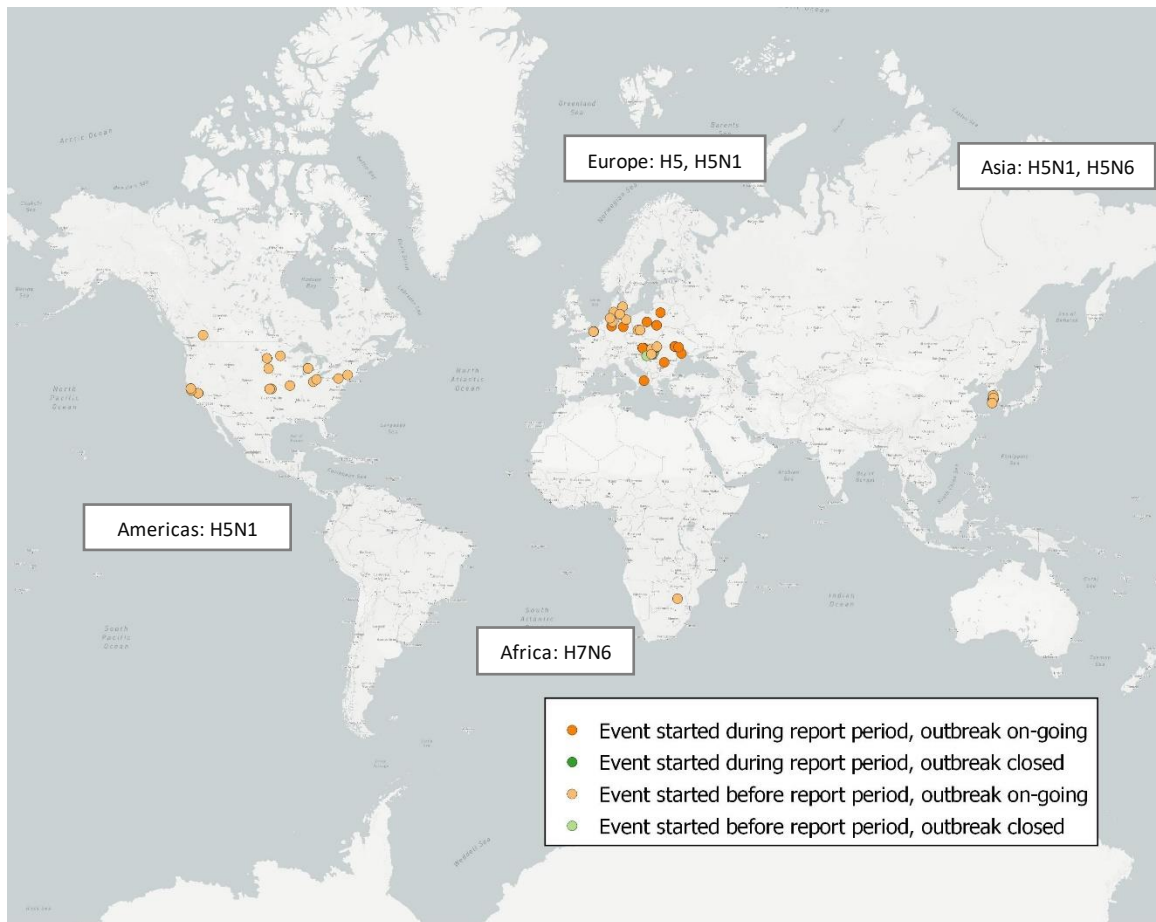


Figure 2. Distribution of HPAI new outbreaks in poultry, and corresponding subtypes

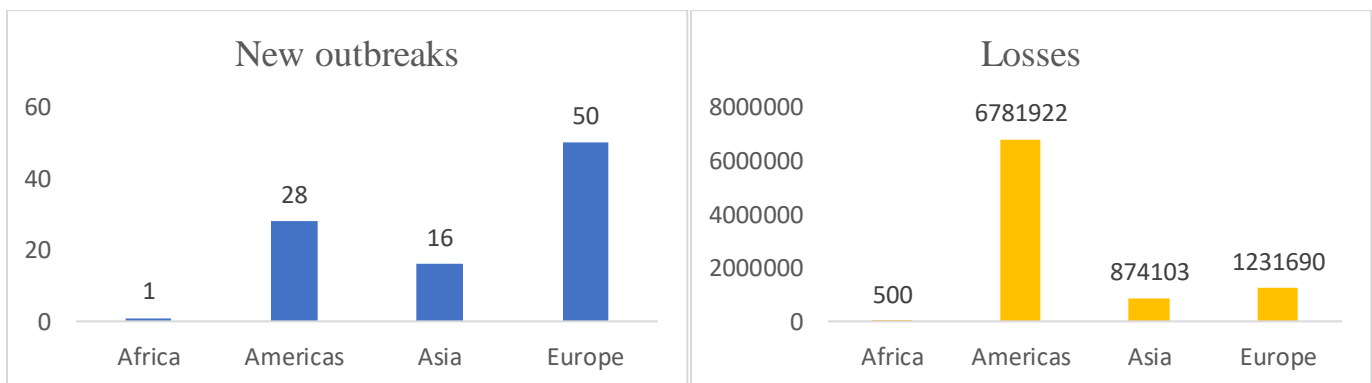


Figure 3. Number of new outbreaks and associated losses by geographical region (losses include animals dead and killed and disposed of within outbreaks – they do not include culling around outbreaks).

Events which started before the 4-week period but were reported during the 4-week period (reported through immediate notifications)

Asia

H5N1

A recurrence started in Chinese Taipei on 22 November 2023 (Clade: 2.3.4.4b - Lineage: Reassortment Eurasian and North American)

H5N6

A recurrence started in Korea (Rep. of) (Chungcheongnam-do, Jeollabuk-do and Jeollanam-do) on 5 December 2023

EuropeH5N1

A recurrence started in Poland (Zachodniopomorskie) on 6 December 2023

Africa, Americas, and Oceania

No events reported.

HPAI in non-poultry**New events by world region (reported through immediate notifications)****Asia**H5 in non-poultry birds

A recurrence started in Kazakhstan (Mangghystau) on 28 December 2023

H5N1 in non-poultry birds

A recurrence started in Chinese Taipei on 8 December 2023 (Clade: 2.3.4.4b - Lineage: Reassortment Eurasian and North American)

EuropeH5N1 in non-poultry birds

4 events started in Germany:

- A recurrence in Sachsen-Anhalt on 8 December 2023
- Another recurrence in Nordrhein-Westfalen on 14 December 2023
- A third recurrence in Hessen on 27 December 2023
- A fourth recurrence in Brandenburg on 30 December 2023

17 events started in Moldova (Clade 2.3.4.4b - Lineage: Fully Eurasian)

- The first occurrence in the area of Sîngerei on 15 December 2023
- The first occurrence in the area of Drochia on 17 December 2023
- A recurrence in Ungheni on 17 December 2023
- The first occurrence in the area of Chişinău on 18 December 2023
- The first occurrence in the area of Floreşti on 20 December 2023
- The first occurrence in the area of Rîşcani on 20 December 2023
- The first occurrence in the area of Dubăsari on 20 December 2023
- A recurrence in Făleşti on 20 December 2023
- The first occurrence in the area of Rezina on 21 December 2023
- The first occurrence in the area of Anenii Noi on 21 December 2023
- The first occurrence in the area of Criuleni on 22 December 2023
- The first occurrence in the area of Briceni on 22 December 2023
- The first occurrence in the area of Orhei on 23 December 2023
- A recurrence in Soroca on 25 December 2023
- The first occurrence in the area of Calarasi on 26 December 2023
- The first occurrence in the area of Glodeni on 1 January 2024
- The first occurrence in the area of Străşeni on 2 January 2024

3 events started in Ukraine:

- A recurrence in Chernivtsi on 22 December 2023
- Another recurrence in Sumy on 29 December 2023
- The first occurrence in the area of Rivne on 1 January 2024

A recurrence started in Switzerland (Zürich) on 25 December 2023

A recurrence started in Czech Republic (Jihočeský) on 31 December 2023 (Clade 2.3.4.4b - Lineage: Fully Eurasian)

A recurrence started in Romania (Constanța and Iași) on 3 January 2024

Africa, Americas, 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, United States of America

AsiaH5N1 in non-poultry birds

Hong Kong, Japan

H5N6 in non-poultry birds

Korea (Rep. of)

Europe

H5N1 in non-poultry birds

Austria, Belgium, France (Clade 2.3.4.4b - Lineage: Fully Eurasian), Germany, Hungary, Netherlands, Poland, Romania, Spain, Sweden, United Kingdom

H5N1 in mammals

Finland: Arctic fox (*Vulpes lagopus*)

Africa, 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 116 outbreaks in non-poultry birds and mammals were reported through WAHIS by 23 countries and territories (Austria, Belgium, Brazil, Chinese Taipei, Czech Republic, Finland, France, Germany, Hong Kong, Hungary, Japan, Kazakhstan, Korea [Rep. of], Moldova, Netherlands, Poland, Romania, Spain, Sweden, Switzerland, Ukraine, 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.

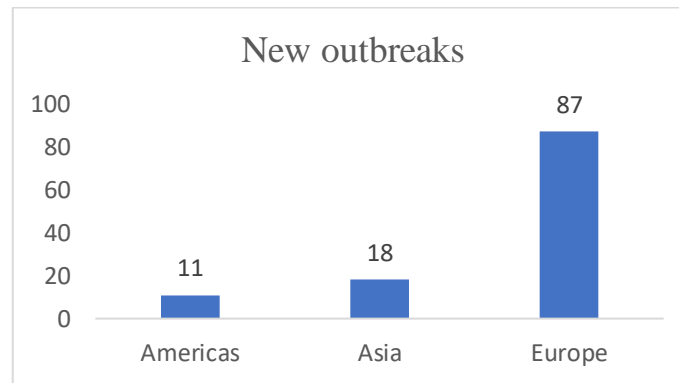


Figure 5. Number of new outbreaks reported through WAHIS by geographical region

Events which started before the 4-week period but were reported during the 4-week period (reported through immediate notifications or through emails)

Asia

H5N1 in non-poultry birds

China (People's Rep. of) reported the first occurrence in the area of Chinese Exclusive Economic Zone with a start date on 5 December 2023.

A recurrence started in Hong Kong (Yuen Long) on 6 December 2023.

H5N6 in non-poultry birds

A recurrence started in Korea (Rep. of) (Gyeongsangbuk-do, Jeollabuk-do) on 4 December 2023

A recurrence started in Japan (Saga) on 6 December 2023

Europe

H5 in non-poultry birds

A recurrence started in Sweden (Ödeshög) on 3 November 2023.

H5N1 in non-poultry birds

A recurrence started in Portugal (Setúbal) on 15 November 2023.

A recurrence started in Germany (Baden-Württemberg) on 5 December 2023.

Africa, Americas, Asia, and Oceania

No new events reported.

Self-declarations of freedom submitted during the 4-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 four 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 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-\(avian-and-other-zoonotic\)](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 924, <https://iris.who.int/bitstream/handle/10665/365675/AI-20231201.pdf?sequence=1906&isAllowed=y>

Key messages

The current HPAI epidemic season continues with 95 outbreaks being reported in poultry and 116 in non-poultry birds and mammals over the 4 weeks covered by the report, in Africa, Americas, Asia and Europe. Nearly 9 million poultry birds died or were culled worldwide during the 4 weeks period, mostly in the Americas. The number of losses has increased significantly compared to the previous report.

On 28 December 2023, WOAAH published a [statement](#) on the use of vaccination against avian influenza in poultry in the context of international trade. It highlights that “the rapidly evolving nature of avian influenza and changes in its patterns of spread require a review of existing prevention and control strategies. To effectively contain the disease, protect the economic sustainability of the poultry sector and reduce potential pandemic risks, all available tools must be reconsidered – including vaccination.”

Some countries have also reported significant mortality in wild birds, such as Moldova and Kazakhstan (each of which reported outbreaks resulting in the death of more than 200 swans in specific locations).

WOAH 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 4 weeks covered by the report, cases in mammals were reported to WOAAH by Finland, in farmed fur animals. Laboratory confirmation of unusual mammal species sometimes takes time. This is for example the case for the confirmation of clade 2.3.4.4b in a free-ranging [wild polar bear](#) (*Ursus maritimus*) in Alaska, by the United States of America.

WOAH 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.

WOAH is also paying close attention to the Antarctic region and is calling on the animal health community to monitor the situation. OFFLU is the joint WOAAH-FAO global network of expertise on animal influenzas. On 21 December 2023, this group issued a [statement on the continued expansion of high pathogenicity avian influenza H5 in wildlife in South America and incursion into the Antarctic region](#). This report summarises the spread and impact of HPAI H5 clade 2.3.4.4b in South America, its incursion into South Georgia, and the risk for further spread in the Antarctic region and for incursion into Oceania. It highlights that “HPAI H5 virus is likely to spread further among Antarctic wildlife, potentially infecting the 48 species of birds and 26 species of marine mammals which inhabit this region. The negative impact of HPAI H5 on Antarctic wildlife could be immense, because their presence in dense colonies of up to thousands of pinnipeds and hundreds of thousands of birds facilitates virus transmission and may result in high mortality.”

Recent news

- [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 \(WAHIS\)](#)
- [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 WOAAH 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

- [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 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 \(September 2023\)](#)

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 2 November to 21 December 2023](#)
- [Vaccination of poultry against highly pathogenic avian influenza – part 1. Available vaccines and vaccination strategies](#)