

Situation report period covered: 17 November to 7 December 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 17 November and 7 December 2023 (3-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.

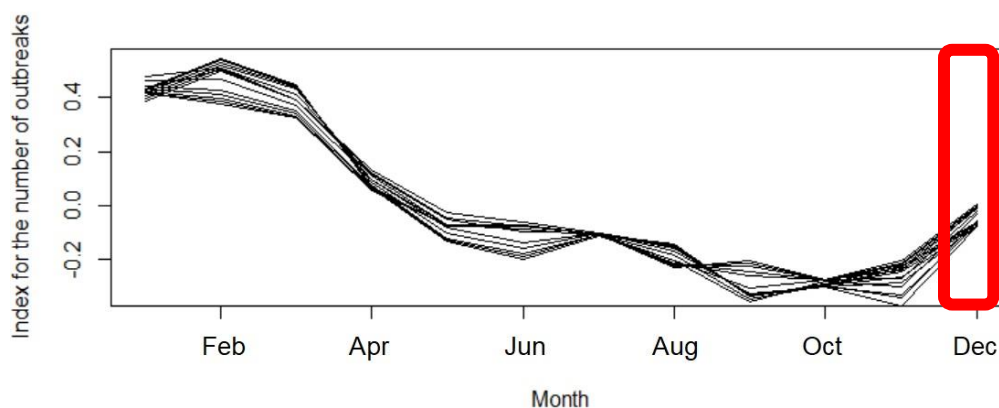


Figure 1. Seasonal trend in global HPAI incidence in poultry

Recent updates (17/11/2023-7/12/2023)

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 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 outbreaks³ 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)****Asia****H5N1**

A recurrence started in Cambodia (Kâmpôt) on 23 November 2023

A recurrence started in Japan (Ibaraki, Kagoshima, Saga, Saitama) on 24 November 2023

A recurrence started in Israel (Jerusalem) on 28 November 2023

A recurrence started in Korea (Rep. of) (Jeollanam-do) on 3 December 2023

Europe**H5**

A recurrence started in France (Bretagne) on 26 November 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.

H5N1

4 events started in Germany:

- A recurrence in Mecklenburg-Vorpommern on 20 November 2023
- Another recurrence in Schleswig-Holstein on 24 November 2023
- A third recurrence in Niedersachsen on 27 November 2023
- A fourth recurrence in Brandenburg on 29 November 2023

A recurrence started in Belgium (Vlaanderen) on 30 November 2023

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**

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

Europe**H5**

Bulgaria

H5N1

Denmark, Hungary, Italy, Netherlands, United Kingdom

Africa, 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, a total of 91 new outbreaks in poultry were notified by 15 countries (Belgium, Bulgaria, Cambodia, Canada, Denmark, France, Germany, Hungary, Israel, Italy, Japan, Korea (Rep. of), Netherlands, United Kingdom and United States of America). Details are presented in Figures 2 and 3.

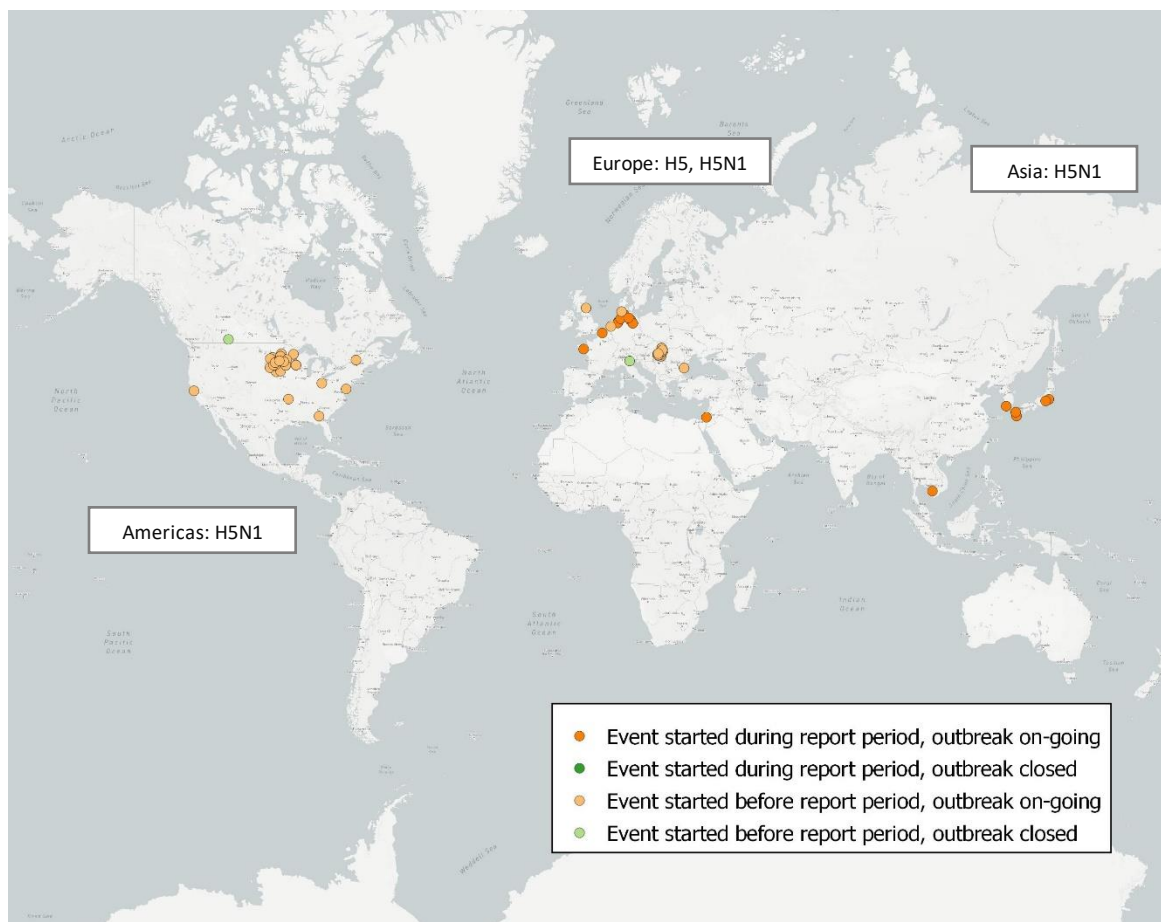


Figure 2. Distribution of HPAI new outbreaks in poultry, and corresponding subtypes

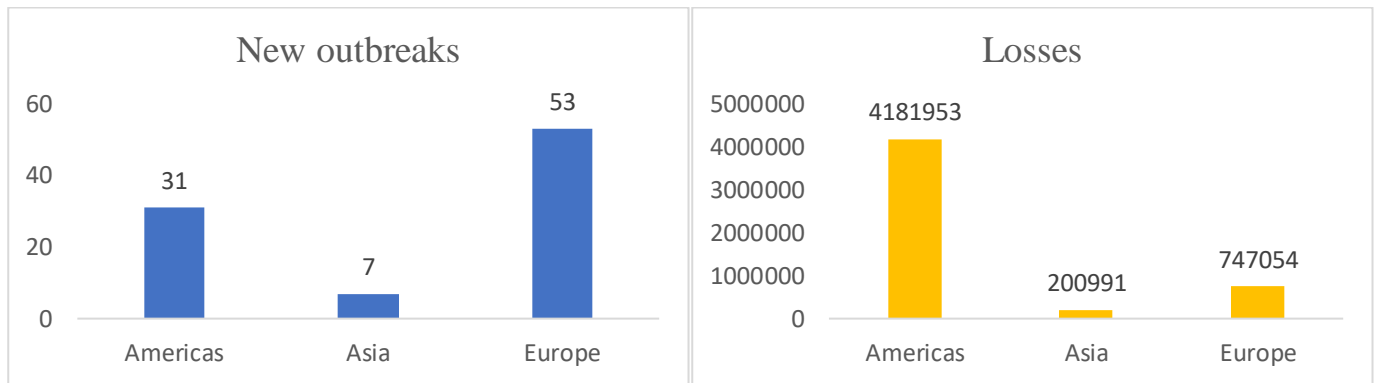


Figure 3. Number of new outbreaks and associated losses by geographical region (losses include animals dead and killed and disposed of within outbreaks – they do not include culling around outbreaks).

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

Europe

H5N1

The first occurrence in the area of Brodsko-Posavska started in Croatia on 14 November 2023

A recurrence started in Hungary (Békés) on 16 November 2023

Africa, Americas, Asia, and Oceania

No events reported.

HPAI in non-poultry

New events by world region (reported through immediate notifications)

Asia

H5N1 in non-poultry birds

A recurrence started in Korea (Rep. of) (Jeollabuk-do) on 27 November 2023

Europe

H5N1 in non-poultry birds

A recurrence started in Germany (Thüringen) on 19 November 2023

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

H5 in non-poultry birds

Colombia

H5N1 in non-poultry birds

United States of America

H5N1 in mammals

United States of America: domestic cat (*Felis catus*)

Asia

H5N1 in non-poultry birds

Japan

Europe

H5N1 in non-poultry birds

Austria, Germany, Hungary, Italy, Netherlands (Clade 2.3.4.4b - Lineage: Fully Eurasian), Romania, Serbia (Clade: 2.3.4.4b - Lineage: Reassortment Eurasian and North American), Slovenia (Clade 2.3.4.4b - Lineage: Fully Eurasian), United Kingdom

H5N1 in mammals

Finland: Arctic fox (*Vulpes lagopus*), raccoon dog (*Nyctereutes procyonoides*), red fox (*Vulpes vulpes*)

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 46 outbreaks in non-poultry birds and mammals were reported through WAHIS by 14 countries (Austria, Colombia, Finland, Germany, Hungary, Italy, Japan, Korea (Rep. of), Netherlands, Romania, Serbia, Slovenia, United Kingdom, United States of America). Details are presented in Figures 4 and 5.

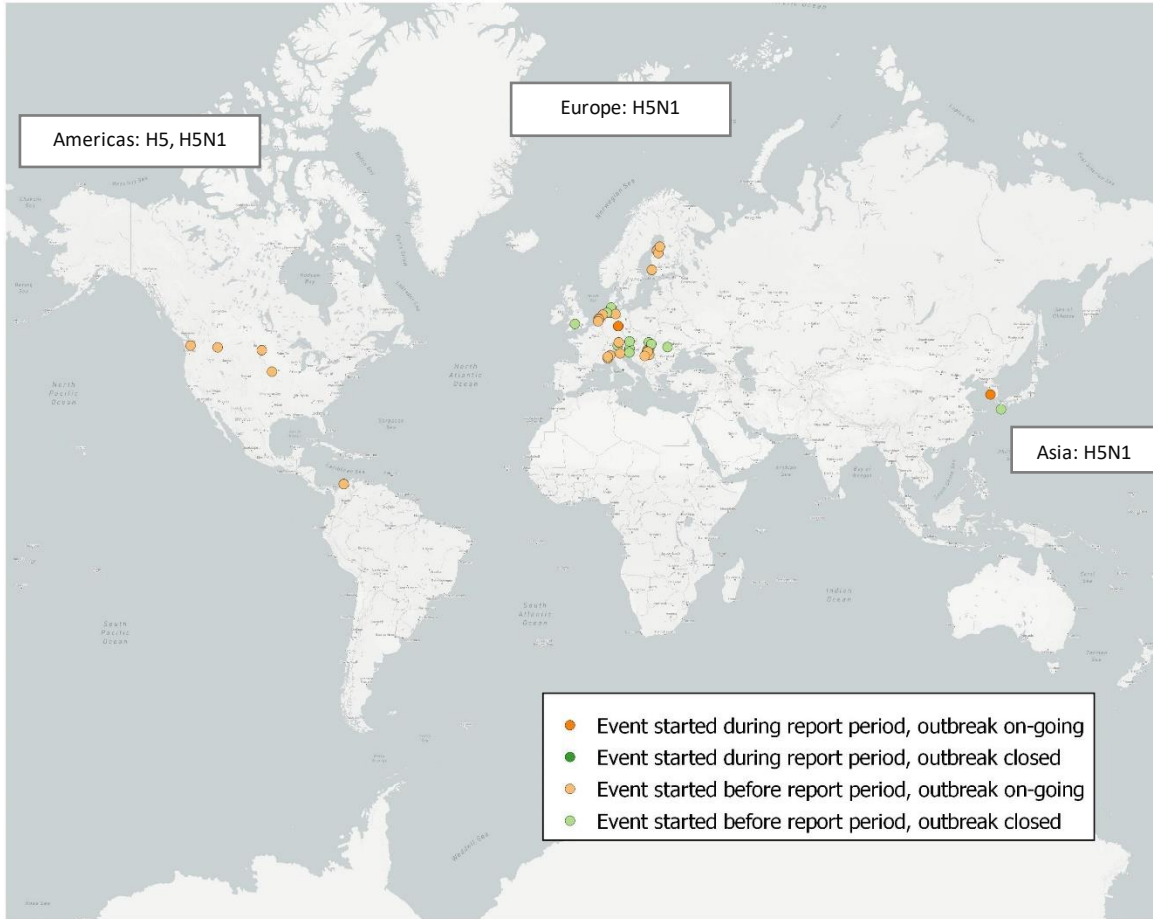


Figure 4. Distribution of HPAI new outbreaks in non-poultry animals reported through WAHIS, and corresponding subtypes.

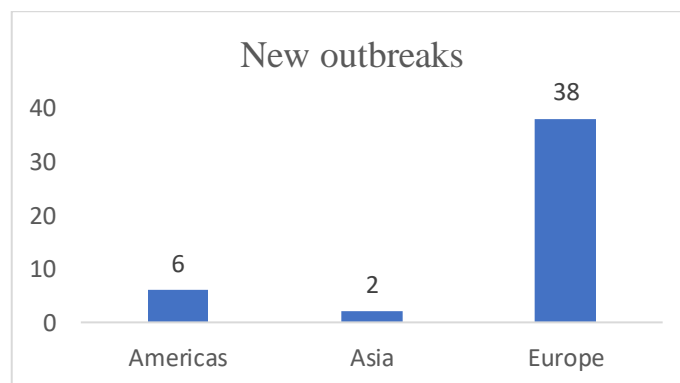


Figure 5. Number of new outbreaks reported through WAHIS by geographical region

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

Europe

H5N1 in non-poultry birds

Two recurrences started in Germany:

- One in Hamburg on 8 November 2023
- Another one in Bayern on 13 November 2023

A recurrence started in Portugal (Leiria) on 13 November 2023.

The first occurrence in the area of Brodsko-Posavska started in Croatia on 14 November 2023.

H5N5 in non-poultry birds

A recurrence started in Germany (Schleswig-Holstein) on 9 November 2023

Africa, Americas, Asia, and Oceania

No new events 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 three 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}.

Key messages

The current HPAI epidemic season continues with 91 outbreaks being reported in poultry and 46 in non-poultry birds and mammals over the 3 weeks covered by the report, in Americas, Asia and Europe. More than 5 million poultry birds died or were culled worldwide during the 3 weeks period, mostly in the Americas. Both the number of outbreaks and losses have increased significantly compared to the previous reports.

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 3 weeks covered by the report, cases in mammals were reported to WOAH by Finland and United States of America, in four species, including domestic cats and farmed fur animals.

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 situation in the sub-Antarctic region and is calling on the animal health community to monitor the situation and the potential spread to Antarctica, as experts fear that the consequences for wildlife could be devastating in this region.

On 29 November 2023, the World Health Organization (WHO) posted [information](#) on the detection of avian influenza in humans in Cambodia. National authorities confirmed two cases of human infection with influenza A(H5N1) (of which one died) from the same village in Kampot Province. Epidemiological investigation shows both cases had exposure to backyard birds which were reported to be sick and dead, over the past month. In total, six cases of influenza A(H5N1) have been reported from Cambodia this year. Given reports of sporadic influenza A (H5N1) cases in humans, outbreaks in mammals, the widespread circulation in birds and the constantly evolving nature of influenza viruses, WHO continues

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>

to stress the importance of global surveillance to detect and monitor virological, epidemiological, and clinical changes associated with emerging or circulating influenza viruses that may affect human or animal health and timely virus sharing for risk assessment.

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 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 WOA 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**](mailto: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 4 October to 1 November 2023](#)
- [Vaccination of poultry against highly pathogenic avian influenza – part 1. Available vaccines and vaccination strategies](#)